THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

EDITED BY

GEORGE F. SHRADY, M.D.

Volume 3.

MARCH 1, 1868—FEBRUARY 15, 1869.

NEW YORK:
WILLIAM WOOD & COMPANY,
61 WALKER STREET.

THE NEW YORK PRINTING COMPANY.
81, 83, *and* 85 *Centre street,*
NEW YORK.

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A Semi-Monthly Journal of Medicine and Surgery.

VOL. 3. NEW YORK, MARCH 2, 1868. No. 49.

Original Communications.

A SUCCESSFUL CASE OF CÆSAREAN SECTION.

BY F. L. DIBBLE, M.D.,

NEW HAVEN, CONN.

ABOUT eleven o'clock on the night of the 15th of November, 1867, I was called to see a patient who, the messenger said, had been in labor forty-eight hours. She was an unmarried girl, aged sixteen years. In her infancy, her mother said, she had suffered from rickets. The membranes had ruptured twelve hours before she sent for medical aid.

A vaginal examination revealed a most serious deformity of the pelvis. The head of the child was at the superior strait; the os uteri seemed dilatable, but was pinched between the tumor of the scalp, the sacral promontory, and the pubic bones; the opening of the womb being an ellipsoid whose short diameter (antero-posterior) was about one inch. The promontory of the sacrum approached to within an inch and a half of the symphysis pubis. At this time the uterus was making no powerful efforts to expel its contents, and I remained with the girl an hour, verifying the diagnosis by repeated examinations. Not far from one A.M. I called on Professor C. A. Lindsley, and requested his counsel and assistance, telling him my opinion that the short diameter of the patient's pelvis was less than two inches.

Repairing to her bedside, Dr. Lindsley made a careful examination, and declared that the pelvic diameter was not more than an inch and a half. He had with him Smellie's scissors, but believed the use of this instrument was impracticable, and doubted if the cephalotribe could be applied. The uterus was still moderately quiet; the irritation of a vaginal examination would excite contractions, so that two or three pains would follow each other in rather quick succession; but, unless stimulated in this way, the intervals between the pains would occupy a full half-hour, and these pains were far from violent. We waited for an hour, and concluded to make no interference until morning, unless the uterine efforts should become greatly increased in force and frequency, in which event Dr. Lindsley was to be called. At eight A.M. I reported to him that there was no material change in the patient's condition. Dr. Lindsley then announced his opinion, that the only operation which promised safety to the mother was the Cæsarean section. My own mind had already reached the same conclusion. It was determined to call on Dr. T. Beers Townsend, request him to examine the girl, and if, after further consultation, hysterotomy should seem inevitable, to perform the operation. After examining the patient, Dr. Townsend did not hesitate to recommend the Cæsarean section, but expressed a desire that a greater number of medical men should be thoroughly committed to its necessity. Drs. L. Ives, S. G. Hubbard, D. L. Daggett, and E. W. Blake, were named as council, and the number was finally augmented to eleven by the addition of Drs. N. B. Ives, C. L. Ives, E. Bulkley, and R. S. Ives. Each of these gentlemen was requested to examine the patient, and give his opinion what was the best operation for the relief of the mother. The council assembled at 1.30 P.M., and was very nearly unanimous that hysterotomy was more hopeful for the mother than any other process of delivery which could be considered, and it was decided to proceed without delay. The patient was already on the table, and part ally under the influence of anæsthetics. When she became unconscious, Dr. Townsend took his position on the left side of the patient, who was placed on her back, the shoulders elevated with pillows, and after requesting Drs. Lindsley and Bulkley to steady the uterus in the median line (this organ had a strong right obliquity) and be prepared to grasp the uterine walls as soon as they were divided, and press them close against the abdominal parietes, he vacated the bladder and made an incision with a scalpel in the median line, commencing one inch above the symphysis pubis, and carrying it up to and a little to the left of the umbilicus. He divided carefully the skin, superficial fascia, tendon of abdominal muscles, and transversalis fascia. Coming to the peritoneum, he incised this with a probe-pointed bistoury; he divided the uterine walls layer by layer, until the cavity was reached, when he slit open the membranes with a probe-pointed bistoury, and drew forth a living male child, which weighed, after it was clothed, eight pounds and three ounces.

After the uterus was evacuated of its entire contents, five uterine vessels were ligated, the ends of the ligatures cut short, the uterine walls were secured by interrupted sutures of fine hempen thread, the parietes of the abdomen were closed with silver wire, adhesive plaster, a compress and bandage were applied, and the patient was removed to bed. The wound in the abdominal walls was allowed to gape three-fourths of an inch at its lower angle, to favor any discharge of fluid. So far as could be observed, but a trifling quantity of blood fell into the cavity of the peritoneum. Throughout the entire operation, not as much blood was lost as ordinarily accompanies a natural delivery.

It is but a feeble tribute to the coolness and dexterity of the surgeon who performed this operation to say that its completion excited the admiration of all who witnessed it. Soon after she had recovered from the effects of the ether, a quarter of a grain of sulph. morphine was given; at six P.M. an eighth, and at eight P.M. an eighth. The girl slept well all night, took her breakfast of beef-tea and toast in the morning, and said she felt well.

During the day her pulse was about 160, though otherwise she seemed in good condition. A quarter of a grain of morphine was administered at night; she slept quietly, and on awaking said she felt well, and called for her breakfast. During this day (Monday, the third after the operation) a tympanitic state of the bowels came on, but disappeared in a few hours after the application of a turpentine stupe, an aromatic infusion, and the use of a perforated rectal bougie. This was the only unpleasant symptom which occurred

during her recovery, except the pulse, which varied from 130 to 160 the first five days; the sixth it fell to 110, the seventh to 105, the eighth to 92.

The eighth day the bowels were moved by injection. The bladder was relieved by the catheter three times each day, the first five days; after that twice each day, until the eighth day, when she passed water without artificial aid. The lochial discharge was normal and on the third day the milk made its appearance. Since then she has nursed the child.

Each night of the first week she took one-fourth grain sulph. morphine at tea-time; after this it was omitted, and no drug has been since administered except an occasional dose of castor-oil.

Arrangements were made to carefully ventilate her room, and absolute quiet was insisted on. The first three weeks, no one saw her but her nurses and physicians. The first ten days, her diet consisted of beef-tea or mutton broth, with toast and tea for her breakfast, roasted oysters with toast for dinner, and milk porridge for supper.

Besides this, each day of twenty-four hours during the first fortnight, she took three ounces of whiskey and twelve ounces of milk in the form of punch. After this period she was allowed to select her own diet.

These nutriments were given with a good deal of freedom, partly because they were agreeable to her appetite, but mostly, because it was deemed best to keep her system sustained to its highest point; and concentrated articles were preferred, to avoid loading the bowels with excrementitious matter.

During the first week, two teaspoons would have contained the pus which was discharged by the incision; after this, for two weeks, the integuments suppurated rather freely.

At the end of the fourth week the wound was almost entirely healed, and the patient was allowed to get up and walk about the room if she desired. I saw her the 25th of December, 1867, when she was carrying the child in her arms, and seemed in vigorous health.

The wound had healed, except about a half-inch close to the umbilicus, where the granulations were uncovered by the skin, but looked healthy. She is advised to continue wearing an abdominal bandage for some time to come, but is no longer considered a patient. An interesting point in this case is, that the girl herself did not know what operation was to be performed for her relief, and it is certain that at least two weeks had elapsed before she fully comprehended its magnitude.

(Since the above has been in type, we learn from Dr. Townsend that the wound has entirely healed, and that the patient has, contrary to the earnest advice of her medical attendants, married her paramour. There is, then, a bare chance that the operation may be repeated at no distant date.—Ed.)

New Method of Closing Bleeding Vessels.—Mr. Thomas Nunneley, Surgeon Leeds General Infirmary (*British Medical Journal*), has devised a peculiar, long and slender-nibbed spring forceps, for the purpose of pressing together the mouths of bleeding vessels. The jaws of the instrument are kept together by the crossing of their shanks and their expansion into an oval-shaped spring. The ends of the nibs are serrated, and the arms are made of different lengths, and the springs of different strength, to adapt themselves to deep wounds and large vessels. The forceps are brought outside of the wound, the rounded or spring extremity only being exposed. The writer claims that they are less liable to be disturbed, and to cause annoyance to the patient, than the acupressure needles.

AN ACCOUNT OF THE POST-MORTEM APPEARANCES OF AN APPENDIX VERMIFORMIS,

WHICH, TWO YEARS PREVIOUSLY, HAD BEEN THE SEAT OF ABSCESS, AND HAD BEEN OPERATED UPON BY PROF. WILLARD PARKER, M.D.

By G. H. WYNKOOP, M.D,

of New York.

In the Medical Record of March 15, 1867, Dr. Parker reported several cases of abscess of the appendix vermiformis. A few of the particulars of one of these (page 26) I will briefly refer to

On the 4th of December, 1865, Dr. Parker operated by a small incision. Some pus and a small calculus made their exit through the wound. The calculus was examined by myself, and found to consist of uric acid, biliary coloring matter, and débris of muscular food. On the 16th of the following January—the tumor in the meantime having disappeared, leaving only an indurated hardness—the patient was again attacked with violent pain, vomiting, etc., as at the first. On the 17th, some enlargement was noticed over the iliac fossa, and on the 20th (it having attained a large size, and fluctuation being discovered) I opened it, and a great quantity of pus was discharged. The patient recovered in a short time, and has never had any more trouble in that neighborhood. In the early part of Dec., 1867, he was attacked by fever of no well defined form, of which he died. On Sunday, Dec. 29th, twelve hours after death, with the assistance of Dr. Magie, I made the autopsy.

The appendix was attached by strong adhesions to the anterior abdominal wall, at about the external limit of the right inguinal region. The cæcum was also pretty firmly bound to the wall of the abdomen and iliac fossa, by adhesions. The appendix was given off from the cæcum normally, and was four inches in length. It did not lie curled upon itself, but was stretched out along the cæcum, and strongly adherent to it. The point of attachment to the abdominal wall was an inch to the right side of, and a little below the cicatrix of the former incisions. The contents of the abscess, therefore, must have worked their way for an inch or more between the abdominal muscles, before they showed any inclination to point. The parts being now removed and examined more in detail, it was found that the entire free surface (that which was attached to the abdominal wall) of the appendix was covered with a thick wall of false membrane, which was thickest at about its middle portion. At this point also, the appendix presented a tubular dilatation. Upon dissecting off this false membrane, the appendix beneath presented nothing abnormal in appearance until the point of dilatation was reached. Here there was found to be no true wall, the muscular and mucous coats being entirely absent. This dilatation extended three-fourths of an inch down the canal, and that portion of it which was without a true wall was probably one-fourth of an inch in length. Below the dilatation the appendix was normal as to its coats. On opening now the cavity of its canal, it was found to be pervious for two inches and a quarter. From this point for a quarter of an inch, it was entirely occluded, when it opened again into the dilatation spoken of above. The cavity of the dilatation was filled with a brown mucous secretion. The canal again became obliterated half an inch from the free extremity of the appendix, which from this point was converted into a solid cord.

That portion of its wall which was attached to the cæcum was normal as to its coats.

This specimen illustrates most perfectly the *preservative* efforts of nature. It is a full confirmation of the theories advanced in the paper above referred to. Undoubtedly the calculus which escaped when Dr. Parker operated, was the exciting cause of the difficulty. By it, inflammation, first of the mucous, then of the muscular, and finally of the serous coats of the appendix, was induced. The inflammation of the two inner coats went on to ulceration and destruction of their substance, and was limited in its extent; while that of the serous coat involved a greater area, and terminated in the effusion of plastic lymph, which glued not only the appendix, but also a large portion of the cæcum to the abdominal wall.

Furthermore, this effusion of plastic material was not designed for a temporary purpose simply, but having accomplished its end in keeping the contents of the abscess out of the peritoneal cavity, it was destined to remain as a lasting wall for the breach of substance made by the ulceration and destruction of the part.

43 UNIVERSITY PLACE, Feb. 12, 1868.

A CASE OF
SUBMUCOUS FIBROUS UTERINE TUMOR.

THE EFFECT OF ERGOT IN CAUSING ITS EXPULSION.

BY THEODORE R. VARICK, M.D.,

JERSEY CITY, N. J.

MRS. McG——, a widow, æt. 40 years, the mother of one child, first noticed, in November, 1866, a swelling in the hypogastrium about the size of a small hen's egg. This continued to grow steadily until the 11th of November, 1867, the date of her application to me. At this time the fundus uteri was on a level with the umbilicus. Eight months ago she was attacked with severe hæmorrhage, which recurred at short intervals, producing extreme prostration.

On a digital examination, the os tincæ was found sufficiently open to admit the first phalanx, and I was enabled to recognize the presence of a foreign body. The sound, which I was able to pass within the uterine cavity to the depth of six and a half inches, revealed a tumor developed in the anterior wall, extending all the way from the cervix to the fundus uteri, with a smooth surface, firm feel, and projecting boldly into the cavity of the womb.

A process of dilatation was commenced on the 15th of November, by means of tents of compressed sponge, and continued until the 15th of December, when the os being dilated to the size of a half dollar, I administered fl. ext. ergot in drachm doses every hour, until powerful uterine contraction was produced; which had the effect to engage the lower portion of the growth in the expanded cervix. With the assistance of Dr. B. A. Watson, of this city, I operated as follows:

The patient being placed on her left side, and the uterus steadied and forced down by external pressure as far as practicable, I grasped the tumor with a pair of broad-bladed forceps, and lacerated, to as great an extent as possible, the mucous membrane covering the growth. I then removed piece by piece as much of the tumor as was within reach, leaving the balance to be thrown off by uterine contraction. This last result was effected in nine hours. The portion thrown off came away *en masse*, was fibrous in character, and weighed fifteen ounces avoirdupois.

There was perfect freedom from hæmorrhage; and although no anæsthetic was used, the pain was trifling. A few days following the operation there was an offensive sanious discharge.

The subsequent treatment consisted of ℞. T. ferri sesquichloridi gtt. xx. ter in die; also ℞. Sodæ bisulphatis gr. xv. at the same intervals, allowing three hours to intervene between the administration of the different remedies.

There were also used frequent vaginal injections of tepid water, followed by ℞. Sodæ bisulphatis ʒss.; Aq. rosarum ℥j. M., one or two ounces of which were thrown up after each washing. Her recovery was progressive, and on the eighth day she was able to walk about her own and the adjoining room without any inconvenience.

The points of interest in this case were the absence of hæmorrhage during the operation, and more particularly the happy effect of ergot in expelling the major portion of the growth so speedily after the laceration of the capsule; thereby obviating, in a great measure, the danger of pyæmia, which has in more than one instance produced a fatal result in operations otherwise successful.

The greater safety of laceration, as compared with incision of the capsule regarding hæmorrhage, must be apparent to any one at all conversant with the principles of surgery; while a sufficient opening having been made, the growth, with attachments scarcely if at all greater, under these circumstances occupies an analogous position to a retained placenta or a blighted ovum; it needs but strong and persistent uterine contraction to produce perfect enucleation of the mass.

REPORT OF A
CASE OF LEUKÆMIA.

OCCURRING IN CONNECTION WITH OSTEO-MYELITIS, FOLLOWING AMPUTATION OF THE THIGH.

BY GEORGE A. MURSICK, M.D., OF NEW YORK,

LATE ASSISTANT SURGEON N. Y. VOLS.

THE following case came under my care during my service in the Stanton U. S. A. General Hospital, Washington, D. C. It presents all the characteristics of that form of disease described by Virchow as "Leukæmia," viz.: Enlargement of the spleen and lymphatic ganglia; a large excess of white corpuscles in the blood; the peculiar pale, earthy, or waxy complexion; emaciation; diarrhœa; dropsical accumulations; the "hæmorrhagic diathesis;" and the gradual failure of the vital powers. It is also interesting, by reason of its association with osteo-myelitis and pyæmia—of which one of the complications of the latter disease—pneumonia—appeared to be the immediate cause of death.

Case.—Corporal E. Stirling, of Co. E, 143d Pa. Vols., aged 32 years, was admitted to the hospital on the 13th of May, 1864. He had suffered amputation of the left thigh in its lower third, in consequence of a gun-shot fracture received in the battles of the Wilderness, Va., May 8th. He stated that at the time he was wounded his general health was good, and that he had suffered but little from sickness during his service in the army. When admitted he appeared rather pale and anæmic, and was somewhat emaciated; the flaps of the stump were partially united, and the discharge from it was moderate in quantity, but thin and flaky. A tonic (ferri et potassæ tart,) was prescribed for him, together with a moderate amount of alcoholic stimulants, and a liberal diet.

May 14th.—He had some diarrhœa, for which pills of opium and camphor were prescribed *pro re nata*.

May 16th.—The diarrhœa is checked; the discharge from the stump has increased in quantity, and the granulations look pale and flabby. He continued in

pretty much the same condition until May 27th, when secondary hæmorrhage occurred from the stump to the extent of about six ounces. The stump was laid open and a ligature applied to one of the branches of the external circumflex artery, which was bleeding; pretty free oozing of blood occurred from the surface of the flaps, which was readily controlled by the free application of the Liq. Ferri persulphas.

From this time the patient gradually became more pale and anæmic. His countenance assumed a dirty, waxy hue; his appetite failed him, and his strength grew weaker; œdema of the opposite extremity, and of the stump and face occurred, together with dropsical accumulations in the scrotum, abdomen, both pleural cavities, and the pericardium. The stump became painful, and an abscess formed among the muscles of it, which was incised and its contents evacuated. The flaps also commenced to slough, and there was a constant thin, watery discharge from it; the end of the stump bone became denuded of its periosteum; the medulla protruded from it, and it was soft, pulpy, and very dark colored.

August 10th.—He complains of pain in the right side, has some cough, with viscid sputa; coarse mucous râles and bronchial respiration are heard in the lower lobe of the right lung posteriorly; his respiration became embarrassed, his pulse more feeble, and he gradually sank and died August 12th.

Specimens of his blood have been examined from time to time, and were found (under the micro-cope) to contain an unusually large quantity of the white blood corpuscles. His urine was also frequently examined, and at no time did it contain albumen.

Autopsy eighteen hours after death. Body emaciated; skin of a pale clay color; no rigor mortis; the right lower extremity is œdematous.

Thorax.—Each pleural cavity contained about a pint of pale, straw-colored serum. The lower lobe of the right lung was in the second stage of pneumonia (hepatized), the left lung was œdematous, but otherwise presented no abnormal appearance. The pericardium contained about four ounces of serum; the muscular tissue of the heart was of a pale fawn color, softened and flabby; both ventricles and auricles contained "heart clots" of recent formation. No emboli were found in the pulmonary artery.

Abdomen.—It contained about a quart of straw-colored serum. The liver was enlarged, of a pale buff color (fatty), and softened. The gall bladder contained about two ounces of light colored bile. The spleen was enlarged one-half, was harder than natural, and its capsule thickened. It was of a pale brick color. Upon section its trabeculæ were unusually prominent. The kidneys were pale, exsanguinated; otherwise they presented no abnormal appearance to the eye. The urinary bladder was empty. The lymphatic ganglia of the groins, pelvis, and abdomen, were found to be very much enlarged, many of them to the size of almonds. They also contained a large amount of black pigment.

Stump.—The flaps had sloughed off; the bone protruded about one inch; four inches of it had necrosed, and a line of demarcation had formed around the portion that protruded, and it was about to separate. The remaining three inches was detached from the periosteum, and an involucrum had formed around it. Upon section of the bone the medulla was found to be in a gangrenous condition, to about four inches above the end of it, and was of a dark yellowish green color, interspersed here and there with small patches of yellow medulla, which had not yet completed its degeneration (gangrenous osteo-myelitis). No thrombi were found in any of the larger veins. The treatment was tonic and supporting, with anodynes to allay pain and restlessness.

No particular symptoms marked the advent of the pyemia before the lung complication manifested itself, though its existence was suspected for some time before his death. The absence of the rigors, the icterode skin and conjunctiva, and the typhoid symptoms which so generally mark the course of pyemia, rendered the diagnosis of these frequent sequelæ of osteo-myelitis difficult, and had not the objective symptoms of osteo-myelitis been so apparent, even the existence might have been doubted, so completely were the usual symptoms marked by the "phenomena of leukæmia."

SPONTANEOUS INVERSION OF THE UTERUS

DURING THE EXPULSION OF A FOUR MONTHS OVUM.

RESTORATION OF THE ORGAN TO ITS NORMAL POSITION, BY THE UNAIDED POWERS OF THE ORGANISM.

By H. B. TRIST, M.D.,

WASHINGTON, D. C.

On October 11, I was called to see Mrs. B., whom I found miscarrying. She supposed herself to be about the fourth month, or a little over. On examination, a mass was found apparently engaged in a patulous os, which naturally enough, at first blush, was taken to be the product of conception, and which it was confidently expected would at once yield to slight traction with the index. This procedure, however, failed to detach more than some small portions of membrane and clots. The attempt was then made with abortion forceps, but these were soon put aside, and recourse had to the finger as the safer means. The mass still resisting any safe degree of force, further effort was abandoned, under the impression that abnormal adhesions must exist, which in the course of a day or two would yield, and allow an easy expulsion or removal. At the expiration of this time, another examination revealed the same condition. By attentive and close exploration, a portion of the mass was found to give and to allow itself to be detached, to be peeled off the rest. After removal, it proved to be nearly the entire placenta, the small portion wanting having passed probably with clots at an early period. It was now evident that the elastic, pyriform mass, which in the first instance had been taken for an ovum, must be an inverted uterus, or possibly a polypus. Mrs. B. suffering considerably from irritative fever, it was deemed expedient to allow a few days' rest before attempting a reduction, there then existing no urgent indication to be met, no hæmorrhage, etc.

At the expiration of about a week or ten days, the same condition was manifest on examination. The mass, about the size of a lemon, was pyriform, elastic, and not of uniform smoothness. The posterior half of the os could be distinctly felt embracing it, anteriorly this could not be distinguished; pressure over the pubes imparted motion to the finger in the vagina, but no fundus could be perceived. A sound could only be carried to the depth of an inch or so, in any direction. Exploration by the rectum, a sedillot being in the bladder, gave no positive evidence of the pressure or absence of the fundus. Convinced now from the nature of the case and the results of exploration, that an inversion must be diagnosed, reduction was attempted by firm and continuous pressure on the fundus; the mass apparently yielded and diminished somewhat in size, but complete success failed, and not being prepared

to attempt any vigorous measure, further manipulation was abandoned.

Some days after, Dr. Wm. P. Johnson, a practitioner of great experience in gynecology, saw the case with me. After another minute examination, he decided that unquestionably we could have nothing but an inverted womb to deal with, and that so soon as the patient had regained sufficient tone to admit of the safe use of chloroform, reduction had better be attempted. Ten days from that time we again met. The patient was placed in position, the anæsthetic prepared, when to my great surprise, on the introduction of the index, no fundus uteri was felt; there was the patulous cervix, easily admitting the finger, and there the fundus quite as readily recognized above the symphisis. An inverted womb no longer existed!

Though abundant evidence of the highest character exists in medical literature, corroborative of the possibility of an occurrence like the one mentioned above, it is almost a duty for practitioners to put on record all remarkable and interesting cases falling under their notice.

That the uterus, when its walls are distended and softened from physiological or pathological causes, may, by the violence of its expulsive efforts, become spontaneously inverted, is a fact generally acceded. From one or two cases reported, it would appear, even, that inexplicable as it is, and contrary apparently to physical possibility, the organ may become inverted, without having undergone structural change. Baudelocque and Boyer both cite occurrences of this sort. In the first instance a virgin uterus is said to have undergone the change, and in the second, an invagination of the organ happened fifteen years after the last labor. Whatever doubt exists as regards Baudelocque's diagnosis, none can be admitted in Boyer's, for in this the catamenial exudation was recognized as coming from the body in the vagina, at the proper periods. Velpeau himself lends support to this case (*Dictionnaire des Dictionnaires de Medicine*).

Though generally admitted that spontaneous inversion may occur, the capability of the organ to readjust itself by its inherent power is generally not credited. Lisfranç in his Clinique de la Pitié, vol. 3, p. 391, says: It is even asserted that the uterus, when having been invaginated for some time, is susceptible of spontaneous reduction. * * * Baudelocque cites a fact of this nature, which was of seven or eight years' standing. Dr. la Barre reports another of the same character. Prof. Meigs, in his letter on inversion (Woman and her Diseases), adduces abundant evidence in support of the question; in fact, from his quotation from the essay by Dailez, it would appear that better than one-seventh of the cases are "self-adjusting." A. Courty, in his "Traité Pratique des Maladies de l'Utérus," etc., etc. (1866), recognizes the possibility of spontaneous reduction, though occurring very rarely, within a few days following delivery.

By considering the distribution of the muscular fibres of the womb, we can see how this displacement might occur. Supposing contraction to take place in the whorl of fibres concentrically arranged round the fallopian tubes, a narrowing or compressing of the fundus necessarily follows; the longitudinal fibres then coming into action must approach this narrowed fundus to the os, itself soft and patulous. Here, then, is an incomplete invagination, which, from persistent tenesmus, may result in complete displacement of the fundus. This accomplished, contraction occurring in the same set of fibres, the cervix again acting as the "point d'appui," the tendency must be to bring the fundus up through the os, though from the curve in the fibres at the neck much force is lost. In fact, the patient whose case is reported suffered considerably from uterine contraction two days before our last visit, and it is in the highest degree probable that restoration occurred at that time.

By whatever method we attempt to explain the mechanism of the process, muscular contraction must have been the power effecting restoration. As faithful students of nature and her ways, we may, therefore, in future succeed, after the usual methods have proved abortive in reducing the organ, by exciting contraction with the induced current, thus bringing about, if possible, a restoration.

Original Lectures.

LECTURES ON TUMORS:

BEING PORTION OF THE COURSE ON SURGERY AT THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

SESSION 1867–8.

BY S. D. GROSS, M.D., LL.D.,

PROFESSOR OF SURGERY.

(Reported expressly for the MEDICAL RECORD.)

III.

NO. X.—CYSTIC TUMORS.

THERE is a great variety of the cystic or encysted tumor, as it is sometimes called. There are two great forms; one is single, and the other is multilocular or proliferous. In the simple cyst there are usually only one layer or stratum, which is of course of variable thickness; still the inner surface is commonly perfectly smooth and polished. The outer surface is always rough and more or less connected with the surrounding structures by means of condensed cellular substance. The cyst in the advanced stage is capable of undergoing various degenerations. It becomes thickened; sometimes it undergoes the earthy transformation. The contents of the simple cyst are usually serous or serosanguinolent. In the former case the fluid is limpid, like water, coagulable with acids, alcohol, etc. In other cases the contents are more or less solid, as in the sebaceous tumor of the scalp. A cyst, however simple, has its blood-vessels, nerves, and absorbents. The cyst is usually slow in its growth, gradual in its development, and manifests no disposition, however long it may continue, or however bulky it may be, to take on malignancy. It simply acts as a matter of inconvenience, obstructingly.

The multilocular cyst is a very curious formation. Often connected with the parent cyst, there are offsets of cysts. Some of these cysts will contain one thing, and other cysts another. One may contain water, another a bloody fluid, another may contain fat, and another a semi-solid substance, and another an entirely solid substance. In the ovary it is not uncommon to find cysts of this kind containing hair, teeth, pieces of bone, in consequence of impregnation, followed by what has been called extra-uterine fœtation. Sometimes we find sebaceous substance. These multilocular cysts are capable of acquiring a large bulk; and sometimes they take on malignancy, especially that form known under the name of encephaloid. Large bloodvessels enter into the composition of a tumor of this kind. The walls of the cyst are originally thin or translucent; ultimately they become opaque, very dense, and fibroid in their character.

These tumors require treatment of various kinds.

We occasionally find a tumor in connection with the

tendons of the hand, more frequently the extensors than the flexors, forming what is called a *ganglion;* this is a cystic tumor. Little bodies are frequently contained in cysts of this kind when large and of long standing. Such a tumor requires removal, but in the more simple forms of the affection we make use of subcutaneous division, comminuting the sac in which the fluid is contained.

The cystic tumor of the scalp is always removed with the knife; it is not amenable to the absorbents. So with the cystic tumor in the inner surface of the cheek, in the labia, nymphæ, vagina, etc. Sometimes we let out the contents and inject an irritating fluid—as dilute tincture of iodine, thus producing obliterative inflammation. In other cases we are obliged to excise the tumor. The operation of ovariotomy has become fashionable, and very justly so. When performed in cases properly selected, and well executed, and the after treatment properly attended to, the mortality is not any greater than from many other capital operations.

XI.—HYDATIC TUMORS.

The hydatic tumor is a very uncommon tumor; a tumor produced by the presence of the hydatid, the acephalocysts, described by Laennec in the earlier part of the present century. It may occur in the mammary gland, the ovary, the liver, the subcutaneous cellular substance. You may have a solitary tumor, or numbers scattered throughout the affected organ. Sometimes we find a number of these acephalocysts; rounded or globular bodies shut up in the same bag, cyst, or cavity. They are composed usually of two membranes, more or less closely connected together, transparent or translucent in the earlier stages, but becoming more opaque as they increase with age. The inner surface is studded with immense numbers of little bodies, not larger than a grain of sand, distinctly cystic in their character, and containing each one or more of those little bodies called echinococci, a term signifying a spine. When such a growth is situated in the mammary gland, there will be a certain degree of fluctuation, but that will not enable you to determine whether the tumor is one of this character or whether it is an encysted tumor; and therefore you can determine the existence of a growth of this kind only by an operation. So, also, when situated in the ovary, only after the tumor is tapped, when the spines may be found in the fluid by examination under the microscope. So if, examining urine, you find these bodies, you are certain that there is such a tumor connected with the kidneys.

The proper remedy is removal. If left to itself, these structures at length perish, and in this way give rise to inflammation, followed frequently by the death of the individual.

XII.—POLYPOID TUMORS.

The polypoid tumor is so called because it resembles a polyp. Of this variety of tumor we have not less than four; for example, the gelatinoid or oyster-like polyp, which is the most common and the most simple. Then there is the fibroid polyp, resembling in its structure the fibroid tumor as already described, liable to take on malignancy. Then there is the vascular polyp, found most frequently in the rectum of young persons, bleeding on the slightest touch, composed mainly of blood-vessels, arteries, and veins, supported by connective or cellular tissue. Then there is the granular polyp, composed of a friable granular mass, found chiefly in the uterus and in the vagina.

These tumors occur in the outlets of the body, the nose, ear, throat, larynx, œsophagus, stomach, bowels—especially the rectum—vagina, vulva, uterus. In all these structures lined by mucous membrane there may be a development of a tumor of this kind.

The *gelatinoid* variety is most frequently found in the cavity of the nose; it is composed essentially of cellulo-fibrous tissue, the cavities or cells of which are filled with a sort of gelatinoid fluid, and it is covered by a reflexion of the mucous membrane of the cavity in which it is developed, having blood-vessels, frequently of large size, straggling in their arrangement, and also nerves and absorbents. It is often pedunculated, that is, attached by a narrow footstalk, and has a free extremity.

The *fibroid* polyp is uncommon—liable to occur more particularly in the uterus, in the vagina, and in the nose. In the latter situation it frequently assumes malignancy. Attached generally wherever it may occur by a broad base, especially in the nose, where it is adherent to the margins of the posterior nares, or the septum of the nose, liable to bleed, exceedingly tough, dense and firm. Such a tumor is an ugly growth, difficult of detachment, and exceedingly prone to take on malignancy when allowed to pursue its course.

It is usually removed by torsion. It must be got rid of as early as possible.

The *vascular* polyp is usually connected, by a long pedicle, to the bowel. The operation for its removal consists in seizing hold of it with a pair of forceps, and twisting it off; or tying it close to its point of attachment.

The *granular* polyp is uncommon. It looks not unlike the lobes which enter into the composition of the parotid gland. It is most liable to occur in the uterus and vagina, and also in the nose; it is slow in its growth.

All these tumors are covered by a reflexion of the mucous membrane of the part to which they are attached.

XIII.—MYELOID TUMORS.

The myeloid tumor is so called from its resemblance to the marrow of the bones—marrow-like—originally described by Paget and by Lebert. It is found most commonly to grow upon the surface or in the interior of the bones; sometimes in the mammary gland, occasionally in the uterus or ovary, now and then in the subcutaneous or intermuscular cellular tissue; it has been found in various parts of the body. Under the microscope it is found to consist of cells, some rounded or spherical, some oval, elongated, or lanceolated, very small, containing nuclei and nucleoli. A section consists of a mass, marrow-like in its consistence, or of a substance resembling tallow. It is highly organized, having large blood-vessels, nerves, and absorbents. It has no distinct envelope. The section often presents a peculiar pinkish or reddish appearance; now and then blotches of a livid aspect, characteristic, it is said, of this kind of formation. It grows rapidly, and is capable of acquiring a large bulk. When extirpated, it always returns. It is nothing but a modification of the ordinary encephaloid, or recurring fibroid tumor.

THE DIFFERENTIAL DIAGNOSIS OF BENIGN TUMORS.

A few general remarks on diagnosis will be much better than to individualize.

The *hypertrophic tumor* can generally be diagnosticated from the history of the case. Thus, when there is an enlargement of the tonsils, you cause the patient to open the mouth, depress the tongue, and look into the throat. The glands will present themselves increased in size, and increased in hardness; there are few cases where enlargement and induration do not coexist. In regard to goitre, there is no difficulty in the diagnosis; there is a tumor under the skin, which moves with the larynx.

In regard to the *vascular tumor* there is no difficulty. Its color is always sufficient to enable you to distinguish between it and other morbid growths; it is reddish, or purple, or modena in appearance. Its consistence is always soft; and if it is aneurismal in its character, there will be an impulse or pulsation synchronous with the contraction of the left ventricle of the heart.

The *horny tumor* can always be readily distinguished by its shape, consistence, and appearance.

The *fatty tumor* has a softish, inelastic, doughy consistence; grows very slowly; is generally situated immediately beneath the skin, or between the skin and the muscles, or among the muscles; it never degenerates into malignancy; has no tendency to ulceration; there is no enlargement of the subcutaneous veins; no hardening.

In regard to the *fibroid tumor*. This is usually slow in development, situated most frequently underneath the skin, or beneath the skin and among the muscles, and in the interior of the uterus; generally very slow in formation; very firm, dense, and resisting; seldom acquiring a large magnitude except when it occurs in connection with the uterus; no enlargement of the subcutaneous veins; no discoloration of the skin; usually circumscribed; sometimes movable, at other times confined or restricted in its movements.

The fibro-cartilaginous tumor, or *enchondroma*, varies in consistence between the fibroid and the bony, partaking of the character of both. It is also slow in development, capable of acquiring large size, and usually found in connection with the skeleton, sometimes below the skin and among the muscles. The history of the case, the want of pain, and the absence of malignancy will serve, along with its consistence, to illustrate its diagnosis.

The *bony tumor* can always be readily distinguished by its form and consistence, and by its connection usually with a portion of the skeleton.

The *cystic tumor* always fluctuates more or less distinctly under pressure. If any doubt remains, all we have to do is to use an exploring needle, and the escape of fluid will generally determine the character of the affection. It is slow in development, sometimes congenital, oftener acquired.

The *hydatic tumor* has nothing of a diagnostic character during any stage of its progress. We can determine its existence when it occurs in the lung, kidney, or liver, by finding some of the hydatids in the expectoration, urine, or feces; or if there is an opening in the wall of the abdomen, for instance, attended with discharge.

In regard to the *polypoid tumor*, that occurs always in the outlets of the body, the nose, or ear, or throat, or maxillary sinus, or in the rectum, the vagina, or the uterus. Usually one can readily determine the nature of the case by inspection, and by means of the touch.

The *myeloid tumor* I believe to be nothing but a variety of encephaloid, and its characteristics distinguish it.

If you can remember these facts brought prominently before you, you will have little difficulty in arriving at a correct diagnosis.

THE CONDENSED MEAT FROM AUSTRALIA is beginning to constitute quite an important article of trade, especially with England. It is prepared according to Baron Liebig's formula, but on an extensive scale. The process consists in removing every morsel of fat, tendon, etc., the soluble matter of the meat itself being then extracted by steam. The liquid thus obtained is dried by evaporation to the consistence of extremely thick jelly.

Reports of Hospitals.

BELLEVUE HOSPITAL.

LATERAL OPERATION FOR LITHOTOMY.—THREE INCHES OF CATHETER BROKEN OFF AND IMPACTED IN THE BLADDER.

SERVICE OF DR. SAYRE.

REPORTED BY CHAS. S. BULL, M.D., ACTING HOUSE-SURGEON.

W. H——, æt. 45, married, a native of the U. S., and by occupation a farmer, was admitted to Bellevue Hospital, Dec. 26, 1867.

The patient stated that about three years ago he first began to be troubled with slight difficulty in micturition. He took no particular notice of it at first; but it gradually increased to such a degree, that life became a burden to him. He denied ever having had any venereal disease, and was unable to assign any cause for his trouble.

About a year after this difficulty in micturition first appeared, a small swelling showed itself in the perineum, accompanied by pain and redness. It rapidly attained the size of a hen's egg, was opened, and pus freely discharged. He then passed most of his water through the fistula, and it was six or seven months before the latter was entirely closed. The difficulty in micturition again returned, and he resorted to the use of a catheter to relieve his pain. Subsequently a small fluctuating tumor appeared in the same place as the previous one, which was poulticed, and discharged some pus, and soon healed. This time he did not pass any water through the opening in the perineum.

About the 1st of September, 1867, while using a small gum elastic catheter, the instrument broke off, leaving about three inches of it in the bladder. Since then he has suffered from symptoms of stone, and the difficulty in micturition has increased. On admission into the hospital, he was in a very low condition, being considerably emaciated, and his urine dribbling from him constantly. A No. 12 conical steel sound was introduced, but was arrested five and a half inches from the meatus. Nos. 11, 10, 9, and 8 were then introduced, but neither of them penetrated the stricture. No. 7, however, passed through it and entered the bladder. It was allowed to remain for a short time, and was then withdrawn and No. 8 introduced, which passed readily through the stricture. No. 9 was then with some little difficulty passed into the bladder, and on its withdrawal a few drops of blood followed. No further attempt was made to dilate the stricture.

A consultation having been called, it was decided to operate on January 10, 1868.

The patient was etherized, and placed in the usual position for lithotomy. Dr. Sayre performed the ordinary lateral operation, the incision being about two inches and a half in length. Some hæmorrhage occurred, which was readily controlled. On entering the bladder, a hard mass of considerable size was felt, lying transversely across the neck of the organ. A pair of lithotomy forceps were introduced and an attempt was made to remove the mass entire, but it was so friable that it had to be removed in pieces. It proved to be the remains of the catheter, which had become incrusted with the urinary deposits, but not throughout its whole extent, for the incrustations formed a loop, extending from one end to the other, the central portion being free.

The patient rallied well from the operation, and the wound in the perineum healed very rapidly. A sound was passed on him every day, but the stricture has again contracted, so as to admit only a No. 6 conical bougie.

The man, however, passes a good stream, and but very little escapes through the wound. He was discharged February 3, 1868, at his own request.

Progress of Medical Science.

Identity of Fungi of Favus and Tænia Circinnata.—Dr. John M. Purser has a very able article tending to prove the above, in the last number of the *Dublin Quarterly Journal of Medical Science.*

Tuberculous Inoculation.—Dr. Lebert, continuing his researches on this topic, has at length obtained positive results, having demonstrated it on the *coelhos* and *porquinhos* of India, which he inoculated with tuberculous matter. He afterwards found tubercles in the liver, spleen, pericardium, pleuræ, and throughout the entire lymphatic system, and a microscopical analysis demonstrated that these tubercles were the same as found in man.—*Gazeta Med. da Bahia.*

The Cause of Caries in Teeth.—It has been established by an English surgeon (Dr. I. P. H. Brown) that this condition of the teeth commences to manifest itself in many women after fecundation, for, during that state, the mother is called on to furnish precisely this calcareous element, for the development of the fœtal structure; and when this assimilating material is insufficient, the fœtal organization must be supplied at the cost of the bone proper of the teeth—a material difficult of repair, but admitting of ready and rapid deterioration. Dr. Mayitot, in his new treatise on dental caries, demonstrates that the saliva of the mouth, in consequence of the change in its composition, in various diseases, as typhoid fever, dyspepsia, etc., exercises a hurtful influence, and is a true cause of dental caries.—*Gazeta Med. da Bahia.*

Cerebral Congestion in Insanity.—M. Lisle regards arsenious acid, in doses of from five to sixteen milligrammes (from about one-tenth to one third of a grain), given three times a day before meals, as a specific remedy for cerebral congestion in insanity.—*L'Evénement Médical.*

Discovery of a New Human Parasite.—Dr. Judée reports in the *France Médicale* the discovery of a new parasite, which produces the same symptoms as the acarus of the itch; but essentially distinct in appearance. This insect is black, visible to the naked eye, and about the size of a punctuation point. There are no ridges on the skin as seen in the itch caused by the burrowing of the acarus. Examined by the aid of lenses and the microscope this new insect is found composed of a head armed with two antennæ, of an abdomen, and of four pairs of legs having each four joints. Examined with a power of one hundred and forty diameters, the body and legs are seen to be covered with hairs. The insect is destroyed and the eruption cured by the use of Helmerick's ointment, which contains sulphur and subcarbonate of potassa.

A Curious Case of Rupture of the Diaphragm.—John D. Hill, M.R.C.S., relates the particulars of a case which lately occurred to Mr. Marsden, that is interesting in a clinical point of view. The patient was a male forty-six years of age, who was crushed by a mass of earth while making an excavation. He was immediately after extricated in a state of collapse, from which, however, he subsequently rallied. During the first forty-eight hours he suffered from great embarrassment in breathing on the slightest motion, and also passed a considerable quantity of bloody urine. The only way in which relief was afforded was by lying on the right side with the lower extremities drawn up. The case progressed favorably until the twenty-second day, when, the patient feeling so well and desiring to change his position, was soon after seized with internal hæmorrhage, from which he shortly after died. At the post-mortem it was found that the liver had been ruptured, and its lacerated portion had been crowded through a rent in the right wing of the diaphragm in such a manner as to prevent accident, until it was dislodged by the unfortunate change in his position. The right kidney showed a cicatrix of a recently healed laceration.

A Study to Serve as a Basis for the Nosological Classification of a Special Epidemic of Paralysis prevailing near Bahia.—The following interesting extract is taken from the able article of Dr. Julio Rodrigues de Moura, in the *Gazeta Medica da Bahia* (Brazil), of July 31st, 1867: An epidemic paralytic affection, which has been so prevalent of late in Bahia, and which is so identical with certain cases which I have observed in my own modest clinics, offers several points of observation and study. And since comparing my cases with those presenting similar symptoms noticed by the distinguished physician of the Hospital da Caridade, Dr. Silva Lima, who agreed with me in my opinion concerning this curious affection, I have determined, by the aid of my notes, and in consideration of the importance of the disease, especially when its general fatal termination is known, to cite the cases constituting my experience. The doctor then proceeds to speak of the difficulty of a correct diagnosis in the cases, and of his own present state of indecision in regard to the disease, and then refers to the symptoms. He says: "The following symptoms are well marked: Gastric symptoms, as anorexia and vomiting, preceded and accompanied by a paralytic lesion, pains, resembling the phenomenon of muscular neuralgia, increased on pressure by walking, by any movement, and accompanied by an œdema, which gradually invades the lower extremities, then the superior, then the face, and then the entire body—a sensation of epigastric tightness, blunting of the cutaneous sensibility, an absence or diminution of the urinary secretion, and terminating finally in rapid sinking, anæmia, typhous symptoms, dyspnœa and asphyxia." The doctor cites, in this number of the *Gazette*, seven cases, in four of which death ensued, and in three of which a cure was the result. One of the latter is translated: "Case 3d. C. J. d'A., aged forty-two, sanguine temperament, single, strong constitution, street-paver, and an inhabitant of Surubby. In February, 1866, he presented himself to me complaining of some trouble, which, he averred, he derived from *serious thoughts!* He stated he had never suffered from syphilitic taint, nor from rheumatism, but was led to tell me of his having had a grave disease, resembling, from his description, pernicious fever, for which he had been treated. Shortly after his entrance, he complained of a muscular torpor and weakness, great difficulty of locomotion, especially when going upstairs. Œdema of the lower limbs took place, anorexia and moral apprehensions, then a feverish flush passing up the spinal column. This patient was much improved at once by the exhibition of potass. iodid. taken in an infusion of bupulin, to which was added the syrup of codeia. At the same time, stimulating frictions were used, in which was the composition of the English liniment of the tinctures of pepper and nux vomica. The muscles soon acquired their natural strength, the œdema passed off, and finally the man was discharged well." Dr. de Moura lays great stress

on the *drowsiness* and *moral apprehension* or *timidity* occurring in the course of the disease.

Lancing the Gums in Children.—Dr. F. H. Thomson (*Glasgow Medical Journal*), believing that the irritation of teething is caused by the engorgement of vessels supplying their circulation, advises the practitioner to cut low down at the reflected junction between the lip and the gum, instead of upon the summit of the gum itself.

Bisulphite of Lime as an Antiseptic.—According to W. S. Scott, F.C.S., the bisulphite of lime possesses the valuable property of arresting decomposition when added to mixtures. He uses it to preserve ointments from rancidity (a fluid drachm to the pound being sufficient for such a purpose), and also advises its employment with beef-tea and jellies for the same purpose.

Camp Itch.—Dr. F. W. Hunter recommends the following as a remedy: Take four ounces of fresh May-apple root, put into one pint of water, boil down to two ounces, and add two ounces of lard, and half an ounce of tinct. iodine; scent with oil bergamot, q. s. Wash the affected parts with castile soap and water, and apply the ointment at once. Two applications will suffice.—*Half-Yearly Compendium of Medical Science.*

Decapitation in Cases of Transverse Presentation.—Dr. Emil Meissner reports in the *Wiener Medical Wochenschrift* that out of 8,500 cases presenting themselves at the clinic of Professor Spalth for obstetrical attendance, the operation of decapitation was twice performed. In both cases the internal os was so constructed that turning was impracticable. In one case it was found necessary to crush the head with the cephalotribe before it could be extracted. In the remaining case the head was extracted without much difficulty, by the forceps. Both cases made a good recovery.—*Half-Yearly Compendium of Med. Science.*

Tooth-ache Drops.—The following is considered a very good application for cavities of carious teeth: Equal parts of creasote, laudanum, chloroform, tinct. aconite, tinct. of iodine, and liq. plumbi subacetat. It is used upon a pellet of cotton.

Joint Inflammation.—Mr. Barwell, Surgeon to Charing-Cross Hospital, is in the habit of treating cases in which the acute symptoms have subsided, with the applications of iodine and bicarb. of potash, also combinations of iodide of lead and iodide of potassium. The latter he considers as a most valuable absorbent in cases of strumous and rheumatic thickening.

Excess of Urea in certain kinds of Dyspepsia.—Dr. Fuller recently remarked before the Royal Medical and Chirurgical Society concerning the association of an excess of urea with certain forms of dyspepsia, attended with strongly marked nervous or hypochondrial symptoms. He believed that the urea was produced from the elements of the food during the primary processes of assimilation, probably as a consequence of perverted nervous action.

Traumatic Aneurism of Uterus.—Dr. Graily Hewitt presented to the London Pathological Society a case of the foregoing. The woman was delivered with the forceps, and everything went on satisfactorily until the fourth day, when she suffered violence from a drunken husband, who knelt upon her. This was followed by a good deal of inflammatory action about the uterus, and hæmorrhage, which eventuated in her death at the end of the thirty-seventh day. A pouch was found at the post-mortem on the right side of the organ, in which was a nodular swelling, the size of a nut, containing clotted blood, and communicating with one of the large uterine vessels.

Carbolic Acid as a Dressing for Surgical Wounds is becoming fashionable with surgeons. Used in the form of solution in water, in the proportion of a drachm to the pint, it is a valuable remedy.

Vulcanized India Rubber Catheters are used by MM. Rechet, Maisonneuve, and others, with good results. They seem to find their way into the urethra with the utmost facility, and cause no pain.

Gastric Neuralgia with Arsenic.—Dr. Leared, of the Great Northern Hospital, strongly advises the use of arsenic, in the form of Fowler's solution, in such cases. The dose is from two to five minims thrice daily, after meals.

The Medical Uses of Chloroform.—In an article with the above caption in the *Dublin Quarterly Journal of Medical Science*, Dr. Charles Kidd, of London, gives a very interesting review of the uses of this anæsthetic. He is not a believer in mixed vapors, and is of the opinion that it is much safer to give ether or chloroform separately. As regards safety, he avers that chloroform will rank above all the other anæsthetics when used with care, forethought, and skill. He alludes to the great benefit arising from its administration in the different affections hitherto regarded as intractable, such, for instance, as tetanus, hooping cough, gall-stone colic, hydrophobia, and for the pain occasioned by the treatment of aneurisms by compression. He believes, with Brown-Séquard, that chloroform proves fatal by active reflex influence, due to the sudden irritation of the branches of the par vagum in the lung, at least in those cases in which the heart's action ceases before the respiration. Death occurs only in the incomplete stage of the anæsthetic process, and not when motive power is abolished. "In other words," says he, "in trivial operations mostly, and before the patient is well put under chloroform, the accidents have occurred. Almost like a nettle (unpopular as this idea may be), chloroform stings when lightly touched, causing laryngeal spasm."

Reunion of an Amputated Finger.—Mr. Walter Bernard, L. K. Q. C. P. (*British Medical Journal*), relates the case of a lad who had half an inch of his finger separated in an oblique direction through the nail by a circular saw. Although the patient was seen twelve minutes after the accident, the severed portion of the member, after having been cleaned of the dirt into which it had fallen, was accurately applied to the stump, and united after a time throughout its entire extent.

Treatment of Menorrhagia.—Dr. Murray, of the Great Northern Hospital, treats those obstinate cases of menorrhagia dependent upon enlarged uterus and granular mucous membrane with cotton plugs saturated with sesquichloride of iron, introduced into the uterine cavity. He allows them to remain *in situ* for 24 and 48 hours.

Heartburn.—Dr. F. W. Pavy (*Digestion and its Disorders*) says, in speaking of this very common complaint, that rich living is a frequent source of its production. He is inclined to think that the burning sensation at the pit of the stomach is due to a retrograde flow of bile into the cavity of the viscus, but Dr. Leared believes it to be produced by butyric acid either taken with pastries or formed in the process of imperfect digestion. The treatment advised is mainly comprised in the administration of alkaline reagents.

A very useful form is a combination of carbonate of soda or ammonia with rhubarb and magnesia, or with rhubarb and calumba. Sometimes the liquor potassæ is to be preferred. The Selzer and Vichy waters are sometimes very agreeable, and valuable as correctives. When of very long standing it is best relieved by dilute mineral acids, nitric being in most cases the preferable one.

Delirium Tremens treated with Cannabis Indica.—Dr. Bedoe, Physician to the Bristol Royal Infirmary, advises, in the treatment of *mania-a-potu*, the employment of the cannabis indica. He usually begins with a grain of good extract or twenty minims of the tincture; waits from four to six hours, and then, if the patient be awake, gives a double dose. If this also prove fruitless, six hours later he gives three or even four grains; then allows six or eight hours to pass, and if necessary tries a yet larger dose. Longer intervals are obviously needful for extract than for tincture. In one case Dr. B. gave as much as six grains before the patient began to sleep. Along with the remedy he is accustomed to give as much soup, milk, and other digestible food as the patient's stomach will bear, and says that cannabis does not injure the appetite as does opium. He rarely gives alcoholic stimulants unless the pulse gives unmistakable evidence of its propriety.

Treatment of Diseases of the Heart.—Dr. S. O. Habershon, Physician to Guy's Hospital (*Guy's Hospital Reports*, 1867), lays down seven principles of treatment for diseases of the heart: 1st, to lessen its work; 2d, to insure regularity of action in avoiding all excitement; 3d, to lessen the distension of the right heart by purgatives, diuretics, etc.; 4th, to prevent syncope, attendant upon exhaustion; 5th, to strengthen the fibres of the heart by suitable out-door exercise; 6th, to prevent fibrillation of the blood by suitable remedies, for instance, carbonate of ammonia; and 7th, to prevent secondary complications, such as pneumonia, pleuritic effusion, etc.

A new Form of Cystitis.—Dr. Heller, in charge of the Pathological Chemical Laboratory of the Imperial General Hospital in Vienna, made the following communication before the Society of Physicians of that city: In cases of vesico rectal fistula it not unfrequently happens that as, on the one hand, the urine flows into the rectum, giving rise to liquid stools; so on the other, faecal matter finds its way into the bladder, and is found in the urine discharged. It has, however, escaped the observation of the profession up to this time that a form of cystitis exists, in which, with a completely closed bladder, faecal matter shows itself in the urine. Heller has observed twenty cases, partly in hospital partly in private practice, where investigation showed faecal matter in the urine during life, and an autopsy discovered a normally closed bladder. According to his experience this form of cystitis occurs in certain inflammatory affections of the brain and spinal cord. The presence of faecal matter in the urine will be apparent on treating it with concentrated sulphuric acid. An intense faecal odor will thus be developed. He succeeded in these cases in separating the faecal matter from the urine by the processes of distillation and filtering. According to Dr. Heller's observation, this urine, in comparison with that of other forms of cystitis, is less viscid and contains but little mucus or sediment. In all cases where such a cystitis (which he would call *cystitis fæculenta*) occurred, the prognosis was very bad and death soon supervened.—*Allgemeine Wiener Zeitung.*

Effect of Condensation of Population on Life.—At the recent meeting of the Massachusetts Medical Society, Dr. Edward Jarvis, of Dorchester, read a paper on the "Effect of Condensation of Population on Life." After giving copious statistics to show the tendency of the population of all countries to centre in cities and large towns, and speaking of the increase of cities by condensation as well as by extension, Dr. Jarvis considered the subject in its mortuary aspects. In many cities, he observed, the deaths of natives annually exceeded the births of children of native parents. It was extremely rare to find a citizen of Paris with many generations of Parisians among his progenitors. London needed 10,000 recruits from the country each year to keep its number good. In speaking of the effect of condensation on the rates of mortality, Dr. Jarvis said the registration reports of England for thirty years showed an average annual mortality of 26 to 1000 in the closest districts, and 16 to 1000 in the sparest districts. The difference of mortality in town and country was not exactly proportional in all the causes of death. For instance, there was a much larger proportion of deaths by zymotic and nervous diseases, and diseases of the respiratory and digestive organs, in the city than in the country; while the proportion of deaths by old age was 37 per cent. larger in the country than in the city. The mortality of children was also greater in the city,—the excess of deaths of children under five years, in English towns and cities, from 1851 to 1860, being 152 per cent. over the proportion prevailing in the country.

In considering whether this excessive mortality in cities is inherent and unavoidable, Dr. Jarvis attributed much of it to the destitution and privation; the dangerous occupations and the protracted labors of many of the inhabitants of cities; the compactness, narrowness, and crookedness of the streets leaving little chance for the circulation of air; and the excessive mental exertion, and undue expenditure of the vital powers by the better classes. In so far as these causes could be removed, the rate of mortality would be lessened. Sanitary improvements in 19 towns and cities of Great Britain had reduced the rate of mortality from 28 in 1000 to 21 in 1,000. In Liverpool the decrease was 30 per cent. The same might be done here, in Boston and New York.

Congenital Atresia of Anus.—The *Gazette Médicale* of Strasburg, of May 25, contains an interesting paper in which is reported a case of congenital atresia of the anus, successfully operated by Prof. Rizzoli, of Bologna, and communicated to the Society of Medicine of Strasburg by Prof. Stoltz. By an incision from the fourchette to the coccyx, the terminal enlargement of the rectum was exposed and separated by dissection, and also the little canal by which it communicated with the vulva. The posterior surface of the rectum was slit longitudinally, its inferior extremity completely isolated, drawn down and fixed to the integument at its proper place.

Ligature of Femoral for Lacerated Wound of Knee-Joint.—A case, at the London Hospital, of acute inflammation in and about the knee-joint of a male adult, who had sustained a lacerated wound of the joint, has been treated (at the suggestion of Mr. Maunder) by ligature of the femoral artery, with a view to modify the inflammatory action. "Thirty days," says the *Lancet*, "have elapsed since Mr. Little applied the ligature at the apex of Scarpa's triangle, and the case has hitherto progressed most satisfactorily. Mr. Maunder proposes also to ligature the brachial artery in cases of acute inflammation of the palm of the hand."

Corpulency as a Risk in Surgery.—The over-fat are certainly a bad class, especially when their fatness

is not hereditary, but may be referred in any degree to their over-eating, soaking, indolence, and defective excretions. The worst of this class are such as have soft, loose, flabby, and yellow fat; and I think you may know them by their bellies being pendulous and more prominent than even their thick, subcutaneous fat accounts for; for this shape tells of thick omental fat; and, I suppose, of defective portal circulation. I know no operations in which I more nearly despair of doing good than in those for umbilical hernia or for compound fractures in people that are over-fat after this fashion. Nothing short of the clearest evidence of necessity or of great probable good should lead you to advise cutting operations in people of this kind. Do lithotrity for them rather than lithotomy; incline against amputations for even bad compound fractures; and, wherever you can—as for instance, for cutaneous cysts, hæmorrhoids, and the smaller examples of scirrhous mammary cancers—use caustics rather than the knife or ligature.—James Paget, *Lancet.*

Syphilis and the Bottle.—There are so many ways of contamination that some are probably to this day unknown. The blowing of bottles has lately been the means, at Montluçon in France, of spreading the complaint from one individual to almost all the workmen of the glass-house. Such danger had been long pointed out by the medical men of Lyons, and one of them had even contrived a mouth-piece which would prevent the mischief. But manufacturers and their men are impatient of restrictions, and will not listen to scientific advice until the mischief is patent.

Novel Accident attending the Operation for Vesical Calculus.—By Moses Gunn, M.D., Chicago. A patient, greatly emaciated, and experiencing all the subjective symptoms of vesical calculus, which he had felt for twenty-seven years previously, came to the College Clinic. A stricture was discovered through which only a No. 1 sound could be passed. A large calculus was discovered in the bladder, and one or more smaller ones in the urethra posterior to the stricture. The patient was etherized, and a No. 2 staff introduced. After the incision had been made upon the staff, and while the assistant attempted to depress it to facilitate opening the urethra, the instrument broke completely off at the commencement of the groove, and the detached portion receded into the bladder. A No. 4 staff was then introduced by using considerable force, the incision was completed, and first the fragment of the staff was removed, then a large calculus and two smaller. The larger one was an ammonio-magnesian phosphate. The patient made a good recovery.—*Chicago Medical Journal.*

The Dose to suit the Age.—To reduce the dose of any drug (except narcotics and perhaps mercurials) according to the age of a child, the rule suffices to divide the dose for an adult in proportion to the number of years of the child's age increased by twelve. Thus for a child of two years the dose will be $\frac{2}{14}$ (2 divided by 2+12) or $\frac{1}{7}$ of that of an adult; for a child of three years (3 divided by 3+12=15) $\frac{3}{15}$ or $\frac{1}{5}$, etc. Opium and other narcotics act more powerfully upon children; so that their dose should be reduced in a greater degree, calomel and other mercurials do not so readily affect the glands, at least, in children as adults.—*Hartshorne's Essentials of Medicine.*

Hæmorrhagic Diathesis.—A boy of seven years, in falling, wounded his tongue with one of his incisors. He was blanched, and almost pulseless, forty-eight hours after the accident. The perchloride and persulphate of iron, and a sharp pencil of nitrate of silver, had already been applied, and long-continued compression had been used without success. On inquiry, it was ascertained that hæmorrhage from a slight cut of the finger had nearly proved fatal on a former occasion. Instead of the actual cautery evidently here indicated, the application of nitric acid was substituted by the following method: A few drops of fuming nitric acid were drawn in succession into a glass tube having a capillary extremity. This was pressed into the puncture, and several drops of the acid injected into the bottom of it by compressing the air in the tube with the lips at the opposite extremity. The arrest of this hæmorrhage was instantaneous and permanent.—G. R. Patton, M.D., in the *Cincinnati Lancet and Observer.*

Liquor Ferri Persulphatis in the Treatment of Intermittent Fever.—Dr. G. H. Lenoir, having witnessed the unpleasant effects of quinine in intermittents, was persuaded to try this preparation of iron in several cases where quinine not only led to unpleasant results, but failed totally to cure the disease. The patients to whom the iron was administered, had been taking quinine for some weeks, and some for months. Immediately after the administration of the iron, the chills ceased, and in but one case was there a recurrence of the disease, and in that the patient had but one chill, after which there was no symptom of a recurrence. The dose is from gtt. viij. to gtt. xv. every four or six hours, generally preceded by a dose of pil. cath. comp. This preparation of iron is also a most powerful styptic in epistaxis, hæmoptysis, and all minor hæmorrhages.—*Southern Journal of Med. Sciences.*

Treatment of Spina Bifida.—Dr. J. S. Carodec, of Brest, in the *S. Union Médicale*, gives a mode of treatment which has succeeded in radically curing two out of three cases of spina bifida in which he tried it. One of the cases was in a child one month old, who was suffering from a tumor in the lumbar region, three inches long and two and a-half inches wide. The skin covering it was reddish, smooth in some places, and rough in others; the tumor was translucent, and as no opaque body could be discovered in it, he concluded it contained none of the spinal cord. The fissure in the column was not large, and the liquid was with difficulty forced into the canal. Moderate pressure gave an uneasiness and a tendency to convulsions. All the functions of the child were performed with ease. June 21st, it was concluded to operate by means of iodine injections. The tumor was punctured with a fine trocar, and partly emptied of a clear, colorless liquid, closely resembling the cerebro-spinal fluid, and a light compress applied. On the 23d the fluid had again collected, and on the 24th the tumor was again punctured, and about an ounce of the liquid evacuated. ℥ ss. of a solution of iodine (aquæ ℥ v. to tr. iod. ℥ j.) was then injected. After allowing it to remain three minutes it was pressed out, and the tumor covered with collodion. Next day the patient seemed well, and the tumor showed signs of inflammation. June 30th, tumor again punctured, and ℥ j. of the solution injected. During the operation, the opening into the spinal canal was kept closed by pressure of the fingers at the base of the tumor. From the 1st to the 5th of July the tension of the sac diminished, and the general health of the patient was good. July 6th, a fourth puncture was made, and ℥ ij of the solution injected. From this date to the 12th the walls of the sac began to diminish and to be indurated. On the 12th, a fifth puncture was made, and ℥ iij. of a solution (aquæ ℥ iij. tr. iod. ℥ j.) injected. From this time the tumor became more and more dense and opaque, owing to the evident deposit of lymph. July 21st, another injection was made, half water and half

iodine. The last injection was made August 2d, after which the opening into the spinal canal closed entirely, and no fluctuation could be detected. Four months afterward the child was perfectly well, except a slight weakness of the legs, and was of the average intelligence. The other two cases were similar to the above, and the treatment the same. In the case of the patient who died, the progress was satisfactory when the child was carried off by infantile cholera.—*Southern Journal of Med. Sciences.*

Cure of Opaque Cornea.—De Luca has just presented to the French Academy a paper, in which he states that he has found that sulphate of soda has the power of removing corneal spots in an almost incredibly short space of time. He was led to the experiment from the fact that it maintains the fibrin of the blood in a state of solution. He first used the salt dissolved in distilled water, and allowed the liquid to fall drop by drop on the ball of the affected eye, and the result was that, after some days' treatment, the opacity was, to a considerable extent, diminished. He then used the sulphate in fine powder, allowing a few particles to fall upon the eye. In this way a more decided result was obtained—one patient, who had previously been almost completely blind, regained a certain amount of distinct vision.—*Med. Times and Gazette.*

Hydrochlorate of Ammonia in Senile Gangrene.—M. Gru speaks of the efficacy of this remedy in this disease, and reports a case in which its good effects were marked. An old lady, 85 years of age, was suffering from acute pains in the right foot. The next day unmistakable evidences of gangrene manifested themselves. A solution of ammonia was made in the proportion of an ounce of the salt to a gallon and a half of water. After the foot was immersed for two hours, the patient was very much relieved. Whenever the solution was not applied the pain appeared. The natural color and heat of the skin also returned under this remedy. A year after the same patient had a return of the same disease, which, being treated in the same manner, was attended with great success.—*L'Union Médicale.*

Ergot in Paralysis of the Bladder.—Dr. Leon Serbet was called to a patient, aged 66 years, who had been suffering from incontinence of urine for fifteen years. On the day of the visit the patient had complete retention. There was no constriction of the urethra, marked sensibility, or obstacle to the passage of water, except a slight enlargement of the prostate. At the end of eight days the patient had still no power over the bladder. The case being considered as one of paralysis, owing to over-distention, it was concluded to try the ergot of rye in powder—thirty grains during the day. This produced no effect beyond slight pains in the hypogastric region, and the water still required to be drawn with the catheter. At the end of ten days the ergot was administered in fifteen-grain doses, four times daily, at twenty minutes' interval before and after a hip-bath given in the morning. From this time the patient could urinate, and the incontinence disappeared. This treatment was continued for fifteen days, at the end of which time the patient was cured.

Strychnine in Epilepsy.—Mr. Tyrrell, in the *Med. Times and Gazette*, has reported a number of cases in which he tested the efficacy of strychnine in this disease. The first case in which he used it is thus described: "The first case in which I used strychnia was in 1860 in a patient 28 years old, who had been for some time losing flesh and strength, and had latterly been subject to attacks of epilepsy. After enforcing rules for diet, exercise, etc., I prescribed for him the sixteenth part of a grain of the sulphate of strychnia, to be taken twice daily in solution. Under this treatment, at the end of two months, he entirely recovered, has had no further attack, and is improving in health and strength." Mr. Tyrrell further says: "I have seen, as yet, no case in which the strychnine did not exhibit a marked power in controlling and altering the convulsive attacks."

Opium Poisoning.—A case of poisoning by opium is reported in the *N. O. Med. and Surg. Journal*, where the antidote effects of atropine were produced in a few minutes by the hypodermic use of one-twelfth of a grain of atropine. The patient was aroused from profound coma, and made a perfect recovery.—*Southern Journal of Med. Sciences.*

Rupture of the Uterus.—A correspondent of the *Med. and Surg. Rep.* at Paris, reports from the *Union Medicale* a remarkable case related by Dr. Cheron. A patient during her seventh accouchement, the first stage proceeding slowly and the os dilating well, had a prolapsus funis which escaped by the vulva, and could not be replaced. The pains were violent for an hour and a half, when the patient suddenly experienced a sensation in the belly as if something had given way. She became pale, pulseless, and fainted. A vaginal examination revealed, instead of the fœtal head, a spongy mass, a sort of magma. The abdomen was bi-lobed, with a marked depression in the centre. The hand introduced into the vagina, penetrated into the abdominal cavity, and reached the left foot of the fœtus. The fœtus had escaped through the left side of the uterus into the peritoneal cavity, and was placed astride, as it were, on the edges of the wound. The left foot was withdrawn, and held by a cord; the right foot and the arms were successively drawn into the uterus, and finally with the finger crossed into the mouth of the child, the accoucheur was able to draw the entire body from the peritoneal cavity, and deliver. After delivery, a mass of intestines escaped, was four times pushed back into place, and as many times reappeared between the thighs. The patient was placed in an inclined position, with the pelvis elevated, and by this means the intestines were retained in place. Peritonitis ensued, and continued five weeks. Nevertheless the patient recovered completely, the menses were reestablished at the end of sixteen months, and four years later the woman was confined for the eighth time, and in perfect safety.

Ozena.—Mr. Heath, in the *Lancet*, recommends, in addition to frequent washings, the application of tannin in solution with glycerine (tannin, grs. i.-j., glycerine, ʒ i., aquæ ʒ i.), and blown into the nostrils with a spray producer for the treatment of ozena. It has the advantage of more fully spreading through the cavity, and the method may be advantageously employed in those cases of polypus nasi in which the nostril is so completely blocked that the patient cannot snuff up.

Puncture of the Bladder.—Dr. Mackie reports a case of distended bladder from retention of urine, owing to an impassable stricture. No urine had been passed, the supra-pubic operation was performed by a medium-sized trocar and canula. While the urine was still flowing, a small gum catheter was passed through the canula into the bladder, and allowed to remain, the canula being withdrawn over the catheter. A full dose of morphine was given after the operation. The following day the patient was free from pain, and able to pass his urine naturally. The catheter was withdrawn, and on the fourth day the external wound was entirely healed.—*Boston Medical and Surgical Journal.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEBMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, March 2, 1868.

DELEGATION IN THE STATE MEDICAL SOCIETY.

IN connection with the subject of *representation* in the New York State Medical Society, we desire to offer a few suggestions which were presented to our mind at the recent meeting.

As a general rule, county and other medical societies, and medical schools, have been in the habit of *soliciting* individual members to act as their representatives in the State Medical Society. In some instances, intriguing and ambitious members, by means of the machinery in common use in political caucuses and conventions, *have solicited* such appointments.

The rule should invariably be, to select as delegates to the parent Society, not such members as can conveniently attend, and who have private, personal, ambitious ends to gratify, but such worthy and honored men as have, by their lives and labors in the profession, emphatically earned the *title*, as well as the many privileges which belong to that representative capacity.

To be a delegate to the State Medical Society, is the first step toward membership in that body; and membership once secured, a man of ambition may aspire to fuller honors, and in the position of presiding officer may enjoy an opportunity of making his views as extensively known as the Transactions of the Society are circulated and read. If his opinions are sound in every way, no one will object to see them thus spread abroad. But the sentiments of such a man might, under certain circumstances, seriously compromise the venerable Society, which, through the addresses of Romeyne, Stearns, Mitchell, the Becks, the Coventry's, Eights, McNaughton, Wing, Spencer, Blatchford, March, Stephens, Clark, Howe, and others, has spoken clearly and boldly in support of the "truth as it is" in our profession.

Not only to prevent the evils of such an almost impossible contingency as the election of an unworthy President, but to add strength, dignity, and effectiveness to the practical operations of the State Medical Society, we would propose a revision of the plan by which representation in this body is governed. Not by any change in the law of the State, nor by an amended by-law of the Society, but simply by a firmer and more inflexible adherence to the rule in force, to select the best and most fitting representative men.

If it has been the practice in some local societies to suffer the office of delegate to go a-begging, a wiser and more intelligent custom is certainly needed. If, again, a member who is aware that if his name is presented in open session it will be rejected, seeks, through the miserable manœuvring of political tactics, to carry an election, let him be stamped as *unworthy*, because *dishonorable*. If, again, a local society, for the purpose of preserving its relations to the State society, consents to be improperly represented, because it is *entirely convenient* for a delegate to attend, it should be *shamed* into propriety on this subject. If, again, a local society is represented by a delegate who also, and *more heartily*, as we have known, acts as delegate to the Masonic Convention, which always meets at Albany on the day of the assembling of the Society, it should be informed most decidedly that we claim the whole time and constant attendance of such as are appointed to take part in the deliberations.

Representation in the State Medical Society should not, in form or appearance, be allowed to lose its dignity. It should be of the best material at the command of local societies; of such a character as will advance the interests of science, for which end, as individuals, and in voluntary and incorporated organizations, we are striving and laboring, in the midst of ignorance and opposition outside of our ranks, and irresolution and vacillation among our own members.

If we look for wise and intelligent representation in the medical societies in the *country*, as distinguished from those in the *metropolis*, we surely have a right to expect that equal care will be exercised by the latter in the designation of individuals to sustain their honor and credit at the annual gathering of the professional wisdom of the State. As the metropolis claims to possess the collective advantages, on a large scale, for imparting medical knowledge, as summed up in colleges, hospitals, infirmaries, and other general and special fields of observation and research, and as, to an almost unlimited degree, in this respect, the country concedes to the city its undoubted advantages as "the seat of learning," it is but simple justice to insist that a voluntary society, composed of many of the elements which enter into the formation of professional chairs, and which for years has published to the world the records of its proceedings, should, as well in every one of its delegated members as in every one of its remarkable volumes, reflect the full measure of its exalted name and character.

Will it be believed that a delegate from this Society, at the late meeting of the State Medical Society, by means of *five petitions in his own handwriting*, besought the Nominating Committee to make him a permanent member and a delegate to the Medical Society of the

State of Connecticut? And yet this is the literal truth, as a member of the committee asserts.

Now for the remedy for mal-representation. The State Medical Society is powerless to change the custom in this respect. It is bound to receive the accredited delegates from subordinate societies. The offer of credentials is proof, on the part of the delegate, that he is worthy of fellowship in the superior body. The responsibility rests entirely with the local societies, that their members are invited to "go up higher." In this all-important particular, let the discrimination be so rigid and exact—in favor only of such men as will add dignity to the position—that the List of Permanent Members, which began with the honored names of Nicholas Romeyne and Samuel Bard, in 1813, may continue to indicate the best and most eminently representative talent known to the profession in the State.

It is no new thing to inform Americans of the high estimation in which our war material has been held by European governments. In all the departments of military matters, we have made a progress which has been commensurate with our necessities and opportunities for experience; and in that which refers more particularly to the care of the wounded, we are by no means behind any of the older nations. We have recently had a practical proof of this fact in the published report on the Ambulance and Sanitary matériel at the great exhibition which has been prepared by Dr. Thomas W. Evans, a member of the jury of the Universal Exposition (class xi.), and U. S. Commissioner. This report, which is of an official character, contains the following remarks: "In the American department, this material has not only been well represented, but surpasses, both in value and extent, any similar collection in the Exposition," in proof of the truth of which, the superiority of the different articles on exhibition is pointedly set forth.

It is not necessary to go into a detail of the reasons for the several preferences, but our present purpose will be served by a little more than the mere mention of the results of a universal competition.

The Howard Ambulance receives an honorable mention from the Imperial Commission, and a silver medal (the highest prize awarded) from the special jury appointed by the *Société de Secours aux Blessés*. We learn that the principal merit of our ambulances is lightness, the heaviest weighing not over 1,300 lbs., the average weight of those of European manufacture being about 2,000. This latter fact is no doubt accounted for by the general use on our ambulances of coverings of enamelled cloth, or cotton duck, instead of the clumsy wooden sides and tops of the European models. The model hospital car by Dr. Elisha Harris, received a bronze medal from the *Société de Secours aux Blessés*. It is spoken of as "one of the most beautiful and attractive objects of the American Exhibition." The "Wall" regulation tent is generally admitted to best realize the important principles of construction, impermeability, convenience of form, ventilation, facility of pitching and striking, solidity, transportability, and simplicity; the employment of the "fly" securing the impermeability without adding to its weight or cost. Our instrument department was well represented by Messrs. Tiemann & Co., and Hernstein the former being the recipient of a silver medal from the Imperial Commission. The number of artificial limbs exhibited was not great, but the selections were well made, and Dr. Hudson's leg walked off with the bronze medal. Our canned fruit seems to have met with great favor, some of the articles, such as green corn, cranberries, okra, etc., being almost entirely unknown in Europe. Borden's extract of beef and condensed milk are considered as the best extracts known, the former receiving a silver medal from the *Société de Secours aux Blessés*. There are other articles which received honorable mention, but as they are not of such relative importance in the care of the wounded, we shall not refer to them particularly.

Our exhibit as a nation was creditable enough in this particular department, it is true, but it would not have been nearly so well made had not Dr. Evans, the American physician of Paris, taken an almost personal interest in the proper representation of the creditable doings of his medical countrymen.

Reviews and Notices of Books.

TREATISE ON THE DISEASES OF THE EYE, including the Anatomy of the Organ. By CARL STELLWAG VON CARION, M.D., Professor of Ophthalmology in the Imperial Royal University of Vienna. Translated from the third German edition, and edited by CHARLES E. HACKLEY, M.D., Surgeon to the N. Y. Eye and Ear Infirmary, Physician to the N. Y. Hospital, Fellow of the N. Y. Academy of Medicine, etc., and D. B. St. JOHN ROOSA, M.D., Clinical Professor of the Diseases of the Eye and Ear in the Medical Department of the University of the City of N. Y., etc. With an appendix by the editors. Illustrated by ninety-six wood engravings, and eighteen chromo-lithographs. New York: WILLIAM WOOD & Co., 61 Walker St. 1868. Pp. 774.

It is with great pleasure that we announce the translation into English of this admirable book on the eye. Since Mackenzie, there has been no complete treatise, in English, on ophthalmology. There have been, indeed, many excellent monographs on the subject, and very many "Handbooks" which cannot be accused of a great degree of usefulness, since it is required in consulting a book to find something not known before, or at least a reasonable fund of information on the subject in hand. It may be argued that a volume of nearly eight hundred pages must be diffuse—not adapted to the wants of the practising physician, whose time is so limited. The book is certainly exhaustive, but hardly diffuse. By referring to any subject on ophthalmology, the reader is sure to find most of what has been written upon it which is of value; and it takes but little power of selection to find what is wanted, especially when so well arranged as is Stellwag.

Nothing can be more disappointing than, in referring to a book professing to instruct us on a given subject,

to find it wanting in the very points under investigation. Stellwag is characterized by being *up* to the modern requirements of the science; by not clinging affectionately to by-gone notions; by presenting a very complete *resumé* of the opinions of most of the eminent men in ophthalmology, as well as by fully presenting his own; by prefixing to each subject a succinct anatomy of the part, and by very full pathological statements.

The author seems to be more of an innovator than a conservative, and rejects without ceremony long cherished ideas and opinions, which seem to have been demolished by recent investigations. In this he exhibits an improvement over many recent authors, who, in their respect for authority, have been led into many ridiculous errors.

The diseases of the cornea occupy seventy-four pages, and, as may well be imagined, are very exhaustively discussed. In acute inflammations of the cornea with great photophobia, the author very rarely speaks of the use of atropine, which American ophthalmologists are so fond of using; and the somewhat typical keratitis in children, known with us as the phlyctennlar variety, is scarcely spoken of, the author contenting himself with a more general statement of the disease, under the head of herpes of the cornea. In the recent question concerning the presence or absence of the strumous taint in herpetic keratitis in children, the author agrees with those who believe in the local nature of the disease, but admits that, as a result of the disease, a condition of things closely allied to struma may be developed; of course then necessitating constitutional treatment. In speaking of the cause of diffuse keratitis, he states that that dependent upon a syphilitic taint is of doubtful origin, Mr. Hutchinson to the contrary notwithstanding. But the situation is philosophically managed in the remarks on the treatment of the disease, by the statement that, "if there is any constitutional disease that can possibly influence the local affection, of course it must be appropriately treated." Suppurative keratitis is well illustrated by a large number of excellent wood-cuts, exhibiting lesions of the cornea, of almost every conceivable variety. To mitigate the pain in this disease, the hypodermic injection of morphine is recommended. It is also advised in painful affections of the eye, throughout the book.

Professor Stellwag justly recognizes the importance of intra-ocular pressure in suppurative keratitis, and recommends paracentesis of the cornea, especially in hypopion—not insisting upon the necessity of evacuating the pus, but of relieving the pressure. Atropine is freely used as a mydriatic, except in case of peripheral ulcers, when the pupil must be *contracted* by the use of preparations of calabar bean. In pannus of the cornea, the treatment does not materially differ from that lately employed by most American surgeons. In the opacities of the cornea the subject of artificial pupil is very ably and exhaustively dwelt upon.

The old and useless operations in corneal staphyloma are altogether discarded, while most, if not all, of the valuable ones are described.

Sections third and fourth will delight ophthalmoscopists, treating as they do of inflammations of the optic nerve and the retina, and their consequences. We can say without hesitation, that these sections are the most satisfactory that have yet appeared in any English text-book. Iritis is also managed in a very comprehensive manner. The other divisions of specific, rheumatic, scrofulous, arthritic iritis, etc., are ignored, but, under the head of causes, every influence is recognized which may produce the disease. The author does not deign to mention a recent method of treating iritis by atropine alone, but seems to place great stress upon inunction treatment, whether it be specific or not. In short, rare skill is exhibited in rejecting or adopting various methods of treatment, throughout the book. The whole subject of operation for artificial pupil is included in the brief space of ten pages, and consists only of iridectomy, iridodesis, and iridenkleisis, and is in delightful contrast to the long drawn out inanities of some of the older books.

Section sixth treats of the inflammation of the choroid and ciliary body.

As an evidence of the advance of ophthalmology, we may here state that what was formerly called "Internal Ophthalmia" is now designated as "Irido-cyclitis," "Irido-choroiditis," "Choroiditis," and "Panophthalmitis," these diagnoses being greatly assisted by the ophthalmoscope.

The subject of Glaucoma is incidentally alluded to under the head of Irido-cyclitis, besides being fully described in an appropriate section. We would like so exact a statement of what is understood by the term Glaucoma as never again to be in doubt as to its meaning. It is here very philosophically, though not quite systematically, treated. The disease, according to Stellwag, is composed of a number of elements; rigidity of the ocular capsule, a characteristic of old age; intra-ocular pressure from various causes, inflammation being the most frequent, and cupping of the optic disc as a consequence of the pressure. The inflammation productive of this mischief being a choroiditis, and irido-choroiditis, and irido-cyclitis. Of course glaucomatous symptoms may result from a great variety of inflammations extending to any one of these parts, without the production of a true glaucoma. In the treatment, no folly is committed by wasting other therapeutic means than operative measures upon the disease, but the latter are unhesitatingly recommended, such as paracentesis of the cornea as a temporary measure, iridectomy, and the so called Hancock's operation, as curative means. It seems to us, however, that Hancock's operation is too slightly esteemed. In sympathetic choroiditis, enucleation of the globe seems to be the main reliance in treatment, although abscission, evisceration, and iridectomy are spoken of.

Posterior staphyloma is here regarded as being a result of an incomplete development of the eyeball, "in which the raphé closing the fœtal ocular fissure and the union of the inner nervous sheath with the sclera, is less firm than normally." Its hereditary nature tends to confirm this opinion. Graefe's idea that sclero-choroiditis posterior is an integral part of this disease, is here recognized.

Inflammation of the conjunctiva covers sixty-two pages, and is undoubtedly more completely disposed of than in any recent English book. The pathology of granular conjunctivitis is very ably considered. A few of the new modes of treatment are not mentioned, but all that is of value is given. In inflammation of the conjunctiva in general, the use of the solution of tannine in glycerine is not recommended; a mode of treatment much esteemed in this country. Under the head of Blennorrhœa are included all the diseases of the eyes formerly considered as purulent ophthalmia, Egyptian ophthalmia, gonorrhœal ophthalmia, etc., the essential identity of these diseases being recognized. The great value of ice compresses and applications of cold water are in this disease, as in other acute inflammations of the conjunctiva, fully dwelt upon. Where a paracentesis or iridectomy is indicated, the author seems too fearful of performing it during the height of the inflammation. He very judiciously abstains from the use of strong applications of nitrate of silver during the

more acute symptoms. In the purulent ophthalmia of infants, allusion is made to the slough produced by the application of the nitrate of silver to the palpebral conjunctiva. It seems to us that the application should be so moderate as not to result in a slough—that it should coagulate secretions, and destroy the epithelial layer of the conjunctiva only. Inunctions of mercurial ointment are here recommended, we hardly know why.

Atropine, in our opinion, is not sufficiently recommended in purulent conjunctivitis as well as in many other forms of disease. There is a chapter of six pages on Diphtheritic Conjunctivitis—somewhat of a novelty in ophthalmic literature. The causes of the affection are not satisfactorily given, the diphtheritic element not really entering into more than a small number of cases. Where the conjunctivitis seems to be diphtheritic the usual treatment for diphtheria is very properly recommended by the editors; beyond this no especial treatment for the affection is necessary.

The results of trachoma are very completely stated, but granulations of the ocular conjunctiva are much more frequently spoken of here than we are in the habit of seeing. The author attempts to give the indication for the use of different stimulant cauterizing applications; but we think that in many instances the application should be made which seems to be of the greatest benefit to the patient, and that changes from one agent to another are often indicated; of course this necessitates a certain amount of experimentation.

Section ninth disposes of inflammation of the lids. As a consequence of this inflammation, we have various deformities, necessitating operations which are detailed at length, and are well illustrated by diagrams. Most of the operations promising a reasonable hope of success are here described. In removing tumors from the lid, splitting it up for trichiasis and entropion, etc., the horn spatula is used inserted beneath the upper eyelid, as has often been recommended elsewhere. In this country the finger has been passed under the eyelid for the same purpose as the spatula, and is on some accounts much to be preferred, as the operator is enabled to determine accurately where and how far the incision is made. Diseases of the lachrymal apparatus are very satisfactorily presented. Inasmuch as great improvements have somewhat recently been instituted, the old style has entirely gone out of use, and the slitting up of the canaliculus and the introduction of probes have superseded it.

Several varieties of probes are recommended, but the original form suggested by Bowman is still retained, and is undoubtedly as good as any other. The necessity of treating the catarrh of the sac and tear duct is fully stated, as is certainly necessary. We remember some time since to have met with a gentleman having an obstruction of the tear duct, dependent on a swollen state of the mucous lining, the result of catarrh. On applying to a surgeon the probe was recommended, but the gentleman objecting to it, went away, and treated his catarrh by injections of water, curing the obstruction. Destruction of the lachrymal sac is spoken of as a means of doubtful utility.

For contracting and closing the cavity of an abscess of the sac, he recommends the application of collodion, a procedure we have been happy to justify by practice. The operation of removal of the lachrymal gland, as lately recommended by Laurence, of London, is not alluded to, and we may remark in this place that comparatively few English authors *are* quoted from.

Part second is devoted to tumors of the eye extra-ocular and intra-ocular—prefaced by an exceedingly able and exhaustive statement of their nosology, symptoms, and course, illustrated by a large number of finely executed wood-cuts. We need only state that the almost constant reference to Virchow is a sufficient guarantee of its excellence.

The nosology of cataract is very thoroughly explained. In the treatment we find most of the modern methods very fairly considered.

The indications for the modified linear extraction of Graefe, it seems to us, are not very clearly given. He seems to approve of this practice in certain cases, but does not believe it supersedes the old method of flap extraction, on the whole. In this country it does not seem to have met with as large a success as would have been inferred from the statements of Graefe. Still greater perfection in its performance may cause it to result more satisfactorily.

Linear extraction by means of the spoon, it seems to us, is almost too freely recommended, as it is a hazardous operation, and the surgeon, desirous of a quick result, may be led to accept this, instead of the slower but safer needle operation.

"For the removing secondary cataracts or other membraniform obstruction from the pupil," the operation performed by our fellow-countryman, Dr. C. R. Agnew, and described in this book by the editors, is in our opinion one of the best that has been devised.

A section on the operations for cataract describes only discission, linear extraction, flap extraction, and the modified linear extraction.

We think more stress should be laid upon the use of the finger in removing the lens, instead of Daniels' spoon.

We are extremely gratified to see here over seventy pages of matter pertaining to diseases of refraction and accommodation, a subject that has scarcely received attention until recently. It is true there have been excellent monographs on the subject, Donder's work being the greatest and the best; but this is the first time that a reasonable amount of information has appeared on this subject in any systematic general treatise in our language. We notice an immense advance in ophthalmology in looking over the subject of amblyopia and amaurosis, so vaguely treated of in older works. Here, by the aid of the ophthalmoscope, the pathological changes are exactly and minutely noted, and the number of cases formerly condemned to amaurosis is very much diminished. Formerly, if a patient was unable to see, and the physician equally unable to state why he could not see, the diagnosis was almost invariably amaurosis. The action of the muscles of the eyeball, and their diseases, are very fully discussed.

The article on strabismus is not quite as satisfactory as we had hoped to have found it. The operation for squint is here recommended without the use of an anæsthetic, but the editors very properly suggest that it is commonly used.

The author somewhat surprises us by stating that binocular vision after strabotomy is comparatively infrequently attained. In recommending the postponement of an operation for strabismus until puberty, he differs materially from most American surgeons, who place much stress on operating during childhood. The advancement of the internal rectus muscle for divergent squint is fully considered. On the whole, enough is said in this section to teach any surgeon of moderate ability to perform the operation for squint with tolerable success. The subject is undoubtedly as yet very imperfectly understood, it being one of the most difficult problems an eye surgeon is called upon to solve.

The translator's appendix, on "lateral illumination and the ophthalmoscope," is timely—the subjects not being directly treated of in the body of the book. Jaeger's test types are inserted in the latter part of the

book, with chromo lithographs of the fundus oculi. These chromos are scarcely exaggerated in color, as may be the case with Liebreich's and some others.

The references to authorities are placed at the end of each chapter, and also in parentheses, directly after the sentence quoted—a commendable feature. The translation of the book has been a work of great labor, and we are glad that it has been so well done; any verbal criticisms may well be spared, in view of the great service done to the profession by the presentation of so noble a work in such readable English.

In conclusion, we feel bound to state that this book is a positive and great acquisition to the English literature of ophthalmology.

A PRACTICAL TREATISE ON DISEASES OF CHILDREN, by D. FRANCIS CONDIE, M D., Fellow of the College of Physicians, etc. 6th Edition, revised and enlarged. Philadelphia: H. C. Lea. 8vo., pp. 773.

There are no patients who are more numerous and who more constantly claim the attention of the physician than the little ones. The great number of diseases which are peculiar to infancy and childhood, and the difficulties in the way of diagnosis and treatment, are such as have always commanded the serious attention and careful study of the practitioner. This is as it should be, and every means that is taken to lessen the number of difficulties is calculated to meet with favor. Dr. Condie has been one of those who have performed such a service satisfactorily, and, as a result, his popular, comprehensive, and practical work has received that high compliment of approval on the part of his brethren, which several editions incontestably set forth. The present edition, which is the sixth, is fully up to the times in the discussion of all those points in the pathology and treatment of infantile diseases which have been brought forward by the German and French teachers. Their views are fully and impartially given, perhaps too much so, at the expense of the author's individual convictions. On reading the work, we have become impressed with this fact, and have several times wished that the author was more committal on the treatment of several diseases in which he himself must have had a large experience. As a whole, however, the work is the best American one that we have, and in its special adaptation to American practitioners it certainly has no equal. Although all the diseases are well treated, we should be better satisfied to see some, such for instance as that of morbus coxarius, chronic synovitis, etc., at least glanced at in some of their surgical bearings. This we are convinced would add much to a more extended applicability of the work.

MECHANICAL THERAPEUTICS A PRACTICAL TREATISE ON SURGICAL APPARATUS, APPLIANCES, AND ELEMENTARY OPERATIONS, EMBRACING BANDAGING, MINOR SURGERY, ORTHOPRAXY, AND THE TREATMENT OF FRACTURES AND DISLOCATIONS. By PHILIP S. WALES, M.D., Surgeon U. S. N. With six hundred and forty-two illustrations. Philadelphia: H. C. Lea, 1867. 8vo, pp. 685.

THE title of this book will give a reasonably good idea of its scope, but its merits can only be appreciated by a careful perusal of its text. No one who undertakes such a task will have any reason to complain that the author has not performed his duty, and has not taken every pains to present every subject in a clear, common-sense and practical light. It is a unique specimen of literature in its way, in that, treating upon such a variety of subjects, it is as a whole so completely up to the wants of the student and the general practitioner. We have never seen any work of its kind that can compete with it in real utility and extensive adaptability. The various minor surgeries which have from time to time been presented to the profession have always, in our opinion, lacked one of two things: completeness in the number of subjects treated of, and systematic attention to little things which to the student is so indispensable to the laying of the proper foundation for his future and more advanced study in surgery. Dr Wales perfectly understands what may naturally be required of him in the premises, and in the work before us has bridged over a very wide gap which has always heretofore existed between the first rudiments of surgery and practical surgery proper. He has emphatically given us a comprehensive work for the beginner; and when we say of his labors, that in their particular sphere they leave nothing to be desired, we assert a great deal to recommend the book to the attention of those specially concerned. But it is particularly in regard to the detailing of minor matters connected with dressings, trivial operations, and the like, that the excellence of the work consists. These are in fact the most important subjects to the tyro, for the reason that they are not treated of either in the lecture-room or in the more advanced text-books. How often has a young graduate to get his first idea of the best manner to make a poultice, and to do many other simple things, from some hint judiciously and perhaps courteously dropped by the nurse, and all this for the reason of the very simplicity of the manœuvres. Many a young practitioner has been more puzzled over the proper dressing of a stump than the operation which created it; and many a young fledgling would rather attempt Cæsarean section than the passage of a female catheter. Our author seems to have understood the extent of this ignorance in all of the various departments of elementary surgery, and has made a very elaborate and successful effort to dispel it.

But to the book itself. It is divided into five parts, which treat respectively of the following subjects: 1. The apparatus of dressing, comprising a description of the instruments to be used, the materials, and the bandages, general and special. 2. Mechanical bandages and apparatus. 3. Fractures; their reduction, dressings, and apparatus. 4. Dislocations; their reduction, dressings, and apparatus; and 5. The minor operations of surgery, in which are embodied directions for performing rubefaction, vesication, and cauterization, making moxas, issues, and setons, also remarks on acupuncture and electro puncture, puncturing, vaccination, incisions, bloodletting, extraction of teeth, removal of foreign bodies, modes of arresting hæmorrhage, on the dressing of different kinds of wounds, and lastly on anæsthesia.

The first part is well arranged, and all the various subjects are well treated. He commences with a description of the ordinary pocket case and its contents, which fills out the whole of the first chapter. The second chapter treats of what he calls the first pieces of dressings, such as lint, charpie, sponge-tent, cotton, oakum, tow, etc., at the conclusion of which is the description of an ingenious, handy, and useful surgical tray, and surgical wallet. Chapter third is occupied with a discussion of some of the topical remedies, as cerates, plasters, liniments, lotions, poultices, and the like, very many different receipts for the same being given. The use of water as a surgical dressing is taken up in chapter fourth, and chapter fifth details the various methods for making injections into the different cavities of the body. Passing over the next chapter, on the use of gases and vapors, we come to the next, on bandaging generally and specially, which concludes the first division of the work.

In Part II., under the caption of "apparatus for remedying loss of parts," the writer takes up in turn deficiencies in the cranial wall, integuments, nose, eye,

palate, arm, leg, etc., and gives as full a description as the size of the work will allow, of all the more important appliances usually recommended by writers on mechanical surgery.

The treatment of all the different fractures is then pretty thoroughly canvassed in Part III., and sprains and dislocations in Part IV. The minor operations in Part V. are very satisfactorily detailed, and, without special disparagement to the rest of the work, we deem that portion of it entitled to especial commendation.

The profusion of illustration adds incalculably to the proper comprehension of the text, and saves many an otherwise tedious description.

In conclusion, we would state, at the risk of reiteration, that it is the most comprehensive book on the subject that we have seen; is the best that can be placed in the hands of the student in need of a first book on surgery, and the most useful that can be named for such general practitioners who, without any special pretensions to surgery, are occasionally liable to treat surgical cases.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, NOVEMBER 27, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

WILL A DEAD FŒTUS BE CARRIED TO FULL TERM?

DR. MARKOE exhibited a still-born and shrivelled fœtus, which was discharged at full term by a lady, six weeks ago. About the first of January she conceived, and went on prosperously until the latter part of May (she being at that time a little past the middle of the pregnancy, and having for several weeks previously felt the motions of the child)—when she was pitched out of her wagon while riding in the country. Although she did not suffer any serious bodily injuries, she was greatly shocked and not a little alarmed; and from that moment did not feel any more motion, all her former symptoms of pregnancy ceasing.

At the end of seven or eight weeks after she consulted Dr. M., who found her in the enjoyment of perfect health, her abdomen having dwindled down very much, and there being unquestionable evidence of a dead fœtus within her. The os was found large and patulous, but no further examination was made *per vaginam*. Her condition being so excellent, Dr. M. expressed the probability to her that she would go on until full term, when the ovum would be discharged. About the first of October, having then completed her precise time, she was rather suddenly attacked with severe pain, which lasted but a short time, when the child, with membranes entire, was discharged together. There was no hæmorrhage at the time, although a month afterward, when she menstruated, she had a rather violent and continuous flow of blood. The fœtus was as perfectly formed as any child at five months, and only showed the effects of being blighted at that stage of its growth, and subsequently retained so long a time in the uterus.

In conclusion, he stated that he had no authority for the prognosis, as given to the patient, and had reason to believe that its verification was only a fortunate circumstance, not liable to occur very soon again under the same circumstances. He wished, however, to ask how frequently such an occurrence might be expected.

DR. POST stated that he had had a case precisely similar to the one related by Dr. Markoe. In his patient it was also a dry birth, all the membranes coming away together.

DR. SAYRE remarked that he also met with a case of the sort about ten years ago. The death of the child took place at the third month, but the mother went on to her full period. The labor was a dry one, but was as painful as any he had ever attended. Her health did not at all suffer after the death of the fœtus.

DR. JACOBI recollected that the question asked by Dr. Markoe was once raised in the Obstetrical Society of this city, and although numerous cases were related by a number of obstetricians present, still the impression of the meeting was, that the carrying of a dead fœtus for months, until the conclusion of gestation, was an exception to the rule.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

STATED MEETING, JAN. 6, 1868.

DR. E. R. PEASLEE, PRESIDENT, in the Chair.

THE PRESIDENT announced the admission to the Society of the following new members: Drs. A. Du Berceau, C. C. Lee, L. M. Yale, B. F. Vosburgh, B. S. Thompson, and W. T. Lusk. He announced also the death, since the last meeting, of Drs. Nichol H. Deering and Wm. Rockwell, both ex-Presidents of the Society. Dr. VanKleeck pronounced a eulogy upon his friend, Dr. Rockwell.

ALIMENTATION IN DISEASE.

DR. AUSTIN FLINT, SEN., in opening a discussion of this subject, insisted, with Chomel, that all medical theory and observation must be brought for final judgment to the bar of good-sense, the true genius of medical experience. After an account of the phenomena of starvation, he remarked that for their production it is unnecessary that food be entirely withheld; starvation takes place whenever aliment is either insufficient in quantity, or unsuitable in quality, to supply the blood with all the materials for nutrition. But where the effects of innutrition are developed slowly, they are less striking, and are apt to be overlooked. Again, one part, or one tissue, may be starved, from lack of its own proper nutriment, while the rest of the system is sufficiently nourished. Recognizing these facts, we are next to consider that disease has no protective power against starvation; which is sure to occur if aliment is not ingested or not assimilated. More or less of the morbid phenomena of nearly all diseases are due to innutrition; indeed, this may often supersede the affection of which at first it was an incidental element, and prove the immediate cause of death.

From the time of Graves, who inaugurated so great a reform in the treatment of the essential fevers, we have been gradually learning the value of alimentation in their management; but it is of equal importance in the treatment of other diseases. Among supporting measures in active diseases, it holds the first rank; and in those chronic affections where recovery is impossible, it helps to postpone the fatal termination. What are its limitations? If we except the early stage of some acute diseases, when depletion may be an object, there can never be any risk of hypernutrition; and our principle should be to give all that the system will assimilate. True, we must attend to the condition of the digestive organs; yet the harm arising from over-alimentation is less than generally supposed, and rarely greater than that from a cathartic. It is safer to err in the direction of over-feeding than to limit our

supplies below the capacity for digestion. As to the rules which should guide us, a few suggestions must suffice.

In acute diseases, where the object is to support the patient through their course, it is often necessary to give food without regard to appetite or taste. In many cases the wants of the system are not indicated by hunger; and you must then not only feed your patient, but make sure that the aliment given contains all the elements of nutrition. He may starve to death on beef-tea. The diet, moreover, should be concentrated, and in liquid form. Milk is the best single article, and is improved by admixture with farinaceous substances; eggs and meat-broths are of great value. Allow sufficient intervals (at least three or four hours) between the times of administering nourishment, in order to observe the effect upon the digestive organs, to give them rest, and to avoid interference with sleep. Frequently vary the articles of diet, their proportion, and mode of preparation; otherwise the stomach, as well as the palate, will rebel. To secure proper variety, the physician must be minute in his directions. The patient's desire for special articles should generally be gratified; nature's judgment is often better than the doctor's. If the stomach will not retain food, give it by the rectum. In convalescence, return to ordinary diet as early as practicable.

In chronic diseases, nutrition should be kept as near as possible to the standard of health. In doing this we shall very likely have to combat the prejudices of patients and their friends, in favor of a sparing and uniform diet, or against the most wholesome and nutritious articles of food, or in regard to imagined idiosyncrasies. "Milk and eggs will make them bilious," etc. Guard the appetite; and to this end avoid drugs, except when clearly demanded; and when demanded, choose their least offensive forms. Happy moral influences produce much of their effect through the improvement of appetite and digestion, and should receive a degree of attention commensurate with their importance.

IN THE PUERPERAL CONDITION AND ITS DISEASES.

Dr. Fordyce Barker, being called upon by the President, said that he would supplement Dr. Flint's paper by some remarks upon the diet proper for women after confinement. From Celsus downward, nearly all authorities have regarded the puerperal woman as either in an inflammatory condition or in a state predisposed to inflammation, and have restricted her to what may be termed an antiphlogistic diet—tea, toast, and tapioca, for at least sixty hours after labor, and a bill of fare but gradually extended at the end of a week. In opposition to these views, Denman, well called "the judicious," stands almost alone among standard writers. He placed his patient at once upon a regimen accordant with her previous habits. Some fifteen years ago, Dr. Barker had been led carefully to review this whole subject, with the result of an entire change in his theory, teaching, and practice. Close, cautious, and conscientious observation, based upon an extensive clinical experience, had since fully confirmed the opinions then formed.

What does puerperal convalescence imply? and what regimen does it demand? It implies the restoration of all the organs connected with parturition to their condition prior to conception, and also the establishment of a new function, lactation. During gestation these organs have undergone great changes of tissue, of function, of position. The uterus has increased in weight from an ounce and a-half to thirty-three ounces. It must be restored to its former size; and the decidua must be replaced by a new mucous membrane. Can it be supposed that all this will be more easily and completely effected by depriving the system of its wonted support? After labor, then, first the exhausted woman needs rest. This gained, as soon as she shows any desire for food, give what will best sustain her—a cup of good clear beef-soup, for instance. Add solid food as rapidly as the stomach can digest, and the system assimilate, it. Often on the first day after confinement the patient will take her first good reasonable meal of birds, poultry, even beef or mutton if she desire it, and with only the happiest result. Nurses will oppose you, and fail to carry out your directions; but if intelligent, they will soon become enthusiastic converts.

This regimen has been found to save the patients from the greater number of those annoying nervous phenomena so commonly following parturition, when the nervous system is apt to be in a condition of exalted susceptibility. Patients rest and sleep better, and their functions are established with less disturbance. To illustrate: All the authorities speak of the milk fever as a customary thing, and most students would fully expect it in a normal case. In actual practice, owing to many changes in the management of the puerperal condition, it is much less common than the books would imply; and where, in addition, the plan above recommended has been carried out, it becomes a very rare complication. During the last three months of Dr. Barker's attendance on the lying-in wards of Bellevue Hospital, careful records had been kept of all the cases, their symptoms being noted daily, and often hourly. Attention was specially directed to this subject of the milk fever, and it occurred in less than ten per cent. of the cases, as indicated by pulse, temperature, headache, or other symptoms. Yet the wards of a public hospital offer by no means the conditions most favorable to convalescence.

During the same period had occurred from sixteen to twenty cases of puerperal fever of a severe form, the temperature rising to 102 –104 and even higher; pulse 130–160 per minute; respiration 30–40. Out of this large number of aggravated cases, not a single one was lost. Hospital statistics of this disease generally show a mortality of twenty-five to fifty per cent. The treatment in this epidemic was in some respects similar to that adopted in former ones, vascular excitement being controlled by veratrum viride, nervous excitement by opium, etc.; but the special change made this year, which the Dr. thought had materially contributed to the fortunate result, consisted in insuring that, immediately after confinement, the patient should have the best diet the hospital could afford—milk, eggs, oysters, beef-soup, etc. In connection with this, quinine, chlorate of potassa, and alcoholic stimulants were given much more freely than before.

Puerperal mania, again, is a disease commonly dependent on exhaustion. The Dr. had been struck by this statement in Tyler Smith's lectures, when they first appeared, as it so fully accorded with the results of his own observation. It is the tendency at present to ascribe this affection, as well as puerperal convulsions, to uræmia. Several years' investigation of this point, in a large number of cases in hospital and consulting practice, had shown but ten per cent. of the cases associated with albuminuria. This would seem to indicate that the association, when found, is rather casual than causative. If toxæmia be one of the causes, it is not the only one; and we should look rather to exhaustion of the brain and defective nutrition.

In conclusion, Dr. Barker wished to acknowledge his indebtedness to Dr. Jacobi, many years since, for ideas that had led to a change in his management of infants; and he hoped to hear from him.

IN DISEASES OF CHILDREN.

DR. JACOBI said that the views expressed by Dr. Flint agreed so well with his own, that they left him little to add. But he thought the paper had under-estimated the dangers of over-alimentation. There are few diseases in which the circulation is not more or less disordered; and the extensive network of capillaries in the mucous membrane of the intestinal tract pre-eminently requires to be kept free from obstruction. Any undue distension of the intestine would, by its pressure, impede circulation through this capillary system, and might so prove harmful.

The evils of inanition received marked illustration in practice among children. With them, even more than with adults, it is essential to maintain full nutrition; for in them metamorphosis of tissue is more rapid. They succumb more readily to acute diseases; and as these have generally a definite course to run, it is all-important to sustain the powers of life until the limit of the disease is reached, and the return to health may begin; else the patient may die just as you think the disease cured. If to the exhaustion of disease we add that of inanition, relapses will be much more liable to occur. In pneumonia, for example, where the blood loses a part of its salts, and becomes more watery, if the deficient elements be not supplied, new effusions will be apt to take place on the slightest occasion, due less to violence of inflammatory action than to poverty of the blood and the relaxed condition of its vessels.

As an instance of the chronic starvation of special tissues spoken of in the paper, might be mentioned rachitis, a disease exhibiting defective nutrition of the osseous and muscular systems. The proportion of phosphate and carbonate of lime (chiefly phosphate) in the bones of infants, is 60 to 63 per cent.; while in rachitic children, and particularly in cases of rachitic softening of the cranial bones, it falls as low as 50 and even 20 per cent. The lack of these elements is most probably due to excessive elimination; we cannot stop this, and must meet it by an increased supply. Experience has shown that a diet rich in phosphates will often, without medicine, effect a marked improvement. One theory of rachitis attributes it to an excess of lactic acid in the system; and the lactate of lime has been found in the bones. This would lead us to avoid a diet of pure cow's milk, and to mix it with the farinacea, which render it more digestible and furnish a larger proportion of phosphates. Mother's milk contains these more abundantly than cow's milk, and, if normal, will not produce rickets.

Most of the summer complaints of children are caused by improper food, though the paralysis of the intestine, from heat, has also its effect. The gastric juice is often unduly acid; so that if milk be taken pure, or mixed only with water, it at once forms a curd so hard as to be indigestible, and must be rejected either by vomiting or by diarrhœa. Alkaline treatment has no permanent effect. We must address ourselves to the child's diet. Never give a drop of milk pure, or simply diluted. Always combine with it some farinaceous food, such as barley-water, or farina-water, adding a little salt. The curds formed will then be loose and digestible.

In acute gastro-intestinal catarrh it is frequently necessary to withhold food, and even water, for many hours. Where everything is rejected, alimentation becomes no alimentation. The irritated mucous membrane must be allowed absolute rest. In one severe case Dr. Jacobi had not suffered even a drop of water to be given for twenty-four hours, and the infant looked rounder at the end of that time than before.

IN OPHTHALMIC SURGERY.

DR. NOYES remarked that, after the able commentaries upon the alimentation proper for infancy and for the puerperal state, he had only to call attention to certain conditions which obtain in old age. It is at this period that cataract most frequently demands relief. The cornea is a tissue without blood-vessels, and the operation involves an incision through one-third or one-half its circumference. It is thus deprived of a large share of its nutrition, at a time of life when the nutritive process is least active. To secure speedy union of the incision, the same general rules are to be observed as in the case of other wounds; but however great the precautions taken, the operation will fail unless the patient, if at all debilitated, be well sustained by good nourishment. If he be an old man, with skin yellow and leathery, pulse feeble, and the artery beaded by atheromatous deposit, he must be fed well, both immediately before and immediately after the operation; or the plastic matter thrown out in the wound will have a low degree of vitality, will be soft and opaque, and finally suppuration will appear, and the sight be hopelessly lost. Plastic operations illustrate the same principle. A few years ago it was the custom to put the patient, after extraction of cataract, upon low diet and an anti-phlogistic regimen. The effects of this plan are well shown in a recent paper, instructive because so honest, by an eminent surgeon of Moscow. He found he was losing half his cases. His patients were, as a class, much addicted to alcohol. By allowing them their accustomed stimulus, though in moderation, and improving their diet, he brought up his success to the usual standard, losing but ten or fifteen per cent.

NEW METHOD OF TEACHING ANATOMY OF HERNIA.

DR. BENJ. HOWARD read a paper upon the methods of teaching the surgical anatomy of inguinal hernia. He proposed certain changes in the usual terminology, to render the subject more easily comprehended by the student. In particular, he would substitute for the phrases "external abdominal ring" and "internal abdominal ring," the unambiguous ones "superficial abdominal opening" and "deep abdominal opening;" leaving the terms "external" and "internal" to be used with reference to the median line alone. The doctor presented a model, adapted to class-room instruction, exhibiting the anatomical relations of the inguinal region.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, FEB. 5, 1868.

PROFESSOR ALFRED C. POST, PRESIDENT, in the Chair.

CONGENITAL DEAF-MUTISM.

DR. D. B. ST. JOHN ROOSA read a paper upon the above subject, in which he gave the results of his observations, corroborated by statistics, etc. These were rather negative in character, and were to the effect that the vocal chords, in some cases, had undergone no degeneration, except such as might be reasonably expected from want of use.

DR. DELMOLD, who had discussed the question at a previous session of the Academy, advanced the idea that children congenitally deaf, being unable to comprehend the force and use of sounds, were consequently dumb. After a somewhat desultory debate upon the subject, the President declared in order,

THE QUESTION OF VENESECTION.

DR. O'SULLIVAN alluded to the earliest lessons he had received in the study of medicine as having been ultimately connected with the ideas prevailing at the time as regards blood-letting, and which governed the practice some years since.

When he commenced practice, he determined, with all the zeal of a young practitioner, to test the merits of blood-letting thoroughly. In the neighborhood where he resided for the past eleven years, there are several large foundries and machine shops, where hundreds of stalwart men are daily employed. Here, he thought, was a wide field for investigation, and so determined was he to give the matter a full and complete trial, that for several years he never went without a lancet in his pocket. He, however, very soon began to perceive that, among this class of patients, who were apparently well able to stand depletion, he was compelled to alter his views very materially; and finally was led to abandon almost entirely the use of the lancet, especially in diseases affecting the respiratory organs. Whether this conviction of his was due to the fact that these persons reside in ill-ventilated and crowded apartments, or that in their daily avocations they are constantly breathing a vitiated and poisoned atmosphere, or to climatic reasons, he would not at present presume to declare. The fact, however, remains that a certain degree of enervation exists among this class of patients, and that we must be very careful how we deplete them. In acute diseases of children he never pursued the practice. He could say with a clear conscience that he had never applied a single leech, but, on the contrary, sustained his little patients from the beginning in every possible way, with such local adjuvants as the oil-silk jacket and poultices, which answered full well the indications for depletion. In this connection he would briefly mention the history of an interesting case which occurred in his practice some eight years ago, and which he thought would strongly sustain his views on the subject. In January, 1860, he received an urgent telegram from a relative in Baltimore, a student at the Theological Seminary there. Immediately upon his arrival at five A.M., he proceeded to the seminary, and found the patient, at best an anæmic youth of nineteen years, in a very debilitated condition, being in the second stage of pneumonia. He learned that his relative had been without sleep for three days and nights, and a probable delirium looming up in the future, he naturally concluded that the procurement of repose was the first thing in order. He was further informed, by both the medical attendant and nurse, that at the outset of the disease, a large basinful of blood had been taken from him, and that he was then only slowly rallying from the consequent debility. He need not say that the antiphlogistic regimen was also pursued, without, of course, omitting extensive counter-irritation. On auscultation, a very extensive pneumonia, involving both the lower and middle lobes of the lung, was detected. In relating particulars, the attending physician expressed his surprise that notwithstanding the fact that the patient had been taking large doses of opium in concentrated form, no sleep had been procured, and that in his opinion the case was very serious, and an immediate fatal result probable. Expressing his (Dr. O'Sullivan's) regret that in the earlier stage of the disease such treatment had been adopted, especially in so young and weak a patient, since the solidification in consequence had become undoubtedly more extensive, and the debility more extreme, he accordingly suggested at once the most heroic sustaining treatment—beef-tea, tonics, stimulants, etc. Being then unacquainted with any of the profession in Baltimore, he telegraphed to a distinguished Fellow of this Academy, who kindly sent him the names of several prominent physicians in Baltimore, with one of whom he had an immediate consultation, and who fully endorsed the therapeutical views to which allusion has already been made. On the first night a few grains of Dover's powder procured a most refreshing and placid sleep, three hours in duration, he himself, with the nurse, watching the patient throughout the night. Now, as to the sequel. *The pneumonia was cured, but the patient was lost*, as he died of phthisis after a lapse of six months. The deduction he had made as to the immediate and predisposing cause of the fatal result in this case, is attributable to excessive depletion on the one hand, and to defective nutrition on the other. He would say further that the young man inherited no predisposition to the disease of which he died, and his relatives on both sides were also free from it, many of them living to an extreme old age.

The doctor further stated that during the whole collegiate course of the patient in this city, he was under his supervision, and was never, to his knowledge, sick for a single day.

The Academy then adjourned.

N. Y. MEDICAL JOURNAL ASSOCIATION.

STATED REUNION, FRIDAY, DEC. 20, 1867.

DR. S. T. HUBBARD, VICE-PRESIDENT, in the Chair.

TREATMENT OF ECZEMA.

DR. W. S. LUDLUM gave a resumé of the practice of numerous authorities, among them Rose, Anderson, Wilson, Mead, Milton, Johnson, and others.

DR. HAMILTON thought the manifold plans of treatment presented might be classified under alkalies and alteratives internally, alkalies and stimulants locally. The constitutional causes of eczema were reached with comparative ease, but after their removal the local affection would still propagate itself. Here lay the radical difficulty. The pain was relieved by anything that would produce smarting. The destruction of the altered integument by blisters or escharotics; correction, by alkalies, of the acid secretions as soon as poured out; and removal of the inflammatory condition, would, no doubt, often effect a cure.

DR. KEYES considered baths, in their various forms, as among the most useful means of treatment: sulphur baths in the strumous, alkaline in the gouty diathesis; simple water or vapor baths, or baths with starch or bran, in the acute inflammatory stage. Hardy had used oiled silk with excellent effect, and preferred it to other forms of poultice. Cold irrigations had proved of marked benefit in acute eczema rubrum.

DR. WEISSE thought skin diseases had too often been considered as lying outside the domain of general pathology, and subject to different laws. Eczema was nothing but an inflammation, and should be treated on general principles. If the eruption was general, cathartics should be given, and he had found the infusion of senna leaves and wild violet flowers among the best. Under this, a general eruption would soon localize itself. The soda and bran baths were a great help. Then address constitutional treatment to the cause of the disease. In strumous cases, iodide of iron was of much value; in those of dartrous origin, arsenic should be pushed until the eruption yields, even to the extent of producing considerable conjunctival irritation; in rheumatic cases, colchicum and quinine. If the eruption is circumscribed, as in the patches on the back of the hand, so common in winter, local treatment may suffice. Anderson's treatment, by powerful applications, seems to give the best results: solutions of potassa fusa, of varying strength, mixed with glycerine, which prevents the skin from being made dry and hard. In a case of severe chronic eczema of the palm, where the

skin was tough as leather, the constant application of potassa and glycerine for a week restored comparative softness to the skin and considerable motion to the fingers; and in three weeks the flexibility was perfect. Reasoning from the effect of potassa in exciting to active vibration the cilia of epithelial cells, after their apparent death, Dr. W. thought it might act in these cases, by spurring the dormant cell-elements of the dermis and hypoderma into functional activity. He wished to mention the almost magical relief often given by the application, for two or three hours, of water as hot as could be borne.

Dr. Pieffard would speak of one or two remedies, not yet mentioned, which had given brilliant results. In those cases where the eruption is obstinate, with much serous or sero-plastic effusion, especially in children, Hebra and others recommend the ammoniochloride of mercury. This has certainly proved of great efficacy in the mass of cases in dispensary practice. It may be employed freely, with little risk of salivation. In one case, however, of eczema rubrum covering the whole body, its use for three days slightly touched the gums, and it was ordered discontinued. By mistake this was not done, and the patient was severely ptyalized; but the eruption disappeared. Another remedy, whose value he had discovered by accident, was opium. Using it to relieve the pain of a severe eczema rubrum, he was surprised to see the eruption decidedly improve within twenty-four hours. He had since employed it in other cases with good effect, giving gtt. xv—xx of the tincture thrice daily, with a purgative every fourth or fifth day. Its *modus operandi* here might be similar to that in indolent ulcers, as pointed out by Skey. It might also act as an antiphlogistic in the cutaneous inflammation, as we have lately come to consider it in serous, mucous, and parenchymatous inflammations.

NEW LARYNGOSCOPIC ILLUMINATOR.

Dr. Burrall presented an apparatus of his own devising for laryngoscopic illumination, which he thought possessed advantages in convenience, simplicity, and cheapness, over those commonly in use.

Correspondence.

BICHLORIDE OF METHYLENE.

To the Editor of the Medical Record.

Sir—Not having seen any report of experiments made on this side of the Atlantic with Dr. Richardson's new anæsthetic, bichloride of methylene, I beg to submit to you, for publication in the Record, the following notes, which may serve to bring more prominently before the profession in New York this new agent, which, from all accounts, seems to merit a close experimental examination.

Having received a sample of bichloride of methylene from London, England, I proceeded first to test the anæsthetic properties of the agent upon myself. Pouring about half an ounce of the fluid into a small bottle, and taking a piece of lint covered on one side with oil-silk, I extended myself on a sofa, and then pouring about a drachm of "chloromethyl," as Mr. Spencer Wells has named it, on the lint, commenced inhalation. The sensations I at once experienced were pleasant and extremely composing, and soon I felt stealing over me an irresistible tendency to somnolence, without any of the unpleasant sensations in the head usually attendant upon the inhalation of chloroform or ether. I gradually added more of the anæsthetic, until feeling that I would soon lose the power of voluntary movement, I poured the remainder of the fluid upon the lint, and was soon completely unconscious. About half an hour after commencing the inhalation I found myself sitting up cross-legged on the sofa, having suddenly become conscious, feeling perfectly well and in a fit state to attend to my ordinary occupations. I suffered no nausea, oppression, or other unpleasant feelings, save a somewhat disagreeable flavor in my mouth and throat, which alone reminded me that I had been the subject of experiment.

On the 7th of January I operated on a young man, of twenty-six years, for necrosis of the humerus. Having consented to the administration of the bichloride, at ten minutes past one o'clock, about two drachms were poured on a napkin, folded as a mouthpiece, and covered with oil-silk, as is customary in the administration of ether, and inhalation was commenced. Four minutes afterward another drachm was added, and in three minutes more the patient was fully narcotized, being perfectly passive and insensible to pain, and not having evinced any feeling of suffocation. The operation was proceeded with, occupying nearly three-quarters of an hour, during which time somewhat more than an ounce and a half of the anæsthetic was used. The patient remained perfectly passive for about ten minutes after the removal of the napkin, and then, suddenly opening his eyes, rose up, said he felt "all right," complaining only of stiffness of his arm, and walked by himself into an adjoining room. There were no subsequent unpleasant effects.

On the 12th of January I attended a lady in her second confinement, who had taken chloroform at her previous one, and consented, at my request, to take "chloromethyl" as an anæsthetic. Active labor pain came, and about seven o'clock a drachm and a half of the anæsthetic was given. As in the preceding cases within three minutes she was unconscious, much to the astonishment of a lady friend who was present, having dropped quietly to sleep, without any excitement, merely making the remark, "How very pleasant." Her child was born five minutes past eight o'clock, she having been for the greater part of the time completely under the anæsthetic influence; and when she awoke, which she did suddenly, she said that she felt none of the unpleasant head symptoms which she had experienced after taking chloroform, and that her sensations whilst passing under its influence were very agreeable, averring that were she again to use an anæsthetic she would have no hesitancy in choosing "chloromethyl" in preference to chloroform.

As Dr. Richardson truly remarks, "When twenty thousand persons have slept away pain under the influence of 'chloromethyl,' and those who have slept too deeply shall be counted as fewer than ten, an advance over chloroform will have been proved, but not sooner, nor with less of that tribulation through which we must ever attain to the good that is great and persistently beneficent." But if "chloromethyl" is an agent better than ether or chloroform as an anæsthetic, the sooner it is proved the better.

A. Russell Strachan, M.D.

47 East 23d st. February 16th, 1868.

DILATATION OF THE URETHRA FOR INJECTIONS.

To the Editor of the Medical Record.

Sir—On reading Dr. Buttle's description of his new syringe, and its effect in dilating the urethra, it recalled to mind a simple mode of accomplishing the same result, which I have been accustomed to recommend to patients. One or two fingers of the left hand of the patient are placed on the urethra, directly under the

pubes, making pressure sufficient to prevent the injected fluid from passing beyond; this, however, is not essential, as it is difficult to force an injection into the bladder There is this consideration in its favor: that portion of the urethra in front of the pubes will admit of freer dilation, without inconvenience, than the parts beyond. The essential point is, to prevent the regurgitation of the fluid by the side of the injecting pipe. This is effected by the patient's pressing the thumb upon one side of the penis, back of the gland, and the second finger opposite, and holding the parts with firmness sufficient to counteract the pressure made by the forefinger of the same hand used to force in the contents of the syringe. The conical portion of the pipe of the common metal or glass syringe, is pressed into the orifice of the urethra with force sufficient to prevent the fluid from escaping, although injected until the distension of the urethra by the fluid becomes painful.

By this process the urethra is equally throughout, for the moment, dilated to its fullest capacity.

We have in this proceeding a counterpart of the hydraulic press, an engine of immense power. This plan is not mentioned so much for its superiority over Dr. Buttle's syringe, as for its simplicity. By it every surgeon is able to accomplish the object with the instruments already in his possession.

HENRY G. DAVIS, M.D.

100 EAST TWENTY-THIRD STREET.

Medical Items and News.

PERSONAL.—Prof. Charles A. Budd has been appointed one of the Consulting Physicians to the New York State Woman's Hospital.

M. CLAUDE BERNARD has recently been elected President of the Society of Biology of Paris.

THE Wisconsin State Hospital for the Insane has been enlarged, at an expense of $98,000, by the addition of one longitudinal and one transverse wing on each side of the main building—thus doubling the capacity of the Hospital, and furnishing accommodations for three hundred and fifty patients.

THE NAVAL APPROPRIATION BILL, passed by Congress, allows $82,000 to the Bureau of Medicine and Surgery.

ALUMNI ASSOCIATION COLLEGE PHYSICIANS AND SURGEONS.—The next meeting of this Association will be held March 4. Dr. Gurdon Buck will deliver the address.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.—At the meeting to be held March 2, Dr. O. G. Smith will read a paper on General Paralysis of the Insane, and Dr. James R Leaming will make some remarks on cardiac diseases.

THE Second International Medical Congress is to be held in Italy in 1869.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.—Dr. J. Abbot and Luther Parks, Jr., have relinquished the editorial charge of this journal, and it is to be conducted hereafter by Dr. DAVID W. CHEEVER, of Boston.

HIPPOPHAGY IN NEW YORK.—A well-known French restaurant of this city, it is said, will shortly introduce to our citizens sundry dishes of "cooked horse."

THE bill to incorporate a Presbyterian Hospital in New York City has advanced to its third reading before the State Legislature.

SIR DAVID BREWSTER, the celebrated English physician and distinguished scientific discoverer and author, died on the 10th ultimo, at the advanced age of eighty-seven.

He was educated for the Church of Scotland, of which he became licentiate, and in 1800 he received from the University of Edinburgh the honorary degree of A.M. While studying there he enjoyed the intimate friendship of Robinson, Playfair, and Dugald Stewart. In 1808 he undertook the editorship of the *Edinburgh Encyclopædia*, which was only finished in 1830. In 1807 he received the honorary degree of LL.D. from the University of Aberdeen, and subsequently from Cambridge the degree of A.M., and that of D.C.L. from Oxford. In 1808 he was also elected a Fellow of the Royal Society of Edinburgh, and afterward filled the offices of Secretary and Vice-President. Between 1801 and 1812 he devoted his attention to the study of optics, and the results were embodied in a "Treatise on New Philosophical Instruments" in 1813, when he announced his discovery in regard to the polarization of light, which was also made by Malus and Arago. From this time his contributions to the Edinburgh and London Philosophical Transactions contain the record of many brilliant discoveries in optics in regard to the polarization of light, and also to the absorption of light in passing through various media. While writing the article on "Burning Instruments" in the *Edinburgh Encyclopædia*, he was led, by a proposal of Buffon, to suggest the construction of a new illuminating apparatus for lighthouses, to consist of lenses made out of zones of glass, to be built up of several circular segments, and thus increase the illuminating power to an extraordinary degree. This beautiful and valuable invention was claimed by the French *savant* Fresnel, and it now bears his name. In 1816 Dr. Brewster invented the kaleidoscope, an instrument which has had immense sales, but which resulted in no pecuniary benefit to the inventor. In 1819, in conjunction with Professor Jameson, he established the *Edinburgh Philosophical Journal*, and subsequently the *Edinburgh Journal of Science*. In 1825 the Institute of France elected Dr. Brewster a corresponding member, and he has since received the same honors from the Royal Academies of Russia, Prussia, Austria, Sweden, Denmark. In 1831 he proposed the meeting at York, out of which grew the British Association for the Advancement of Science; and in the same year he received the decoration of the Hanoverian Guelphic Order, and the next year the honor of knighthood from King William IV. In 1838 he was appointed Principal of the University of St. Andrew, being the first layman who ever held that office. In 1850 he was unanimously elected Principal of the University of Edinburgh. In 1849 he was elected one of the eight foreign members of the National Institute of France, the distinguished philosopher Arago being the Chairman of the Committee on Selection of Candidates. Sir David received also the Prussian Order of Merit, and in 1855 the Emperor Napoleon made him Officer of the Legion of Honor. Sir David has edited and written various works, besides contributing largely to the Edinburgh and Quarterly Reviews, and the Transactions of all the prominent scientific associations in Great Britain. His most popular works are a "Treatise on the Kaleidoscope," a "Treatise on the Stereoscope," a "Treatise on Optics," "Letters on Natural Magic," "The Martyrs of Science," "Memoirs of the Life and Writings of Sir Isaac Newton," "More Worlds than One," and others that we have not space to mention. It is impossible to recall here in our limited space all the facts with which Sir David has enriched the most delicate

branches of natural philosophy; and the laws, experimental and positive, to which he has reduced these discoveries, cannot be expressed except in scientific terms and formulas not generally understood. His development of Newton's discovery of the polarization of light really constituted a new branch of science. The result of his researches in this domain of science forms, as it were, a mine of scientific wealth from which his contemporaries have already freely drawn, and which furnishes a rich field for future philosophers. We also owe to the deceased valuable facts resulting from his researches on the mean temperature of the earth and the determination of the isothermal lines. In his examination of the mineral world he also discovered two new fluids. Dr. Brewster was not indifferent to the general movement of ideas and to the political and social questions that have agitated the world. In religion he adopted the principles of the Independent Free Church. His first wife was a daughter of McPherson, translator or author of "Ossian," and his second wife was a daughter of the late Thomas Parnell. Sir David Brewster's death will be lamented wherever science has her votaries.—*N. Y. Herald.*

Homœopathy in Porto.—We learn that at Santa Casa da Misericorde, in Porto, it has been determined, so Minor says, to establish in the hospital there an infirmary under the care and control of the homœopaths, and that it will succeed! We may rest assured, if this resolution be carried into effect, and should it reach the ears of the faculty, and still be allowed to go on unpunished and *unabated*, that the greater part of the professors in the Medico-Chirurgical School will quit the city. If this thing is continued, will it not happen, as every day it does happen, that as *homœopathy* enters one door *medicine* will go out by the other?—*Gazeta Med. da Bahia.*

New Form of Antiseptic for Local Use.—The liquor carbonis detergens is an alcoholic solution of coal-tar, containing, we presume, the carbolic, phenic, and other acids, with the dark tarry matter, and differing from carbolic acid, as the liquor cinchonæ does from quinine. It readily mixes with water, forming a permanent emulsion, and in varying strength is available as a mouth wash, a gargle, an injection for fœtid uterine discharges, cancer, retained placenta, gonorrhœa in the female, foul ulcers, sloughing sores, and all maladies dependent on, or complicated by, parasitic beings, lice, fungi, etc. It is also used combined with soda.—*St. Louis Medical Reporter.*

Hebra against Pitha.—Professor Hebra, of Vienna, makes an attack upon Professor Pitha, of the same city, who was the physician in attendance upon the Arch-Duchess Mathilde, because the latter named gentleman asserted that the use of the constant water-bath, recommended by Hebra in skin affections and burns, did harm, in the sad case of the Duchess, who, as our readers will remember, was severely burned, and died in consequence. The attack is published in the "Presse" (Medizinische, we suppose). The editor of the Medizinische Zeitung, in an article condemning Hebra's course, calls him in sport the "Lord of all integuments" (Beherrscher aller Haute), and says that the Professor is so thin-skinned that he takes all criticism on his views as a personal assault on his honor. "He has boundless vanity, and the sensitiveness of ciliated epithelium." German doctors have a way of saying hard things of each other, *vide* the Langenbeck and Dumreicher controversy, etc.

Transmission of Syphilis to Animals.—A committee was some time ago appointed in Florence to ascertain this point. Drs. Ricordi and Dell'Acqua were entrusted with the experiments, and after several months' labor the answer was given in the negative. The original cause of the investigation was a child affected with hereditary syphilis, which had been entrusted to a wet-nurse in a village called Cantu. The nurse gave bran baths to the infant (covered with an eruption) in a pail from which her cow was (only once) allowed to drink. The cow presented about ten months afterwards ulcerations about the mouth, and was taken very ill. It also happened that the bull suffered from ulcerations which the veterinary surgeon could not refer to ordinary complaints, and the outcry was that the child had poisoned these animals. More than these two heads of cattle, however, were attacked with ulcerations, and the Committee had much trouble in clearing up and arranging the facts. Not less than twenty-one distinct experiments were made, and the final result was, as we stated above, that the disease in question is *not* transmissible to animals.—*Lancet.*

The Medical Schools, London.—There are now eleven recognized schools of medicine in that city, attached to as many hospitals, and opportunities are afforded to students of gaining information in special branches of practice. The recognized schools are those of Guy's, St. Bartholomew's, St. Thomas's, St George's, St. Mary's, Charing-Cross, Westminster, the London and the Middlesex Hospitals, and King's and University Colleges. The hospitals to which these schools are attached contain collectively more than 3,000 beds, the largest institutions not recognized by the examining bodies being the Royal Free Hospital and the Dreadnought hospital ship, the former of which contains 150 and the latter 200 beds. A diminution has lately taken place in the number of entries at the London medical schools, consequent upon important changes that have been adopted in the requirements exacted by the examining bodies.

The Alumni of the Medical Department of the University meet on Monday Evening, March 3, in the small Chapel of the University, at 7 o'clock.

New Publications.

The Diagnosis, Pathology, and Treatment of Diseases of Women, including a Diagnosis of Pregnancy. By Graily Hewitt, M.D., London, F.R.C.P., etc. First American from second London edition, revised and enlarged. Philadelphia: Lindsay & Blakiston. 1868.

Chronic Alcoholic Intoxication: with an Inquiry into the Influence of the Abuse of Alcohol as a Predisposing Cause of Disease. By W. Marcet, M.D., Fellow of the Royal College of Physicians, etc. First American from second London edition. New York: Moorhead, Simpson & Bond. 1868.

The Principles and Practice of Obstetrics. By Gunning S. Bedford, A.M., M.D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York, etc., etc. Illustrated with four colored lithographic plates, and ninety-one wood engravings. Fourth Edition, carefully revised throughout and enlarged. New York: W. Wood & Co. 1868.

Lectures on Orthopædic Surgery, delivered at the Brooklyn Medical and Surgical Institute. By Louis Bauer, M.D., M.R.C.S. Eng., Professor of Anatomy and Clinical Surgery, etc. Second edition, revised and augmented with eighty-four illustrations. New York: William Wood & Co. 1868.

Original Communications.

REFLECTIONS ON UTERINE PATHOLOGY,

AND THEIR APPLICATION TO THE TREATMENT OF ULCERATION OF THE OS AND CERVIX:

BEING A PAPER READ BEFORE THE KINGS CO. MEDICAL SOCIETY,

By J. BYRNE, M.D., Etc.

There is, perhaps, no subject connected with the study of uterine pathology, which, during the last thirty or forty years, has so engaged the attention of those more directly devoted to this branch of medical science as that of ulceration of the os and cervix uteri.

Indeed, so much has already been said and written on this lesion by authors of acknowledged ability, deep research, and almost unlimited opportunities for practical observation, that, even to the specialist, it might seem as if but little of value could be added to our present stock of information. That the subject is by no means exhausted, however, but rather the patience of any one who honestly endeavors to glean some practical knowledge from most of the contributions to this branch of uterine pathology, a mere passing glance at the great diversity of opinion existing among those who are generally, and in many respects deservedly, looked upon as authorities and guides, will suffice to prove. Because, if authors of the most undoubted ability are found to be totally at variance in their estimate of plain pathological facts, and differing widely on some of the most vital points, how is it possible for us to decide upon any fixed principles of treatment?

For instance, when we see, on the one hand, men endowed with every prerequisite for close, careful, and profitable investigation, and laboring zealously for years amid abundance of material for the fullest development of these faculties, declaring that ulceration of the os and cervix uteri, pathologically and therapeutically considered, is purely local in its origin; that pains, aches, and general ill health coexisting with such condition, are remediable only by means of topical applications to this "*fons et origo mali*:" and, on the other hand, no less high authorities boldly asserting that such a disease has been carefully looked for in the dead-house as well as at the bed-side, without resulting in its discovery; that, in fact, non-specific and non-malignant ulceration of these parts has no existence outside the brain of him who looks for the lesion with a determination to find it—how, I repeat, is it possible, for physicians of limited practical experience, however well qualified for the task in other respects, to steer clear of this gulf of doubt and perplexity, while each such beacon-light, with speculum in hand, sits perched upon his favorite *Scylla or Charybdis?*

Fortunately, however, for a large class of afflicted humanity, much has also been written and said by various observers, representing what may be called the conservative section of uterine pathologists, with a view, if possible, of correcting or neutralizing the evil tendencies of what they deem to be unwarrantable conclusions.

These erroneous doctrines, they assert, are based, on the one hand, upon the folly of totally ignoring the pathological importance, if not the very existence, of this lesion; and, on the other, the attributing to it undue consequence, almost to the complete exclusion of what they believe to be more correct principles and safer practice.

In a word, that strict adherence to either of these extremes will not only lead us into grave errors, but tempt us to ignore certain pathological facts and physiological phenomena, concerning which there is, or at least ought to be, a fixed and unanimous opinion.

When it is borne in mind, however, that the birthday of uterine pathology as *a distinct and special study* is but of recent date; that even at the present day our profession numbers among its active members many who have witnessed its advent; it is not to be so much wondered at, that, in its infant-like attempts to strike out and walk erect and on sure footing, numerous have been its ups and downs, its rapid strides and inglorious retreats. For, no sooner did Recamier, by his speculum, reveal pathological treasures heretofore hidden, and thereby usher into the world of research this scientific bantling, than almost every country in Europe, I might say every city and town, had its one or more ambitious candidates for the position of foster-father. Is it, then, any wonder that uterine pathology, like some hapless infant, with a numerous retinue of maiden aunts, and more grandmothers than the law allows, should be doomed to have its growth and progressive development occasionally checked and retarded by colics and indigestions? However, though such difficulties are inseparable from the rise and progress of every branch of medical science, whether new or resuscitated, it is, nevertheless, consoling in some measure to reflect that they oftentimes serve to promote both knowledge and truth, by constantly teaching us how to avoid past mistakes, and stimulating us to renewed efforts in the future. And here permit me to remark that there is no branch of science or learning, in the honest pursuit of which the strictest adherence to facts, carefully and closely observed, is more demanded than in that of our own noble and holy calling, where every effort, and all our exertions, are directed towards the alleviation of human suffering, and to the end that, aided by, or rather by aiding, that wonderful and ever active "*vis medicatrix naturæ*," we may be enabled to restore to our poor afflicted fellow-beings, that without which wealth, exalted position, and every earthly means of enjoyment offer no charms, even for life itself—namely, "*mens sana in corpore sano*."

If we take up almost any volume of the older writers on obstetrics, from the beginning to the middle of the last half century, and, indeed, in many cases even up to a very late period, we look in vain for any pathological facts worthy the name, touching many diseases of the uterus and its appendages, now becoming tolerably well understood; and, as for explanations of some of the most important phenomena of uterine life, there is such an evident attempt to gloss over ignorance by mysticism and a want of exact knowledge by false hypothesis, that the sooner our pursuit for information in this quarter is abandoned, the better. Dr. West says,* "So recently, indeed, as thirty years ago, neither was the structure, nor even the functions of the sexual organs at all correctly understood. The uterus, it is true, was known to be muscular; but neither the process by which its muscularity becomes so marked during pregnancy, while it ceases to be clearly apparent soon after delivery, nor the intimate nature of its structure in the virgin state, had been the subject of inquiry. . . . . ." "Though the structure of the ovaries was in the main understood, yet the ovarian ovule had not been discovered, and the function of the ovaries was supposed to be called into exercise only during the stimulus of sexual congress. Hence it resulted that the import of menstruation continued to be a riddle unread; all that was

* Croonian Lectures, Philadelphia edition, 1854. Diseases of Women, p. 88.

certainly known about it being, that it was a function which bore an important, though undefined, relation to the generative process."

A lengthy review of the rise and progress of uterine pathology, bearing upon the subject of this paper, though highly instructive as well as interesting, would take up more space and time than would seem consistent with my present purpose, and might serve only to detract from the few remarks I purpose to make, some of their practical value, if any they possess. Nevertheless, a brief allus on to some of the fierce and acrimonious discussions growing out of the investigation of this lesion, will serve to show, not only the great diversity of opinion existing on points of the utmost importance, but also that, with regard to some of the most palpable pathological facts, diametrically opposite conclusions have been arrived at.

It was not long after Recamier gave the grand impetus to a rational method of investigating uterine diseases that at least two distinct schools sprang up in France. One advocated what has been called the "displacement theory," and insisted that abrasions and ulceration of the uterus were principally, if not wholly, the results of mechanical action. To this party belonged Velpeau, Malgaigne, Huguier, and many other celebrated surgeons. The other numbered among its most noteworthy advocates men like Lisfranc, Dubois, and Cazeau, and taught that these affections had their origin in simple idiopathic inflammation.

France, however, did not long enjoy a monopoly of the quarrel thus inaugurated, for, as I have said before, almost every city and town throughout continental Europe could boast of its champion in support of one or other theory. Those of the older writers on obstetrics then living, and teachers whose dicta on the subject of uterine diseases it were almost blasphemy to doubt, pricked up their ears, and stood aghast at the boldness with which these new aspirants for scientific honors and distinction ventured to doubt old dogmas so long inculcated and complacently accepted, and with the facility with which these new and improved munitions of pathological warf re made fearful breaches in their time-honored stronghold of doubt and hypothesis. It was, then, about this period that an English physician of great ability and unwearying industry, a pupil of the celebrated Velpeau, and thoroughly imbued with that praiseworthy spirit of ambition which should characterize every candidate for scientific fame, saw fit to launch into the arena by espousing the cause of the inflammation theorists. I refer to Dr. James Henry Bennet, whose inestimable contributions to uterine pathology might with truth be styled "monumentum ære perennius," though very many able writers, and, in addition, the humble author of this paper, have seen fit from time to time to differ widely from him, and to record their honest and conscientious distrust of conclusions which seem to them wholly unwarranted by facts.

The gauntlet thus cast down was at once eagerly clutched by several opponents, most prominent amongst whom, as refusing to acknowledge even the existence of ulceration of the os and cervix uteri, was Dr. Robert Lee; while, between these two extremes, there arose advocates of every shade of opinion, but most of whom pinned their faith more or less to one or other horn of this literary dilemma.

The main question, however, could not long remain unsettled, and very soon it became evident to every impartial observer, that much time had been spent, no little bad feeling manifested, and many columns of the London Lancet, that might have been put to better use, had been devoted to a mere war of words, as aggravating as it was unprofitable. In a word, the frequent existence of a certain palpable fact could not be denied; and, after all, it turned out that what Dr. Bennet chose to designate inflammatory ulceration, Dr. Robert Lee refused to honor by a name of greater pathological import than simple epithelial excoriation.

But it must not be forgotten that there was still another, and, I hope and sincerely believe, a more numerous and no less able, but distinct, class of contestants, who were with truth looked upon as more conservative, and who, though by no means unwilling to accept any and every ray of light compatible with honest convictions deduced from experience, yet, amid the mass of doubt and confusion thus arising from so great a revolution, still hesitated to lose sight of old and well-tried landmarks, firmly established, as they believed, by physiology, and supported by therapeutics. Foremost, and by far the most prominent among the promoters and powerful advocates of this third party, was, and is to this day, the gifted and scholarly Dr. West, whose sound and lucid arguments, supported by an amount of practical experience that falls to the lot of but few, have accomplished more towards checking the too rapid strides of our young pathological giant, than all other British writers before and since the publication of his Croonian Lectures in 1854. After this cursory but somewhat discouraging retrospect of the last twenty-five or thirty years, it cannot be surprising to find at the present day the greatest possible variety of opinion as to the causes and nature of uterine ulceration, and, as a consequence, a total absence of any fixed principles to guide us in its treatment.

In a merely scientific sense, this state of things is deeply to be deplored; but, forgetting for the moment the interests and advancement of science alone, let us reflect on the feelings, bodily and mental, of the victims to these infirmities, for which we are expected, and ought to be able, to provide relief, if not a remedy. If abrasions and ulceration of the os and cervix uteri *produce* the almost endless train of painful sensations, and an amount of constitutional disturbance wholly incompatible with vigorous health and usefulness, that some writers assert and insist they do: if the seductive arguments brought forward by Dr. Bennet, for instance, and his conclusions regarding the nature, causes, and treatment of these ailments, bear the test of practical scrutiny, we have, at once, not only a system of uterine pathology, as bearing upon these lesions, made easy and much simplified in its application to treatment, but we are bound in duty to shape our practice accordingly. If, however, on the other hand, a denuded and patulous os uteri has little or no pathological import in its entity, is a very common occurrence, and not necessarily accompanied by symptoms of sufficient gravity to require any special attention, to what a frightful amount of criminal torture, mental certainly not less than physical, do we not subject our poor victims of false pathology and conceited ignorance!

Who of us can have noticed unmoved the nervous agitation, sometimes little short of mental anguish, of a pure-minded woman, and especially if unmarried, when the announcement is first made that a speculum examination in her case will be unavoidable? Are we not warned by her rapidly changing flushed or pallid cheek and anxious look of foreboding evil, that nothing short of the direst necessity can justify even the very suggestion?

Does she, only from a keen sense of the duty she owes to herself, her family, and to society, reluctantly submit to that ordeal, the very thought of which shocks every modest impulse of her heart and body, and makes her very blood run cold, and all to no other purpose than to

add perhaps to her already too great suffering, and thereby become unconsciously the instrument that enables us to perpetuate our own folly and wickedness?

These remarks offer material for careful and serious reflection, and cannot justly, I think, be ignored or deemed inappropriate to the subject of this paper.

It does not require a very long lifetime devoted to the active pursuits of our profession, and the study of a science which cannot, as yet, nor, probably, for ages to come, lay any claim to even approximate exactness, to convince the most superficial observer how little disposed the strictly scientific mind is to be checked in its onward course by any such moralizing influences.

Moreover, personal knowledge, as well as the records of uterine surgery, clearly establish in my mind at least one conclusion, and that is, that this branch of our art has latterly become entirely too fashionable, and consequen ly that the surgical treatment of diseases affecting the female sexual organs needs much reform.

Reports of cases are constantly met with where treatment of the heroic kind has been pursued by gentlemen who wield the potent steel and cautery, and ostentatiously paraded as "*the proofs of their diagnostic skill, and as trophies of their chirurgical dexterity*;"* but it were better, I imagine, for the progress of science as well as some of "the ills that flesh is heir to," if these records could be blotted out and the poor victims of over-zealous meddlers allowed to eke out a wretched existence untouched and unwritten, or quietly "sleep the sleep that knows no waking."

If there be some among the junior members of our profession who think my language too strong because so plain, I only ask such to search the records, and then tell me why. As to my contemporaries, I would confidently appeal to their own personal experience alone in justification of my remarks; for I am sorry to have to admit, and all know the fact full well, that earthly records at least tell but a tithe of the sad tale.

This much, then, by way of apology, and in explanation of my motive for venturing to offer a few remarks on the treatment, more especially, of uterine ulceration, suggested by practical observation. I purposely propose to omit saying anything touching the alleged symptoms of these affections, first, because they are already stereotyped and would occupy time and space fruitlessly; and, secondly, because they can be made to refer to many other and entirely different lesions, and are not unfrequently present when the speculum fails to reveal anything abnormal in this particular part of the uterus. Indeed, so frequently have I observed this fact that, when I am consulted by a patient presenting a train of symptoms usually referable to uterine ulceration and congestion, my inquiries are directed almost exclusively toward estimating the condition of her system generally, and the beginning, progress, and history of her ailments, so that topical treatment, except vaginal lotions, and consequently speculum examinations, are omitted at the outset; and thus I have by no means unfrequently had the satisfaction of curing my patient, and at the same time saving her that part of treatment which must often be to her most objectionable. When it is borne in mind that three out of four of the patients coming under our notice for these troubles present unequivocal evidence of great debility, and at the same time inform us that their "appetite is poor," that "they have so sometimes thought they had dyspepsia," that they have much "much back-ache," bearing down, and leucorrhœa, and bowels moved once in four or five days, and sometimes not for a whole week, it is more obvious than wonderful how much they are likely to be benefited, nay cured, by *rest, proper regimen*, some *mild alterative aperient*, *blood* and *nerve* tonics, and the cold or tepid douche to the vagina and uterus.

Taking it for granted, also, that those for whose consideration these remarks are respectfully submitted are already familiar with the structure and functions of the uterus and its appendages, it is not essential that I should enter into an extended description of their anatomy and the physiological phenomena of active uterine life. A mere reference, therefore, to a few points having, as I conceive, a most important bearing on my subject, will suffice for the present. If we examine the vaginal, cervical, and uterine mucous membrane proper, we will observe that, not only its structure, but its functions as well, differ very materially in these three distinct parts of this extensive tract. In the vaginal mucous membrane with its squamous epithelium, and mucous follicles large and numerous at the inferior part of this canal especially, we notice nothing which can be said to differ from similar tissues elsewhere. At all events, there is nothing in this particular structure worthy of special notice in our present inquiry. Because, whether the opinion that the chemical action of alkaline cervical mucus on acid secretions from the vaginal membrane has any pathological importance, as some affirm, or is to be viewed as a mere fanciful hypothesis, according to others, are questions which it would be out of place to argue for or against just now. However, that the secretions from these two distinct parts of a continuous mucous membrane differ chemically as well as microscopically, are facts which it would be well to bear in mind, and the ignoring of which would undoubtedly lead to grave errors, in diagnosis especially, if at all based upon the appearance and chemical composition of utero-vaginal discharges.

The lining membrane of the cervix presents several remarkable features, prominent among which may be noticed its arrangement in folds and deep transverse fissures, intersected in a few places by elevated ridges; and by which, it is important to remark as well as to recollect, a much greater mucous secreting surface is compressed, as it were, within a given space, than we find in any other part thoughout the whole system. Its epithelium, instead of being squamous, is cylindrical, and its follicles proportionately large and numerous, and thickly imbedded in and between the ruge. This duplicated arrangement of the cervical mucous membrane, though admirably adapted to meet the wonderful changes consequent upon pregnancy and parturition, is, nevertheless, as a very little reflection will show, a highly important fact, and accounts, in a great measure, for the well-known obstinacy with which diseases of this tissue often resist for an almost indefinite period of time the ordinary local, and, as I believe, unscientific methods of treatment. It also explains how likely structural changes in this part of the uterus are to be superinduced by pent up acrid and vitiated discharges, whether resulting from disordered menstruation or the patho-physiological process of involution, when imperfect and incomplete.

The mucous membrane of the uterine cavity is remarkable chiefly on account of its extreme thickness and density of structure, owing to the large proportion of fibro-plastic material composing it; and, being intimately interwoven, as it were, with the muscular substance of the uterus on account of the absence of intermediate cellular tissue, we can readily understand why we have so often to encounter those dangerous metro-peritonæal complications resulting from the slightest impediment to that remarkable process of fatty degeneration, and the removal of substances no longer required.

This membrane also differs from that of the cervix in

* Dr. West.

two other respects, namely, in its being decidnous, or at least partially so, and possessing glands of a tortuous shape. Above all, however, the muscular tissue of the cervix, I contend, plays a most important part in the perpetuation of its diseases, and I think the day is not far distant when uterine pathologists will unite in opening their eyes to this fact, and in it discover the main reason why structural lesions of this canal so often resist the cauterizing treatment at present in vogue.

Dr. W. Tyler Smith says, in alluding to the contractility of the cervix under certain conditions:

"I have seen it embrace the uterine sound quite firmly, and I have seen it expel a sponge tent by an active contraction. If the effort to bear down is made while the speculum is introduced, the os uteri may be seen to diminish in size in some women. Inversion of the unimpregnated virgin uterus has taken place from dysmenorrhœa, and I have no doubt that much of the pain in some cases of dysmenorrhœa is dependent upon a *tenesmus of the os uteri*. In the treatment of leucorrhœa by injections, this motor power is brought into beneficial operation. It is most marked in women who have borne children, but is by no means confined to them." *

This quotation, and the hint already offered, will, I doubt not, suggest the grounds on which I presume to recommend a plan of treatment, not only original *in principle* so far as I know, but which I believe to be the only one consistent with anatomical facts and pathological observations.

(*To be continued.*)

REPORT ON
RESECTION OF THE LONG BONES.†

By JOSEPH W. THOMPSON, M.D.,

OF PADUCAH, KENTUCKY.

Case I. *Femur, middle third; shortening four and a half inches.*—J. H. S——, a soldier, Co. L, 3d Ky. Regiment Mounted Infantry, late Confederate, was wounded June 10, 1864, at the battle of Sishamingo Creek, Miss., by a Minié ball, making a compound comminuted fracture of middle of shaft of femur. Resection was performed on the battle-field by my friend, Dr. S. F. Clardy, then Chief Surgeon of Buford's Division of Cavalry, embracing at least four and a half inches of the middle of the shaft. In a few days he entered Forrest Hospital, at Lauderdale Springs, Miss., of which I was then in charge. He was in this hospital, as a patient, lacking a few days of six months, at which time he was discharged; wound almost entirely healed; could bear but little weight on the limb.

This case was treated by position and water dressing. The wound suppurated copiously. Stimulants and tonics, and the most nourishing diet, were freely given, and opiates were required to secure rest. At the time he was wounded he was in his fifteenth year, but had a fine constitution. He is of a remarkably cheerful temperament, and I think that disposition enabled him to bear up with more than ordinary fortitude under the suppuration from so extensive a wound. This case made a remarkable recovery. He can now dance, and is able to plough. Commenced dancing July 4, 1866. I am informed by one of my students that he ploughed during last summer (1867). There was four and a half inches' shortening of the limb, as accurately measured, at my request, by Dr. Beeler, of Clinton, Ky., in the summer of 1866. I failed to measure the extent of the resection while the patient was in the hospital; but Dr. S. N. Denham, of Missouri, a very accurate observer, in whose ward this case was treated, records in the hospital case-book, now in my possession, that one-third of the femur was removed; and Dr. Beeler's report shows there was a removal of four and a half inches of bone, if not more. I will take this opportunity of correcting an error in my report of this case in the *Nashville Journal*, November, 1866, in which I stated that the resection extended to near the trochanter minor, embracing a good portion of the upper third of femur. It was from the middle of the shaft, as given above.

Case II. *Fibula; six or seven inches resected.*—Major A., of this city, volunteer aid to Gen. Breckenridge, was wounded at the battle of Shiloh, by the explosion of a shell, a portion of it striking his right leg, producing a compound comminuted fracture of the fibula. The comminution was extensive, as well as the injury to the soft parts around the bone. He would not submit to amputation. Dr. B. W. Avent, then Chief Surgeon of Breckenridge's Division, and myself, removed carefully all the fragments of bone, made the ends smooth, and closed the wound as well as we could. After temporary supporting, dressing was applied; he was transported to Memphis. We directed, as soon as reaction was sufficiently established, to apply cold water dressing. I learn from the patient that his recovery was slow and tedious. I have met him and examined the wound several times, since the surrender of the late Confederate armies, and found it entirely healed. The leg continues in a healthy condition, and the patient walks well; moves about freely without the aid of a crutch or any other support. He is a very energetic man and taxes the crippled leg very much, but it gives him but little inconvenience. Prof. Eve saw and treated this case before the wound healed, if I recollect correctly, at Atlanta, Georgia. There is between six and seven inches' loss of bone.

The result of this case is interesting, not only that between six and seven inches of bone were resected, but that that loss of bone was attended with extensive injury to the soft structures immediately around it.

Case III. *Humerus, lower third: two inches resected.*—Mr. B——, a soldier (late Confederate), was wounded at the battle of Chickamauga, by a Minié ball, making a compound fracture of lower portion of humerus. Surgeon Crawford, of Atlanta, Ga., resected two inches of the bone. The lower portion of resection is only about half an inch above the elbow-joint. For several months he was troubled with abscesses in and around the location of the wound. I have met him several times since he suffered with the abscesses, and on examining the arm, found it in a healthy condition. He is a steam-boat engineer, and when he had followed that vocation for several months after the operation, I met him and he informed me that the arm was giving him no inconvenience. He states that he can do the duties of an engineer almost as well as he ever could. The functions of the arm are but little impaired.

Case IV. *Shoulder-joint: three inches of upper end of Humerus removed.*—Mr. S——, a soldier, Co. L, 3d Ky. Regiment Mounted Infantry (late Confederate,) was wounded during the summer of 1864, through the left shoulder-joint. Three inches of the upper portion of the humerus were resected, embracing the head. I am

* Dr. W. Tyler Smith on Leucorrhœa; Philadelphia edition, page 188.

† This interesting report of eight cases of resection having been sent to Prof. F. H. Hamilton, of this city, he kindly forwards it to us for publication, with the following remarks: "Its special interest consists in the fact that it furnishes results after a considerable lapse of time. In this way alone can the value of resections be determined. Indeed, it may be ten or twenty years before we can decide many questions connected with this subject, satisfactorily. If, then, some one will gather up the cases resulting from the late war, and ascertain how many of the resected limbs have been cut off as nuisances, and how many are endured as useless burdens, conclusions of great value may be drawn. I hope you will find room for it in your journal."

of the impression that Dr. S. F. Clardy performed the operation. It was done on the bat le-field, and I am not positive as to who operated.

This case was treated in the hospital under my charge, and progressed so slowly while he was an inmate of that institution, that I was very doubtful as to whether the operation would prove better than amputation.

Dr. J. Gaddis, of Miss., in whose neighborhood this gentleman now resides, wrote me in August last (1867) that he is able to do light work, but is unable to raise any weighty bodies without the assistance of the other arm. He also states that the end of the humerus rests in an artificial cavity, just underneath the edge of the pectoralis major muscle. This result, I incline to think, proves that the arm is better than no arm.

Case V. *Humerus, upper and middle thirds; three inches removed.*—Captain S——, Co. K, 31st Regiment Tenn. Infantry, was wounded at the battle of Atlanta, Ga., on 22d of July, 1864, by a Minié ball, making a compound fracture of a portion of the upper and middle thirds of the humerus. Three inches of bone were removed. Can raise the forearm by bringing the arm against the body. Can lift no weight at arm's length. Cannot extend the limb, but can flex. The arm is in a healthy condition. Report of this case was furnished me by Dr. Freeman, of Dukedom, Tenn.

I have never examined this case; but from what two medical friends, who have examined it in the past two years, tell me, one of them but a few weeks since, I am satisfied that the arm is of considerable service to the patient.

Case VI. *Femur, upper third; two and a half inches removed.*—S. B——, a soldier, 7th Ky. Regiment Mounted Infantry (late Confederate), was wounded at the battle of Shiloh. Two and a half inches of upper third of femur were resected by Dr. S. F. Clardy. The ends of the bone have united well. The limb is of great use to him; locomotion performed moderately well.

I examined this case slightly a few days after the operation, and have not seen it since; but I have had two reports about it recently, made by Dr. Paschall, who examined the patient at my request. The resection was performed in preference to the grave operation, amputation of upper third of femur, and therefore I think the operation was wise in this instance.

Case VII. *Radius and Ulna; three inches of both bones removed; no bony union.*—Lieut. E. R. S——, of Co. D, 9th Alabama Regiment (late Confederate), was wounded at the battle of Boydton Plank Road, by a large Minié ball, making an oblique compound fracture of radius and ulna of left arm. Three inches of both radius and ulna were resected by the regimental surgeon, H. A. Minor, M.D. Dr. C. B. Sullivan, of Waterloo, Alabama, writes me that bony union has never taken place. The patient's brother says that the arm is of considerable advantage to him; that he can handle his fork while eating, put his hat on and off, and rest the gun on that arm when shooting. I have never examined this case; he lives in Alabama, some distance from me. Dr. Sullivan, who has furnished the notes of it, states that he is of the opinion that bony union will not take place unless there is an operation performed to produce it. I suppose the union so far ligamentous.

From what Dr. Sullivan informs me, I think it doubtful as to whether the exsection has proved to be better than primary amputation. Although patient's brother states, as I have said, that he could use the arm to advantage in several ways, yet he told me, but a few days since, that the patient stated he had recently broken the arm at the seat of resection, and that it was annoying him so much that he wished it was off.

Case VIII. *Humerus, upper and middle thirds; four inches removed; no shortening.*—Lieut. H. W. B——, Co. H, 16th Iowa Infantry, was wounded at the battle of Missionary Ridge, about the central portion of shaft of humerus, by a Minié ball. Resection of four inches of the bone was performed by Dr. R. J. Moore, surgeon of the regiment. The upper portion of resection extended to within two and a half inches of the head of the bone. Dr. McReynolds, of Clarksville, Tenn., who furnishes me the notes of the case, remarks that "there is absolutely no shortening of the limb; the space between the ends of the bone is filled with a fine cartilage-like substance; and Lieut. B—— thinks the ends of the bone are growing in length, thus gradually narrowing the space between them. He lifts heavy weights in a line with his body; cannot place the hand upon his head, but uses the wrist and hand with great freedom, as in writing, &c; and altogether finds it a very useful member."

The operation was performed in November or December, 1863—that being the date of the battle of Missionary Ridge, if I recollect correctly—more than four years ago. I think, as the arm has continued to improve, and is of so much use after four years, that it may be considered that exsection was highly successful in this instance, in which four inches of the shaft of the humerus were removed.

Paducah, Ky., January, 1868.

CASES OF TUMORS AND OTHER DISEASES OF THE BRAIN AND ORBIT,

WITH IMPAIRED VISION.

By E. WILLIAMS, M.D.,

of Cincinnati.

Case I.—Tim. Foley, aged 50, coachman, native of Ireland, was admitted to Commercial Hospital, April 1, 1867, service of Dr. Murphy. For some three months before his admission he had been an inmate of the Good Samaritan Hospital, under the care of Dr. Bartholow. For his history while there I am indebted to Dr. W. Baker. When received there, his symptoms were as follows: Violent pain throughout the distribution of the left trigeminus; left eye congested and correspondingly side of face suffused and painful to the touch; intellectual acts normally performed; no disorder of locomotion or of vegetative functions. Dizziness, tic douloureux. During second week he was suddenly attacked, after a few hours of stupor, with violent convulsions and maniacal excitement, during which he tried to bite and injure all who came near him. This excitement was accompanied by heat of the surface and hyperæsthesia, especially of the right half of the body and the inferior extremities. All remedies failed to quiet him except the inhalation of chloroform and large doses of bromide of potassium. After this attack his pupils were dilated and vision impaired; and he had repeated attacks of epistaxis from left nostril, the left eye and side of the face continuing swollen and exceedingly sensitive. From this date till the time of his admission to the Commercial Hospital he was subject to epileptiform convulsions, the pupils remained dilated and fixed, and all perception of light was destroyed. The speech became thick and stuttering; the intellect, never very bright, became clouded, and his temper peevish and fretful.

When received into the Commercial Hospital his condition was as follows: appearance feeble and emaciated, ulceration over sacrum, trochanters and scapulæ, decubitus dorsal; intellect dull; right pupil dilated and

insensible to light; conjunctivitis and keratitis of the left eye; abrasion of the upper lip; tongue covered in centre with a dark coat; some sordes on teeth; pulse 84, and weak. There was no paralysis of the extremities, but it was impossible to determine whether the sensibility was affected, on account of his mental state. Patient very restless. Ordered by Dr. Murphy, potass. bromid. in large doses, with stimulants and nutrients freely. On the 6th of April he was examined with the ophthalmoscope by Dr. Williams.* In the right eye he found great enlargement and tortuosity of the retinal veins; papilla swollen and prominent, with blurring and partial obscuration of the vessels on its surface. The great unsteadiness of the patient's eyes prevented any more minute examination. The fundus of the left eye could not be examined in consequence of the large opacity of the cornea. Enough, however, was recognized to justify the diagnosis of *impeded venous return from the eye to the brain, due in all probability to a tumor at the base of the brain.*

The patient gradually sank, and died on the 15th of April. Sectio cadaveris, by Dr. W. H. Taylor, pathologist of the hospital, seven hours after death. Dura mater firmly adherent to the calvarium; membranes of the brain much engorged with blood; increased number of puncta vasculosa in substance of brain; two ounces of limpid serum in the lateral ventricles, which were much distended transversely; small amount of serum in the middle fossæ; *anterior portion of the right hemisphere of the cerebellum firmly adherent to the base of the cranium;* and lying anteriorly to and below the right hemisphere of the cerebellum was a *firm, oval, nodulated tumor* enveloped in a distinct capsule attached to but easily separated from the membranes. The tumor measured four and a half and three and a half inches in circumference in the two directions, and in structure resembles encephaloid. It had compressed the right half of the medulla oblongata toward the median line. Imbedded in the substance of the cerebellum, above and behind the solid tumor, was a *pyriform cyst containing transparent fluid.* It measured two inches in the long and one and a half inches in the short diameter, and its apex extended into the crus cerebri. The surrounding brain substance was of a semi-fluid consistence. In this case the passive venous hyperæmia of the retina, and consequent neuro-retinitis, was due to increased intra-cranial pressure from the great size of the tumor.

Case II.—Reported by Dr Judkins, Interne of Commercial Hospital. J—, a stout, healthy-looking servant girl of 20 years, was brought to the Commercial Hospital in a partially comatose state, on the 27th of March, 1867. The person accompanying her gave the following history: About four months since, she fell down stairs and sprained her ankle, but never complained of anything else. She further states that for several months, even before the fall, the patient was in the habit of vomiting occasionally without any evident cause; also that five days ago she became unable to hold anything in her arms, and would let the child she was nursing fall from her hands, and could not walk well. Two days before she was brought to the hospital it was ascertained that she could not see, hear, or speak, and slept most of the time. When brought in, her face was slightly flushed; she walked slowly, with head and body bent forward; pupils widely dilated and insensible to light; all the special senses impaired, and she can only be made to understand by signs. She protrudes the tongue with difficulty, and always to the right side, and it is covered with a dense white coat; pulse 46 in the minute, irregular and easily compressed; respirations 15 and labored; extremities cold. Under the use of stimulants the pulse rose in four hours to 55, but continued irregular, and the body grew warmer. With free purgation the pulse became more regular and stronger, and on the 28th reached 60, with respiration 17 in a minute, and patient replies to questions. She complains of pain in the frontal region, especially over the right eye. March 29.—Patient more rational and general condition improved. 31st.—Pulse 54, soft and regular; tongue red over whole surface, but moist and still protrudes to the right; pupils natural. She now says that the right side of the face and head feels swollen and numb, and she cannot see as well with the right eye as with the left eye. In consequence of her impaired vision she was transferred to the care of Dr. Williams. April 6.—An ophthalmoscopic examination revealed a well marked neuro-retinitis in both eyes, but more advanced and intense in the right. The optic papillæ were greatly swollen, opaque, and the limits not capable of being distinguished from the surrounding retina, which was itself opaque and streaked with numerous ecchymoses. The grayish opacities, the radiating streaks of blood, and the blood-vessels of the papilla and adjacent retina, gave a striking resemblance to a *variegated rose.*

The vessels of the papilla and retina, to near the equator, were veiled with grayish opacities, and often interrupted, so as to look like dotted lines. At the junction of the optic disc and the retina there was a marked bend in all the vessels, where they mount up over the swollen papilla. The veins are extremely tortuous both perpendicularly to, and parallel with the plane of the retina, and vary in color according as they are more or less deep in the hazy retinal tissue.

The grayish-white cloudiness of the retina, with here and there groups of chalky-white patches, gradually fades off into the natural condition toward the equator, but the serpentine course of the veins continues as far as they can be traced, and they are much enlarged. In following the veins, streaks of bluish-gray opacity line their borders considerably beyond the general retinal cloudiness. The only difference in the appearance of the two eyes is in degree, the characteristic changes of neuro-retinitis in the right eye being more marked and farther advanced, and all perception of light abolished, while the patient insists that the sight of the left eye is *perfect*, although on trial she can only discern the very large print of Snellen's 6¼ at 6 inches. It was now ascertained that *complete anæsthesia of the right side of the face existed*, and the eye could be touched freely without the patient feeling it. The hearing and taste were perfect, but the sense of smell somewhat impaired. Diagnosis: *Tumor of the base of the brain pressing on the optic chiasm and the fifth nerve of the right side.* There was now no loss of motor power anywhere, and although she complained of giddiness, she could walk about the ward with tolerable ease and certainty. She suffers all the time with *pain and heaviness over the eyes*, but never in the back of the head. The pain was increased by coughing, straining, jolting, and percussion of the head with the finger.

A solution of sulph. atropia was dropped into the eyes three times a day, and iodide of potash and corrosive sublimate given internally. April 17.—Frequent ophthalmoscopic examinations, since the last report, show that the diseased condition of the retinæ was increasing, although the patient's general state remained much the same. April 30.—Same treatment, with the application of cantharidal collodion to the back of the neck. The conjunctiva of the right eye is much injected and the eye painful. Ordered to be closed

* This part of the history is taken from the hospital records by Dr. Whitaker, the chief Interne.

with a bandage and protected from irritation, under which the *redness soon disappeared and the pain ceased.* May 5.—On visiting the patient this morning, she was vomiting and complaining of great pain in the forehead. During the day she grew rapidly worse, passing into a comatose state, and died at 2 P.M. Up to the time of death, the loss of sensibility in the right side of the face continued, but no paralysis of motion or of sensation elsewhere, and she had no convulsive movements while in the hospital.

Post-mortem twelve hours after death, by Dr. Taylor: Dura mater congested, vessels of arachnoid distended, but no points of opacity. On slicing the hemispheres the puncta vasculosa are large and very numerous. Lateral ventricles distended with a clear fluid about an ounce in quantity. Surface of thalamus opticus of left side apparently softened but not congested. On removing the brain a tumor was discovered about three inches in length lying under the left anterior lobe of the cerebrum, and extending from the falx cerebri, to which it was adherent, over the cribiform plate of the ethmoid, involving the left olfactory nerve, backwards and diagonally across the sella turcica to the right petrous bone, where the end of it pressed on the fifth nerve of the right side at its point of exit from the posterior fossa of the base of the brain. There was thus direct pressure on the left olfactory, the optic chiasm, the cavernous sinus and ophthalmic branch of the fifth nerve, as well as upon the main trunk of the trigeminus, at the seat of the Casserian ganglion. The posterior part of the tumor extended across to the right side, about an inch beyond the median line, producing a corresponding concavity in the right side of the brain. The posterior two-thirds of the tumor was very soft and red looking, very much like brain tissue in a state of red softening. The anterior one-third was about the size of a walnut, hard, pale, nodular and scirrhous in its character. When the brain was laid on the table, the tumor projected nearly an inch beyond the end of the anterior lobe. The loss of smell in the left nostril, and the complete anæsthesia of the right half of the face, receive a ready explanation from direct pressure. The impairment of vision was due to a threefold cause—direct pressure on the optic chiasm; compression of the cavernous sinus, and obstruction to the venous return from the retina, giving rise to neuro-retinitis; and thirdly to increased intra-cranial pressure.

Another point in the history of this case is that notwithstanding the complete loss of sensibility of the right eye for so long a time, no *ulceration or sloughing of the cornea ensued.* At one time the conjunctiva became red and the eye painful, no doubt from the presence of foreign particles which the eye did not feel nor resent. As soon as I ordered the eye to be kept closed part of the time, and frequently moistened with water, the congestion disappeared. This, with many similar observations, goes to prove that the disease of the cornea occurring in cases of lesion of the trigeminus, is not the result of impaired nutrition, but of increased irritation from the presence of offending substances that are not rejected because not felt. Protect the eye from that source of trouble, and the integrity of the cornea is preserved.

Case III.—Mrs. S——, æt. 48, milliner, a healthy, active woman, consulted me, June 6th, for a recent failure of sight in the left eye. I obtained from her the following history: In October last, was suddenly attacked with giddiness, difficulty of speaking and swallowing, and vomiting. For some two hours she was obliged to lie down, and the swimming of the head persisted even then. Intense soreness of the head and stiffness of the neck lasted for several days. Six weeks after this, the left eye became red and painful, with failure of vision for about two weeks, when the sight again returned perfectly. From the first attack of giddiness and vomiting, however, her head has never felt right, the vague, uneasy feeling, with paroxysms of pain, being confined to the forehead and temples. She remembers, too, that for several years she has occasionally experienced a numbness in one-half of her body, with a defective sense of smell. Two weeks ago she was seized with dimness of vision and glimmering before her left eye, without any pain or redness. This has increased till she can barely recognize *x x x* of Snellen at 4 inches. The right eye also is slightly affected, so that she only reads $1\frac{1}{2}$ of Snellen at 8 inches, and but for a few seconds at a time.

Present condition—pupils moderately dilated and sluggish, especially the left; but the eyes otherwise look natural. The ophthalmoscope reveals the symptoms of neuro-retinitis in an intense degree; papilla of left eye greatly swollen, of a dirty grayish color; vessels on the disc traced with difficulty, and often interrupted; veins dilated and serpentine, and often obscured at points where they dip deeper in the opaque retina. The most marked and sudden deviation in the course of the veins is at the margin of the papilla, where they either mount up over the swollen disc or suddenly disappear in its cloudy tissue. In the right eye the papilla is hazy and puffy, and the veins enlarged and crooked, all indicating the incipient stage of the same disease.

Diagnosis.—*Organic lesion at the base of the brain, most probably a tumor situated in the anterior fossa.* The loss of sense of smell many years ago, the occasional numbness in one side of the body, followed at last by more decided brain-symptoms, probably arising from inflammation, congestion, or hæmorrhage in the vicinity of the morbid growth, would very naturally indicate a slowly developing tumor. The seat of the pain over the eyes and in the temples, the implication of the special senses of sight and smell exclusively, would tend to fix the seat of the disease anteriorly, where it involves only the olfactories and the optic chiasm. The slow progress of the disease, the absence of disturbed mental functions or other evidences of encephalitis with abscess, and of basilar meningitis, argue for a slowly developing tumor.

(To be continued.)

The Nursing of Children with the Milk of Animals in France.—Dr. Dercins has written a pamphlet in which he shows that the custom of French mothers to send their children into the country to hired nurses is most destructive of life. He proposes to erect in a healthy country district, near Paris, an "oasis for infants," where the latter shall be carefully attended to, and fed with the milk of cows and other animals kept exclusively for the purpose. The author maintains that the plan can be carried out in two ways, either by public charitable subscription or by shares. It remains to be seen how his countrymen will respond to his benevolent views. The mortality of infants confided to country nurses has been shown to be frightful.

Punctured Wound of the Knee-joint treated by Compression of the Femoral Artery.—Dr. Arthur Jackson (*Lancet*) reports a case in which he applied the tourniquet to the femoral artery in a case of inflammation from a punctorial wound of the knee-joint. The tourniquet was kept applied for forty-eight hours, when it became necessary to remove it on account of the pain produced by the pressure. The inflammation had subsided, and the patient made a rapid recovery.

Original Lectures.

LECTURES ON TUMORS:

BEING PORTION OF THE COURSE OF SURGERY AT THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

SESSION 1867-8.

BY S. D. GROSS, M.D., LL.D.,

PROFESSOR OF SURGERY.

(Reported expressly for THE MEDICAL RECORD.)

IV.

MALIGNANT TUMORS.

THESE formations comprise *scirrhus, encephaloid, colloid, melanosis,* and *epithelioma.*

We are to consider the anatomy and the symptoms, the march and the terminations, of these affections. They are described in the books under the name of the heterologous, het roclyte, heteromorphous, or the malignant formations; called heterologous, heteroclyte, or heteromorphous, because they do not resemble, or if they do, very remotely, the natural tissues of the body; called malignant, because of their tendency to destroy the tissues in which they are developed, and likewise the life of the individual. These formations possess certain features or characteristics in common with each other, and it therefore will be well to consider these before describing them individually.

In the first place, it has been found that these structures are composed mainly of the protein principles of the blood—in other words, of albuminous or albuminoid substance, containing comparatively little fibrin or plastic matter; it has also been ascertained that during the progress of their development there is superadded to them, especially those portions of the morbid mass which are of earlier formation, a large quantity of fatty or oily substance. It is owing to the existence of this protein or albuminoid substance that these structures possess such a short life; they perish readily at a comparatively early period, because of this impaired organization, in consequence of the absence of plasma or fibrin, or the more vital principles of the blood.

In the second place, we find that these structures are composed essentially of a stroma, and of cells, bearing to each other respectively the relations of containing and contained bodies or structures; a stroma or basement substance, or basis substance as it is not infrequently called, and cells which are interspersed through this stroma. This is their characteristic feature. The stroma consists of a fibroid tissue, composed of fibres which resemble the structure of the fibroid tumor, the structure of the dura mater, the periosteum, pericardium, etc.; these cross each other in every direction, and intercept cells or cavities filled with the proper cancerous substance. This fibroid tissue thus forming the stroma of this substance is either of new formation, or, as sometimes happens, it is made up of the pre-existing structures, or natural structures, in a modified, altered, or changed condition. In some of these tumors, especially in scirrhus and encephaloid, it is of new formation; in others it is composed of the pre-existing textures in an altered or changed condition. Within this stroma is the proper cancerous or malignant substance, and this substance is found to be composed especially of what are called the cancer cells. These cancer cells vary somewhat in the different divisions of the malignant formations; they are not alike, for example, in scirrhus and in encephaloid, nor in scirrhus and colloid, nor in scirrhus and epithelioma, nor in scirrhus and melanosis. They have all a rounded or ovoidal shape, but during the progress of the development of a tumor of this kind, are liable to become modified in their appearance and configuration by the pressure which is exerted upon them by the adjoining cells, as well as by the other structures, especially the stroma, in consequence of which they become flattened; sometimes they are lanceolate, at others remarkably caudate, spun out as it were, presenting a great variety of forms; but, as a general principle, we see them rounded or oval, especially in the earlier periods of their existence. These are very much larger than the globules of the blood, and generally contain, each of them, nuclei and nucleoli, in their interior; some have only one nucleus, some several, so with regard to the nucleoli in the nuclei, depending apparently upon other than intrinsic circumstances. In addition to these structures, we find, especially in scirrhus, the hard variety of cancer, what is called the cancer-juice. If I take a tumor of this kind in its recent state, and make a section and then scrape the surface of that section, I find upon the blade of the instrument, a substance looking very much like thin gruel, or a milky fluid, almost of a thin cream-like consistence; this is the cancer-juice, and does not exist in what is called colloid and melanosis; it exists very sparingly in epithelioma; it exists, likewise, comparatively sparingly, in encephaloid; it is found in greatest abundance in scirrhus, or the hard variety of these formations; it is mainly characteristic of malignancy. If a small quantity of this fluid be placed under the field of the microscope, it will be found to be composed of large numbers of cancer cells.

These malignant formations occur in several varieties of form; as the tuberoid, the stratiform, and the infiltrated. The surgeon deals more particularly with the tuberoid variety. The physician, on the contrary, not infrequently meets with the variety which presents itself in the form of a stratum, as, for example, in connection with the mucous membrane of the alimentary canal; the infiltrated variety is met with more particularly in the uterus, the cancerous matter under such circumstances presenting an appearance as if it had been injected into the tissues with a syringe.

These formations are sometimes hereditarily transmitted from the parent to the offspring; such an occurrence is infrequent. It is more common to find the co-existence of these tumors in different parts of the body in the same individual, and sometimes in several members of the same family. I have myself seen not less than four members of the same family affected by cancerous affections. There would seem to be a family predisposition therefore; whereas, I have rarely found the disease hereditary.

These formations are liable to occur at all periods of life, but not all of them with equal frequency. Scirrhus is most common between the ages of forty-five and fifty-five. Encephaloid, on the contrary, is most liable to occur under the age of forty or forty-five, the greatest number of cases occurring between the ages of twenty and forty; it is sometimes observed as a congenital affection, an intra-uterine disease; or the disease comes on soon after birth. Under such circumstances it is mostly observed in the eye, in the lymphatic ganglions, or in the testis. Melanosis is most common in young subjects, and it occurs most frequently in the lymphatic ganglions in the liver, in the kidneys, and in the adipose and cellular tissue, of different portions of the body; it often involves a large number of organs simultaneously. Colloid is most common in elderly subjects, generally in persons after the age of thirty-five or forty; and it

is a comparatively rare form of disease, as is also melanosis. Epithelioma is most common after the age of forty, but now and then we encounter a case at a comparatively early period.

After these affections have continued for an indefinite or variable period, they all manifest a disposition to softening, disintegration, and ulceration. Sooner or later, they break down, just precisely as tubercles of the lungs during the progress of pulmonary consumption. The period at which this disintegration occurs varies in different cases and under different circumstances. Encephaloid cancer manifests this disposition more rapidly than any of the other formations. We find that a patient affected in such a manner rarely survives twelve, fifteen, or eighteen months; ulceration of the skin takes place, a fungus protrudes, followed by a more or less copious hæmorrhage, gradually undermining the health, and eventually destroying the life of the individual. Scirrhus frequently lasts considerably longer; it is slower in taking on ulcerative action, but this is sure to supervene and destroy the patient. So, likewise, with epithelioma, melanosis, and colloid. Colloid, perhaps, is slower in taking on this action than any other of the formations under consideration; it often destroys the life of the patient without taking on ulcerative action, by its mechanical pressure upon surrounding and perhaps important structures, wearing the patient out by hectic irritation.

During the progress of these growths, disease of a similar kind is liable to occur in the neighboring parts, especially in the lymphatic ganglions; not to the same extent in colloid as in the other formations. This tendency to contamination of the surrounding structures manifests itself at a variable period, generally not until a certain amount of development has occurred in the main mass; this is either in consequence of the absorption of some of this substance, and its extension along the lymphatic vessels, the lymphatic ganglions becoming contaminated; or else in consequence of sympathetic irritation.

All these tumors, formations, or growths have a disposition, after extirpation, or after their destruction by any process whatever, to return sooner or later. This recurrence may take place within a few weeks or a few months after extirpation; or it may be delayed for a number of years.

SCIRRHUS.

Scirrhus, or hard cancer, is so called because the substance of which it is composed is harder than any of the natural tissues, with the exception of bone and cartilage. Scirrhus is most liable to occur after the age of forty-five; it rarely takes place at an earlier period. The youngest subject in which I have seen it was a child, a little boy, three months of age, who died under my care, and upon a post-mortem examination I found several tubercles of this character in the liver, all as distinctly marked as the cancerous tubercles in the case presented before you a few days ago. This was the only case in which I have seen scirrhus at so early an age; I do not know that there is on record an instance in which it has appeared earlier. Now and then we observe scirrhus in the mammary gland at the age of twenty-six or seven, at thirty, thirty-five, and forty, but seldom under the age of forty-five.

The structures most liable to scirrhus are the mammary gland and the uterus. It occurs here more frequently than in all the other parts of the body together, provided we exclude epithelioma, which I regard as but another form of scirrhus. The liver is not an uncommon seat. We find it in the prostate gland, in the kidneys, in the spleen, in the lungs, in the salivary glands, in the brain, and in connection with the bone; occasionally, but rarely, under the skin, in connection with the subcutaneous inter-muscular and cellular tissue.

The disease usually begins in the form of a little tubercle, not larger than the size of a small pea when attention is first attracted to it. This goes on gradually increasing in volume, until at length it may acquire the bulk of the fist, or of a large orange, or some other object of this kind; it is rarely that a scirrhous tumor, properly so called, attains any very great bulk; small size is one of its characteristic features, in which it differs remarkably from encephaloid and colloid, and even melanosis. Hardness, even in the earlier stages of the affection, is one of the distinguishing signs of a growth of this kind, and this hardness continues during the whole progress of the disease. We often find a tumor of apparently large growth in the mammary gland; but after extirpation, on clearing away all the adventitious structures the scirrhous formation is always comparatively small.

The tumor is found to consist of a stroma and of cells. The cells are of different shapes—some ovoidal, some elongated, and some caudate, with nuclei and nucleoli, some in large numbers, thus showing great vital activity. Wherever this deposit occurs it replaces the natural structure, as in the mammary gland, an example under which it is best studied. You will find that the mammary gland is entirely destroyed during the progress of the affection; that the glandular tissue of which it naturally consists is replaced entirely by this new formation, this stroma and these cancer cells, so that in the advanced stages you will not, even under the microscope, be able to recognize any of the natural structure. There are blood-vessels, as well as nerves, and absorbents in such a growth. The arteries and veins are probably nothing but the vessels which naturally existed in the mammary gland, compressed in their structure, as well as in position, by the deposit. These vessels have a diminished circulation, otherwise the tumor would be capable of acquiring a much larger bulk than it does. The coats of the vessels are changed in their character, and frequently during the progress of the affection become exceedingly brittle, so as to give rise during the progress of ulceration to more or less bleeding, though this is seldom very copious. We infer the existence of nerves, rather than profess to be able to demonstrate them; there is always a pain of a peculiar character, denotive of the existence of nerves. We infer the existence of absorbents from the fact that if we place upon an ulcer of this kind arsenic, belladonna, morphia, etc., these substances will manifest their effects upon the system at large, nearly as rapidly and effectually as when taken into the stomach, or administered by the rectum, or hypodermically, in the form of injection.

The scirrhous tumor is usually devoid of anything like a distinct capsule or covering; the cellular tissue around it, however, is generally more or less condensed, precisely as in the case of the benign formations. Therefore, it is impossible to enucleate such a tumor when we come to extirpate it, unless it is very brittle, as occasionally happens when of long duration.

The progress of the scirrhous tumor is comparatively slow. As it proceeds, we find that the mass increases in every direction, and that it tends ultimately to the surface, to which, as well as to the deeper and surrounding structures, it contracts adhesions. The surrounding tissues are in a state of irritation in consequence of the pressure exerted by the morbid mass, and the irritation thus excited leads to the deposition of plasma, lymph, or fibrin, giving rise to adhesions, so that while a tumor of this kind is, in its earlier stages, perfectly movable from absence of adhesions, after several months we find that it is comparatively immovable on account of them.

As it advances to the surface, the skin becomes firmly adherent at several portions of its extent. Originally the skin is entirely free from discoloration, and without enlargement of the subcutaneous veins; after a while it becomes discolored and tender, with a disposition to ulceration, which finally occurs, leaving a characteristic sore. The ulcer of scirrhus, as presented to you very often in the mammary gland, has everted edges, more or less ragged and irregular; sometimes they are steep at one part, everted at another, and perhaps undermined at a third portion of their extent; but, generally speaking, we say that the edges are everted, and they are very hard and very irregular. The surface of the ulcer has the appearance as if it had been made by a punch or some similar instrument, scooped out as it were, excavated; and it is always incrusted with aplastic, cacoplastic, or spoiled lymph—lymph which is not convertible into granulations; hence an ulcer of this kind is usually free from granulations, or, if there are any, they are unhealthy, imperfectly developed, not tending to reparation. The discharge from such an ulcer is thin, sanious, ichorous, or sanguinolent—not natural, healthy, or laudable pus; it varies in quantity, is frequently very profuse, and at the same time excessively offensive; it will tarnish a silver probe, showing that it contains what is supposed to be sulphuretted hydrogen. Occasionally a vessel at the seat of the ulcer is laid open, and, in consequence, there is hæmorrhage more or less copious, but usually comparatively small in quantity; it may amount to a few ounces, or even half a pint in rare cases, but is never copious, as is so liable to happen in encephaloid.

During the progress of the disease, the surrounding lymphatic ganglions always become involved, sometimes before the establishment of ulceration, but generally not until it is about to take place or after it has actually occurred. Proceeding still further, the constitution suffers in a marked degree; the countenance gradually assumes a peculiar cadaverous appearance, often denotive of the cancerous cachexia; the eyes gradually sink in their sockets; the features become shrunk and contracted; rapid emaciation takes place, followed by hectic, loss of appetite, disorder of the secretions and of the digestive apparatus; and sooner or later the death of the patient is the inevitable result.

In some cases we find secondary developments. Thus, for example, in cancer of the mammary gland nothing is more common, during the progress of the case, than the development of little cancerous tubercles in the skin around the original seat of the disease, or even in remote portions of the body. Thus I have seen these secondary formations upon the top of the shoulder, between the shoulder and the vertebral column, sometimes in the extremities; I have seen them in the lower extremities in a case of cancer of the maxillary sinus. Sometimes they occur in the lungs, in the liver, the kidneys, the spleen, the pleura, the latter even as a sequence of cancer in the mammary gland. The blood becomes impoverished in a marked degree, the patient is rendered anæmic, and there is lesion of the skeleton, so that some of the long bones are liable to give way on the slightest exertion.

Arsenious Acid in Cerebral Congestion and Hallucination. Dr. Lisle states that insane persons often present symptoms of cerebral congestion. Patients who suffer from hallucination always do; but 67 per cent. of these were cured, and 29 in 193 permanently improved. Arsenious acid is an infallible specific in cerebral fever. The dose varies from $\frac{1}{12}$ to $\frac{1}{4}$ of a grain thrice during the day, before meals.—*Am. Jour. Med. Sciences.*

Clinical Department.

UNIVERSITY MEDICAL COLLEGE OF NEW YORK.

OPHTHALMIC AND AURAL CLINIC, CONDUCTED BY PROFESSOR ROOSA.

Reported by W. J. H. Bellamy, February 14, 1868.

CASE I.—NEPHRITIC NEURO-RETINITIS.

W. L., aged 18, a pale-faced, intelligent-looking boy. He is a clerk in one of the large houses of the city. About a year ago, he began to suffer from occasional attacks of what was called "sick headache." This headache was severe, compelling the patient to quit work for the time, and it was usually accompanied by vomiting. This state of affairs continued until about four weeks ago, when he began to observe that his sight failed him. Two days ago he presented himself to Dr. Roosa, who brings him before the class to-day. His vision, as tested by Snellen's test types, showed that it was about one-third the normal amount, that is, he could only read letters in the types at ten feet which he should be able to discern at thirty feet. Smaller type, ordinary reading matter, he cannot read at all. On examination with the ophthalmoscope, it is found that there is no appearance of the optic nerve entrance, except that the vessels may be seen emerging at the *porus opticus*, the veins tortuous and distended, while the normal appearance of a white disc is not recognized at all. There do not seem to be any exudations or hæmorrhages in the retina. The urine was examined by heat and nitric acid, and found heavily loaded with albumen.

Remarks.—This is undoubtedly a case of nephritic neuro-retinitis, so called. The primary disease is in the kidney of course, and is what is known as Bright's disease. The changes in the retina are secondary, just as we may have changes in the vascular system in various parts of the body, consequent upon weakness of structure. A short time since a medical man died in this city from rupture of the heart or the aorta, whose retina of one eye I had the opportunity to examine some few months before his death, and which I found affected as is this young man's. The affection of the eye generally, although not always, occurs in the later stages of the disease; at least it is very apt to be unnoticed until then.

I would advise this boy to go into a hospital, and be there treated as only hospitals can treat this class of unfortunates. He needs tonics, the most nourishing food, and vapor baths, to excite the action of the skin, which is now doing scarcely any of its work. He should be wrapped in flannel from head to foot. Polliluvia may be frequently used.

As to his eyes, we need only put on a pair of blue glasses to protect them from excessive light, there being a slight amount of photophobia. He will take the muriated tincture of iron, and as his mother refuses to send him to a hospital, we shall endeavor to see that the requirements of treatment are answered at home. I should remark, that there are none of the peculiar patches in the retina which characterize nephritic neuro-retinitis, because the disease has not advanced far enough. The ophthalmoscopic symptoms are those of the first stages of nephritic neuro-retinitis. The prognosis is, of course, very grave, both as to the general condition and as to the vision. His youth is of favorable import as far as it goes.

CASE II.—SUPPURATIVE KERATITIS.

Ellen D., aged thirty, a poorly nourished subject.

This patient has an affection of the right eye, for which she has used innumerable remedies recommended by her friends, *e. g.* poultices of various kinds; the last one was made of the fæces of a cow. Great photophobia, and congestion of the palpebral and ocular conjunctiva are observed. There is a small ulcer on the lower portion of the cornea.

Treatment.—The diet should be regulated, made a nourishing one; all slops should be avoided; a bath should be taken once a week, a blue shade should be worn over the eye, and an anodyne application made to it. The best anodyne application for the eye, is the sulphate of atropia, or some form of belladonna. We often use the aqueous extract. It may be used wherever there is severe pain in the eye, except in cases of glaucoma. It has a far more extensive value than that due to its mechanical effect in dilating the pupil, and preventing adhesions of the margin of the iris. It acts directly upon the sensory nerves of the eye. This patient may use a solution of the strength of two grains to the ounce twice a day. One drop is sufficient in order to secure the effect desired, and this may be introduced with a camel's hair brush two or three times a day.

The eyes should be kept very clean with lukewarm water, and a little simple cerate applied to the edges of the lid at night.

I would again call your attention to the impropriety of using poultices in affections of the eye. They are only admissible when you wish to hasten or promote suppuration. Many eyes are lost every year from the criminal haste of the laity to prescribe remedies for affections of the eye. The remedies recommended by non-professional advisers consist of very different articles, varying somewhat, I suppose, according to the latitude. In this part of the country, tea leaves, urine, figs, and oysters are favorite applications. This poor woman's case was probably in the beginning one of simple conjunctivitis, of the herpetic or phlyctenular variety, which the improper application has brought to this stage of keratitis, and has produced the intense congestion and relaxation of the conjunctiva that we now see.

CASE III.—OBSTRUCTION OF THE LACHRYMAL DUCT.

D. L., aged fifty-one, laborer. This patient complains that for the past six months the tears have refused to run off, but flow over his cheek from both eyes. The symptom is known as epiphora. It may depend on several causes, *e. g.* displacement of the puncta, obstruction of the duct leading into the nose from the lachrymal sac. From the appearances in this case, it probably depends on the latter cause. I accordingly slit up the canaliculi on each lid, with a peculiar probe-pointed knife, introducing the probe point vertically into the punctum, and then changing it to the horizontal position. I lay open the canal into the lachrymal sac. It produces some considerable pain, and yet a patient with an ordinary amount of pluck can bear it without an anæsthetic. It causes no deformity. We are unable to see that the canaliculi are slit up unless we evert the lid. Some divide the canaliculi with scissors, others with a cataract knife on a grooved probe. I have found this method which I have just adopted, on the whole, the best one. We shall not use a Bowman's probe to day, but when the patient is next seen, which will be to-morrow, I will endeavor to pass a No. 1 probe. In the meantime he will occasionally apply cold water to the eye. I have often before spoken at length on this class of cases, and the close of the hour prevents any more extended remarks at this time.

CASE IV.—GLAUCOMA.

A case of Glaucoma of both eyes, in a sailor of middle age, was also presented, for which the operation of Iridectomy had been done at another place, but without success, the patient undoubtedly having presented himself when the disease was advanced to atrophy of the optic nerve with excavation. It was remarked that the cicatrix marking the point of entrance of the knife, *i. e.*, in the sclerotica, just beyond the *limbus conjunctivalis*, showed what the diagnosis had been. If the object had been to make an artificial pupil simply, the incision would have begun in the cornea, or just at the line of junction of cornea and sclerotica. Here, where the object was to relieve intra-ocular tension, the incision was begun through the ciliary region, as you see. The symptoms of acute Glaucoma are, intense pain in the eye—sometimes mistaken for neuralgia—hardness or increased tension of the globe, with opacity of the dioptric media. An iridectomy is the only efficient means of relieving the tension and pain. Excavation of the optic disc, and its atrophy, are symptoms of *absolute glaucoma*, for which there is no hope of relief. This patient, as you see, has absolutely no perception of light.

Progress of Medical Science.

PHOSPHATE OF SODA, IN SMALL DOSES, is considered by Dr. W. St phenson (*Edinburgh Med. Jour.*), a very important remedy for bowel complaints in children, induced by a lack of the requisite variety of food. The cases in which he recommends it are chiefly the following: In infants who are being artificially reared, and who are liable to frequent derangement of the bowels, also where the phosphatic elements in the food seem deficient, or where articles of food rich in phosphates, such as oatmeal, disagree; where, from the character of the motions, there is a deficient or defective secretion of bile. It is thus of service in cases of chalky stools or white fluid motions. The dose for children is from four to ten grains in the food, and for adults twenty to forty grains dissolved in water, after meals. In adults he had found that it effectually removed constipation when taken in drachm doses in the morning, and had seen benefit derived from its use in those cases where there was a feeling of fulness, and pain in the epigastrium some hours after taking food.

TREATMENT OF CORNS by Dr. E. Wilson (*Ranking's Abstract*).—"Remove the cause," Mr. Wilson says, "is a favorite dogma of medicine; but the removal of the cause is not always practicable; hence we must study how we can best afford relief to these troublesome disorders. The laminated corn or callus, produced by pressure, congestion, and increased formation of epidermis, may be softened by moisture, as by soaking in warm water, by the application of a starch or soap poultice; and being softened, the thick cuticle may be thinned by scraping with a blunt knife, or the albuminous epidermis may be dissolved by an alkaline solution and moderate friction. When the thickening has been reduced sufficiently, it may be kept down by daily washing with soap. The soft corn requires removal with the knife; if it be of moderate size, a single pinch with a pair of pointed scissors will effect its removal, while the hard callus will require patient digging with the point of not too sharp a knife. The eye of the corn may always be made visible by rubbing the part with eau-de-cologne, or spirits of wine, and any remains of the core may be detected in this way, either during or after the operation. After the operation the corn

should be covered with a piece of soft plaster for a day or two, and a perforated plaster of buff leather or amadou subsequently worn to keep off pressure from the centre of the growth. The removal of a corn may be very considerably aided by the use of the compound tincture of iodine painted on the swelling. When the corn is painful, this application subdues the sensibility, and renders the corn dry and pliable, and easy of removal by means of a file. Soap and water, so useful to the skin in many ways, are especially serviceable to feet afflicted with corns, and particularly when they are soft corns. Daily washing with soap, and the subsequent interposition of a piece of cotton wool between the toes, may be considered as a cure for soft corns. And in these cases the skin may be hardened by sponging with spirits of camphor after the washing. The cotton wool should be removed at night, and this is a good time for the use of the camphorated spirit."

Local Anæsthesia in Otalgia.—Dr. C. C. Shoyer (*American Journal of Medical Science*) has found the following means effectual in promptly relieving the pain in ear-ache: He draws into the smallest size India-rubber syringe about one-half a drachm of chloroform, and slightly elevating the nozzle to prevent slipping, introduces it into the ear. The effect, he says, is magical, stopping the pain almost immediately.

New Method of Delivery by the Practice of External Manipulation by Dr. Kristeller (*Berlin, Klin. Wochenschr.*) (*Ranking's Abstract*).—After the very favorable results that have been derived on the one hand from external manipulation, as recommended by Wiegand, in the better position of the fœtus, and also in the preparatory stages of the labor, and on the other hand from Crede's practice of removing the placenta to complete delivery, Kristeller inquires whether it be not possible to regulate, by external manipulation, the course of a labor which is progressing abnormally, and thus to restrict the indications for manual or instrumental extraction. With weak, irregular, or faulty pains, and in cases where an abridgment of the labor is desirable, the following method of delivery has been followed by Kristeller for some time, with the best results. Standing on one side of the woman, who is placed on her back, he attempts to isolate the uterus from the coils of the intestine, and to carry it in the axis of the pelvis. He then grasps it with the hand-is in such a way that the little finger is directed toward the pelvis, and the palm of the hand clasps the fundus of the uterus, or its sides at the upper part, with the thumb placed upon the anterior, and the slightly stretched fingers upon the posterior surface, of the organ. Kristeller next commences to move the integument of the abdomen gently over the uterus, and then proceeds, keeping the hands in the same position, to exert upon the organ a pressure at first slight, but later gradually increased in amount. A pause is soon made in the compression, which varies from one-half to three minutes, according to the gravity of the case, the stage of delivery, and the sensibility of the woman; after which the pressure is again exerted, though not at the exact place as before. The compressions are thus repeated, ten, twenty, or forty times, and toward the end of delivery are continued with short intermissions. Sometimes a few compressions suffice to bring a slow labor to a favorable conclusion. When no signs of any results are observed after twenty or thirty compressions, this method is given up. The compressions act in the first place by increasing the power of the uterus, and by exciting pains; and in the second place by removing spasmodic strictures, by producing complete dilatation of the os uteri, and favoring the onward movements and regular descent of the child. When the child is descending, one may feel, by introducing a finger into the vagina, that the movements take place simultaneously with the compressions produced externally, and if any parts of the child project from the genitals the operator can perceive the visible results of the pressure. The pain caused by the manipulation is not generally more severe than the pains of labor; with multiparæ when the abdominal walls are lax, and in twin-birth, after one child has been expelled, this method succeeds the best. On the other hand, when the integument of the abdomen is distended and thick, it is much more difficult, although, if the patient be narcotized, it may be practised with success.

Inhalation of Bromide of Potassium in Hooping-Cough.—Dr. Helmke, of Jena (*Ranking's Abstract*), advises the inhalation of a solution of bromide of potassium for hooping-cough. He uses it with the strength of two grains of the salt to an ounce of water.

Treatment of Malarial Fevers by the Subcutaneous Use of Quinine.—This method seems first to have been used by Dr. Chasseaud, of Smyrna, in 1862. It was first tried in the N. Y. Hospital in 1866, in a case of congestive remittent fever, and is now a part of the regular practice of the house. A solution of quinine is used, of which thirty-five minims are equal to four grains of the salt. It was soon discovered that abscesses were sometimes caused by the undissolved crystals of quinine, and by particles of dust which had dropped into the solution. An excess of acid removed this source of danger, and but slightly increased the pain of administration. After some experiments, it was observed that four grains of the salt were needed to break an attack of tertian fever, and fully eight a quotidian. In cases of congestive fever the amount varied with the symptoms present, and was given upon the estimate that one grain subcutaneously equalled four by the mouth. The injections were first given, and the rule is still observed, two hours before the expected paroxysm. Where two injections were required, if there was time, four grains were given, and the other dose two hours before the expected chill, and if the time was too short, both were given at once. Three cases are cited as examples of many in which this general plan of treatment was carried out. In many cases no quinia was given after the last chill, except on the anniversary days. In some small doses were administered to guard against a return of the chill. By the hypodermic method of administration, a great saving in the use of the medicine may be made, not more being employed in the entire course of many cases than were formerly needed to avoid a single paroxysm. In the remittent fever, the experience is not very satisfactory. —E. C. Seguin, *in the N. Y. Medical Journal*.

Electricity in Pulmonary Consumption.—Dr. Eisberg, in a communication to the *Philadelphia Reporter*, on the subject of electricity in pulmonary consumption, claims the following advantages in the employment of electricity: 1st. It can be applied directly to any muscle or set of muscles which the physician desires to bring under its influence. 2d. It can be carried out daily, at all hours and seasons. 3d. It does not fatigue or exhaust the patient. 4th. It can be employed at all ages, and in every condition of debility. 5th. It can be employed in the patient's house, in bed, etc. 6th. Even when absolute rest is requisite, such as in pulmonary hæmorrhage, it may be employed. 7th. The injurious influences of the weather, and other inconveniences inseparable from other kinds of exercise or muscular gymnastics, are avoided. 8th. It acts more powerfully, and in less time, than any other gymnastics.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, March 16, 1868.

LEGISLATIVE ENACTMENT FOR THE ELEVATION OF THE STANDARD OF MEDICAL ACQUIREMENTS.

OUR condensed report of the proceedings of the late Annual Meeting of the Medical Society of the State of New York gave a brief abstract of the two addresses, delivered by the President, Dr. John P. Gray, of the State Lunatic Asylum. The subjects taken up in those addresses are of the highest importance, not only to the medical profession, but to society at large. Dr. Gray's discussion of them was received by the members present with deep interest, and a full conviction of the truth and justice of the views presented, of the real need of some action on the part of the profession, and, perhaps, even of the Legislature, to meet the evils that have arisen from past neglect, and to place the profession on a ground better corresponding with the present advanced stage of science and civilization.

One of these subjects was Medical Education, the importance of which our daily experience is more and more imperatively urging upon our consideration. We feel warranted, therefore, in directing special attention to this topic, and to the suggestions thrown out by Dr. Gray, even in advance of the regular publication of the *Transactions*:—First, that a higher standard of preliminary education should be required in students before entering upon the study of medicine; and, second, that a higher grade of medical qualifications should be demanded before granting a diploma as a Doctor of Medicine.

Any person, whether belonging to the medical profession or not, who recognizes the undoubted fact of the vast progress which every branch of scientific knowledge has made within the past forty years—even since the comparatively recent days of Sir Humphrey Davy—must regard it as an obvious consequence, that the qualifications of a profession to which the health and lives of the whole community are intrusted, should be put upon a constantly ascending scale, instead of being allowed to deteriorate. But the policy actually pursued in our country would seem to be just the reverse of this. While science has everywhere advanced, the standard of individual qualifications seems to have been constantly lowered; while there is vastly so much more to learn, in order to discharge our commonest duties to society, there appears to have been less and less required of the student to know before actually entering upon one of the gravest and most solemn responsibilities that mortal man can undertake—the dealing with the health and lives of his fellow-men. Whether we are permitted to hope for any reform in this matter through legislative enactments or not, we think every man of experience and reflection must deplore the present indifferent state of public opinion and social usage on this subject, which has aided so highly in bringing about the prevalence of so much charlatanry and fraud, and subjected our country to the annual payment of a tribute to ignorance and fanaticism which would be enough in a few years to pay off the national debt.

The laws for the security of property and moneyed interests are minute and stringent. Commercial dishonesty and malversation are closely watched and guarded against; but for that which is dearest and most valuable to man—life and health—there is absolutely no precautionary provision—beyond the question of pecuniary damages after irreparable mischief has been done! Dr. Gray, after tracing the history of legislation in this State, shows what every one who looks at it must admit, "that in some respects there has been retrograde action which might have been arrested by the vigorous and calm remonstrances of the profession."

The Revised Statutes of 1813, digested by lawyers whose superiors in their specialty the State has never seen, provided for four years of study, allowed no license to practise except to doctors having diplomas, and those to be at least twenty-one years of age; and imposed a penalty of fine and imprisonment upon those who attempted to practise in violation of these restrictions. In 1828 the provision as to age was repealed; and in 1830, the penalty was modified to a petty fine of twenty-five dollars, and even this was remitted to those "doctors" who "used only roots, barks, or herbs, the growth or production of the United States"—"an extraordinary application," the Doctor quietly remarks, "of the principle of protection to domestic productions!" It is, indeed, a certain, though melancholy indication of the ignorance in which this subject was dealt with, and the too great apathy of the profession, at the time, that such a ridiculous and unmeaning discrimination was made as was thus incorporated into this law.

In 1835, another downward step was taken in reducing the period of study to three years. And in 1844, the final plunge was taken of repealing all penalties and restrictions on the subject, and providing only for prosecution in cases of malpractice, gross ignorance, or immoral conduct in such practice. Since that time the doors have been thrown wide open to all who desire to practise medicine; and the profession have been left to sustain, not merely their own dignity, but the cause of true science and the physical welfare of the community,

as best they may, against the mass of empiricism which the abolition of all legal restrictions has let in with full sweep over the length and breadth of the land.

We are aware that there are many—perhaps it is the usual and popular view—who maintain that every profession must stand upon its own merits, and every individual of a profession, especially, must so stand. But this is not a matter of private and personal concern. It is a question of public health or safety. Surely those are subjects that must take precedence of mere pecuniary interests, and we have no hesitation in saying that any government is derelict in duty that takes no notice of "causes that operate to spread diseases and increase mortality." A railroad corporation may have sufficient inducement to secure competent and skilful engineers, solely in the consideration of the great expense for damages attending an accident. But we all know that the skill or competence of the engineer does not enter into the question at all when an accident does occur. It is simply what material damage has been suffered. Not so in medical or non-medical practice; here the gist of the matter is, "malpractice, gross ignorance, or immoral conduct;" any of which must be proved, and the burden of proving them is thrown upon the victims of them. And here we would note that Dr. Gray very properly cites the Metropolitan Health Bill as one forcible illustration of the *principle* which determines the right and duty of the State to secure the public welfare by legislation in these matters as well as others.

We agree with him that it is not likely we shall ever return to the full measure of former legislation on this subject; but we have no doubt much can be done to better the existing state of things. The questions proposed by him in his inaugural address, as to whether a uniform standard of qualifications should or could be enforced under legislative power, and whether the various schools should be confined to some prescribed forms, or left to announce their own standard, with varying inducements to students, are, indeed, worthy of attention. The lengthening of the sessions in some of our medical colleges is a step in advance, if only some rule can be made for enforcing attendance throughout the whole of the course.

But the chief step in reform, or at least the first, must be taken by the members of the profession themselves. In the matter of granting certificates, they must observe a perfect fidelity to the letter and spirit of the regulation on that subject. It is especially with them that the standard of preliminary education rests, and it is wrong to introduce candidates for a medical diploma who have not what should be deemed respectable qualifications as to general education.

But we do not wish to anticipate too far the reading of these addresses, or the labor of the committee appointed by the Society to bring the subject to the attention of the Legislature. Our object is merely to call particular attention to the important subject treated of in the address, and bring the matter to the due notice of the profession. All will be glad to know that the Society, by their resolutions, thoroughly endorsed the views presented by Dr. Gray, and a committee is occupied with the task of considering the various suggestions and putting them into shape for presentation to the Legislature. The question of a higher standard of medical education has received considerable attention for several years past. We welcome each new impulse toward its solution, and we hope the interest and effort will increase until the profession is placed on a higher vantage ground of usefulness, intelligence, and honor, than it has ever before occupied.

The medical public of New York need a building of their own, which shall be a focus where all the converging rays of the various societies,—Academy of Medicine, County Medical, Pathological Society, Journal Association, etc.,—may unite. It might be called the Academy of Medicine, and be large enough to afford ample accommodations for all the societies, which are now sustained with so much zeal by their members. It should also be so beautiful and grand as to claim the tribute of admiration from the laity of our city and land. Such a building, adequately equipped, with library, reading-room, large hall for public occasions, smaller rooms for the various societies, such as the obstetrical and ophthalmological, which now meet at the private houses of members, would do more to unite the medical profession of the metropolis, than all other agencies combined. A museum might be founded in connection with it, which would in time rival the great museums of London and Washington, and which would be, what the latter monument of science and labor is not fully, on account of its inaccessibility, of great utility to the teachers of the profession.

If our prominent young medical men would take hold of this suggestion of ours, the older men would undoubtedly seize the opportunity for the safe deposit of some of their wealth; while the laity of our great city, always noble and generous, would be proud to testify by substantial aid to the debt of gratitude which they owe the medical profession of New York.

Who will inaugurate this matter, sure to be begun and accomplished by another generation of medical men, should ours leave it undone?

The establishment of a public foundling hospital has been suggested by the Grand Jury, in a late presentment to the Court of Oyer and Terminer, as the only effectual remedy against the crime of infantile abandonment so prevalent in this and other large cities. The opinion is an eminently orthodox one, and reflects credit upon the parties concerned. It is to be hoped that something substantial may grow out of it. The medical profession have long been convinced of the practicability of such a measure, and will stand ready to give it all the aid in their power.

Reviews and Notices of Books.

HALF-YEARLY COMPENDIUM OF MEDICAL SCIENCES. Part I. January 7, 1868. Edited by Drs. S. W. BUTLER and D. G. BRINTON. Philadelphia, 1868.

THIS is a periodical which commences its first issue with January, 1868. As it is an effort to give mainly the doings of American physicians, it deserves the hearty support of our countrymen. Its departments are varied and well kept up, and it gives a reliable and extensive *resumé* of most of the new things that have transpired, not only on this continent, but in Europe. We wish it that success which the enterprise of the editors so richly deserves.

THE DIAGNOSIS, PATHOLOGY, AND TREATMENT OF DISEASES OF WOMEN, INCLUDING THE DIAGNOSIS OF PREGNANCY. By GRAILLY HEWITT, M.D., London, F.R.C.P., Prof. Midwifery and Diseases of Women, University College, and Obstetric Physician to the Hospital, etc., etc. First American, from the Second London Edition, revised and enlarged, with 116 illustrations. Philadelphia: Lindsay & Blakiston, 1868. 8vo. pp. 707.

IN the latter part of 1863, Dr. Grailly Hewitt offered to the profession a work principally devoted to the diagnosis and treatment of diseases incident to females. So practically and comprehensively was the subject treated, that the volume met with the well-merited approval of his professional brethren, and added not a little to the reputation of the distinguished English professor as a practical and scientific teacher. Since then the treatise has been regarded as among the leading authoritative ones upon the subject. A first edition has been disposed of, and now a second, with many enlargements and improvements (not the least of which are a great number of original illustrations), has made its appearance, and has been republished in the first American by a Philadelphia firm.

The diseases of women are now considered of so much importance, occupying as they now do such a large proportion of all the maladies which the general practitioner is called upon to treat, that an eminently practical treatise upon the subject will be eagerly sought after. As one of this kind, Dr. Hewitt's book must continue to hold the very highest rank, more especially in regard to the important matter of diagnosis. This department is treated in a truly masterly manner, not only by the adoption of a rational and singularly faultless system, but by the manner in which the details are simplified to the comprehension of the merest student. The whole ground is most thoroughly gone over, and every element that may have the slightest significance in forming an opinion of any particular class of cases, is succinctly and impressively stated. A distinctive feature in the second edition is the importance attached to the discussion of pathological changes in connection with the subject of treatment. The ideas of the author in regard to the nature of the various lesions are so fully up to our present knowledge, that nothing practically is left to be desired; while the treatment is marked by that conservatism and respect to the opinions of others who may differ with him, which serve to stamp him as a sound reasoner and safe and reliable practitioner. Under the caption of "Data obtained without physical examination," the subjects of age, sexual relations, menstrual derangements, various substances expelled from the generative organs, vaginal discharges, symptoms referable to the rectum, and abnormal sensations, are severally treated of in all that detail which their significance demands; while the section which treats of "Data obtainable by physical examination" is singularly full of practical directions as to the different methods of conducting examinations of the uterus and abdomen. Upon the latter point his remarks concerning the diagnosis of abdominal tumors, the discussion of the possible difficulties in the way, and the various precautions to take, are extremely valuable to the general practitioner, and form one of the distinctive excellences of the treatise.

In the matter of treatment he appeals to the common sense of every one called to the class of cases under consideration, for not only does he lay stress upon the management of the causes of the thousand and one ailments peculiar to women, but gives an almost equal importance to the therapeutics of the various symptoms *per se*, each one of which is taken up in due order, and disposed of in accordance with its respective cause.

In conclusion, it is probably unnecessary for us to say, at the penalty of a reiteration, that it is one of the most useful, practical, and yet comprehensive works upon the subject in the English language, a true guide to the student, and an invaluable means of reference for the teacher.

ON DISEASES OF THE LUNGS AND AIR PASSAGES; THEIR PATHOLOGY, PHYSICAL DIAGNOSIS, SYMPTOMS, AND TREATMENT. By HENRY WILLIAM FULLER, M.D. Cantab., Fellow of the Royal College of Physicians, London; Physician to St. George's Hospital, etc., etc. From the Second Revised London Edition. Philadelphia: Henry C. Lea, 1867.

IT is indeed difficult, among all the various excellent treatises upon chest diseases now before the public, to claim which is the best. The science of physical exploration has arrived to such perfection that very little that is really new can be offered by writers on the subject. Occasionally a new view will crop out as the result of a particular line of investigation; but writers are generally content simply to give the results of their own experience in the applications of the principles of physical exploration to the diagnosis of the various chest diseases, and feel that they have discharged a duty in adding to the store of recorded facts. In this latter respect our author has departed somewhat from the beaten track, and presents us in one or two of the topics something that is original. For instance, upon the sign of ægophony he has made some original deductions, which are of the highest practical value in the matter of diagnosis. He sums up some very interesting arguments upon the subject with the following remarks: "Practically ægophonic resonance implies one of two conditions: either hepatized or otherwise solidified lung (or, according to its position, a large superficial cavity or bronchus in the lungs), with tenacious mucus, so placed in the air passages as to vibrate in a particular manner; or else the same condition of lung, with effusion into the pleural cavity, and slightly separating the two surfaces of the membrane, but admitting of their coming so far in contact at the spot where the peculiar sound is heard, as to vibrate the one against the other. The latter is its common, its usual source; and when the sound is well developed and persistent, I believe it to be its invariable source. In certain instances of pneumonia, and in cases of tumors pressing on the pleural cavity, the voice has somewhat of an ægophonic character; but if due care be taken in making the examination, and a conclusion be not arrived at until after two or three interviews, I believe, with Laennec, that well-developed ægophony may be depended upon as proof of the existence of fluid in the pleural cavity."

There are some other explanations of the manner in which the various abnormal sounds of pectoral diseases are produced, which are marked by equally good com-

mon sense and forethought; but we need not here particularize them by entering into the lengthened detail that would be necessary. In the discussion of phthisis, its causes, pathology, physical signs, he is really felicitous, and in the matter of treatment he is especially so. His remarks on climate, change of scene, etc., are replete with valuable practical suggestions. He shows very conclusively that cold is by no means prejudicial, except in a very few cases. He advocates the supporting treatment, the use of cod-liver oil, and the other well-known medicaments, in an able manner.

As the result of a careful perusal of the work, we have come to the conclusion that it is not excelled by any of the many now before the public; the author has taken nothing for granted, but commenced at the beginning, and has carried his reader by easy stages through a long and difficult journey, explaining everything on the way, and giving entire satisfaction at the end.

On the Signs and Diseases of Pregnancy. By Thomas Hawkes Tanner, M.D., F.L.S., Member of Royal College of Physicians, &c. From the second and enlarged London edition, with four colored plates and illustrations on wood. Philadelphia: H. C. Lea. 1868. 8vo. pp. 482.

This is a well-written and useful book upon a very important subject. The title, although comprehensive, does not by any means belie the contents of the volume. All the trivial as well as important signs pertaining to pregnancy, are carefully noted, and, founded as they are on an ex'en-ive clinical appearance, are in every way trustworthy. The style is happy and anecdotal, and the subject is presented in a manner that is not only interesting but instructive. In order to give a better idea of the scope of the work, we will present a summary of its contents: The general observations on the state of pregnancy; the signs and symptoms of pregnancy, a chapter which is thoroughly exhaustive; the diseases which simulate pregnancy, full of interesting cases and illustrative points; the duration of pregnancy; the premature expulsion of the fœtus; the examination of substances expelled from the uterus; extra-uterine gestation; superfœtation; missed labor; the diseases which may coexist with pregnancy and their reciprocal influence; the sympathetic disorders of pregnancy; the diseases of the urinary and generative organs; and lastly, the displacements of the gravid uterus.

With the immense variety of subjects treated of and the ground which they are made to cover, the impossibility of giving an extended review of this truly remarkable work must be apparent. We have not a single fault to find with it, and most heartily commend it to the careful study of every physician who would not only always be sure of his diagnosis of pregnancy, but always ready to treat all the numerous ailments that are, unfortunately for the civilized women of to-day, so commonly associated with the function.

Observations on the Nature and Treatment of Polypus of the Ear. By Edward H. Clarke, M.D., Professor of Materia Medica in Harvard University, etc. Boston: Ticknor & Fields. 1867. Pp. 71.

Professor Clarke has done the profession a service in presenting this exhaustive and interesting monograph. As is observed by the author in introducing his subject, "while all systematic writers on aural diseases describe polypi of the ear, their descriptions are by no means precise, and sometimes confused." The monograph consists of two parts, in one of which the nature of aural polypi is clearly stated by means of illustrative cases, and plates of sections of these growths, as seen under the microscope, while in the second part the treatment is carefully detailed. Dr. Clarke believes that the meatus, near the membrana tympani, is the most common situation of aural polypi; and agreeing with all other authorities except the redoubtable Kramer, of Berlin, ascribes their origin to suppurative inflammation. The adaptation of Weber's principle of cleansing the nares to the injection of the auditory canal, is suggested, with an engraving of the apparatus.

The author alludes in the preface to the interest which diseases of the ear have recently excited, and yet we are sorry to see that he does not fully adopt that method of examining the membrana tympani and auditory canal, *i.e.* by means of ordinary daylight and the concave mirror, which, as is almost universally conceded, has done more than any one suggestion towards exciting interest in aural diseases. We are sorry to take issue with so distinguished an authority as Professor Clarke, but we must believe that a mirror with a forehead-band attached, and ordinary daylight, afford a much better means of illumination for the manipulations necessary in removing aural polypi than "sunlight reflected into the meatus by means of a mirror, so that its rays pass into the ear horizontally."

The monograph to which we have thus barely called the attention of our readers, nearly fills one of the vacancies in aural literature. We must regret that the author does not write more, since he writes so well.

Hysteria.—Remote Causes of Diseases in General; Treatment of Disease by Tonic Agency; Local or Surgical Forms of Hysteria, etc. Six Lectures delivered to the Students of St. Bartholomew's Hospital, 1866. By F. C. Skey, F.R.S., late President, and member of the Council and of the Court of Examiners of the Royal College of Surgeons, England, etc. New York: A. Simpson & Co. 1867. 12mo. pp. 103.

This little work is made up of a course of six lectures, delivered at Saint Bartholomew's Hospital, on the various subjects as named above, and is one of the most readable *brochures* that we have come across for many a day. Not only is it readable, but it is so full of practical hints and valuable instruction, that every one who reads it will wish it was longer. Mr. Skey is the warmest kind of advocate for active stimulation in disease, and may be considered the champion for the *supporters*. His views are open to some serious objections as to their universal adoption; but, in the main, they are true enough to recommend themselves to serious consideration. His remarks on the surgical forms of hysteria are of the highest value to every general practitioner.

Plastics.—A New Classification and a Brief Exposition of Plastic Surgery. A reprint from a report in the Transactions of the Illinois State Medical Society for 1867. By David Prince, M.D. Philadelphia: Lindsay & Blakiston. 1868. 8vo., pp. 93.

This work is one which will hardly reflect credit upon Dr. Prince's former efforts, as it is too small and incomplete to be a reliable guide in the performance of the most delicate operations in surgery; and altogether too long, not to say tedious, for a pamphlet giving us the mere outline sketch of a new classification. There is a plentiful supply of wood-cuts scattered throughout the work; but their quality is scarcely redeemed by their quantity. The declared intention of the author has been to furnish a new classification, and give a brief exposition of plastic surgery. A new arrangement, it is true, has been offered to us; but the advantages of it are by no means apparent. As to his exposition of the science of "plastics," we think it altogether unnecessary. Every surgeon who operates upon a particular case would hardly rely upon the plans as here laid down, but would be more apt to consult with much better sat-

isfaction the larger works on the subject. The subject, as it has been worked up, was very creditable as a paper to a Medical Society, but it is quite another matter when it is put up in regular book form.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, DEC. 12, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

MORBUS COXARIUS—SHALL EXSECTION BE PERFORMED FOR SIMPLE EROSION OF ARTICULAR CARTILAGES?

DR. HAMILTON presented the upper end of the shaft of the femur taken from a lad, a patient in Bellevue Hospital, upon whom he had operated seven weeks ago for morbus coxarius. The child had had disease of the hip for many years, but was able to get about the ward, notwithstanding the existence of several open and discharging sinuses in the neighborhood of the hip joint and inguinal region. It was thought best to explore the diseased part, not only with the view of deciding, from the extent of the disease, the necessity of resection, but more especially to establish a direct route for the matter. Ether was administered, and on cutting down upon the articulation, it was the opinion of Dr. Sands, himself, and others of the staff present, that the disease had not advanced sufficiently far to warrant exsection. It was observed that there was very little motion between the head of the femur and the acetabulum, and it was thought that the parts were in the process of repair rather than in that of destruction. The child did not recover well from the operation, owing, in Dr. Hamilton's opinion, principally to the anæsthetic, and gradually sank at the end of five or six weeks after.

The autopsy revealed a complete erosion of the head of the femur, with a partial loss of its substance, and erosion of the acetabulum and of the anterior surface of the pelvic bones. From these surfaces sinuses communicated externally. A portion of sea tangle was discovered in the wound, which was supposed to have been removed during life. The orderly had given a promise to the child (who dreaded the operation of its removal), to say that it had been taken away, and had forgotten to inform the doctor otherwise after the visit. The sea tangle was not in view, and the statement of the nurse was not questioned. The lesson that was to be learned, however, from this, was always to secure the weed by a string, to prevent its slipping.

The case, as a whole, was of importance, principally in reference to the question whether or not the opinion concerning the inexpediency of performing resection was justifiable or not. It did not seem warrantable to him to take away the head of the bone when there was nothing more than simple erosion of the articulating surfaces to necessitate it. All that he thought was required was the establishment of a free exit to the matter, in the hope that nature would then complete the cure by the establishment of anchylosis. In fact, under the circumstances, even a better result might be expected, as was the case in a patient of the same age, and with the same condition of joint, and who had submitted to the same operation with the result of not only averting the progress of the disease, but of preserving the motion of the joint.

He could readily understand how, in complicated joints, such as the elbow and wrist, on account of the dense tissues and multiplication of surrounding layers, resection would promise more than mere incision, but in those that were simple and had large cavities the case was different.

The only argument in favor of resection was the taking away of the pressure of the diseased surfaces upon each other, but he did not consider that even this could be urged with sufficient force to overthrow the practicability of an operation which, under the circumstances, was not only a trivial one, but which, all other things being equal, promised so much.

In answer to a question from Dr. Sayre, he stated that the limb after the operation was virtually in the same position as before.

DR. KRACKOWIZER remarked that the respective dangers of incision and resection were the same; that the danger of resection was not greater by removing the head and neck of the bone than when the head was left *in situ*, provided that the extent of the disease could at the time of the operation be definitely determined by the free introduction of the finger into the joint cavity; and that the usefulness of the limb afterward depended upon the position in which it was found when the incision was made, and was left, after the resection was performed. In regard to the extent of the disease, there could be nothing but conjecture offered when an incision was simply made, as only a comparatively small part of the joint could be reached by the finger. That portion might show indications of repair while those parts that were hidden might be undergoing more or less rapid degeneration. Then again, if the reparative process were allowed to go on, it did so under less favorable circumstances than when resection was performed, as in the great majority of cases where a simple exit for pus was made, the process was very tedious, and many accidental circumstances might occur which might even compromise life. Again, the usefulness of the limb was altogether in favor of resection, unless an exceptional case were found in which, at the time of the incision, the position should be exactly what was wanted.

DR. SAYRE endorsed Dr. Krackowizer's views, except so far as they related to the comparative dangers between the simple incision and resection. His experience had taught him that there was no decent comparison to be made, that resection was very much the safest: the recoveries more rapid, less complicated, and more satisfactory than when the, so to speak, simpler operation was performed. Again the position forced to be assumed by a patient with incision was not calculated to allow free drainage, which was altogether different where the head and neck of the bone were removed. He stated that he was in the habit of not only taking away the head and neck of the femur, but the great trochanter as well, the line of section being parallel with the short axis of the bone. If the trochanter were left, it would, according to his view, act as a more or less complete plug to the wound, and thus prevent the free exit of the discharge. The periosteum was easily, with a proper instrument, peeled from these parts, and under favorable circumstances was enabled to secrete new bone. He did not hesitate to say, in conclusion, that in such a case as the one reported by Dr. Hamilton he would advise resection.

DR. HAMILTON did not consider that section below the trochanter was by any means a trivial operation, as it involved a great deal of tedious dissection to separate the strong tendinous attachments of the rotator and glutei muscles to the bone. He did not think it was possible to peel off these attachments by hand. It was not fair to conclude that the periosteum could be easily separated, unless suppuration were confined entirely to the head of the bone, when resection would in reality be a comparatively trivial operation.

Dr. Sayre remarked that the attempt to separate the periosteum from the points indicated by Dr. Hamilton, was altogether different when made when the bone was healthy, and when it was diseased. In the former case it was almost impossible, but in the latter, it was accomplished easily with a little tact and patience.

Dr. Hamilton stated that in his specimen it was impossible to separate the periosteum from the digital fossa, except very imperfectly and in strips.

Dr. Sayre stated that sometimes it was necessary to nick these attachments with the knife.

Dr. Krackowizer remarked that in comparing the danger of the two procedures he referred to the section of the neck. In the greater number of his cases he preferred to leave the great trochanter intact, although in all his operations he was governed by the extent of the disease. If the great trochanter is not diseased it should be retained, as in his opinion the separation of its muscular attachments always involves the use of the knife. When the operation is performed low down, of course it becomes, in comparison, more grave as to the chances for recovery.

Dr. Sayre believed that, independent of the other reasons which he had given, a strong argument in favor of removal of the bone below the trochanter was to be found in the great liability of that portion, if not already diseased, to soon afterwards becoming so. Out of the twenty-three cases of his own which he had examined, there was found in all more or less of caries of the trochanter.

In passing he remarked that it was always best, when there were evidences of pus in the joint, to make a free incision, in the hope of coming at the disease in its incipiency, and if the surgeon is lucky enough to strike it at that point, a simple gouging off of the carious portions may preserve the integrity of the limb.

In regard to the separation of tendinous attachments to necrosed bone, Dr. Sands stated that he believed it was pretty generally understood that when such connections were with the bone direct, as in the case of the rotators, it was always necessary to use the knife, but when the periosteum merely intervened, that membrane could be easily stripped.

CYSTIC KIDNEYS—CORPUS LUTEUM, ETC.

Dr. Finnell exhibited several specimens, of which he gave short histories.

The first was a pair of cystic kidneys, removed from a man who had died suddenly of brain symptoms; the second was an ovary, containing a handsome corpus luteum, removed from a woman 36 years of age, who died of Bright's disease, and who had an abortion performed upon her 24 hours before death; the 3d was an inflamed uterus and sloughing vagina, removed from a woman who had suffered severely from delayed labor, owing to the stupidity of a midwife in attendance. The forceps was at last applied by a physician, but she sank and died 8 days after from inflammation of the parts already named.

The fourth specimen was the uterus of a prostitute, who had died of intemperance, and who, although she had one abortion produced, and was said to have given birth to a child at full term, presented to all appearances a virgin os.*

The fifth specimen was another uterus removed from a woman who aborted at three months. She was seized with a fright, and on returning home, symptoms of labor showed themselves. A few hours after, a physician was called, who attended faithfully through that day and evening, but finding that the fœtus did not come away he introduced a uterine sound. This had the effect of emptying the womb; but symptoms of peritonitis soon after followed, from which she died on the 5th day. The cause of the peritonitis was referred to a false passage made by the instrument into the uterine wall.

Dr. Newman exhibited two small renal calculi, which were passed with the stream of urine without the patient's knowledge.

OVARIOTOMY—GALVANO-CAUSTIC TO PEDICLE.

He next presented a multilocular ovarian cyst removed from the left side of a woman on the 24th of October. She came under his observation last year in November, and was then very much emaciated, in consequence of a tendency to regurgitate her food from pressure of the tumor, and from attendant dropsy. Two weeks after he first saw her, she was first tapped, and ten quarts were drawn off; subsequently the operation was repeated three or four times, eighty-four pounds of fluid being taken away in the course of 11 months.

After being prepared for the operation ether was administered with Dr. Furman's apparatus. In describing this apparatus he stated that it was very similar to the one figured as Dr. Goodwillie's, in a recent number of the Medical Record, the modification being such as would allow of the vapor of water being inhaled with the anæsthetic. It took fifteen minutes to get the patient under the influence of ether; but although the operation lasted a full hour and a half, and anæsthesia was perfect during the whole period, only three drachms of ether were used. The unpleasant influences of the ether were not marked; there was vomiting only for a day, and nausea lasted only three days.

An incision, at first three inches in length, was made in the linea alba, but when adhesions were discovered by sweeping a curved sound along the surface of the tumor, the wound was enlarged from the umbilicus down to the pubes. The fluid was drawn off with a trocar, and the pedicle divided by a galvano-caustic battery in the hands of Dr. Gulecke. In this connection a clamp was exhibited, which was a modification of the one used by Baker Brown for actual cautery. Its adaptation to the particular purpose in this case necessitated the employment of a non-metallic, non-conducting material, to insulate the blades, both for heat and galvanism.

The pedicle was returned into the abdomen after Peaslee's method. It was three inches long, but not very thick. The wound was entirely closed.

On the fourth day after the operation her pulse resumed its normal standard of 88, but after that it went up until the tenth day, when signs of internal suppuration showed themselves, by chills and the other well-known attendant phenomena. The sutures were removed by the 12th day, there being placed over them the carbolic acid putty recommended by Lister.

On the 16th day the pulse ran up to 130, when a drainage tube was introduced, and a stick of laminaria digitata to keep the wound open. A large female catheter was then afterwards introduced; but not having the effect of facilitating the discharge, the cavity of the abdomen was injected with warm water, containing half a drachm of carbolic acid to the pint. The drainage tube was kept in from the 13th to the 17th day.

From this time the patient commenced to sink until the twentieth day, when she showed signs of rallying, the pulse dropping rather suddenly from 130 to 100. From that time she rapidly gained, so that she was enabled to return to her home on the thirty-fourth day. In conclusion he stated that he was under obliga-

* At a subsequent meeting, it was stated by one of the members that diligent inquiry had elicited the fact that the patient had never given birth to a child.

tions to Drs. Cutter, Hutchison, and Finnell, for their kind assistance and judicious advice during the operation.

In answer to a question from one of the members, he remarked that after the clamp was removed from the pedicle, two arterial twigs commenced to bleed, and gave a great deal of trouble. They were finally secured with silver wire ligature.

Dr. Newman also exhibited a heart which had been kept in carbolic acid water (℥j. to Oj.) for a full year, without giving the least signs of decay.

Dr. Hamilton, in referring to the question of etherization in Dr. Newman's case, took occasion to refer to the statement that the bad effects of the ether were not marked. This assertion to his mind bore considerable significance, in that it left us to infer that in all cases the bad effects of the anæsthetic were always more or less marked. He was at least inclined to that belief, and stated that it had very much to do with the success of operations, especially when such were performed upon individuals deficient in the necessary stamina to resist its bad influences. This was the case with the lad operated upon by him, the shock of the operation, and the shock of the ether, initiating the decline.

Dr. Terry explained the cause of bleeding from the pedicle in Dr. Newman's case by the instrument being lifted from its position too rapidly.

Dr. Howard stated that he had witnessed five operations, with actual cautery, by Baker Brown, of London, and in neither case was there any subsequent hæmorrhage. These cases were all operated upon in regular succession.

Dr. Hutchison, in reply to this remark, stated that during last summer he had seen the same operation performed by the same surgeon upon two cases only, and in each one ligatures had to be applied after the removal of the clamp.

Dr. Cutter thought that it was impossible to divide the pedicle by the means proposed by Dr. Newman, without more or less hæmorrhage. One of the main objections to the instrument was the arrangement of pins in the jaws, which not only prevented the pedicle from dropping back, but were apt to pierce some vessel that might be in the way. He suggested that it might be better to have the blades serrated.

Dr. Finnell wished to state that persulphate of iron was freely applied to the internal surface of the abdominal walls to check oozing.

Dr. Sands stated that he had been in the habit of using an instrument similar to the one shown by Dr. Newman for operating upon hæmorrhoids according to the plan of Henry Smith, of London. The hæmorrhoids were seized in the clamp, cut off, and the divided ends cauterized. He had used it four or five times, but in every instance was compelled to ligate bleeding vessels afterwards.

Protection for the Fingers during the Operation of Local Anæsthesia.—Dr. J. A. Milne, of Kharpoot, Asia Minor, writes: "The great difficulty in using local anæsthesia is in keeping it up during the operation and applying it to the point diseased, and keeping the fingers from its influence. I have been able to perform the former and obviate the latter, by placing a cot upon the thumb and finger to be used in the wound. I find a rubber one fits the best, and is preferable."

Treatment of Itch.—Hebra uses the following compound: Petroleum and spirit, of each one ounce; balsam of Peru, one fluid drachm; oil of rosemary and lavender, of each fifteen minims.

Correspondence.

IPECACUANHA IN DYSENTERY.

To the Editor of the Medical Record.

Sir—In your issue of January 1st, 1868, Dr. H. D. Bulkley—to whom I take the liberty, through your columns, of presenting my respects—reports the treatment of chronic dysentery, in New York Hospital, with ipecac, ten grains, three times a day. My limited experience in this direction may be of use to the profession, or if not, my good intentions may excuse the boldness of obtruding it, a thing I have not often done. I had noticed the striking report of this kind of treatment by E. S. Docker, Esq., an English naval surgeon in Mauritius, published in Braithwaite's Retrospect, part xxxviii., 1859. I was compelled to try it at the Baptist College Hospital, Richmond, in December, 1862. The patient was a pale, emaciated, slender belligerent, who had suffered, for about a month previous to entry, with dysentery, and had been so harassed and weakened by hourly, and even half-hourly, calls to stool, day and night, for a week or ten days since, that his constant supplication had been for something that would put him to sleep to wake no more, or that effect. I had exhausted his and my own patience with elixir of vitriol, nitrate of silver in half-grain doses, tincture of iron in large doses, epsom salts in small doses (an excellent remedy, by the way), and a string of etceteras. His stools were bloody, rice-water, and purulent; no signs of fæces. I followed Mr. Docker's plan to the letter, as far as practicable: sinapised the epigastrium half an hour, gave two grains of opium an hour in advance, and then administered a heaping teaspoonful of powdered ipecac, on water. No vomiting or retching followed, and, incredible as it may seem, in less than four hours thereafter the patient was delivered of a copious, consistent, and well-formed fecal stool, ceased to call on death to end his torment, and in five days more was my most reliable nurse in attendance upon other sufferers in his ward. In the course of these five days I found it necessary, on account of threatened return to the old condition of his stools, to give him two other doses of the ipecac, of half a teaspoonful each, with the sinapism, but without the opium. He convalesced steadily for a month, at the end of which time I discharged him—with a brother of his who had come to nurse him, but upon whom he had turned the tables—from the hospital, and from the army, both for phthisis pulmonalis. I had like success with other cases of the kind there and thereafter by this method, though I did not resort to it unless the usual doses of epsom salts and other means failed.

I would state, in conclusion, that, acting on the rationale which Dr. Bulkley has assigned to this remedy, I have found two grains of podophyllin, a dose that had previously brought watery evacuations from a certain patient laboring under constipation from inactivity of the liver, to secure, in two hours, from the same patient, when given for a fretful diarrhœa of five days' standing from the same cause, a stool of the normal character set forth above, and no further treatment needed, beyond a house-pill of red pepper, to relieve griping and carry off wind—which latter it did, very much to the patient's social discomfiture. Incidentally, in regard to podophyllin: I never dared to give it otherwise than from my own hand, and of specimens tried upon myself; so given, it has answered for me all the indications of evacuants, through the whole range, from mild laxatives to drastics, according to the dose administered; but pre-

scribed, and dispensed by the druggists, it has never failed to call down upon me the invective of the patient (?) for having torn his inside to pieces. The inspectors of medicines may unravel this mystery; I need not hint to them the convenience of elaterum and pulverized liquorice-root.

Respectfully yours,

GEO. S. KING, M.D.

ALEXANDRIA, Va., March, 1868.

STELLINE, STELLURINE AND CONCHOIDINE.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—I know that I am not the only one of your readers who was surprised on finding, in your issue of February 1st, an article by Dr. J. H. Salisbury, in which he announced the discovery of four new pathological products, which he names *Stelline, Stellurine, Pigmentine,* and *Conchoidine.* I am anxious to be able to recognize these new products should they ever come under my observation; and yet every one who is in the habit of using the microscope knows that, in many instances, it is entirely unsafe to trust to appearances alone. For instance, oxalate of lime, carbonate of lime, uric acid, and urate of soda, may all be found in urine in the form of dumb-bells, and it is only by the use of certain reagents that they can with certainty be distinguished from each other. May I, therefore, through your columns, ask Dr. Salisbury for a more minute description of these bodies? It would seem important to know what magnifying power was used in making the woodcuts with which the article referred to was illustrated, so that we may form some idea of the actual size of these bodies.

There may be found in Funke's Atlas, and elsewhere, representations of starch granules, which so nearly resemble the wood-cut of *Stelline,* that one can easily imagine that a beginner might mistake one for the other if he relied on microscopical appearances alone. It seems, therefore, eminently desirable that we should be made acquainted with some *characteristic* reactions of these new bodies.

In speaking of *Stellurine,* the Doctor tells us that "the crystals are usually irregular in shape." If they are sometimes regular—as one might infer—will the Doctor not please to describe them? Are they cubes? or octoedra? or triangular prisms? If they are *always* irregular, what entitles the body to be called a crystal?

If in the wood-cut of *Conchoidine, m, n,* and *o* represent the usual appearance of that body, why should any one suppose that *d* represented the same body?

In what way are these substances to be obtained from the blood? Is it only necessary to prick the skin of the patient and place a drop of the blood so obtained upon a glass slide? Or must the fibrin and corpuscles be separated from a larger quantity, and these bodies be allowed to deposit themselves from the remaining liquid? Or must the blood be submitted to still further treatment?

Do these bodies deposit themselves from the urine when the latter is simply allowed to stand, or must some reagent be employed to separate them? Have the crystals any color, or are they perfectly transparent and colorless?

Trusting that Dr. Salisbury will favor us at as early a period as possible with a detailed account of these bodies, and with their *chemical analysis,* I remain,

Very truly yours, W.

OINTMENT FOR SORE NIPPLES.—Dr. Blacquieres uses the following compound for the cure of sore nipples: Cocoa butter, 150 grains; extract of rhatany, 10 grains.

ORTHOPÆDY ABROAD.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—Thinking that some of the readers of the MEDICAL RECORD may be interested in a subject not often mentioned by European correspondents of the medical press, I venture to give them a concise summary of my observations in regard to the treatment of deformities, made during my last visit to Europe.

It was no secret that the principal object of this my third visit was to secure criticisms on some of my own orthopædic apparatus, sixteen specimens of which had been sent to the Paris Exposition. But at the same time I endeavored to see and learn what I could while abroad, and all my leisure time was devoted to that purpose.

I was very well received by our English brethren in London, and made the acquaintance of Mr. Wm. Adams, who, every one admitted, stands at the head of English orthopædists; Mr. Bradhurst, Mr. Tamplin, Mr. Page, and others. In London they have two institutions devoted exclusively to the treatment of deformities, viz.: the Royal Orthopædic Hospital, Oxford street, and the National Orthopædic Hospital. The former, however, is the principal one. It is a moderate-sized building, supported, I believe, by the benevolent, and has a certain number of beds—perhaps thirty or forty (I merely estimate the number)—for in-patients. There are also facilities for the treatment of out-patients, large numbers of whom visit the hospital twice a week for advice and treatment. Mr. Wm. Adams, principal surgeon, is assisted by Mr. Bradhurst, in attendance on these out-cases, and by Mr. Tamplin, I understood, for the patients in the hospital. I observed these cases with a special interest, and I must confess I was more astonished by what I did *not* see them by anything I saw. In deformities of the feet and knees, there was sufficient success. But these deformities are the easiest to treat. Where time is not taken into the calculation, and the prominent idea is merely to reduce the aspect of the deformity, any plan of treatment will answer a certain purpose. The largest number of these patients—that is, in the hospital—were cases of deformed feet and knees, contortions at the knees predominating. Simple extension by apparatus, sometimes by means of a screw at the joint of an apparatus worn on the leg, and sometimes by a pulley and weight at the foot of the bed, were the principal means employed. There was no case of Pott's disease, nor hip-joint disease, in the hospital when I visited it. On inquiry I found Mr. Tamplin very much opposed to our American practice of counter-extension in hip-joint disease, saying *it was all nonsense.* There were several cases of counter-extension in disease of the knee-joint, why not for the hip also? And he showed a case of congenital dislocation of the hip-joint which he was treating by counter-extension, as an evidence that he had tried it. I might have assured him that, if that was the way he had tried it, he had not tried it at all. I was more interested in the out-patients. Nearly all forms of deformity incident to a poor, ill-fed population were represented. There was nothing worthy of remark in their treatment, except the rapidity with which twenty or thirty patients were run off. There might have been some means, to me invisible, of reapplying the bandages and instruments, and making or directing the necessary modifications. And here let me say that the great criticism I have to offer on the management of all cases of deformity in the London Hospital is not so much the plan of treatment as the lack of attention to little details. I think too much is left to the uneducated judgment of subordinates.

Notwithstanding this criticism, there is a vast

amount of good done in this institution. Mr. Adams' treatment of talipes seemed to be used everywhere. It consists in dividing the plantar fascia in order to first reduce the tarsal deformity, and when a varus or valgus is converted into an equinus, to divide the tendo Achillis as the last step of the treatment, instead of its being the first step, as has heretofore been the case. The relations of the steps of the operation and treatment for talipes are, without doubt, the proper ones, and I am indebted to Mr. Adams for this idea. The apparatus he uses is very simple indeed. It consists of a piece of zinc about one inch wide and from six to twelve inches long, according to the size of the patient. This is then covered and padded on one side. This simple splint, either straight or curved to the desired shape, is laid along the outside of the foot and a roller bandage carried around the whole extending well up the leg. This is all the instrument he uses for clubfoot. Of course the patient cannot walk, and as the treatment is often prolonged, it must be a great inconvenience. Mr. Adams gets most excellent results; but the same steps in the operations and treatment may be taken with a better instrument, one which will allow locomotion and constant use of the muscles.

The Hospital for Sick Children in Great Ormond Street, London, is a very interesting place to visit for any one interested in children's deformities.

The number of children among the ill-fed poor of London, with limbs distorted from casualties, is enormous. There was a great deal more pains taken in the dressings and bandages of these cases than in the London hospital, and I saw very good results in knock-knees and bow-legs by the persistent and careful use of a padded piece of wood bound to the outside of the leg from foot to hip, with a bandage. I saw an operation for cleft-palate very skilfully performed by Mr. Smith, surgeon-in-charge. A marked feature among the out-patients was the number of infants brought to be treated for nævi. Threads soaked in chloride of zinc—if I remember rightly—were drawn through the veins. These are removed in about a week, when the vascular mass is seen to be shrunken and more pale, and in a short time disappears. I saw many cases where one could hardly discover the location where nævi had existed.

In the larger hospitals, Guy's, University, St. George's, St. Bartholomew's, etc., there seems to be very little attention paid to deformities. Whatever does not admit of an "operation," seems to be looked upon with indifference, to say the least.

Occasionally, on diligent inquiry, some one would remember a case of diseased spine or hip-joint in some corner of the wards, but for the most part they were merely waiting to die. I saw no mechanical treatment for disease of the spine in any of the large hospitals. In St. Mary's there were two cases of hip-joint disease treated with the starch bandage, and straight splint for promoting anchylosis.

In Paris they still pursue the *mixed system*. That is, different classes of cases—club-foot, syphilis, cancers, injuries and amputations, fevers, and small-pox, are treated side by side in the same ward. This is just the opposite to the idea of specialties in surgery. Still, specialties are largely cultivated, and are very successful in Paris, though the professed sentiment of the profession is against them. A much better idea of French orthopædic practice may be obtained at the "bureau central" than in the hospitals. All the hospitals of Paris are under one direction, the "bureau central," where there is a department for the treatment of such patients as do not want to be supported in hospital. This includes, of course, a large proportion of deformities. Every morning at one o'clock, at the office just opposite Hotel Dieu, may be seen the orthopædic cases. Large numbers are here prescribed for, and furnished with apparatus, who are never seen in any hospital. Bouvier, who to-day stands at the head of French orthopædic surgeons, and Duval direct the treatment. I was much pleased with the patient care with which each case was examined and prescribed for. The apparatus also, though very simple and cheap, seemed to answer well the indications. I noticed with pleasure how neatly and carefully they were applied. The apparatus used here are quite different, and, though cheaper, are in my opinion much better than those for sale in the shops.

Duval has a private orthopædic institution at the extremity of rue Faubourg St. Honoré, beyond the barrier. I noticed, what would seem very strange in this country, that the place was advertised in large painted letters on the fence, together with a catalogue of the diseases he would undertake to treat.

There is no hospital specially devoted to orthopædy in Paris, though the "Hôpital des Enfans Malades" undoubtedly receives most such cases. There is a well appointed gymnasium in the court of this Hospital.

In Vienna, the Children's Hospital, a little way beyond the Grand Hospital, receives the larger portion of deformities. I am sorry I cannot remember the hard German name of the professor who so kindly showed me the arrangements of the hospital. They were excellent, and much attention is paid to deformities. But everywhere, as in London, the chief attention seemed to be paid to deformities of the feet and legs, generally resulting from infantile paralysis and rachitis, cases most difficult to treat, so far as restoring the form is concerned. Dr. Weil has a well-appointed private orthopædic establishment a short distance from the city, which I visited. My astonishment continued to increase, and at last became extreme, that nowhere was I able to find any special attention given to those most serious maladies, Pott's disease and morbus coxarius. I was often told that Pott's disease was considered incurable. In London many inquiries were made about our American instruments, and Mr. Adams, Mr. Bradhurst, and Mr. Paget, took copies of my spinal and hip-joint instruments, and seemed very much pleased with them. Mr. Paget particularly was loud in his praises of the hip splint, and said, "it answered the indications the best of any instrument made for any purpose he had ever seen." He took measures to have one applied at once in St. Bartholomew's.

Mr. Paget was especially pleased with the feature in my hip splint, by which the whole weight of the body in locomotion is supported on the instrument as on a perineal crutch.

But he shook his head when disease of the spine was mentioned, saying he had never seen it cured.

It is a curious fact that the term "Pott's disease" is not used in England, and I had to explain myself to one of the surgeons at St. Bartholomew's, on the very ground of P. Percival Pott's researches, and with his bust standing in the room before us. They always say "angular curvature," a term still worse; for the curvature, or rather distortion, occurs only *after* the disease; and how can an *angle* be a *curve?* There is need of a good term to properly designate this class of cases.

The result of three visits, which were made with an earnest desire to be instructed, has satisfied me that there is little for Americans to learn abroad in regard to the subject of deformities. I say this with special reference to England and France. The German institutions I hope to more fully examine at some future time. But orthopædy is a legitimate field for the ex-

ercise of our proverbial ingenuity, and my conviction is that we are already many years ahead of the old world in this branch of practical surgery.

Yours, etc.,
CHARLES F. TAYLOR, M.D.

Medical Items and News.

PERSONAL.

DR. STEPHEN SMITH has been appointed a Sanitary Commissioner for the Metropolitan Health District, *vice* Dr. Willard Parker, term of service expired.

DR. JOHN SWINBURNE has been reappointed Health Officer for the Port of New York.

DR. NELSON L. NORTH has been elected President of the Eastern District Medical Society.

DR. MARY C. PUTNAM of this city, now in Paris, has received permission to follow the lectures of the Ecole de Medicine, she being the first woman ever admitted to such privileges.

DR. C. C. LEE, late U. S. Army, has been appointed one of the Sanitary Inspectors, vice J. Haven Emerson, resigned.

NEW YORK PATHOLOGICAL SOCIETY.—Drs. W. De F. Day and Charles Young have been elected members of the Society.

DEAF-MUTISM.—Dr. D. B. St. John Roosa read a paper, at a recent meeting of the Academy of Medicine, on the Etiology of Congenital Deaf-Mutism. It was claimed by the author that the statistics heretofore presented by superintendents of deaf and dumb asylums for the purpose of showing the causes of congenital deaf-mutism, were unreliable. The only method of ascertaining the causes was by an objective examination of the ear and pharynx. The improved methods of examination afford ample facilities for such an objective investigation. The history of the patient should also be taken into consideration, just as in investigating any other affection. Of course the dumbness arose only in consequence of the deafness. There was no congenital affection of the vocal organs. Whatever changes may have occurred there, were simply owing to non-use of the parts. From the investigations made by himself, in 296 cases, and from the researches of Voltolini, he was disposed to think that the causes of so-called congenital deaf-mutism were about the same as those of deafness occurring later in life, *i. e.* inflammation of some part of the auditory apparatus. In this view he excluded those cases usually accompanied by idiocy, complete or partial, where the organ of hearing was not completely developed.

BORO-CITRATE OF MAGNESIA AS A REMEDY IN URINARY CALCULUS.—Dr. Becker, of Muhlhausen, reports (Memorabilien, xxii. 4, 1867) some cases in which the use of this double salt, consisting of borate and citrate of magnesia ("as much as will lie on the point of a knife given every two hours") effected the cessation of pains in the region of the kidney and the passing of stones. —*Med. and Surg. Reporter.*

THE AYLETT MEDICAL INSTITUTE.—The annual commencement exercises of the Aylett Medical Institute were held at the University Medical College, corner of Worth and Church streets, March 4th. Prof. Budd delivered a very happy address, and Dr. F. J. Moore pronounced the valedictory.

THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHYSICIANS AND SURGEONS held its tenth annual meeting on March 4th. Dr. Gurdon Buck read an address in which he briefly touched upon certain points of professional etiquette, and counselled the cultivation of more intimate relations among medical men in general. He also alluded in feeling terms to the decease of Prof. Watts. A copy was requested for publication. The Alumni Association Prize was awarded to Dr. Samuel R. Percy for a paper on "Atropia." A resolution that a tablet be erected by the Association in the lower lecture-room of the college to the memory of Profs. Joseph M. Smith, Chandler R. Gilman, and Robert Watts, was unanimously adopted.

The following officers were elected:

President, Joseph Mauran; *Vice-President*, John Torrey; *Secretary*, Ellsworth Eliot; *Assistant Secretary*, John Shrady; *Treasurer*, Wm. H. Draper; and twenty-eight Councillors.

According to the necrological report, the following members had died since the last meeting:—Dr. Nicoll Havens Dering (class of 1817), Richard Esselstyne (1819), Benjamin Ogden (1820), John B. McEwen (1831), John Hart and Robert Watts (1835), Thomas W. Horsfield (1839), Peter G. S. Ten Broeck (1847), Nathaniel S. Crowell (1851), Edward C. McGrath (1854), John Galvan (1855), John Trenor, Jr. (1856), Charles E. Morgan (1857), Edward K. Hogan (1863).

The Association adjourned to a bountiful collation prepared by the faculty at the Ashland House, adjacent to the College, where they were also entertained with various unique gems of vocal music by the graduating class.

BELLEVUE HOSPITAL MEDICAL COLLEGE.—The Alumni Association of this college held its annual business meeting on Wednesday, February 26th, when the following officers were elected: President, Dr. James Ferguson; Vice-President, Dr. Leroy M. Yale; Recording Secretary, Dr. R. A. Vance; Corresponding Secretary, Dr. Fred. A. Castle; Treasurer, Dr. Henry Raphael; Executive Committee, Drs. L. B. Irish, E. L. Mola, Bradney Griffin, O. M. Pray, T. R. Pooley, Wm. T. Lusk, Chas. A. Leale, John W. Southack, Geo. W. Terriberry, John W. Pinkham, Joseph Cushman, and P. R. Cortelyou.

On Thursday, February 27th, was held the anniversary meeting of the O. Æ. Society. Addresses were made by its President, Mr. E. C Harwood, and by Prof. Doremus. Toasts were responded to by other members of the faculty and of the society, and by Hon. C. A. Seward among the invited guests. The speeches were interspersed with music, and the occasion was one of much interest.

The commencement of the college took place at the Academy of Music, on Saturday, February 29th. One hundred and eleven students received the degree of M.D. The address to the graduates was given by Hon. Clarence A. Seward. He humorously alluded to the relations between the sister professions of law and medicine, and to the debt both owed the railway managers, whose great purpose was clearly to furnish the young doctor and lawyer with something to do. While the one is binding the bruised and broken limbs with his fomentations and his splints, the other pours on the wounded spirit the healing balm of damages. After further remarks in this vein, the speaker congratulated the college upon its marked success, and eulogized the several members of its Faculty. He then turned to the solemn obligations which the profession imposes; the difficulties and anxieties which beset the young practitioner at the outset of his career; and the spirit in which they should be met. The choice of location was the first problem,

The saddle-bags or the "one-hoss shay" of a country ride might do fairly enough at twenty-five, but at fifty their owner would have but a sorry record to show. The professional man needs the stimulating air of the great city; though for success here he must expect to wait through a weary time of heart-sickening from hope deferred. Yet it is not the centre of the city, but its suburbs which offer the best field. One always finds the basement crowded, while the attic, which has the purer air and the better view, is comparatively tenantless. Success is assured to faithfulness and enthusiasm. Without this ardent devotion, a profession sinks into a mere trade, which will hardly gain the poor reward it covets. But the culture must be broad. Exclusive devotion to one pursuit operates upon the man like the grindstone on the knife, it sharpens but it narrows. There is no fact so trivial, no learning so profound, but the time will come when it will be seen to bear directly on present practical success.

The valedictory was delivered by Dr. F. H. Bosworth, of the graduating class. He rapidly traced the growth of medicine, as an art and a science, from the days of Æsculapius to our own. If in the past it was built upon religious superstition, and propped by veneration for the old and the mysterious, at present the ancient temple has toppled down and its very foundations are being swept away. The materials lie strewn around in vast profusion; but the master-builder has not yet appeared who can rear anew the edifice in strength and beauty. The only knowledge that we can safely trust is that gained from personal experience. In behalf of the class the speaker warmly thanked their instructors. He then addressed his classmates upon the opportunities and the duties opening before them.

A full orchestra, under the direction of Mr. Bergmann, performed several excellent selections. After the exercises, the class repaired to the house of the President, Dr. Isaac E. Taylor, to enjoy the customary supper.

Commencement of the Medical Department of the University.—The commencement was held in the large chapel of the University on Tuesday evening. In the absence of the Chancellor, President Draper gave diplomas to eighty-two graduates, as follows:

Wm. M. Abernethy, N. C.; D. R. Ambrose, N. C.; A. Asadorian, Turkey; A. Assenheimer, N. Y.; W. J. H. Bellamy, N. C.; L. Bennett, Ky.; J. Q. Bird, N. J.; Wm. L. Broaddus, Va.; M. Broening, N. Y.; E. Clark, N. C.; S. G. Clark, N. J.; C. C. Clarkson, N. J.; E. W. Close, N. Y.; J. L. Diaz, Cuba; R. W. Dorsey, Va.; J. A. Duggan, N. Y.; M. C. Dunigan, N. Y.; A. D. Elmer, N. Y.; G. C. Estabrook, Me.; J. E. Ferdinand, N. Y.; E. G. Flagg, Me.; B. Franklin, N. Y.; R. L. Grindle, Me.; Wm. K. Gray, N. J.; L. P. G. Gouley, N. Y.; Wm. Haggerty, N. Y.; S. P. Harned, N. J.; J. C. Hallock, N. Y.; T. W. Harris, N. C.; C. Hammel, N. Y.; A. M. Henkel, Va.; L. G. Herrera, Cuba; P. V. P. Hewlett, N. J.; C. J. Holmes, N. Y.; C. W. Horner, Cal.; B. Hughes, Conn.; C. Inches, N. B.; R. P. A. Jentz, N. Y.; D. H. Johnson, N. Y.; A. G. Jones, N. C.; J. L. Jordan, S. C.; D. A. Kennedy, Tenn.; J. Kidder, N. Y.; T. C. Knox, N. Y.; L. R. Lamport, N. Y.; Wm. A. Lash, N. C.; C. M. y Lastra, Cuba; F. Leflaly, Syria; A. A. Lewis, N. J.; Mesa J. y Llarena, Cuba; J. McIlwain, Ill.; Ed. F. Merritt, Ky.; L. M. Mitchell, N. Y.; J. H. Morgan, Conn.; Alex. Montague, N. C.; T. J. Moore, N. C.; L. H. Mosely, Vt.; Wm. H. Munn, N. Y.; C. R. O'Hare, N. Y.; R. C. M. Page, Va.; J. W. Pardoe, Ohio; J. H. Pruett, Ala.; G. P. Ramirez, Cuba; I. J. Reynolds, N. Y.; J. L. Robertson, N. Y.; C. E. Rogers, Minn.; J. W. Sanders, N. C.; F. L. R. Satterlee, N. Y.; J. O. T. Schurig, N. Y.; C. Secord, N. B.; G. Smart, N. J.; J. Smith, N. Y.; M. C. Stone, N. Y.; A. B. Sturges, N. Y.; T. Sullivan, R. I.; Wm. Taliaferro, Va.; K. R. Taylor, N. C.; J. Thompson, N. Y.; T. B. Twitty, N. C.; A. Voelker, N. Y.; Wm. P. Welch, Cal.; J. V. S. Wooley, N. Y. Total, eighty-two.

The following prizes were awarded:

Mott medal, Gold, to James Synott, Conn.
" " *Silver*, to A. S. Ranney, N. Y.
" " *Bronze*, to B. Hughes, Conn.
Budd prize, Thomas J. Moore, N. C.
Rosa prize, W. J. H. Bellamy, N. C.
Bottles prize, James C. Hallock, N. Y.
Jacobi prize, $100, divided among four competitors.

Prof. W. Darling then delivered the Valedictory Address to the graduates on behalf of the Faculty, after which the exercises were closed with the Benediction by Prof. Martin, of the University.

Alumni Association.—S. S. Purple, M.D., was re-elected President, together with all the officers of last year. Dr. H. S. Hewit was elected Orator for 1869, and Dr. James R. Leaning, Alternate.

The College of Physicians and Surgeons held their sixty-first commencement at Steinway Hall, March 5, a week earlier than usual. Dr. Delafield, the President of the College, after the charge to the class regarding their moral obligations to the community, presented 104 candidates for the doctorate, with their diplomas. Prof. Dalton announced the award of the "Hansen Prize" to Charles A. Leonard, and of the "Faculty Prizes" for theses, the first to Edward Frankel, and the second to Benjamin R. Swan. Honorable mention was made of several other theses as being far above the average. Rev. Dr. John Hall then delivered an eloquent address to the class, enjoining them *ever to study* zealously, faithfully, and conscientiously, assuring them that there could be no excellence without labor. A singularly chaste and pertinent valedictory, gracefully pronounced by Dr. Thos. H. Kenan, closed the exercises of the evening, which, we should not omit to mention, were enlivened with some very excellent music.

Population of Great Britain.—Great Britain now contains thirty millions of people, an increase of two and a half millions since 1852, and during the time she has furnished three millions of emigrants to this country, Australia, and other parts of the globe. During the last fifteen years Ireland has decreased in population nearly eight hundred thousand.

A Healthy City.—Wheeling, W. Va., was never in a healthier condition. During the past month there were only twenty-eight deaths, and ten of that number were under five years of age.

A New Alloy of Aluminum, consisting of one-third silver and two-thirds of aluminum, has been introduced into the arts. It is said to be harder than silver, but more easily engraved.

Removal of Freckles.—D. Savignac employs successfully a lotion of Vichy water for two or three minutes night and morning. After the washing, the skin is allowed to dry without wiping it.

Marriage of First Cousins.—A bill is pending before the New York Legislature prohibiting the marriage of first cousins under a heavy penalty.

Fecundity.—A single plant louse will, in the fifth generation, have a progeny of six billions of lice, and will be still living.

THE PRESERVATION OF ANATOMICAL PREPARATIONS.—Dr. Duchesne, of Boulogne, has availed himself for five years of Van Vetter's plan of preserving anatomical preparations, with the most gratifying success. Seven parts of glycerine are mixed with one part of brown sugar, and one-half part of saltpetre; and the specimen to be preserved is immersed in this mixture for a greater or less length of time, according to the size of the specimen; thus, a hand, for instance, requires a week's immersion. After first being taken out, the part is immovable and stiff, but hung up in a dry and warm place, the superfluous glycerine evaporates slowly, and the muscles and joints become soft and pliable. To prevent mouldiness, the specimen is then varnished, and must always be kept in a rather warm and dry place. Dr. Duchenne states that he demonstrated the motions of the middle finger in a hand exposed to the air for four months.

ABUSES IN THE ENGLISH LUNATIC ASYLUMS.—The English "Commissioners of Lunacy" have unearthed during their recent sessions many startling facts. At Colney Hatch, for instance, it was discovered that a practice had prevailed of placing certain male patients of destructive habits in their rooms at night in a completely nude state, and without bed or bedding. The practice has now been stopped; but the superintendent stoutly defended it for cases where patients are given to destroying clothes and bedding. At Hanford, in another large asylum, which contains three dormitories with an aggregate of thirty-six beds, it was found that there was no visitation whatever during the night. In another basement in the same establishment, containing sixty-eight beds, there were no attendants within call. The violent death of a patient led to the investigation in this particular instance. Further, it was found that violent cases of mania were constantly admitted into common workhouses, where neither suitable accommodations nor medical assistance were provided; and that the manner of dealing with them when excited, or, as it is termed, "refractory," was to throw them down upon the ground and keep them there by force until they became quiet. There was nothing for it, the assistant said, but to "down" a man; to "leg" him down; to trip him up and hold him down; the patient was never so mad but he found out that way who his masters were, and then he gave over.

These and other abuses of like character the Commissioners have of course corrected; they now require nurses to sleep in the vicinity of the dormitories, so as to be within call in case of emergency.

Many other collateral facts were also developed; one of these, according to Dr. Mitchell's report, was that of a woman, not a pauper, living with her mother and sister, and kept in a long and cruel imprisonment, while the case was clearly one for asylum care and treatment.

The doctor says that "he learnt that some years ago she was very violent and destructive; he found her quiet, but after a bit he time she refused to answer questions, and he was told that she now and then still breaks out into 'fits of passion,' and is very noisy. What he also found, is, that for the last seven or eight years, and probably for a much longer time, she had never been in the open air nor seen full daylight, but had been kept in a bare and dismal room, admitting no light but by a small sliding panel in the roof; in all that time had not had any body clothes on, and was found in bed absolutely naked. Her hair had not been combed for many years; it was like a skullcap of filthy felt two or three inches thick. The bed was quite rotten—a mere dunghcap, in fact. Occasionally she would creep to the fireside, still with no clothing on. Long confinement in bed made her unable to use her legs properly, but her general health appeared good. Strange as it may seem, the mother and sister, poor, but supporting themselves and the patient, had a sincere affection for the miserable creature they had so utterly mismanaged, and to the last opposed her removal."

ALPINE CLIMATES IN THE TREATMENT OF CONSUMPTION.—Mountain climates have recently attracted attention as fit health-resorts for phthisical invalids. It is asserted that pulmonary consumption, which is a very prevalent disease in Lima and the coast of Peru, is unknown in the highest inhabited valleys of the Peruvian Andes, and that phthisis may be cured by this mountain climate; a fact of which the Peruvian Government have availed themselves by establishing a military hospital in the valley of Jauja, upwards of 10,000 feet above the sea-level, to which phthisical soldiers are sent, and, as it is stated, with the most striking benefit. Somewhat similar assertions are also made with regard to the effects on phthisis of the climate of some of the Swiss Alpine valleys; and French writers are not behindhand in claiming a remarkable exemption from consumption for the inhabitants of the High-Pyrenees. With regard to the Peruvian Andes, the benefit said to follow the removal of a consumptive patient from a very warm and relaxing climate, within the tropics, to a pure, dry, and bracing mountain atmosphere of a moderate temperature, is easily comprehended. But the valleys of the Alps and Pyrenees can bear no comparison in these respects to the valleys of the Peruvian Andes. I should myself hesitate to send a patient, actually phthisical, from this country, to either the Swiss or French mountain districts. For, a pressure so considerable as that of the atmosphere in a lowland country, at sea-level, cannot be suddenly diminished, as it must be in ascending to an elevated mountain district, where, too, the temperature falls together with pressure of the air as we ascend, without danger of occasioning pulmonary congestion or hæmorrhage from the lungs of a consumptive person. A short residence in Switzerland or the Pyrenees, in summer or autumn, may, however, prove bracing and serviceable to some patients predisposed to consumption.—THOMAS MOORE MADDEN, *Med. Press and Circular.*

A BILL for the regulation of prostitution in the Metropolis is again before the Legislature.

New Publications.

BOOKS AND PAMPHLETS RECEIVED.

A PRACTICAL TREATISE ON THE DISEASES OF WOMEN. By T. Gaillard Thomas, M.D., Professor of Obstetrics and Diseases of Women and Children, College of Physicians and Surgeons, New York. Philadelphia: H. C. Lea. 1868.

ATLAS OF VENEREAL DISEASES. By A. Cullerier, Surgeon to Hôpital du Midi, etc. Translated from the French, with Notes and Additions, by Freeman J. Bumstead, M.D., Professor of Venereal Diseases, College of Physicians and Surgeons, New York. With 150 beautifully colored figures in 26 plates. Part I. To be complete in five parts. Philadelphia: H. C. Lea. 1868.

FELIX VON NIEMEYER'S CLINICAL LECTURES ON PULMONARY PHTHISIS. Translated from second German edition, by J. L. Parke. New York: Morehand, Simpson, and Bond.

EIGHTH AND NINTH CENSUS OF UNITED STATES OF AMERICA. Compiled by Woodworth and Lawton, Cambridge, Washington Co., New York. 1866.

Original Communications.

REFLECTIONS ON UTERINE PATHOLOGY,

AND THEIR APPLICATION TO THE TREATMENT OF ULCERATION OF THE OS AND CERVIX:

BEING A PAPER READ BEFORE THE KINGS CO. MEDICAL SOCIETY,

By J. BYRNE, M.D., Etc.

(Continued.)

The purport of this paper being to direct attention and to elicit some practical inquiry touching treatment, from gentlemen supposed to be already familiar with the literature of inflammation, congestion, and ulceration of the uterus, any attempt to discuss fully the various causes supposed to produce or influence these affections would be likely to result in but little practical value on the present occasion. Besides, if we reflect on the anatomy of the several structures and organs embraced in the female sexual system, and, at the same time, bear in mind how much we have yet to learn as to the actual causal connection existing between the various phenomena of uterine life and certain coexisting or subsequent occurrences, it will be evident that any statements on this subject, from whatever source, must be viewed, for the most part, as conjectural at best. Because, however reasonably our conclusions may lay claim to probability, we will find, in many instances, that what have hitherto been considered *primâ facie* causes, are, in reality, nothing more than precursory or concomitant deviations from normal function, and, therefore, totally unworthy to be accepted as explanatory of the actual, and probably more remote, cause or causes in any given case.

This difficulty, however, is not confined to the investigation of any one particular function or disease, but is met with, unfortunately, at every step in our attempts to associate cause and effect. And hence, though no other science, so much as that of medicine, offers so many attractive inducements to hasty and erroneous conclusions, nevertheless, with our present limited knowledge, some speculative discussion in this direction is not only justifiable, but, if it even fails, as it often does, in bringing us nearer the goal of our hopes, it oftentimes serves many good purposes *if confined within logical limits.*

For the foregoing reasons, therefore, and influenced by the proposed scope of this paper, I will briefly allude to two conditions; either, and often both of which, will be generally recognized as prominently associated with, or precursory to, the lesions under consideration. One of these is disordered menstruation and imperfect ovulation from whatever remote cause; and the other, incomplete involution following parturition, but *especially and more frequently premature expulsion of the fœtus.*

Every candid and close observer must admit the correctness of Dr. Bennet's views in claiming for ulceration of the os uteri in the non-puerperal state, a greater frequency than most other writers would have us infer. Such conclusions accord with my own experience, and it is difficult to understand how it could be otherwise; because, from the primary maturation of the Graafian vesicle until the final end of the ovarian nisus, the physiological death—if I may be permitted so to express it—of the female organs of generation, every tissue comprising this most wonderful system is almost continually in a state of reparative change. Consequently, every impediment to the perfor[illegible] functions must necessarily be follo[illegible] structural disturbance in some part [illegible] tract.

It, therefore, due weight be giv[illegible] must seem very evident that in n[illegible] tion, not only can no benefit follo[illegible] ment, but, if practised to the exc[illegible] or the careless and injudicious [illegible] because erroneously deemed of [illegible] by certain authorities, might, doubtle[illegible] injury than good to the patient. Co[illegible] would be much more rational, and, I think, [illegible] accordance with general experience, to say [illegible] whereas constitutional treatment in these cases can never be safely dispensed with, topical measures are rarely needed. On the other hand, however, though tonics, alteratives, and a strict regard to hygienic rules exclusively, will be followed by quick and permanent relief in a vast majority of this class of sufferers, still it must be admitted that cases are occasionally met with where, notwithstanding the most judicious medical treatment, and every apparent indication of a speedy return to vigorous health, some local proceeding calculated to repair damaged tissues will, in the end, become necessary.

With regard to the influence of chronic ovaritis, and consequent disturbance of the catamenial function, in bringing about structural lesions in parts adjacent, I ventured a few years ago to express some views in my paper on *pelvic hæmatocele*, and more fully on a subsequent occasion during the discussion of that subject before the New York Academy of Medicine. I was then accused of "sneering" at the opinions of Dr. Bennet because I could not accept his theories and conclusions as to the causes, consequences, and treatment of uterine ulceration.

I could not then, nor do I yet see any reasonable grounds for such a charge, in merely venturing to dissent from some statements and opinions of an author so justly distinguished; and who, I think and sincerely hope, may yet live to see the fallacy of his teaching, and, like an honorable and indefatigable searcher after scientific truth that I believe him to be, frankly acknowledge the error of his ways by modifying his treatment.

It is prominently insisted upon by some authors, and, for the most part, conceded by all, that extensive uterine ulceration exerts a most baneful influence in its reaction on the system generally; at the same time an unqualified admission even of such an opinion, is precisely what seems to me most likely to prolong indefinitely the present muddle of cause and effect. The treatment of these cases by caustic substances presupposes, as a rule, absolute rest, proper dietetic measures, and strict attention to the digestive organs; and, as the medical attendant must necessarily feel it his duty to see the patient at least once, and perhaps twice a week during such treatment, it is not unreasonable to suppose that occasionally, if not very frequently, the use of iron and quinine, or some other *aid*, might possibly be deemed indicated, and, therefore, constitute no inconsiderable part of the treatment after all.*

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* "We may observe various ailments to diminish, nay, even in a number of cases to disappear, after the employment of certain remedies, as constantly as we see day follow night, or good weather follow bad; yet without being justified in assuming that a given remedy has been the cause of such improvement or cure, any more than that night is the cause of day, or bad weather the cause of good. Physicians would be equally justified in drawing from the fact that all their patients affected with pulmonary phthisis, or cancer, had died after the employment of cod-liver oil, or iodine, etc., the inference that these drugs have been the cause of their death. In short, under the most favorable

Her health underwent little change until the fall of 1866, when she took cold during menstruation, while on a journey to Philadelphia.

She was now confined to her bed for several days with most agonizing pains in her bowels, back, hips, and groins, and constant nausea and vomiting.

From this occurrence up to the period of my attention being called to her case, her health has been wretched, and, in her pale, sickly-looking, and anæmic countenance, as well as her feeble voice and unsteady gait, might be easily read her whole pathological history.

Before attempting to treat her ulceration, I ordered her to take twenty drops of syrup of iodide of iron three times a day, and two grains quinine, also three times a day. The bowels "never acting without medicine," she was told to use once a day *regularly* a tepid water enema, as well as the cold douche to the vaginal canal, and absolute rest was strictly enjoined. This treatment was rigidly carried out for about three weeks, when she began to look much improved, and felt very much stronger, and I decided now for the first time to find out the actual condition of the uterine neck and cavity.

On making a digital examination the cervix was found barely within the labia. It was very much swollen, and to the touch reminded me of a half ripe nodulated tomato that had been pecked in spots and gouged in the centre; the slightest pressure was very painful, especially if applied to the posterior lip, which was considerably larger than the anterior. The finger passed with ease for some distance into the cervix, and on being withdrawn was covered with what seemed to be bloody muco-pus.

When the speculum brought the diseased organ into view, it was found necessary to sponge off the parts, which being done, the cervix presented two irritable, fungous-looking patches of ulceration, here and there dipping into its cavity, and bleeding on the slightest touch. Though the posterior lip was much more congested and larger than the anterior, the ulceration on the latter's surface was more extensive, but not so deep or irritable-looking as that on the posterior, and when the cervical cavity was brought into partial view by introducing and separating the blades of a dressing forceps, it was evident that the posterior spot of ulceration at least involved the cervical canal in that direction.

A probe-pointed tenotomy blade was now introduced within the os to the extent of about an inch, and carried down the posterior cervical wall through the centre of the ulcer, and a little beyond, and in depth what I judged sufficient to incise some of the submucous tissues. Two other incisions, nearly parallel with the first —one to either side of it—were next made, and then three or four, but more superficial, on the anterior surface of the os. The flow of blood was in this case very copious, so that I found it necessary to use cold instead of warm sponging, and after about half an hour, the bleeding having quite ceased, a sponge prepared in the manner already referred to was applied to the os. The patient was now directed to use, twice daily by syringe, a solution of permanganate of potash, 15 grs. to the pint, and to keep the bowels free by tepid water injections once every day, and in addition was ordered pyrophosphate of iron and bark.

On the 17th of September, one week after the above procedings, on visiting her I was met by an encouraging and cheerful look, and at the same time the assurance that she felt wonderfully better, and that she was sure an examination would convince me of the fact. A speculum examination soon settled that question, to my own as well as to the patient's satisfaction, for the cervix was reduced in size at least one-third. The anterior surface, though slightly livid, did not seem even excoriated, and the deep spot of ulceration was now more superficial, and not more than one-half the size it formerly presented. The cavity of the uterus was now washed out with a solution of chlorate of potass (15 grs. to ℥ j.), and tincture of iodine freely brushed over the same surface. A repetition of the incisions as above described, but less deep, was now performed, and the parts dressed as before.

The catamenia appeared on the 19th and lasted till the 24th, being in every respect natural and almost free from pain, a condition of things "she could not boast of for years before."

September 28th. A digital examination was attended by little or no pain, and showed a very remarkable change in the size of the cervix, which was now situated higher up, and seemed but little larger than we often find it in healthy puerperal women. The patulous state of the os no longer existed, and on the posterior lip was a small but not deep spot of ulceration, apparently isolated, and having no connection with the cervical cavity. The anterior lip, however, was now denuded, but presented, nevertheless, a healthy granular look, and there was evidence of cervical leucorrhœa, but the vaginal membrane was healthy. Crucial incisions were made over the surface of the small ulcer, and the anterior wall of the cervical canal and ulcerated surface in front scarified freely from above downwards. After the bleeding, which in this instance, also, was somewhat troublesome, had ceased, a suppository was introduced into the cervix, and the sponge dressing applied as on former occasions. The formula for the suppository used on this occasion, I may state, was as follows:

℞	Pulv. kino	
	Potassæ chlor.	āā grs. x.
	Ext. belladonnæ	
	Morphiæ mur.	āā gr. j.
	Saponis com.	q. s.

Vaginal injections of chlorate of soda, ℥ ss. to the pint of water, were now ordered to be used once daily.

October 8th. The patient informed me that she eats, drinks, and sleeps well, and has gained eleven pounds in weight since I first saw her. A digital examination revealed nothing remarkable in the size of the cervix or character of the mucous surfaces, and the finger could be passed freely around the cervix without the least pain. There was no trace of ulceration on the posterior lip, and no more than the size of a split pea on the anterior, neither was there pouting or other evidence of intra-cervical congestion, and the clear tenacious secretion from that source filled up the os. There has been no trace of leucorrhœa since last visit, and the bowels keep regular without the aid of medicine or injections. A suppository was all I deemed necessary.

November 21. The patient called upon me to say that she felt perfectly well, and can walk almost any distance without pain or fatigue, and that menstruation appeared at the proper time and passed over without any unpleasant symptoms.

The case just detailed being one of more than ordinary severity, but similar in its character and results to many others which could be related did space permit, will serve to illustrate the general principles above submitted, and the favorable issue of their practical adoption.

It no less clearly proves, also, that neither by incisions as recommended and practised by me, nor by any other merely local measure yet suggested, can we reasonably hope to bring these cases to a successful termination.

I doubt not there may be some who might say, that

though this practice seems to have been successful in the hands of the author of this paper, yet is it not a fact, after all, that scarifications have been over and over again practised and recommended by various authorities, and consequently, being as "old as the hills," can have no just claim to originality? To such I would reply, that had I presumed to claim for this part of my treatment the distinction of *originality*, the records of uterine surgery furnish evidence sufficient to dispose of such pretensions. Indeed, over twenty years ago, Huguier, in one of his lectures published in the *Gazette des Hôpitaux*, recommends, and says he has practised with very great advantage, scarification of the cervical membrane. It is worthy of remark, however, that the measure was resorted to only in cases of great obstinacy, and merely as a preparatory step to cauterization, in order that his caustics might have a more powerful and decided influence on mucous follicles and other tissues thus previously exposed.

But no such distinction is claimed or aimed at, for, as I have said before, it is not the practice—though as to the manner and extent I think justly so—but the principle on which it is founded, that I believe has escaped the notice of writers.

The abstraction of blood from these parts, whether by cutting or leeching, was, I insist, all that seemed to be desired, and the only effect sought to be produced was that of lessening the local congestion. I have myself watched the effect of leeches in these cases, and though for a short time relief seemed to follow their use, I have serious doubts whether, in the long run, they did not do more harm than good, especially in attracting to the part an increased influx of blood; nor have I failed to notice, more than once, troublesome spots of ulceration following their bites. Scarification, moreover, when occasionally resorted to, was and is practised more as a convenient substitute for leeches, and without reference to the particular part cut, the manner of doing it, or, what I consider most important of all, the particular tissues to be included in these incisions. A reference to the writings of Drs. West, Tyler Smith, Bennet, and many others, will clearly show that the sole object in view in scarifying these parts has been to abstract blood, and thereby relieve congestion.*

Now I contend that, though emptying the capillary vessels of the mucous membrane by scarification is doubtless a very useful proceeding, yet this is a secondary effect, and an object comparatively unimportant in resorting to *incisions* in the manner proposed and practised by me. *First*, because, whether the congestion and inflammation be great, or apparently almost absent, if there be ulceration, the treatment recommended is no less indicated and equally salutary in its results; and *secondly*, ulceration, especially if deep, and involving both the os and cervix, requires for its quick and permanent cure, not only incisions through the cervical mucous-membrane and its submucous tissue, but also some of its muscular fibres, and more especially those encircling the os tincæ.

In conclusion, I trust the preceding remarks will have the effect of inducing others to forget, for the time being, any preconceived opinions likely to influence their judgment, and subject my suggestions to a rigid but unbiassed practical test. If thus their observation should coincide with my own, I feel warranted in hoping we will henceforward be enabled to remove a troublesome obstacle to the successful treatment of a class of diseases whose acknowledged obstinacy in resisting the present clumsy and unscientific cauterizing method is fast and deservedly becoming an opprobrium of this specialty.

* "I may just add, that it has been advised, as a more expeditious and less irksome mode of depleting the uterus, to scarify its lips through a speculum by means of a sharp lancet affixed to a long handle. Such scarifications are by no means painful, and in some instances, where the mucous membrane covering the lips of the uterus is the seat of undue vascularity, and presents a peculiar granular shaded appearance, I have seen much benefit result from it, just in the same manner as scarification of the palpebral conjunctiva sometimes does much good in strumous and other forms of ophthalmia. We cannot, however, abstract by this means any considerable amount of blood, and whenever there is much congestion of the vessels of the uterine substance, which we are anxious to relieve by depletion, leeches to the part are always to be preferred."—*West on the Diseases of Women*, page 72.

"The immediate effect of each scarification, that of taking blood directly from the uterus, is beneficial, and in the healing of the incisions some amount of contraction takes place."—*Tyler Smith on Leucorrhœa*, page 189.

CASES OF SPOTTED FEVER.

BEING A SPECIAL REPORT MADE TO DR. E. E. DALTON, SANITARY SUPERINTENDENT METROPOLITAN BOARD OF HEALTH.

By JAMES L. BROWN, M.D.,

SANITARY INSPECTOR.

The following report is respectfully submitted:

On the afternoon of Monday, the 13th inst., I received a communication from the central office of the Board of Health, instructing me to investigate the facts relating to some cases of "spotted fever" that were reported to have occurred at No. 10½ Grove St.

I went at once to the place mentioned, and ascertained the following particulars:

In the rear of No. 10½ Grove St., there is a row of small tenement houses, six in number, each three stories high, and each containing three families. The occupants are chiefly the families of respectable mechanics, and are of a rather better class than the usual tenement house population. The apartments are generally well kept and in good sanitary condition, and I found nothing about the premises to favor the occurrence of any zymotic disease. I learned upon inquiry that two deaths had occurred within the last ten days in this row of houses, from a disease believed by the attending physician to be "spotted fever," and that there was a child now lying dangerously ill with the same affection.

I obtained from the parents of the patients the following account of the symptoms of the disease, and I am assured by the attending physician, Dr. Denison, that it is entirely correct:

The first case occurred in house No. 4 of this row, and its history is as follows:

Case I.—John Tweed, aged 3 years 2½ months, was taken suddenly ill on the evening of the 2d inst., being apparently in perfect health up to the time of attack. About 9 P.M. he began to complain of severe pain in the head, which was soon followed by vomiting and considerable fever. He passed a very restless night, being delirious, or, as the parents expressed it, "raving," yet not to such a degree as to be unconscious of the pain in the head, which was persistent, and apparently agonizing. The vomiting was repeated two or three times during the night.

About 10 o'clock next morning, he began to have spasms, affecting chiefly the muscles of the back, neck, and jaws, which recurred frequently and with increasing severity until 5 P.M., when he died after an illness of about twenty hours.

About two hours before death a purpuric eruption began to appear on the neck, thighs, and legs. The spots were at first quite small, and by the parents were likened to the eruption of measles. Subsequently, however, large blotches appeared, and after death there were extensive patches of livid discoloration.

The disease was *not* ushered in by a chill.

Case II.—Occurred in house No. 2 of the row. Pe-

ter Magee, aged 3 years 4½ months, was to all appearance in perfect health at 9 o'clock on the evening of Saturday, the 11th inst., when he was suddenly taken with severe pain in the head, stomach, and legs, accompanied by a well-marked chill. On being placed for a moment on the floor, it was found that his limbs would not support him, and that he was unable to stand.

Vomiting soon occurred, and was repeated several times. He had considerable fever, and soon became delirious. He spent a very restless night, and seemed to be in constant pain. About 8 o'clock next morning he began to have spasms of a tetanic character, which were almost continuous until he expired at 11 P.M., twenty-six hours from the time of attack. The head was thrown back during the whole of the illness, and in the more violent spasms there was almost complete opisthotonos.

About eight hours before death an eruption began to appear, almost identical in aspect with that described in Case No. I. I had an opportunity of inspecting the body of this child before it was interred, but not soon enough to make any arrangements for an autopsy. The ecchymotic spots, and the livid discoloration of large tracts of skin, closely resembled the appearances seen in some of the rapidly fatal cases of scarlet fever, in which death occurs before the *proper* eruption has time to make its appearance. I remember to have seen two cases of scarlet fever that terminated fatally in twenty-four hours, in both of which there was a petechial eruption of precisely the same character as was seen in this case.

Case III.—Elizabeth Tweed, a sister of the first patient, aged 9 years 10 months, became suddenly ill about 5 P.M. on Friday, the 10th inst. She was taken with violent pain in the lower part of the back, to which was speedily added severe headache. In the course of an hour or two she began to vomit, and through the night was restless and delirious, but never to such a degree that she could not be roused to consciousness.

The pain in the head, with occasional delirium, persisted during the next two days, and when I saw her on the afternoon of Monday, the 13th, it appeared to be the chief cause of her suffering. The vomiting had recurred at intervals during the first forty-eight hours, but had ceased since that time. There had also been a tendency to diarrhœa during the second day, but it was readily controlled by opiate suppositories, which had also the effect of quieting the restlessness. There had been no chill and no spasm. I first saw her about seventy-two hours from the time of attack, and found her lying on her side, with the head drawn back, and the muscles of the back of the neck so rigidly contracted that any attempt to flex the head occasioned the greatest distress. The face was pale and anxious. The eyes red and watery, without any inequality of the pupils, or irregularity in their action. The skin was dry, but not hot, and there was some hyperæsthesia, but no spots or eruption. The pulse was 120, soft, regular, and not notably feeble. There was no delirium or derangement of the intellect, further than a certain dulness or drowsiness, which was not sufficient, however, to prevent her answering intelligently and correctly such questions as were put to her, or calling for drink, or for whatever else she might desire. The pain in the head was referred chiefly to the forehead, and occasioned her much suffering. It was somewhat mitigated by applications of ice.

The treatment had consisted mainly of the use of opium suppositories, each containing three-quarters of a grain, and administered at intervals varying from six to twelve hours, according to the severity of the pain and the degree of restlessness, together with an abundance of nourishing diet. I saw her every morning during the ensuing fortnight, and kept the following notes of the progress of the case:

Tuesday, 14th.—Pulse 110. Temperature, as indicated by thermometer in axilla, 102½°. Tongue a little more furred. Pain in the forehead still persists. Nothing abnormal in condition of the urine as examined by chemical tests. Vesicles of herpes on the lips. Condition otherwise much the same as yesterday. No delirium.

Wednesday, 15th.—Pulse 120, soft and regular. Temperature 102½°. Complains of severe pain in the eyes, particularly the left, which is more inflamed than the other. There is an eruption of herpetic vesicles around the edges of the tongue. Pain in the head still persists. No delirium.

Thursday, 16th.—Pulse 132, regular, and not markedly feeble. Temperature 103°. Eyes very painful. Tongue more thickly coated with a whitish fur, but moist, and fringed with numerous vesicles. Some pain and swelling in left elbow, with partial paralysis of left arm. Intellection good. Headache still persists.

Friday, 17th.—Passed a very restless night. Pulse 124. Temperature 103°. Intellection good. Began to complain yesterday afternoon of severe pain in right knee, which is now swollen and tender. Left elbow is also swollen and painful, and left arm powerless. Eyes less painful, but very much injected, particularly the left. Urine again examined, with negative results. Bowels were moved to-day for the first time since Monday last.

Saturday, 18th.—Pulse 104. Temperature 101°. Free perspiration during the night. Pain in the head and in the knee still persists. Right eye looks much better, but vision is entirely lost in the left, which is acutely inflamed. Left arm still powerless. Tongue pretty thickly coated, but moist. Intellection continues to be good.

Sunday, 19th.—Pulse 112, and full. Temperature 100½°. Skin moist. Intellection good. Complains of pain in the forehead and back of the neck. No power of vision in left eye. Left arm paralyzed.

Monday, 20th.—Pulse 124, and full. Temperature 100°. Skin cool and moist. Can see a little with left eye. Can bend right knee a little. Pain in the head somewhat intermittent. Bowels have moved twice since yesterday. Suffered during the night from pain in the left shoulder.

Tuesday, 21st.—Pulse 126, and full. Temperature 100. Condition much the same as yesterday.

Wednesday, 22d.—Pulse 110. Temperature 99°. Pain in the head still persists. No pain in the joints except on movement. Has had some bronchitis during the past two days. Left eye is slowly regaining the power of vision.

Thursday, 23d.—Condition about the same as yesterday.

Friday, 24th.—Head still continues to be painful, and appears to be worse at night. Pulse 112. Temperature 99°. Tongue less thickly coated. Less cough.

Saturday, 25th.—Pulse 104. Condition rather better in every respect than it was yesterday.

Sunday, 26th.—Appears to be convalescing. Sat up a little while, but is very much debilitated. Still suffers somewhat from pain in the head, which is generally worse at night.

I have not recorded the treatment each day, because it was subject to very little variation. Opium suppositories to relieve pain and quiet restlessness, quinine, beef-tea, milk-punch, etc., constituted the whole of the treatment, except applications of ice to the forehead, which afforded much relief.

In concluding the report of these cases, I desire to ex-

press my indebtedness to the attending physician, Dr. Ellery Denison, who was the first to recognize the nature of the disease, and who had the sole charge of the treatment, for the kindness and courtesy with which he placed at my disposal all the facts in his possession, and assisted me in collecting the foregoing details.

Spotted fever, or cerebro-spinal meningitis, is a disease of such rare occurrence in New York that very few practitioners here have ever seen a case of it. I had not myself met with it until called to investigate the cases here recorded, but I have no doubt whatever that they are genuine examples of that disease. The symptoms correspond entirely with those that are described as characterizing it, and do not belong to any other disease of which I have any knowledge.

JANUARY 27, 1868.

Original Lectures.

LECTURES ON TUMORS:

BEING PORTION OF THE COURSE OF SURGERY AT THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

SESSION 1867–8.

BY S. D. GROSS, M.D., LL.D.,

PROFESSOR OF SURGERY.

(Reported expressly for THE MEDICAL RECORD.)

V.

ENCEPHALOID.

THIS affection was originally described in the earlier part of the present century by the late John Burns of Glasgow under the name of the spongoid formation; afterward by the late Mr. Hey of Leeds, England, under the name of fungus hæmatodes, a name still retained in connection with a particular variety of the affection. It is also called medullary sarcoma, a name bestowed upon it by Mr. Abernethy, and is likewise known under the name of soft cancer; but the term encephaloid or brain-like is the one under which it is most familiarly known at the present day.

This affection is also sufficiently frequent, not as common, by any means, as scirrhus, nor as common as epithelioma, but more frequent a great deal than colloid or melanosis. The organs and structures in which it is most generally situated are the cellular tissue, subcutaneous and intermuscular; the lymphatic ganglions in various parts of the body, especially the neck, axilla, and groin; the testicle; the bones; the uterus; the ovary; the mammary gland; it is liable to occur also in the liver, in the lungs, in the brain; there is hardly, indeed, a part of the body in which it is not occasionally found; the eye is not infrequently the seat of it, especially in young subjects.

Encephaloid is characterized by the rapidity of its growth, and by the great bulk which it is liable to attain if it be permitted to proceed unmolested. It has a high degree of organization, containing an abundance of bloodvessels, nerves, and absorbents. The circulation is one of great activity; hence we have a ready explanation of the rapidity of the growth, and the great size of a tumor of this description.

If we look at a tumor of this kind we shall find that it consists essentially, as all the other heterologous formations, of two distinct substances; a stroma consisting of fibroid tissue, and the proper cancerous substance situated in the meshes of this stroma. The arrangement of the stroma may be said to be in its general principles like that of scirrhus, consisting of fibres which interlace in every possible direction, of variable size and consistence, either of new formation, or, as not infrequently happens, composed of the pre-existing tissues, precisely in the same manner as the stroma or basement structure of scirrhus. The cancer cells differ somewhat from those of scirrhus; comparatively few of them are rounded or ovoidal; the great majority are caudate or fusiform, the extremities of the cells being as it were elongated, tail-like, or spindle-shaped. These cancer cells possess a much greater power of proliferation, generation, or reproduction, than the cancer cells in the ordinary scirrhous formations; and this accounts, along with the vascularity and great nerve power of a tumor of this kind, for the rapidity of its growth, and its great size. The cells exist in great abundance; many of them are flattened, especially in growths of long standing, and this may arise either from the pressure of the surrounding cells, or from the pressure of the stroma. Such, then, in a few words are the substances which enter into the composition of a tumor of this kind.

In the great majority of cases the encephaloid tumor has nothing of a distinct envelope, covering, or capsule; anything that may present the appearance of this is deceptive, depending entirely on the condensed condition of the surrounding cellular tissue. If now and then such a structure exists, it forms an exception to the general rule.

The vascularity of such a tumor is excessive. It is supposed by pathologists that there are two kinds of such circulation, one which it derives from the surrounding natural tissues; and the other self-existing, precisely as in plasma, lymph, or fibrin, which never that substance becomes organized and converted into an analogous tissue; thus, this substance is capable of forming its own vessels, but in the great majority of instances it receives them from the surrounding structures. I believe that it has two separate existences, one residing in itself, the other derived from the surrounding structures. Be this as it may, all these vessels are exceedingly brittle, their walls are very fragile and therefore liable to give way under the slightest influence both of increased circulation and of external injury, results apt to be followed by a more or less copious hæmorrhage.

There are several varieties of this affection derived from the appearance which the tumor presents on section. One variety looks like a mass consisting of a number of coagula in a state of organization—not at all like the substance of the brain to which another variety bears resemblance—and this is the hematoid variety; sometimes it cuts more solid and looks not unlike a section of an unripe pear, carrot, or turnip. It is not necessary to bear these subdivisions in mind, because they are matters of but comparatively little importance. We never find a tumor of this kind of the same appearance throughout; one part will look much like the substance of the brain, and be comparatively soft; whereas another portion will be comparatively hard, consisting of a substance resembling coagulated albumen, or cheese; another will not be quite as hard, but a little more firm. Again, we find that the color varies; some portion may be almost perfectly white, another portion drab-colored, another portion may be rosaceous, showing a great degree of vascularity, or it may even be considerably darker.

The surface of the tumor is frequently lobulated, in which respect it differs very considerably from the ordinary scirrhous tumor.

Tumors of this kind are liable to occur at all periods of life, sometimes as an intra-uterine affection; this is especially true as regards this affection in the testes, in the eye, and in the lymphatic ganglions of different

parts of the body. Sometimes the disease coexists in different organs; as, for instance, in the testicle and in the liver, or in the testicle and in the eye, or in the testicle and the lymphatic ganglions of the axilla, or of the groin; in the female, it may coexist in the uterus and in the mammary gland, or in one of these organs and in some other part of the body.

The disease is generally, like scirrhus, of spontaneous origin, that is to say, we can discern no exciting cause; in some instances, however, it is distinctly traceable to external injury, as I have myself seen in a number of instances. I will refer to one case which occurred in a medical gentleman, seventy-one years of age, a man at one time of extensive practice in this city, who, in riding along in his chaise one morning, was struck upon the cheek by a stone thrown by a boy at play in the street. A short time after the receipt of the injury, a tumor began to form in the antrum which proved to be of an encephaloid character, and which went on gradually increasing from bad to worse, until at length the gentleman died from its effects.

I could mention a number of other cases illustrative of the truth of the statement that the origin of encephaloid is sometimes traceable to external injury; but in the great majority of cases it arises without any assignable or evident cause.

After this tumor has existed for an indefinite period, it manifests, like scirrhus, a disposition to take on ulcerative action, the period varying on an average from six to ten or twelve months. Gradually a portion of the growth becomes softened, disintegrated, and broken down; the superimposed or overlying skin gradually yielding, an ulcer of a peculiar character is thus formed. The edges are sharp and undermined; not everted, not abrupt or steep as in the case of scirrhus, but thin and undermined, so that if you place a finger in it you will be able to pass it underneath the overlying integument. The surface of the ulcer has a fungous or fungoid appearance, and looks very much like the surface of a mushroom, only that it is much more irregular; and it is incrusted with adiastic lymph of a grayish, drab-colored, or greenish appearance. There are no granulations of a healthy appearance, any more than upon the ulcer of a scirrhous character. The discharge is thin, ichorous, exceedingly abundant, and highly offensive: frequently an ulcer of this kind becomes the seat of copious hæmorrhage.

I have called your attention to the fact that in the encephaloid tumor there is an active circulation, that the vessels are large, their walls brittle, and therefore, under the impulse of the circulation, or of external injury, these vessels readily yield, and thus part with their contents, giving rise in this way to more or less copious hæmorrhage. A patient may lose a pint or even a quart of blood in this manner in the course of a very few minutes; when the hæmorrhage is abundant or frequent, life will be speedily destroyed in consequence.

During the progress of this affection there is involvement of the surrounding lymphatic ganglions, an occurrence which takes place frequently before the manifestation of ulceration, especially if the tumor is large and of rapid formation. Gradually, the system suffers precisely in the same manner as in scirrhus; the countenance assuming the peculiar, cachectic, withered, sallow appearance, attended with rapid emaciation, loss of muscular power, impairment of the appetite, and derangement of all the secretions. Death gradually follows at a period varying, on an average, we suppose, from nine to fifteen or eighteen months; very few persons surviving eighteen months from the first appearance of the development of the disease.

If the tumor be removed, there will be a tendency to relapse, generally at an earlier period than after an operation for the removal of a scirrhous tumor.

There is no remedy, as far as our knowledge at present extends, which exercises the slightest influence in modifying the action of a tumor of this kind, or in arresting its progress.

COLLOID.

I show you a beautiful specimen illustrative of the nature of this affection. This tumor was a small portion of an enormous mass taken from the abdomen of a man after death. The formation is called colloid from its resemblance to a mass of glue, or of jelly; called gelatinoid, or gelatiniform; called sometimes gum cancer, an appellation bestowed upon it by the late Mr. Hodgkin of London. It was called gelatiniform by Cruveilhier of Paris. These appellations have reference to the appearance of the mass of which it is composed.

It has hitherto been found only in comparatively few instances; it is, indeed, exceedingly rare. I have myself seen but a few well marked instances, in two of which the tumor occupied the omentum, having evidently commenced in that structure, and extended from thence to the remainder of the peritoneum as it lines the walls of the abdomen and covers the abdominal viscera. Perhaps the greatest majority of cases of colloid, well developed, have been found in connection with the peritoneum, a singular fact for which we cannot account. This formation has likewise been met with in the ovary, in the mammary gland, and in different portions of the skeleton. I have seen it upon the sella-turcica of the sphenoid bone. It has occurred in the scapula perhaps more frequently than in the other flat bones, and it has occasionally been met with in the long bones. It has been found likewise in the pyloric extremity of the stomach, in the ileo-cæcal valve, in the rectum, and in the lymphatic ganglions.

This growth consists, like the other heterologous formations, of two distinct substances bearing to each other the relation of containing and contained parts. The stroma is fibroid in its character, precisely as in scirrhus, encephaloid, and melanosis, and it is, generally speaking, of new formation, not composed of the pre-existing or natural tissues; presenting all the chemical, microscopical, and physical properties of the fibroid tissue. The arrangement of the fibres of this tissue is such as to leave cells, cavities, or loculi for the lodgment or accommodation of the substance from which the name of the formation is derived; this is the jelly-like or gum-like substance. These cells, as I have ascertained by a careful examination of different specimens, communicate with each other laterally, precisely like the cells of a sponge; they do not form distinct cysts or sacs, but they are nevertheless lined by a distinct membrane which presents in many respects all the attributes of a serous structure. This jelly substance is found under the microscope to consist of cells similar to those of scirrhus; they are, however, smaller, exceedingly numerous, and they contain nuclei and nucleoli precisely like the other formations. They are of a rounded or ovoidal shape, some of them fusiform, some are caudate, precisely as the cells in encephaloid cancer. The stroma is amply supplied with bloodvessels, and we suppose also, though we are not able to demonstrate the fact by dissection, with nerves and absorbent vessels. I have traced long straggling vessels to tumors of this description which penetrate the mass. Such, in a few words, is the organization of this substance. Large tumors are formed in this way, weighing ten, fifteen, and even twenty-five and thirty pounds. This jelly-like substance is only slightly attached to the

walls of these cavities, as it can readily be scraped away with the knife, and is utterly destitute of anything like organization and vitality; differing in this respect from the ordinary cell of cancer, scirrhus, or encephaloid.

These tumors are of slow formation. In a case under my observation, many years ago, it had been in progress nearly four years; in another case it had proceeded a long time before the patient's attention was arrested by it. In the great majority of instances it is more slow than encephaloid or scirrhus, and the tendency to multiplication or to diffusion is much less than in the other heterologous formations; the tumor is usually solitary, no secondary formations occurring during its progress; there is less tendency to lymphatic involvement; and the disposition to ulceration does not exist in as strong a degree as in the others.

We know very little of the clinical history of cases of this kind, except that death is gradually produced by the obstruction of function from the pressure of the tumor upon important organs. We are also ignorant about the tendency to recurrence after extirpation, very few cases being on record where an operation of this kind has been performed.

MELANOSIS.

The melanotic tumor is a very curious growth, also exceedingly infrequent in comparison with scirrhus, encephaloid, and epithelioma. I have specimens as they occur in various parts of the body. It is sometimes called *black cancer*, a name originally given to it by Alibert and Dupuytren, in the earlier part of the present century. I show you two specimens from the prostate gland and the urinary bladder with the adjoining peritoneum. You see several masses appearing in the form of little dots or tubercles, the inner surface of the bladder likewise presenting a number of these bodies. In the rectum there is a large mass a few inches above the verge of the anus, and the peritoneum connected with the rectum is also very much involved.

These tumors sometimes attack an immense number of organs either simultaneously or successively, so as to constitute what may be called the melanotic diathesis. In the case from which these specimens were taken the tumors existed in almost every organ of the body; in the bladder, prostate gland, kidneys, rectum, peritoneum, pancreas, liver, lymphatic ganglions, subcutaneous cellular tissue, heart, and lungs; the brain of the patient was not examined, nor the muscles, nor the bones; but I have no doubt that, could the whole body of this individual have been thoroughly explored, we should have found melanotic tumors in all the tissues. This will give you an idea of the diffusion of this substance. I have seen many cases of melanosis. The first was in a patient of the late Dr. Geo. McClellan of this city. In that instance large numbers of these tumors occupied the subcutaneous cellular tissue and skin of the abdomen; the lymphatic ganglions of the groin were also implicated, and ultimately those of the axilla. In the case from which the specimens exhibited were taken, the gentleman was nearly sixty years of age; he had been a steamboat captain on the Ohio and Mississippi rivers, and his health had been failing upwards of a year, when he died worn out by hectic irritation. I have seen several cases in this city since my residence here. In one of these there was a tumor in the right groin involving the superficial femoral artery; when I first saw it, it was about the size of a small fist; I recognized its peculiar character and gave my opinion that an operation would be improper; at the solicitation of the patient an operation for its removal was performed; there was a relapse, and five months afterward the patient expired, numerous secondary growths having appeared in the meantime in different portions of the body, the trunk as well as the extremities. In another case I found a number of tumors in different regions, in the lymphatics of the groin and axilla, in the subcutaneous cellular tissue of the shoulders and back, as well as the abdomen, showing a great tendency to diffusion in a formation of this kind.

We have here, likewise, a stroma and a peculiar cancerous matter; the stroma is fibroid precisely as in the other formations; and the peculiar cancerous matter is inorganic, has no vitality, in the same condition precisely as the gelatiniform substance of that peculiar form of disease just described under the name of colloid. This cancerous substance, which may be readily scraped away from the cells in which it is contained, is a black material, readily miscible with water, and composed of fibrin and of a peculiar coloring matter similar to the cruor of the blood: it readily leaves its stain upon white paper. It has cells of a rounded, spherical, or ovoidal character: very few if any of them are caudate, no matter at what stage of the disease they may be examined; they have their nuclei in great numbers as well as nucleoli, showing a great power of proliferation or of forming new cells.

Tumors of this kind have been found in some of the inferior animals to attain a volume of as many as twenty-five or thirty pounds; in the human subject their size is comparatively small.

When removed, the tumor has a tendency to reappear, either at the cicatrix, or in other parts of the body, precisely as the other heterologous formations.

Clinical Department.

BELLEVUE HOSPITAL.

FRACTURE OF FEMUR AND SCIRRHUS OF MAMMA.

Service of Dr. James R. Wood. House Surgeon, Dr. P. R. Cortelyou, to whom we are indebted for report of the case.

Magdalena Smith, German, housekeeper, aged 37, admitted November 25, 1867. While returning from church, the day before admission, the patient had fallen on the sidewalk, striking upon her right side, and fracturing the right femur in its middle third. Shortening about two inches. Buck's apparatus was applied, with six pounds extension. No other dressing was ordered, as the woman was found suffering from a cancerous tumor of the right mamma, which had progressed to the stage of ulceration, the axillary glands also being involved. She stated that, eleven months previous, she had first noticed in the breast a small, hard, and somewhat painful tumor, which had broken about a month before her admission, and had since continued to discharge ichorous and fetid matter. The patient was given as generous a diet and as much stimulus as she would take; but she gradually sank into a semi-comatose condition, and died December 9.

The post-mortem examination, by Dr. Delafield, revealed the following appearances: The right mamma was the seat of a large ulceration, with thickened edges. The floor of the ulcer was covered with new tissue, firm and fibrous in character, and composed of polygonal and nucleated cells contained in alveoli of fibrous tissues. The glands in right axilla were much enlarged. The brain was normal, except that the dura mater was abnormally adherent to the diseased portions of the parietal bones, shortly to be mentioned. The heart showed yellow clots in both ventricles, and an atheromatous condition of the mitral valve. The lungs con-

tained an unusual amount of pigment, and the upper lobe of the right lung was hepatized. The liver weighed but two pounds, its left lobe being very small. Gall-stones were found in the gall-bladder and in the ductus communis. Neither the lungs nor the liver showed any cancerous deposit. The pelves and calices of both kidneys were dilated and contained pus. The peritoneum was studded, both on its visceral and on its parietal surface, with small white tumors. The large intestines contained in their walls these small tumors, over which the mucous membrane was ulcerated. In the right and left parietal bones were three spots, from one to two inches in diameter, where the bone was softened and like fibrous tissue. The fractured femur showed no effort at repair, and the ends of both its fragments were bathed in pus. Its medullary cavity was filled with a firm mass of new growth. Similar deposits were found in the other femur, both tibiæ, both humeri, and the left os innominatum; but the clavicles, scapulæ, radii, ulnæ, and metacarpal bones contained none. In the long bones this new growth was in the form of yellow masses, situated in the medullary cavity and in the cancellous structure. It consisted of nucleated and polygonal cells, surrounded by fibrous tissue. The bone with which it lay in contact was thinned, but not softened.

This case affords another of the many examples of non-union of bone when cancerous and other diseases, which draw so largely upon the economy, exist in other parts of the body.

Progress of Medical Science.

Puerperal Convulsions treated with Bromide of Potassium.—A primipara, aged 18, was taken with severe pain near the fundus of the uterus. Morphine quelled the pain, but vomiting came on, followed by great craving for food. The following morning she vomited again, and was taken with convulsions. The child being dead, the membranes were ruptured to bring on labor, and purgatives administered. Chloroform, when used continuously, prevented the paroxysms, but there being no one to administer it, bromide of potassium, in fifteen grain doses, was ordered every hour. From this time till the termination of labor, 22½ hours, there were no convulsions, nor did they recur thereafter.—*Pac. Med. and Sur. Journal.*

Permanganate of Potash in Acute Rheumatism.—Dr. C. M. Fern, in the *Det. Rev. of Med. and Pharm.*, speaks in praise of this remedy, and reports three cases in which he used it with most decided success. In one of the cases he prescribed half a grain of the permanganate three times a day, and was soon after surprised at the marked abatement of all the symptoms. The tongue became quite clean, the perspiration no longer excessive or disagreeable, and the pains were so far relieved as almost to preclude the continuance of an anodyne. Convalescence was now constant and rapid. The progress of the other two cases was equally satisfactory.

Bromide of Potassium in Pertussis.—Dr. Behrend considers bromide of potassium to be one of the best remedies for hooping-cough, and states that it converts the hooping-cough into an ordinary catarrhal cough. He prescribes one drachm of the bromide in four ounces of water, and adds from two to four drachms of syrup of marshmallow. One teaspoonful of this mixture is given to children every three or four hours, according to the frequency and severity of the paroxysms. The administration of this remedy is continued until the hooping inspiration has entirely ceased.—*Journ. für Kinderheilk.* (*British Med. Journ.*)

Another Method of Securing Vessels.—Dr. E. R. Van Gieson, of Greenpoint, New York (*Medical and Surgical Reporter*), has devised a new apparatus for securing vessels. It consists of two slightly tapering silver tubes and a connecting medium of silk, iron wire, or silver wire. At their internal or arterial extremities, the tubes have a certain amount of curve, depending upon the circumference of the artery to be included. The aperture at the arterial points of the tubes is almost capillary in size, being only a trifle larger than the wire which is to pass through it. This aperture is situated as near as possible to the side of the tube lying furthest from the artery, so that the bottom of the tube is nearly solid where it lies in contact with the artery. At the external ends of the tubes, a screw can be easily adapted, by which pressure can be graduated to any desired degree. An ample supply of wire is first passed beneath the exposed artery, and the ends brought out at the incision; over each end of the wire, one of the tubes is now passed down to the vessel, and their internal extremities brought in contact. The protruding wire is now abruptly bent over the end of each tube, and the external ends of the tubes brought together by means of the screw, or the ends of the wire may be wound around a wedge of cork between the tubes, by altering the position of the wedge, or by turning the screw the amount of compression desired is obtained. The removal of the apparatus may be accomplished in one of two ways, according to the depth of the artery. If the artery is quite superficial, the end of the wire over one tube can be cut, the tube of the same side removed, and afterward the other tube with the wire attached; but if the artery is deep seated, let *both* tubes be firmly held by a clamp, now cut off the end of the wire over one of the tubes, and seizing the other end of the wire, draw it steadily through the whole length of both tubes; the latter are now free and can be easily withdrawn. This apparatus is more especially designed for the treatment of aneurism, and since it is now generally admitted, and indeed taught, that it is by no means necessary for the whole of the circulation through an artery to be either entirely or permanently arrested to secure coagulation in the sac, the belief is justified that such an apparatus, presenting neither difficulty in application nor removal, may possibly aid in securing the desired result, without the irritation and suppuration which have, with occasional exceptions, attended other methods of procedure.

Spurious Creosote.—A large proportion of ordinary creosote is simply carbolic acid. But the pure creosote, which constitutes the lachrymosal property and peculiar smell of smoke, is quite a different substance, and may be distinguished from the false, as shown by Rust, by its behavior with collodion. A mixture with this latter and carbolic acid gives a gelatinous precipitate, while with true creosote the collodion remains clear. Dr. Hager gives another test: To a weak solution of iron, a few drops of ammonia are added until the precipitate, which originally forms, is dissolved. Carbolic acid communicates a blue or violet tinge to the solution, while genuine creosote gives a green color, afterward turning to brown.—*Scientific American.*

Science in the Detection of Crime.—A case, in which the value of the evidence of two distinguished experts was singularly correct, is reported in a late number of *L'Union Médicale.* A man, about an hour

after taking some soup from his wife, was seized, on the way to his work, with symptoms of intestinal pain and vomiting. He was taken to the Hospital of La Châtre, and was treated by Dr. Pestal, but died on the sixth day in intolerable pain. He had accused his wife of poisoning him with "dogbane" (colchicum), but MM. Tardieu and Roussin having discovered in the intestines ammonio-magnesian phosphate, deposited sulphur, artificial ultramarine blue, and a little chip of wood covered with sulphur—in fact, the chemicals of a lucifer match—they came to the conclusion that the man had died from phosphorus derived from matches, a view which the post-mortem examination supported. The confession of the woman ultimately confirmed the conclusion of the experts.—*Med. Gazette.*

Iodide of Potassium.—M. Gigon maintains that iodide of potassium, through the short route of the vena porta and emulgent veins, passes instantaneously into the urine. He mentions that he found the iodide in his own urine, passing the latter almost immediately after having taken a dose of the iodide. But as M. Gigon has also found that the iodide can be detected in the urine three or four months after its ingestion, it is just possible that, in the experiment alluded to, the iodide so quickly discovered in the urine might be *old* remains.—*Lancet.*

Alkaline Treatment of Pneumonia.—Dr. John Popham (*British Med. Journ.*) highly extols the bicarbonate of potash in the treatment of pneumonia. In all the cases the salt was given largely diluted in mucilaginous liquids, a measure, in his opinion, indispensable. The cases were persons of both sexes, and of various ages from 2 years up to 65. The quantity given varied from five grains or less in each dose, in very young children, up to half a drachm in adults. It was seldom necessary to exceed this latter amount. The number of doses amounted to four, six, and sometimes eight, within twenty-four hours. The average quantity for an adult was from two to three drachms per day, less for weakly persons and for those advanced in life. It was commenced directly that the case came under notice, and increased until the disease reached its acme, and was then gradually lessened as it gave way. It was continued for a short time after convalescence. He watched closely the effects of the medicine in the several cases. In a few, it seemed to exercise no appreciable change in the symptoms, except a gradual return to convalescence; but in the majority, it left sensible evidence of its effects. Of these, the most striking was the alteration in the expectoration. After the alkaline salt had been taken for two or three days, the viscid sputa became resolved, the fine bubbles became coarse and inflated, the rubiginous color changed to white, and its tenacity of adhesion to the air-cells lessened, so that it was brought up easily. The cough, instead of being dry, hard, and irritative, became moist, soft, and expulsive. In this way alkalies act indirectly as sedatives, not specially allaying the cough, but abating the congestive state upon which cough depends. The effect of the medicine was perhaps soonest observable in the tongue. The pneumonic tongue is well known to present a dense white coat, which, as the disease becomes typhoid, lapses into the dry, brown, and fuliginous condition. Very soon after the potash was given, a change for the better was noticed. The pasty induvium seemed to dissolve away in an increased flow of saliva, the gums becoming slightly red and turgid, with a white line occasionally, and the whole surface became clean in a few days. In the lungs, as determined by auscultation, a local improvement concurred with the fall of the pulse, and of the temperature. In his experience of pneumonia, the lung does not return to its normal state till some time after the febrile symptoms have been quite resolved. In the urine, the change is also remarkable. It is well known that, in pneumonia, the acid state of this excretion is at a maximum, reddening litmus rapidly and deeply. This acidity, after a variable period of use of the alkali, is altered to an alkaline, neutral, or slightly acid state. He regarded this alkalinity of the urine as a kind of test of the medicine; not so decided, indeed, as is salivation from mercury, but sufficient both as an evidence that the medicine has been duly given, and as regulating its amount. This change seldom occurs before the third day, and he found it to persist some days after the medicine had been discontinued. The other changes require to be carefully studied. The quantity is of course increased by the diluents. The high color, indicating an excess of pigment due to intensely inflammatory condition, soon becomes pale.

Crypta Syphilitica and Crypta Gonorrhœa are the names given by Prof. Salisbury to microscopic fungoids found in the corresponding diseases. These are figured and described in the last number of the *Amer. Jour. Med. Sciences.* Crypta syphilitica is found in the blood and the bases of chancres. It consists of homogeneous filaments, with obtusely rounded extremities, running in all directions, singly or in bundles, through and among the diseased connective tissue elements. It was seen in multitudes, in all stages of development, from the spore to the mature filament, in over one hundred carefully examined cases. Transverse markings are seen only in an early stage. The filaments are either straight, curved, or coiled. They develop from more or less active spores in the connective tissue, and may be transferred from one individual to another by inoculation or contact of mucous surfaces. They are believed to produce syphilis. The spores vegetate, when deposited on a mucous surface, the filaments making their way through the basement membrane instead of extending laterally amid the epithelium. The epithelial tissue, in the primary disease, is only destroyed immediately over where the plants first penetrate the connective tissue beneath. Crypta syphilitica shows itself in the blood as soon as the disease becomes constitutional, and is considered a sure guide for the continuance of treatment. Crypta gonorrhœa, believed to be the specific cause of the disease from which it obtains its name, finds its nidus in the epithelial not the connective tissues. It may be obtained by gently scraping the walls of the urethra just within the meatus. Prof. Salisbury has preserved full notes of several hundred cases in which it has been found. This cryptogam consists of spores and filaments. The latter are found among the epithelial cells in all stages of growth. Those more advanced are usually homogeneous, no transverse markings being visible. They occur either singly or in little knots running a more or less tortuous course. Occasionally a filament is found covered with spores.

New Method of Local Anæsthesia, Applicable to the Extraction of Teeth and other Operations in the Cavity of the Mouth.—The following communication by Hénoque and E. Fredel deserves the fullest attention of surgeons and dentists. It opens a new means for the painless performance of operations in the mouth, without inducing general anæsthesia, or submitting to the numerous inconveniences of Richardson's method when applied to these parts. The attention of the profession having been particularly called to this subject by Magitot's representation of the disadvantages of local anæsthesia as hitherto applied to operations in the mouth, two physicians of Paris, Hénoque and Fredel, inaugu-

rated the attempt to produce the anæsthesia required by the application of the ether spray along the course of the trifacial nerve outside of the mouth. The well-known practice of introducing narcotic substances, chloroform liniments, etc., into the external auditory canal for the purpose of relieving toothache, induced the experimenters to test the value of the anæsthetization of this canal as a means to the painless removal of teeth. Anæsthesia of the meatus auditorius externus was accomplished by the use of ether, with the ordinary atomizing tubes, and the results were as follows:

Of thirty-two individuals who had teeth extracted, twenty-four experienced no pain whatever; in five cases the extraction was painful, and in three cases the result was doubtful.

Among the cases where the absence of pain was complete were five extractions of upper molars, and one of a canine tooth; among the painful cases were three upper molars and one lower bicuspid.

It only remains to establish a sure criterion of the full accomplishment of anæsthesia. In the cases reported by Bénoque and Fredel, it appeared necessary to continue the application of the ether spray to the external meatus for at least three minutes. These gentlemen believe that the procedure above described is applicable to other operations in the mouth. They have employed it in one case for the removal of the tonsils, and the patient, an intelligent young man, declared that he experienced not the slightest pain. They commend their method to the further trial of the profession. —*Gaz. Hebdom.—Aerztliches Literaturblatt. No.* 10, 1867.

Labor during Sleep.—Dr. Wendell Case, of Chicago, narrates the case of a primipara of 21, a well developed brunette from the south of France, who had the head of the child wholly expelled during profound sleep. In less than 20 minutes the secundines had passed off, and the uterus contracted with scarcely any pain. She said she had dreamed something was the matter with her, and awoke with a fright, probably the instant the head was expelled.

Twice since she has been confined, he learns with the usual labor pains.—*Amer. Jour. Med. Science.*

Four Cases of Excision of the Inferior Dental Nerve are reported in the *Amer. Jour. Med. Sciences*, in which Prof. Gross completely relieved the severe sufferings of the patients. From two and one-half to three inches of the nerve were removed after trephining.

Replacement and Union of a Detached Part.—A carpenter got the outside of his thumb against a circular saw, and it was cut through at the junction of the first and second phalanges, the latter thrown back and held by a shred of skin, like a hinge, and the metacarpo-phalangeal joint of the forefinger cut across—without displacement, however. The detached end of the thumb was replaced and held in position, until I saw him, fifteen minutes afterwards. Against his desire, I thought best to incur the risks of attempting union. Three sutures steadied and held the parts, which were carefully dried (not washed) and covered with lint. The splints as in fracture, and a bandage were applied. The union was perfect, leaving a stiff joint.—W. O. Johnson, *in the Boston. Med. and Surg. Journal.*

Cannabis Indica in Insanity.—A physician of Prussia, Dr. Bircher (*Biennial Retrospect*), has used this drug in the various forms of mental disease, sometimes with transitory effects only, sometimes with improvement, and sometimes producing complete cure. He gives one-quarter or one-half of a grain of the extract, or fifteen drops of the tincture twice a day, using the Prussian preparations, which are stronger than ours. It is especially useful in the forming stage, with loss of sleep and precordial uneasiness. Of four cases of melancholia thus treated, one recovered in two months, a second in three months, a third after a much longer time, and the fourth was partially cured and suffered a relapse.

Diagnosis of Hooping-Cough.—Ulcers of the frenum linguæ and surrounding parts, when present, are said to be a certain mark of hooping-cough. They have been attributed to the mechanical effect of the teeth, and have a resemblance to the teeth-marks of epilepsy.—*Pacific Medical and Surgical Journal.*

Compression of the Carotids for Convulsions.—Some curious results of this treatment are given by a French practitioner, M. Faviz. He relates three cases of convulsions in which it was successful. The first was that of a child six years old, who had violent spasms of the left side of the body, with clenched jaws, bitten tongue, etc. Compression of the right carotid stopped the fit immediately; the child fell asleep, and awoke in full consciousness a quarter of an hour afterwards. The second was a girl of seven years. She had convulsions of the right side of the body, apparently produced by fright. Here compression of the left carotid produced equally happy results. The third was a child of two and a half years, with convulsions of both sides. Compression of the right carotid at once arrested the movements of the left side. The left carotid was then compressed, and the convulsions of the right side ceased. Sleep followed, and the patient awoke in an hour, quite well.—*Pacific Medical and Surgical Journal.*

A Replanted Tooth.—W. M. Herriott, dentist, of Zanesville, Ohio, reports to the *Dental Register* the following interesting case:—"August 13, 1857, a lady came to my office to have the first right upper molar tooth removed. By taking hold of my hand and moving her head, she shifted the instrument so that I extracted the second bicuspid, a perfectly sound tooth. I then extracted the aching tooth; but the patient was so much annoyed by the loss of a perfect tooth, that I concluded to replace it, which I did, after it had been out of the mouth about ten minutes. I first removed the ragged portions of the periosteum from the root; then thoroughly cleansing the socket with pledgets of cotton and tepid water, I returned the tooth, closed the mouth, and bandaged it to hold the tooth in place. The tooth was so firmly in its place that the bandage was removed in about three weeks. A few months ago the lady came to me with the *same tooth* aching from an exposed nerve."

Sulphate of Manganese in Chorea.—Dr. Hammond (*N. Y. Medical Gazette*) mentions two cases of chorea treated by him with this remedy after other treatment had failed. One was a girl, fourteen years old, who took five grains three times a day; the other a boy of fifteen, who used the iodinized cod-oil in addition. In the girl iron had disturbed the head and stomach. The therapeutic action of the two articles is said to be analogous, as they both exist in the blood, which contains, in an adult, sixteen grains of iron and 10.5 of manganese.

Vaginal Suppositories.—It has been proposed in the *Journ. de Méd. de Bordeaux* to cast in a mould hollow cones of cocoa butter, to pour into them glycerine in which either tannin or morphine has been dissolved, and to close the cone by a plug of the same butter. The latter dissolves in the vagina as far as the hollow cone is concerned; but the plug being thicker, resists, and the medicated glycerine remains in contact with the vagiral walls.—*Lancet.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—R. HEEMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, April 1, 1868.

THEORY AND PRACTICE.

THEORY is a gross and wealthy epicure, who sits long at the table, is garrulous, eats because he has educated his palate to high-seasoned dishes, is only companionable at the festive board, believes that nobody's meal is as good as his own, and if he essays any work is apt to be troubled with dyspepsia and its attendant disordered fancies. Practice, on the other hand, is a lively and ever-ready individual, who earns his own living, who eats that he may sustain his body for work, has always a good appetite for plain food, but best of all has a good digestion.

We need not stretch our imaginations to find both of these individuals in the respective classes of theorists and practitioners in our profession. The former of these are always in the ascendant, because it is so much easier to plan a battle than to fight it, so much pleasanter to track a voyage upon the map than to weather the storms which may arise in its course. It is necessary, after all, that we should have both of these types—one to suggest principles, the other to subject the principles to practice; but while both are useful in their way, the practical man is really the true benefactor to his race, and the one for the age in which we live.

In order to become a thoroughly practical man, a very different education is required from that followed in our schools of medicine. The principles of a science can be taught, but the art to apply them is unteachable. In mastering any art, each one must train himself specially to the accurate observation of those facts which are presented to him, and reason in his own way not only with tact, but with strong common sense. Such cannot tell exactly how they arrive at conclusions, but still such conclusions are in the main correct.

It is the possession of that rather rare commodity, common sense coupled with promptitude, that faculty of applying a knowledge which is distributed through a mass of isolated facts, that distinguishes the success of one practitioner from another. When a distinguished painter, in answer to a question as to what he mixed his colors with, replied, "With brains, sir," he struck at the root of the whole matter. The student of art must not only be acquainted with the laws which combine pigments, but in order to be a successful and accomplished colorist, he must, with spatula in hand, mix his own paints, and with the touch of his own brush work in the lights and shadows, and create his own effects. His admirers would much rather see a speaking canvas as the result of such labors, than read an article on the philosophy of art. The same application of principles to practice is as essential to the physician as to the artist; the former must be as willing, as ready, and as able to work up his facts and blend them into a diagnosis, and a plan for treatment, as the latter is to cause his picture to glow with life-like representation.

The only way in which the physician can acquire a practical knowledge of his profession is by a constant study of each case by itself, throwing himself upon the general principles of disease as his foundation, and giving his common sense the fullest possible sweep. For this purpose the bedside is his proper position, and the hospital the laboratory where he must separate the dross from the true metal.

The value of clinical instruction has been acknowledged to be so indispensable, that it seems almost like useless reiteration to urge its claims afresh; but in view of the number of graduates who have been lately added to our ranks, many of whom have had little or no opportunity in this line, we offer no special excuse for alluding once more to a threadbare subject.

A freshly-graduated student is nowadays too much like the "crier" of old times who could describe to the townsmen the dress and appearance of a lost child, but who could not identify the little one when it was presented to him; or like the would-be grammarian, who can recite every rule in Murray's Grammar and cannot of himself write a correct English sentence. On general principles the "crier" would be expected to be first to pick out the lost child from a crowd, and the man of rules to write with ease and precision. The young medical man of to-day is *par excellence* a crammed individual, one who generally believes himself to have his science on his finger-ends, and who is too ready to fight single-handed every difficulty that may come into his way; consequently few avail themselves of the opportunities afforded by clinical instruction or hospital pupilage, becoming pretentious theorists instead of capable practitioners. No one who is wise and who wishes to lay the only sure foundation for an unequivocal success, will neglect to avail himself of such glorious opportunities as a public institution can afford. It is true that every one who may wish cannot be an interne, but at least every one can familiarize himself with hospital cases, by walking the wards, or by attendance upon some dispensary.

He who is fortunate enough to become a hospital pupil and properly improves his opportunities, has of course an immense advantage over all who are less

favored, and receives a training in two or three years that is equal to ten years as a beginner in practice. The experience of those who have gone through this species of preparation speaks in unmistakable tones of persuasion to those who may, at the completion of their college course, be "halting between two opinions," to turn aside from the pet project which they may have formed of tacking up their "shingles" and launching out at once into general practice.

The first excuse which is offered by the young doctor is the loss of time which a residence in a hospital necessitates. This is altogether more apparent than real. We believe that it is a settled fact, that no young man rushes at once into practice; he of course expects to, but every one from the time of Hippocrates has been disappointed. The disadvantages which hang around a young, and perhaps beardless face, are weighty enough to turn the balances against the chances of the aspirant, while an unseasoned sign is known to be looked upon with suspicion by the community. Yet with all these disadvantages, each youngster in his turn will coax himself to believe that he at least is to be the exception to a general rule, and will really incur more expense in keeping up a respectable-looking office than if he were more profitably employed in studying the great problem of disease in the grand school of nature.

Again:—The true way of impressing facts upon the mind, and strengthening the memory, is by association, and when is there a better time to do it than when these facts are still hanging loosely to the mind, when theories are floating about without a resting-place, surrounded by an almost impenetrable mist of conjectures. All the eloquent descriptions of disease that are pointed in the text-books are not half so impressive as one single example of a particular malady that may be read from a patient's face. The memory of a peculiar expression, of a certain color of the skin, of a remarkable decubitus, will be treasured under such circumstances long after the printed description of it is forgotten. The development of these habits of observation so essential to the practical man is sure and rapid, and ere long he is enabled to look at disease through a glass that is singularly free from aberration. A special faculty of jumping at once into the merits of the case is brought to life unconsciously to its possessor, and he after a time believes that he is almost guessing at a diagnosis, so easy does it seem for him to arrive at a conclusion. A popular writer has said that "a lucky guess is never merely luck, but there is always some talent in it;" this seems especially true in the matter of the knowledge of disease gained by careful study at the bedside. When a pupil first enters a hospital, the number and complexity of the cases bewilders him, and he wonders how the examining physician can make a diagnosis so quickly; but wait until he gets more familiar with the facies of disease, and he will be doing the same thing, and will be enabled to fill out the cards of admission as rapidly and as correctly as any. In examining any new case, a few questions give him the scent, and his trained mind, by a system of its own, follows it up with a certainty that is truly surprising.

The benefits growing out of the study of the treatment of a large number of cases are to the novice immense. It gives to him broad and reliable views of therapeutics, which he can gain in no other way. His ideas become expanded in a hospital ward, and the skill with which he by and by will learn to ride through a hurricane, will give him a comforting ease in a squall. He gets a method in his investigation, a dexterity in his manipulation, which proves to the merest looker-on that he is perfectly at home in the sick-room. Contrast the behavior of such a one with the fledgling graduate who has, perhaps, during his college term, walked the hospital a dozen times, and makes his friends believe that "he has gone through the mill." His wings are soon so completely clipped that the nurse shows him how to adjust a bandage, apply the binder, and administer an injection. Can such a practitioner always be certain that a bandage is not a little too tight, or that a dose that has been prescribed is not a little too large? It is true, he can consult his text-books, but is his mind in a state to be refreshed when an emergency stares him in the face? He may have some "handy-book" in his pocket, but this is but a light and uncertain anchor to keep his bark from drifting before the wind. When one wishes to show skill in horsemanship by leaping a ditch or clearing a fence, he is supposed, first of all, to have learned how to keep an ordinary seat in the saddle. It is then a little too late for him to try and apply the rules of the riding-master. A rather characteristic anecdote applying to this class of individuals has been related by a distinguished professor of this city. Let us hope for the sake of humanity that it is not founded on absolute fact. A luckless young practitioner was summoned to a patient with strangulated hernia, and obtained the services of a counsel no better qualified to treat the case than himself. The latter agreed to read aloud the anatomy of hernia, while the other with knife in hand proceeded with the operation. The consequence was that as long as the one read the other cut, and when both had finished the incision reached nearly to the umbilicus, and the constriction was not relieved.

What young practitioner without previous hospital experience has not supposed, when summoned to his first case in obstetrics, that he has to deal with a retained placenta, an hour-glass contraction, or perhaps a placenta prævia? We are not presupposing that the young man is not in the ordinary sense "well posted," that he has not filled himself with all sorts of rules, that he has not twenty specifics for each malady, that the theories of diseases which he entertains are not in strict accordance with the transcendentalism of the German and French schools; on the contrary, we are willing to give him full credit for such knowledge. When, however, we think of such an individual, we are reminded of the

danger which sometimes obtains when a soldier goes into battle with an overloaded stomach.

In conclusion, we would take the occasion to urge upon the graduate—for to him particularly we are addressing ourselves—to put himself in the way of enjoying some sort of advantages in the way of more extended clinical study, if not by a residence in a hospital, at least by walking the wards, or by attaching himself to some dispensary; he may depend upon it that he will not lose time by so doing, but, on the contrary, will take a surprisingly short cut to a speedy and permanent success.

It has been the custom for some time past to keep a record in the office of the Sanitary Superintendent of the Board of Health, as required by law, of all contagious diseases reported by the practising physicians of this city. These reports are strictly private, and no action is taken by the officers of the Board, unless when the physician making them states the necessity for such action. Through the kindness of Dr. E. B. Dalton we shall be enabled, from time to time, to present the statistics resulting from the consolidation of these reports, and it is to be hoped that their semi-monthly publication may induce a more general compliance with the law. A glance at his letter in another column, will show how small a proportion of all cases of contagious diseases really occurring are reported.

The law provides "That every physician shall report to this Board, in writing, every person (and state of his or her disease, and his or her place of dwelling, and name, if known) which such physician has prescribed for, or attended for the first time, having a contagious disease, during any part of the preceding twenty-four hours, but not more than two reports shall be required in one week concerning the same person; but every attending or practising physician thereat must, at his peril, see that such report is or has been made by some attending physician."

It would seem unnecessary, in view of the above, to urge upon the profession the importance of promptly reporting every case of contagious or infectious disease coming under their notice, not only for the reason that, by neglecting to do so, they render themselves liable to suit for penalty, but also because the full record, which fidelity in this matter will render possible, cannot fail to be of great value to every practising physician.

We would call the attention of our younger readers to the Surgeon-General's circular, in reference to the examination of candidates for admission into the medical staff of the United States Army. All the necessary directions are therein given to those who may be desirous of entering the service. The high order of acquirements, and the strict impartiality of the examinations, are of themselves, independently of the reputation of this model corps, sufficient to invite every energetic and capable medical man to enter the lists. We learn that there are thirty-nine vacancies.

Reviews and Notices of Books.

The Principles and Practice of Obstetrics. By Gunning S. Bedford, A.M., M.D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York. Author of "Clinical Lectures on the Diseases of Women and Children." Illustrated with four colored lithographic plates and ninety-nine wood-engravings. Fourth Edition. Carefully revised throughout and enlarged. New York: William Wood & Co., 61 Walker Street. 1868. 8vo., pp. 746.

The work before us has, since the appearance of its first edition in October, 1861, maintained the very enviable reputation of the highest authority on the subject of which it treats, and, from present appearances, is likely to maintain it. The present edition, while it preserves to us all the peculiarly valuable features of its forerunners, has been much enlarged by numerous incorporations in the original text, as well as the addition of an entirely new lecture upon the complications of pregnancy, in which are discussed various topics of importance, such, for example, as chorea, paralysis, jaundice, etc. The subjects of twin pregnancy and anæsthesia have been most especially elaborated, and embody much that is of great practical interest to the accoucheur. As the work now stands, there is nothing left to be desired by any student or practitioner who seeks a complete and standard treatise upon this most important branch of medicine. Every conceivable point connected with his subject receives its due share of attention, from the anatomy of the pelvic regions to the rarest forms of complications to the parturient act, and all this is done in the thoroughly systematic manner of a practised and accomplished teacher. The arrangement in the form of lectures gives our author the great advantage of presenting important facts in a familiar and impressive manner, and of allowing himself a latitude of expression and illustration which would hardly be consistent in a work upon a different plan. The style is easy and elegant, and the numerous illustrative anecdotes are introduced in the places where they do the most good by riveting an important fact in the mind of the learner. Nothing in the shape of detail of explanation is avoided, and the student will not seek for any practical instruction on the smallest or most trivial points in vain. He insensibly enters the lying-in chamber with his master, and witnesses every little manœuvre from the lubrication of the finger for the first examination to the final adjustment of the binder and the application of the child to the breast. If the labor is to be a preternatural one, if manual or instrumental interference is called for, the same confidence is infused into the beginner which the just appreciation of all his wants on the part of his teacher naturally begets. In those cases where prompt action is required the reader cannot mistake the earnestness with which the author strives to impress the point. No one after reading the lecture on post-partum hæmorrhage will forget to introduce his hand into the uterine cavity and induce contraction, to press firmly upon the abdominal walls, or to dash cold water upon the hypogastrium; neither will the younger practitioner who peruses the touching history of the clergyman's daughter be too apt to arrive at a hasty diagnosis of the existence of pregnancy, or rule out of his mind the impossibility of a fibrous tumor of the uterus creating suspicious symptoms. His remarks upon the proper use of the forceps, the treatment of puerperal convulsions, the cæsarean operation, and the employment of anæsthetics, are thoroughly practical, and are marked with that conservatism which characterizes one with broad views and sound

common sense. It is not necessary, however, to notice all the various topics that are treated of in this masterly work, as its special claims for favor are well enough known to the profession to render it unnecessary. Its translation into German and French would, independently of any other endorsement of its merits, be sufficient to give it the very highest rank as a text-book, not only in this country, but throughout civilized Europe. In conclusion, it is only necessary for us to advise the student or practitioner, who must content himself with a simple work on midwifery, to give Bedford's Obstetrics the preference of any other in our language.

Is It I? A Book for Every Man. A Companion to Why Not? A Book for Every Woman. By Prof. Horatio Robinson Storer, M.D., of Boston, Vice-President of the American Medical Association. Boston: Lea & Shepard. 1867.

To use the words of a late writer in one of the English reviews in noticing a much larger work than the present, we are perplexed not so much as to what we shall say, as to what must unavoidably be left unsaid. Let us begin with the dedication, which is, to say the least, unique. It is "to one of the only two uterine specialists in America," and then a note is kind enough to explain by saying, "as contradistinguished from especialists, of whom there are many." Thus our modest author has given himself a notice in keeping with the tenor and object of the book. The "publishers' note" takes up thirteen pages of the book, and consists of an "ante-mortem" eulogy of Professor Storer, with an enumeration of his writings. It is a peculiar affair, with its analysis of his character, which must have come from one having rare opportunities for acquaintance with the author. His pupilage in Edinburgh is noted, and it is stated that "he has conquered renown," whatever that may mean. A case which was at one time the subject of much discussion in Boston, and from which the author has acquired a notoriety not altogether enviable, is given, and then a series of resolutions, signed by a grateful and admiring class, and for which publication was requested, *not as an advertisement*, is appended. The age of our author is also given. This publishers' note is a new and attractive feature in medical literature, which we, who live far away from the "hub," ought to appreciate.

The "prefatory remarks" occupy nine more pages, in which, among other valuable matter, the reason that the essay did not take the prize of the "American Medical Association" is given. This reason seems to be that it was not quite as valuable as those essays which did get it.

The subject-matter of the book—that is, the abuse of marital rights—is now entered upon. It is treated of in a somewhat grandiloquent style, and we have been at a loss in attempting to find anything novel in the book except the lavish amount of quotation, more than thirty-seven and a half pages, from Rev. Frederick Robertson, John Todd, and John Ware, and Acton. In fact we are not a little puzzled to know how Dr. Storer can claim that this little book has any new truths in it. Certainly such paragraphs as the following are not startling on account of their newness or mode of presentation: "All men, old or young, seek companionship. This is necessary for their very self-possession, both in body and mind, and the companionship which they instinctively seek, as truly and unvaryingly as the load-star seeks its pole (sic), is that of the opposite sex." "As for age, there can be no doubt that for some reasons it would be better for no man to marry before he has reached the age of twenty-five, and for no woman until she is twenty; for at this time neither party can be considered, physically, as really mature."

We should like to give some specimens of the author's *fine* writing, such as this—"It is not the zephyr that calls into being the sturdiness of the oak," etc.—but our space forbids. We regret this; for we do not often, in our notices of the somewhat barren style of medical authors in general, have occasion to see such specimens.

Yet this book is well adapted to its market. It will be read with avidity by that large class who gloat over all references to matters which are the most sacred of all those with which physicians have to deal, and which seem to be common topics of conversation among a certain class of patients who speak of "conceptions, sexual intercourse, marital rights," with a sang-froid which smacks of the shop.

The best part of Dr. Storer's book is his thirty-seven pages of quotations, with which we trust our readers are familiar, and that they are not in the habit of either countenancing abortions, and asking "why not?" or of abusing their wives, and innocently inquiring "Is it I?"

As was indicated in the beginning of this notice, we have refrained from saying much which was on our pen's end, in noticing Dr. Storer's book.

Without any want of appreciation of the author's scientific labors, we have deemed it our duty to protest against the undue importance ascribed to books like this, which seem to us in some respects worthy of the name, "Much ado about nothing."

The Principles and Practice of Laryngoscopy and Rhinoscopy in Diseases of the Throat and Nasal Passages. With fifty-nine engravings on wood. By Antoine Ruppaner, M.D., M.A. New York: A. Simpson & Co., 1868. 8vo., pp. 154.

A very neatly printed book from the Agathynian Press, N. Y., but one which would have looked much better had it been made into a duodecimo, instead of a thin octavo.

This book is a sufficiently accurate résumé of the history and practice of laryngoscopy and rhinoscopy, and contains the records of many cases in the author's practice illustrative of the value of the laryngoscope.

The engravings, with the exception of a few from Mackenzie, Gibb, Tobold, and perhaps one or two others, are taken from the elaborate treatise of Türck of Vienna, and serve better to illustrate the *instrumentomania* which has seized upon laryngoscopists than to subserve any practical purpose. The illustrations are of very inferior execution, especially the anatomical ones, a matter to be deeply regretted. Had they been one-third in number, and three times better in quality, they would have added more to the value of the book. Although this work is published to "supply a want long felt by those interested in this branch of medical science," we are at a loss to see, apart from the presentation of some illustrations of Türck's instruments, that it tells any story not already better told in Mackenzie's work on the same subject, or Caswell's translation of Semeleder, both of which have been for some time within reach of the American public. Had the author translated some of Turck's valuable clinical observations, and displayed fewer of his instruments, he would have rendered valuable service to this department of surgery.

The character of the appendix shows evidence of carelessness or haste in the preparation of the volume.

The Treatment of Diseases of the Throat and Lungs by Inhalations with a new inhaling apparatus. By Emil Siegle, M.D. Translated from the second German edition; by S. Nickles, M.D. Cincinnati: R. W. Carroll & Co. 1868. 12mo., pp. 136.

Dr Emil Siegle, of Stuttgart (the translator neglects to give his address and the date of the edition), has done more perhaps than any other physician to popularize the

administration of nebulized fluids by inhalation, by his application of steam as a motive power; and his original steam apparatus, which has been before the profession for several years, remains better and more reliable than any of the numerous modifications which have flooded the market. As a matter of history, this translation of the inventor's work is valuable, but to have been of practical use it should have been published more than three years ago, for in this time which has elapsed since the publication of the second edition in the original, and the volume before us, much progress has been made in this department of therapeutics, and the work therefore does not represent the present state of the subject. It is to be regretted that the translator did not furnish additional matter which might have made the work as valuable to the practitioner as some others which have recently appeared on the same topic, and which we fear will to some extent supersede the volume before us. The compliment of a translation was due to Siegle, and though it appears late, cannot but be gratifying to that gentleman, who will ever share with Sales-Girous whatever merit may accrue from the adoption of this method of inhalation. Without the employment of his steam nebulizer, this special branch of inhalation would not have been advanced far beyond the condition in which Siegle found it at the time he devised his steam apparatus.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA AT ITS EIGHTEENTH ANNUAL SESSION, 1867. Philadelphia. 8vo., pp. 500.

APART from the usual various County Reports, lists of members, standing resolutions, etc., this volume, though larger than usual, contains no original article on any medical subject, except the very valuable prize essay on "Ancient Transfusion and Infusion compared with Modern Transfusion, Infusion, and Hypodermic or Subcutaneous Injections." This essay is published both in French and in English, and is not the production of a member of the Society, but of a foreigner, Jean Baptiste Ullersperger, of Munich, Bavaria, member of an exceedingly long list of societies enumerated, besides those comprised in "etc."

This essay comprises some eighty octavo pages, and appears to be an exceedingly valuable contribution to medical literature. It was presented in French, and translated by Dr. Chas. F. Wittig, of Philadelphia, one of the most classically educated physicians in our sister city.

The essay has evidently been the result of much labor and study, and is well worthy of being reproduced in some other form more accessible to the professional public at large.

TRANSACTIONS OF THE TWENTY-SECOND ANNUAL MEETING OF THE OHIO STATE MEDICAL SOCIETY. Cincinnati: 1867. 8vo., pp. 82.

WE regret the deficiency of a table of contents to this volume, which contains some valuable papers. These comprise the valedictory address of the retiring President, Dr. J. W. Hamilton, of Columbus, entitled "Some of the wants, or supposed wants, of the Medical Profession of Ohio, more particularly with reference to Legislation;" these wants being principally in reference to facilities in the pursuit of practical anatomy, and the protection of the profession against individuals not properly qualified. "A Report on the Incurable Insane," by Drs. E. Pearce and B. S. Brown; "Remarks on Medical Ethics," by D. Geo. W. Maris, of Columbus; "The Treatment of Cholera," by Dr. John Davis, of Cincinnati, who has met with success in the administration every ten or fifteen minutes, until the intervals between the evacuations became three hours, of a powder containing one grain of calomel, two of tannin, and one of piperine; the vomiting being restrained by mustard poultices, or, this failing, small doses of chloroform and creasote every half-hour.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, DECEMBER 12, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

EXTIRATION OF THE SCAPULA.

DR. ROGERS exhibited a scapula which he had extirpated from a girl seven years of age, for malignant disease. About the beginning of this year the patient was said to have received an injury of the scapula. Dr. Rogers saw her a few months after, for injury of the elbow, when the mother called his attention to a bunch on the scapula, in the infra-spinatus fossa. He watched it for a few months, and regarded it as probably cartilaginous in character. With that view it was afterward extirpated. The bone below it was roughened at the point of attachment. The mass, however, on being afterward examined by Dr. Jacobi and himself, proved to be malignant in character. The wound healed quickly, and the child was apparently in perfect health. The return of the tumor was, however, anxiously looked for. Finally, at the end of two or three months, a nodule made its appearance under the spine of the scapula. It grew with moderation for two months, when a New Jersey cancer doctor was consulted. He applied some of his cure-all ointment, which was of a very irritating character, the result being a frightfully rapid increase of the morbid growth. This disposition to enlarge was very marked until the afternoon of the 11th of December, when the mass was removed, which was simply an extirpation of the entire scapula. The bone was found exceedingly rotten, and saturated with disease.

The dissection was of course in a measure explorative. The clavicle was found entirely free from disease. The coromoid process was loose, and in raising up the mass the acromion process of the scapula left its attachment to the spine of the scapula, and adhered by ligament to the clavicle. The ligaments of the clavicle were not diseased.

"The child," said he, "is not quite eight years of age, and, considering the size of the tumor, I am afraid I have been performing one of the most frightful operations on the scapula on record. The largest tumor reported weighed a twentieth part of the individual; this is a tenth part of the entire child!"

Although there were four inches of skin taken away with the tumor, there was no difficulty in bringing the ends of the wound nicely together.

The end of the humerus was brought up against the end of the clavicle, and kept in that position by confining the arm diagonally across the chest. There was less hæmorrhage than was anticipated. Four hours after the operation reaction was perfectly established, and a good night's rest was enjoyed. At the end of thirty hours the child had some irritative fever, and was suffering from some nausea, which the doctor did not feel quite certain was not caused by ether.

The dissection exposed the axillary artery throughout a considerable portion of its course. The arteries of import that were ligated were the supra-scapular and subscapularis.

STATED MEETING, DECEMBER 26, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

EXTIRPATION OF THE BREAST—MISSISQUOI WATER IN CANCER.

DR. SAYRE exhibited the breast of a woman which had been extirpated two weeks before in Paterson, New Jersey. She was 42 years of age, of a large and robust constitution, and had ceased menstruating at 37. Last April she first noticed, by accident, a nodule in the right breast. It grew considerably for weeks after this, when she consulted a surgeon, who recommended the Missisquoi water. Notwithstanding the use of this water, however, her disease did not disappear, but on the contrary continued to increase, until Dr. Sayre was called by her attendant, Dr. Riggs, in consultation. There was at that time an ulcer, two inches in diameter, involving the nipple, and the mammary gland was so much infiltrated with organic matter that it was necessary, in the operation which was called for, to remove the whole breast.

After its removal an examination by Prof. Flint, Jr., showed it to be cancerous. It weighed six pounds and three quarters. There was only one very small twig of a vessel in the pectoral muscle that required even a temporary ligature.

DR. SAYRE stated that this was the fourth operation of the kind that he had performed without the use of a ligature, and believed that the fact was explained by a practice of dividing the vessels in an oblique direction.

DR. HAMILTON asked how long the Missisquoi water had been used in the case reported?

DR. SAYRE answered, six months. She drank about eighty pint bottles of it, besides making local applications.

DR. HAMILTON stated it as a fact, which was a little remarkable, that notwithstanding the reputation which the "Squaw's water" had for curing cancer, there had been but one successful case reported; that instance was mentioned by Dr. Dixon, and there was room for a good deal of doubt as to its successful use upon that patient in the very case as reported by him.

DR. KRACKOWIZER believed with Dr. Hamilton that the case could not be considered as one of pure cancer, as it was stated in Dr. Dixon's pamphlet that the patient had been troubled with the disease some eight or ten years before applying to the springs for relief.

DR. DRAPER remarked that he had known a case recently, in which a lady had a cancer of the breast removed last spring, and the disease returned in the cicatrix three months afterward. She visited the spring, and applied the mud to the parts, but so much irritation was occasioned by it that she was obliged to desist. She also drank the water for several weeks, but neither was attended by any relief. He believed that the virtue of the water, if it really possessed any, resided in its diuretic properties.

DR. W. B. LEWIS stated that he had a patient who was of a scrofulous constitution, and was troubled with constipation. In that case the water exhibited a very decided laxative effect.

DR. SQUIBB, at this stage of the discussion, remarked that the most reliable analysis proved that, far from containing any special medicinal quality, the water was the veriest type of chemical purity. He further stated that the spring was not a newly discovered one, but had enjoyed some little reputation in its immediate neighborhood for the cure of cancer. Lately, however, it had passed into new hands, and its virtues were lauded more for a mercantile object than any other.

DR. ROGERS believed that the spring water was of the character as represented. Such a supposition was to his mind true, inasmuch as the proprietor was unwilling to have any of the precious fluid analysed.

DR. PARKER expressed strong doubts as to any of the supposed virtues of the water. As his name had been used by the proprietor of the spring in the way of endorsing its supposed curative power over cancer, he thought it would be well for him to state what he had to do with it. In the first place, it was unnecessary to premise that the recommendation was not used by any permission, even provided it was based upon truth.

Some year and a half ago, a gentleman called upon him with a system very much broken down from various constitutional vices, and showed a large ulcer upon the tongue, which was phagedenic in character, and was giving him a great deal of trouble. The ulcer was large and deep enough to admit the end of his little finger, was ragged, and exceedingly unhealthy in appearance. After talking over the case with the patient, it was represented to him that he was in a very bad condition, and unless he was revolutionized, the ulcer would get very much worse. He was distinctly told that it was not cancerous in character. He was advised to go into the country among the mountains and get plenty of good air and plain food, which would afford him the best possible chance for recovery. The patient left, and had not been seen since. Another gentleman, however, had since told the doctor that the patient had been cured of cancer (?) of the tongue by the use of the Missisquoi water, and had purchased the farm on which the spring was situated. That gentleman is the present proprietor of the concern, and is doing his best to advertise his place. Dr. Parker had been in the habit of recommending the waters to numbers of his patients, and he found that a diuretic effect was pretty generally induced; beyond this, however, he could say nothing.

In conclusion he made the rather significant statement, vouched to him by a lady of the highest respectability, that in the immediate neighborhood of the spring is a large laboratory for the manufacture of artificial mineral water.

DR. DRAPER had seen great benefit from the use of this water in the uric acid diathesis.

MORBUS COXARIUS. EXSECTION.

DR. SAYRE presented a second specimen, consisting of the head, neck, trochanter, and about four inches of the femur, removed by operation, from a boy fourteen years of age, in Mount Holyoke, N. J. The operation was performed the Sunday previous, assisted by Drs. Bragg, Rockwell, and Allen. In September last the patient was struck with a bat while at play. The pain occasioned by the stroke was so intense, and the shock to the system so considerable, that fainting ensued. He, however, soon recovered from its immediate effects. The next day he was exposed to a very hard storm while riding in an open wagon, and without cover, for two hours. The following day, he was engaged in digging potatoes for several hours. In the afternoon of that day he went fishing, and, according to his statement, was constantly out and in the water while watching for a bite. That night he had a severe pain in his hip, accompanied by a chill, and from that time until the operation, was forced to keep his bed. Three weeks from that time an abscess appeared on the upper and anterior portion of the thigh, just in front of the trochanter major, which pointed and opened itself. This opening was afterward enlarged by Dr. Rockwell. It continued to discharge, but there was not full drainage. Matter formed there, and various other openings had occurred, so that at the time Dr. Sayre saw the case, there were nine of these sinuses running in various directions around the hip-joint and femur, but through

none of them could bare bone be detected. This latter circumstance occasioned no little difficulty in diagnosis, so that the attending physicians were unable to decide between hip disease and lumbar abscess.

When Dr. Sayre saw the patient he was confined to his bed with a weight and pulley attached to his feet. The measurement from the anterior superior spinous process of the well leg was thirty-three and three quarter inches; from the same point the right leg measured thirty-two inches. The size of his left leg at the largest part was nine inches in circumference, while the calf was only six inches in circumference. The knee was over nine and a half inches in circumference. He was, in fact, reduced to a mere skeleton. His body was twisted, as is usual in that deformity.

It was recommended to make an explorative operation. The diagnosis given at the time was, that the disease had commenced as periosteal inflammation, and had subsequently involved the joint, producing a luxation of the head of the femur upon the dorsum of the ilium. The determination was, in case the head of the bone was found diseased, to excise the joint. The ordinary incision was made over the protuberance, but not quite so far back as he would have liked to have had it, on account of the various sinuses in the neighborhood. The head of the bone was found entirely without the acetabulum, the only case, by the by, that the operator had seen in which the disease was of such short duration. The acetabulum was perfectly healthy, except a bare inch of diseased surface at the upper and outer portion of the rim. The bone was, however, very rough and very much enlarged, as the result of ossific deposit from periosteal inflammation, and the disease had extended some three inches down the femur, where it ended abruptly in healthy bone. At that point the saw was applied. On making the incision the knife was passed half way round the bone, and the section of the bone made at right angles. The periosteum was completely peeled off, except a small portion attached to the digital fossa, which required the knife.

In conclusion, he stated that he had that afternoon received a telegram to the effect that the patient was doing splendidly.

(To be continued.)

NEW YORK MEDICO-LEGAL SOCIETY.

STATED MEETING, JANUARY 28, 1868.

DR. THOS. C. FINNELL, PRESIDENT, in the Chair.

CAN ANY WOUND BE CONSIDERED AS ABSOLUTELY NOT DANGEROUS?

DR. WOOSTER BEACH related the particulars of a case in which the victim, seven days before death, had been shot in a frenzy, and in which the amount of injury was apparently so slight that a fatal prognosis did not seem at all warranted.

The point of entrance of the wound was in the groin, just below Poupart's ligament, and the communicating canal extended to the region of the knee. The patient refused an examination at the New York Hospital, to which he was brought, and having left walked a considerable part of the way home with the idea that his wound was not of much consequence.

DR. FINNELL said that the interest of the case was centred in the question, might not this man have shot himself? This view, however, he did not think debatable, since the direction of the wound did not warrant any such theory. The death of the victim was due to pyæmia.

A QUESTION OF SOME MEDICO-LEGAL INTEREST.

DR. FINNELL likewise gave the details of a case in which the victim had received a kick in the left pectoral region, and was afterward found to have a small wound of the scalp, evidently occasioned by a glancing pistol-ball. For the latter he was trephined directly over the occipito-parietal suture, when a fissure was found in the button of bone. The patient lived ten days. At the autopsy one entire lobe of the left lung was discovered to be the seat of fibrinous infiltration, while the brain, soft and pultaceous, was a mass of purulent deposit, uniform in character, and extending from the centre to the circumference. Was the kick an exciting cause of the pneumonia, without, as in this case, the complication of a broken rib?

DR. TERRY, in elucidating the case, referred to the fact that there was a reasonable amount of favorable progress during the first four or five days, after which the patient began to sink, became comatose, had hernia cerebri; in fact, a large mass of brain fell out.

FATTY DEGENERATION OF THE DIAPHRAGM.

DR. S. ROGERS exhibited by a diagram the appearance of fatty degeneration of the diaphragm under the microscope. The doctor pointed out the thorough degeneration of a fibre in anatomical relation with another. He should say that at least three-fourths of the specimen thus examined was in that diseased condition.

Several pathological specimens were exhibited during the evening, and their points of interest discussed.

CAUSES OF SUDDEN DEATH.

DR. TERRY, in continuing the discussion upon the above subject, alluded briefly to its obvious division into natural and accidental death. He maintained that among the vital organs such as the brain, the lungs, and the heart, which Bichât was wont to style the "tripod of life," the sympathetic system should also be added, since it constituted the medium which bound the others together, and afforded a satisfactory ground upon which to base a theory in some cases of death. He also called attention to the fact that respiration might cease for an interval, and the brain almost entirely suspend its function and yet life would continue, but when the heart ceases to act, death ensues.

The causes of death may be either immediate or mediate. The electric current paralyses the nervous centres in an instant, although the shot or stab which severs the medulla oblongata is scarcely less sudden. If we use "*sudden*" and "*instant*" as convertible terms, the question, as far as regards immediate causes, becomes narrowed down to quite a small compass. If we say death is the result of irremediable changes, we necessarily include many lingering diseases, inscrutable in origin and resistless in progress when once fairly started on their course. If we content ourselves with the definition that it is a speedily fatal irruption upon previous health or an extrinsic and quickly fatal complication of an otherwise protracted disease, the subject would embrace the whole domain of medicine and surgery.

The heart, it is true, is the centre around which revolves the whole vitality, and here we look for the last step in the devitalizing process; but with our ignorance of the essential nature of life, we can only hope to find some injured link where the clue to the inner and more proximate morbid changes is to be abandoned. The test tube, the microscope, the prism, the electric spark, and the polarizing reflector, may conduct us a few steps further beyond but not to the end of the journey.

Hence often the primary agent is all that can be discovered, though, in the majority of cases, a secondary cause is discernible. This latter we regard as the

proximate in a medical sense, while the former is the procuring cause legally. As medical jurists we regard both, attaching the secondary to the result, the primary to the deed, while the lawyer further seeks the *intent* of the doer.

The Doctor then closed with some remarks upon the propriety of considering the divisions of his subject in a physiological as well as a mechanical view. The fear which paralyzes, and the condition known as concussion, are physiological. The force which rends the coats of an aorta, and the pressure of the effused blood when the rent happens within the pericardium, are mechanical. He also deduced other instances where there was a union of both these causes, the mechanical acting first and then inducing the operation of the physiological element.

Dr. Finnell said that he had indulged the hope that perhaps the responsibility of sudden death might be fixed upon a single organ, and that the present discussion might have shed some light upon the subject, but this, he confessed, he now regarded as impossible.

The Society then adjourned.

Stated Meeting, February 11, 1868.

Dr. Thomas C. Finnell, President, in the Chair.

WAS IT INFANTICIDE?

Dr. Leo presented the heart and lungs of the child of a Polish woman, belonging to the laboring class, and 27 years old. While in labor she went to the water-closet and into it dropped her child. After her removal to Bellevue Hospital, a second child was born, but soon expired. The autopsy showed the lungs of both to be buoyant, that of the first child most markedly so. The funis in the latter case was broken off three inches from the abdomen.

Dr. Terry referred to the case of a lady taken in labor on board of a steamboat who dropped her child in a chamber vessel.

A CASE OF CYSTIC DEGENERATION OF THE KIDNEYS.

Dr. J. Beach showed the kidney of a woman aged 33 years, who had been subject to fits of fainting, and had once been attacked with partial blindness. At about one o'clock on the morning of her death she was discovered by her husband in a convulsion, and was dead fifteen minutes afterward. Heart and lungs healthy, uterus larger than normal, one ovary very large and containing a *corpus luteum*; the kidney exhibited was far advanced in cystic degeneration.

Dr. Finnell inquired whether the brain had been examined.

Dr. Beach replied that it had not, but that the woman, although in poor health, was not under the care of a physician. He regarded the kidneys, in the advanced stage of disease as they were, quite sufficient to cause death.

Dr. Terry coincided in this view.

A CASE OF ANEURISM OF THE AORTA.

Dr. Sterling exhibited a specimen of ruptured aneurism taken from a patient 46 years old, in whom the diagnosis had been fully made out before death.

The patient died soon after having been seized with a fainting fit. Large quantities of serum and clotted blood were found in the left pleural cavity. The point of rupture in the sac was in the descending portion of the aorta, the walls of which were in part formed by lung substance. A second aneurism was found in the ascending aorta.

Dr. Finnell called attention to the advantage of weighing blood, especially when as in this case, it having been retained, the amount necessary for a fatal hæmorrhage might be so easily ascertained.

After the exhibition of a placenta of five months' growth, Dr. Terry opened the discussion upon "infanticide" in an elaborate and comprehensive paper profusely illustrated by diagrams, and accompanied by wet preparations. This will soon be published.

The Society then adjourned.

Correspondence.

MEDICAL MATTERS IN PARIS.

(FROM OUR SPECIAL CORRESPONDENT.)

CONCERNING APHASIA.

To the Editor of the Medical Record.

Sir—Americans are bound by every natural principle to oppose the tendency to centralization, which, like a dose of hashish, serves to concentrate the consciousness of entire France upon its head, Paris. We may most profitably and agreeably fulfil this duty by giving a hospitable reception to the medical and scientific news so richly furnished by the provinces.

One of the most interesting memoirs that have appeared during the past fortnight was read at the Imperial Society of Medicine, at Marseilles, by Dr. Fabre, wherein are discussed, with much clearness and originality, three problems concerning aphasia, a disease whose symptoms and pathology are so remarkable and mysterious.

A fourfold division is made of the disease. In the first variety or degree the patient forgets words; in the second, he loses voluntary control over their formation; in the third, he ceases to understand their meaning; finally, all these conditions may coexist in the most complex form of aphasia.

The loss of the faculty for written language, which is so remarkable a secondary phenomenon of aphasia, also exists in four degrees. In the first, the patient loses all recollection of written letters or words, but is able perfectly well to copy models placed before him. In the second, he is unable to write, even when understanding what he wishes to transcribe. In the third case, he has lost the faculty of reading; and if he tries to write, although he succeeds sometimes in forming the letters well, he cannot co-ordinate them into words. Finally, all understanding of written or spoken language may have been completely abolished, while the rest of the intellectual faculties remain completely intact.

It is remarkable that when aphasic patients are unable to express their wishes, either by words or gestures, they sometimes succeed in giving utterance to their feelings. Thus, a lively sense of gratitude inspired a patient at Hotel Dieu to utter the only word that he pronounced in the ward; he said "*merci*" to the *religieuse* who was taking care of him.

In the first class, there are various degrees of forgetfulness. Some patients forget proper names, or the greater number of substantives, and express their meaning by circumlocution. Thus, instead of asking for a pen, they demand something to write with. Others cannot construct a complete sentence. In the second class the patients pronounce words differently from what they intend; and although conscious of their mistake, and irritated by it, they are unable to rectify it. After this simple perversion of language comes real impotence; the patients express all their meaning with the same word, or even syllable, often utterly devoid of

sense. Thus a patient of Trousseau's always repeated the word *consisi*, and the syllable *tin* constituted the entire vocabulary of a patient of Broca's. With these patients the movements of the tongue are perfectly free, and there is not a trace of glosso-labio-pharyngeal paralysis.

In the third category, the functional trouble is less grave, as regards the mechanism of speech, and more serious in respect to intellectual disorder. The patients cease to understand the meaning of their own words, and when they wish to say one thing, express a meaning directly the opposite. Thus a lady receiving visitors, addressed them in terms of gross insult, supposing that she simply invited them to be seated.

In the most complete cases of aphasia, from the testimony of certain physicians who have been affected by it and recovered, the intelligence is still perfectly intact. Thus Rostan observed his own case, and mentally prepared a clinical lecture upon it. Lordat, and Dr. Spalding of Berlin, had a similar experience. Whatever difficulty is encountered in intellectual exertion is not a cause of the aphasia, but a result, on account of the loss of signs necessary to give precision and support to thought.

M. Fabre enters at length into the discussion of the anatomical locality for the lesion in aphasia. He inclines entirely to the opinion that, in the majority of cases, the left frontal lobe is the seat of the disease. Four or five cases have, however, been reported, in which a destruction of both the anterior lobes was unaccompanied by any symptom of aphasia. In these cases, however, the posterior part of the lobes was nearly intact. Moreover, M. Fabre suggests, although the faculty of speech be specially localized in this part of the brain, that in case of need, other portions might sometimes supplement its action.

Again, autopsies of aphasic patients have not unfrequently revealed lesions of various parts of the encephalon, other than the frontal lobe. But it is easily conceivable that the fibres from this locality, in passing through diseased portions of brain substance, should become affected, even though their centre remained healthy. In this case the cause of the aphasia would be no indication of the seat of the faculty of speech. It is presumable, moreover, that there exist varieties in the lesions, to which the clinical varieties correspond. In permanent aphasia, the lesion generally consists in softening, especially such as results from obliteration of the middle cerebral artery. Such obliteration frequently determines a hemiplegia at the same time, on account of the distribution of the artery to the corpus striatum. In cases of sudden hemiplegia, M. Fabre considers that the coincidence of aphasia alone permits the diagnosis of obliteration instead of hæmorrhage, as the cause of the accident.

Transitory aphasia either depends upon neuroses, as hysteria or epilepsy, or is attributed to congestions. But M. Fabre is inclined to rule out this last circumstance, and substitute obliterations of arterioles, which cause a temporary derangement of the nutrition. After a while the development of collateral circulation renews the nutritive activity of the region, and the patients recover.

No therapeutic indication can at present be based upon this fact of arterial obliteration as the most common cause of aphasia, but it may tend to prevent the trial of useless or untimely measures.

PULMONARY EMBOLI AS A CONSEQUENCE OF CONGELATION OF THE LIMBS.

At Strasbourg, the opening lecture of the course of operative surgery, delivered by Professor Michel, consisted in an interesting study upon pulmonary emboli as a consequence of congelation of the limbs. At first sight this consequence seems to be extremely farfetched, but the links are easily traced by means of such experiments as those made by M. Powelict on animals. The following are the conclusions of a memoir submitted by him to the Academy:

1st. The first phenomenon produced by the cold is the contraction of the capillary vessels to such an extent that no globule can enter them.

2d. Presently the blood globules begin to alter, become granular, opaque, crumpled on the edges. If only the limbs have been frozen, about the fifteenth or twentieth part of the globules are altered; but if the entire body has submitted to the cold, nearly all the globules are disorganized. In this case, the animal dies inevitably.

3d. When the congelation is partial, the frozen part is destroyed by gangrene. If it be of small extent, the amount of disorganized globules poured into the blood is often not sufficient to compromise life.

4th. If a large extent of surface has been frozen, and then suddenly thawed, so that a quantity of disorganized blood globules are thrown into the circulation, the animal is liable to die on account of this alteration of the blood, and by no means in consequence of stupefaction of the nervous system. Hence it follows that the chances of life are increased in proportion to the moderation with which the thawing-out process is conducted.

M. Michel, supported by the case of a patient at the hospital, who exhibited symptoms of asphyxia after her frozen feet had been thawed, admits that the danger results, not merely from the presence of disorganized globules in the blood, but their presence in the pulmonary capillaries. The accidents occur only after sufficient time has elapsed for the formation of clots from dead globules, their separation from the main mass in the large veins, and their arrival in the lungs. Here are found obstructing the capillaries, long clots, containing little whitish grains which seem evidently to be formed by altered blood globules, fat globules, and fusiform epithelial cells. The more recent clots surrounding these grains, and the infarctus found in the pulmonary parenchyma, prove an arrest of the current of blood in the lung, on account of their presence in the capillaries. These lesions explain the symptoms observed in such cases, the frequency of the respiration supplementing the impermeable portions of the lung, the presence of râles due to the sero-sanguinolent exudation that succeeds the embarrassment of the circulation, the bluish tint of the face, coinciding with a certain pallor of the skin. Death may result from syncope caused by the simultaneous formation of a great number of the pulmonary emboli in the capillaries, or even, and more suddenly, by the obstruction of the pulmonary aorta itself. Larrey relates a case during the Russian campaign, where this seems to have happened: "The chief pharmaceutist, Zurcan, arrived at Kawno, exhausted with hunger and cold, and passed several hours in a warm room. Immediately his frozen limbs became swollen, and he expired without uttering a word."

One of two destinies is reserved for the microscopic clots of blood globules. They either degenerate, and in consequence of their molecular disorganization the capillaries are reopened; or they organize by means of the development of fusiform cells, and then the capillaries are definitely obstructed. The method of elimination from the general circulation is at present unknown.

In either of the foregoing cases, the patient may recover. The danger is always in proportion to the EXTENT of the lesion, and the SUDDENNESS with which it is produced.

UTERINE RETROVERSION DURING PREGNANCY.

Dr. Vignard, of Nantes, communicates to the *Journal de l'Ouest*, two observations of uterine retroversion occurring, one at the third month, the other at the fourth month of pregnancy.

In the first case, a difficulty of micturition existed for several days, and was followed by an attack at night of acute hypogastric colic, accompanied by intense vesical tenesmus. In the morning these symptoms abated, to give place to severe pains in the back and the groins, and particularly a most painful pressure on the rectum. On examination, a tumor was discovered in the hypogastric region, extending 10-12 centimetres above the symphysis. This was formed by the distended bladder.

By the vaginal touch, an immobile tumor was discovered, extending from the sacral concavity to the pubes, and forming to the vagina a convex roof, perfectly uniform, but slightly inclined downwards and backwards. The neck of the uterus was discovered with difficulty, forcibly pressed against the upper part of the posterior face of the pubes. No fluctuation was perceived between the hand placed on the vesical tumor and the finger pressed against the tumor in the vagina. Pressure on the abdomen did not in the least affect the roof of the vagina.

The bladder and rectum were evacuated by the sound, and an injection, and the physician then attempted the reduction of the uterus. After various methods had been tried in vain, the following proved successful:

The patient was placed on the back, the head tolerably low, the thighs separated widely, the feet on two high chairs, and the pelvis supported on a pillow placed at the edge of the bed. The physician then introduced the four fingers of the right hand, one after another, into the vagina, and taking with the left hand a *point d'appui* on the pubes, he forcibly pushed the uterus in a direction directly upwards. The tumor did not budge. Upon this the tactics were changed, and the operator directed his fingers forcibly, but with extreme slowness, toward the sacro-vertebral angle, gliding around the tumor, and keeping the radial border of the hand as near as possible to the pubic arch. It was tolerably easy to arrive at the promontory, and at the same moment the uterus seemed mobilized. Upon withdrawing his hand, Dr. Vignard discovered the neck of the womb returned to the centre of the vagina. Abdominal palpitation discovered the body of the uterus above the pubes, replacing the void that had been left after the evacuation of the bladder. The only indications afforded during the operation that the reduction had been effected, were the slight mobility of the uterus, and the contact of the fingers with the sacro-vertebral angle. Dr. Vignard thinks that the operator may be sure that he has succeeded, every time that the diameter sacro-sus-pubien can be occupied by the radial border of the hand.

The patient was recommended to recline upon the abdomen during the first day, and the uterus retained its normal position. The subsequent pregnancy and the accouchement were unaccompanied by accident, but the child, who had vomited bile in the amnion, continued to vomit after birth, and died in seventeen hours, with the signs of acute peritonitis.

In the second case, the third degree of retroversion seemed to have been attained, and the vaginal cavity was completely occupied by a globular body, warm, firm, elastic, that seemed to be the posterior face of the uterus. The neck forcibly flexed, was discovered high up behind the pubes. The retention of urine was considerable, but easily relieved by catheterism. The reduction was first attempted by the attending physician, but he found it impossible to raise the uterus above the superior strait. M. Vignard then practised the manœuvre already described. The four fingers were pushed directly backwards in the sacro-pubien diameter of the pelvis, while the radial border of the hand pressed forcibly against the pubic arch. The pressure was as moderate as possible, to avoid injury to the fœtus. At the moment that the fingers touched the upper part of the sacrum, a faint crackling sound was heard, the resistance was felt to be vanquished, and the vagina free. On withdrawing the hand, the neck of the womb was found returned to its place. The patient continued her pregnancy in safety, and was delivered at term of a healthy child.

M. Vignard passes in review several methods that have been proposed for remedying this serious accident of retroversion.

The method of Burns consists in placing the patient on the belly, and keeping the bladder perfectly empty by repeated catheterism. This method can only be successful in the first degree, in which the long axis of the uterus is parallel to the sacro-pubic diameter. This, however, was the case in Vignard's first observation, but the method was tried and failed.

Boyer's direction, to draw down the neck of the womb at the same moment that the body is pushed upwards, is regarded as at least superfluous, since the neck returns of itself when the immobility of the body has been overcome.

Moreau's plan of hooking the index finger around the neck, is condemned as futile.

Negrier introduces the entire hand into the vagina, and pushes the uterus *en masse* as in certain methods for reducing hernias. A very large surface is here attacked at once, the tumor is flattened, and the inferior portion therefore increased in size, so that the method is more painful and more difficult than that of Vignard.

M. Vignard rejects all methods by the rectum, because the hand will find more difficulty in reaching the promontory by this route than by the vagina, and all efforts to push the uterus directly upward tend merely to press it against the promontory which forms an insuperable barrier to its ascent. In resuming his own method, M. Vignard observes, that before directing the fingers toward the sacrum, he pushes upward on the anterior part of the uterus, and then glides toward the body of the organ behind.

TUMORS OF THE TONGUE AND PHARYNX—NEW OPERATION.

M. Desgranges publishes in the *Journal de Lyon*, certain considerations on tumors of the tongue and pharynx, and a special method for operating upon them. This method belongs to M. Sedillot, and consists of a section of the lower maxilla on the median line, by means of which the two halves of the bone could be drawn aside and sufficient space left to excise the tumor. The wound of the soft parts heals readily, but for the cicatrization of the segments of the maxilla it was found necessary to maintain the adjustment by means of pincers. This instrument presents certain inconveniences, and M. Desgranges has used metallic sutures instead, piercing the bone with a drill, for the passage of the silver wire.

Two cases are related where this operation was successfully performed for an epithelial cancer of the floor of the mouth. In the first case, the tumor, situated under the tongue, extended from the first molar of the left side to the canine at the right. The posterior face of the maxilla was invaded, and the incisors and left canine were partially loosened from the alveoli.

In operating, the integuments were divided as far as the hyoid bone, then the section of the maxilla effected by the chain saw. Care was taken that the

section should be made at the left side, and the insertions of the genio-hyoid and genio-glossal muscles of the right side avoided. Upon separating the segments of the bone, the diseased parts were easily removed with curved scissors, without touching the subjacent muscles. No blood fell into the pharynx, so that suffocation was avoided. The results were most happy. The tongue retained its movements, and no trouble occurred in the respiration. The two halves of the maxilla were not displaced, and when the patient left the hospital three weeks after the operation, a fibrous callus united the segments, and with sufficient solidity to permit movements of the entire jaw.

In the second case, the tumor had burrowed more deeply, and was ulcerated. The superficial layers of muscles were removed, but enough remained to insure the movements of the tongue. The operation performed exactly as in the preceding case, was followed by a slight attack of erysipelas, and it was a month before the two halves of the divided maxilla ceased to shake in the movements of the lower jaw. But in six weeks the osseous union was complete.

This preliminary osteotomy opens a free route to the bistoury; it enables the operator to examine the entire tumor, and to pursue its prolongations, a circumstance essential as a guarantee against relapse. Moreover, the extreme difficulty of ligating the numerous arteries encountered in this region is greatly palliated, and finally, the danger avoided of suffocation during the anæsthetic sleep, on account of blood flowing into the larynx.

P. C. M.

THE CONTAGIOUS DISEASES IN NEW YORK.

To the Editor of the Medical Record.

Sir—The reports of contagious diseases made to this office, by practising physicians in this city, during the two weeks ending March 15, 1868, show 150 cases of scarlet fever, 132 of which were under the age of 10 years; 15 cases of typhus fever, the ages varying from 4 to 50 years; 7 cases of typhoid fever, between the ages of 3 and 40 years; 14 cases of diphtheria, 6 of which were under the age of 6 years; and 2 cases of smallpox, one 12, the other 25 years of age. The reports do not indicate the special prevalence of any of the above diseases in particular localities.

Very respectfully yours,
Ed. B. Dalton, M.D.,
Sanitary Superintendent.

Office of the Sanitary Superintendent,
Metropolitan Board of Health,
No. 301 Mott street, New York,
March 19, 1868.

New Publications.

Sanitary Institutions during the Austro-Prussian-Italian Conflict, etc., etc. By Thomas W. Evans, M.D., Author of U. S. Sanitary Commission, its Origin, History, and Results, An Uncle's Letters to his Nephew on the Constitution of the United States, Officer of Legion of Honor, etc., etc. Third edition. Paris: Simon Racon & Co., 1868. By same author, History and Description of an Ambulance Wagon. Paris: E. Bnère. 1868.

A Manual of the Dissection of the Human Body. By Luther Holden, F.R.C.S., Assistant Surgeon and Lecturer on Anatomy at St. Bartholomew's Hospital, London. With notes and additions by Erskine Mason, M.D., Demonstrator of Anatomy at the College of Physicians and Surgeons, and Surgeon to the Charity Hospital, N. Y. Illustrated with numerous wood engravings. New York: R. M. De Witt, 13 Frankfort Street. 8vo., pp. 588.

Obstetric Clinic; a Practical Contribution to the Study of Obstetrics and the Diseases of Women and Children. By Geo. T. Elliot, Jr., A.M., M.D., Professor of Obstetrics and the Diseases of Women and Children in the Belleyne Hospital Medical College, Physician to Bellevue Hospital and the N. Y. State Lying-in Asylum, etc., etc. New York: Appleton & Co. 1868. 8vo. pp. 444. (We regret to say that, on account of an error in direction, this work has only just reached us.—Ed.)

The Microscope; its History, Construction, and Application: being a Familiar Introduction to the Use of the Instrument and the Study of Microscopical Science. By Jabez Hogg, F.L.S., F.R.M.S., Secretary Royal Microscopical Society, etc., etc. With upwards of five hundred engravings and colored illustrations by Tuffen West. Sixth edition. London: Geo. Routledge & Sons, Broadway, Ludgate. New York: 416 Broome Street. 1867. 12mo., pp. 752.

Electro-Physiology and Therapeutics: being a Study of the Electrical and other Physical Phenomena of the Muscular and other Systems during Health and Disease, including the Phenomena of the Electrical Fishes. By Charles E. Morgan, A.B., M.D. In one very handsome octavo volume of 730 pages, illustrated by 171 fine wood engravings. New York: Wm. Wood & Co.

Medical Items and News.

Death of Dr. Isaac Wood.—We are called upon to communicate the sad intelligence of the death, from double pneumonia, of Dr. Isaac Wood of this city, which took place on the evening of the 25th of March, in the 75th year of his age. We will give an obituary notice of the deceased in our next.

Charity Hospital, Blackwell's Island.—Dr. C. C. Lee has been appointed one of the attending surgeons, vice Dr. Birnall, resigned.

The Toronto Eye and Ear Infirmary.—A new institution, with the above title, has been founded in Toronto. The medical officers are Drs. W. H. Cumming, M.D., A. M. Rosenbrugh, and R. A. Reeve.

James Miller, M. D., M. R. C. S., son of the late Professor Miller, of Edinburgh, died at Annesley Bay, on January 8.

The Alabama State Medical society has been reorganized. Dr. A. G. Mabry, of Selma, has been chosen president.

Mr. F. H. Lovell of Appley, the present House Surgeon of the South Devon Hospital, Plymouth, has just been decorated with the Bronze Cross by order of his Majesty the King of Prussia, for his services in the victorious Prussian campaign of 1866.

Yellow Fever.—Andrew Dunlap, Surgeon to the expedition employed in laying the Florida and Cuba cable, reports the particulars of nineteen cases of yellow fever which occurred on board the steamship "Narva." Thirteen of these cases proved fatal. The introduction of the fever could not be traced to any infectious origin, but evidently arose from local or endemic influence. The experience of Dr. Dunlap convinced him that as yellow fever appeared aboard the "Narva," it was not personally contagious. His treatment was confined to saline, nutrients, stimulants, and sinapisms.

Part of a Subject sent by Mail.—The English Post Office is intrusted with some curious packages. A limb for dissection, was recently detected among the mails, and thrown out on account of its bad smell.

MEDICAL CORPS U. S. ARMY.—We have received from Surgeon-General J. K. BARNES, U. S. A, the following memorandum, for the information of persons desirous of entering the Medical Corps of the U. S. Army:

ACT OF CONGRESS, *Approved* JUNE 30, 1834. "SEC. 1. *Be it enacted*, &c., That from and after the passing of this Act, no person shall receive the appointment of Assistant Surgeon in the Army of the United States, unless he shall have been examined and approved by an Army Medical Board, to consist of not less than three Surgeons or Assistant Surgeons, who shall be designated for that purpose by the Secretary of War; and no person shall receive the appointment of Surgeon in the Army of the United States, unless he shall have served at least five years as an Assistant Surgeon, and unless, also, he shall have been examined by an Army Medical Board constituted as aforesaid."

ACT OF CONGRESS, *Approved* JULY 28, 1866. "SEC. 17. *And be it further enacted*, That the Medical Department of the Army shall hereafter consist of one Surgeon-General * * * * One Assistant Surgeon-General * * * * * One Chief Medical Purveyor and four Assistant Medical Purveyors * * * * Sixty Surgeons, with the rank, pay and emoluments of Majors of Cavalry. One hundred and fifty Assistant Surgeons, with the rank, pay and emoluments of First Lieutenants of Cavalry, for the first three years service, and with the rank, pay and emoluments of Captains of Cavalry after three years service. * * * * "

All candidates for appointment in the Medical Corps must apply to the Surgeon-General U. S. Army for an invitation to appear before the Medical Examining Board. The application must be in the handwriting of the candidate, stating age and birthplace, and be accompanied by testimonials from the Professors of the College in which he graduated, or from other physicians of good repute. If the candidate has been in the Medical service of the Army during the war, the fact should be stated, together with his former rank, and time and place of service, and Testimonials as to qualifications and character from Officers with whom he has served should also be forwarded.

Candidates must be graduates of some regular Medical College, proof of which must be submitted to the Board before examination, and must be between twenty-one and thirty years of age.

The morals, habits, and physical and mental qualifications of each candidate will be subjects for careful examination by the Board, and a favorable report will not be made in any case in which there is a reasonable doubt.

The following will be the general plan of examination:—1. A short essay, either autobiographical or upon some professional subject—to be indicated by the Board. 2. Physical examination. This will be rigid, and each candidate will be required to certify "*that he labors under no mental or physical infirmity, nor disability of any kind, which can in any way interfere with the most efficient discharge of his duties in any climate.*" 3. Examination as to general aptitude and education. 4. Written examination on anatomy, physiology, hygiene, surgery, and practice of medicine. 5. Oral examination on each of the above mentioned subjects, and also on obstetrics, general pathology, chemistry, toxicology, medical jurisprudence, and materia medica. 6. Clinical examination, medical and surgical, at a hospital. 7. Performance of surgical operations on the cadaver.

The Board will deviate from this general plan whenever necessary, in such a manner as they may deem best to secure the interests of the service. The Board will report the merits of the candidates in the several branches of the examination, and their relative merit in the whole, according to which, if the vacancies exist within two years thereafter, *the approved* candidates will receive appointments and take rank in the Medical Corps. An applicant failing at one examination, may be allowed a second after one year, but not a third. No allowance will be made for the expenses of persons undergoing examination, as this is an indispensable prerequisite to appointment, but those who are approved and receive appointments, will be entitled to transportation on their obeying their first order. If the result of the examination of a candidate be satisfactory he will be offered a contract for duty as Acting Assistant Surgeon until such time as he can be appointed or commissioned as Assistant Surgeon.

The pay and emoluments of Surgeons and Assistant Surgeons are shown by the following table.

SERVANTS.	Surgeon, over ten years' service	Surgeon, under ten years' service	Assistant Surgeon, over ten years' service,	Assistant Surgeon, over three years' service,	Assistant Surgeon, under three years' service,	
	$80.00	$80.00	$70.00	$70.00	$33.33	Pay per month.
	8	4	8	4	4	No. of rations per day.
	72	36	72	36	$36	Amount of rations per month.
	2	2	1	1	$1	No. for which pay is allowed.
	32	32	16	16	$16	Am't allow'd for pay per month.
	18.00	18.00	6.50	6.50	$6.50	Am't allowed for clothing per m'th.
	18	18	9	9	$9	Am't allowed for rations per m'th.
	63.00	63.00	31.50	31.50	$31.50	Total amount allowed per m'th.
	215.00	179.00	173.50	137.50	$49.83	Aggregate amount receivable.
PORRAGE FURNISHED FOR HORSES WHEN ACTUALLY IN PT.	4	4	3	3	2	In time of war.
	2	2	2	2	2	In time of peace

In addition to the above, Surgeons and Assistant Surgeons are allowed an additional ration per day, after the termination of every five years' service.

Quarters and fuel, or commutation therefor, are also furnished to Medical Officers.

The number of vacancies now existing in the Medical Corps of the Army is.....

JOS. K. BARNES,
Surgeon-General U. S. Army.

WAR DEPARTMENT,
SURGEON-GENERAL'S OFFICE,
January 1, 1868.

A NEW magazine, "The London Student," is to be issued shortly in London. It is to be devoted to the subject of education in its widest sense, and is intended to be a link of connection between the different London colleges. It will be conducted by Professor Seely, Dr. Headland, and Mr. J. W. Hales. Each number will consist of sixty-four pages, Messrs. Churchill and Sons undertaking the publishing.

ERRATUM.—In Dr. Newman's case of Ovariotomy, page 42, vol. iii., tenth line, third paragraph, second column, it should read three *ounces* of ether, instead of three *drachms*.

Original Communications.

CASES OF TUMORS AND OTHER DISEASES OF THE BRAIN AND ORBIT,

WITH IMPAIRED VISION.

By E. WILLIAMS, M.D.,

OF CINCINNATI.

(*Concluded from page* 31.)

Case IV.—Augusta R——, act. 22, of fair complexion, small stature, but healthy and active, had been under the treatment of Dr. Littel, of this city, who called me in consultation on the 18th of May, 1867, on account of impaired vision and troublesome diplopia. In January last she first began to experience giddiness, which was aggravated by stooping, lifting, or any active exertion. From the first onset, this feeling has never entirely ceased, and has grown gradually worse, causing the patient often to seize some object to avoid falling. An uneasy feeling soon supervened over the eyes and toward each temple, especially the right, which has persisted ever since, with occasional paroxysms of excruciating pain. About the middle of April, she commenced vomiting, which has been repeated almost every day since. She vomits *without nausea*, which is characteristic of brain trouble. She knows when the emesis is coming, not by *feeling sick*, but by the pain in the head which almost constantly precedes it. The only matters ejected are her food and a glairy mucus. The pain in the forehead, and more over the right eye, is incessant, with paroxysms of such intensity that she rolls and bores her head in the pillow for very agony. Her mind has always been perfectly clear, and she talks and laughs cheerfully when not in extreme torture. She complains of double vision—images homonymous—to avoid the confusion of which she constantly closes the right eye. In this way she walks naturally; but, with the left eye shut and the right open, her locomotion is uncertain, and her head swims. Is the diplopia the result of paresis of the external rectus, or spasm of the internal? In the median line she sees constantly double; but when the object is moved a few degrees to the right or to the left, the images approximate and blend in one. When she looks directly forward, and at a distant object, there is manifest convergence of the right eye, when the muscles ought to be in equilibrium. When, however, the eyes are moved either right or left, the internal rectus of the right eye is either stretched, or else contracted physiologically, the spasm is overcome, and single vision is established.

Ophthalmoscopic examination.—Enormous infiltration of the optic papilla in both eyes. Its outlines cannot be accurately discerned, but the bluish-white swelling that takes its place is much larger than the optic disc, and terminates with ragged edges in the transparent retina. The abrupt margin of the optic nerve, and the sudden bend of the vessels as they mount over its swollen surface, are characteristic, and the parallactic effect is most remarkable. Over the nerve discs, only interrupted portions of the vessels are seen here and there, like dotted lines, converging to the centre. The surrounding zone of retina is traversed by irregular streaks of opacity, following mostly the course of the vessels. The veins, much dilated, and pursuing a serpentine course, vary in color according to their greater or less depth in the opaque tissue. Confined to the turbid parts of the membrane are numerous radiating lines of ecchymosis. In each eye is a group of chalky-white specks near the margin of the papilla; in one, toward the macula lutea, and in the other on the opposite side. In the right eye, it is with great difficulty, and only in the erect image, that the vessels can be traced, any of them, to the centre of the papilla. The pupils, previous to the use of the atropia, were of medium size, and quite active.

As to the vision, the patient insists that she sees perfectly with the *left eye!* The test with print shows that she can only read 2½ of Snellen at 6 inches.

Even this degree of acuteness is marvellous when one considers the terrible lesion in the fundus of the eye. With the right she reads with difficulty No. 6½.

The first ophthalmoscopic examination was made on the 18th of May, the day I was first consulted. Since then I have examined the eyes four different times, at intervals of a few days, and find the condition of the fundus but little altered, except the increased number of white chalky spots in the retina, indicating atrophic degeneration. June 8. The sight of both eyes has failed perceptibly in the past two weeks, but she still sees to recognize persons, and to walk about alone. Her appetite is perfect, and she has a remarkable flow of spirits, but is becoming anæmic from vomiting her food, and the extreme pain in the head. She has perfect control of her muscles, except the internal recti of the eyes—no paralysis of sensation or impairment of other special senses.

All this, taken in connection with her normal intellectual acts, would lead us to locate the tumor not only at the base of the brain, but in the region of the *sella turcica*, with pressure upon the cavernous sinus. That it is seated anteriorly is indicated (but not positively) by the *seat of the pain*. I omitted to state that by percussing the head the pain is aggravated and felt most intensely over the right eye, wherever the head may be struck. This case is very much like No. 2, and will no doubt terminate in the same way ere long. The only remedy that palliates the pain and controls the vomiting is opium, in from 1 to 2 gr. powders twice a day. In fact the condition of her stomach has prevented the administration of other remedies, such as the iodides and corrosive sublimate, for any length of time.

The frequent and unexplained occurrence of pain in the head, its duration, severity, remissions, and obstinate *persistence* in spite of all remedial agents, create always a strong suspicion of a tumor of the brain. Cephalalgia, then, is a very important symptom of morbid growths in the cavity of the cranium. When accompanied by giddiness and vomiting, especially *without nausea*, the diagnosis is almost certain. If, with all these symptoms, there is impairment of vision, with the characteristic ophthalmoscopic appearances of neuro-retinitis from stasis of the venous blood in the retina, indicating direct pressure on the cavernous sinus, or increased intra-cranial pressure, then we have an array of symptoms that could hardly result from anything else than a morbid growth. I consider the ophthalmoscopic a very valuable aid in the diagnosis of diseases of the brain, because it enables us to see with the greatest clearness a complete diverticulum of the cerebral circulation, composed of the retinal arteries, capillaries, and veins; as well as the most delicate pathological changes of the tissue of the optic nerve and retina. Still the neuro-retinitis, so characteristic of lesions of the brain, may not be present; or being present, it may result from tumors and pathological changes *in the orbit*. If it exist alone, it creates a strong suspicion of brain difficulty when there are no evidences of any disease of the orbit to retard the free return of blood from the eye to the brain. It may be the first symptom of a tumor, of basilar meningitis, or other diseases in the cavity of the cranium, and should there-

fore put us on our guard. Let the diagnosis in such a case be set down with a "little crooked thing that asks a question," after it, and wait for further developments. From my own observations, as well as the many interesting monographs that have recently appeared on this subject, by Graefe, Jackson, Galezowski, Ladame, Horner of Zurich, Weidler, and others, I think the gist of the question as to the value of the ophthalmoscope in the diagnosis of cerebral diseases may be summed up about as follows. If we exclude all diseases of the optic nerve between the *foramen opticum* and the eye, there are indeed certain symptoms in the fundus of the eye, which, if well marked, can settle the diagnosis as to the existence of disease in cavo cranii. Here I will say that the disease of the opticus proves nothing conclusive in regard to the seat of the tumor.

The important point is not its position with respect to the course of the opticus, so much as *diminished space* with pressure, direct or indirect, upon the cavernous sinus, and venous stasis in the retina. The tumor may even have its seat in the cerebellum and still cause abnormal intra-cranial pressure; or act on the optic nerve secondarily by closing the aqueduct of Sylvius and producing dropsy of the third ventricle. But I will not take up further time with general observations. It is my object simply to add something to the ophthalmoscopic symptomatology, and the pathological anatomy of tumors and other diseases of the brain.*

Case V.—Mrs. J. R., aged thirty-seven, consulted me April 2, 1867. She states that for a year past she has often suffered from headache and giddiness. Four months ago she was suddenly seized with loss of consciousness, followed by vomiting, from which she was confined to her bed three days. During that time she could barely recognize light, but was unable to distinguish objects. After this the sight returned to the left half of the field of vision, while the right remained obscured. On the 2d February she was again attacked with headache and giddiness, which lasted two weeks and confined her to her bed. She again recovered, but the hemiopia had remained just the same since the first attack. When I examined her the right half of the field of vision was dark throughout, while to the left from a vertical line passing through the macula lutea, her sight was good, so that she could read No. 1½ Snellen with tolerable fluency. She unconsciously places herself in such a position as to bring the objects she wishes to see, on her left side. She is seldom, if ever, free from headache; and vertigo, felt even when lying upon the back, is not infrequent. The swimming of the head when standing is increased by closing the eyes.

Ophthalmoscopic examination: Vessels of the papillæ and retinæ, normal in all respects. There is no appearance of neuritis or atrophy of the optic nerve. The physiological concavity of the papilla is well marked, and the lamina cribrosa visible at the bottom of the depression. The diagnosis in this instance is undoubtedly organic lesion of the base of the brain involving the left tractus opticus or the optic centre, the corpora geniculata of the same side. As there is complete hemiopia, it is quite probable that the lesion is between the optic centre and the optic chiasm. It has been ascertained that the extravasations of blood in the optic centres, or near them, may produce scotoma differing in form and extent, in one or the other half of the field of vision, but seldom if ever a complete hemiopia. It is only where the lesion involves the whole optic tract between its origin and the chiasm, that complete well-defined blindness in the corresponding lateral halves of the field of vision is observed. The *seat* of the disease then being fixed with some certainty, what is its nature? Here we are in doubt and must remain so. It may be a morbid growth, inflammatory effusion from the periosteum basis cranii, a circumscribed basilar meningitis, an aneurism, an abscess, or some other difficulty. The sudden occurrence of the hemiopia, with loss of consciousness and vomiting, would indicate an apoplectic effusion. Still, as she had suffered from headache and giddiness for nearly a year previously, it may be a slowly developing tumor with a hæmorrhage, or some rapid inflammatory change near it. As there is no lesion of innervation anywhere, or disturbance of any other special sense than that of sight, and the mental functions are unimpaired, the prognosis is favorable. If the lesion be not a tumor, the patient's life is not so seriously in danger, and she is likely to retain the vision in the one half of the field intact. In view of all the circumstances, I ventured a favorable prognosis in these particulars. The functional symptoms of a tumor are not emphatic, and the ophthalmoscopic signs being wanting, I cannot make a positive diagnosis.*

Case VI.—In conclusion, I wish to state the brief particulars of another patient, where a false diagnosis might easily and naturally have been made, so completely did the symptoms indicate organic lesion of the brain. Laura C., aged twelve, small and slender in shape, and dark complexion, has had convergent strabismus since the age of three years. Her sister states that she had spasms when an infant. For a year past she has complained of an uneasy feeling in her head, with frequent paroxysms of intense headache, followed by nausea and vomiting. She had a strange hesitating gait, and often a weakness in her arms and hands, causing her to let things fall without knowing it, and a weakness of the limbs and an almost constant tired feeling. She also complained of seeing flashes and colors before her eyes. The pain is generally over the eyes and along the course of the base of the brain, and is aggravated by jarring and straining. By percussion, pain is developed in the forehead and left temple, on a level with the ears, both directly and indirectly. The other senses were perfect. Her vision has always been so defective that she could not be sent to school; the attempt to use her eyes for a long time always producing headache, and frequently vomiting, followed by some hours of great languor. She had manifest H. of $\frac{1}{10}$; and on paralyzing the accommodation the total H. was equal to $\frac{1}{4}$. With +5 she saw 20 at 10 feet, V=$\frac{1}{2}$. I furnished her with a pair of convex 10, with which she reads 1½ at 6 inches, and studies with impunity. All her head symptoms have ceased with the constant use of the glasses, and her whole temper and disposition have changed. On examination with the ophthalmoscope, I found a remarkably tortuous condition of all the veins and most of the arteries of the retinæ, but with no opacity or swelling of the papillæ. The large size and extremely serpentine course of the veins continue as far as they can be traced toward the ora

*(P. S. Dec. 11 1867. This patient is still living and *much improved*—has less headache, but little vomiting, and only rarely feels giddiness. She has gained health and strength sufficient to get married and make her husband happy by doing all the work of her humble home. She has large pearly white opacities of the left papilla and surrounding retina with partial obscuration of the vessels; and some haziness and slight atrophy of the right. She reads No. 1½ Snellen at eight inches with the left eye, and No 3 at the same distance with the right. The remarkable preservation of vision would indicate that the great changes seen in the papillæ were limited within the lamina cribrosa, and not the result of neuritis descendens. In spite of this great improvement, I still believe she has a cerebral tumor. Temporary cessation in the growth of the tumor, with great amelioration of the symptoms, even for some months, is sometimes observed. I shall follow it till I see the issue.

*On the 18th of September, more than five months after the above was written, I had a letter from the family physician of this patient stating that there was no perceptible change in her vision.

serrata. This fact, with the imperfect vision and the emphatic head symptoms, was well calculated to lead to a false diagnosis of disease in the cavity of the cranium, while they were all the result of H. in a high degree, with a congenital peculiarity of the retinal blood-vessels.

A fact well known to all ophthalmoscopists is that the impairment of vision in neuro-retinitis is by no means in proportion to the lesions detected in the papilla. Great swelling and varicosity of the veins of the retina; opacities, ecchymoses, etc., may exist with comparatively little injury to the sight, as in my case No. 5; and *vice versâ*, but little local lesion, with complete abolition of vision. I am disposed to think that neuritis descendens, as it occurs in basilar meningitis and other inflammations of the brain, is more likely to produce great and permanent impairment of vision; while neuritis from venous stasis, from tumors, etc., although it may be much more striking ophthalmoscopically, is not attended by such injury to vision, or by such extreme subsequent atrophy. This, of course, is based on the supposition that the tumor does not involve the optic centres or tracts directly. Blessig, Mauthner, and others have observed cases of this kind, where, with well marked neuritis, the vision was, and remained, almost perfect. Mauthner's patient died suddenly, and the post mortem section revealed a sarcoma, as large as a walnut, in the right *crus cerebelli ad pontem*, and a decided accumulation in the sinuses of the brain.

On the other hand I have seen two cases, in the past few days, of complete loss of vision from neuritis in both eyes, and coming on rapidly. The one was a boy aged eleven, who had meningitis, with convulsions, six weeks previously, which lasted three weeks. After the head symptoms began to subside, his sight grew dim, and in three weeks more was reduced to simple perception of light. He had, when I saw him, great swelling and opacity of the papilke and adjacent retinæ, but not more intense than in my No. 5. The other was a man, aged twenty-seven, who has been subject to what he calls fainting spells for five years, with headache and other symptoms of chronic disease of the brain. Within the past few weeks his vision began to fail, and when I saw him, he could only imperfectly discern light. The papillæ showed well marked neuritis, as indicated by the usual characteristic appearances. In both of these patients I believe the inflammation extended along the optic nerves from the brain to the eyes. The pupils of both were but very moderately dilated, and responded pretty promptly and freely to varying degrees of light.

I have the notes of another case of neuritis descendens reported for me by Dr. Guthrie, House Physician of the Commercial Hospital. A woman, twenty-seven years old, fell upon her head, causing severe concussion. Some four months afterward she became drowsy, and began to suffer with frequent headaches. Soon afterward she was struck with hemiplegia of the left side, involving motion and sensation. After her admission to the hospital she complained of loss of vision in the right eye. On examination I found neuritis in this eye, with such congestion of the vessels that the papilla could scarcely be recognized. In the left eye the optic disc was natural, and vision good. Three weeks thereafter she died from convulsions followed by coma. At the post mortem, fifteen hours after death, the right hemisphere of the brain was found larger than the left, and the corresponding tractus opticus one-third wider than the other, and softened, as was also the brain substance about the infundibulum. In the anterior half of the right hemisphere, near the middle, was a patch of yellow discoloration, and just beneath it a cavity 3/4 by 3/4 inches in diameter, extending to within three-fourths of an inch of the base and one-fourth of an inch of the convex surface. This cavity communicated with the substance of the right corpus striatum and thalamus. Its upper one-fourth contained dark coagulated blood, and its lower three-fourths a semifluid mass of pus and brain substance. The right thalamus opticus and corpus striatum entirely filled the corresponding ventricle. The left hemisphere was healthy. Heart and lungs were not examined, nor were unfortunately the optic nerves. There can be little doubt, however, that the inflammation followed the optic track and nerve till it appeared in the eye. Had the neuritis been the result of increased intra-cranial pressure, both eyes would have been affected.

With one other extraordinary case of aneurism of the ophthalmic artery, I will conclude my paper. The case was brought into my ward at the Hospital, on account of extreme exophthalmus of the left eye. The following brief notes were furnished me from the record book of the eye ward, by the chief house physician, Dr. Whitaker.

Dennis C., aged twenty, was admitted June 15, 1867. Seven months previous to admission he received an injury which caused a depression of the skull 2½ inches long, across the vertex from the left frontal eminence, followed immediately by exophthalmus of the left eye from aneurism of the ophthalmic artery. When admitted, his cerebral functions were unimpaired, and digest on perfect. The left eye was protruded beyond the equator, but the patient could still close the lids over it. The conjunctival, but especially the sub-conjunctival vessels, were enormously increased in number and size, and extremely tortuous, with slight serous chemosis at the outer canthus. There was a very strong pulsation, with an intense aneurismal thrill, and a very loud bruit, audible even to the patient himself, and most marked at the inner canthus and over the brow. Vision of this eye very imperfect. The ophthalmoscope showed the retinal vessels to be, like the external, excessively enlarged and tortuous, especially the veins. The optic papilla was greatly swollen, ill defined in its outlines, and grayish in color, with very many minute points of ecchymosis. The blood-vessels disappeared, suddenly for the most part, in the swollen and opaque papilla, and were somewhat obscured for a short way beyond the disc. The vessels, arteries as well as veins, were very serpentine as far as they could be traced toward the ora serrata. Along the veins there were frequent ecchymoses, especially large where the vessels made sudden short bends. My diagnosis was traumatic aneurism of the ophthalmic artery; and after consultation with the Hospital Staff, it was unanimously agreed that ligation of the common carotid ought to be performed. I waived the right to operate in favor of Dr. H. E. Foote, the surgeon then in attendance. June 22.—The carotid was ligated. The thrill and murmur both ceased, but returned slightly after two hours. The vision, previously reduced to counting fingers at two feet, was not affected. June 23.—Diminution of the thrill and bruit, the latter feebly audible to the patient. Veratrum internally, and perfect rest in bed for three days. July 1.—Thrill and murmur vary in intensity at different times in the day —rather on the increase. July 9, seventeen days after the operation, the ophthalmoscopic examination was repeated. Same appearances as before operation, except an increased opacity along the course of the vessels, with more concentrated grayish patches at the knuckles where the short bends took place. July 20, *thirty days* after the first operation, it being evident that the aneurism was still not relieved, the other car-

otid was ligated in the same way by the same surgeon. Pupils were not influenced but remained active. Bruit and thrill completely silenced, but in five minutes were again heard very faintly. Vision, he says, is not worse than before the operation. July 21.—Vision of left eye reduced to perception of light; pupil somewhat dilated, and responds feebly to light. Sight of the right eye intact—no thrill or bruit. August 3, fourteen days after last ligation, the ophthalmoscope revealed a remarkable change in the fundus of the affected organ. Swelling and opacity of papilla nearly gone; vessels much straighter and smaller; exudation at points of sudden curvature disappeared except two or three; some ecchymoses here and there in process of absorption; vessels of papilla, both arteries and veins, *completely* and *instantly emptied* by the *least possible pressure* on the eye with the finger. I could see them grow pale even before I was conscious of making any pressure, even the weight of the finger affecting their fullness. What was still more interesting was the *slowness* with which both sets of vessels filled after the pressure was relaxed, and the entire absence of *pulsations* under any circumstances. This was true of the retinal vessels in both eyes, and the *acuteness* of vision was alike quickly affected by slight pressure, both facts showing the diminution in the *vis a tergo*, and the feeble circulation in the brain and retina after ligation of both carotids. August 11.—Same condition with merest *suspicion* of bruit. It is now three weeks after the second ligation, and the vision of the left eye has so far improved that he can count fingers at two feet, and decipher No. XX. print, and see large familiar objects at seventy yards. Vision of the other eye perfect, but eyes easily fatigued with attempts to see small objects.

August 21.—Discharged, to return in three months. I have taken the liberty of publishing this brief account of the case, in advance of a more detailed description to be published by Dr. Foote, because of its intimate connection with my subject, and the remarkable ophthalmoscopic phenomena. I am not aware that any such observations on the circulation of the retina, after ligation of both carotids, have ever been published.

REPORT ON A CASE OF
DEATH FROM HÆMORRHAGE FROM A RUPTURED EXTRA-UTERINE FŒTAL CYST.

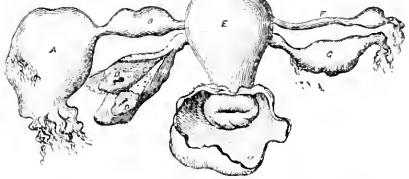
By STEPHEN ROGERS, M.D.,

NEW YORK.

To the N. Y. Pathological Society.

Dr. T. C. Finnell presented to the New York Pathological Society, the uterus and appendages of a woman twenty-five years of age, and gave the following history:—The patient had suffered irregular menstruation, but had supposed herself pregnant about a month or six weeks, when about two weeks previous to her death, her menses again returned, as was supposed, attended by an unusual degree of pain. She was suddenly seized with violent abdominal pains, and died, of apparent anæmia, twelve hours after the attack. The doctor saw her six hours before death, and was so impressed with the extreme pallor, depressed pulse, and other signs of the fatal bleeding so usual in extra-uterine gestation, that he asked if she had menstruated regularly, and received the above reply. The diagnosis was thereby obscured, and it was thought that a perforation of the intestine might have taken place. Five pints of blood were found in the peritoneal cavity; the left Fallopian tube was the seat of two bulbous enlargements, one near the uterus, about the size of a small almond—represented in the cut—the other at or near the fimbriated extremity of the tube, and about the size of a large plum—also seen in the cut. There was found a small perforation or rent in the walls of the smaller tumor, and a somewhat similar lesion upon the surface of the larger one. The left ovary contained a corpus luteum of recent date, marked D in the cut. The uterus was but slightly enlarged. The doctor remarked that it was believed that the fatal haemorrhage took place from the lesion on the surface of the larger tumor, which appeared more like a mass of coagulated blood than anything else, though it was not doubted that it had been the locality of an impregnated and developing ovum. The smaller tumor, he said, had been supposed to indicate the locality of the placenta.

On account of the importance of the case, and the uncertainty as to the exact pathology of the parts, on motion a committee, consisting of Dr. T. C. Finnell and myself, was appointed to examine it more carefully, and report at a future meeting.



The committee reported as follows: The larger tumor consisted of one large oval clot of firmly coagulated blood, occupying a cystic cavity, and of several smaller clots surrounding it, each one in its separate cell or cyst. These cysts appeared to be simply portions of a common areolar tissue more or less distended and filled up. This polycystic mass was firmly adherent through the folds of the broad ligament to the ovary. Its walls were composed of the peritoneal covering, and one or more thin layers of organized fibrin, and the Fallopian tube could be traced along over its surface for a considerable distance.

The larger tumor therefore, marked A in the above wood-cut, is found to be a simple accumulation of blood in the areolar tissue of that portion of the broad ligament which falls over the outer extremity of the Fallopian tube, and reaches down to and attaches the ovary to the tube.

The other enlargement, marked B in the cut, occupying a part of the uterine half of the tube, the committee found to be the real fœtal cyst. This conclusion is supported by the presence of several conditions, viz.: First, this tumor was quite large enough to accommodate an ovum of six weeks, the period this woman is stated to have gone.

Second, the parietes of this tumor were exceedingly vascular, as might still be seen at the dissection, by the arborescent arrangement of the distended vessels of its collapsed walls.

Third, the canal of the Fallopian tube is perfectly occluded, both on the uterine and on the free aspect of this tumor. As it is a pathological law that the Fallopian canal becomes early occluded on either side of a tubal fœtal cyst, the closure of the canal in this case is regarded by the committee as very significant.

In Rogers' Memoir on Extra Uterine Fœtation, at page 11, may be found the following observation upon this point, viz.: "The law is, so far as I have been able to ascertain from pathological history, that the devel-

opment of an ovum in any portion of the ovaro-uterine track results in the obliteration of the corresponding canal, and it remains so obliterated after all its attachments to the cyst have been severed." Another allusion to the subject is also made on page 44, of the same paper.

The fourth condition was, that the tumor comprised a peritoneal coat, a sub-peritoneal coat, containing *unstriated muscle* whose fibres were disposed in longitudinal and transverse layers, and lastly a lining cyst. In respect to this cyst and the layer of muscle, this smaller tumor differed from the larger. The lining cyst was filled with a fibrillated, clotty substance, but no recognizable ovum was found, if we except some villous tissue which projected from a small opening through the peritoneal covering of the tumor, at the point indicated by B in the cut. This tissue we regarded, however, as the tufts from the surface of the chorion, the undoubted character of the cyst lining the tumor, and therefore definitely settled the question of the fœtal character of this smaller tumor. The opening through which it projected was no doubt the point whence most of the fatal hæmorrhage occurred, though at the time the specimen was presented, the larger tumor was supposed to have been the seat of the final bleeding. This dissection explained the existence of a corpus luteum of pregnancy in the left ovary. The idea that one tumor indicated the locality of the ovum, and the other the placenta, was of course physiologically impossible. An instructive feature of this specimen, explanatory of the manner of formation of the larger tumor, is the presence of several apoplectic clots scattered about in the sub-peritoneal tissues over the fundus of the uterus, and both broad ligaments. A better name, perhaps, for these spots of effused blood would be ecchymoses. They show that a rupture of vessels supplying the fœtal cyst took place, and that the blood found its way from that point along the course of the Fallopian tube and the broad ligament beneath the peritoneum, finally accumulating in that portion affording least resistance, viz., the areolar tissues connecting the folds of the broad ligament near the outer portion of the Fallopian tube, the position occupied by the larger tumor. It was in fact a very marked and illustrative case of circumscribed pelvic hæmatocele, resulting from rupture of vessels upon the sub-peritoneal coats of a tubal fœtal cyst. Had the walls of the bloody tumor, or the peritoneal covering of the fœtal cyst, resisted the pressure of effused blood long enough, there can be no doubt that the hæmatocele would have become general. It was stated at the time this specimen was presented, that the rupture whence the fatal bleeding took place into the peritoneal cavity, occurred on the surface of the larger tumor or hæmatocele, as has already been stated. The committee now regard this as very improbable, in view of the fact that a rupture of the coats of the fœtal cyst was found, permitting the protrusion of the villi of the chorion through it. As this point of rupture is the general one in fatal hæmorrhage in these cases, there appears no reason for believing that it was not so in this case. We therefore conclude that the giving way of the peritoneal covering of the fœtal cyst, prevented in this case the occurrence of a more or less general pelvic hæmatocele, and that by far the greater part of the fatal hæmorrhage occurred from this opening. Another fact which should not pass unnoticed, is the absence of decidua in the cavity of the uterus, a fact which cannot be accounted for, if we admit that there was extra-uterine pregnancy, without supposing that it had been thrown off at some period before death. The supposed return of her menses with unusual pain, two weeks before her death, affords us the means of accounting for the absence of the decidua.

To more fully explain this point, we will quote a few lines from the memoir before cited: "I am convinced, by the evidence afforded by a somewhat extended research, that an intra-uterine decidua is invariably formed in extra-uterine pregnancy, and that a careful history of the cases in which no such decidua appeared at the post-mortem examination of the uterus, would reveal the fact that a sanguineous discharge from the uterus occurred at some period before death. As such a discharge is pretty generally attended by the exfoliation and extrusion of the decidua, therefore, where a decidua is not found and such a discharge is known to have occurred, I should accept it as almost demonstrated, that the decidua had escaped at the time of the hæmorrhage. Conversely with this proposition, the absence of a uterine decidua in extra-uterine pregnancy, would to me be evidence that it had been discharged with the usual accompaniment of blood and pain. These bloody discharges are generally regarded by the patients as returns of their lost menstruation, or as some irregular manifestation of it. They are usually attended by hypogastric, colicky pains, and seem to result from either spontaneous efforts of the uterus to throw off an excrescence which the unemployed decidua has now become, or from sympathetic action with the disturbed and contractile fœtal cyst. There does not appear to be any regularity in the matter of the date of the occurrence of this discharge with respect to the gestation, appearing sometimes before the sixth week, and again not occurring till some months have passed." Op. Cit., pp. 17, 18. The supposed menstruation in this case, which occurred two weeks before the fatal accident, we conclude was the usual discharge of the decidua, and so far from satisfying the physicians in attendance that the case was not one of extra-uterine pregnancy, as it did, it was the very symptom that they should have inquired for, and that should have confirmed their first impressions that such was the character of the case. We do not doubt that, had the exact character of the pains attending this supposed menstruation been ascertained, they would have been found the same as those usual to cases of extra-uterine pregnancy at the time of the extrusion of the decidua.

As this woman had experienced the usual signs of pregnancy for several days at least, we do not doubt that she had, from the beginning to the end, the usual signs of extra-uterine pregnancy, viz.: First, those of pregnancy of the usual character; second, paroxysms of hypogastric, colicky pains, referred to the left iliac region, recurring at varying intervals, perhaps attended with nausea and a feeling of debility; third, a sanguinolent discharge from the uterus, which we know she had; fourth, the uterus appreciably enlarged, which we see was slight only in this case; and fifth, more or less tenderness over the region of the abdomen corresponding to the pain. Op. Cit., p. 35. We therefore regard it as a most unfortunate circumstance, that the medical gentlemen in attendance on this case were unacquainted with these symptoms and facts belonging to the natural history of extra-uterine pregnancy, for they were in consequence entirely unprepared to find that "during one of the accustomed attacks of colic, or perhaps without it, the patient suddenly experienced an acute pang in the right or left hypogastric region, followed by depression, sickness of the stomach, collapse and pallor; by sighing and syncope, and feeble or absent pulse; that the abdomen became more or less enlarged, attended by a sense of fluctuation and probable dulness on percussion over the more depending portions. Indeed, they were in consequence entirely unprepared to seek for these physical signs, and did not detect them. Had they been fully instructed in the subject,

we cannot doubt that the presence of blood in the peritoneal cavity would have been early detected, for it must have been there in considerable quantity, to account for the symptoms of hæmorrhage said to have been present in this case. This failure naturally resulted in neglect to employ the only means offering any promise to save the life of this unfortunate woman, viz., *gastrotomy* for the purpose of ligating the bleeding tissues, pedicle or vessels, and the removal of the effused blood from the cavity of the belly. Op. Cit., p. 40. After a due consideration of the history of this case, the committee think that it presented most of the circumstances favorable to the success of this operation, and very much regret that so promising an opportunity to practise it was lost. We deem it of importance to comment upon the supposition entertained by the physicians in attendance upon this case, that a perforation of the intestine had taken place. This is a resort which physicians very unaccountably have too long practised, when placed under similar circumstances. We regard it as a pathological axiom that symptoms, such as this case presented, coming on suddenly in a woman whose health up to the moment of their appearance had been perfect, do not indicate perforation of the intestine and the escape of its contents into the peritoneal cavity; for such an accident must necessarily be preceded by other symptoms than those of perfect health. Op. Cit., p. 37.

The only excusable mistake a physician could commit in diagnosticating a case presenting such a history and symptoms, would be in taking them to indicate pelvic hæmatocele. This pathological condition, and hæmorrhage from a ruptured fœtal cyst, have been repeatedly confounded by diagnosticians of acumen. The differential symptoms, however, we regard as sufficiently distinct, if carefully observed, to enable the physician to avoid such an error. We subjoin a tabular statement of the symptoms of the two, for the purpose of ready comparison:

TABULAR STATEMENT OF SYMPTOMS.

Extra-uterine Pregnancy.	*Pelvic Hæmatocele.*
The usual rational signs of pregnancy are present.	Absent.
Paroxysmal, hypogastric, colicky pains are very commonly present from the end of about the first month, and when present, are always referred more to one iliac region than the other.	Are not generally present, but when they are, they are more diffused over the whole pelvic and hypogastric region.
Tenderness over the seat of pain is generally not marked.	It is extreme over the seat of pain.
Bloody discharge from the uterus apt to attend the colic pains, regardless of the menstrual period.	Not present except at the usual menstrual period.
More or less sickness at the stomach.	Sickness at the stomach.
After rupture of the cyst.	
Pallor, depression, and collapse.	Pallor, depression, and collapse.
Enlargement of the abdomen with little tympanitis.	Enlargement of the abdomen mostly tympanitic.
General dullness on percussion over the more depending portions, and fluctuation.	Local dulness on percussion, generally on one side not influenced by the position of the body, and no fluctuation beyond the circumscribed dulness and not often detectable even there.
No tumor or local enlargement during the early months can be distinguished.	Distinguishable tumor either in the iliac region, or in the pelvis, or both.
Uterus evidently enlarged, but not displaced.	Uterus normal as to size, but generally displaced in some direction.
Dysuria.	Dysuria.

Should the bleeding be intra-peritoneal, it is obvious that the local signs compared in this table must be the same in both extra-uterine pregnancy and pelvic hæmatocele, the only difference being in the early rational signs of pregnancy. But it is to us equally obvious, that so far as the treatment goes, it is a matter of no importance whence or from what cause the bleeding comes, providing it be into the peritoneal cavity.

The ligation of the bleeding vessels from the peritoneal cavity, and the cleaning out of that cavity, are unquestionably indicated in both cases.*

In conclusion, the committee would state that in their opinion, had the gastrotomy treatment been employed in this case as early as it might have been, the chances that it would have saved the life of the woman were as great, at least, as are the chances for recovery after an ordinary operation for extirpation of the diseased ovary.

STEPHEN ROGERS,
T. C. FINNELL,
Committee.

CASES ILLUSTRATIVE
OF THE ASSISTANCE AFFORDED IN
DIAGNOSIS BY THERMOMETRIC OBSERVATIONS IN PRIVATE PRACTICE.

By JOSEPH G. RICHARDSON, M.D.,

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WHEN any new scientific instrument is introduced among the implements of our profession, it often happens that many practitioners, after a partial test of its capacities, become dissatisfied with its failure to aid them in solving *all* the problems which diseases, modi-

* I would here state my reason for omitting in my memoir to discuss the differential diagnosis between pelvic hæmatocele and rupture of an extra-uterine fœtal cyst. The latter pathological condition, being one preceded and attended by symptoms of pregnancy so almost invariably, it seemed to me an unnecessary addition to the paper already very greatly extended.

In Dr. John Byrne's elaborate papers on pelvic hæmatocele, the following observation may be found in support of this decision, viz.: "A sixth class of hæmatocele comprises those cases in which the blood has been derived from a ruptured ovisac, or a ruptured vessel in extra-uterine pregnancy. These cases constitute, in my opinion, a nosological species of their own, and can be properly excluded in a treatise on hæmatocele of the non-pregnant female."

The presence of the symptoms of pregnancy at the diagnosis can only indicate to which species any given case belongs; and as my paper was devoted to the accident of pregnancy, the accidents of the non-pregnant state were excluded. The relation, however, of two interesting cases by Prof. Fordyce Barker, which had fallen under his observation, has convinced me that the discussion of this differential diagnosis would have added to the value of my memoir. I shall certainly add it in my republication of the paper. One of Prof. Barker's cases was an unmarried and unsuspected female, who died of *supposed* pelvic hæmatocele, but who was really the subject of an extra-uterine pregnancy. The other a married woman, who was *thought* to be the victim of extra-uterine pregnancy, but who was in reality dying of pelvic hæmatocele. S. R.

fied by the infinitely diverse idiosyncrasies of patients present; and, in the disappointment which they feel over its shortcomings, renounce even the benefits which it is able to confer—an injustice which the examples recorded below may help to avert from the clinical thermometer.

Case I.—Eva E., a robust, healthy-looking little girl of five years old, was attacked on the 14th of September, 1867, with symptoms of fever, which, although somewhat relieved by domestic treatment the day after, again increased on the 17th, when, on the urgent solicitation of a relation, I was called to see her. I found my little patient lying upon the bed, somewhat inclined to sleep, but quite willing to answer questions, and to interest herself in passing events. Her eyes, when thus aroused, were bright and intelligent, her sense of hearing unimpaired, her tongue lightly furred with a whitish coat, her skin dry and warm, but not hot, and her pulse beating 120 per minute. She complained of some pain in her bowels, which had been moved five or six times in the preceding three days; the abdomen was somewhat tympanitic, and there was a little tenderness, with occasional gurgling in the right iliac fossa, so that although there had been no epistaxis, my suspicions were strongly directed towards enteric (typhoid) fever, especially as I learned that her father and brother had both been ill with that disease a few weeks before, at their former home in northern Pennsylvania. The mother of the child insisted, however, that the attack was only one of "worm fever," and assured me that she had several times seen her little daughter exhibit just such symptoms, which would pass off in a few days without any trouble; and in opposition to this statement, it seemed difficult to feel positive of the nature of her malady, until having tested her temperature with the axilla thermometer, and found it 102½°. I was able to assert that it was no ephemeral seizure, but a fever of severe type, probably typhoid in its character, an opinion which her condition the next day, when the thermometer marked 104°, rendered much less doubtful, and whose correctness the course of the disease during the following two weeks amply demonstrated.

Case II.—Miss E., æt. 18 years, a pupil at —— seminary, came under my care on the 2d day of March, 1868; she had been the subject of a slight attack of diphtheritic sore throat about one week before, and, as appears to be often the case, even after mild seizures of that complaint, did not soon regain her strength or appetite. On the 4th, I was called to see her again, and a death from typhoid fever having occurred the week previous, much anxiety was felt among the panic-stricken students to know whether another case of that dreaded disease was about to develop in the person of their school-mate. I found the young lady with a flushed face, a hot and dry skin, a furred tongue, a pulse of 92 per minute, and a dull apathetic expression of countenance strongly suggestive of the hebetude so universal in fever patients. She complained of severe headache, pain in her back and limbs, sleeplessness at night, sickness at her stomach, and griping pain in the bowels. The abdomen was a little distended, and quite resonant on percussion, but there was no special tenderness in the iliac fossa, nor had either diarrhœa or epistaxis occurred. With such a group of symptoms it becomes a matter of some difficulty to give a sufficiently definite opinion as to whether it was or was not typhoid fever, but finding that the thermometer in the axilla marked a temperature of 99° only, I discarded the febrile hypothesis, and informed her friends that I believed the attack was not one of the disease they so much feared.

On the 5th of March I found her symptoms very much the same as on the day previous, except that the headache, pain in the abdomen, and general feverishness were slightly increased; the temperature in the axilla was however still 99° only, and before the close of my visit I was informed by the matron of the establishment, that she had learned, from a rigid cross-examination, that the young lady was suffering from a difficulty about the bladder which had caused some retention of urine, a symptom which, with the natural modesty of a school-girl thrown among entire strangers, she positively denied to me, and scrupulously concealed from all her attendants; under appropriate treatment she was soon relieved, and in less than a week entirely cured.

DECAPITATION IN A CASE OF TRANSVERSE PRESENTATION.

By A. G. FIELD, M.D.,

DES MOINES, IOWA.

A paragraph in a recent issue (No. 49) of the Medical Record prompts me to furnish from my case-book the following brief history of a case of cross birth, in which delivery was effected by decapitation:

In November, 1861, I was called to visit Mrs. H., and upon arrival was informed by the attending physicians that the case was one of preternatural labor, having been lingering for thirty-eight hours. Nothing unusual had occurred in the progress of the first stage of labor, which had terminated twelve hours previously. Since the rupture of the membranes there had apparently been no progress toward delivery, although the uterine contractions had been good for some hours.

Upon examination, I found the patient well nigh exhausted, the pulse at the wrist fluttering and barely perceptible, the surface bathed in a cold perspiration, and consciousness manifested only during the paroxysms of pain from uterine contractions, which were still strong and recurring at quite regular intervals of about ten minutes each. One hand of the child protruded from the vulva, the os uteri was well dilated and flaccid, and the right side of the head was resting against the left brim of the pelvis, the face looking toward the spine. The body of the uterus was so firmly contracted upon the body of the child as to defy all efforts to turn, and I determined to attempt delivery by decapitation.

Owing to the impacted condition of the child, it was with considerable difficulty that I succeeded in reaching the neck, and in passing my left forefinger around it in order to bring it as low as possible, as well as to protect the parts of the mother from injury. Having succeeded in this I proceeded, with the perforator in my right hand, to cut against the neck of the child, with a rocking motion, until I felt the point of the instrument against my finger; repeating the process several times until the separation was effected, the body of the child was soon expelled, shoulders first, and after it the placenta. A short period of repose succeeded, when another good contraction of the uterus expelled the head, the vertical diameter affording an easy exit.

The child was at full term and well developed.

The patient made a good recovery.

In this connection I will mention, further, that in 1865, I was called to visit a lady in labor—six months or more advanced in pregnancy. Upon arrival I was informed that the waters had escaped with a gush, while she was in a standing posture, some twenty-four hours previously, and that, too, without any premonition of the accident. The uterine contractions were quite hard and were recurring with considerable regularity.

Upon vaginal examination I found one hand protruding from the vulva, the os uteri well dilated, and the fœtus impacted in the superior strait of the pelvis.

In consideration of the immaturity of the child, I ventured some traction upon the protruding limb, and in the course of an hour succeeded in delivering it doubled upon itself. The child had evidently been dead some hours, and the protruded limb was quite dark with incipient gangrene.

The patient made a good recovery.

Some years ago it was my fate to meet with two other instances of cross birth, in which it was impossible to turn, and both of which terminated fatally to both mother and child. As I kept no record of them at the time, I will not attempt their history from memory.

But to return to the proper subject of this communication, I will say that I regard decapitation as the best means of delivering in very many cases of cross birth, where the child cannot be turned, and that in my opinion the head will be expelled in most instances without instrumental aid, on account of its freedom to engage its shortest diameter in the passage.

A NEW DEVICE FOR THE TREATMENT OF FRACTURE OF THE PATELLA.

By J. H. HOBART BURGE, M.D., ETC.

THE number of methods already in use for securing the best possible union after fracture of the patella is so great, and so much ingenuity and experience have been brought to the subject, that one could hardly excuse himself for occupying afresh the attention of the surgical world, unless he felt sure that he had something of real value to contribute.

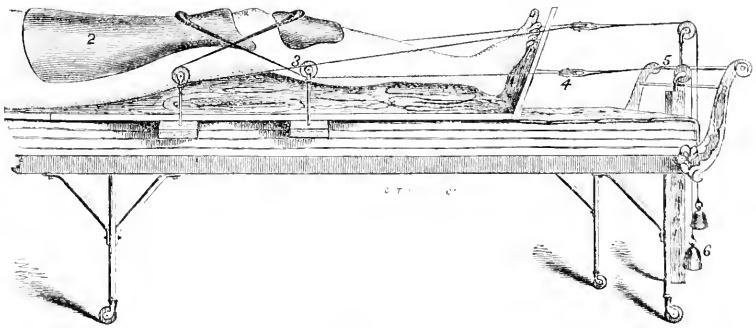
If the fracture be simple and there be no considerable swelling of the limb, it will not be necessary to bandage from the foot. Should there be much local inflammation an evaporating lotion should be applied till its severity is abated. In other cases we may proceed at once to the permanent dressing.

Place the limb upon a straight splint of uniform width provided with a foot-piece and comfortably padded. The foot may be elevated, or not, as seems best in individual cases. A substantial piece of sole-leather, of suitable length and width to cover the anterior aspect of the thigh, should be nicely fitted by narrowing it towards the knee and making its lower end concave, to adapt it to the upper border of the patella. Immerse it in cold water till it is thoroughly pliable. (If hot water be used it will take too long to dry.) Pad it on one side with cotton-batting and cover with cotton-cloth, neatly sewed on. Confine it to the limb by means of a bandage evenly applied. After a few hours it will be firm as a board. Then a small, strong cord, stitched across the lower end of the splint (2), is passed through a pulley at a lower level (3) on either side of the limb, and made to complete the circuit by traversing a pulley (4) beyond the foot. Another cord passes over the wheel (5) at the foot of the bed, connecting the flying pulley (4) with the weight (6). The lower fragment may be dressed in a similar manner, as shown in the engraving. Further description is unnecessary.

The amount of extension and of padding, and the tightness of bandages, must, of course, be left to each surgeon's judgment. The smallest-sized metallic pulleys are cheaper, more appropriate, and just as efficient as the larger. Those at the side of the limb should not be attached to the long splint,—it is better to screw them into separate strips of pine board lying transversely under the long splint. Their distance from the limb, and their inclination from the perpendicular line, must vary in different cases; otherwise the cord will sometimes press unpleasantly upon the sides of the limb, or slip from the pulleys.

While my efficient House Surgeon, Dr. A. E. Spohn, was dressing a case for me, he introduced what I have called the "flying pulley" (4), and I was glad to adopt it, equalizing as it does the pressure upon opposite sides of the limb.

When the leather splint has become dry and firm, the bandage which secures it may be replaced by strips tied or buckled around, outside of both upper and lower splints, thus leaving the circulation free in the sides of the limb.



The straight splint upon which the limb rests, may be divided transversely and strongly hinged opposite the knee, to enable the surgeon to make slight passive motion without disturbing the dressings; in this case, however, it will be necessary to support it upon another board.

The advantages promised by this apparatus are:

1. It leaves the injured bone so exposed to the surgeon's observation that he need have no anxiety in reference to *tilting, side-slipping,* or *retracting* of the fragments.

2. It grasps so firmly, and yet so tenderly, the quadriceps extensor, together with the upper fragment of the bone, that it enables us to approximate the broken surfaces more completely than I have ever been able to do without violence.

3. It is comfortable to the patient.

4. It is inexpensive, simple in all its parts,—easily extemporized and easily applied.

I am not unmindful of the fact that some are now treating these fractures without apparatus of any kind, and I have no doubt that where the separation of the fragments is very slight, some of the best results will follow this plan of non-interference. This expectant method in surgical practice must, however, be the exception and not the rule.

Surgeons using this apparatus are requested to report their cases, bad, good, and indifferent.

BROOKLYN, 60 Court street.

Original Lectures.

AFFECTIONS OF THE BURSA PATELLÆ.

TREATMENT BY EXCISION, ETC.

REMARKS MADE AT THE MEETING OF THE N. Y. MEDICAL JOURNAL ASSOCIATION, JAN. 17, 1868,

BY FRANK H. HAMILTON, M.D.,

PROFESSOR OF FRACTURES AND DISLOCATIONS, MILITARY SURGERY AND PRINCIPLES OF SURGERY, BELLEVUE HOSPITAL MEDICAL COLLEGE.

MR. PRESIDENT—As some question has arisen concerning the anatomy of housemaid's knee, which has given interest to the subject and has made further investigation desirable, I wish to present the report of a case in point, recently treated by excision, together with the record of nine others, with some comments which I hope may elicit discussion.

Ellen Conklin, æt. 30, admitted to ward 18, Bellevue Hospital, Oct., 1867. The history of her case before admission is, briefly, that the enlargement over the patella began about three years before; and that it was caused by resting on her knees in scrubbing floors. At the date of the operation it was a little larger in circumference than the patella, circular, with quite abrupt margins, and about two inches in height. It felt so firm as to lead to the impression that it was solid, but an exploration proved it to contain fluid. Operation before the class, Oct. 26, 1867. A crucial incision was made across the summit of the tumor, and the sac carefully exposed to its base, when accidentally the cavity was opened and the contents escaped. The dissection was continued, however, until all the sac was removed. Underneath the sac the tendinous attachments of the quadriceps to the front of the patella were exposed. The wound was closed by a compress laid over the flaps, and a roller, and the limb was placed upon a splint to render it immovable. The whole united by first intention; and in about one month the patient was discharged cured.

These bursæ exist as natural cavities in most adults, but they are not often found in the dissecting room as complete, unilocular cavities. In general there is one cavity, or cell, covering the lower half of the front of the patella, or perhaps the middle; with several smaller cavities, or cells, occupying the upper half of the front of the patella, or the outer margins. If great care is not used, however, in making the dissection, the thin cell-walls will be destroyed, and the cavity will appear to be unilocular. In old persons there are found sometimes numerous small, round cords crossing the base and sides of the cavity, appearing like threads. Upon examination these are found to be vascular. Some of them are perhaps simply vessels stretched across; in other cases flattened bands, or plates, traverse the cavity, one above the other.

We are now prepared to understand some of the pathological circumstances observed in this case. The cyst was unilocular. Its walls were quite thick, which accounts for the sensation of solidity which it gave to the finger. Its contents were chiefly a thin fluid stained with blood (sanguinolent). It contained also about two drachms of fibrinous material, composed of fine cords rolled into a mass, but separated entirely from the walls. These rolls of fibrinous tissue resembled so closely the small thread-like cords which I have so generally found in the patellar bursæ of old people, in the dissecting room, as to leave little doubt that they were the same. At first this fluid was deposited not in one cell, but in a number of cells, between which were interposed vascular walls. As the several cavities increased in size, the intermediate walls gave way, and a few drops of blood were poured out, staining the natural fluid of the sac. Or, if these intermediate walls had already degenerated into vascular cords, then, as the outer walls were separated by accumulation of fluid, one after another would break, pour out a little blood, and become rolled up by the motion of the limb. This will explain the sanguinolent character of the fluid in this case, and the fact, also, as stated by Velpeau, that the fluid often presents this character. Velpeau generally found it stained with blood.

I would call attention to the fact that enlarged patellar bursæ are not unfrequently multilocular; which is explained by a study of their anatomy. Again, I have constantly observed that multilocular cysts, occurring elsewhere in the areolar tissue, and not having their origin in nævi, or other vascular tissues, are very apt to have vascular walls, and sanguinolent contents. Several instances have come under my notice; and they have been among the most troublesome tumors with which I have had to deal. The explanation of their anatomy seems to be that these multilocular areolar cysts, or hygromata, are the results of serous effusion into several cells of the areolar tissue, just as in the case of multilocular patellar bursæ; the subsequent expansion of the cells leaves their intermediate vascular walls for a time unbroken; the vessels grow and enlarge as the cells expand, until at length the strain is sufficient to break some of them.

As to the treatment adopted in this case—viz., excision—it is only applicable to old cases with thickened walls, or to cases in which the tumor is solid. Simple rest is often sufficient in recent cases. Pressure and blisters, or some other stimulating applications, such as tincture of iodine, are required in some cases. Others demand a free incision. Punctures, setons, and injections are more hazardous than excision, and cannot be recommended.

This malady is not so much confined to housemaids as its name might imply. In the record of ten cases, six were women and four were men.

The other cases were as follows:

CASE I.—In June, 1845, I was consulted by a German woman, aged 40. She was not accustomed to rest upon her knees; but she had a sudden enlargement of the bursa over the patella, supervening upon a severe illness. At the same time a small tumor appeared upon the upper eyelid, which soon opened, discharged, and got well. The bursa was cured in a short time, without suppuration, by the application of tincture of iodine.

CASE II.—One of the "Sisters" at the hospital of the Sisters of Charity, in Buffalo, had, in 1854, an enlarged patellar bursa, caused, probably, by kneeling. It was never tender, and disappeared in a few weeks under the application of tincture of iodine.

CASE III.—Ellen Allen, æt. 22, presented herself in one of my wards at Bellevue Hospital, April 30,

1867. The bursa on the right knee had commenced to inflame, after scrubbing floors, just four days before admission. It was inflamed and fluctuating. I opened it, and its contents were found to be dark, chocolate-colored pus. The recovery was speedy and complete.

Case IV.—Ellen McElroy stated that, when 18 years old, she had an enlarged bursa on the right knee. She entered a hospital in Ireland, where it was leeched and blistered; but it was not cured during the two weeks that she remained in hospital. Subsequently, tartar emetic ointment was applied, and the tumor slowly disappeared. From that time, a period of thirty years, it had not returned. Six weeks before consulting me (1860), she had fallen and injured the same knee. A small temporary swelling had resulted, something like a bursal tumor, but at this time it had disappeared, the ligaments of the joint only remaining tender. No traces of the original bursa could be found.

Case V.—Mrs. Johnson, aged about 25, was accustomed to kneel and wash her own floors. Two days before being seen by me, February 27, 1860, she had scrubbed a floor. At this time the patellar bursa was considerably enlarged, and the knee felt stiff. There was also a chafing or crepitant sensation caused by handling the bursa. It was neither tender nor painful. A simple diachylon plaster was applied, and rest enjoined. In a few days the swelling had disappeared.

Case VI.—A laboring man, aged about 40, called upon me February 10, 1848, with an enlarged patellar bursa, the cause of which he could not explain. It had existed about three weeks, and was neither tender nor painful. An ointment of iodide of potassium was prescribed, and six weeks later it had disappeared.

Case VII.—On the 27th of March, 1850, Mr. E. C., of Ellicottville, N. Y., aged 18, consulted me for a bursal tumor on his left knee, caused by striking the knee, three months before, against the corner of a stone. At first a small, hard lump had appeared, which gradually enlarged until it attained the size represented in the cast here shown. It was neither painful nor tender. The case was prescribed for, but the result is not known.

Case VIII.—P. Brown, æt. 20, of Portageville, N. Y., fell on his left knee some time in July, 1856, and consulted me seven months later. The knee had become swollen immediately, and remained enlarged, with slight variations in size, until seen by me, at the request of Dr. Youmans. It was then larger than the patella, soft, not painful, and only slightly tender. The patient's health was good. He was advised to apply tincture of iodine. Result not known.

Case IX.—Edward Mangon, æt. 58, a stone-mason, presented himself at the Long Island College Hospital, Nov. 19, 1860, with a bursal enlargement over his right knee, which had commenced three weeks before. He was accustomed to stand upon his knees in setting grates. Dr. Duval had, three days before, commenced the application of tincture of iodine, and the tumor was already diminished in size. A few days later it was reported as "disappearing rapidly."

Other cases may have come under my observation, but if so, I have no special record of them. It has happened to me, also, to see several cases of rapid suppuration, resulting from injuries, commencing on the top of the patella, probably in the bursa, which had quickly spread beyond the bounds of the bursa into the adjacent areolar tissue, involving thus almost the entire circumference of the joint. They were opened, and this was followed by a good recovery. I have been surprised, on making dissections, to find how imperfect is the separation between the bursa and the areolar tissue adjacent. There seems to be no great obstacle to the escape of the bursal fluid into the surrounding tissue.

I have never seen examples of solid fibrous bursæ over the patella, or of bursæ containing the flattened, ovoid bodies, which have occasionally been reported. In one instance, however, I have seen solid bursal tumors of large size over the tubercles of both tibiæ, caused probably by kneeling.

In a published account of one of Dr. Willard Parker's clinics, some years ago, he is made to say: "Although it is usually termed an *enlarged* bursa, I have never been able to detect a bursa in the natural state of the parts." Dr. Markoe, in presenting a specimen to the Pathological Society of this city, April 10, 1867, said that he was inclined to the belief that no bursa existed over the ligamentum patellæ or patella itself, in the natural condition of the parts, as it was not found in young subjects, and in many adults. In confirmation of this latter statement, he remarked that Prof. Watts had given attention to this very matter some years ago, and looked over all the subjects in the dissecting room for one season, and had not succeeded in finding a single one of the bursæ. (Medical Record, July 1, 1867, vol. 2, p. 210.)

I must believe that these distinguished surgeons have not stated the fact precisely as it is. I have until recently considered it quite probable that the patellar bursa did not exist in very early life; but I have been led to qualify this view. In a child five years old, lately examined, the cells over the right knee were very large, to say the least; and the left knee showed a complete bursa, covering about half of the patella. I did not find anything but a loose areolar tissue over the patella of an infant about two months old; but the bursa was well defined, being about the size of a ten cent piece, in a child one year old; and it was equally distinct in a child five years old. These constitute all the observations upon infants that I have made. In fifteen dissections of adults, however, I have not failed in a single instance to find the bursa. In all of the examples but one it covered from one-third to the whole of the anterior surface of the patella. In the exceptional case, a female, it was complete, but covered not more than one-fifth of the patella. I am compelled, therefore, to regard its absence in the adult as altogether exceptional. It is very probable that these bursæ are never original, or congenital; but that, like most other superficial and subcutaneous bursæ, they are the result of pressure, friction, or motion. Indeed it is probable that in this particular case of patellar bursæ, they are the result of motion chiefly, with some pressure.—the constant motion of the integument over the patella, in flexion and extension of the leg, elongating and enlarging the natural cells of the areolar tissue; while the "miner's elbow," the various bursæ on the bottom and sides of the foot in cases of distortion, and the bursa over the tubercle of the tibia, all of which are subcutaneous bursæ, are more directly the results of pressure alone.

It is not to be supposed, because these patellar bursæ occasionally fill up and occasionally become inflamed, that they are very liable to disease. On the contrary, they seem, by a law of nature, to be exceedingly tolerant of injury, and actually seldom become acutely inflamed; and it is not very often that their normal condition is at all disturbed. Most of these swellings are devoid of tenderness, and if these bursæ, with other *superficial* bursæ, were not generally over joints, it might be quite safe always to treat them by setons or

injections. It is only their proximity to such surfaces that renders such practices hazardous, as experience has sometimes proved.

Progress of Medical Science.

After-treatment in Necrosis.—Prof. Gunn, in speaking of secondary operations in certain cases of necrosis, says: "To secure the final expulsion of the remaining sequestra without an additional operation, I introduce into the opening through the walls of the capsula sequestralis, made for the removal of the main sequestrum, a plug or tent of white wax, which fits the opening, without obstructing the flow of pus. The plug is removed daily, and the wounds are cleansed, when it is reinserted. At each dressing the wound is explored with the finger, and when additional sequestra are detected they are removed. After the sequestra have all come away, and as the chamber gradually fills, the plug may have a piece cut from the bottom at each dressing, until it is all cut away, and the wound has healed to the surface.—*Chicago Medical Journal.*

Cysticercus in the Eye.—Mr. Teale, in the *Ophthal. Hosp. Reports*, gives an example of this parasitic disease, occurring in a girl ten years old. The child's mother, for six weeks, had observed a speck on the iris. When seen by Mr. Teale there was acute kerato-iritis, and he performed iridectomy, removing the animal intact, relieving the inflammation, and restoring the sight.

Results of Ovariotomy.—On the completion of one hundred cases of ovariotomy in the Samaritan Hospital, Mr. Spencer Wells gave a short account of the progress of the operation in London Hospitals. When he performed his first operation, in February, 1858, ovariotomy had only once been performed successfully in any of the large hospitals of the Metropolis, and that solitary case was in 1846, or twelve years before. For twelve years —or from 1846 to 1858—there had not been a single successful case of ovariotomy in any of the large hospitals of London; yet in less than ten years after 1858, he (Mr. Wells) had himself, in this small hospital, completed one hundred cases, with a result of seventy recoveries and thirty deaths—a result which ten years ago would have been regarded as incredible, but which the experience of the past teaches us will become still more encouraging in the future.

After performing the first operation in the hospital this year, Mr. Wells again recurred to this subject, and exhibited the following table of his hospital cases, from the first in 1858 till the last in 1867:—

Year	Cases	Recoveries	Deaths
1858	3	3	0
1859	7	4	3
1860	2	1	1
1861	6	3	3
1862	13	10	3
1863	16	11	5
1864	13	10	3
1865	14	11	3
1866	11	6	5
1867	21	17	4
	106	76	30

He said this table proved that a much greater success has been attained in 1867 than in any preceding year; and if the cases are divided into two nearly equal series, by comparing the 47 cases up to 1863 with the 59 cases since, it will be seen that there were 15 deaths in each series—15 deaths and 32 recoveries in the 47 cases, 15 deaths and 44 recoveries in the 59 cases.

These results may be compared with those in some of the larger hospitals by means of a table given by Dr. Skoldberg, of Stockholm, in a treatise which he has recently published in Swedish, entitled "Om Ovariotomi." In this table he gives the statistics of ovariotomy in the following hospitals up to November, 1866:—

Hospital	Cases	Recoveries	Deaths	Mortality per cent	Authority
St. Bartholomew's	12	4	8	66·67	Mr. Willett.
Middlesex	8	1	7	87·50	Dr. Hall Davis.
King's College	7	1	6	85·71	Dr. Priestley.
St. George's	7	2	5	71·43	Dr. R. Lee.
University	5	1	4	80·00	Mr. Erichsen.
Total	39	9	30	76·92	

Dr. Skoldberg also gives the statistics of ovariotomy in Guy's Hospital, on the authority of Dr. Braxton Hicks, as 44 cases, with 23 recoveries and 21 deaths—a mortality of 47·73 per cent.; and he explains this mortality, so much *more* favorable than that of the other large hospitals, but so much *less* favorable than the results obtained by Mr. Spencer Wells in the Samaritan Hospital, and by Dr. Keith in a small private hospital in Edinburgh, by the fact that many of the precautions taken in the small hospitals are observed more carefully in Guy's than in the other large hospitals. The results are very striking:—

	Cases	Recoveries	Deaths	Mortality per cent.
Five large Hospitals	39	9	30	76·92
Guy's Hospital	44	23	21	47·73
Samaritan Hospital	106	76	30	28·30

In reply to a question, last Wednesday, on the comparative success of ovariotomy in hospital and private practice, Mr. Wells said the experience of the Samaritan Hospital proves that it is possible to obtain as good, or nearly as good, results in a small hospital as in a private house; for his own success in hospital and in private practice has been almost the same. He has completed the operation in 250 cases, with a result of 180 recoveries and 70 deaths—a mortality of exactly 28 per cent. But the results of the latter cases have been much more favorable, for of the last 50 cases only 8 have died and 42 have recovered—a mortality of only 16 per cent. He believes that even this mortality will be still further reduced.—*Med. Times and Gaz., Feb.* 22, 1868.

Carbolic Acid in Burns.—Mr. Pirnie (*Lancet*), in reporting a case of burn, advocates the use of carbolic acid. The patient was a child, eleven years old, who was scalded with hot water on the face, neck, chest, and back. She had shivering, complained of excessive pain, pulse feeble, rapid, and irregular, and she was troubled with vomiting for two days. Folds of lint, dipped in a liniment of carbolic acid one part and olive oil six parts, were closely applied to the scalded surface, a double layer of tin-foil was placed above the lint, and the whole secured by a bandage. The air was thus excluded, and the patient in ten minutes expressed herself as free from pain. On the second day the condition of the skin was greatly improved. On the twelfth the skin was everywhere perfectly healed, the cuticle having been thrown off; and, although the case was closely watched, not a drop of pus was discovered.

Amaurosis Saturnina.—In the *Klin. Mon.* Dr. Haase reports a patient affected with lead colic, from which he recovered perfectly. After six years another attack came on, with violent abdominal pain. On the ninth day, as the colic pains diminished, a sudden loss of sight ensued, which in twenty-four hours became total blindness. An examination then revealed some perception of light, pupils rather large and sluggish, retinal veins dilated, no paralysis of muscles; a disagreeable sweetish taste in the mouth, a blue line along the

gums. Patient had been taking opium, and this was continued. After six days the sight was enough better to enable the patient to go out of doors alone. Visual fields normal; nothing abnormal in urine, and nothing to be seen by the ophthalmoscope. Sulph. morph. gr. $\frac{1}{6}$ was used subcutaneously under the temple daily, with rapid improvement, and after a week v. = $\frac{2}{3}$. This amount of sight the patient retained, but there remained an inability to distinguish colors as exactly as before, and he had to give up his business as a painter. —*N. Y. Medical Journal.*

Tracheotomy for Croup.—M. Paris relates the case of a boy of five and a half years upon whom he operated for the relief of croup. Recovery was complete on the fourteenth day. On the thirty-second day the canula was removed and the wound allowed to heal. Respiration, however, became so difficult that it was replaced. Other attempts were made at four and six months, but without success. A laryngoscopic examination revealed a healthy larynx and vocal cords. At the date of report, sixteen months after the operation, the boy was well, but wore the canula. During the day he closes it, but removes the plug at night. He breathes very well with the tube completely closed, but cannot breathe when it is removed. M. Trousseau had seen several similar cases, in one of which a cure was effected after five years.—*Amer. Jour. Med. Sciences.*

Mustard Paper.—M. Rigollot, a Paris pharmaceutist, has contrived an elegant and efficient substitute for the mustard cataplasm. He extracts the fixed oil, retaining the rubefacient principle, and saturates the paper with this. A portion of the required size is placed in water a few seconds and then applied wet to the part. Here it is retained by a handkerchief. It is cheap, efficacious, and always ready.—*Amer. Jour. Med. Sciences.*

Action of Curare.—Dr. Hermann has explained the different results obtained by subcutaneous injection of curare and its administration by the stomach. He tied the renal vessels previous to the latter method of exhibition, and found that death was just as certain, though not so rapid as by the former. He infers from this that the immunity by stomach-administration is due to such *body* absorption as allows of its removal by the kidneys before any poisonous accumulation in the blood.

He accounts in the same manner for the non-fatal effects of the poison of serpents and of some potassium salts when introduced by the stomach. Birds always suffer, as he supposes, because the removal is slower, the urine of birds being semifluid. He points out the importance of attention to the excretory organs during the administration of poisons.—*Amer. Jour. Med. Sciences.*

Perchloride of Palladium in Microscopic Investigations.—Dr. Schultze, of Rostock, uses a solution of 1 in 800, feebly acidulated with hydrochloric acid. Small pieces of tissue, by immersion in this, become as consistent as cheese within eight days, and minute sections might then be easily made. Sections may then be deprived of water and impregnated with carmine, whereby parts not colored by perchloride of palladium become red. This substance gives hyaline membranes a light yellow, cells a darker yellow, and nerve-marrow a grayish black hue. The connective and elastic tissues remained uncolored. Unstriped muscular fibres were rendered yellow, and this led Dr. Schultze to the discovery of the arrangement of fibres in the ciliary muscle.—*Amer. Jour. Med. Sciences.*

Facial Neuralgia.—Dr. F. H. Thompson has published an instructive paper upon this painful affection, and shows that symptoms much resembling those of obstinate tic are caused by the impeded irruption of the wisdom teeth, or by exostoses of the extremities of the fangs. Two cases are related in which complete relief was given by the removal of the offending members.—*Amer. Jour. Med. Sciences.*

Preservation of Soups.—Beef-soup, broths, or jellies may be preserved from turning sour in the sick-room, or elsewhere, by stirring in a few drops of the solution of bisulphite of lime. This will not impair the taste in the least.—*Chicago Medical Journal.*

Traumatic Paralysis of the Right Arm treated with Strychnia and Chloroform locally.—Dr. W. H. Watkins, of New Orleans, in the *N. O. Journal of Medicine*, reports the following case:—A. S., a native of Spain, aged twenty-six years, was wounded by a ball passing through the supra-spinous portion of the scapula, coming out at the sterno-clavicular articulation. No large vessels were severed, and the hæmorrhage was slight. The wound healed rapidly. From the instant the wound was received, the left arm was paralyzed. He was, four months after, unable to move the arm, and when it was pricked with a pin, he felt no pain. The greater part of the deltoid muscle was paralyzed. Upon examination the case was considered hopeless, but it was concluded to try the local application of strychnia, as recommended by Brown-Séquard. The formula was as follows:—℞. Strychniæ sulph. gr. ij. Chloroformi ℥j. M. Apply half night and morning, and with rapid friction. After continuing the application for twelve days, he complained of an uneasy sensation in the arm, and when again pricked with a pin below the elbow, found that he felt pain. Passive motion was used, and the applications continued as usual. The power of motion soon returned, and at the end of the fourth week he was discharged, using the arm very nearly as well as ever.

A New Styptic and Adhesive Fluid.—Dr. W. B. Richardson's experiments have resulted in the formation of a styptic composed of ether, alcohol, tannin, and gun-cotton, which is thus described: "The pure tannin is treated with pure alcohol, and digested for several days. Absolute ether is then added until the mixture is rendered quite fluid. The gun-cotton is next added until it ceases to be readily dissolved. A little tincture of benzoin may be added for its agreeable odor. The solution may be applied with a brush, or in the form of spray mixed with equal parts of ether. When applied to an open surface of the body, the ether and alcohol evaporate, the blood or secretion of the surface permeates the cotton or tannin, and the tannin acting on the albumen, forms a leathery membrane, which completely protects the surface." This solution may be used, and is recommended by Dr. Richardson, in capillary and other hæmorrhages, in open cancer, and on suppurating or other decomposing surfaces, in simple wounds, amputations, etc. To remove the dressing a mixture of ether and alcohol may be used, or proof spirit warmed a little above the temperature of the body. Cold or warm water will not dissolve the styptic, and should not be used. —*Pacific Med. and Surg. Journal.*

Pepsin in the Vomiting of Pregnancy.—A number of French physicians declare the efficacy of pepsin in the vomiting of pregnancy. It should be given in the dose of 8 or 10 grains before eating. Hydrochloric acid is also recommended as equally efficacious. Thirty to sixty drops to be taken daily, properly diluted. Strychnia, we think, is not inferior to either; the twentieth to the twelfth of a grain three times a day.—*Pacific Medical and Surgical Journal.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEGMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, April 15, 1868.

EYE AND EAR HOSPITALS.

THE scope and aim of the MEDICAL RECORD do not allow of a lengthy and detailed statement of the workings of medical institutions on very frequent occasions. We have thought, however, that the claims of the various Eye and Ear Infirmaries and Hospitals of our country, in view of the great work they have done, demanded more than the passing notice they have as yet received at our hands.

We have also added to the list of reports and papers that will form the basis of our remarks, a report and an article from a foreign source.

It is less than half a century since the first institution for the treatment of Diseases of the Eye was established in America. Dr. J. Kearney Rogers, now dead, and Dr. Edward Delafield, yet living, in a vigorous and honored old age, after a study in the English Hospitals, came home to New York, and called a meeting which led to the establishment of the "New York Eye Infirmary." The operations and practice of the English surgeons in special institutions, led Drs. Rogers and Delafield to believe that much could be done by similar work in a similar institution in New York. Boston soon followed New York. The success of both these infirmaries was at first brilliant, and has continued to be great. Those blind from cataract especially, flocked to New York from all parts of the State and country, and the then young surgeons were almost inundated by operations to be performed. The practice was like fishing in an aboriginal trout pond. From the humble beginning of small rooms, both the New York and Boston institutions have gone on until large and handsome buildings are fully occupied by the respective infirmaries. It is true that the one in New York is not as well adapted for its purpose as a building that modern sanitary architecture would build; yet the rooms for the reception of out-door patients, for the diagnosis of cases, the lecture-room, are not surpassed or even equalled in Vienna or Berlin, although in the former city the special treatment of eye diseases, under Beer and Rosas, was cradled, while in the latter it has achieved its proudest triumphs.

Chicago, also, has a well appointed Eye and Ear Infirmary, for which its citizens are mainly indebted to the labors of Dr. E. L. Holmes, one of its surgeons. The building occupied by this institution was not originally intended as an Eye Infirmary, it having been a private house; but the alterations that have been made render it, on the whole, better adapted for the lodgment of patients requiring to be kept in-doors than some larger institutions. The rooms are small, there are no large wards—an advantage not to be over-estimated in the treatment of certain classes of eye diseases.

Dr. Knapp's institution in Heidelberg, although in a town of only 16,000 inhabitants, took care of more than 3,500 patients in 1866; in London, at Moorfields, there were more than 15,000, while in New York in 1867 there were only 6,800, in round numbers, treated at the Eye Infirmary; in Boston, 3,000; in Chicago, only 432. There is also another institution, although a smaller one, in Heidelberg, and several others in London; so that we are driven to find some other reason than the competition of other places where diseases of the eye and ear are treated, for the comparatively small number treated at the infirmaries in Chicago, Boston, and New York. These reasons are manifold; among others is the fact that, in Germany and England, Ophthalmology has been zealously cultivated for a century. People with diseased organs of sight have been thoroughly educated to the existence of special institutions for the treatment of diseases of the eye, and to the fact that they will be treated there more skilfully than in a general hospital. We are not inclined to believe, as some assert, except in the matter of errors of refraction and accommodation, that there are more diseased eyes in Germany than in America. Even in this latter-named class of affections, too many hours' study at school, badly arranged desks, vile gas, diamond type in books, and other influences, if diligently nourished, will soon enable us to compete with our German brethren in this respect, and exhibit as many spectacled people as our Teutonic friends. We believe, then, that the better education of the people on this subject is the main cause for the seemingly greater number of eye cases in Germany than in America.

Every little city in the former country, corresponding to Springfield, Mass., Utica, N.Y., Buffalo, N.Y., Lancaster, Pa., in the United States, has its eye infirmary under the care of a skilful and specially educated man. Yet, in the large cities like Berlin, where there are 7,000 pa-

1. *Fünfter Bericht über die Augen Klinik des Dr. H. Knapp zu Heidelberg.* 1866.
Fifth Report of Dr. H. Knapp's Eye Hospital at Heidelberg. 1866.

2. *Provincial Eye Hospitals. Ophthalmic Review. January,* 1866.

3. *Tenth Annual Report of the Chicago Charitable Eye and Ear Infirmary.* 1867.

4. *Forty-second Annual Report of the Massachusetts Charitable Eye and Ear Infirmary.* 1867.

5. *Forty-seventh Annual Report of the Surgeons of the New York Eye and Ear Infirmary for* 1867.

tients a year at *Graefe's*; Vienna, which has 7,000 more, divided among *Arlt, Stellwag*, and *Jaeger*; Munich, with 2,000 under *Rothmund*; Prague, with 1,800 under *Hasner*, the number of eye patients constantly increases. A little observation in our country districts will convince any one that there are thousands of eyes with their functions being impaired without let or hindrance, that might be saved under proper care. Many cases of cataract that might be successfully operated upon are never even diagnosticated.

Two things are wanted at this time—first, more accommodations for the eye patients in the large cities, and secondly, the establishment of the kind of Eye Hospitals in a smaller way in the lesser towns. In Boston, there are special wards in the new hospital, under the care of H. W. Williams, where there are nearly, if not quite, as many patients as at the Infirmary. There are also eye wards in the Island Hospitals in New York, and each Medical College has a weekly clinic, while the Dispensaries have large numbers in attendance upon the eye and ear classes; yet in New York there is really but one place, and that with limited accommodation (for about fifty patients), where patients requiring operations can be boarded for the necessary time for the after-treatment. Patients are often sent away unrelieved because there is either no room, or they have no money to pay their board. They cannot find admittance to the Island or Bellevue Hospitals, unless residents of New York city, nor to the New York Hospital, unless they can pay. The liberality of the latter-named institution in the past, and the failure of the State, and of our citizens, to endow it, have compelled it at last to shut its doors to many who deserve entrance, but who have no money.

The New York Infirmary Report states "that, for the majority of such cases, the Infirmary possesses sufficient room; but it is compelled to turn away many who most need its aid, because for those who are unable to pay the sum required for their board there is very insufficient provision, from the want of means to support them." We question, however, if there would be one-third room enough for the deserving *in*-patients if it were once known that all who actually needed treatment in-doors and good food, and who were unable to pay, could get it on application. On turning to the Treasurer's Report of the Infirmary, we find a balance of more than $2,000 unexpended, so that the institution can hardly be said to be poverty-stricken. The Massachusetts Infirmary also shows a balance of more than $2,000 on the right side, while Dr. Knapp has a deficit of 7130 florins in a total expenditure of 3,500 florins (about 1,700 dollars) for his 3,000 patients. How far a little money will go in Germany!

We may only quote one paragraph from the article on that subject in the "Ophthalmic Review" as to the second need of provincial eye hospitals. *Ab uno disce omnes.* An eye infirmary was established in a small town in England, and in the first year of its existence it was resorted to by 1,200 patients. No less than twenty-four persons, all of whom were absolutely blind at the time of application, have been restored to sight, and enabled to return to their respective avocations. "In one of those cases, the patient had been living in the neighborhood as a blind man for a period of ten years." The foundation of such eye hospitals, or of special departments in general hospitals that may already exist, as has lately been done at Rochester, N. Y., would soon rid the country of those pests, the peripatetic oculists "from the London and New York Institutions," and no other method will. People with bad eyes, who cannot afford or do not wish to come to the large cities, *will* be treated at home, and if not by competent general practitioners, who do not like to meddle with the eye, then by quacks. Our medical colleges are now, however, thanks to special chairs established, as well as our infirmaries, sending out young men who will create a healthy public sentiment in ophthalmology, because they can show that they know whereof they affirm, and that they are not afraid to treat a diseased eye. We predict that infirmaries will be common in all sizable American towns in less than twenty years. While writing these lines we find that an eye and ear clinic has been established in Cincinnati, and also one in Baltimore, places which certainly cannot be called provincial, but which until now have had no sufficient accommodations for patients with diseased eyes.

To return to our city and its wants, for a moment. Very many of the patients who are now treated at the only infirmary of the city, are brought from vast distances in this great metropolis by mothers who can ill afford the time consumed in going as far as from Fiftieth street and Ninth avenue, for instance, to Thirteenth street and Second avenue (the situation of the Infirmary). This fact alone is sufficient to demand that we should have another, and an uptown institution. In Boston the case is not quite so bad, owing to the smaller size of the city and the special wards in the new hospital; but one infirmary is by no means enough for Boston.

We desire to say a few words about the aural department of these American institutions; but these must be brief, owing to the length to which these remarks have extended. In Germany ear patients are not treated in the same institution with those affected with diseases of the eye, and until lately they were much neglected. We believe the American plan of a union of an eye with an ear infirmary, is, on the whole, the best. Diseases of the eye and ear are inseparably connected with each other in the minds of the laity, and it would be impracticable and unwise at this late day to attempt to dissever them. 901 ear patients were treated in the Boston Infirmary in 1866, 50 in Chicago, and 1,218 in New York. There is either more aural disease in Massachusetts than in New York

and Illinois, or the public are better educated as to the proper source for relief in the former city, if we may judge from the comparative number of ear cases treated at the eye and ear institutions of these cities. As we should expect, advertising quacks abound in Chicago in consequence of there being but two small eye and ear hospitals in that great city. It is gratifying in the extreme to see aural medicine and surgery receiving its just recognition, and the fact acknowledged that diseases of the ear may be satisfactorily treated.

We beg to offer our congratulations to all the surgeons employed in restoring sight to the blind, and hearing to the deaf, in view of the exhibit of these reports, and to especially commend the Massachusetts Charitable Eye and Ear Infirmary for the excellence of that part of the report, entitled "Classification of Patients, Diseases, and Operations." The statistics as to the latter are especially valuable; Professor Knapp's report has the same good feature. Attention to the matter would make the reports of all eye institutions as additions to our statistical knowledge of eye and ear diseases. "Ophthalmic Hospital Reports" and "Archives" should not be limited to England and Germany, but be issued from American institutions also. The material is here in abundance. The medical public have a right to expect it to be used. We are gratified to be able to announce finally, that steps are being taken to found a new infirmary in this city, to meet the wants of one million and over of people, some of them living at magnificent distances from each other, and that one has just been established in Brooklyn.

We are glad to learn that the necessity for the establishment of cheap and accessible public baths is being urged by the Health authorities of our city. There is no question as to the utility of this measure in a sanitary point of view, and it is to be hoped that some measures will at once be taken to make suitable provisions for the great unwashed. We have only to look at the workings of a similar scheme in Boston during the past year, to be assured of the triumphant success of such an undertaking. The expense involved, however great, would be exceedingly small compared with the benefits which would directly and indirectly grow out of the adoption of some feasible plan for carrying out the project.

Contagious Diseases in New York.—The reports of contagious diseases made to the office of the Sanitary Superintendent of the Board of Health, by practising physicians in this city, from March 16 to March 31, 1868, inclusive, show 268 cases of scarlet fever, 238 of which were under the age of ten years; 6 cases of typhus fever, the ages varying from four to fifty years; 7 cases of typhoid fever, between the ages of four and fifty years; 45 cases of diphtheria, 29 cases of which were under the age of six years; 6 cases of small-pox, between the ages of one and thirty-five years. The reports do not indicate the special prevalence of any of the above diseases in particular localities.

Reviews and Notices of Books.

A Practical Treatise on the Diseases of Women. By T. Gaillard Thomas, M.D., Professor of Obstetrics and the Diseases of Women and Children, in the College of Physicians and Surgeons, New York; Physician to Bellevue Hospital; Consulting Physician to State Woman's Hospital; late President N. Y. Obstetrical Society; Member of N. Y. Academy of Medicine, of the County Medical Society, etc., etc. With two hundred and nineteen illustrations. Philadelphia: H. C. Lea, 1868. 8vo. pp. 609.

The prejudice which has of late existed against gynecology has been in no small degree due to a misdirected zeal on the part of many of those who have devoted themselves to that branch. No right-minded individual, however, has been justified in believing that the proper study of uterine diseases can be fraught with anything but the best of results, both for the sake of science and for the benefit of a rapidly increasing class of sufferers. The great difficulty in the way of placing the specialty upon the elevated basis which it is entitled to, has been a disposition to take extreme views, and a lack of infusion of that spirit of conservatism, that unprejudiced weighing of facts, which alone can beget confidence in the scientific mind. The book of Prof. Thomas is well calculated to do away with this latter objection, and to accomplish more towards the establishment of a rational system of uterine therapeutics than any other work of its size in any language. We have rarely read any treatise upon a medical topic that has given us better satisfaction, or impressed us with the fitness of an author for the proper performance of a most responsible task. Premising this our good opinion of the work as a whole, we shall prepare the reader for an appreciation of its special merits by a cursory review of its subject-matter.

The first chapter is devoted to an historical sketch of uterine pathology, which, without being exhaustive, gives the student a very interesting and reliable account of the doings of the old classic authors in medicine towards founding the specialty of which the book treats. We are told that the literature of gynecology commenced with the writings of Hippocrates, and that his investigations in the study of uterine diseases were followed up by Aretæus, Galen, Celsus and Aetius, the latter giving very unmistakable evidence of a pretty thorough knowledge of this subject. We are also informed that Galen speaks of the speculum vaginæ in the second century, and that Columbat advises the air-pessary in certain displacements. The allusion to the speculum as having been known to very many of the ancient authors is of especial interest to such as would in this late age class themselves among inventors. The history of gynecology is then traced through the different periods of times gone by to the present, giving it as a sketch all desirable completeness.

The etiology of uterine diseases of America, in connection with the want of fresh air and exercise, excessive development of the nervous system, improprieties of dress, imprudence during menstruation and after parturition, prevention of conception and induction of abortion, and marriage with existing uterine disease, is honestly and fairly discussed. Every practitioner of medicine can fully endorse the views of the author in regard to the respective influences which these conditions have upon the production and increase of uterine maladies in America.

The chapter on the diagnosis of diseases of the female organs and the physical means to be employed for that purpose, is full of practical suggestions in regard to the manner of conducting digital and specular examina-

tions. A considerable variety of instruments is figured, one of which, the "telescopic speculum" of the author, so-called from its mechanism, is a useful modification of many of the other forms, in that it can be adapted to vaginæ of different lengths, a matter of no small importance in the treatment of uterine disorders. The writer has also a modification of Sims's speculum figured, which combines the advantages of Emmet's self-retainer and Sims's fixed depressor. This instrument has, however, this objection, entirely removed by Bozeman's, in this that both the hands of the operator are not free. In regard to the introduction of uterine tents, all the necessary instruction is given, the author's preference being declared for the improved sponge cones. Diseases of the vulva have devoted to them the next chapter, and chapter fifth discusses rupture of the perinæum, describing Baker Brown's and Sims's operations for the same.

Vaginismus next claims attention. Our author believes it to be of more frequent occurrence than is generally supposed, and agrees with other writers upon the subject as to its cause being referable in a great degree to the irritability of the nerves supplying the sphincter vaginæ. In ordinary cases reliance is to be placed upon the improvement of the general health, the use of dilators and anodyne applications; but these failing, the operation of section of the muscle by Sims's method, or division of the pudic nerve according to Burns and Simpson, is recommended.

Diseases of the vagina follow next in order, and are clearly presented. The subject of vesico-vaginal fistules is treated in a most complete manner, all the different standard operations are succinctly described and profusely illustrated, giving the merest tyro as good an insight into the treatment of this most annoying and yet frequent accident, as can be obtained from any text-book.

The discussion of inflammations of the uterus forms one of the most interesting portions of the work. The treatment of this portion of his subject is surprisingly thorough for the amount of space devoted to it; all the ordinary difficulties in the way of a proper understanding of it are effectually removed by a most admirable, simple, and systematic classification. Under the heads of cervical and corporeal endometritis, and cervical and corporeal metritis, all the other affections which are naturally dependent upon them are arranged. The employment of diagrams to illustrate by dotted lines the exact position of the respective inflammations, is the conception of a mind fully alive to the necessities of the student and the busy practitioner. Each one of these diagrams for the purpose of impressing the mind, is worth a page of the best descriptive text that the author can give us. His remarks upon the symptoms of the various inflammatory complaints are thoroughly practical, and while he gives his reader to understand that he is content to lean towards simple remedies, such, for instance, as the warm douche, mild astringents, weak caustics, etc., he is not backward in recommending the more severe measures in cases that demand them. The more severe caustics, their introduction in the cervical canal and the uterine cavity, etc., are advised in the more intractable cases; but the most ample directions are given for their proper employment, the dangers that sometimes attend their use are plainly stated, and the failures which not unfrequently result from their faithful employment are candidly given.

The displacements of the uterus are as fully described as their great importance demands, and the different modes of treatment receive earnest attention. The illustrative diagrams that are scattered through this section, also form a very commendable feature. The description and treatment of tumors of the uterus occupy a large portion of the work, and are much simplified, by the divisions made by the author. The most desirable operations are sufficiently detailed, and the importance of diagnosticating the different varieties fairly presented.

The subjects of peri-uterine cellulitis and pelvic peritonitis will amply repay careful study, especially in relation to the important matter of diagnosis and treatment; we have nowhere seen the distinctions between the two so clearly drawn. The causes and management of cases of menorrhagia and metrorrhagia, claim their due amount of attention. Amputation of the neck of the uterus is described and illustrated. The new operation by galvano-caustic is also detailed, and a figure of the instrument is given. The diseases of the ovaries and the operations for their relief, among which must be prominently reckoned ovariotomy, occupy an extended space, giving the student all the facts connected with the subject which are necessary as a foundation for practice and for future study.

In conclusion, we would again express our satisfaction as to the manner in which the author's task has been accomplished. His professional brethren are not only under obligations to him for many practical ideas, but for a most admirable and systematic division of his subject. In reference to this latter point we wish to say a word or two.

His experience as a teacher has taught him a certain lesson which he does not lose sight of in the writing of his book, and that refers to the utility of simplifying his subject by bringing out certain cardinal points. He, so to speak, skeletonizes his subject by bringing out the real framework in strong relief, and afterwards fills out all the rotundities for a complete figure. The causes of a disease are simply enumerated in regular order of importance, as well as their treatment, and then elaborated in the most concise and straightforward manner. In the matter of differentiation, in which he shows a remarkable and special skill, the lines of distinction between two apparently similar maladies are boldly sketched, and their points of antagonism placed side by side in tabulated form. Every one who reads the book will be impressed with the thorough practical knowledge which the author has of his subject; his opinions will be respected for their frankness and soundness, and his advice followed on account of its conservatism and common sense. It is, perhaps, unnecessary for us to commend the work most heartily to every one who is or may be liable to treat uterine diseases.

TRANSACTIONS OF THE INDIANA STATE MEDICAL SOCIETY AT ITS SEVENTEENTH ANNUAL SESSION, HELD AT INDIANAPOLIS, MAY 21 AND 22, 1867. pp. 132.

THIS report comes to us without table of contents or index, an omission which we trust will be discontinued in future. The report contains the minutes of the meeting, the interest of which is principally local. A resolution was passed expressing it as the sense of the society that it was desirable to establish a medical journal in the State of Indiana, and the journal of Dr. T. Parvin, then published in Cincinnati, was selected, said journal being now published at Indianapolis, to which city Dr. Parvin has changed his residence. The following resolution was offered by Dr. R. E. Haughton, of Richmond, with the recommendation that it lie on the table until the next annual meeting, and was accordingly laid over:—

WHEREAS, Women are subjected to disabilities in procuring medical education, by reason of exclusion from the medical colleges of our country; therefore

Resolved, That such disabilities, imposed by the action

of such colleges, should be removed, and the admission of women, for the purposes of education, be allowed.

Resolved, That the Medical Society of the State of Indiana is willing to recognize women as practitioners of medicine, subject only to the same requirements of education and observance of ethics as are required of men.

The committee on prize essays reported that they did not consider the papers received as worthy of a prize.

The papers included in the Transactions are, *the address of the retiring President*, Dr. Vierling Kersey of Richmond, Ind.; a paper on *Bile*, by Dr. James F. Hibberd of Richmond; a paper entitled, *A Contribution to the Statistics in relation to Foreign Bodies in the Air Passages*, by Dr. J. R. Weist of Richmond; *A Report on Cholera*, by Dr. George Sutton of Aurora; a paper on *The Collapsed Stage of Cholera*, by Dr. W. S. Haymond of Monticello; a paper on *Cerebro-Spinal Meningitis*, by Dr. John Moffett of Rushville; a paper on *Female Doctors*, by Dr. Dongan Clark of Richmond; a paper on *Tracheotomy in Cynanche Trachealis, Diphtheria and Laryngitis*, by Dr. R. E. Haughton of Richmond; and a paper on *Epidemic Dysentery in Allen County in* 1845, 1854, 1856, 1864, by Dr. H. P. Ayres of Fort Wayne.

Dr. Weist's contribution to the statistics in relation to foreign bodies in the air passages is an exceedingly valuable contribution to the literature of the subject, and one which we would like to see republished, as its modest incorporation into the Transactions, without even an index to refer to it, will hardly give it the prominence it deserves. Tabulated statements are given of one hundred and sixty-three cases, of which thirty-four have been collected from various medical journals, since the publication of Prof. Gross's work in 1854; and the remaining one hundred and twenty-nine cases have been collected by himself from the medical gentlemen whose names appear in connection with them. They include sixty-one cases of spontaneous expulsion followed by recovery; twenty cases terminating fatally, without operation and without expulsion of the foreign body; forty-eight cases of tracheotomy followed by the expulsion of the foreign body, and the recovery of the patient; nineteen cases of tracheotomy followed by death; ten cases of laryngotomy, followed by the expulsion of the foreign body and the recovery of the patient; five cases of laryngo-tracheotomy, followed by the expulsion of the foreign body and the recovery of the patient.

In these tables eighty-one cases are reported not subjected to bronchotomy. In twenty of these, or 24.69 per cent., the foreign body was not expelled, tallying almost exactly with the tables of Prof. Gross, which give 24.70 per cent. In these tables no cases of death occurring after spontaneous expulsion are reported; Prof. Gross's tables show a mortality of thirteen per cent. in the same class of cases. In the report sixty-seven cases of tracheotomy give a mortality of nineteen, or 28.35 per cent.; Prof. Gross's tables record a mortality, after tracheotomy, of only twelve per cent. The eighty-two cases subjected to operation give nineteen deaths, or 23.17 per cent.; while the similar cases reported by Prof. Gross give a mortality of but fifteen per cent.

Dr. Weist concludes: "As determined by Prof. Gross's tables, the chances for recovery are more than twice as great after bronchotomy as they are without this operation; while the cases here presented show only a difference of one and one-half per cent. in favor of operation, and I feel sure, from observations made during the collection of material for this paper, that were it possible to collect from medical men generally *all* the facts known to them in relation to this subject, the difference in favor of operations would be reduced still more; for I have found among many medical men a disinclination to report cases where operations have been followed by fatal results, as well as in those which, though the patient ultimately recovered, death for a long time seemed imminent, while the practitioner waited uncertain as to what he should do. This is much to be regretted, for without all the facts, it is very difficult, if not entirely impossible, to arrive at true conclusions." Dr. Haughton's paper on Tracheotomy deserves notice. He gives tables of 1,533 cases operated on, of which 357 recovered, or a percentage of 23.28.

PENNSYLVANIA HOSPITAL REPORTS, vol. I, 1868. Philadelphia: Lindsay & Blakiston, 1868. 8vo., pp. 426.

THE volume before us is the first of a regular series of reports, to be issued from this time-honored Pennsylvania Hospital. The Hospital in question is probably the oldest in this country, being founded as early as 1755, since which time it has kept its doors open to the sick and wounded, and has afforded invaluable instruction to thousands of American physicians. Although at the advanced age of one hundred and twelve years, she sends forth her first oracle; every lover of science, and every one of the many now living, who have enjoyed the privileges of walking her wards, will be delighted to learn that it has come at last. As a purely scientific work, it is well calculated to represent the doings of this great charity, and to take its place creditably by the side of publications from the sister institutions in Europe.

The first article is from the pen of the venerable Charles D. Meigs, and gives a history of the institution from its foundation, together with an authentic list of the names of those who so creditably served the interests of science and humanity.

The second article, by D. Hayes Agnew, is upon the history and treatment of laceration of the perineum, wherein an original operation is described. The whole subject is very fairly presented, and the different steps of the author's own method of procedure very comprehensively given. The chapter is illustrated by several fine engravings.

The morphological changes of the blood in malarial fever, is the title of the third chapter, by J. Forsyth Meigs, assisted by Drs. E. Rhoads and William Pepper. This paper is a very elaborate one, tending to prove the existence of a pigment in the blood of patients suffering from malarial fevers. The formation of this heterologous deposit is supposed to be principally in the parenchyma of the spleen, during the paroxysms. A number of cases are given in detail, and many very important relations between the cause and effect of the deposit set forth. The treatment advised is simply summed up in the following directions: rest, a sustaining regimen, with stimulants whenever debility is marked, and the use of quinia from the very first day. The patients were compelled to lie abed so long as the fever presented the intermittent type, and also during the paroxysms of intermittent fever. A longer or shorter confinement to bed was insisted upon in proportion to the continuance of the attack, and the amount of cachexia present. The diet was the same as that employed in typhoid fever. The quinia was given almost always in solution, the regular dose being four grains, repeated every hour or two until sixteen or twenty grains had been taken. As soon as the periodic element was thoroughly subdued, chalybeate tonics were administered, the favorite one being the ammonio-citrate of iron.

Dr. Addinell Hewson's paper on acupressure gives, more or less *in extenso*, the practice of the Hospital with this method of securing bleeding vessels, and will

doubtless tend to revive a practice which, for some unaccountable reason, has not received due attention from American surgeons. Article V. is a statistical account of the cases of amputation performed at the Hospital during the past thirty years, by George W. Morris, M.D. During this period, 428 capital amputations were performed, of which 321 recovered. 261 of these were primary in character, of which 54 died, and 83 were secondary, of which 31 died. 84 were for the cure of chronic disease, of which 18 died. 194 were upon the upper extremities, with 21 deaths; 234 of the lower extremities, with 74 deaths, and 46 at the joints, with 6 deaths. We would gladly summarize more at length upon this interesting table, but must content ourselves in passing, by commending it to the attention of every surgeon interested in the results of the various operations named.

The physiological observations and experiments on a case of large artificial anus by Dr. William Hunt, is a very interesting contribution to our knowledge of the function of the large intestine, besides giving the results of a novel operation for its cure.

Dr. Da Costa, so well-known as a careful observer and clinical teacher, has contributed a practical article on the action of narceine; then follows a review of the ligatures of large arteries, between the years 1835 and 1868, by Thomas G. Morton, which in a statistical point of view is of great value, more especially as many of the cases referred to have not been before published. We must, however, in fear of exceeding the limits allotted to this notice, deny ourselves the opportunity of remarking in detail upon the merits of each and all of the remaining articles, and content ourselves with the bare enumeration of their titles, believing that we have said enough to recommend the book to the careful study of every physician and surgeon interested in the results of hospital practice. The following, then, are the captions of the other articles of the work:—A case of aneurism of the arteria innominata, illustrating some points in physiology, and the principle of Mr. Wardrop's operation by Addinell Hewson, M.D.; On the treatment of continued fevers, from clinical lectures at the Pennsylvania Hospital, by W. W. Gerhard, M.D.; A contribution towards our knowledge of the pathological changes in the florescence of the tissues, by William Pepper, M.D.; Case of penetrating wound of the skull in which the ball entered the brain, terminating in recovery, with an analysis of similar cases, by T. H. Andrews, M.D.; A contribution to the history of toxæmia, by William Hunt; Notes on medical cases, by Horatio C. Wood, M.D.; Cases of progressive locomotor ataxia, with remarks by James H. Hutchinson, M.D.; Poisoning from atropia treated by opium, and subsequent recovery, by Dr. D. H. Agnew; Note on fracture of acromion process of scapula, by Dr. A. D. Hall; Case of retroversion of the uterus, the posterior wall of which was the seat of a large mural fibrous tumor, by George Pepper, M.D.; Heat Fever (sunstroke), by James J. Levick, M.D.; on the use of paper for surgical dressings, by Addinell Hewson; Extracts from a clinical lecture on muscular rheumatism, by Dr. Da Costa; and lastly, we have an account of the pathological specimens in the Hospital Museum, by Dr. Pepper, and also an extract from the statistical report of the Hospital for the year ending April 27, 1867.

In this volume we have contributions from each one of the hospital staff on special subjects as indicated above, and each has done his part towards making this one of the most readable and instructive compendiums of practice in the English language. Each article as far as it goes is complete in itself, and no one can feel that any can be spared from the book. There are some twenty-seven first class illustrations scattered throughout the work, and the typographical execution is very creditable.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, DECEMBER 26, 1867.

DR. H. B. SANDS, PRESIDENT, IN THE CHAIR.

STRICTURE OF THE URETHRA—HOLT'S INSTRUMENT.

DR. HUTCHISON presented a gangrenous lung and the urethra taken from the body of a sailor thirty-eight years old, who came into the City Hospital on the 9th of Sept. last. He stated that he had had gonorrhœa seven or eight different times, being first attacked at the age of fifteen, and that after that he had observed a diminution in his stream of urine. His last attack dated back three and a half years before entering the institution, and since that attack he had been troubled with a gleety discharge. He had also suffered from intermittent fever a few weeks before he came under observation, and had had, within the last three or four months, several attacks of retention, which had been relieved by opium and the warm bath.

After admission into the hospital, the passage of a sound revealed the existence of a stricture two and a half inches from the meatus. This stricture admitted the passage of a number three sound, which passed back five and a half inches, when it encountered a second stricture, and was arrested. Through this second obstruction the smallest bougie could not be passed. He was accustomed to pass his urine every half hour or so. An instrument was introduced at first every fourth day, and afterward daily, when the house surgeon finally succeeded in passing a No. 1 bougie into the bladder. The second stricture was a very long one, and appeared to occupy an inch and a half of the urethra. Soon after the first bougie was passed into the bladder, a No. 3 was successfully introduced. In the meantime he had suffered somewhat from malarial poison, and also from constipation, for which latter condition the ordinary remedies did not seem to answer. Accordingly ten grains of calomel, five of rhubarb, and five of jalap were administered on the 24th of September. Before it was given him he was asked if he had ever been salivated, and said not. The effect of the dose, however, was the bringing on of an attack of profuse salivation, two days afterward. He, however, recovered from this, and his health became pretty good.

On the 15th of October, a No. 3 flexible bougie having been previously passed and allowed to remain for about an hour, a Holt's instrument was introduced to the extent of seven and a half inches, when it became arrested. Why it was impossible to pass it entirely into the bladder he could not then understand. Being satisfied that the instrument was entirely through the second stricture, he proceeded to rupture. No chloroform was used, and the patient suffered a good deal of pain. A No. 10 of Holt's staff was thrust down, and was followed by the introduction of a No. 7 catheter. In the evening the patient was more comfortable than he had been for a number of months before. Twenty-four hours subsequently, however, he had a chill. Two grains of quinine with opium were administered. The chill passed off, leaving him very comfortable, but the second day, after having another chill, it was supposed that the malarial fever had returned, and the quinine was resumed with good effect. Seven days after, however, he had a very severe chill, accompanied with the

symptoms of double pneumonia. Five days after the pneumonia was detected, his expectoration began to be excessively fœtid. He continued in this state until his death, which took place six weeks after his urethra was ruptured, and five weeks after the first symptoms of pneumonia first showed themselves. The expectoration was quite abundant, and almost invariably fœtid.

On post-mortem examination a large cavity was found in the right lung filled with an exceedingly putrid fluid, in which floated sloughy tissue. Although the specimen had been kept for a considerable time in alcohol, and soaked in a solution of carbolic acid, the odor was still quite marked.

On examining the urethra, the first stricture was found unruptured. In passing he explained the circumstance by alluding to the fact that a stricture which allows the passage of a No. 5 sound, would not be acted upon by Holt's instrument. This first stricture was simply dilated, and had since contracted very much, but the other was perfectly ruptured. He remarked that outside of this obstruction there was noted a hardened spot that gave the impression of the urethra being surrounded by a hard cord. The second stricture was five and a half inches from the meatus, three-eighths of it being confined to the spongy tissue. The contraction of the stricture which had been ruptured was not nearly so great as in the one which had been simply dilated.

In going still farther back, he found the third lobe of the prostate very prominent, which explained the difficulty in introducing Holt's instrument beyond the point indicated, the said instrument having only a very slight curved arc of a large circle. Going still farther back, there was a belt-like ridge, which extended from the orifice of one ureter to the other. This was three lines in thickness, with a sharp edge.

The bladder was very small, the cellular tissue of its walls being very much thickened.

The kidneys appeared to be granular. His urine was not examined during life. He had no difficulty in passing his water after the operation. His condition after the operation was such as prevented the regular introduction of a suitable instrument.

Dr. Hutchison stated that the instrument of Mr. Holt had been used in four cases in the Brooklyn City Hospital, three times by himself, and once by the house surgeon. In the latter case a patient was admitted with retention of urine, a No. 3 catheter was introduced, and it was afterward followed by Holt's instrument. He remarked that the instrument in question presented very decided advantages over any other; at any rate it was a valuable addition to the surgical means for treating stricture. In the first place, the advantage which it had over the ordinary method of dilatation was the rapidity with which it could be accomplished, a few minutes only being necessary. In the second place, it had a very decided advantage over the internal incision of strictures, because he believed, from the appearance of the specimen, and from a case recorded by Holt himself, in which he practised upon a patient after death, that the rupture would take place through the stricture itself, and not through the healthy tissue, provided the stricture only partially surrounds the mucous membrane. Thirdly, it had very decided advantages over Syme's operation, which is practised in cases where the contraction takes place very rapidly, and where there is very great irritability of the urethra, so great as to cause very serious symptoms after the introduction of an instrument. In such cases the operation with Holt's instrument was a very appropriate one, and less severe than with Syme's method.

He further stated that he had hesitated to perform Holt's operation, until he had heard it recommended so highly by Mr. McNamara, of the Heath Hospital, that gentleman having used it in 250 cases in the outdoor department of that institution, without a single bad result. Mr. McNamara, together with his confrères Messrs. Colles, Porter, and Smellie, had operated successfully in all of 500 cases.

Dr. Whitehead asked if it was not always safer, before attempting to dilate a stricture, to be assured of its presence in the bladder by the escape of some urine?

Dr. Hutchison believed that it was much the better plan. He would have done it in his case had it been possible. He was, however, assured that it had gone far enough, and even though it were in the prostatic portion, no harm would come of the dilatation, as the extremity of the instrument was powerless of mischief.

Dr. Whitehead believed on general principles, that a rupture of the urethra would be more apt to be attended with extravasation of urine than if the free incision of Mr. Syme were employed.

Dr. Hamilton stated that he had lived through three or four periods of the use of dilators, external incisions, etc. Very many years ago Dr. Dudley, of Lexington, in answer to a note concerning other matters, had written him a letter, in which he stated that he could cure all strictures without instruments, by simply confining the patient to low diet, and physicking him. Not long after that it was the common practice to force strictures. He had happened to see the late Dr. McClellan, of Philadelphia, do this operation many times. Then followed the method of perineal section introduced by Syme, since which time there had been various changes in opinion.

The conclusions which Dr. Hamilton had arrived at from his own observations, and the observations of others, whose experiments he had witnessed, were, that very few strictures existed through which water could be passed that could not be eventually overcome by rest, regimen, and gradual dilatation. Cures by this method were quite as successful as by any other, with the great advantage that they were not attended with any hazard. In conclusion, he stated that he could not be convinced, either by theory or observation, that forcible rupture was not more likely to leave a traumatic stricture in place of one which before was not, such strictures being exceedingly intractable to treatment.

Dr. Parker concurred in the main with the views of Dr. Hamilton. He believed that Dr. Dudley's plan of treatment was eminently successful in the so-called acute stricture. He learned a very important lesson touching that point, in a young man whom he attempted to treat mechanically, and failed. He gave him ptisans of flax-seed, put him on low diet, etc, and he soon after entirely recovered without the use of an instrument. He never had any good result from burning out strictures. He had finally settled upon three methods, viz.: that of Dudley's, that by dilatation, and that of Syme's, each case treated, of course, on its own merits. The practice of Mr. Holt he had never yet put into execution. His prejudices were not in favor of it as a mode of treatment, and on the whole he thought it a very unsurgical proceeding.

He was amazed to hear that any one individual, such as Mr. McNamara, had met with 250 cases of stricture, and healed them by the method referred to, in the short space of seven years.

The question came up in his mind, whether the patient of Dr. Hutchison was not put in great jeopardy by the virtual existence of a stricture near the meatus after the second one had been fairly ruptured? Would there not have been, had the patient lived, danger of having the flow of urine in a measure dammed up?

Dr. Hutchison stated, that if another such case should present itself, he should permanently dilate the first stricture or rupture it before healing the second. But he hardly thought that there would be danger in the case, as a dilating instrument could be used with advantage, after the operation with Holt's instrument.

LAMINARIA DIGITATA AS A DILATOR IN STRICTURES.

Dr. Newman wished to call the attention of the Society to a new dilating material for strictures, namely, the laminaria digitata. He had been able to dilate strictures with it in an unusually short space of time. The last case of the sort which came under his observation, was particularly remarkable. The patient could scarcely pass any urine at all, and a No. 1 sound could not even be introduced. By the exercise of considerable patience, the stricture, which existed about six and a half inches from the meatus, was rendered passable when bougies of the sea tangle were employed. The dilatation was commenced with a No. 1, and only a few operations were required to enable a No. 7 to pass. At the end of a week he was able to pass a good sized sound, and the patient made a rapid and satisfactory recovery. He had operated in a similar manner with similar success upon three other patients, but these strictures were not so tight as in the one more particularly referred to.

MYELOID DISEASE OF FEMUR—AMPUTATION.

Dr. Parker presented a specimen of myeloid disease of the femur which he had removed by amputation from a gardener, a patient of Dr. Fonda of Jersey City. On examination of the case, Dr. Parker expected to find disease of the knee-joint, but discovered instead, that the lower extremity of the femur was double its natural size. There was no opening in the soft parts, nor was there any discoloration of the skin over the tumor. On handling the swelling, it was rather soft, and gave some of the peculiar egg-shell crumpling. The patient had suffered no considerable pain in the part until the last, when his system commenced to break down, in consequence of the rapidity of the development of the disease. The advice given to the attending surgeon was to amputate the limb, which was accordingly done a day or two after Dr. Parker saw the case in consultation.

He remarked that the specimen was a beautiful example of fibro-plastic tumor of the bone, beginning in the cancellous structure of the lower end of the femur. The groins were not involved in the disease. The patient was fifty-three years of age.

Dr. Whitehead remarked, that this specimen presented the appearance of a growth described by Paget as the myeloid tumor, which, in type cases, has a firm, fleshy feel, and resembles the substance of a fresh mammalian heart. He stated that this was a rare and interesting specimen; and that these tumors are much more frequently seen occupying the superior maxilla than any other region. Their principal anatomical element is the "myeloplaxe" of Robin, which is one of two new and distinct histological elements found in the marrow of bones, and described by this microscopist. The myeloplaxe is the large multi-nucleated cell of Paget and others. The other element is what Robin terms the medullary cell proper, and tumors composed principally of this last are exceedingly rare, and are never seen in the upper jaw, and have more the appearance of encephaloid tissue. What is generally known as myeloid tumor is most frequent in the upper maxilla, and has been well described by Eugene Nélaton in a valuable work on this subject, illustrated with plates.

Dr. Sands stated that a year and a half ago, he had presented to the Society an example of the same disease in the lower end of the humerus. The microscopic characters of the growth were precisely similar to those in Dr. Parker's specimen. He had learned from a relative of the patient that the disease had not returned, and that the patient was in the enjoyment of good health. He believed that it was a fact very well settled by extended observation, that these tumors, although possessing a certain degree of malignancy, did not show the history of true cancer.

EPITHELIOMA OF THUMB.

Dr. Rogers presented a specimen of epithelioma of the thumb, which he had removed by amputation from a female Dispensary patient. The bones of the thumb were perfect, the flexors and extensors being intact. The microscope showed that part of the tumor near the bone was composed very largely of stroma, with the ordinary infiltration of cancerous material, but, coming towards the surface, compound cancer-cells were observed, with a decrease of stroma. The disease was entirely confined to the soft parts around the thumb, which had grown to a prodigious size. It had been in existence something like four years.

He regarded the appearance of this disease in such a locality as a great rarity, inasmuch as in a recent work on deformities (Anandale) only one instance of the kind was reported, and that was a growth only three quarters of an inch in length, which appeared at one side of the nail of the thumb, and Mr. Paget, in mentioning the localities of these tumors, refers to the extremities as the very last in the list.

Dr. Hamilton stated that he had operated upon two cases of epithelioma of the extremities, one upon the thumb, and the other upon the heel, within the last year at Bellevue Hospital.

CANCER OF DURA MATER AND CORD.

Dr. Draper exhibited a specimen of cancer of the dura mater and cord. The patient from whom it was removed was an intelligent German boy, sixteen years of age, who on the 24th of last November, when in perfect health, having had no previous symptoms of disease whatever, being able to attend to his work as a tinsmith, and giving the history of perfectly healthy parentage, began to suffer from headache and pain in the back. The day after this suffering began he slept at night on the outside of his bed near an open window, and thought that his symptoms were aggravated thereby. He kept his room, though not his bed, until five days had elapsed, when on the morning of the sixth day, in attempting to get up, he felt very weak, and afterwards, making an effort to walk, fell. He tried the same thing on the seventh day with a similar result, and on the eighth day he was brought into the hospital perfectly paralyzed as to motion and sensation in his lower extremities. The paralysis extended to the abdominal muscles, and afterwards to a higher point. There was no evidence of there having been any febrile excitement out of the hospital. The sphincters of the bladder and rectum were not paralyzed when he was admitted. On the third day after admission, the anal sphincter gave way; the sphincter of the bladder remained intact for about ten days after admission, when his water began to dribble away.

Most of his water after this was drawn off by the catheter. After a time there was a certain amount of priapism. On the tenth day after admission the paralysis had extended to the intercostal muscles, and paralysis of sensation was found by the æsthesiometer to extend as high up as the fourth rib. At that point he

could feel the blow of the instrument, but no prick. Observations made upon the back corresponded with those made upon the anterior surface of the body. Sponges with hot and cold water were applied to the back, and the sensations were accurately appreciated to about the sixth dorsal vertebra. These observations, however, were made ten days before his death.

After his intercostals became paralyzed, his breathing was for the most part diaphragmatic, and remained so until death, which took place as the result of apnœa on the 20th of December.

The conclusion that Dr. Draper came to after the patient was admitted into the hospital, was, that he was suffering from softening of the cord from the existence of complete paralysis, both of sensation and motion, with an absence of the reflex movements. He further presumed that the softening, commencing at the eighth dorsal vertebra, was inflammatory in origin.

The post-mortem examination, at which Dr. D. was not present, revealed a softening of the cord, from the second dorsal vertebra, as low down as the lumbo-dorsal enlargement. The softening in some parts was to such a degree as to be almost diffluent. There was no extreme congestion anywhere. On examination of the membranes, a growth was discovered on the external surface of the dura mater, which extended from the second to the ninth dorsal vertebra, and this growth was medullary in character.

On microscopic examination, the exudation was found to be composed of rudimental connective tissue, fibre cells, and nuclei in great abundance. The growth was, in fact, almost entirely cellular; the nuclei were either round or oval, varying in dimensions from the 2000th to the 250th part of an inch, the whole being imbedded in the granular substance of the connective tissue referred to.

The specimen was of a good deal of interest to him in connection with a similar one which he had exhibited a year ago. In the latter instance the disease was, however, situated lower down, and did not involve so much space, being confined between the tenth dorsal and first lumbar vertebræ. In that case the disease was acute in its course, lasting scarcely three months; the boy was nineteen years of age, having previously enjoyed good health. The last specimen was also acute in its course, not lasting one third the time of the former; this circumstance could, however, be explained by the extension of the disease so high up as to involve the intercostal region.

Dr Cutter wished to state that the little patient from whom he had exsected the entire two-thirds of the radius, and whose case had already been reported to the Society, had gained in flesh since the operation; the wound had healed, there was pronation and suppuration to a certain extent, and four weeks after the operation she had been enabled to reach an octave on the piano.

The society then adjourned.

Dr. Cormeau has been elevated to a seat in the Senate of France—while the same honor is said shortly to await M. Nélaton.

M. Bérard, Professor of Chemistry at the Faculty of Medicine, has been decorated with the Cross of Knight Commander of the Legion of Honor.

M. Michel Lévy, Professor at Val de Grace, has been nominated Grand Officer of the Legion of Honor.

Rokitansky has been promoted to the High Chamber of Austria.

M. Lanza has been elected President of the Lower House of Italy.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, March 8, 1868.

Dr. Alfred C. Post, President, in the Chair.

THERAPEUTIC VALUE OF CERTAIN ARTICLES OF THE MATERIA MEDICA OF RECENT INTRODUCTION.

Dr. Griscom repeated his paper with the above caption read before the New York State Medical Society, at its last meeting, a brief synopsis of which has already been given in our report of the proceedings.

The articles in question are the *sulphite of soda* and *glycerine*.

Dr. Biddins said that it would be well to inquire into the purity of the various samples of glycerine sold in the shops, since he had known of a great deal of irritation to arise from the use of certain specimens in the case of chapped lips.

Dr. Peaslee alluded to the well known experiments of Prof. Polli with the alkaline sulphites, and his conclusions upon their value. He said that in a case of threatened septicæmia in ovariotomy, he had used ten grains of the sulphite of soda in solution every four hours, and he thought with marked benefit, although it might be stated in all fairness, that he had at the same time given quinine and stimulants. He had also used it successfully in a case of a low form of scarlatina, and had arrested an erysipelas in a few days, by its exhibition, internally and externally, at one and the same time. The strength of the external application was $\frac{7}{}$ ss.—Oi.

He should certainly regard it as a valuable remedy in flatulence dependent upon fermentation. As a matter of information, he would state that the disulphite of soda was exceedingly unpleasant in solution.

Dr. Van Kleeck referred to the fact that some of the apothecaries here had no well-defined ideas of the chemical differences between the sulphite, bisulphite, and hyposulphite of soda. The first of these in taste resembled "*pop-corn*."

Dr. Bokkley, after a general interchange of views upon the essential differences of the various salts, said that he believed that the hyposulphite of soda was much used in the arts, and therefore more readily obtainable, but it was uncertain, irregular, and apt to gripe the bowels. He had quite early used externally the sulphites in solution in cases of cutaneous disease, long before their antiseptic æmic virtues were suspected. This was particularly the case in herpes tonsurans, in which the action of sulphurous acid was desirable.

ADVANTAGEOUS INCREASE IN THE SIZE OF CUPPING GLASSES.

Dr. Biddins called attention to the advantage of an increased size in dry cups, as being greater than might at first be supposed. In support of this view, he related the case of a patient who, in consequence of an acute lumbago, was unable to rise from his chair; six cups of the size of the ordinary goblet were applied in the course of forty-eight hours, and the patient was enabled to walk with his cane under his arm. The Doctor had adopted this plan of treatment in pleurodynia, and was well satisfied with it.

NEW THERAPEUTICAL AGENTS.

Dr. Peaslee in the course of the evening exhibited samples of medicated vaginal suppositories of different colors as a matter of distinction. These articles were intended to supersede injections.

Dr. Post also exhibited a very beautiful specimen of isinglass animal membrane put up in rolls of a yard each. This possessed the advantage over other specimens of adhesive plasters in accurate adaptation to any irregularities of surface.

The Academy then adjourned.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

STATED RE-UNION, FRIDAY, JANUARY 17, 1868.

DR. GURDON BUCK, PRESIDENT, in the Chair.

AFFECTIONS OF BURSÆ MUCOSÆ.

DR. F. H. HAMILTON presented a report of ten cases of enlarged bursa patellæ, with comments upon the pathological anatomy of the affection. (Vide page 81.)

DR. ENOS had found the structure of the bursa over the trochanter very similar to that described by Dr. Hamilton in the patellar bursæ. His own impression was that most, if not all, of the bursæ were the result of motion and pressure. We occasionally find effusions into the natural cavities, as of lymph into the pericardium, so whipped up by the motion of the parts as to resemble the contents of these bursæ. The walls of the bursal sacs are often so very thin as to appear unequal to retaining the fluid; but doubtless they gradually gain firmness under the constant friction.

DR. POST'S experience differed from Dr. Hamilton's in regard to solid tumors over the patella. He had excised one of cartilaginous hardness, in which the cells were almost completely obliterated. He had seen several others in which the cell-walls were very thick, but none so nearly approaching solidity.

DR. WHITEHEAD had, in 1858, while a student in the service of M. Boyer, at the Hôtel Dieu, seen a cyst, of the same general character with these bursal tumors, produced by a kick upon the back. It was of the size of a small orange, somewhat flattened. The liquid contained in it, evacuated eight or ten days after its formation, was of a lemon color. (The contents of these tumors vary in consistency, they vary also in color from a light lemon to a dark chocolate.) The location of this tumor, its rapid formation, and the firmness of its walls, composed, doubtless, of condensed areolar tissue, made it somewhat remarkable. The mechanism of its production was probably essentially the same as in housemaid's knee. Between the skin of the back and the subjacent muscles is interposed a layer of very loose areolar tissue, allowing great freedom of motion. This being ruptured by the blow, a certain amount of fluid is poured out; and owing to the constant sliding (*glissement*) of the parts upon each other, the small cyst so formed is rapidly enlarged. In the *Archives Générales* for 1853, M. Morel-Lavallée has an extended article—"*Epanchements Traumatiques de Sérosité*"—in which he reports a number of similar instances.

Ganglion Dr. W. had seen treated, with the happiest results, by the seton. In a case of palmar ganglion extending above the annular ligament, that had occurred in the service of M. Boyer, the contents of the sac were evacuated, and a seton of lampwick, as large as the little finger, was passed beneath the ligament, and renewed daily for upwards of two months. This gave rise at first to some constitutional disturbance, but it soon subsided. Six months later the patient was seen, and he had perfect use of the hand and fingers.

DR. W. had seen an eminent surgeon operate for what was supposed to be caries of the trochanter major, until the incision showed that it was a diseased bursa with which he had to deal. A number of small fistulous openings, like those seen in necrosis, had led to the error in diagnosis.

DR. HAMILTON said that palmar ganglion was always difficult to treat. He had seen two cases that terminated very unfavorably by spontaneous suppuration of the sac, the pus burrowing among the bones of the carpus. The second he had opened, and had enormous discharge of matter for a long time, with great constitutional disturbance. His next case he did not meddle with. He recollected a case upon the dorsum of the foot, where the surgeon had attempted to dissect out the sac, but, finding it near a tendon, had desisted; yet the man nearly lost his life. It was dangerous to interfere with ganglia when near tendons. It had been questioned whether these are within the sheath of the tendon, or in laminæ of the sheath. If the latter, operations would be less hazardous.

DR. POST related a case in which the injection of iodine had caused great disturbance, though the patient ultimately recovered.

DR. DAVIS had used an ointment of corrosive sublimate, a drachm to the ounce, to produce absorption. It destroys the cuticle, and its action should be limited by adhesive plaster.

DR. FOSTER wished to hear what was thought of the treatment of ganglion by violent rupture.

DR. HAMILTON considered this method applicable only to those ganglia situated on the back of the wrist.

DR. POST had treated a number in this way, and had never had them return. He preferred for the purpose a wooden bat. After the rupture, the tumor should be strongly compressed by the thumbs until the sac was emptied; and then a compress should be applied and firmly bandaged.

DR. BUCK had found the tumors return after this treatment. He had tried evacuating the sac, by means of a cataract needle, but it had refilled, and he had then excised it.

DR. DAVIS had practised opening the sac by Dr. Buck's method, allowing the fluid to escape, not externally but into the surrounding cellular tissue.

DR. PEASLEE had in a few cases ruptured the ganglion on the back of the wrist, but never without seeing it return. In many cases the walls are so thick that even any violent blow will not rupture them. He had been accustomed to evacuate the fluid by means of a very fine trocar, applying compression immediately and keeping it up for a fortnight. After this treatment he had never had a return of the tumor.

DR. POST had never failed to rupture them, though not always succeeding at the first stroke.

DR. PEASLEE had often evacuated the sac, not by a cataract needle but by a very fine trocar, introduced through a valvular opening; pressure being applied immediately and maintained during the escape of the fluid, so as to insure that no air should enter. Treated in this manner the tumors had never returned, nor had any inflammation resulted. In regard to their structure, his investigations had led him to suppose these ganglia nothing more than diverticula from the sheaths of the tendons. As to the patellar bursa, his attention had been called to it some years ago, and it was his impression that it was not congenital, but was produced by use; though it might be found in almost every adult. He usually found it measure from three-fourths of an inch to an inch in diameter. He had supposed that inasmuch as it is the result of use and of enlargement of the cells of the areolar tissue, therefore we do not find such definite walls as in the case of some other cysts. The tumor of the back described by Dr. Whitehead appeared to him, as to Dr. W., to have been produced in a similar manner, only more rapidly. He had never hesitated to open these tumors freely at once and let out the fluid; and he had seen no bad results from the practice. He had never seen the condition mentioned by Dr. Hamilton; had never found the fluid sanguinolent. His observations had been made chiefly among sailors, in Maine, where he had gone for thirteen years in succession, and seen a great many cases of this character. He had always kept the patient perfectly still, and prepared for serious inflammation, but it never

came. In one case inflammation occurred in the sac itself, but it went no further.

Dr. Garrish had found it a good plan, where the ganglion on the back of the hand had returned after rupture, to scarify subcutaneously the inner surface of the sac. He had seen amputation the consequence of opening a patellar bursa.

Dr. Hamilton had had a case in which the bursa of the ligamentum patellæ was the one affected. He had ventured to open it and introduce a very small silk thread. The patient, who had left his office on a severely cold day, finally died of inflammation of the knee-joint. In this case the bursa was found to communicate with the joint, but that may have been due to the inflammation. Dr. H. had never been able to find such communication in the healthy subject.

SUPERNUMERARY FINGERS.

Dr. Garrish presented two small tumors which he had removed from an infant eleven days after birth. They had been attached, by pedicles half an inch long, one to the middle of each little finger. Though now shrunk and soft, they had been at birth many times larger than the fingers themselves, and were quite hard until the tenth day. In one the doctor thought he had discovered an attempt at the formation of a nail. Pinching either of the tumors would make the child cry.

Dr. Yale had met with a case where two fingers, each comprising the distal phalanx and a part of the next with perfect nail, were suspended by pedicles one-third of an inch in length.

Dr. Post had seen a similar case.

Correspondence.

BROMIDE OF POTASSIUM IN FUNCTIONAL EPILEPSY.

To the Editor of the Medical Record.

Sir—I observed, with some interest, the notes of a case of *apparent cure* of functional epilepsy in your issue of the 15th Feb. The following case, analogous in respect of being functional, and also as to treatment, I beg leave to submit:

A young lady, æt. 16, residing in this city, came under my care about the 1st of Jan., 1867—that is, a little more than a year ago, who had suffered from epilepsy nine years. The fits averaged from twelve to fifteen in a week—there would sometimes be over twenty. What is very singular is that they assumed somewhat of an intermittent character. She usually had them during the last three days of each week. Every ordinary, and a good many very *extraordinary* plans of treatment had been tried—all, however, had for several months been abandoned, and the case lapsed apparently, as many of that ilk do, into an *opprobrium medicorum*. Sulphate of zinc and belladonna, which formed my first prescriptions, exercised no control over the fits whatever. I then endeavored, carefully, to find some structural lesion on which the paroxysms might depend, but with the exception of portal congestion and dysmenorrhœa, which soon yielded to the Pil. Aloe et Myrrhæ with Muriat. Ammon., none could be traced.

The bromide of potassium was now determined on, and the type of the formulas prescribed was the following:—℞ Potass. Bromid., ʒ j.; Ammon. Bromid., ʒ ij.; Fl. Ext. Cinchon., Aq., *aa.*, fl ʒ ij. Mix. Cap. un. coch. parv. ter in die.

The fifteen grains of Potass. Bromid. which each dose thus contained, soon exercised a marked influence over the fits. From an interval apart of a week, or ten days even, they became quite irregular and *much lighter*, and in a few months only occurred in the "petit mal" form, scarcely occasioning more than temporary discomfort, and followed by none of the cerebral engorgement which produces the ordinary stertorous coma as a sequela of "le grand mal." During the summer, intervals of four, five, and six weeks elapsed between the fits, and in one instance *thirteen weeks*. A large seton, introduced just below the occipital protuberance, seemed to do no good. I now discontinued the medicine gradually, when they at once returned with unabated vigor, and up to the present writing they are simply *modified* by the drug—not cured. That the bromide, by its subduing action on the vaso-motor branches of the sympathetic, produces contraction of the parts supplied through the circle of Willis, and is thus a nervous sedative, admits, I think, of no doubt. That we have got in this drug—(a *fashionable* one, at present,)—any specific for epileptiform convulsions, even purely functional, is very far from true.

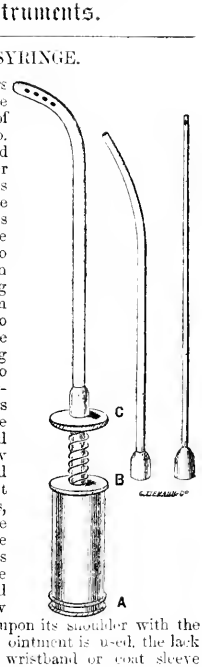
Yours very truly,

Edward C. Huse, M.D.

Rockford, Ills., March 10th, 1868.

New Instruments.

A NEW SYRINGE.

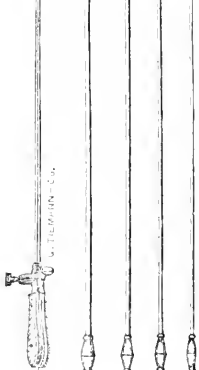


We present our readers with a new form of syringe devised by Mr. Stohlmann, of the firm of Tiemann & Co. It is made of hard rubber and consists of a hollow cylinder and a staff. The staff is nothing more than a tube one end of which passes through an opening into the chamber, and is attached to a piston having a perforation in its centre, corresponding to that in the tube. From the shoulder on the staff to the upper portion of the chamber is a spiral spring which draws up the piston to the top of the internal portion of the cylinder, and thus enables the syringe to be easily filled. The lower end of the cylinder has a screw cap, which can be removed for the purpose of loading it with semi-solid substances, such as ointments and the like. The advantages of the instrument over others of its sort, are that it can be worked easily with one hand (by bracing it in the hollow of the palm and pressing upon its shoulder with the two forefingers), and when ointment is used, the lack of danger in soiling the wristband or coat sleeve by any regurgitation. The principle upon which it works is obvious, the pressure of the piston upon the column of fluid or semi-solid forcing the substance through the tube. The shoulder is provided with a screw on its upper surface to which can be attached any sized tube for the different canals of the body. It is of course only really useful in those cases which do not require a continuous injection, or more than one charge of the fluid at a time, and hence will answer a good pur-

pose in hemorrhoidal affections where an anodyne ointment is indicated; and in various affections of the urethra, throat, ear, uterus, etc. In most cases the patient can make the application without assistance.

HOLT'S INSTRUMENT FOR DILATATION OF STRICTURES OF THE URETHRA.

In another portion of the RECORD, a considerable amount of space being occupied in the discussion of Holt's dilator, we have thought that a short description of the instrument and its mode of action would not be uninteresting to such of our readers as may have heard of it for the first time. It is shaped like an ordinary sound, the staff being hollowed in its interior, and split horizontally in its long axis, as far as the curve. The extremity of the curve is perforated, and is continuous with a small tube which finds its way through the handle. The instrument is first passed through the stricture, until some urine escapes through the small tube, over which tubes, with conical extremities and of larger size are slipped. These latter tubes, when they arrive at the split portion of the staff, dilate them to a greater or less degree, until finally the stricture gives way. It is expedient to retain, for a few moments at a time, the smaller sized dilators before employing those of larger calibre, and for this purpose a screw is provided near the handle for the purpose of keeping the dilating tube in position.



Although this instrument is by no means a new one, we have thought best to describe it at this time, for reasons above stated.

Medical Items and News.

NEW REGULATION TO INSURE ATTENDANCE OF MEDICAL STUDENTS ON LECTURES IN ENGLAND.—The Medical Teachers' Association, of England, have adopted a rule requiring that no Professor sign any schedule necessary to admission for examination before any of the examining boards, unless, by the system of marking recently adopted, it appears that the student in question has attended at least two-thirds of the whole number of lectures comprising the course represented by the schedule or certificate.

THE RATION OF THE BRITISH SOLDIERS IN ABYSSINIA consists of bread 1 lb., or flour 1¼ lb.; rice 2 oz.; potatoes 12 oz.; and includes onions, salt, sugar, tea, and rum.

LAENNEC AND DUPUYTREN.—Statues of Laennec and Dupuytren will soon be erected in their native towns.

NEXT MEETING OF THE AMERICAN MEDICAL ASSOCIATION.—The nineteenth annual meeting of the American Medical Association will be held in Washington, on Tuesday, May 5th, 1868, at 11 o'clock A.M. The following committees are expected to report:—On Ophthalmology, Dr. Jos. S. Hildreth, Illinois, chairman; on Cultivation of the Cinchona Tree, Dr. J. M. Toner, D.C., chairman; on Surgical Diseases of Women, Dr. Theophilus Parvin, Ind., chairman; on Rank of Medical Men in the Navy, Dr. N. S. Davis, Ill., chairman; on Insanity, Dr. C. A. Lee, N. Y., chairman; on American Medical Necrology, Dr. C. C. Cox, Md., chairman; on Leakage of Gas-Pipes, Dr. J. C. Draper, N. Y., chairman; on Medical Ethics, ————, chairman; on Plan of Organization, Dr. C. C. Cox., Md., chairman; on Provision for the Insane, Dr. C. A. Lee, N. Y., chairman; on the Climatology and Epidemics of Maine, Dr. J. S. Weston; of New Hampshire, Dr. P. A. Stackpole, Vermont, Dr. Henry Janes, Massachusetts, Dr. Alfred C. Garrett, 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 Harriss, Missouri, Dr. G. Engelman, Alabama, Dr. R. Miller, Texas, Dr. T. J. Heard, Illinois, Dr. R. C. Hamil, Indiana, Dr. J. F. Hibberd, District of Columbia, Dr. T. Antisell, Iowa, Dr. J. W. H. Baker, Michigan, Dr. Alan. Sager, Ohio, Dr. J. W. Russell, California, Dr. F. W. Hatch, Tennessee, Dr. Joseph Jones, West Virginia, Dr. E. A. Hildreth, Minnesota, Dr. Samuel Willey; on Clinical Thermometry in Diphtheria, Dr. Jos. G. Richardson, N. Y., chairman; on the treatment of Disease by Atomized Substances, Dr. A. G. Field, Iowa, chairman; on the Ligation of Arteries, Dr. Benj. Howard, N. Y., chairman; on the Treatment of Club-Foot without Tenotomy, Dr. L. A. Sayre, N. Y., chairman; on the Radical Cure of Hernia, Dr. G. C. Blackman, Ohio, chairman; on Operations for Hare-Lip, Dr. Hammer, Mo., chairman; on Errors of Diagnosis in Abdominal Tumors, Dr. G. C. E. Weber, Ohio, chairman; on Prize Essays, Dr. Chas. Woodward, Ohio, chairman; on Medical Education, Dr. A. B. Palmer, Mich., chairman; on Medical Literature, Dr. Geo. Mendenhall, Ohio, chairman. Secretaries of all medical organizations are requested to forward lists of their delegates as soon as elected, to the permanent secretary, W. B. Atkinson.

POLICE SURGEON HIRAM A. POOLER was recently presented by the widow and children of the late Police Commissioner John G. Bergen, with a very handsome and complete case of surgical instruments, as an evidence of their appreciation of his services during the illness of Commissioner Bergen. The case bears a suitable inscription.

THE COBRA POISON.—His Royal Highness the Prince Rama Varma offers 1750 rupees for the discovery of an antidote to this poison. To facilitate investigation, Dr. Shortt of India, who has himself carefully studied the subject, offers to forward to medical men, properly endorsed, anything they may need in their researches, including living specimens of the poisonous reptiles.

A CURIOUS CASE.—In the London Pathological Society, on the 4th inst., Mr Kelley exhibited a specimen consisting of two kidneys, both of which were found on the right side, none being on the left. They were situated one above the other, the one belonging on the right side being uppermost.

SANITARY SCIENCE IN INDIA.—The Government of India has appointed one sanitary officer to each province, one of whom is the sanitary adviser of the Viceroy and commander-in-chief.

Original Communications.

A REPORT ON ONE HUNDRED CASES OF CATARACT,

OPERATED ON BY THE LINEAR SECTION IN THE BORDER OF THE SCLEROTIC.

By DR. H. KNAPP,

PROF. OF OPHTHALMOLOGY AT THE UNIVERSITY OF HEIDELBERG.

[A detailed account will be given in the xiv. vol. of the "Archiv for Ophthalmologie."]

I HAVE already published, a year ago, in the xiii. vol. of the Arch. f. Ophth., the results of the first hundred cases of cataract upon which I operated after the method above mentioned, and expressed myself highly in favor of this operation, which was devised principally by Prof. von Gräfe. Since that time I have had the opportunity of operating upon another hundred cases, the results of which have but confirmed my favorable opinion of the same method. I performed the section entirely within the sclerotic border (limbus conjunctivæ) following rather exactly the direction of a greatest circle track. The length of the internal wound rarely exceeded 9 mm. The radius of curvature of the inner surface of the sclerotic border may be assumed at 8 mm. in length. The very largest cataracts possess an equatorial diameter of 9 mm., and a polar distance of 4 mm. From these data the length of the inner wound in the sclerotic border, affording easy passage to the largest cataracts, is calculated to be 9·47 mm., the area of the sclerotic circle belonging to it being 10·14 mm. in length. When the angles of the wound of 9·5 mm. approach each other one-half mm., the wound itself forms an opening of 4 mm. at its greatest breadth. A wound of such dimensions, sufficient for the passage of the largest cataracts, can be made to gape either by depressing its posterior (sclerotic) lip or by drawing both lips asunder. Under these conditions the cataract makes its exit without causing any contusion of the wound or losing its cortical layer.

Von Gräfe has recently made an addition to this method, which consists in pressing gently with a spoon upon the cornea in a direction from below upwards towards the wound. In this manner the crystalline is carried before the instrument through the opening in the sclerotic. I tested this manœuvre as soon as it came to my knowledge, and found it to be a decided improvement on the previous mode of extraction. While pressing with the convex surface of the spoon on the cornea, I find it of advantage to depress the posterior lip of the wound towards the centre of the eye, and observe that by this proceeding the lens glides out easier and with less loss of cortical substance than when this is omitted and the cataract itself left to open the wound by crowding both lips apart.

In the above-mentioned hundred cases the operation was quite normal, *i. e.*, without any accident, in seventy-two; in eighteen there was an escape of a portion of vitreous humor, preventing the complete removal of cortical substance in six of these cases. This rather frequent loss of vitreous can be accounted for in my having intentionally, in many cases, performed the section very remote from the margin of the cornea. In ten cases of normal operation I did not succeed in cleaning the pupil from all cortical substance. Other accidents, as hæmorrhage, iridodyalisis, etc., did not happen.

Eighty-four cases healed without any disturbance. Pure, uncomplicated *after-bleeding* into the vitreous space occurred three times, but disappeared without having damaged the eye. *Iritis* manifested itself nine times, in one case complicated with purulent *capsulitis* (proliferation of the intracapsular cells). All the cases of iritis healed well, having resulted in good sight at the period of the patients' leaving the hospital, or affording excellent conditions for the operation of secondary cataract.

Transitory Turbidity of the vitreous (Hyalitis diffusa) was observed twice. *Two eyes were lost*, the one by *purulent iritis*, the other by *primary suppuration of the cornea*, both cases having been operated upon without the least accident.

The average *duration of healing* (the patients sojourning in the hospital) was 17·8 days.

The operation of *artificial pupil*, for the sake of converting an incomplete into a complete success, was indicated four times. I performed more frequently, about ten times, the early *discission* (in the second or third week) of capsular opacities with one or two needles. This proceeding, which I saw executed, in October, 1867, by Messrs. Bowman and Critchett, in London, I found not only innocuous, but also advantageous for obtaining a clear pupil before the patient is dismissed.

The *age* of the patients did not exert a noticeable influence on the healing process after this method of operating.

The *hyper-mature cataracts*, seventeen in number, presented the least favorable results. The operations upon five *complicated cataracts*, where good perception of light was preserved, and upon three *diabetic cataracts*, resulted in perfect success.

Of seventy-two cases where the operation was a normal one, sixty-nine, *i. e.*, ninety-six per cent., had regained good sight at the period of the patients' leaving the hospital. The ten cases in which portions of the cortical substance remained in the eye, but without simultaneous escape of vitreous, obtained good sight mostly at a later period.

The examination of the *acuteness of vision* was always made at the time of the patients' leaving the hospital, *i. e.*, when the healing and clearing up the eye was not yet terminated but only assured. Later examinations revealed a power of vision essentially better; but as such were not to be obtained from all patients, and observations made under different conditions have no comparative value, I prefer to announce the primary results of the operation, such as were noticed at the time of the dismissal.

The hundred cases showed the following visual acuteness (S.), which was determined with Snellen's test-types, at a distance of twenty feet, in a moderately illuminated room:

In 1 case S.$=\frac{2}{3}$ the normal; 7 S.$=\frac{1}{2}$; 31 S.$=\frac{1}{3}$; 22 S.$=\frac{1}{4}$; 11 S.$=\frac{1}{5}$; 4 S.$=\frac{1}{6}$; 9 S.$=\frac{1}{10}$; 1 S.$=\frac{1}{12}$; 2 S.$=\frac{1}{15}$; 2 S.$=\frac{1}{20}$; 4 S.$=\frac{1}{30}$; 1 S.$=\frac{1}{60}$; 2 S.$=\frac{1}{200}$ (viz., counting fingers at a distance of 2 feet) 2 S.$=0$ (blindness).

A general summary of these cases showed eighty-six *perfect successes* (S.$=\frac{2}{3}$ to $\frac{1}{10}$, viz., faculty of reading finest or ordinary print); 12 *imperfect successes* (S.$=\frac{1}{12}$ to $\frac{1}{200}$, viz., reading larger types and being able to walk about without assistance), and 2 failures.

These being only primary results and a spontaneous amelioration to be expected in all cases (two imperfect successes S.$=\frac{1}{15}$ and S.$=\frac{1}{60}$ showed soon after S.$=\frac{2}{3}$ and S.$=\frac{1}{2}$), I may fairly assume that half of the remaining ten cases of imperfect success will turn out to be perfect, either spontaneously or by a subsequent operation. The statistics of the results obtained then offer the following percentage: Two failures, five imperfect, and ninety-three perfect successes. Every member of the medical profession, remembering the results of oper-

ations for cataract, as they were performed in previous years, will, by this table and other similar ones, recognize the extraordinary progress operative ophthalmology has made during the last years.

Heidelberg, March 10, 1868.

REPORT OF A CASE OF MEDIAN LITHOTOMY.

By CHARLES C. LEE, M.D.,

NEW YORK.

I am induced to offer the following case for publication, as an additional contribution to the value of Median Lithotomy in young subjects.

The patient, a thin, delicate-looking boy, æt. ten years, was brought to the Bellevue Dispensary on the 7th February with the following history:

When he was three years old, symptoms of stone occurred, and were soon followed by complete retention of urine; his medical attendants relieved the retention, but advised against any interference with the calculus, hoping probably it would be passed per urethram.

This never occurred, and the calculous symptoms persisted; the retention being followed by partial incontinence of urine, and the child growing up thin and delicate, though never confined to his bed. Examination revealed a stone at the base of the bladder which seemed about the size of a hickory nut, although this was only inferred by drawing the sound across it, as the urethra was too small to admit any lithotrite at hand.

The urine was normal in sp. gr. and scanty, depositing no ropy sediment, but a hazy precipitate composed of pus and blood corpuscles in limited quantity, and a large excess of uric acid crystals; repeated examinations by Drs. Keyes, Humphreys, and myself, yielded the same result.

The boy was ordered ferruginous tonics and cod-liver oil, which he took steadily until February 29, when he was prepared for operation; and, with the assistance of my friends Drs. Humphreys and Raborg of this city, and Dr. A. N. Dougherty of Newark, Median Lithotomy was performed as proposed by Mr. Allarton * and modified by Dr. Markoe. † I was induced to select this method, partly because the patient had so narrow a perineum as almost to preclude the lateral operation, and partly from the great advantages claimed for it by Dr. Markoe.

The little patient was in bad condition for an operation of any kind, having such severe bronchitis as to render etherization both difficult and hazardous. When the membranous urethra had been laid open in the manner described by Allarton, a broad probe-pointed director, devised ‡ by Dr. Little, was passed down the groove of the staff, and, between the two, the prostate was cautiously dilated with the finger. This process I found more difficult than I had inferred from Dr. Markoe's paper, or Mr. Allarton's statements—which may, however, have been due to my inexperience, as I had never seen the operation performed. The stone was readily found, and proved to be about the size supposed; had it been too large to admit of ready extraction, I was prepared to crush it *in situ* with a strong pair of straight forceps, rather than deviate from the steps of the operation by incising the prostate. In its withdrawal, which was slowly effected, a small portion of the cortical layer crumbled off, but the fragments were easily removed by the forceps; and after thoroughly washing out the bladder, the patient was removed to bed, having lost certainly not more than a tea-spoonful of blood during the operation.

Scarcely any oozing followed, and the boy reacted well from the anæsthetic, which had been a source of more concern than any step of the operation; and during the next day passed most of his urine through the urethra. No untoward symptom ensued; the upper half of the wound healed by first intention, and the boy was allowed to sit up on the ninth day, as he could hold his water three or four hours.

There had, indeed, been no involuntary drainage, or other evidence of prostatic atony, from the date of the operation. The bowels were moved spontaneously on the fifth day, and although the perineal wound still remains open to a slight extent, the patient is practically well.

The stone weighed 75 grs. and consisted of an uric acid nucleus, covered with cortical layers of the triple phosphates; no uric acid could be found on the surface of the stone, and it was somewhat singular, under these circumstances, that the urine should have been loaded with uric acid crystals, while it presented no phosphatic deposit.

In view of the facility of the operation and its remarkable freedom from hæmorrhage, unless the bulb be wounded, which it seems to me need never occur with ordinary care, I confess I should prefer it to the lateral method in any case similar to the foregoing. But it may well be doubted whether, as Mr. Allarton believes, it is destined to supplant the lateral operation in general practice; and it is but just to add that other lithotomists of great experience and repute have not found it to yield the ratio of cures quoted by Mr. Allarton and Dr. Markoe.

The former remarks: "The average mortality is one in twelve, as compared with lateral lithotomy, which is one in five or six; a saving of life equal to one half;" while in a table of forty-four cases reported by Mr. Williams of the Norfolk and Norwich Hospital, there were eleven deaths, giving a mortality of one in four. Mr. Alfred Poland * and Sir Henry Thompson † also clearly intimate their unwillingness to accept Mr. Allarton's statistics.

53 West Thirty-second street, March 14, 1868.

* Median Lithotomy, 1863.
† N. Y. Med. Journal, April, 1867.
‡ Loc. cit. p. 13.

CASE OF SUPPOSED SPOTTED FEVER.

BEING A SPECIAL REPORT MADE TO DR. E. B. DALTON, SANITARY SUPERINTENDENT OF THE METROPOLITAN BOARD OF HEALTH.

By THOMAS H. WHITE, M.D.,

SANITARY INSPECTOR.

The following facts, with regard to a case of reported "spotted fever," which died in this city upon the 19th instant, are respectfully submitted.

W. A. H., aged 27 years, a well-built, muscular man, captain of a canal barge, was attacked on Saturday morning, May 18, with a severe headache.

In the afternoon, feeling somewhat better, he went out and collected some money due him, visiting several groverymen. He returned to his barge about four o'clock, feeling more unwell, and saying that he thought he was going to have a chill. During the evening and night he vomited a little, and was freely purged. He passed a restless night, the headache continuing. The following morning he was confined to his berth and slightly delirious, and about eleven o'clock an eruption was observed upon the face, arms and body.

A physician was called in, and prescribed some meas-

* Holmes's Syst. of Surgery, vol. iv., p. 469.
† Practical Lithotomy and Lithotrity, pp. 63, 258.

ures of relief. His condition growing more unfavorable after the physician left him, Dr. H. G. Piffard was summoned in haste to his boat at four o'clock.

From Dr. Piffard the following statement of the symptoms presented at this time is derived.

The face was dusky; extremities cold: pulse about 100, and very feeble, being scarcely perceptible at the wrist; respirations slightly spasmodic but not accelerated; bowels loose; no vomiting. A very abundant petechial eruption covered the entire body, the spots varying in size from that of the head of a pin to that of a half dime, and consisting of true ecchymoses. There was slight delirium, but patient answered questions rationally, and complained of headache and pain in the back of the neck. Opisthotonos existed, confined to the upper portion of the spinal column, the head being thrown a little backward.

Remedial measures were of no avail, the respiration became more impeded and spasmodic, and between five and six P.M. he died, having been unconscious for about twenty minutes before death.

On Monday morning, in accordance with your instructions, I visited the barge and examined the body. From its appearance, and the history obtained, I thought it to be a case of malignant disease, and suggested that an autopsy be held to ascertain, if possible, its true nature.

The friends consenting, a post-mortem examination was made at Bellevue Hospital, twenty-two hours after death, Dr. Piffard being present. The following appearances were observed: Rigor mortis well marked, surface of the body livid and covered with an ecchymotic eruption. On opening the thoracic and abdominal cavities the lungs were found to be moderately congested. On their pleural surfaces were a few ecchymotic spots, and along their free margins occasional apoplectic effusions. The heart was healthy in appearance, its cavities containing fluid blood but no clots. Beneath the pericardium were a few ecchymotic spots. The liver was very much congested and enlarged, with occasional ecchymoses on its surface.

The kidneys were likewise congested and increased in size, weighing together fourteen ounces. Beneath the microscope both the liver and kidneys were found to be fatty. Considerable serous effusion was found in the peritoneal cavity, and the fatty tissue around the kidneys beneath the peritoneum was infiltrated with serum, as was also the mesentery. The mesenteric glands were slightly enlarged. On the parietal and visceral layer of the peritoneum hæmorrhagic effusions were abundant. There was a little freshly exuded lymph on the surface of the intestines, but no adhesions. The intestines were filled with fluid feculent matter. Beneath their mucous membrane there were numerous ecchymoses. The agminated glands appeared normal, but the solitary glands in the ileum, just above the ileo-cæcal valve, were prominent and slightly enlarged. Slight exfoliation of the epithelium was observed here and there in a few small patches. The spleen and bladder were normal. On opening the cavity of the cranium the venous sinuses were found filled with blood, and the vessels of the pia-mater appeared very much congested, but no lymph or signs of meningitis were observed.

On the superior surface of the cerebellum, commencing at its anterior border, beneath the arachnoid, there was an effusion of fluid blood an inch and a half in length, half an inch in width, and about a line in thickness. Another similar effusion filled the fourth ventricle, and in the substance of its walls there was a small clot, the size of a split pea.

The substance of the brain, especially the fornix, was somewhat softened.

On laying open the vertebral canal, a clot of blood, about three inches in length, and external to the theca, was found surrounding the upper part of the cord, beginning at the lower portion of the medulla oblongata, and extending downward.

The previous history of the case, so far as it could be gathered from his brother, and other persons who had been with him recently, is as follows: For a week or ten days previous to his death it had been noticed that he had been rather listless and disinclined to move about ("looking dumpish," was the expression), and had complained of not being able to sleep well at night, owing to the offensive odors arising from the potatoes with which his barge was loaded, several barrels of which had begun to decay. He stated that at night he was frequently compelled to open the hatches of his cabin in order to sleep. The cabin was small, but clean, and easily ventilated, and contained a good-sized cooking-stove, in which a fire was generally kept.

He had slept on his barge every night since he came to the city last fall.

From the clinical history of the case, the post-mortem appearances, the nature of the probable poison which led to such a rapid disorganization of the blood, and the fact that the patient is not known to have been exposed to the contagion of typhus, it would appear that the disease resembled that known as spotted fever, or cerebro-spinal meningitis. Though one of the characteristic lesions of the latter disease was not found, yet there was a tendency to the exudation of lymph on serous surfaces, as shown by that found on the peritoneum, and if death had not resulted from apnœa by reason of the impeded respiration caused by the hæmorrhagic effusions in the brain and around the spinal cord, it is not unreasonable to suppose that meningitis might have been developed.

In conclusion, I would state that the decaying potatoes were removed from the barge and the vessel thoroughly disinfected.

New York, May 28, 1867.

TWO CASES OF URETHRAL DISCHARGE WITHOUT APPARENT CAUSE.

By W. F. MONROE, M.D.,

PHYSICIAN TO THE BOSTON DISPENSARY.

Mr. X., an intelligent man, with a large, well-made, and powerful frame, light complexioned, with a clear and rather thin skin, came to me about a year ago, with a urethral discharge of two days' duration, originally mucous, but at that time muco-purulent; painless at commencement, but, since the first day, accompanied by an uneasy feeling in the membranous portion of the urethra, where there was some pain during micturition.

The patient, who was a professional man of excellent moral and physical habits, had been a widower nearly three years, during which period he had had no connection with a woman. At one time, however, he yielded to the suggestions of his strongly sexual nature and came near falling into the habit of self-abuse. This, however, he never practised to any excess, nor was it long continued, the appearance of blood-streaked seminal emissions so frightening him that he stopped the habit at once. Since this period—some eighteen months before—these (to the patient) alarming symptoms had never returned; there had been no undue sensitiveness of the urethra, nor spermatorrhœa. The natural emissions had taken place at intervals of from ten to fifteen days, accompanied by the usual erotic dreams and voluptuous

sensations. I have never seen a more perfect specimen of good general health, and could discover no gonorrhœal, syphilitic, gouty, arthritic, herpetic, or strumous antecedents; neither could the discharge be explained by any error in diet or any unusual sexual excitement, the patient especially denying the latter. He himself attributed the discharge to the sudden suppression of a nasal catarrh by a caustic douche—with how much justice is more than I pretend to say. Certainly the doctrine of metastasis has been invoked in much weaker cases. After four weeks of a conscientiously followed treatment by hygiene, Vichy water, and sub-nitrate of bismuth injections, with bromide of potassa at night, to control the painful erections, the discharge ceased entirely, and had not returned some six months after the cessation of treatment. At that time all the genital organs were in a perfectly healthy condition.

My second case came to me a few days later, in the person of a burly Irish teamster, closely resembling the former patient in physical characteristics, who had left his wife in the old country more than five years before, and had been contenting himself with the society of other women until some three months previous to his coming to me. At that time the woman with whom he had been living having left town, he entered upon a virtuous course of life. When I first saw him the discharge was in its third day, and was quite abundant and markedly purulent. During micturition there was some smarting in the prostatic and membranous portions of the urethra. Erections, although frequent and vigorous, were almost painless—a fact which I attributed to the slight difference in the size of the organ in its two conditions. The closest questioning elicited no satisfactory cause for the symptoms. When a child, the patient had suffered from rheumatic fever, and had always been subject to vague pains in his muscles after exposure. This, however, would hardly justify the diagnosis of arthritic urethritis in default of the other symptoms, eruptions, etc. In respect to drinking, the patient's habits were very good, and I could discover no recent excesses of any sort of which he had been guilty. Such a long period of chastity in a man so remarkably virile, made me think of masturbation as a possible source of the trouble, but I convinced myself that such a supposition was unjustified. It was the first urethral discharge in the man's experience, and his astonishment and terror at having a "clap which he hadn't caught," would have been amusing if not so sincere. A mild treatment of lemonade and nitrate of potash either cured or did not prevent the patient from getting well, and in less than a month his urethra was in its normal condition.

In neither of these two cases could I find any diathesis or excess to accuse; both the patients were decided blonds, it is true, but, apart from their complexion, had none of the signs of past or present struma; in both the cases it was the first attack; in both the pain was in the deeper portion of the urethra; and in both the symptoms yielded easily to a very mild treatment. The seat of the pain in the early stages of the discharge would be a strong argument against contagion. In respect to the absence of other causes, I have, of course, only my own judgment to decide by. I am in my own mind perfectly satisfied as to the evidence, and have thought the cases worth reporting on account of their very great rarity.

Regeneration of the Inferior Maxilla.—M. Juan Bautista Parcet relates, in the *Compilador Medico*, a case of reproduction of the right half of the lower jaw, of a child seven years of age, after necrosis from gangrenous stomatitis occurring during typhoid fever.—*L'Union Médicale.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Jan. 8, 1868.

Dr. H. B. Sands, President, in the Chair.

INTERESTING CASE OF BRAIN DISEASE.

Dr. Whitehead exhibited the brain and stomach of a maiden lady, whose history he gave as follows:—I saw this patient for the first time last August, after she had been affected with a peculiar train of emotional symptoms for five years. The symptoms were very vague in character, and corresponded with those referred to by Dr. Maudsley, in his recent work on the physiology and pathology of the mind. My recent impression was, after a thorough examination failed to detect any organic disease, that she was suffering under the emotional disease of the brain alluded to. I then put her under the treatment of the bromide of potassium, with the occasional addition of one-half a grain of codeine. This seemed to benefit her somewhat, and she stood stimulants very well.

She was fifty years of age, and up to within six months of her death was still menstruating. Her principal complaint was severe pain in the head of a constricting character; her intelligence was not, however, affected, although, in consequence of the disturbance of her emotional faculties, she would whine and cry on the slightest provocation. I ceased to visit her a few months since, and then at my own request, and did not see her again until a few days before she died, when she was almost pulseless; and the account was, that she had not taken any solid food for seven weeks, and for many days at a time no liquids. The persistent refusal to take nourishment, and the remarkable manner of supporting such a long abstinence, was a peculiarly characteristic symptom.

I should state that I was told that the symptom, which was a very prominent one, a few weeks before her death, was the vomiting up of a stringy material, which had a very offensive smell. This matter, the family physician informed me, he had examined, and found to consist of nothing but mucus and disintegrated blood. While under my treatment, leeches were applied once or twice behind the ears, without any appreciable benefit.

In speaking of the post-mortem appearance presented by the brain, he remarked, that it was well known that the lesions most frequently met with after mental alienation, affected the surface of the brain, and the membranes in immediate contact. There was a considerable deposit on the upper surface of the organ, along the borders of the hemispheres. This morbid product, in connection with the peculiar symptoms observed during life, was of significant import. There was no effusion in the ventricles.

The intestines, from the rectum to the stomach, were filled with hardened masses of fæces, from the size of a hickory-nut to that of a walnut. The stomach was filled with a muco-purulent secretion. From the large quantity of impacted hardened fæces in the duodenum, and the rest of the intestinal tract, it is probable that some of the masses were expelled, which would explain the cause of the abominable odor already spoken of. The accumulated secretion of the stomach thus arrested by an impassable barrier, could be ejected only by repeated efforts of vomiting, which occurring suddenly, induced the belief, and which, when told of it, I thought possible, that an abscess of the liver, or of some other

abdominal organ, had opened into the stomach. That organ was softened in its mucous coat, and apparently ulcerated. The liver and other abdominal organs were perfectly healthy; the heart was remarkably firm and healthy. The amount of bromide of potassium administered was about 30 grains a day.

I was informed, that up to the third week before death, there was an attempt, three or four times, to nourish the patient with beef-tea injections, one of which caused an evacuation of the lower bowel.

At one time, a few years ago, conversation on certain subjects produced occasionally considerable nervous excitement, which usually lasted a day or more.

While in attendance on her, I noticed that she evinced great "self-feeling;" and self was the constant subject of her thoughts.

I do not consider the condition of the stomach properly a pathological state.

At the time of incising the upper layers of the cortical substance, I thought I observed a softened condition of this substance, the nerve-cells of which should have been examined microscopically.

SCIRRHUS OF BREAST.

Dr. Cutter exhibited a specimen of scirrhus of the breast, which he had removed from a lady forty-four years of age. The disease first made its appearance about three years before, and gradually increased, involving secondarily the axillary glands. All the diseased tissue was readily removed in the operation. Only four vessels required the use of the ligature. Two-thirds of the wound united by the first intention. In conclusion, he spoke of the beneficial effects of the use of carbolic acid as a dressing.

Dr. Rogers presented a small calculus which he was forced to remove by incision from the urethra.

MORBUS COXARIUS.—EXSECTION.

He also exhibited the person of a young lad upon whom he had performed, two years ago, the operation for exsection of the head and neck of the right femur. The specimen that had been removed was also exhibited in connection with the case. The patient had been ill for two years previous to the operation. He exhibited him for the purpose of showing the extent to which the limb operated upon could be moved. There was a movement in the joint itself, which could be measured by an arc of a circle of from 25° to 28°. The knee was deflected toward the opposite side, and bracing itself against the sound limb, he was able to stand upon the right leg, to a certain extent unaided. The shortening amounted to two and a half inches, but this was accounted for in a measure by the arrest in growth of the parts, and also by allowing, contrary to instructions, the weight of the body to come on the leg too soon, and thus shoving it up. Immediately after the operation, by careful measurement, there was no shortening whatever.

He wished to exhibit the case and the specimen, in order to afford an illustration of the beneficial effects of removing no more bone than was actually diseased, or already deprived of its periosteum. By the following out of such a plan, he was enabled to preserve the attachments of those muscles which were of the greatest service to the patient in allowing more or less freedom in the use of the joint.

In this connection, he took occasion to object to the rule laid down by Dr. Sayre, which was the removal of the great trochanter in all cases, in the fear that it would become subsequently diseased. He thought that the specimen presented at the last meeting by that gentleman did not go far toward substantiating that idea, as he had reason to believe that there were portions removed which were not involved in the destructive process.

Dr. Sayre remarked that Dr. Rogers labored under a wrong impression, and that all the bone removed was in a condition past the hope of repair. After repeating the steps of the operation, which are already familiar to the members of the Society, he claimed the privilege of bringing the specimen once more to notice, at a future meeting, in order that the point in dispute might be fairly set forth.

GOÎTRE, EPILEPSY, EMPHYSEMA, AND ANEURISM IN THE SAME PATIENT.

Dr. Thomson presented several specimens removed from a patient in the Charity Hospital, who was admitted to that institution in the beginning of last July. She was an Englishwoman, æt. 58, and complained on admission of dyspnœa, which she referred to a large bronchocele. There was some exophthalmus present, and a thrill was audible on both sides of the tumor. The goître declined under the persistent use of iron and quinine internally, and the ointment of biniodide of mercury externally. At the same time she coughed a great deal, and expectorated a considerable amount of mucus. Examination of the chest revealed marked evidences of emphysema. The occurrence of her dyspnœa was thought to be explained by this discovery. It should be stated in this connection, that the patient complained of a distressing pain in the back, extending from a little to the left of the 5th or 6th dorsal vertebra to the scapula. In addition to her other troubles she had some seven or eight epileptic fits. On the 7th of last December she had febrile symptoms, with increased difficulty in breathing, which terminated in congestion of the lower lobe of the right lung, with attendant broncho-pneumonia. She lingered until the 27th of December, when she had an epileptic fit, and shortly after expired.

At the post-mortem examination the heart was found very fatty, but the valves appeared to be healthy. On the descending aorta was an aneurism that sprang apparently from the posterior part of the aorta, just below the origin of the left subclavian; this aneurism was adherent to the 5th or 6th dorsal vertebra, the wall of the sac having become absorbed, so that the bones of both vertebræ were eroded where this adhesion had occurred; no rupture of the aneurism had, however, happened.

Dr. Thomson did not think that the aneurism could have had more than an occasional influence in bringing about these attacks of spasmodic breathing. Beside the evidences of marked emphysema in the left lung, there was a considerable deposit of tubercles in the upper end of the right lung.

On opening the abdomen, the liver was healthy, but the right kidney had its pelvis dilated to the capacity of four fluid-ounces. The orifice of the ureter of this side was barely found, and was scarcely as large as a pin's head.

The patient, therefore, had *goître, epilepsy, phthisis, emphysema*, aneurism of the aorta, and the disease of the kidney referred to, and she died of them!!

Dr. Thomson next exhibited a specimen of tubercular peritonitis removed from a female patient of the same hospital, who had died of symptoms of chronic dysentery.

PEDULOUS LIPOMA.

Dr. Howard presented a unilobular, pedulous fatty tumor, removed from the posterior fold of the axilla of a lady thirty-five years of age. It was three years in growing, and although weighing four ounces and a half

its pedicle was smaller than an ordinary lead pencil, and was quite translucent.

OVARIOTOMY.

Dr. Peaslee exhibited an ovarian tumor which he had removed from a patient the Saturday before. He first detected the growth in April, it being then about two inches and a half in diameter, and supposed it a monocyst. He only saw the patient again a few weeks ago, and although the size of the tumor had not increased as high up as the umbilicus, he was struck with the inroads which it had made upon the patient's health. He proposed that she should be tapped at once, which was done three weeks before he removed the tumor. He obtained from the sac about three quarts of a fluid that resembled very much in physical qualities the pea soup. This caused a perfect collapse of what he supposed to be a monocyst, and which was all that was left, except a body to the side of it that felt like an inverted saucer. To his surprise the sac, instead of taking several months to refill, was enlarged to its full dimensions in the course of three weeks, the consequence of which was an earlier operation than was anticipated. The incision was only three inches in length, but the tumor, which proved to be of considerable size, and polycystic withal, was removed by tapping one cyst at a time and drawing it outside of the wound until all were emptied. There were only a few slight adhesions in the median line. The pedicle, which was very delicate, and about the width of the hand, was secured by a strong double ligature passed through its middle and tied both ways, after which the pedicle was returned. He presented the specimen to illustrate two points: the first regarded the development of tumors upon what appeared to be a monocyst; and the second had reference to the small size of a tumor which could give rise to such an amount of mischief.

The Society then adjourned.

Stated Meeting, Jan. 22, 1868.

Dr. Wm. B. Bibbins, President, in the Chair.

ACUPRESSURE AND ITS EFFECTS.

Dr. Hutchison presented some specimens illustrating the effects of acupressure on the arteries of sheep, dogs, and men, and remarked upon them as follows:—

The specimen which I have here, marked number three, is the left carotid of a sheep ten days after acupressure in continuity, the needle having been removed fifty hours after they were applied. The specimen shows that the coats of the artery have been cut through (except at the posterior part), and that more pressure was consequently applied than was necessary. It shows two very decided plugs, one on the distal and one on the cardiac side of the needle. The orifices of each part of the vessel were closed up with lymph, and firmly plugged together. Just at the opening of the vessel there was an occlusion, the coats firmly joining together by lymph. The blow-pipe was introduced into each extremity of this vessel while under water, and no air could be made to pass through, showing them to be entirely occluded.

The second specimen (number four) is the right carotid of a sheep four days after acupressure. The needles in this case were removed in seventy-four hours. Two needles were applied here by the fourth method of Sir James Simpson, and the artery divided between. I intended these to have been removed forty-eight hours after the operation, but they were forgotten by the gentleman with whom I left the animal in charge. The specimen shows large clots, an inch and a half in length, on either side of the needle. The occlusion here of both extremities was so complete that no air could be passed through when the specimens were placed under water. When the needles were removed no hæmorrhage took place.

The specimen marked number five, was the popliteal artery removed along with amputation seven days and nineteen hours after acupressure. The needle was removed forty-eight hours after acupressure was employed. The patient had an extensive lacerated wound of the lower and outer part of the right leg, for which he was admitted to the Brooklyn City Hospital. There was some hæmorrhage from the branch of the anterior tibial artery, which was arrested by the acupressure needle, which in its turn was removed thirteen hours after.

Subsequently erysipelas supervened, attended with extensive sloughing of the soft parts. The patient ran down rapidly in consequence of this, and it was necessary to amputate his leg at the knee-joint, to save his life. In this case, in consequence of inflammation, the small vessels were so much enlarged that it was necessary to apply ten needles, by the various methods. This artery was closed by the fifth method. It was done very promptly, and very efficiently, and on examining the specimens the results are seen. The patient died subsequently from exhaustion, seven days and nineteen hours after the operation. After the needle was applied to the popliteal, pulsation was plainly seen in the vibrations of the glass at the end of the needle; this condition continued until the instrument was removed. I was satisfied that the artery must be closed sufficiently to take away the needle, and to prove that I was right, I would state that no hæmorrhage followed its withdrawal. The specimen shows quite a firm red clot, which is not adherent to the vessel except at its extremity. The mouth was firmly closed by lymph. I also introduced a blow pipe into this vessel while it was under water, and was unable to get any air through it.

Specimen number six is the posterior tibial artery, removed from a man who came into the Brooklyn City Hospital on the 2d of January, with a compound comminuted fracture of both bones of the leg. He had, as proved after the amputation, though not recognized before, a rupture of the anterior tibial, from which he bled considerably. I ascertained that the House Surgeon attempted to ligate this vessel, but did not succeed.

Amputation was performed the following day, the limb being removed just below the tubercle of the tibia. Three vessels, the anterior and posterior tibial and muscular branch, were closed by the acupressure needles. The third, fourth, and fifth methods, were used in this case, respectively. The fourth method was employed on this vessel. The operation was performed by Dr. Cochrane, and with his permission the needles were applied. Two hours subsequently I was requested to see the patient, who was suffering from secondary hæmorrhage; and I was told that pressure over the femoral had failed to arrest it. I deemed it safest to open the wound, and for this purpose removed the metallic sutures. I sought for the source of the hæmorrhage, and found those vessels to which the needles had been applied perfectly dry. The bleeding came from two muscular branches, which had not bled at the time of the operation, although the wound was kept open for some time. This bleeding came on after an effort at vomiting, and after he reacted. These were arrested by acupressure, and some oozing from the end of the tibia was checked by the application of the persulphate of iron. This patient vomited continuously after the stump had

been opened, and gradually sank afterwards and died of exhaustion. The specimen shows a clot very well marked, not adherent except at the extremity. The anterior tibial was not preserved in making the dissection.

Specimen number 7 is the right carotid of a dog. An acupressure needle was applied to the vessel in its continuity, and was removed in twenty-five hours. The animal was killed by the ether which was used to bring on the anæsthesia for the second operation. The vessel shows on its cardiac side a plug about an inch and a half in length; on the opposite side the plug is about an inch and a third in length. It appears that in this case there was rather more pressure used than was necessary, for in examining it carefully I find that the coats have given away and have been absorbed by pressure in front. The vessel is, however, firmly plugged, as the air could not be forced through it while under water. I think that the reason why the artery has not yielded to pressure as in the human subject, is the small amount of elastic tissue which it contains.

The next specimen was removed this afternoon. It is the left carotid of a sheep vivisected forty-seven hours after acupressure. The vessel shows a plug on both sides of the needle, and it is firmly occluded, as I ascertained by attempting to pass air through it under water.

These specimens, in company with those presented at a previous meeting, comprise my experience with acupressure. It has been employed in twenty-eight arteries in man and five or six in the lower animals. Among other operations in which it was employed were, two amputations of the leg, one at knee-joint and one of foot, and one of wound in the radial artery—which latter, by the way, illustrated the value of acupressure in a striking manner. The patient had suffered from an extensive lacerated wound in the lower part of the forearm and hand, and, several days after, sloughing took place followed by hæmorrhage from the radial artery. The bleeding was very profuse, so much so that the patient lost a pint and a half of blood in a very few minutes. The artery was exposed in the midst of sloughing tissue. The tourniquet had been applied and also the persulphate of iron; these were, however, removed and acupressure needles slipped under the artery above and below, with the effect of arresting the hæmorrhage in an instant. The needles were removed at the end of twenty-two hours. The following day the patient had hæmorrhage from the superficialis volæ from the same cause. The blood oozed out very freely, and a considerable quantity was lost before the house-surgeon could arrive to arrest it. This Dr. Elbrig did by the method of acupressure with a very satisfactory result. This latter needle was removed at the end of twenty-seven hours. These two cases illustrate very strongly the value of acupressure in certain cases. I believe that if a ligature had been applied premature sloughing might have resulted, with its attendant hæmorrhage. In either case, in order to prevent this occurrence, it would have been necessary to have applied a ligature in sound tissue above and below the wound, to have made a very long, tedious, and unsatisfactory dissection, with the result, as before stated, of having secondary hæmorrhage afterwards.

The value of acupressure is, of course, not fully known. Yet it has been demonstrated that we can by these means certainly arrest hæmorrhage. I am disposed to think that secondary hæmorrhage is less apt to occur after it than after ligature. It is very well known that secondary hæmorrhage, from some peculiarity of the constitution, does not form a firm enough clot before the ligature separates. Then, again, it occurs as the result of ulcerations of the arteries prematurely and from sloughing, which not infrequently extends beyond the seat of the plug. By means of acupressure we simply compress the coats of the artery together; no violence is used, the coats are not disturbed at all, and there is on that account less liability to secondary hæmorrhage. Mr. Perry, of Aberdeen, who has used this method more than any one else, is strongly in its favor, and although, in company with Mr. Keith and Mr. Fyfes, of the hospital of that place, he has applied it to eight hundred arteries, only two instances of secondary hæmorrhage have occurred.

The great value of acupressure, however, and its adoption or reject on in the majority of cases, will depend upon our ability to obtain union by the first intention in large wounds. Dr. Perry states that in fifty-one capital operations there were twenty-one in which union by the first intention occurred. These comprised amputations of the leg, thigh, arm, and the removal of mammary glands and large tumors. By union by first intention he means union without the formation of a single drop of pus; if a single drop of pus is observed he rejects the case.

In answer to questions by various of the members, he explained the different methods of acupressure as advised by Simpson, of Edinburgh.

MALIGNANT DISEASE OF LARYNX, ETC.

Dr. Bradley next exhibited a specimen of disease of the larynx, which was removed at the post-mortem examination of an Englishman, fifty-four years of age. The following history was given: The man had always been healthy up to a year ago last February. There was no hereditary taint in his family, and his father lived to the age of ninety-three, and his mother to eighty-seven. He first noticed a difficulty in swallowing at the time referred to. He would get up very suddenly from the table and complain of something choking him, become for a time strangulated, and then sit down and finish his meal. This continued until the first of June, from which time he was unable to swallow any solids. He first came under observation at the Dispensary about the first of October, and Dr. Bradley saw the patient at intervals from that time until his death. Bromide of potassium was administered, and it is thought with some relief. He did not complain of any pain in the larynx, but located all his uneasy sensations in that locality, and, after all, he got on well enough until he attempted to swallow solid food. His case was examined by the laryngoscope, and as near as the speaker could remember, there was found some thickening behind the arytenoid cartilages.

The patient finally died of starvation. On making the post-mortem examination, as soon as the omo-hyoid muscle was cut through where it comes up alongside of the larynx, pus exuded. The larynx was then opened into in front, and an ulceration of its posterior wall was found, which extended from above the cricoid cartilage throughout its whole extent and along the posterior wall of the trachea as far down as its bifurcation. This ulceration and deficiency of tissue was about four inches in extent; the whole of the trachea was opened for about four inches, and the œsophagus, which lay in immediate contact, had also disappeared by ulceration. The rest of the larynx and the vocal cords looked quite healthy.

The specimen had been examined microscopically by Dr. Rogers, who declared it to be a rare example of epithelial cancer of the larynx and trachea. The peculiarities of the case were: that the man had very little pain and was able to swallow liquids within three hours of his death without difficulty.

Dr. Parker could not understand how the fluids

which the patient swallowed during the last hours of his life could get into the stomach, that is, if the free communication between the œsophagus and trachea, as shown in the specimen, existed at the time.

Dr. Krackowizer was of the same way of thinking.

Dr. Rogers believed that there must have been left between the two tubes a thin partition of connective tissue, which was necessarily destroyed at the time of the post-mortem examination. He thought also that the results of the laryngoscopic examination foreshadowed the case as one of cancerous disease.

Dr. Bradley thought that it was altogether probable that the thin partition referred to by Dr. Rogers existed before the post-mortem examination was made.

FATTY DEGENERATION OF DIAPHRAGM, ETC.

Dr. Finnell presented a portion of a diaphragm which had been subject to fatty degeneration, with a view of obtaining the opinion of some of the members in regard to its being an element in the production of sudden death. It was removed along with a fatty heart from a woman 50 years of age, who was seemingly as well as usual, lay down in the afternoon and was found dead in the evening. He next exhibited a calcified tuberculous bronchial gland, and also a hydrocele from the right side which presented the peculiarity of having the testicle adherent to the left side of the sac, which circumstance would have insured the wounding of that organ if the operation of tapping had been performed.

Dr. Wynkoop exhibited an appendix vermiformis which has already been published.

ELEPHANTIASIS OF CLITORIS.

Dr. Mason exhibited a specimen of elephantiasis of the clitoris removed from a patient of the Charity Hospital. She was about 30 years, and had been suffering from constitutional syphilis. The tumor had commenced to grow about five years ago and had gradually increased until, at the time of its removal, it weighed two ounces and a hundred grains. It measured four inches in length and four and a half inches around its largest circumference. The removal was effected by the écraseur. Two large arteries had to be tied, and some oozing which persisted had to be controlled by actual cautery.

The nymphæ were not involved in the disease, a circumstance which was, by the way, remarkable.

Dr. Messinger exhibited a portion of the falx cerebri containing a bony deposit, for the sake of ascertaining if it had anything to do with the cause of death in the following case:—A patient having suffered previously with pain in the mastoid process and discharge from the ears, which, by the way, was treated with cups and leeches, received a playful blow upon one side of his face, causing him a great deal of extra pain. This was followed by chills, which continued for four or five days at irregular intervals, when he was seized with the declared symptoms of meningitis, from which he shortly after died.

At the post-mortem examination there was found a good deal of effusion at the base of the brain and in the cavity of the ventricles. The point, however, to which the reporter wished to call the attention of the members was, the existence of bony plates of deposit on the upper surface of the brain in the neighborhood of the longitudinal sinus and falx cerebri. He wished to inquire if the appearance of such a concretion, which was true bone under the microscope, had anything to do in directly causing the inflammation which led to the death of the patient.

Dr. Parker did not think it had.

Dr. Finnell remarked that similar deposits of bone were often found in healthy brains in the substance of the falx cerebri or the tentorium. Adjourned.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Reunion, Friday, January 24, 1868.

Dr. Isaac E. Taylor, Vice-President, in the Chair.

Dr. Samuel D. Moses read a résumé of the diagnosis and treatment of *Uterine Displacements*. The paper laid no claim to originality, but gave a concise yet comprehensive statement of the views held by the best authorities.

Dr. Peaslee, after speaking of certain methods of manipulation, said he had been glad to hear the statement that mechanical support is necessary, as a general rule, in the treatment of uterine displacements. It is as indispensable here as are splints for fractures. Some uterine malpositions, like some fractures, may be treated without support, but others cannot be; and when it is said that the proper treatment is to remove the cause, the remark is as appropriate with reference to fractures as to displacements.

DR. BOZEMAN'S SPECULUM.

Dr. Post stated that he had been present, a fortnight before, at an operation for vesico-vaginal fistula performed by Dr. Bozeman, with the employment of his new speculum and "thoracic rest." (*Vide* Med. Record, vol. 2, p. 481, Jan. 1, 1868.) The position upon the knees, with the chest supported by a frame, was one of exceeding comfort to the patient and convenience to the operator; and the speculum brought the parts very fully into view.

Dr. Hubbard and Dr I. E. Taylor both endorsed Dr. Post's estimate.

Dr. Bozeman said that he had now used the supporting frame in five cases, and always with entire satisfaction. It had been his object to devise an apparatus which should not only place the patient in the best position, but should also firmly secure her there. Anæsthetics could be readily and safely administered in this position. He had recently kept a patient thus under chloroform for an hour and a half. The speculum he had used three times, and it had fully met his expectations. In one case the vagina was the largest he had ever seen; in another it was very short and constricted, the fistula being in the bas-fond of the bladder and complicating the cervix uteri. The speculum was thus far only completed in gutta-percha. When properly made, in steel, it would be exhibited to the Association. [This was done at the meeting of March 13th, 1868, when Dr. B. described the instrument substantially as in the article above referred to, and gave a detailed history of the steps by which he had perfected it.—Ed.]

Stated Reunion, Friday, January 31, 1868.

Dr. Isaac E. Taylor, Vice-President, in the Chair.

ENDOSCOPY.

Dr. Robert F. Weir read an extended résumé of the history of the endoscope and its additions to our knowledge, especially in urethral pathology; giving also the results of his own observations. As the paper is to be published, we confine ourselves to a brief abstract. The subject was illustrated by the exhibition of several varieties of the instrument, and numerous water-color drawings of normal and morbid appearances.

[Our readers will find the endoscope figured and described on page 50, vol. I., of the Record, in a paper by Dr. Van Buren.] Both as originally devised by Desormeaux, and as modified by Cruise, of Dublin, the instrument required one hand of the operator to hold the lamp connected with it, or it was placed on an un-

wieldy stand. Dr. Weir had obviated this inconvenience by attaching to a common table-lamp (burning camphorated kerosene, as in Cruise's apparatus) a Tobold's condenser, and reflecting into the tube the light received from this, by means of a Troltsch's ear-mirror, which might, if desired, be fastened to the head, as in laryngoscopy.

Desormeaux describes the mucous membrane of the healthy urethra as smooth, polished, and of a pale pink color. Its longitudinal rugæ are plainly seen radiating from centre to circumference of the open end of the endoscopic tube; and the absence of this appearance indicates loss of contractility from disease. The prostatic portion has a deeper color, and shows a less regular radiation of its folds; the vera montanum and the orifices of the ejaculatory ducts are not generally observable, owing to the distension produced by the instrument.

In acute gonorrhœa it is commonly unwise to introduce the tube, and Desormeaux had never examined a case before the eighth day. The mucous membrane had then lost its polish, was intensely injected, thickened, and superficially ulcerated. Dr. W. had been able to examine a urethra within twenty-four hours after the appearance of the discharge, with similar results, except that the ulcerations were absent. The endoscope reveals diagnostic differences between this specific urethritis, and the traumatic, herpetic, and catarrhal forms.

The progress from gonorrhœa to gleet is like that from acute to granular conjunctivitis. The granular condition of the mucous membrane, once established, keeps up a subacute inflammatory action in this membrane and its subjacent areolar tissue, which leads to contraction and stricture. Desormeaux divides urethral stricture into three stages: 1. The acute inflammatory, seen in gonorrhœa. 2. The chronic inflammatory, with mucous membrane granular and tumefied, and the subjacent tissue also swollen. 3. The organic or inodular, where the tissues have a cicatricial, even cartilaginous hardness; their vessels have disappeared, and, probably, in consequence of this, their granulations also; and the surface presents a pearly grayish appearance. These changes may be comparatively rapid or very slow. Desormeaux found, in one case, a stricture only in the second stage, though caused by an attack of gonorrhœa forty-seven years before.

In the treatment of these conditions the endoscope gives a precision and facility otherwise unattainable, the eye guiding the hand to make applications, through the instrument, directly to the affected part. It is of value in urethrotomy; and in some strictures of peculiar form it has proved an indispensable aid to the passage of a bougie, when without it resort to perinæal section or puncture of the bladder would have been inevitable. Its uses, as shown by Desormeaux, in perinæal fistula, in various affections of the prostatic urethra, and in spermatorrhœa, were touched upon; and the synopsis of this writer's work was concluded by an account of his results in examination of the bladder, about one-half of which is opened to inspection by the instrument. Among other interesting observations, an encysted calculus had been detected, and the diagnosis confirmed by autopsy.

Cruise's observations generally corroborated those of Desormeaux, and added some points of value. He had used the instrument also in examination of the pleural cavity, through a fistula left after empyema. The *Lancet* for Sept. 29, 1865, contained observations on the use of endoscopy in connection with lithotomy and lithotrity, by Dr. T. P. Teale, Jr. In the same journal, for Oct. 13, 1865, Mr. Christopher Heath stated that he had discovered in the walls of the healthy urethra a constant vermicular contraction, apparently passing towards the bladder, and he thus explained the tendency of foreign bodies in the canal to pass into the bladder. Mr. Henry Thompson (*Lancet*, Oct. 27, 1866) gave as the result of his own, apparently trustworthy, observations, that this vermicular motion was in the reverse direction, from the bladder outward. Dr. Henry Dick (*Lancet*, Nov. 24, 1866) had discovered granular urethritis but two and a half inches from the meatus; he had also employed the instrument in the removal of a urethral polypus.

In this city the endoscope had been used by various persons, among them Drs. Bumstead, Gouley, and Lee. Dr. Bumstead had success-fully treated, by its means, several cases of granular urethritis. Dr. Gouley had employed it in eight cases of the same affection; also in impassable stricture, and in internal urethrotomy, where he had been led to substitute for Desormeaux's urethrotome one of his own invention; he saw no advantage, however, in endoscopic urethrotomy. Dr. Weir's own experience comprised three success-ful cases of granular urethritis, in which he had found the granulations smaller than represented by Desormeaux; several cases of spermatorrhœa dependent on congestion or inflammation of the prostatic mucous membrane, in one of which he had observed an enlarged vera montanum; many cases of organic stricture where the mother-of-pearl appearance was noticeable; two of impassable stricture overcome by aid of the instrument, the difficulty being due to false passages produced under other hands; a case of scrotal fistula healed by its means, and two cases of the effect of Holt's dilator, one of them still under treatment, whose appearances were beautifully figured; also observations on the effect of internal urethrotomy, and on that of lithotrity upon the urethral and vesical surfaces.

In conclusion, he regarded the endoscope as of positive value in the pathology, diagnosis, and treatment of genito-urinary diseases; especially in the detection of urethral chancre; in the recognition and treatment of granular urethritis (including spermatorrhœa of local origin); in the passage of such strictures as occasionally fail the best surgeons; and to a certain extent in the diagnosis of vesical calculi.

Dr. Stein had used the endoscope successfully in treating urethral granulations. He thought its value unquestionable, but somewhat limited by difficulty of manipulation. He had been unable, as yet, to introduce the tube into the bladder.

Dr. C. C. Lee could endorse the last speaker's remark about the difficulty of introducing the abruptly bent tube of Desormeaux into the bladder; and though he had often done it, yet it was always with pain to the patient, and he thought also with more or less damage to the urethral canal. A modification of the tube, by Warwick of London, described in *Brit. Med. Jour.* for August, 1867, rendered it easier of introduction, and gave a wider field of view. The application of the light in Warwick's apparatus was also peculiar, ordinary daylight being condensed by a conical metallic reflector, attached at right angles to the main tube, and having at the base of the cone a powerful convex lens. For artificial light the speaker considered Dr. Weir's apparatus an improvement upon Cruise's, and superior to any he had yet seen. As to the medical value and applicability of the endoscope, they would soon be as well established as those of the ophthalmoscope and laryngoscope; and as the instrument became more simplified, its use would rapidly extend. Desormeaux's invention was cumbersome, and though excellent for class demonstration, was hardly fit for everyday use. Warwick's was much lighter and more convenient. Vesical examinations were necessarily the most difficult

demanding great care and gentleness. In cases of stone, where the calculus was moderately large and the bladder tolerably full of fluid, Dr. Lee had found little difficulty in making out the outlines, though he had been unable to satisfy himself in regard to the size. But it was in the study of urethral disease that the instrument found its greatest use; and upon this he had nothing to add to the paper of Dr. Weir.

Dr. Weir stated that a translation of Desormeaux's work, by Dr. Hunt, was to be found in the *Chicago Med. Journal* of this year.

A NEW BATTERY.

Dr. Rockwell presented a galvanic battery made by Chester, of Prince street. The cells are of glass, in which zinc and carbon plates are suspended above a solution of bisulphide of mercury. The apparatus exhibited comprised twenty cells, which by a simple contrivance could be inverted, thus immersing the plates and setting the battery in action. The advantages claimed for it were its compactness, portability, and readiness for instant use; its great power, as shown by satisfactory tests; and the length of time (several months) during which it would retain its efficiency without recharging.

STAPHYLORAPHY.

Dr. Whitehead presented a private patient, a young woman some twenty-five years of age, upon whom he had operated for congenital cleft palate. The fissure had been large, involving both the soft and hard palate, extending forward to the front teeth, and measuring seven-eighths of an inch in width. After three operations he had succeeded in completely closing the fissure in the soft parts, and in considerably diminishing that of the hard palate; so that the patient could now speak more distinctly without an obturator than she had before done with one. The great extent of the chasm had made the operations difficult. The last had been more successful than those preceding it, owing to the Doctor's having passed the wire sutures at a considerable distance from the pared edges; making them very numerous; removing them but two or three at once; and renewing when necessary. The staphyloraphy proper was then complete; but the effort at uranisco-plasty, that is, closure of the opening in the hard palate, had, thus far, partially failed, having been attended with alarming hæmorrhage and some sloughing of the flaps. The operation attempted, and which the Doctor proposed again to try, is that known as Langenbeck's, which consists in dissecting up the mucous membrane and periosteum from the alveolar process on each side, sliding them towards the centre, and uniting by sutures, —the fissure being ultimately closed by new bone developed by the transplanted periosteum.

Dr. James H. Armsby, of Albany, has been presented by the trustees of the Albany City Hospital, with a splendid service of plate, for his ceaseless diligence in soliciting subscriptions for the improvement and enlargement of the said institution. We are happy to announce such a grateful recognition of valuable services.

At the University of Michigan, in consequence of the appointment of a homœopathic professor to the faculty, Professors Ford, Armor, and Green have tendered their resignations. The remainder of the regular professional corps will probably follow suit.

Dr. Ludwig Türck, of Vienna, the distinguished laryngoscopist, died at Vienna on the 25th of February, of exanthematous typhus, at the age of fifty-six.

Original Lectures.

CLINICAL LECTURES ON DISEASES OF THE GENITO-URINARY ORGANS.

By Prof. W. H. VAN BUREN, M.D.,

CHARITY HOSPITAL.

April 1, 1868.

We have here a case of "*mucous patches*" in a young girl of 20, and I show you the case, because they occupy one of the rarer localities of this form of cutaneous syphilis, viz.: on the under surface of the breast, and the corresponding surface of the integument of the trunk, on both sides of the body. These patches, like other syphilides, affect both the skin and the mucous membranes, but they take their designation as "*mucous*" patches, because a serous discharge is secreted from their surfaces. Most frequently developed near the outlets of the mucous canals, as in the mouth, around the anus, especially in the neighborhood of the vulva in the female; they also affect by preference those localities on the external integument where two cutaneous surfaces are in habitual contact, as in the case before you. The house-surgeon will show you that she has them also in the cleft of the buttocks around the anus. Their discharge is offensive in its odor, and this is mainly due to the large number of sebaceous follicles developed in the regions where friction takes place habitually between adjacent cutaneous surfaces, these sebaceous follicles being the seat of the odoriferous secretions of the human body. They are found sometimes between the fingers and toes. In this case they are present also at the angles of the mouth, on the sides of the tongue, and around the tonsils, presenting the appearance of whitish patches, sometimes called "milk-spots," and looking as though the parts had been recently touched with nitrate of silver.

This form of syphilis belongs to the earlier varieties of skin eruptions, and when the patches occupy the external integument they yield promptly to treatment. This girl is getting well rapidly by washing her sores with a weak solution of chloride of soda, which also neutralizes their offensive odor, and drying, and dusting them with calomel, which should be diluted with rice-flour. She is taking internally a pill composed of blue mass with one of the dried sulphate of iron. The ure of iron in some forms, with small doses of mercury, for the syphilis of women, is an excellent plan of treatment, for they tend strongly to become anæmic and chlorotic under the deteriorating influence of the poison, which has been proved to directly diminish the relative proportions of red blood corpuscles.

But mucous patches in the mouth do not get well so readily. They reappear in this locality in successive crops, often with great obstinacy, especially in smokers, in some cases outlasting all other manifestations of the disease. I think I have seen benefit from touching them with the solid sulphate of copper, the persulphate of iron, and chlorate of potassa. It has been asserted that the secretion of mucous patches is contagious, and capable of conveying the disease. I have little doubt of this; but in many cases cited in proof of the fact, it is probable that an infecting chancre, slow in healing, has become gradually converted into a mucous patch contemporaneously with the appearance of the earlier eruptions of the skin, and the poison from this source has been ascribed to the mucous patch, when in reality it was due to the unhealed chancre.

In the next case, a young woman of twenty-two,

you see a papular eruption scattered over the face, trunk and arms, which made its appearance five weeks after the discovery of a sore upon the vulva, and which is accompanied by enlarged lymphatic glands in the groins, at the back of the neck, and just above the elbow-joint on the inner side of the arms. The eruption is of a dull, dusky tint, and does not itch. She complains of sore throat, and we see on the soft palate and around the tonsils a patchy redness, which is different from the mucous patches of which we have been speaking, and is in fact identical with the papular eruption of the skin. She is hoarse, and has been so since the eruption appeared, and from this I would infer that the affection of the mucous membrane extends also within the larynx. She is improving under the use of minute doses of the proto-iodide of mercury.

The next cases, all women, are examples of constitutional syphilis in its more advanced stages. The first, 55 years of age, was infected, she states, by her husband, and this is a very common story, and I fear too often true, thirty-two years ago. Previously to this she had two healthy children. Subsequently several miscarriages, and two children born with an eruption of small water-blisters covering their bodies, at different times, and other evidences of infantile syphilis. She has now a cluster of angry-looking elevations surmounted by yellow scabs surrounding the nostrils, upon the upper lip and cheeks. The end of the nose has fallen in, and is misshapen, evidently from destruction of the triangular cartilaginous continuation of the vomer which forms its septum. The chronic bloody discharge from the nose shows that its mucous lining is involved in the same disease as the external integument. The physiognomy of this case is very like the skin disease called lupus, which presents the same hard red tubercular elevations, with tendency to ulceration. But it is not lupus; it is a tubercular syphilitic eruption. Looking into the throat, you see dense white cicatrices, and, at one point, an old perforation. The eruption has been here, also, and has left its mark. She has been suffering with these symptoms for more than two years.

In the next case, infecting chancres, contracted more than three years ago, were followed, in a couple of months, by sore-throat, pains in the bones, falling of the hair, and "a spotted eruption," which did not itch; all of which symptoms passed away without treatment in two or three months. But a year and a half afterward crops of "yellow headed pimples" made their appearance, mostly on her back, which ran into ulcers, were a long while in healing, leaving the very extensive cicatrices covering her shoulders, and resembling those of a burn, which you now see. Some of them are still unhealed, after lasting a year. She took large doses of iodide of potassium, but did not improve much until a mercurial was added to the treatment.

The other woman, 48 years of age, presents a similar history. You see cicatrices around her mouth, left by a tubercular eruption, and some ulcers on the thigh, still unhealed. She has taken very large doses of the iodide of potassium, but has not improved rapidly.

These cases serve as examples of the *earlier* and *later* syphilitic eruptions, contrasted with each other. The former, you see, are mild and superficial in character, tending to get well spontaneously, or yielding readily to treatment, and leaving no deformity. The latter, on the contrary, are more serious and permanent, affecting the skin more deeply, resisting treatment, and leaving indelible cicatrices behind them. They exemplify the fact that the disease becomes more grave and destructive, and at the same time more uncontrollable by treatment, in its later phases. This, as a general rule, in bad cases, is true; whilst in others, milder in character, from the first, there is an obvious tendency in the disease to wear out, and disappear spontaneously.

There is one point in practice I would urge upon you in this connection. Do not expect too much from the iodide of potassium, even in large doses, where the skin is the seat of the disease. You will find more benefit from the "mixed treatment" in these cases—that is, from the use of mercury and iodide of potassium given in combination. In affections of the periosteum, or bones, or where destruction of tissue is threatened from ulceration of gummy tumors, the iodide is all-powerful; it is the remedy *par excellence*. But whilst the disease lingers on the skin, in any of its many forms, the judicious use of mercury, in small doses and long continued, either given internally, in the form of vapor, or administered by inunction, is the more reliable remedy.

Clinical Department.

NEW YORK HOSPITAL.

SYPHILIS — NECROSIS OF SKULL — PATIENT'S WIFE AND CHILDREN NOT INFECTED.

Service of Dr. Gurdon Buck. House-surgeon, Dr. C. M. Bull, who has furnished notes of the case.

John R——, æt. 33, Conn., hatter, admitted January 18, 1868. Patient states that twelve years ago he had a chancre, accompanied by a non-suppurating bubo. The chancre soon healed. Shortly after an eruption appeared all over the body. This dried up, and then came a sore throat, which continued two years before improvement, the whole of the soft palate being lost. Since then the patient has had osteocopic pains. Ten months ago he first noticed a red spot on his forehead, which persisted until two months since, when it was poulticed, broke, and discharged considerable matter; it has remained open ever since. Following this, various sores appeared at intervals, remaining open. The patient is now in very good condition, with good appetite. On examination, the greater part of the scalp and a part of the forehead are found covered with ulcers, varying in size from that of a small pea to that of a silver dollar. They all communicate with dead bone, and over two or three of them the pulsations of the brain can be distinctly seen. There is a very profuse discharge of foul-smelling pus.

The head is carefully cleansed with solution of chlorinated soda; nourishing diet is ordered; also the following prescriptions:—℞. Ol. Morrhuæ Oj., Syr. Fer. Iodid. f℥ v., Ol. Cinnam. f℥j., M. Cap. f℥ss. ter in die. ℞. Potas. Iodid. ℥j., Mist. Fer. et Cinchon. f℥jv., M. Cap. f℥ss. ter in die.

Jan. 20.—Patient's general condition improved. He is etherized; one or two irregular incisions are made so as to allow the integument to be thrown back; and, with the bone-forceps, the dead bone is removed in small pieces, comprehending both tables of the skull from the supraorbital ridge on the left side, and from just above this ridge on the right, back to the junction of the sagittal and lambdoidal sutures, and on either side to near the parietal eminence. The reflected integument was then replaced, its edges lightly supported with straps, and cold water dressing applied.

Jan. 25.—The operation was well borne; the patient has had a slight diarrhœa, which has been checked; and this morning he has no pain in the head, and says he feels very comfortable. Pulse 116, rather thready. He is ordered wine and ale freely, and the following:

R. Quin. Sulph. gr. xv., Tr. Fer. Chlor. f 3 ij., Acid. Sulph. Arom. f 3 j, Syr. Zinzib. f 3 ss., Aq. f 3 iijss., M. Cap. f 3 ss. ter in die. Jan. 26.—Patient has slept well and is quite easy. There is recurrence of the diarrhœa, for which pills of opium and camphor are ordered. The head continues to discharge profusely; it is cleansed, and the parts are supported as before.

Jan. 27.—After a pretty good night, the patient has to-day considerable headache, referred to the forehead. The head is hot, and is ordered sprayed thrice daily with nebulized water. Diarrhœa ceasing; appetite gone; pulse rather frequent and thready. Continue treatment. Two days later the diarrhœa had stopped, and the pills were discontinued; the appetite was improved; but the head was still painful, and the discharge very profuse and very fœtid.

Feb. 1.—The patient relished his breakfast, but later in the day had a chill. A hot air bath was given. On the 3d he was up and walking about the ward, saying he "felt first rate." No recurrence of the chill; discharge still considerable.

Feb. 5.—Doing finely, except that the right elbow is painful and shows a fluctuating swelling. This elbow was injured about a year ago, with the result of partial anchylosis. Ordered the elbow poulticed; the head dressed with lint and Bals. Peru; tonics and stimulants continued. After two days the abscess broke and discharged a large amount of laudable pus.

Feb. 8.—The patient had a second chill, and the night of the next day a third. On the morning of the 10th he had no appetite. Later in the day he was totally blind. On the 11th he could see, but indistinctly; had some headache; little or no appetite; much discharge from head and arm. Feb. 12.—Vision clearer; head looking perfectly well. The abscess of the elbow discharges profusely; there is an abnormal amount of motion about the joint, which seems much disintegrated. The limb is placed in a guttered tin splint.

Feb. 14.—Yesterday the patient had a convulsion and fell out of bed, striking his head on the floor; about a fluid ounce of blood, with considerable clear limpid fluid, escaped from the cranial cavity. He has since grown rapidly worse. Pulse now 72, thready; respiration exceedingly slow; surface cool. Refuses to take anything. For the next three days the patient lay nearly unconscious, refusing everything, and slowly failing. On the morning of the 18th he could not be aroused; his evacuations were involuntary, and at half-past six o'clock, P.M., he died.

At the autopsy, twenty hours post mortem, only an examination of the head was permitted. This disclosed necrosis of the greater part of the frontal bone, commencing just above the supraorbital ridge, much of the dead portion, including a part of the left supraorbital ridge, having been removed by operation; of almost the whole of both parietals; of the greater part of the squamous portion of both temporals; of the walls of the meatus auditorius externus on both sides; and of the superior angle of the occipital. The brain was healthy in front, and wherever the bone had been removed, having it covered only by the dura mater. But at the back of the head, wherever the necrosed bone had been left, the brain beneath it was softened to the extent of an inch and a half, and even deeper in some places, the softened portion being of a greenish black color. This softening and change of color were quite superficial at the edges of the dead bone, gradually extending more deeply into the brain as you passed beneath the bone. This would seem to indicate that the process of disintegration had been set up in the brain after the removal, by operation, of a part of the bone.

The history of this patient's family is interesting, as bearing on the question of the liability to the transmission of syphilis from father to child and thence to the mother. The patient was married Oct. 6, 1860, then complaining of "rheumatism." His wife and two remaining children were carefully examined by Dr. Bell a few days before the patient's death. The mother stated that her first child, a girl, was born in Sept., 1861, and died twenty months later, of scarlatina. The second, a girl, still living, was born in Sept., 1864. The third, also a girl, was born about a year and a half later, and died at the age of sixteen months, "teething." The fourth child, a boy, was born on the 19th of December last, and is still living. The woman had always been well, and had had no miscarriages. She appeared in excellent health, and no glandular swellings or other marks of syphilitic infection were discoverable anywhere upon the body. The girl, three years and five months old, appeared in perfect health and uncommonly strong and robust. The infant, being at an age (about two months) when hereditary syphilis would be pretty sure to manifest itself, was examined both by Drs. Bell and Allin, and no sign of the disease was discovered. It appeared perfectly well, and its mother stated that it had always been so. The death of the first child is clearly enough accounted for; that of the third perhaps less satisfactorily.

Contagious Diseases in New York.—The reports of contagious and infectious diseases made to the office of the Sanitary Superintendent of the Metropolitan Board of Health by practising physicians in this city, from April 1st to April 15th, 1868, inclusive, show: 269 cases of scarlet fever, 241 of which were under the age of 10 years; 4 cases of typhus fever, the ages varying from 16 to 61 years; 10 cases of typhoid fever, between the ages of 3 and 40 years; 18 cases of diphtheria, 12 cases of which were under the age of 6 years. The reports do not indicate the special prevalence of any of the above diseases in particular localities.

Kentucky State Medical Society.—The thirteenth annual meeting of the Kentucky State Medical Society was held at Danville, Ky., April 7 and 8. Dr. William Pawling was elected President.

University of Pennsylvania.—The summer courses of instruction at the University of Pennsylvania, and at Jefferson Medical College, are now in operation, under the same régime as last year.

Prof. Gibson, formerly Professor of Surgery in the University of Pennsylvania, died recently in Savannah, at an advanced age, and his body was interred at Philadelphia.

Death from Chloroform.—A death from chloroform recently occurred in a dentist's office in Portland, Me. The deceased had the anæsthetic administered to him for the purpose of having some teeth extracted. After the operation, he rallied for a time, and then expired. He is said to have been suffering with advanced pulmonary phthisis. Prof. Tewksbury, of Portland, made every effort to resuscitate him, but in vain.

Monument to Sir David Brewster.—A statue is to be raised to Sir David Brewster in a conspicuous place in Edinburgh. The British Government has granted the life annuity of £200 to the widow of the distinguished philosopher.

Society for the Prevention of Cruelty to Animals.—A newly chartered Philadelphia Society for the Prevention of Cruelty to Animals, was formally organized April 15, by the election of S. Morris Wahas President.

The Philadelphia College of Pharmacy is to have a new building. Seven thousand dollars' worth of the stock has been taken up by the druggists of that city.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEEMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, May 1, 1868.

THE NEXT MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

THE next session of the American Medical Association will be held in Washington, commencing on Tuesday, the 5th of May. As will be recollected by our readers, the Capital has been chosen as the regular place for meeting, every alternate year, and this will be the first time that the rule is put in force. The object of the determination on the part of the Association is obviously to give some recognized abiding-place to this large and influential body. A library can now be accumulated in the city referred to, and the archives of the Society can be placed in safe-keeping. The place, although not as central as it might be, is still a very fitting one for the purpose, and every one who has the good of the Association at heart, will be interested to watch the result of this movement.

The position which the Association now holds with the profession, is not only a very responsible, but certainly a very honorable one. In these days of party corruption it would seem strange, indeed, if this institution should escape some well merited calumny; but considering all the circumstances in the case, it takes a remarkably high stand, and commends itself to the respect if not the admiration of medical men. It has been evident, particularly of late, that its members have waked up to the sense of responsibility which rests upon them, in preserving the honor and usefulness of the profession; the widespread branches which have ingrafted upon them all the different forms of subtle quackery are being more and more thoroughly pruned, and the number of delinquent members that are disciplined for improper and unprofessional conduct is on the increase. Greater care seems to be exercised in the selection of the delegates from the different societies, and more of the representative men are to be counted among those in attendance. The interest which has been taken in the great medical questions of the day is in the highest degree commendable to the spirit which actuates the members, and is an earnest of a firm determination to maintain the character of the body. Although much might be said as regards the means which might be taken to increase its usefulness, to centralize its power, and extend its influence, still for an association made up as it is, its organization is singularly free from faults. Changes are being made to this end, almost every year, with a good practical effect. Even at the last meeting many little matters of detail were attended to, which will doubtless much facilitate the proper working of the body. We recollect, for instance, the passage of a resolution to the effect that, during the business hours of the Association, no committee of arrangements shall accept invitations to any entertainments. This of itself will give regularity to the workings of the Society, and will not at the same time interfere with the social entertainment of the delegates. There are other points connected with the definition of the rights to membership, the better arrangement of the work for the sections, and the like, which may be referred to in passing. The sections, being really the sessions in which most of the scientific work is done, are most in need of proper regulation, and the liberal allowance of time, and any movement calculated to meet such wants will be regarded with favor. We suggested last year, that in order to facilitate the reading of papers, and crowd as much work as possible in the smallest space of time, abstracts of the subjects should be presented by the authors, sufficiently full to bring out all the necessary points upon which a discussion could be founded. We were pleased to see that those of the members who did so were rewarded with the undivided attention of those present, while their views were most fully comprehended and discussed.

If the numerous committees who are to report properly perform their duty, the meeting is sure to be an interesting one, and the attendance will doubtless be as large as it has been any time heretofore.

THE New York Medical Journal Association is now one of the leading societies in the city, and the determination of its members to keep its reputation good speaks well for the interest they have in the cultivation of scientific discussion and of social intercourse. Its meetings are always well attended, and its resources are being gradually increased. The profession will be glad to learn that, through the liberality of several of the founders of the body, the valuable library of the late Dr. John P. Batchelder has been donated. This is, we hope, for the good of the Society, and its patrons, but the commencement of even better things.

THE three Medical Colleges of this city have commenced their summer courses, which are principally confined to lectures on special subjects. The attendance of students is reasonably large, and the faculties of the

respective institutions should be encouraged, not only to continue their efforts to extend the lecture term, but to add to their existing facilities for acquiring a thorough medical training.

We learn that the State Senate has voted the Medical Society the publication of thirty-five hundred copies of the forthcoming volume of the Transactions, instead of the comparatively paltry number of fifteen hundred, as heretofore. This action does credit alike to the head and heart of this department of our Legislature; and as it stands, it is a fitting comment upon the remarks of a learned physician, a member from the Assembly, who, it will be remembered, at the last meeting of the Society, gave, as it was believed authoritatively, very dreary hopes concerning the probability of even a very limited issue. We hope that he, along with many other worthy patriots at Albany, will be spared the pain of seeing the Legislature seriously impoverished by this judicious, useful, and beneficial outlay. Let us hope that the volume will be of sufficient scientific interest to merit the increased edition.

It is gratifying to notice the estimation in which the Record is held on the Continent of Europe, and particularly by our German exchanges, who are so often quoting articles which appear in our columns. As an earnest of their good intentions towards us we are enabled in the present number to publish an article from the pen of one of the most distinguished ophthalmologists in Europe, Professor Knapp, of Heidelberg, which was written expressly for our use. Our friends who deal much with diseases of the eye, will certainly thank us for it; and we hope that it will be of interest to the great mass of our profession, the aim of the Record being to keep them *au courant* with all that is new in the various departments of our science and art.

Reviews and Notices of Books.

Obstetric Clinic, A Practical Contribution to the Study of Obstetrics and Diseases of Women and Children. By George T. Elliot, Jr., A.M., M.D., Prof. of Obstetrics and the Diseases of Women and Children in the Bellevue Hospital Medical College, Physician to Bellevue Hospital and to the New York Lying-in Asylum, Consulting Physician to the Nursery and Child's Hospital, Consulting Surgeon to the State Women's Hospital, Corresponding Member of the Edinburgh Obstetrical Society, and of the Royal Academy of Havana, etc., etc. New York: D. Appleton & Co. 1868. 8vo., pp. 141.

The duty which medical men in responsible positions and with large experience owe to those less favored is so seldom performed, that it is with peculiar satisfaction that we welcome such a work as that presented by Prof. Elliot. The volume before us is a conscientious and interesting record of the difficulties which are to be encountered in the practice of obstetrics, and as such, coming from one so specially skilled in this branch, is of immense value to every ordinary practitioner. Principally made up of isolated cases, each one of which may be said to represent some important principle in practice, it will be an invaluable book for reference to the perplexed practitioner; and many of the maxims laid down will in the time of trouble and anxiety give comfort and assurance to all who may consult its pages.

To present our readers with some idea of the contents we will give the following headings of the different chapters: Relations of Albuminuria to Pregnancy; Prophylaxis of Puerperal Eclampsia; Varieties of Puerperal Convulsions; Chloroform and Venesection in Puerperal Eclampsia; Relations of Epilepsy to the Puerperal state; Puerperal Mania; Antepartum Hæmorrhage; Induction of Labor; Effect of a Tonic Circular Contraction of a band of Uterine Muscular Fibres in Labor; Brow and Face Presentations; Rupture of Uterus; Post Partum Hæmorrhage; Obstetric Operations in Deformed Pelves; Choice, Uses and Applications of Forceps; Embryotomy; Version; Inflammatory Complications in the Surgical Treatment of the Diseases of Women; Certain Conditions of the Bladder in Women; Dangers from Compression of the Funis; and Kyestein.

It will be seen that the work, as a simple account of individual experience, is remarkably comprehensive, embracing all the really important cases that may occur in public or private practice.

His methods of procedure are eminently orthodox, and are free from every pretension to hobbyism, while all his statements bear that stamp of candor so characteristic of one who is bent on telling the simple truth, and offering a trustworthy guide to those who may follow in his footsteps.

The very variety of the subjects touched upon, forbids us at present a more extended notice of this truly practical treatise, and we must, of necessity, content ourselves with a simple, unqualified approval of the work as a whole.

The Microscope, its History, Construction, and Application. Being a familiar introduction to the use of the instrument and the study of microscopical science. By Jabez Hogg, F.L.S., F.R.M.S., Secretary Royal Microscopical Society, Member of Royal College of Surgeons of England, etc., etc., etc., with upwards of 500 Engravings and Colored Illustrations by Tuffen West, Sixth Edition. London: George Routledge & Sons, Broadway, Ludgate; New York: 416 Broome st. 1867. 12mo., pp. 741.

This deservedly popular and exhaustive work on microscopy has advanced to a sixth edition. To those who are already acquainted with its intrinsic merits as a guide-book to the study of natural objects, it is only necessary to state that many improvements have been made and many additions incorporated, which bring it up as far as consistent with the rapid progress of the science to the present date; to those just commencing the study of microscopy, as applied to the revelation of nature's wonders, we would say, that it is an invaluable treatise, and unsurpassed by any in the language. The text is illuminated with upwards of 500 engravings and eight beautifully colored plates.

A Manual of the Dissection of the Human Body. By Luther Holden, F.R.C.S., Assistant Surgeon of and Lecturer on Anatomy at St. Bartholomew's Hospital, London, with notes and additions by Erskine Mason, M.D., Demonstrator of Anatomy at the College of Physicians and Surgeons, and Surgeon to the Charity Hospital, New York. Illustrated with numerous wood engravings. New York: Robert M. DeWitt, 13 Frankfort st. 1868. 8vo, pp. 588.

After a careful examination of the work before us, and a fair comparison with others of its sort recently presented to the profession, we unhesitatingly say that it is the most complete, reliable, and, as far as is desirable, the most concise of any. It may be considered, as it now stands, the most practical dissecting-room companion

extant. The illustrations are sufficiently numerous for all purposes of reference, and the descriptions of parts are models of terseness and precision. Dr. Mason, the editor, has made some valuable additions to the treatise, principally in reference to the anomalies of the vessels and their practical significance.

Progress of Medical Science.

THE MORNING SICKNESS OF PREGNANCY.—The *Lancet* of February 22, gives a brief summary of the treatment adopted in several of the London hospitals for the relief of morning sickness in pregnancy.

The plan of treatment which Dr. Greenhalgh of St. Bartholomew's has found most successful consists of rest in the semi-recumbent position, especially after meals, which should consist of bland, nutritious, and unstimulating food, frequently administered, and in small quantities. The patient should take a little coffee about a quarter of an hour before rising, and should guard against long fasts. Great attention must be paid to the state of the bowels. In some cases a slight bandage round the lower ribs, and under this a strong sedative application over the epigastrium, appear to have done good. Effervescents, with hydrocyanic acid, belladonna, or nux vomica, ice, and in some cases lemon-juice, have proved useful. Bismuth and charcoal, where there have been large secretions of acrid mucus accompanied with flatulent eructations, have appeared serviceable. But of all remedies Dr. Greenhalgh places most reliance upon the introduction into the vagina of morphia suppositories, more especially in severe cases, and where an irritable condition, with or without abrasion of the cervix uteri, is found to exist. In such cases he believes little or no reliance can be placed upon remedies taken by the mouth, which he has found rather to aggravate than relieve the vomiting.

In the practice of the University College Hospital, Dr. Grailly Hewitt generally finds benefit derivable from giving the patient some nourishing article of diet, such as a teacupful of beef-tea, a small sandwich of meat, a cup of milk, etc., before raising the head from the pillow. The change of posture from the recumbent to the upright position appears to excite the attack when the stomach is empty, but not so much so when the attention of the organ is, so to speak, otherwise occupied. The patient should remain a few minutes or longer in bed after this early meal before attempting to rise.

Dr. Playfair, in King's College Hospital, is not in the habit of treating cases of "morning sickness" much, unless it is unusually severe, beyond carefully regulating the diet, and removing any obvious source of irritation to be met with in the primæ viæ themselves. He is of opinion that there is much truth in the old belief, that pregnancies with out morning sickness are not, as a rule, favorable. He has so frequently noticed that when sickness is entirely absent other and more distressing reflex phenomena, such as syncope, exist to an unusual degree, that he is disposed to look upon the entire absence of nausea as unfavorable. When morning sickness is excessive he has frequently verified the opinion of Dr. Clay and others, that there is some morbid condition of the uterus itself, and has found local treatment, such as the occasional application of leeches to the vulva, or of iodine paint to erosions of the cervix uteri, to be of great service. With regard to actual medicines, he is disposed to place most reliance on the oxalate of cerium, in doses of two grains three times a day. Next to this, effervescing draughts, with hydrocyanic acid, ice for suction *ad libitum*, and the subcutaneous injection of morphia answered best. Pyroxide spirit has not answered as well as was expected.

In the British Lying-in-Hospital, Dr. Murray adopts the following treatment:

One teaspoonful of sal volatile is given before rising. If nausea occurs during the day sinapisms are applied to the epigastric region, with a pill containing the oxalate of cerium and camphor, to be taken twice or three daily. In one or two cases he has found the morning nausea and vomiting stayed by getting the patient to eat either a biscuit or sandwich some time during the night, or very early in the morning. Salicine is a drug which he has used with success. He recommends lime-water, in preference to soda-water, to be taken with almost every drink; and has found nitro-muriatic acid, with some bitter infusion, very useful.

In the Hospital for Women, Soho Square, Dr. Meadows has found the greatest success from medicines which exercise a decidedly sedative action upon the nerves of the stomach. Regarding the sickness of pregnancy as a purely reflex effect of uterine irritation upon the pneumogastric nerves and solar plexus, Dr. Meadows places most reliance on drugs which diminish the sensibility of those nerves in their peripheral distribution. The tincture of aconite in five to ten-minim doses, the tincture of belladonna in ten-minim doses, the liquid extract of opium in five-minim doses, or the dilute hydrocyanic acid in five-minim doses: one or other of these is the remedy which he most commonly and most successfully prescribes. He has also observed marked effects from the oxalate of cerium, or the citrate of bismuth, in five-grain doses. In very intractable cases he has sometimes tried with good effect a small blister, about the size of a florin, over the epigastric region, the blistered surface being afterwards dressed with some diluted savin ointment containing one grain of morphine in a drachm.

COBRA POISONING.—Peter Hood, M.D., describes in the *Lancet* a case of poisoning by the bite of a cobra in India, in which he tied the patient's hands to the back of a buggy, and drove several miles, obliging the man to run rapidly until nearly exhausted. The profuse perspiration thus occasioned was maintained by frequent doses of eau de luce, and the patient recovered. Continued and forced action of the heart and lungs seems the only mode of preventing the action of this terrible poison.

OVARIOTOMY.—M. Richet, of Paris, recently attempted ovariotomy under circumstances which deserve to be mentioned. The patient was forty-five. The tumor for two years and a half had been gradually acquiring an enormous distension. The abdomen, however, instead of bulging forward or presenting a globular form, was flattened and enlarged. M. Richet therefore suspected the presence of extensive adhesions, and operated only at the patient's urgent request. On opening the abdomen, the adhesions between the cyst and the abdominal walls were found so numerous and resisting that M. Richet declined proceeding with the operation. Judging from the adhesions between the cyst and the abdominal walls, he felt convinced that the adhesions between the cyst and pelvic organs would be such as to render the operation impossible. The incision was therefore closed by means of a suture, and the following night the patient died from peritonitis. The autopsy justified M. Richet's prognosis. The adhesions between the cyst and pelvic organs, especially the uterus, were such that they could not be got rid of even by means of the most careful dissection.—*Lancet*, Feb. 22.

Phosphorus in Paralysis.—The *Lancet* of Feb. 22 says: M. Delpech, of Paris, has obtained the best results from the employment of phosphorus in paralysis. There are at present three cases in his wards submitted to this mode of treatment. In one case the disease had been brought on by the prolonged employment of sulphide of carbon; in another, by the effects of cold; and in the third, by an attack of apoplexy. The phosphorus acted at first as an aphrodisiac, producing erections, and thus manifested its peculiar action on the genital organs; mobility and sensibility were then favorably modified, without any apparent inconvenience attributable to the employment of the remedy.

Chloroform has been administered safely and satisfactorily in seventeen hundred cases by Dr. Clover, of London, by means of vapor from a bag. The bag is charged by a bellows holding one thousand cubic inches, and to each bellowsful of air he adds thirty-two minims of chloroform by means of a glass-syringe. The mixture used therefore contains rather less than four per cent. of the vapor of chloroform.

Odontology.—At the last meeting of the Odontological Society of Great Britain, a paper was read by M. Oliver Chalk, M.R.C.S., to support a view previously promulgated by him, but opposed by Mr. Tomes and others, that when redevelopment of the maxilla takes place, as is so frequently seen after the occurrence of necrosis, a new development of teeth is possible. The cases and specimens brought forward in support of this view were four in number, and were examples of necrosis of the jaw in children, with more or less repair of the lost bone, and the subsequent appearance of certain permanent teeth. As pointed out, however, by some of the speakers who took part in the discussion, the subsequent appearance of permanent teeth was no proof of their re-development, unless it were conclusively shown that they had been previously shed in an imperfect condition.

Hottina.—This powder, invented by M. Hottin, of Paris, will make linen fire-proof without impairing its whiteness, when mixed with equal quantities of starch and gum. The powder is prepared by adding a little ammonia to an acid solution of phosphate of lime, and filtering with animal carbon, then evaporating until concentrated, when five per cent. of gelatinous silica is added; the whole is then evaporated, and the resulting crystals are pulverized.

Oxycamphor.—C. G. Wheeler, in a note to the French Academy of Sciences, describes the action of aqueous hypochlorous acid on the essence of turpentine and on camphor. From one of the chlorinated compounds obtained he has been able to separate a body containing ten atoms of carbon, sixteen of hydrogen, and two of oxygen, which crystallizes in white needles, is soluble in alcohol, insoluble in water, and has an odor resembling camphor. Oxycamphor sublimes without decomposition, and is isomorphous with the camphinic acid of Berthelot.

Heat Generated by Electric Discharges.—A paper recently read at the Berlin Academy by Poggendorf, contains the following deductions from experiments made by the author:—1. The direct discharges of the machine are hotter at the positive than at the negative pole. 2. The temperature between the poles varies with the form of the electrodes. If the electrodes are spherical, the temperature is within certain limits—directly as the diameter of the sphere. 3. The elevation of the temperature between the electrodes depends on their nature. Under like conditions, the more volatile the metal forming the electrode, the higher is the temperature produced.

Successful Extirpation of the Spleen.—M. Péan, Sept. 6th, 1867, while operating upon a young woman twenty years of age, for the removal of a cystic tumor of the abdomen, unexpectedly found the cyst to have been developed in a hypertrophied spleen, and was led to extirpate the entire organ, from which operation the patient recovered perfectly.—*Gazette Médicale.*

Tetanus cured by large doses of Aqua Ammoniæ.—Dr. Barot reports a case of tetanus cured by aqua ammoniæ in doses of ten drops in a glass of sweetened water every hour.—*La France Médicale.*

Double Hernia in a Single Sac.—Dr. Henry Lee, Surgeon to St. George's Hospital, London, reports a case in which, during the operation for hernia, two openings were discovered between the sac and the peritoneal cavity. These openings both existed in the neck of the sac at the internal ring. It was supposed that the testis, which had not descended on the side of the hernia, had lodged at the internal ring, and that, by its pressure on the one hand, and the pressure of a truss on the other, adhesions had been established between the two layers of the original hernial sac opposite the most projecting part of the testis. On each side of the adhesions so formed, a fresh hernial protrusion had, it was thought, occurred, so as to present two distinct herniæ in one sac. One of these herniæ, when the patient was first seen, presented a decided impulse upon coughing, which led to the belief that no operation would be required. It appeared, however, subsequently, that the second hernia was strangulated at the time. The symptoms were all relieved by the operation.

Apparatus for Preventing Epileptic Attacks.—M. Broca, of Paris, has presented to the Academy of Medicine an ingenious little apparatus, which has been invented by M. Rozier, of Bordeaux, with the object of exercising an instantaneous compression on the arm, and of thus preventing attacks of epilepsy whenever these are preceded by the aura epileptica. The apparatus had been contrived for an epileptic patient, a quarryman, who was never six weeks without being subject to a fit, and who was warned each time by a peculiar sensation which he felt in the right index. Scarcely a few seconds elapsed between the occurrence of this sensation and the explosion of the attack. It was consequently needful that the compression should be instantaneous. For eleven months the quarryman has constantly worn this little apparatus, and has never once had a complete attack.

Danger of Injections of Iodine in Ovarian Cysts.—*L'Union Médicale* gives the details of two cases taken from Virchow's Archives, in which injections made with the tincture of iodine into ovarian cysts had been attended with very serious accidents. In one instance death had supervened.

Early Treatment of Insanity.—In the report of Dr. Curwin, the Medical Superintendent of the Pennsylvania State Lunatic Asylum at Harrisburg, we find the following declaration, which, as coincident with the opinion of all those who have had any experience in the treatment of insanity, should be widely disseminated: "It cannot be too often repeated that, when an individual has once been placed under treatment in a hospital, the treatment should be continued without interruption until mental health is restored. The nervous system, and often the whole bodily frame, is so disordered, that a long, regular, steadily pursued course

of medical and dietetic treatment is necessary to bring back all the functions to their proper order." By the use of appropriate means at the beginning of an attack of insanity, "eighty out of every one hundred attacked will be restored; while twenty will either remain insane or die." The average length of time required for restoration to health of a case of recent attack "will average about five months, including in the calculation all who have become insane in less than one year." The probability of death in an insane person is much greater than in a sane one of the same age. With the increase of population, there is a steady increase of the number of the insane in Pennsylvania; but, "there has been no corresponding extension of the accommodations for this class." Applying the estimates made by Dr. Edward Jarvis of one insane person for 1699 of the population at large of Massachusetts, Dr. Curwin gives Pennsylvania the number of 2070 annually who become insane; or, assuming the proportion of one in 2,000, the number would be 1,705.

Defective Alimentation.—In an article on "Defective Alimentation a Primary Cause of Disease," by J. H. Salisbury, M.D., Cleveland, Ohio, the following are some of the diseases excited by defective feeding: Vegetable Dyspepsia. This arises from the too exclusive and too long continued use of vegetable, and especially amylaceous and saccharine food. Sooner or later the filamentous stage of yeast vegetation begins, ushering in the acetous fermentation, producing acid stomach, and sour eructations. Yeast plants are rapidly developed in the organ, and every particle of vegetable food that is taken in immediately begins to ferment, the stomach being converted into an apparatus for manufacturing beer, alcohol, vinegar, and carbonic acid. Chronic Diarrhœa:—This disease, with the other intercurrent abnormal states that arise from the too exclusive use of a dry, amylaceous diet, may be conveniently divided into three stages—the incubative, the acute, and the chronic.

The following interesting facts are developed on the microscopic examination of the fæces: 1st. That as soon (after beginning to subsist on amylaceous diet) as gases begin to develop in the intestinal canal, yeast plants begin to develop in the alimentary matters to an abnormal extent. 2d. That this development of yeast plants is evidence of the inauguration of fermentative change in the amylaceous food. 3d. That fermentation and the development of yeast plants continue to increase till diarrhœic conditions are produced. 4th. That a peculiar gelatinous colloid matter, usually in little masses, scattered through the fæces, shows itself to a greater or less extent as soon as the diarrhœa commences; that this matter is present in direct proportion to the severity of the case. 5th. That this colloid matter is not the cause of the diarrhœa, but merely the consequence of certain saccharine and fermentative conditions of the system, in which state the connective tissue of the alimentary walls becomes a proper nidus for its development. As soon as these systemic conditions are overcome, this colloid matter ceases to develop and disappears entirely from the fæces.

On the "microscopic examination of the urine" in "chronic diarrhœa," he finds that the urine is usually small in quantity, rather high colored, and deposits, on standing, a tolerably large sediment of pinkish or brick colored lithates. The disease is not unfrequently accompanied, and followed, also, by obstinate oxaluria and phosphuria. He finds, also, in all three stages of chronic diarrhœa, that sugar is largely present in the fæcal matters and in the mucous secretions of the alimentary canal. There is evidence that the secretions of the mucous membrane of the alimentary canal, fauces, mouth, and pulmonary surfaces, eventually become saccharine. This is evidenced in the development of tubular cells and filaments of penicillium in the viscid layer of mucus lining the whole alimentary canal, and the mucous secretions of œsophagus, pharynx, larynx, trachea, and mouth, in the later stages of the disease.

A Curious Application of Electricity has been made by a jeweller in the Rue Thérèse, M. Trouvé. He makes scarf-pins, etc., with heads upon them which, at the will of the wearer, move their eyes. They are delighting fashionable Paris. The electro-motor is usually carried in the waistcoat pocket. It is formed of one couple, either zinc and carbon or zinc and platinum. The carbon is fixed in the vessel which holds the exciting liquid—a saturated solution of sulphate of mercury—there being an outer case in which this vessel is placed. The zinc is fixed to the lid of the case, and does not plunge into the liquid, which only fills the lower half of the vessel. So long, therefore, as the apparatus is in an erect position, there is no action, but when placed horizontally the current is formed. The whole apparatus makes a little case of the most trifling size. A scarf-pin with electro-motor and connections, costs from sixty francs upwards.—*Chemical News.*

Exophthalmic Goitre accompanied with Gangrene of the Lower Extremities.—M. M. Fournier and Olivier presented, at a late meeting of the Société Médicale des Hôpitaux, the record of a case of exophthalmic goitre (Grave's disease) which presented two points of interest, namely: first, the complication of gangrene, and second, absolute integrity of the great sympathetic nerve, which was very carefully examined by Dr. Ranvier with the microscope. The patient, a female, was 58 years of age, subject to all the ordinary phenomena attendant upon this malady. Several days after her admission into the l'Hôtel-Dieu, a rapidly progressing and extensive gangrene of the entire circumference of the lower third of the left leg set in, similar to senile gangrene. Evidences of gangrene of the left hand, and of the right foot, soon manifested themselves, and the completion of the mortification was arrested only by the death of the patient.

The autopsy showed obliteration of the arteries of the mortified parts, the arteries themselves being apparently perfectly healthy. The most attentive examination of all the organs failed to detect any lesion capable of accounting for any of the symptoms so markedly manifested during life. The great sympathetic was carefully examined under the microscope, and was apparently in a state of complete integrity, cervical, thoracic, semilunar ganglion, and every other portion.—*Gazette Hebdomadaire.*

Cement.—Sorel describes a new cement which he prepares by mixing magnesian oxide with a more or less concentrated solution of magnesian chloride. The hardness of the cement increases with the strength of the solution; 20 to 30° Baumé is found most suitable. Its binding power is greater than that of any other cement, it being capable of producing hard blocks with more than twenty times its weight of sand or other inactive material. (Comptes R. LXV. 102.)—*Chemical News.*

Detection of Salicine in Quinine.—M. Parrot has indicated a method of detecting the presence of salicine in the sulphate of quinine. In effecting this he takes advantage of the action of chromic acid on salicine; by his process a quantity as small as a half per cent. is discovered. To make the examination, the quinine salt is introduced with a little water into a flask; 2 C. C. of sulphuric acid, diluted with four parts of water, are

added, and 4 C. C. of a concentrated solution of bichromate of potash. To the flask is fitted a curved tube which dips into a few grammes of distilled water contained in the little flask serving as receiver. Heat is applied; at the end of three or four minutes, hydride of salicyle is produced, which distils. By adding to the water in the flask a few drops of solution of perchloride of iron, a more or less deep violet color is developed.

Traumatic Aneurism of the Arteria transversalis faciei.—An interesting case is reported in *La Fraternidad*, No. 31, by Dr. Iborra. The patient, a lad of eighteen years of age, presented himself with a tumor upon his left cheek. At the age of eight years, his teacher had struck him violently on the face with a strap; he lost consciousness at the time, and for some time there remained traces of considerable contusion, occupying the malar and temporal region. At the point where the extremity of the strap had struck the cheek a slight tumefaction soon appeared, but remained indolent. Seven years afterwards the tumor, which had gradually enlarged, had acquired such volume as to render the patient uneasy. The diagnosis being made out, the sac was opened, four dilated anastomosing arteries tied, and the parts dressed with charpie saturated with the water of Pagliori. The case was cured. This is perhaps the only case of aneurism of this artery on record.

Arsenic in the Treatment of Pulmonary Consumption.—The clinical investigations of M. Moutard-Martin lead him to place considerable confidence in the employment of arsenic in the treatment of pulmonary consumption. He finds it more suitable to cases slowly progressive, than to such as are attended with fever. He has seen notable amelioration of the patient's condition from the use of arsenic, and in some cases actual suspension of the onward progress of the disease. He administers it in very minute doses, never exceeding two centigrammes, and considers perseverance in its use for a long time necessary to a favorable result.—*Gazette Médicale.*

Estimation of Nicotine.—A process for the estimation of the nicotine contained in tobacco has been devised by M. Leicke. He exhausts the dry tobacco leaves with water acidulated with sulphuric acid, renewing the water three times, and evaporates the solution just to the consistence of an extract. This extract is treated with an equal volume of alcohol, the alcoholic solution filtered, and the residue washed with alcohol. The alcoholic solution contains all the nicotine as sulphate. The solution is evaporated, and the residue obtained from it decomposed by caustic potash in a retort heated by oil to 260° C. the nicotine being received in dilute sulphuric acid.—*Chemical News.*

Viridinic Acid.—This acid may be obtained direct from coffee by pulverizing the beans, extracting them with ether alcohol, to remove fat, and exposing them in moist condition to the air. After a few days the mass, which has assumed a green color, is exhausted with acetic acid and alcohol, which takes up the viridinic acid formed.—*Chemical News.*

Professor Dunglison, the venerable Dean of the Jefferson Medical College, has resigned his chair of Institutes of Medicine in that institution.

We learn that the two most prominent candidates for the vacant chair are, Dr. S. Weir Mitchell, son of the late Prof. John K. Mitchell, and Dr. J. Aitken Meigs, formerly Professor of Physiology in the Philadelphia Medical College. Both these gentlemen are Philadelphians, and favorably known to the profession in certain special departments of science.

Correspondence.

MEDICAL MATTERS IN PARIS.

(FROM OUR SPECIAL CORRESPONDENT.)

THE APPOINTMENT OF HOSPITAL INTERNES IN PARIS—INTERESTING CASES FROM CLINIQUES OF M. GOSSELIN.

To the Editor of the Medical Record.

Sir—I cannot resist the opportunity to say a word on the admirable system that obtains in Paris for the regulation of the hospital studies of the pupils. Admirable both for its democratic equity in throwing open the best clinical advantages to all who choose to try for them, and for the stimulating pressure that it exerts on the mental exertions of the young men. Instead of private cliques surrounding each hospital physician—consisting of his paying students, to whom his only equivalent for three hundred dollars is the prospect of nomination to a vacant place in the wards—there is a perfectly free competition by means of nomination before a jury.

Two sorts of places are directed to be filled by the students in the hospitals. The lowest is that of externe. An externe is obliged to be on hand at every morning visit (a certain number of absences in the course of a year occasions the forfeiture of the place), and with his companions, records the prescriptions, and performs certain personal services required for the patients, as the dressing of wounds, application of blisters, &c. A definite number of externes is attached to each service, the number varying, of course, with the extent of the service. To secure a place in this body, a medical student inscribes himself for the tria-examinations, which are conducted on two year subjects given at the moment, one pathological, the other anatomical. Two examinations take place at each concours. In the first the candidates prepare written answers to the questions, during a half hour allotted for the purpose. Upon the results of this preliminary examination, a certain number of candidates are estimated, and the selected minority are submitted to a second final examination of the same nature, but which is oral. The number of places to be filled each year, is sufficiently large to give nearly every serious student a chance for the external.

For the place of interne, corresponding to what we call resident physician, the externes alone are eligible candidates. There are about forty-five places, and two hundred and eighty competitors.

The examinations (which occupy two or three months) are of the same character as those of the external, only considerably more difficult. An externe generally calculates to compete twice before he succeeds in becoming interne. To prepare for these competitions, the candidates hold conferences in groups of twenty or thirty, that continue throughout the year previous to the moment of trial, and in which the entire outlines of internal and external pathology are passed in review.

An externe is nominated for three years, an interne for four; and each year is passed at a different hospital. A person may become a competitor for either position at any stage of his medical studies at which he feels himself sufficiently *fort* to stand the examination.

It is plain that the benefits of this system—great as they are to the students who succeed at the examinations—extend also to those who fail, since all are equally compelled to prolonged, thorough, and systematic work. No one can observe the working of the method without wishing for its introduction at home.

Another excellent custom in relation to the manage-

ment of hospitals, is that of making the visit between eight and nine o'clock in the morning. M. Gosselin, the successor of Velpeau, for instance, is always on hand at eight precisely, and calls the roll of the students with the exactitude of a drill sergeant. Woe betide him who has overslept himself, and who, in spite of a breakfastless race through the quarter, arrives after the *feuille de présence* has been laid upon the table by the inexorable chief.

"Why is this ulcer not dressed, sir?" demands the surgeon, fixing the trembling externe with his bright black eyes.

"I, I—excuse me, I was late. I meant to do it after the visit."

"Attend to it immediately, and never tell me again that you were late. That is no sort of reason for neglecting your duty. You are not to be late."

All honor to men who, knowing their own duty, know also how to keep others up to the mark. All shame, confusion, and perplexity to those who, careless, indulgent, or shiftless, permit things to be left undone that ought to have been done—after the fashion of all miserable sinners!

As M. Gosselin's clinique lasts three hours, his extreme punctuality alone saves for the student the bulk of the day intact, and able to be employed at lectures, dissections, libraries, etc. After experiencing all the benefits of this system, I feel a certain horror of that prevailing in New York, where the visit is made at any time between twelve and three, subject to all sorts of variations dependent upon the exigencies of the physician's *clientèle* or caprice.

CASES OF METRORRHAGIA.

Two cases of metrorrhagia have formed for M. Gosselin the themes of recent and interesting clinical lectures. In the first case the hæmorrhage had come on after a suppression of menstruation during two months, and the question of spontaneous or provoked abortion immediately suggested itself. M. Gosselin recapitulated the circumstances of the diagnosis which led him to rest finally upon this suggestion. The uterine orifice was neither granulated nor occupied by a polypus. Neither cancerous nor fibrous tumor could be discovered. Ballottement of the uterus was somewhat painful. The body was sufficiently voluminous to be felt in the hypogastrium; the orifice sufficiently open to permit the introduction of the index finger.

Under these circumstances, in spite of the affirmations of the woman that such contingency was impossible (affirmations which, as every practitioner knows, are precisely what create the delicacy and difficulty of the diagnosis), M. Gosselin did not hesitate to pronounce for an abortion. Principally on account of the denial of the patient, the inference was further drawn, that the abortion was deliberate. The hæmorrhage ceased spontaneously, shortly after admission to the hospital, and the principal danger that remained to fear, was that of a metritis, determined by the instrument that had been employed. Hence, while active treatment was superfluous, active surveillance was imperatively required.

The other case was much more serious, and was first mentioned in connection with the autopsy of its subject.

The patient had arrived in a state of exhaustion, too great to admit of a precise examination, but complaining of an abundant uterine hæmorrhage. Small vegetations were discovered around and within the os uteri, which, though apparently different from the tumefaction of cancer, proved at the autopsy to be carcinomatous. A hard tumor of some size was discovered behind and above the vaginal cul-de-sac. M. Gosselin could not decide satisfactorily to himself whether the body of the uterus was simply inflamed, or the seat of a cancerous tumor.

The day after admission the patient was seized with a most intensely acute peritonitis. The constipation was obstinate, and presently accompanied by vomiting of matters that, though destitute of stercoral odor, resembled the contents of the small intestine. It was not the green liquid usually vomited in peritonitis, nor that tinged with brown occasionally observed, but distinctly brown, and characteristic of intestinal obstruction, especially a strangulated hernia. No trace of hernia, however, could be discovered, and the conclusion was arrived at, that the obstruction was caused by intestinal adherences dependent upon the peritonitis.

At the autopsy, adhesions between the intestines and uterus were found in fact to be sufficiently extensive, and the intestines were so agglomerated around the pelvic cavity, that separation of the organs was attended with considerable difficulty. Behind the uterus was a cavity as large as a man's fist, circumscribed by the loops of intestine, by the uterus, and the abdominal walls, and containing a quantity of fecal matter, poured out from the intestine by three or four large openings.

Such openings constitute an unusual lesion under the circumstances. According to M. Gosselin, the uterine cancroid, which extended from the neck into the body of the womb, had been the point of departure of the whole train of circumstances. The irritation of this tumor had first developed the effusion of plastic lymph between the uterus and the intestines, which united these organs by the firm adhesions noticed above. Extension of this subacute inflammation had gradually thinned the coats of the intestine, until, at a given moment, the internal tunic gave way, and the contents were poured into the pelvis, exciting the acute peritonitis which had carried off the patient. The increased obstruction, upon which depended the stercoraceous vomiting, was evidently, as had been supposed, the result of the rapid formation of lymph during the period of acute inflammation.

EMPYEMA AND ITS TREATMENT BY PERPETUAL DRAINAGE.

An extremely valuable clinique was that held by M. Gosselin on a case of empyema, that he had had under his eyes for two years, and in relation to which he suggested several ideas that are not everywhere current.

Until recently (observed the Professor) suppuration of the pleura was regarded as a necessarily fatal disease, both on account of the exhaustion induced by the long continued drain on the system, as also by the habitual coexistence of grave pulmonary disease. No cure is possible unless on the condition of entirely evacuating the pleural cavity, which can only be effected spontaneously by the establishment of a bronchial or cutaneous fistula. In a few cases children have been known to recover after the establishment of the first kind of fistula, or vomica, as it is technically called, but only uncertain reliance can be placed upon the benignity of this mode of evacuation, and no physician has the right to provoke it. On the other hand, the cutaneous fistula is even more dangerous, air insinuates itself into the cavity, decomposes the pus, and prevents the dilatation of the lungs, which gradually assume a state of definite collapse. Hectic fever sets in, with all its train of symptoms, cough, diarrhœa, and everything indicating the absorption of purulent matters, and the patient is generally carried off in two or three months at the furthest. Modern surgery, however, has ventured to interpose the operation of thoracentesis as an attempt to arrest

the fatal march of this serious disease. This operation, whether performed by simple puncture or by incision, is (according to Gosselin) essentially the same, and essentially useless unless accompanied by a certain precaution presently to be described. In the first case, the little wound speedily cicatrizes, and a repetition of tappings is required, which finally results in the establishment of a fistula. By this the pus indeed escapes, but the air also enters, with the consequences above described. The same thing is true of an incision, and although there was more chance of success after Sedillot suggested counter-openings, and the use of injections to wash out the cavity, the results were still far from satisfactory. M. Chassaignac, however, has had the happy idea of inserting by the two openings perforated caoutchouc drainage tubes, which afford free and continual exit to the pus, and thus neutralize any evil effects resulting from the inevitable ingress of air. For the pus, however decomposed, is innoxious if able to freely escape, instead of being shut up in a close cavity, and stimulating its own absorption.

In addition to the use of drainage tubes, injections of warm water are made every two or three days. The patient who furnished the occasion for these remarks, had been treated by the method above described, which had proved remarkably successful. He had first come under the care of M. Gosselin two years ago at La Pitié, and appeared then in a dying condition, exhausted by a long standing empyema and thoracic fistula. As soon as free exit was afforded to the pus, and the drainage tube established, the hectic fever began to mend, the patient's strength rallied, and in three months the convalescence seemed so solidly established, that the drainage tube was removed, and the man left the hospital. The flow of purulent liquid had entirely ceased. After working for about three months the patient began a second time to suffer from oppression. A fistula reopened, and after some weeks the general health had fallen to nearly as desperate a condition as on the first occasion. Readmitted to La Pitié, and treated again by a drainage tube, the patient again rapidly recovered. After this experience, the tube was left permanently in place. A third time he had run down in strength, and entered La Charité, but was speedily built up again by the same treatment, and thoracic injections of iodine and of sulphite of soda. It was M. Gosselin's intention to leave the drainage tube in place until the pleural cavity should be entirely obliterated. And this practice, and the theory upon which it is founded, constitutes the original part of his lecture. He declares that it is absurd and chimerical to hope that a serous membrane that has undergone a pyogenic transformation, can ever regain its original character or functions. So long, therefore, as it exists, so long will there be drainage from renewed secretion of pus. But by prolonged care in carrying off the corroding secretion as it forms, the surgeon may hope for the formation of adhesions which shall definitely obliterate the cavity, and constitute the cure of the disease.

By means of these combined methods, therefore, judiciously applied, many patients, in even grave stages of hectic fever, may be snatched from the jaws of death, and restored to a tolerable degree of health. This, of course, cannot be expected if the empyema complicates advanced tuberculous disease.

M. Gosselin also applies the system of perpetual drainage to abscesses situated under the great pectoral, and whose evacuation is rendered difficult by the tonicity of the muscle. A case of this kind, actually in the ward, is doing extremely well. The tube, of course, passes through the original and the counter incision. Injections are made every two days with warm water.

PSOAS-ILIAC ABSCESS.

A very different kind of abscess was that presented by a case admitted January 7th. This was a young woman, of rather lymphatic temperament, who had suffered for six months with pain in the sacrum, and, for a month in addition with pain in the left groin. In complete repose the patient was conscious of no suffering, but the least movement awakened the pains, as also pressure in the affected regions. Lying on her back, the patient was unable to completely extend the left thigh, and forced flexion of the limb was painful; when the patient attempted herself to flex the thigh on the abdomen, the lumbar vertebræ arched forward. This same forward projection of the lumbar part of the spine was very evident in walking, when also the patient limped, and rested principally on the right leg. You will recognize this curvature as a symptom of insufficiency of action on the part of the psoas muscle. It would seem to be an instinctive attempt, by bringing the fixed insertions of this principal flexor of the thigh in a direction approaching a perpendicular to the lesser trochanter, to supplement the intrinsic deficiency of power by the more favorable direction in which it was enabled to act.

Still another sign was obtained by placing the patient on the abdomen, and after seizure of the ankle, bringing alternately the right and left limb into forced extension. The left offered a resistance altogether abnormal. Finally, deep pressure in the groin, just above Poupart's ligament, detected an obscure tumefaction, though not fluctuation.

In forming the diagnosis, M. Gosselin first set aside the possibility of lumbago, which would have tormented the patient even during repose, and been probably accompanied by rheumatism elsewhere; and of uterine disease, indicated by no other symptoms: and arrived at the discussion of some different forms of spinal disease. The pain in the sacrum must in fact be referred to an affection of the spinal cord itself, of its membranes, or of its bony casement. In the first two cases, however, the sensibility or mobility of the limbs could hardly fail to be affected, while the patient in question offered no sign of lesion of either. There remained, therefore, only arthritis of the sacral vertebræ, which tended to terminate in suppuration, if that were not already commenced.

On the other hand, unquestionable symptoms (recapitulated above) indicated inflammation in the neighborhood of the psoas muscle. The possibility of simple chronic psoitis, or inflammation of the surrounding cellular tissue, was eliminated on account of its extreme rarity, except as a consequence of puerperal inflammation. There remained, therefore, after combination of all the facts, the conclusion of a psoas iliac abscess by congestion, resulting from caries of the lumbar or sacral vertebræ.

The prognosis (pursued the Professor) is excessively grave, and contrasts strikingly with the apparent benignity of the disease at the present moment. Sooner or later, the abscess will probably open, and the patient succumb to exhaustion from the discharge. The only chance is that derived from the use of tonics, and the local application of iodine with the faint hope that the contents of the abscess may be absorbed. Even in that case the spinal disease would continually tend to occasion the formation of another.

DANGER OF APPARATUS IN SOME CASES OF FRACTURE OF JAW.

Three different cases of fracture, one of the lower maxilla, one of the fibula, and one of the radius, fur-

nished the occasion for some pointed and suggestive remarks. The first case was the result of a kick received on the jaw, and the fracture, though distinctly indicated by crepitation, was accompanied by but slight displacement, and an insignificant wound of the mucous membrane. The accident was therefore slight in reality, but Gosselin pointed out a certain possibility of grave danger from an unlooked-for source. He declared that whenever, as in this case, a solution of continuity had been effected inside the mouth, the application of any apparatus for holding in place the fragments of the jaw-bone was extremely mischievous. In two cases observed at La Pitié, irritation of these machines induced extensive inflammation of the mucous and submucous tissue, ultimately reaching the bone, and ex iting osteitis, followed by denudation, necrosis, purulent absorption and infection, and death. Even where death is not the result, the necrosis compels an elimination which often lasts four or five months.

In view of these possible perils (upon which, says Gosselin, authors have not sufficiently insisted), all apparatus should be proscribed, and the fragments retained in place by a simple bandage. The slight deformity resulting from lack of perfectly accurate adjustment, is more than compensated by the security for the life of the patient.

TREATMENT OF FRACTURES OF THE RADIUS, ETC.

Similarly, was an unexpected complication indicated as the occasional result of an accident so simple and seemingly harmless as fracture of the radius. The danger is again due to want of care in the application of the apparatus. A patient comes to the consultations the first day of the accident to have the bone "set" and arm splints adjusted, and insists on returning home, where he will be withdrawn from surveillance. The second or third day the arm swells, and becomes so intensely tightened by the splints that, if they be not removed, the inflammation may result in gangrene. Gosselin had seen some examples of this consequence.

In the case in question, when the patient returned to the hospital, after suffering for two days with sharp lancinating pains and sense of constriction in the arm, the limb was found greatly swollen, and a bright red streak on the back indicated the approach of gangrene. This was happily warded off by the removal of the splints, but the danger had been imminent.

It is, therefore, a rule with M. Gosselin, in all cases of fracture of the arm, especially with female patients, children, or old people, to wait during four or five days after the accident for the application of the splints. During this time the part is kept constantly poulticed, and at the end the inflammation is found to be well reduced, and no difficulty opposes itself to the setting and adjustment of the fragments, as the callus has still hardly begun to be formed.

For further precaution, such an apparatus is selected as shall leave the limb open to observation. Tampons of cotton, wool, and then stout rolled compresses are placed against the free ends of bone to press them into place; a splint is adjusted to the posterior and anterior face of the arm, and retained by two or three bands of diachylon.

In the case of fracture of the fibula and external malleolus, the leg was placed, after adjustment of the fragments, in a simple plaster casing, formed of bands of taffetan, dipped in liquid plaster. This was chosen because it alone becomes fixed in a few minutes, while dextrined, gelatinized, or silicated bands require some time to attain the necessary rigidity. Where, therefore, the fracture only involves a small bone, as in this case, and there is less dread from the possible breaking of the case, M. Gosselin thinks that plaster is preferable to all other material for immobility.

DANGERS OF EROSIONS OF URINARY PASSAGES IN CASES OF RETENTION—REABSORPTION OF THE RETAINED URINE—URÆMIA.

The case of a man who died shortly after admission to the hospital for a retention of urine caused by urethral stricture, furnished opportunity for an acute suggestion from the lecturer. During life, the sinister progress of the disease had been suspected to depend upon concealed inflammation of the kidneys, possibly an abscess, whose presence was betrayed only by the purulent infarction which proved fatal. But at the autopsy, the kidneys were found to be perfectly healthy, and some small erosions of the urethra and the bladder were the only lesions discovered to explain the death.

These lesions, however, were not sufficiently extensive to have caused death directly, but their indirect agency might be explained in one of two ways. It might be supposed that one or both kidneys had ceased to secrete, their functions being interrupted by sympathy with the interruption of the excretion. In this case, death would result from intoxication, caused by accumulation of urea in the blood. But the patient had exhibited no signs of coma, nor the fever characteristic of ordinary uræmic intoxication. M. Gosselin inclined to adopt the other theory, which suggested *reabsorption of the retained urine*, at the eroded surfaces of the urethra and bladder. A special uræmia would therefore result, betrayed by somewhat anomalous symptoms, but leading to definitely fatal results as that dependent upon suppression of urine.

M. Gosselin explained that his reason for insisting upon this mode of fatal termination, was to point out the danger of even small erosions of the urinary passages, in cases of retention of urine from any cause. With the possibility of this danger in mind, the surgeon would often be much more careful than at present, to avoid tearing the mucous membrane by any instrument employed in treatment.

DIAGNOSIS OF CANCEROUS STRICTURE OF RECTUM.

Nearly at the same time, a patient died with stricture of the rectum, and in exposing the result of the autopsy, M. Gosselin recapitulated the clinical details of the case. The patient had entered the wards only eight days previous to his death, and at that time the stricture was so narrow that the little finger of the surgeon could hardly penetrate into the rectum across it. Below the stricture the finger perceived a rough mammillated surface, and the tissues around the narrowing were extremely hard and resistant. These circumstances, joined to the profound emaciation and exhaustion of the patient, excited some suspicion of cancer. But it is rare that cancer is equally disseminated over all the surface of the rectum, or produces a stricture so narrow or so near the sphincter. Cancerous stricture is never impassable to the finger, as was the lesion in question. Moreover, a cancer would not have remained rigid so long a time, but ulcerated considerably before the five years that had elapsed since the beginning of this one.

Cancer being eliminated, the diagnosis turned upon fibrous thickening, probably of course under the influence of syphilis.

An operation was decided upon, and two or three incisions were made at the level of the stricture. Before the operation, however, the patient had been attacked with a chill and some fever, both of which returned with renewed intensity afterwards, and death occurred in consequence of purulent infarction. A metastatic abscess was found in the lungs.

Locally, the autopsy revealed an abrupt stricture, caused by hypertrophy of fibrous tissue, and accompanied above its upper border by a large shallow ulceration of the mucous membrane of the rectum. A certain amount of pus covered the surface denuded of epithelium. This ulcer, said the Professor, added greatly to the gravity of the disease, determining the tenesmic diarrhœa which had exhausted the patient, and probably constituted the immediate cause of death.

P. C. M.

MEDICAL MATTERS IN CHICAGO.

OSSIFIED PERICARDIUM—EXCISION OF UMBILICUS—HYDROPHOBIA AND VARIOLA, ETC., ETC.

To the Editor of the Medical Record.

Sir—At a recent meeting of the Chicago Medical Society, Dr. Ross presented a specimen of ossified pericardium, taken from a patient who died at the County Hospital. The case was remarkable for the extension of adventitious deposit through nearly the whole of the pericardial sac. The discovery of small bony plates in the walls of the pericardium is not very uncommon; but it is certainly very unusual to find the heart surrounded, as was the fact in this case, by a capsule which in form, texture, and resistance to pressure, so nearly resembled the shell of an egg. As Dr. Ross will soon publish a detailed account of the case, I will not forestall his communication by further remarks.

An interesting pair of pathological specimens was exhibited to the Society, during the past year, by Dr. Bogue, one of the surgeons to the County Hospital. Of these, the least remarkable was a large ovarian tumor, containing hair, bones, and teeth, within one of its numerous cysts. The other was also an ovarian tumor, solid, fibrous, globular, and the size of a child's head. The collateral history of this case presented several points of more than ordinary interest. The patient, a young unmarried woman of Swedish birth, was brought into the hospital during the prevalence of the cholera in 1866. She was then suffering with urgent symptoms caused by the strangulation of a large umbilical hernia. Failing to give relief by taxis, Dr. Bogue promptly opened the sac, and finding that even then reduction would be impossible without free incision of the stricture, he proceeded to excise the umbilicus in accordance with the method recommended by Prof. H. R. Storer. Having thus reduced the hernia, before closing the wound Dr. B. became aware of the existence of a solid tumor in the vicinity of the right ovary; but having no available surgical assistance within call, he did not feel justified in pushing his operation beyond the limits which he had originally assigned. The patient recovered rapidly without any unfavorable symptoms, and was soon able to submit to a consultation upon her ovarian difficulty. It was ascertained that the tumor had been under observation for nearly three years, during which time its growth had been constant. It was not adherent to the abdominal walls, and it could easily be displaced from its usual location in the iliac fossa. The uterus appeared to be perfectly normal, and unconnected with the mass of the tumor. A day for the removal of the diseased growth was appointed, but the operation was prevented by the supervention of pleurisy, which, resulting in empyema, terminated the life of the patient. At the autopsy the usual thoracic phenomena which characterize suppurative pleurisy were present. The abdomen contained perhaps a quart of serous fluid. The incisions about the umbilicus were perfectly healed, and there was no appearance of peritonitis either adjacent or remote. The tumor was attached by a long pedicle to the right ovary. The mass was perfectly solid, about six inches in diameter, globular and nodulated as if formed by the agglutination of numerous smaller spherical bodies. The microscope demonstrated the fibrous nature of its elements. The left ovary presented marks of incipient disease, but otherwise the abdominal and pelvic viscera were healthy.

The winter term of clinical lectures in our city was recently terminated with great eclat at the County Hospital. Dr. Ross concluded his course of clinical medicine by the exhibition of a complete series of specimens illustrating the lesions of typhoid fever. Dr. Powell, the newly appointed surgical lecturer, brought his course to a brilliant climax by the removal of an encephaloid tumor from the cervical region. The hospital has been largely attended during the past season, and bids fair to become one of the most important centres of instruction in the West.

Each season brings its own peculiar excitement. Last winter our community was agitated by the subject of hydrophobia. A young man died of this terrible disease, and straightway all the morning papers teemed with harrowing narratives of mad-dog life and death in every ward of the town. The Mayor issued a proclamation against the canine race, and the work of extermination continued until over ten thousand dogs had ceased to be. By this time the advent of warm weather rendered the remedy worse than the disease, and our citizens were glad to seek another sensation. This was soon furnished by the outbreak of a new epidemic. Creeping insidiously along the outskirts of the community, its presence was reluctantly acknowledged. Prominent members of society would retire from public life with "the chicken-pox," only to reappear with visages suggestive of conflict with an enemy more potent than the harmless disease by which they claimed to have been with drawn from business. It became at length necessary to admit that under certain peculiar circumstances chicken-pox might not be distinguishable from varioloid; and as the disease was evidently malignant enough to occasion death in numerous cases, the new Board of Health was scarcely warm in its office, last spring, before it found itself compelled to use active measures against the progress of an epidemic of small-pox. The number of cases of variola and varioloid reported during the year 1867 was nine hundred and sixty-six. The mortality from these was one hundred and fifteen. During the month of January, 1868, there were two hundred and twenty-eight cases of variola, with a mortality of thirty-nine. There were, in addition, eighty-nine cases of varioloid, with a mortality of one.

The year 1868 has with us been one of comparative health. The ratio of deaths to each ten thousand inhabitants has been two hundred and nine against two hundred and seventy the previous year. The aggregate of deaths was four thousand six hundred and four. The aggregate of births during the last half of the year (they were never previously reported) was two thousand eight hundred and nine, showing a wholesome increase of population from that source as well as by immigration.

Our Board of Health has recently, by a decision of the Supreme Court, been confirmed in all its powers. The enemies of the Board alleged that, according to the terms of the act by which it was created, there existed neither power nor authority for the appointment of a sanitary superintendent, inspectors, or officers of any grade above the sanitary police already in existence. This narrow interpretation of the law was gravely urged in open court by the corporation counsel of the

city; but on reference of the case to the Supreme Court of the State, the argument was treated with that contempt which it richly deserved, and the appointments of the Board of Health were confirmed in every instance. This victory will add much to the efficiency of the Board in future.

A number of our most eminent physicians are at present enjoying a vacation in Europe. A holiday trip to Paris or Vienna is now as common as the journey to New York may have been a dozen years ago. With the annual increase of wealth and population in our city, let us hope that these opportunities may become even more frequent.

M.

ACTIVE DEPLETION.

To the Editor of The Medical Record.

Sir—As matter of curiosity, I send you a verbatim report of a "bleeder" handed me by the patient, which you may give to your numerous readers if you think it worthy of space in your columns.

"On the 10th of August, 1847, we commenced bleeding Barbara Clare, sometimes once, twice, and three times a week, more and less till the 4th of November; I bled her then every day till the 9th; I bled her every day and night till the 15th November; I bled her that evening at 7 o'clock; November 16th, bled her three times; November 17th, bled her three times; November 18th, bled her four times; November 19th, once; 20th, once; 21st, three times; 22d, four times; 23d, twice; 24th, three times; 25th, once; 26th, once; January 14th, 1848, once; 15th, once; 19th, once; 23d, once; 25th, once; 26th, once; 27th, once; 28th, once; 29th, once; 30th, once; February 1st, once; 3d, twice; 6th, once; 8th, once; 9th, once; 11th, once; 13th, once; 14th, once; 16th, once; 19th, once; June 23d, once; 29th, once.

"Now in the course of the above-mentioned time, I bled her myself seventy-seven times, and by the doctors fourteen times, making ninety-one times. I was authorized by the doctors." (Signed, *John Yordy.*)

The lady has for twenty-four years been suffering from nervous debility, with periodical attacks of hysterical dyspnœa, resulting from disease of the uterus. She was bled for dyspnœa. In all cases blood was allowed to flow till the difficult respiration had ceased, taking from a few to forty ounces, resulting, as might be imagined, in extreme debility and dropsy.

It will be seen in the month of November, 1847, she was bled forty-five times, and from August to June, ten months, ninety-one times, making the most remarkable case of heroic veresection that ever came to my notice.

H. S. Trout, M.D.

Marietta, Ohio.

St. Louis Medical College.—The commencement exercises of this college were held, March 2d, in the lower hall of the Polytechnic building. This institution is known as *Pope's College*, and was founded more than a quarter of a century ago. On this occasion diplomas were given to forty-six graduates.

Professor F. Verdugo died at the age of one hundred and five years, at Alberca, province of Salamanca, Spain. He practised medicine for eighty years.

Missouri Medical College.—The commencement exercises of this college took place at St Louis on February 29th, with a graduating class of twenty-five, and numerous *ad eundem* graduates.

Obituary.

ISAAC WOOD, M.D.,

of New York.

At a stated meeting of the New York Academy of Medicine, held April 1st, 1868, the following resolutions were adopted:

Resolved, That the New York Academy of Medicine has learned with deep and heartfelt sorrow of the death of its ex-President, Dr. Isaac Wood, who was so largely identified with the inception and early organization of the Academy, and who during its whole existence has felt and manifested so great an interest in its welfare.

Resolved, That, in the life and character of our departed friend and fellow, we recognize, with grateful recollections, a full and living type of that divine nobility which the poet assigns to the honest man; for we feel and know that in all the relations of life, public, private, and professional, he never swerved from that way that marks the upright and the perfect man, the end of whom is peace.

Resolved, That although he has lived to a ripe old age, and in such a manner as has caused him to be honored as one of the first amongst us, yet we cannot but feel his death untimely, for we know not how to fill the void which his death makes in our ranks.

Resolved, That the fellows of this Academy, so often called to mourn the loss of their venerated and respected seniors, should cherish with lively gratitude the bright record of their virtues and their excellence, and strive to emulate and to sustain the high character which they have left behind them.

Resolved, That a copy of these resolutions, with the expression of the deep sympathy of the Academy, be communicated to the family of the deceased, that they be entered on the minutes, and that they be published in the medical journals of the city.

Alfred C. Post, *President.*

E. H. Janes, *Secretary.*

At a meeting of the Medical Board of Bellevue Hospital, held March 31st, 1868, the following preamble and resolutions were unanimously adopted:

Whereas, it has pleased Divine Providence to take from among us our late beloved associate, Dr. Isaac Wood, therefore,

Resolved, That, in the death of Dr. Wood, we lament the loss of one distinguished, not less for his professional attainments, than for his purity of character and kindness of heart.

Resolved, That the able and faithful services which he performed, during many years, both as physician to this Hospital, and as the presiding officer of its Medical Board, entitle him to our grateful recollection and esteem.

Resolved, That the grief we experience at his death is lessened by the fact that his long and well-spent life affords a noble example of steady and conscientious devotion to our profession, of which he was one of its brightest ornaments.

Resolved, That a copy of these resolutions be published in the medical journals of this city.

Isaac E. Taylor, M.D., *Vice-President.*

Henry B. Sands, M.D., *Secretary.*

At the meeting of the County Medical Society, on the 6th ult., the following resolutions were passed, Dr. Van Kleek introducing them by a eulogy upon the late Dr. Wood:

Whereas, since the last meeting of the Society, death has again invaded our ranks, and removed from us one

of our oldest, most beloved and honored members, a former President of the Society, Dr. Isaac Wood, who died on the 26th ult., after a long life of professional usefulness in this city, a life identified with the growth and progress of this and kindred societies, in which he ever manifested a lively interest,

Resolved, That the announcement of the death of Dr. Isaac Wood, by its suddenness, as well as the greatness of the loss, has caused unfeigned sorrow and regret, as the loss of one of those senior members to whom we have so long looked up as exemplars in a calling whose mission and office it is to go about doing good.

Resolved, That this Society desires to bear its grateful testimony to the high character for scientific and professional excellence of our deceased friend, and it rejoices in the universal recognition which has always been bestowed upon his unquestioned probity and purity, which have ever characterized him in all the relations of life.

Resolved, That the life and character of Dr. Wood, during a professional career of more than half a century so duly honored and respected, should stimulate those of us who remain and succeed him so to emulate his example as to merit and attain similar appreciation.

Resolved, That we deeply sympathize with his afflicted family in their bereavement, and that a copy of these resolutions be sent them by the officers of the Society.

HAMPTON HARRIOT, M.D.

At the same meeting Dr. Husted gave an account of the late Dr. Harriot, who died of cancer of the liver, on the 2d ult., and whom he had attended during his illness. He introduced the following resolutions, which were passed:

Resolved, That the members of the New York County Medical Society learn with deep regret the loss of our late brother, Dr. Hampton Harriot, in the maturity of his faculties and usefulness. He was an accomplished physician, a true Christian, a valued friend and brother.

Resolved, That we recognize in our late brother many of the attributes of a practitioner which are of the greatest value to the community.

Resolved, That a copy of these resolutions be sent to the family of the deceased.

JOHN P. BATCHELDER,

Who long enjoyed the unique honor of being the oldest practitioner of medicine in New York city, was born at Wilton, New Hampshire, Aug. 6, 1784. An only child, he enjoyed every advantage for the attainment of a liberal education; but, although prepared for college, he was diverted from his intention by a desire to engage as speedily as possible upon his chosen calling. He accordingly entered the office of Drs. Samuel Fitch and Matthia Spaulding, in Greenfield, N. H. Having been licensed in 1807, in accordance with a somewhat usual practice of the times, he entered upon the duties of his profession with zeal. He, however, supplemented his license with a medical degree from Harvard University in 1815. Three years afterwards, he first operated for stone, and, according to Dr. S. W. Francis, he invented the first craniotome that could be worked with one hand.

In 1817 he was appointed Professor of Anatomy in Castleton College, Vermont, and subsequently to the chair of Surgical Anatomy in the Medical School at Pittsfield, Massachusetts. The honor of having performed the first rhinoplastic operation this side of the Atlantic he gained in 1828, and to him is also allowed the claim of having been a pioneer, so far as his native country is concerned, in the removal of the head of the femur.

Dr. Batchelder has left many mementoes of professional skill in Charlestown, N. H., Pittsfield, Mass., and Utica, N. Y., but has been identified with the physicians of this city for some twenty-five years, during which time he steadily added to his reputation as a fearless but judicious operator. His brethren honored him, in 1858, with the Presidency of the Academy of Medicine, and in the same year he sustained a similar relation toward the New York Medical Association.

The writings of the deceased, always practical in their character, and bearing generally upon those minutiæ, which, after all, give the cue to success, were solid rather than brilliant, simple, not to say severe, in style, but both logical and suggestive.

He died April 7, 1868, aged eighty-two years, eight months, and two days.

Medical Items and News.

Bellevue Hospital Medical College.—Dr. James R. Wood has resigned his Professorship of Operative Surgery and Surgical Pathology, and has been elected Emeritus Professor of Clinical Surgery. Dr. W. H. Van Buren has been elected Professor of the Principles of Surgery.

County Society's Delegation to the American Medical Association.—At the meeting of the County Medical Society, on the 6th ult., the following members were elected delegates to the meeting of the American Medical Association, to be held at Washington in the present month: Drs. E. R. Peaslee, N. Bozeman, Jos. Wooster, C. F. Taylor, Jas. Kennedy, Alfred Underhill, J. C. Smith, E. L. Jones, Wm. R. Whitehead, G. S. Winston, E. S. Dunster, E. S. Finlay, T. A. Emmett, H. P. Farnham, F. H. Hamilton, Geo. W. Ives, A. Jacobi, J. J. Hull, O. G. Smith, J. O. Smith, John Shrady, Foster Swift, S. Teats, Joel Foster, S. Rogers, L. A. Sayre, A. E. M. Purdy, J. C. Peters, B. I. Raphael, J. Messenger, Robert Newman, F. N. Otis, B. Howard, and E. H. M. Sell.

Dr. Bradford S. Thompson has resigned his position as Librarian of the N. Y. Medical Journal Association. He is succeeded by Dr. A. E. M. Purdy.

Medical Journal Association.—The Executive Committee of the Medical Journal Association has decided that hereafter none of the *Foreign Journals* may be taken out from the Reading Room. This matter was discussed at the Reunion of April 10th, and referred to the Executive Committee, and their decision has been in accordance with what is believed to be the wish of the majority of reading members. The American journals may be taken out as before.

New Publications.

Books and Pamphlets Received.

Second Annual Report of the Metropolitan Board of Health of the State of New York. 1867.

Contributions Relating to the Causation and Prevention of Disease, and to Camp Diseases, together with a report of the diseases, etc., among the prisoners at Andersonville, Ga. Edited by Austin Flint, M.D., New York: Hurd & Houghton, for Sanitary Commission.

Atlas of Venereal Diseases. By A. Cullerier, Surgeon to the Hôpital du Midi, etc. Translated by F. J. Bumstead, M.D., Professor of Venereal Diseases, College Physicians and Surgeons. Part II.

American Medical Association.

NINETEENTH ANNUAL MEETING.

FIRST DAY—MAY 5, 1868.

MORNING SESSION.

PROF. SAMUEL D. GROSS, PRESIDENT, in the Chair.

THE Association met at Carroll Hall, Washington, D. C., pursuant to adjournment, and was promptly called to order by the President, at 11 o'clock, the appointed hour.

Prayer was offered by the Rev. Dr. William Pinckney, of Washington.

ADDRESS OF WELCOME.

DR. GRAFTON TYLER, as Chairman of the Committee of Arrangements, tendered the greetings of his Washington brethren to the Association in a pertinent and happy manner. He heartily welcomed each and every one of the gentlemen present, in this the metropolis of the country, the city founded by the Father of his Country. He welcomed them all as the representatives of the great and proud profession of which he was an humble member. He spoke of the profession as it existed in this District—its colleges, hospitals, etc., and of the rare opportunity that would be presented to each member to visit these, and examine the relics of the battle-fields, and view the advancement of the profession in its science. He said, you are assembled here to-day to consider the most important interests confided to man, the health and the happiness of the world; for has not all the world received the aid of American medical science? He spoke of the benefits which the people of the entire world were deriving from the genius of America, in that greatest of all boons, chloroform. For twenty-one years the members of the Association have annually met together at great personal sacrifice; but personal sacrifice will never affect the existence of this important body. The speaker eloquently alluded to Dr. Gross, his career, his influence and support of the Association, and then referred to the integrity of the body, which he alleged was national in its principle—no sect, no politics, no sectional feeling ever having divided it. He concluded by again bidding all present an earnest welcome.

The following announcements were made:

MEETINGS OF SECTIONS.

Chemistry and Materia Medica, in gallery of main hall; Practical Medicine and Obstetrics, in middle room of basement; Surgery and Anatomy, in main hall; Meteorology, Medical Topography and Epidemic Diseases, in south-west room of basement; Medical Jurisprudence, Hygiene, and Physiology, in north-east room of basement; Psychology, in south-east room of basement.

ENTERTAINMENTS AND RECEPTIONS.

Tuesday, May 5th.—The Association to call upon the President of the United States between 8 and 9 P.M.

Chief Justice S. P. CHASE to receive at 9 P.M.

Hon. SCHUYLER COLFAX, Speaker of the House of Representatives, to receive at 9 P.M.

Wednesday, May 6th.—Army Medical Museum entertainment from 6 till 10 P.M.

Senator EDWIN D. MORGAN, of New York, to receive at 9 P.M.

Thursday, May 7th.—Capitol lighted and dome illuminated from 8 till 9 P.M.

Hon. RICHARD WALLACH, Mayor of Washington, to receive at 9 P.M.

DR. ATKINSON, Permanent Secretary, called the roll of members, according to which it appeared there were 218 delegates then present.

DR. ARNOLD moved, in view of the fact that Dr. W. F. Percival, of Aiken, S. C., then present and otherwise qualified, came from a section without a medical organization, he be elected a member by invitation. Carried.

DR. HIBBERD, of Indiana, moved that the regular order of business be suspended, in order to defer the reading of the President's inaugural address until the morrow, when a larger number of delegates would be present. Lost.

PRESIDENT'S ADDRESS.

DR. GROSS then proceeded to address the Association. After several allusions to the catholic spirit of medicine, and the contributions to science by America, he discussed the question of alleged laxity in regard to the admission of members. He also dwelt upon the complaints uttered by some against the character of papers published in the Transactions, as well as the question of medical education. A sound *preliminary* education, he maintained, was an essential feature in the scheme. Reforms should *begin* in the office of the private preceptor.

He also referred to the questions of good nursing, medical evidence, the rank of medical men in the navy. In the course of which he significantly compared the condition of the medical service among Europeans, with the tardy action of our own country in the matter. In America, the highest grade a medical man might obtain in the navy was that of Commodore, now held only by the Chief of the Bureau of Medicine and Surgery. In England and upon the Continent, he might become an Admiral, Rear-Admiral, or Vice-Admiral.

The Doctor then discussed at some length the project of establishing a naval medical school.

He also referred to the benefits which would accrue from the publication by the Association of an annual medical register, as well as from the establishment of societies for the relief of widows and orphans of medical men. This idea was first broached by Dr. Benjamin Rush, in 1808, and successfully carried into operation in New York city, where he believed the only organization of the kind existed. Veterinary schools, and the training of veterinary surgeons, came in for a share of attention. In this respect, this country was far behind the Old World. Up to 1863, Europe contributed nearly 3,000 works upon this subject, while in America hardly a dozen had been published.

The election of officers, as provided for by the present constitution, the speaker considered to be founded upon a wrong principle; as a remedy, he suggested that the ballot in the hand of every delegate be substituted. The time of meeting should also be extended to a week.

The address concluded with an eloquent tribute to the memory of members deceased within the year.

The thanks of the Association were, on motion, tendered the speaker, and a copy of the address requested for publication. Carried.

DR. LEE moved, in view of the importance of the subjects discussed in the address and the suggestions offered, that their consideration be entrusted to a special committee, with instructions to report at the next meeting.

Doctors Charles A. Lee, D. Francis Condie, and John L. Atlee, were appointed said committee.

THE REPORTS OF COMMITTEES.

The reports of the following committees were presented and disposed of as below designated:

"On Ophthalmology." Dr. Jos. S. Hildreth, Illinois, Chairman. Referred to Section on Surgery and Anatomy.

"On Rank of Medical Men in the Navy," Dr. N. S. Davis, Illinois, Chairman. Referred to Committee on Publication.

"On Insanity." Dr. C. A. Lee, New York, Chairman. Referred to Section on Psychology.

"On the Treatment of Club-Foot without Tenotomy," Dr. L. A. Sayre, New York, Chairman. Referred to Section on Surgery and Anatomy.

"On Medical Ethics."

Dr. HENRY I. BOWDITCH reported by letter that two of his colleagues were deceased, and that from those who besides himself composed said committee, he was unable to elicit any reply to his communications. He was therefore compelled to act in his individual capacity in regard to the matters of reference.

The only points brought to his consideration were (1) the status in the profession of regularly educated and otherwise well qualified female physicians. He strongly advocated the recognition of their claims.

(2.) The case of Dr. Julius Homberger.

The report gave rise to an animated debate. The matter was finally disposed of by making the whole subject of Female physicians the special order of business at noon, on the succeeding day.

That portion of the report which referred to the case of Dr. Homberger was referred to the Committee of Medical Ethics, to be hereafter appointed.

"On the Climatology and Epidemics of different States."—Reports were received from the following gentlemen, referred to the Section on Meteorology, Medical Topography, and Epidemic Diseases:

"Pennsylvania," Dr. D. F. Condie. "Texas," Dr. T. J. Heard. "Illinois," Dr. R. C. Hamil. "West Virginia," Dr. E. A. Hildreth.

"The Committee on Prize Essays" reported that none of the four papers offered in competition were of sufficient merit to be entitled to either of the prizes. Report accepted.

The following committees reported progress, and were continued at their own request:

"On Clinical Thermometry in Diphtheria," Dr. Jos. G. Richardson, New York, Chairman.

"On Operations for Hare-Lip, Dr. Hammer, Missouri, Chairman.

The Committee "On the Ligation of Arteries," Dr. Benjamin Howard, New York, Chairman, stated by letter that owing to illness and other causes, he had been unable to prosecute his experiments, and asked to be discharged from the further consideration of the subject. Committee discharged.

The following reports were made special orders of business for the morrow:

Committee "On Medical Education," Dr. A. B. Palmer, Michigan, Chairman, at 10 A.M.

The report of the Committee "On Medical Literature," Dr. George Mendenhall, Ohio, Chairman,—a special order immediately following the disposal of the former.

The remaining committees, excepting only those who did not respond, were privileged to read their reports the succeeding day.

The following voluntary papers were offered, and, on motion, referred to the Section on "Meteorology, Medical Topography and Epidemic Diseases."

"On the Use of Disinfectants in Scarlatina," by Dr. Nelson L. North, of New York.

"On the Prevention of Cholera and the Bowel Affections of Summer," by Dr. Nathan S. Davis, of Illinois.

CHARGES AGAINST MEMBERS.

Charges were preferred against Dr. A. G. Field, Des Moines, Iowa, and referred to the Committee on Medical Ethics, with instructions to report at present meeting.

The Chair then appointed Drs. Condie, Davis, Post, Askew, and Baldwin, members of said committee. Carried.

The meeting then adjourned until 9 o'clock the next morning.

RECEPTIONS.

Between eight and nine o'clock in the evening, the members of the Convention visited the Executive Mansion, and were received by the President, assisted by Secretary Seward, Mrs. Patterson, and Mrs. Stover. The reception took place in the blue parlor, and the guests passed into the East Room.

After leaving the White House they proceeded to the residence of Speaker Colfax, No. 7, President's Square, and were received by the Speaker, assisted by Mrs. and Miss Matthews, his mother and sister. Dr. Tyler again introducing the members of the Convention. The visitors remained here until after ten o'clock, and were most agreeably entertained by Speaker Colfax and the ladies of the house.

SECOND DAY—WEDNESDAY, MAY 6, 1868.

MORNING SESSION.

The Association was called to order at 9 A.M. by the President, and minutes of the preceding meeting were approved.

A letter from Dr. Yandell, of Kentucky, a Vice-President of the Association, expressing regret at his inability to be present on the occasion, was read and ordered on file.

A letter from the Medical Association of New Orleans, proposing that the next Convention be held in that city, was also read, and, on motion, laid on the table.

RECEPTION OF DISTINGUISHED VISITORS.

The President invited Professor Nathan R. Smith, of Maryland, to the platform, which was carried by acclamation.

Dr. MARSDEN, of Quebec, was also accorded a similar honor, and briefly addressed the Association.

Professor JOHN GAMGEE, of the Albert Veterinary College, Bayswater, London, was introduced by the President, and invited to address the Association.

The Professor then delivered an interesting address, bearing upon the mutual relations existing between medical and veterinary science.

SENATOR DRAKE, of Mobile, on the invitation of the President, and with the assent of the Association, then entertained the audience with a few remarks, in which he made several allusions to his father, the late Dr. Drake.

REPORTS OF COMMITTEES.

Dr. LEE, of New York, read the report of the Committee on Topics, treated of in the President's Inaugural Address.

Report accepted, and referred to Committee on Publication.

Dr. DAVIS moved that the Committee be instructed to embody their suggestions in the form of resolutions. Carried.

Dr. LEE said that the resolutions in question would be ready before the adjournment.

Dr. Cox reported from the Committee on Change of Plan in the Organization of the Association. Report laid on the table under the rule governing proposed amendments to the Constitution.

AN EXPLANATION.

Dr. Tyler rose to a question of privilege. He stated that it was through some misunderstanding that Hon. Chief Justice Chase did not receive members of the Association, on the preceding evening. The Committee of Arrangements regretted that it was through misapprehension that said reception was not held, and were willing to take the responsibility of their error. In conclusion, he stated that the Hon. Chief Justice would be happy to meet the delegates at his residence on Thursday evening.

The following were made members of the Association by invitation:

Dr. S. D. Coffin, Bloomington, Ind.

Dr. Simon Fitch, Portland, Me.

Dr. J. Y. Cantwell, Decatur, Ala.

Dr. L. A. James, Cincinnati, O.

Dr. Enoch Pearce, Steubenville, O.

Dr. Thos. J. Bond, Choctaw Nation, Indian Territory.

The Report of the Committee on Medical Education, being in order, was read by Dr. A. B. Palmer. Referred to the Committee on Publication, with the recommendation that the same be published.

Dr. Davis asked the indulgence of the Association for the purpose of making an explanation. Carried.

Dr. Davis then stated that, with the view of maturing their plans, the Committee addressed the several Medical Colleges of the country, regarding proposed changes, suggestions, etc. Although somewhat dilatory in their responses, progress was being made.

Several schools had endorsed the plan agreed upon by the Convention of last year.

For these reasons no convention was called this year to further discuss the matter.

Dr. Palmer, by leave of the Association, stated that several gentlemen had expressed the view that the programme of study was too revolutionary in its character. He was, however, ready to correct any errors of statement in the Report in question.

Dr. Comegys offered the following, which was adopted.

Resolved, that the American Medical Association refers the whole subject of medical education to the faculties of the regular medical colleges of the nation, pledging itself to adopt and enforce any system or plan that may be agreed upon by two-thirds of all recognized medical colleges.

Resolved, That the resolution be referred to the Committee already acting in this matter, and they are requested to report within two years from this session.

Adopted.

Dr. Mendenhall, of Ohio, read the report of the Committee on "Medical Literature." Referred to Committee on Publication.

Dr. Hibbert moved that all communications relating to the next place of meeting be taken from the table and referred to the Committee on Nominations. Carried.

VOLUNTARY PAPERS.

The following papers were read by title, and referred to the sections as below designated.

"On the Best Methods of Treatment for different forms of Cleft Palate." By Dr. Wm. R. Whitehead, of New York. To Section on Surgery and Anatomy.

"Remarks on some of the Operations for Vesico-Vaginal Fistule, with an account of a new self-retaining speculum, and a new mode of securing the patient." By Dr Nathan Bozeman, of New York. To the same Section.

"The Treatment of Syphilis by Hypodermic Injection." By Dr. L. Elsberg, New York. Referred as above.

"A Series of Plans for the Collection and Statistical Arrangement of Facts in regard to Climatological and Sanitary Conditions of the Various States." By Dr. Wm. Faulds Thoms, New York.

This paper was accompanied by the statement that these plans, when filled up, will enable investigators to trace the comparative influence of these facts in the production of epidemics. Referred to Section on Meteorology, Medical Topography, and Epidemic Diseases.

"On the Climatology of South Carolina," by Dr. Percival, of Aiken, S. C. Referred to same Section.

"A new method of reconstructing the lower lip after removal by disease," by Dr. Gurdon Buck, of New York. Referred to Section on Surgery and Anatomy.

Dr. Hamilton stated that he had an apparatus for the administration of anæsthetics, the invention of a friend, not a member of the Association. This he considered to be of value, and desired an opportunity to demonstrate its mode of application. Referred as above.

Dr. Atkinson stated that Dr. Benjamin Lee, of Philadelphia, had printed copies of a paper entitled "Diagnosis of Spinal Arthro-Chondritis," which were at the disposal of members. This was not published, but simply printed for the occasion.

The Association took a recess of five minutes for the purpose of electing members of the Committee on Nominations.

The report of said Committee was as follows:

Maine, N. P. Monroe; N. H., S. B. Twitchell; Vt., Sumner Putnam; Mass., H. R. Storer; R. I., Otis Bullock; Conn., Ashbel Woodward; N. Y., J. H. Armsby; N. J., Samuel Lilly; Penn., A. M. Pollock; Del., H. F. Askew; Md., Thos. H. Helsby; Va., W. O. Owen; W. Va., R. H. Cummins; Ga., R. D. Arnold; Ohio, Wm. H. Mussey; Ill., Jos. S. Hildreth; Ky., Geo. Bealer; Tenn., J. M. Keller; Ala., J. S. Wetherby; Ind., Geo. Sutton; Iowa, H. T. Cleaver; Mich., A. B. Palmer; D. C., F. Howard; U. S. A., Geo. A. Otis.

Dr. Catlin moved that the Committee constituted as above meet immediately. Carried.

Dr. John L. Atlee moved that a committee of seven be appointed to represent the Association at the next meeting of the Canada Medical Association at Montreal. Carried.

Dr. Mayberry nominated the President as one of said delegates. Carried.

THE QUESTION OF FEMALE PHYSICIANS.

The resolution offered by Dr. Bowditch was then declared in order. The text of which was as follows:

Resolved, That the question of sex has never been considered by this Association in connection with consultations among medical practitioners, and that, in the opinion of this meeting, every member of this body has a perfect right to consult with any one who presents the only "presumptive evidence of professional abilities and acquirements" required by this Association, viz.: "a regular medical education."

Dr. Washington L. Atlee advocated the spirit of the resolution, in an animated manner. He referred to the powers of endurance in the female as exemplified in the sick-room, on the operating table, etc. The main question, however, was the justice of excluding woman from any honorable pursuit or avocation, on account of sex alone. The objection that she was uneducated was

urged. Why was she uneducated? Simply because she was debarred the privilege of admission into the medical schools.

In Philadelphia, said the speaker, he might consult with the most ignorant of his own sex, belonging to the regular profession, but not with the most educated of the opposite sex, with every other qualification.

Irregularity in their mode of practice was at first urged as the main objection against the recognition of the claims of female practitioners. This objection does not now, in several instances, exist.

He referred to the familiar instances of Mme. Bovin and Mme. La Chapelle of France, in support of woman's competency to practise the healing art. What may be allowed abroad, may be allowed in a country where the institutions were supposed to be more liberal.

Dr. Combe believed that if the females were to confine themselves to their own sphere, they would have quite enough to do.

That since the time of Lupina, a graduate of the University of Halle in the time of Frederick the Great, there had been notable exceptions to the rule of a general unwillingness on the part of the sex to assume the responsibilities and exactions of the profession. As a matter of history, he stated that the lady in question studied as a male under the name of Lupinus, and did not reveal her sex until after the reception of her diploma.

He deprecated the passage of any law intended to govern the usage of the profession. The matter should be left to the judgment and sense of propriety of the individual.

Some held the view that females shall be let alone: but as he happened to have some interest in the sex, he was opposed to this doctrine. [Loud and prolonged applause.] He concluded by hoping that the subject should not be officially noticed. The more it was discussed, and the greater the opposition, the more decided would be the sympathy in favor of this class of practitioners.

Dr. Davis maintained that the Code of Ethics offered no impediment to consultations on the score of sex alone. The question was left an open one. He denied the right of any local society to force the association into any expression of opinion upon the subject, particularly when any enactment must partake of an *ex post facto* character. He advocated the broadest equality; if woman thought that she could do better in the performance of duties allotted by general consent to the male, and the male was inclined for similar reasons to assume those of the household, he for one would not object.

On motion of Dr. Davis, the whole question was indefinitely postponed by nearly a unanimous vote.

THE CASE OF DR. HOMBERGER.

Dr. John L. Atlee moved the reconsideration of the vote which referred the following resolution to the Committee on Medical Ethics.

"*Resolved*, That the resignation of Dr Julius Homberger, formerly of New York, be accepted, and that all further consideration of him, or of his peculiar methods of procuring practice, be indefinitely postponed."

Dr. Sayre moved that the name in question be stricken from the roll of this association. In support of his view he referred to Dr. Homberger's peculiar views, as set forth in a minority report to the association meeting at Boston, Mass.; in this report he substantially advocated the privilege on the part of specialists to advertise both in the public prints and through other sources.

He also read a letter from Dr. Mitchell of New Orleans, which corroborated the statement that Dr. Homberger was an extensive advertiser in the newspapers.

Dr. Howard, of Maryland, objected. Dr. Homberger's name ought not to be stricken from the roll on the accusation of a single individual, unsupported by other authority. He maintained that his case had been imperfectly investigated, and therefore moved that the following be substituted.

Resolved, That the matter be referred to the Committee on Medical Ethics.

Dr. Arnold, of Georgia, objected to any such reference. The issue must be squarely met. The proof that Dr. Homberger had violated the Code of Ethics was abundant, not to say overwhelming. Some definite action should be taken by the Association in vindication of its dignity, and that speedily.

Dr. Noel, of Maryland, said that the Association should first purge itself of members who were guilty of advertising directly or indirectly, and referred to individual instances in the public prints. He also read the indorsement of a dentifrice, by a distinguished professor and permanent member.

Dr. Tyler excepted to the last instance, as a breach of medical ethics. It was one of those questions about which men might honestly differ. According to his interpretation of the code, it was hardly to be regarded as a violation.

Dr. Raphael, of N. Y., thought that undue importance was being given to the matter, and that no doubt Dr. Homberger would be well pleased with the agitation. Up to the time, however, when he offered his resignation, he had never transgressed the established usages of the profession. Had the resignation then been accepted, much trouble might have been avoided. He, therefore, moved his expulsion.

Dr. Davis reviewed Dr. H.'s relations to the society, and said the real question was, Shall a member who defied its rules be permitted to resign? This was last year referred to the committee on ethics, who reported the resolution. He thought the simplest plan to get rid of him and his humbugs was to accept his resignation.

Dr. Palmer took the ground that no one could by his own act cease to be a member, and was of the opinion that Dr. H. should be expelled.

Dr. Howard wished to be understood as being no advocate for the alleged transgressor, but as desirous of entering his protest against hasty legislation.

After some further debate, chiefly regarding the parliamentary disposal of the matter, Dr. Homberger was ordered, by a decided vote, to be expelled.

PROFESSIONAL ADVERTISING.

Dr. Hartman, of Md., submitted the following:

Whereas, the third paragraph of the first article of the code of medical ethics of the American Medical Association expressly declares it to be "derogatory to the dignity of the profession to resort to public advertisements, inviting the attention of individuals affected with particular diseases;" and

Whereas, certain members of the medical profession in the city of Baltimore, who are permanent members of the American Medical Association, have permitted their names to appear in the daily newspapers indorsing the qualifications and professional character of a foreign specialist who has recently settled here; therefore,

Resolved, That by such conduct these gentlemen have been accessory to a violation of professional ethics, and guilty of an unwarranted and unjustifiable discrimination against those members of the profession who are

quietly, legitimately, and unostentatiously prosecuting the respective branches of medical specialism.

Resolved, That it is the sense of the Baltimore Medical Association that either of the above paragraphs of the code of ethics should be so modified as to allow our own professional brethren who are engaged in the practice of specialties to advertise, and thus be placed on an equal footing with the foreign specialist, who is too often a mere adventurer, whom chance has thrown among us; or those gentlemen who have permitted the use of their names to swell the patronage of a specialist, to the injury of equally deserving members of the profession in our own city, should be compelled to withdraw their names from such advertisements.

Resolved, That the delegates to the American Medical Association from this society be instructed to bring this matter, so vital to the dignity and honor of the profession, before that body at the earliest possible moment.

Dr. John L. Atlee was opposed to the adoption of any such resolution, as he thought the local societies should settle these questions among themselves.

Dr. Gross, during his experience, was well aware that the names of physicians were often used without their authority, and he thought the Association should be careful how it lent its influence to the question of consideration.

Dr. Mabery was anxious that some action should be taken at once; but, pending the discussion, the question was referred to the Committee on Ethics; after which the convention adjourned until Thursday, 9 A.M.

EVENING ENTERTAINMENTS.

The microscopical exhibition in the lower hall of the Army Medical Museum on Tenth street, in the evening, was probably one of the finest ever witnessed in the United States. Nearly the entire delegation was present, as well as a large number of the prominent Government officials. Previous to the exhibition the guests spent several hours in examining the large collection of anatomical specimens collected in the upper halls. Surgeon General J. K. Barnes, assisted by Assistant Surgeons J. J. Woodward and David E. Curtis, received the visitors, and successfully exerted themselves to make the visit one of pleasure and profit. The "photograph room" was bountifully supplied with refreshments, and considerable attention was paid to this department.

The exhibition was conducted by Dr. J. J. Woodward, and the delegates manifested their admiration at the success attained in photographing anatomical specimens by their enthusiastic applause.

The enjoyments of the day terminated with a brilliant reception at the residence of Senator Morgan. Whilst there, General Grant dropped in and shook hands with the visitors. After spending about two hours in pleasant conversation and social enjoyment, the visitors were invited to partake of a collation, and about two hundred guests sat down to a fine supper, to which full justice was done, and shortly afterwards they took their leave.

Third Day—Thursday, May 7, 1868.

MORNING SESSION.

The Association promptly met at 9 A.M. Dr. Gross, President, in the Chair. Minutes of the preceding meeting were read and approved.

The Secretary read a letter from Dr. Cornelius Boyle, inviting the Association to hold its next convention at Farquhar White Springs, Va. Referred to Committee on Nominations.

Reports of the Committee on Publication and the Treasurer were read and accepted.

The Report of Committee on Nominations was declared in order, and after a brief debate, the same was accepted and adopted. Place of meeting—New Orleans, La. Time—May. *President*, Wm. O. Baldwin, of Ala.; *1st Vice-President*, Geo. Mendenhall, Ohio; *2nd Vice-President*, N. Young, D. C.; *3rd Vice-President*, N. P. Monroe, Me.; *4th Vice-President*, S. M. Bemis, La.; *Treasurer*, Caspar Wistar, Philadelphia.

Committee on Publication.—Francis G. Smith, Jr., Phila., Chairman; Wm. B Atkinson, Phila.; H. F. Askew, Del.; Richard M. Cooper, N. J.; J. H. Lovejoy, D. C.; Wm. Maybarry, Pa.

AMENDMENTS TO THE CONSTITUTION.

Dr. Maybery proposed an amendment to the "plan of organization." Add to "Art. V., Standing Committees," a new section to the following effect:

No Report purporting to emanate from any Committee shall be received, *unless it be signed by a majority* of its members. Laid over under rule governing Amendments to the Constitution.

Dr. Hibberd offered another amendment to the Constitution.

Add to Art. VII., the following: Provided, however, that when an amendment is properly under consideration, and an amendment is offered thereto germane to the subject, it shall be in order, and if adopted shall have the same standing and force as if proposed at the preceding meeting of the Association.

Laid over under the same rule.

CERTIFICATES OF TIME OF STUDY FROM IRREGULAR PRACTITIONERS.

Dr. Brinsmade, of N. Y., offered the following in behalf of N. Y State Medical Society:

Resolved, That the chairman of the delegates from this Society to the American Medical Association, be requested to present to said Association, as the desire of the Medical Society of the State of New York, the following resolution, and to urge its adoption:

Resolved, That the Faculties of the several Medical Colleges of the United States be recommended to announce explicitly in their annual commencement circulars and advertisements, that they will not receive certificates of time of study from irregular practitioners, and that they will not confer *the degree* upon any one who may acknowledge his intention to practise in accordance with any exclusive system. Adopted.

Dr. Antisell made some remarks upon the subject of Medical Education, and offered a motion that the same be made the special order of to-day noon.

This, after a debate participated in by Drs Comegys, Rand, and Davis, was lost.

PROPOSED EXTENSION OF TIME FOR ANNUAL SESSIONS.

Dr. Toner submitted the following, which was laid over under the rule in such cases provided, with a view to make the Sessions of the Association more useful and efficient: *Therefore, be it resolved*, That hereafter the Annual Sessions of this Association shall continue four days instead of three, as heretofore, and that two of the evenings, namely, Wednesday and Thursday, shall be devoted to the business of the general body. Laid over until next convention.

A PLAN TO INCREASE THE EFFICIENCY OF THE ORGANIZATION.

Dr. Ohr, of Maryland, with a view of increasing the efficiency of the organization, offered the following:

Resolved, That the morning sessions of the Association on the second and third days of the annual meeting

be devoted to the business of the sections. On motion, laid over under the rule until the next session.

Dr. Post, of New York, announced the terms of the "O'Reilly Prize."

Dr. X. T. Bates, of New York, was elected a member by invitation.

REPORTS OF COMMITTEES.

Dr. Brinsmade, as a member of the delegation from the Association to the International Medical Convention at Paris, reports that they were engaged in the preparation of a detailed account of their visit. This would be submitted in due time to the appropriate Committee for publication in the Transactions.

The Committee on Medical Ethics, to whom was referred the case of Dr. A. G. Field, reported their inability to decide until the alleged offender was heard in his own defence; and asked that they be not required to report until the next session of the Convention. Report accepted and leave granted.

Dr. C. C. Cox, of Maryland, offered the report of the Necrological Committee, giving the names of the decedents.

Dr. Condie moved that the report be retained by the Chairman sufficient time for additions, but without delaying the publication. Adopted.

INVITATIONS.

Dr. Tyler, as Chairman of the Committee of Arrangements, read a communication from Mr. Samuel Gardeler, Electrician of the Capitol, inviting the Association during the evening to an exhibition of the method of lighting by electricity. On motion, the invitation was accepted with thanks.

The Doctor read another invitation from the Young Men's Christian Association to visit their rooms, which was disposed of as above.

VOLUNTARY AND OTHER PAPERS.

The following voluntary papers were referred to the several sections as below designated:

"Investigations upon Pyæmia, with observations upon associated diseases, supervening upon gun-shot wounds." By Dr. Joseph Jones, Tenn. Referred to section on surgery and anatomy.

"Albinism in the Negro Race," by same author. Referred to section on physiology.

"A safe and effectual operation for the radical cure of varicocele," by Dr. Paul F. Eve, of Tenn. Referred to section on anatomy and surgery.

"A case of the extirpation of a scirrhous uterus *in situ*," by Dr. A. B. Jones. Referred to same section.

"A new remedy for amenorrhœa," by Dr. John P. Garrish, of New York. Referred to section on obstetrics and practical medicine.

"Report of Committee on the cultivation of the cinchona tree in the United States." Dr. J. M. Toner, Chairman. Referred to section on materia medica.

TOPICS OF THE PRESIDENT'S INAUGURAL ADDRESS.

The Special Committee appointed for the consideration of the above, and instructed to reduce their suggestions to the form of resolutions, reported as follows:

1. *Resolved*, That the Publishing Committee are hereby invested with plenary power in regard to all papers not read before the Association, or in the sections, to publish or not, as may seem expedient.

2. *Resolved*, That a committee of three be appointed by the Chair to take into consideration the subject of appointment of a commissioner in each judicial district or circuit, whose duty it shall be to aid in the examination of witnesses in every trial involving medico-legal testimony, and to report at the next meeting of the Association.

3. *Resolved*, That a committee be appointed to report next year in regard to the subject of an annual register of the regular profession in the United States, and in the meantime to take necessary measures to carry the plan into effect.

4. *Resolved*, That a committee be appointed to take into consideration the subject of the best mode of providing a fund for the relief of widows and orphans of deceased physicians, and report to the Association at the next meeting.

5. *Resolved*, That a committee of three be appointed to take into consideration the subject of the establishment of veterinary colleges, and report at our next meeting.

Resolved, That all hospitals and public institutions for the care and treatment of the sick should have educated, well-trained nurses only; that this Association would strongly recommend the establishment in all our large cities of nurse-training institutions.

The resolutions were debated *seriatim*, and resulted in the adoption of all except the sixth, which was referred to a Committee.

Dr. McKew, of Maryland, offered the following as bearing particularly upon the first of the above resolutions.

Resolved, That the Committee shall, in carrying out these resolutions, not subject the Association to any expense.

Adopted.

COMMITTEES APPOINTED.

The Chair, agreeably to requirements of the resolutions in question, appointed the following Committees:

Commissioners to Aid in Trials involving Medico-legal Testimony.—Drs. John Ordronaux, of New York; A. B. Palmer, of Michigan; Stephen Smith, of New York; J. W. Dunbar, of Baltimore.

Annual Medical Register.—Drs. John H. Packard, of Philadelphia; Wm. B. Bibbins, of New York; and Ellsworth Eliot, of New York.

Devising a Plan for the Relief of Widows and Orphans of Medical Men.—Drs. J. H. Gr'scom, of New York; N. S. Davis, of Indiana; and A. C. Post, of New York.

Veterinary Colleges.—Drs. Thomas Antisell, of Washington, D. C.; C. A. Lee, of New York; and John C. Dalton, of New York.

Dr. Hibberd moved that the Committee on Nurse-training Institutions consist of Drs. S. D. Gross, Elisha Harris, and Charles A. Lee. Adopted.

The Chair then appointed the following additional delegates to represent the American Medical Association at the Convention in Montreal, to be held in September next: Drs. C. C. Cox, John L. Atlee, N. S. Davis, Chas. A. Lee, and —— Wood, U. S. N.

Dr. Howard, of Maryland, submitted the following:

Resolved, That a committee of three be appointed to report at the next annual meeting of the Association, on the subject of Specialties in Medicine, and on the propriety of specialists advertising.

On motion, adopted.

Committee: Drs. E. Lloyd Howard, Frank Donaldson, and Christopher Johnson, all of Maryland.

INTRODUCTION OF THE PRESIDENT ELECT.

Dr. Baldwin, of Ala., the newly-elected President of the Association for the current year, was introduced to the Association, and returned his thanks for the compliment in appropriate terms. He adverted briefly

to the unfortunate dissensions which had existed between his section and the North, and congratulated the Association and himself that these differences had been settled, at least so far as the medical profession were concerned, and that now we could again meet together as brothers and friends. He hoped that harmony and good-will would hereafter prevail for the general good of the country and the welfare of the profession.

At the close of Dr. Baldwin's remarks, the retiring President, Dr. Gross, arose and said that he desired to correct a misapprehension which existed at the South, that the Medical Association had adopted at one of their sessions, held during the war, a resolution requesting the United States government to pass a law making all medicines and surgical instruments contraband of war. No such resolution had ever been adopted.

Dr. Davis desired to say, in addition, that not only had no such resolution ever been adopted, but that it had never been introduced.

This statement was, on motion, ordered to be recorded in the Transactions of the Association.

AN IMPORTANT DISCOVERY.

Dr. McIlvaine, of Ohio, called attention to a preparation to restore the normal color of animal tissue, a discovery of Mons. Brunetti, of Padua, Italy. He has not yet published the steps of the process, although he has announced his intention so to do. The Doctor, in connection with his remarks, exhibited a small specimen.

MEDICAL RANK IN THE NAVY, AND OTHER MATTERS.

Dr. Davis reported that the Committee on Medical Rank in the Navy had waited upon the proper Congressional committee, and properly presented the subject to their notice.

The Committee as at present constituted, was, on motion, continued for one year longer.

Dr. Davis also called for the report of the Committee on Place of Deposit of the Archives of the Association.

After some explanatory remarks, the Committee was, on motion, continued.

Dr. Bibbins, of N. Y., offered a resolution, substantially calling for the appointment of a sub-committee in all the large cities to act in conjunction with the General Committee of Arrangements. The duty of this Committee was to obtain a reduction of railroad fare, if practicable.

On motion, the Permanent Secretary was empowered to make appointments to said Committee.

Dr. Davis offered a resolution instructing the Chair to appoint a committee of three, to report at the next session on the practicability of establishing a library of American medical works, including books, monograms, and periodica's. Adopted.

The Association then adjourned till 9 o'clock Friday morning.

EVENING ENTERTAINMENTS.

Prof. Samuel Gardener, Electrician of the Capitol, under the direction of General Micklen, Commissioner of Public Buildings, illuminated the dome of the capitol and the House of Representatives.

At 8 precisely, the gas was turned off, and the dome with its 1,300 burners immediately lighted by electricity. The brilliant light produced a marvellous effect on Brumida's great fresco painting. Subsequently to the lighting of the dome, the gas was turned on the burners below, and the pictures of the rotunda lighted.

The members of the Association were invited by Prof. Gardener to visit the battery-room, and shown the electrical apparatus which was built for the Paris Exposition. This exhibited the different combinations for turning on and off the gas, and the manner of lighting by electricity public buildings, picture galleries, chandeliers, brackets, and street lamps, both by means of the electric spark and by concentralizing electricity through platinum coil.

The reception at the residence of Chief-Justice Chase was attended by the delegates in a body, and an hour was pleasantly passed in conversation and in enjoying the hospitality of the house.

The reception at the residence of Mayor Wallach took place at 10 o'clock, and was attended by all the delegates. It formed a brilliant conclusion to the cordial welcome extended to the distinguished representatives of the profession by the people of Washington. The remainder of the evening was spent in social enjoyment. A sumptuous repast was provided, and the party did not separate until a late hour.

FOURTH DAY—FRIDAY, MAY 8, 1868.

The Association promptly met at the appointed hour, Professor Gross, President, in the chair. The minutes of the preceding meeting were read and approved.

INVITATIONS.

Dr. Tyler read an invitation from Mr. Sykes inviting the Convention to visit Mount Vernon at half past eleven o'clock, on his steamer, which was accepted. He also read an invitation from Mr. H. H. King, requesting that he be allowed to make a photograph of the Convention, which was accepted, and at ten o'clock the picture was made in front of the hall. The president introduced Professor Henry, of the Smithsonian Institution, who took a seat upon the platform.

VACCINATION.

Dr. Henry A. Martin, of Mass., offered the following, which was adopted:

"It seems proper that this Association should not be without a committee on a subject so transcendently important as that of vaccination; therefore,

"*Resolved*, That a standing committee of one be appointed upon the whole subject, to report from time to time on such topics connected with vaccination as shall, in the estimation of such committee, appear of chief practical interest and importance to the profession.

Committee.—Dr. H. A. Martin, of Mass.

SUPPLEMENTARY REPORT OF THE COMMITTEE ON NOMINATIONS.

The Committee on Nominations made the following report, which was adopted:

Assistant Secretary.—Dr. A. G. Semmes.

Committee of Arrangements.—Drs. J. G. Richardson, S. M. Bemis, C. Beard, L. T. Pinm, D. Warren Brickell, S. Chopin, and — Mitchell, all of New Orleans.

On Medical Education.—Drs. J. C. Reeve, Dayton, Ohio; J. S. Hildreth, Chicago; W. C. McCook, Pittsburg, Pa.; Frank Rice, Memphis, Tenn.; and S. H. Pennington, Newark, N. J.

Committee on Necrology.—Drs. S. S. Cox, Md.; E. B. Stevens, Ohio; W. F. Peck, Iowa; H. Van Dusen, Wis.; J. M. Toner, D. C.; Jos. Simpson, U. S. Army; J. C. Weston, Maine; Henry Bronson, Conn.; Henry Noble, Ill.; Charles Eversfield, U. S. Navy; T. Parvin, Ind.; J. C. Hupp, West Va.; J. Mauran, R. I.; D. Clark; J. M. Keller, Tenn.; Henry F. Askew, Del.; H. J. Clark, Mass.; E. M. Moore; John Shrady, N. Y.; Charles A. Logan, Kansas; —— Stewart, Minn.; Henry Miller, Ky.; F. G. Armour, Mich.;

John Blaine, N. J.; A. Fleming, E. Wallace, Pa.; R. D. Arnold, Ga.; J. S. Weatherly, Ala; S. L. Welch, Texas; T. M. Logan, Cal.; John W. H. Baker, Iowa; P. A. Stackpole, N. H.; L. Joynes, Va.; W. Brickell, La.; David Booth, Miss.

Committee on Literature.—Drs. E. Warren, Baltimore; J. Jones, Nashville; E. Andrews, Chicago; J. J. Woodward, U. S. Army; P. S. Wales, U. S. Navy.

On the Climatology of their several States.—Drs. J. C. Weston, Me.; P. A. Stackpole, N. H.; Henry James, Vt.; H. I. Bowditch, Mass.; C. W. Parsons, R. I.; E. K. Hunt, Conn.; W. T. Thomas, N. Y.; Ephraim Hunt, N. J.; D. F. Condie, Pa.; O. S. Mahon, Md.; J. Harris, Ga.; George Engleman, Mo.; R. F. Michel, Ala.; T. J. Heard, Texas; R. C. Hammell, Ill.; J. F. Hibbard, Ind.; T. Antisell, D. C.; J. C. Hughes, Iowa; Abraham Sagur, Mich.; T. L. Neal, Ohio; F. W. Hatch, Cal.; B. W. Avent, Tenn.; E. A. Hildreth, W. Va.; W. C. Owen, Va.; Samuel Willey, Minn.; L. B. Bush, Del.; G. W. Lawrence, Ark.; —— Compton, Miss.; Louis Pimm, La.

Committee on Prize Essays.—S. M. Bemis, J. Scott, W. Brickle, S. A. Smith, C. Beard.

Special Committee on Alcohol and its Relations to Medicine.—John Bell, Balt.; J. R. Dunbar, Phila.; and Richard McSherry, Balt.

On Cryptogamic Origin of Disease, with special reference to recent Microscopic Investigations on that Subject.—Dr. Curtis, U. S. A.

On Diseases of the Cornea.—Dr. J. S. Hildreth, of Chicago.

On Excision of Joints for Injuries.—Dr. J. B. Read, of Savannah.

They also reported the following resolution, which was adopted:

Resolved, That those gentlemen who desire to report on special subjects, and will pledge themselves to report at the next meeting, be requested to send their names and the subjects they desire to report upon to the secretary of the Association.

Dr. Charles A. Lee, of New York, was appointed a delegate from the Convention to the meeting of superintendents of insane asylums.

REPORTS OF THE SECTIONS.

Dr. J. Shrady, of N. Y., read the minutes of the Section on Surgery and Anatomy. Adopted, and ordered to be published in the Transactions.

Dr. Davis, of Ill., read the minutes of the Section on Meteorology, Medical Topography, and Epidemic Diseases. Adopted and ordered as above.

Dr. Atkinson, of Penn., presented the minutes of the Section on Practical Medicine and Obstetrics, which, on motion, were ordered as above.

Dr. Hubbell, of Ind., made a verbal report concerning the Section on Medical Jurisprudence, Hygiene, and Physiology.

He stated that the section, after a careful examination of the contribution by Dr. Joseph Jones, entitled "Albinism in the Negro Race," recommend that, in view of its great excellence, it be submitted to the Smithsonian Institution for publication. The report on motion accepted.

RESOLUTIONS ADOPTED.

Dr. Hubbell moved the adoption of Dr. Toner's proposed Amendment to Art. V., as published in the Transactions of the Association for 1867, page 42. Carried.

Dr. Davis offered the following, which was unanimously adopted:

Resolved, That hereafter the necessary expenses for rent of hall for general meetings and rooms for Sections, to accommodate their annual meetings, and the necessary expenses for cards of membership, be paid out of the Treasury of the Association.

The following was also adopted:

Resolved, That a committee of three be appointed on *The Use of Prophylactics in Zymotic Diseases.*

The Chair appointed Dr. Nelson L. North, of N. Y., Chairman of said Committee.

The following was also offered and adopted:

Resolved, That a Committee be appointed by the Chair, on the *Utilization of the Sewerage of Cities*, to be appointed by the Chair to report at next Session of Association.

Dr. Elisha Harris, of N. Y., was accordingly appointed Chairman of said Committee.

Dr. Harris, of N. Y., submitted the following, which was likewise adopted:

Resolved, That a Committee of three be appointed by the President, on the subject of the *Sewerage and Drainage of Cities, Towns, and Malarious Districts of Country*, to report at the next meeting of the Association.

Committee.—Dr. Stephen Smith, of N. Y., Chairman.

On motion, the subjoined was adopted:

Resolved, That a Committee be appointed by the Chair, on the subject of *Inebriate Asylums*, to report at the next meeting of the Association, and that Dr. C. H. Nichols, of the Government Hospital for the Insane, be Chairman of said Committee.

Dr. F. Howard, of D. C., and Dr. J. R. W. Dunbar of Md., were appointed the additional members of said Committee.

MISCELLANEOUS MATTERS.

Dr. Thomas Antisell, D. C., was, on motion, appointed Chairman of the Committee "on the influence of the Pneumogastric nerve on spasmodic and rhythmical movements of the lungs."

The thanks of the Convention were returned to the Baltimore and Ohio railroad, Philadelphia, Wilmington and Baltimore road, Orange and Alexandria, and other railroads, for facilities shown to the members of the Convention. The thanks of the Convention were also tendered to the President of the United States, Speaker Colfax, Chief Justice Chase, Hon. Richard Wallach, Prof. Samuel Gardener, electrician United States Capitol, Dr. Woodward, of the Army Medical Museum; the Committee of Arrangements, of which Dr. Tyler is chairman; and Hon. Edwin D. Morgan, for their politeness and courtesies to the Association. Also, to the press of the city for the correct reports of the proceedings of the Convention.

The President appointed the following gentlemen as delegates to foreign medical societies: Samuel J. Jones, of Chicago; G. C. Blackman, of Cincinnati; Fordyce Barker, of New York; to which committee Dr. Gross, President of the Convention, was added.

Dr. Bliss, of Washington, introduced the following:

Resolved, That a committee of three be appointed to examine into the present plan of organization and management of the United States Marine Hospitals, and report at the next annual meeting of this Association.

The President read a letter from Hon. Geo. Bancroft, our Minister at Berlin, relative to Professor A. Ehrenberg, the great microscopist, who is now blind. On motion, Dr. Gross, the President, was authorized to send a letter on behalf of the American Medical Association.

Dr. Wetherly, of Alabama, then addressed the Convention in the following terms:

Mr. President and Gentlemen of the Association,—I arise on the part of the Southern delegation of the Southern profession, to extend a warm and pressing invitation to the Association to visit us in large force at New Orleans, next May; thereby giving us an opportunity of returning in some measure the great kindness and generosity that have been shown us. Since we have been here, I have no hesitation in speaking for the New Orleans physicians, and will say for them, that you will be received by them with open arms, and as warm a welcome as you have ever received at any other point in the Union.

Dr. Geo. G. Crawford, of Ga., preferred the following charges against the Atlanta Medical College of Georgia:

1. Irregularity of the charter.
2. Graduation of two classes in same year.
3. Conducting the exercises of the institution without the consent or co-operation of the Trustees of the same.

On motion, referred to Committee on Medical Ethics.

THE PRESIDENT'S CLOSING ADDRESS.

Dr. Gross then arose and spoke as follows: Before the question of final adjournment be put, allow me to tender you my cordial acknowledgments for the kindness and courtesy which you have extended to me as your presiding officer. Gratitude and good taste alike prompt the expression of my feelings. In everything I did I felt that I had your generous support and sympathy; whatever errors may have been committed were errors of the head, and not of the heart, and are, I am sure, already forgotten by you. I congratulate you upon the manner in which you have conducted your proceedings. It is questionable whether there ever was a deliberative body of such magnitude in which there was so little discord, or so little said and done of an objectionable character; harmony, cordial and complete, prevailed from the beginning to the end. There was indeed not one word uttered that any one, even the most fastidious, might wish to recall; a circumstance the more surprising when it is recollected that men in the heat of debate often give way to heedless and unguarded expressions calculated to ruffle the feelings and to engender unpleasant reminiscences. We have accomplished not a little work, and above all we have had an opportunity of reviving friendly feeling; of extending our acquaintance with each other, and of interchanging sentiments in regard to matters of vital importance to our beloved profession. I am sure that every one will say, as he leaves this hall, that it was good for him to have been here, and that he will return to his home with new resolves and determined to devote himself more earnestly than ever to the advancement of the glory of his noble calling; that he will strive more than ever to elucidate its great principles, and that, abandoning all other pursuits, he will worship medicine as the only goddess of his idolatry. Hoping that no evil may befall you on your homeward journey, and that your families may greet you with messages of peace and glad tidings, I bid you a cordial and affectionate farewell.

The customary votes of thanks having been passed, the Convention adjourned *sine die*.

REPORTS OF THE SECTIONS.

Section on Surgery and Anatomy.

First Day—May 5, 1868.

The above section met according to arrangement, and organized by the appointment of Dr. John L. Atlee as Chairman, and Dr. John Shrady as Secretary.

Dr. Hildreth, of Ill., read the Report of the Committee on Ophthalmology, in which he reviewed some of the more important advances in this branch of the healing art and alluded to the gradually increasing interest in its behalf. Referred to the Committee on Publication with the recommendation that it be published.

Dr. Hamilton remarked that the paper was admirably calculated to arouse attention to the claims of ophthalmology upon the profession.

CLUB-FOOT.

Dr. Sayre presented a paper "on the treatment of club-foot without tenotomy," and exhibited an apparatus to which an elastic rubber tube was attached for the purpose of keeping up a constant, persistent amount of power. He held that the deformity was due to a paralysis of certain muscles, which was to be overcome by increasing the vitality by such stimulation as the electrical current, sometimes faradaic, and sometimes constant.

Dr. Hamilton presumed that Dr. Sayre in his use of the term meant relative and not absolute paralysis; that is, a loss of power in one set of muscles, generally owing to disuse.

Dr. J. L. Atlee, after a general discussion regarding the merits of tenotomy, and the claims of those who first practised it in this country, stated that Dr. Henry Neill of Philadelphia, in 1825 or 1826, had used a double foot-board for the cure of this deformity. His plan is fully detailed in one of the numbers of the *American Medical Recorder*, published about that period. The two boards are connected by a strip composed also of wood, and have a leather heel loop the better to secure the bandage. Both feet are adjusted to the apparatus, and the child, to get rid of the annoyance, calls into play the peroneal and abductor muscles—in other words *kicks itself well*. The surgeon should commence this treatment as soon after birth as possible. The Doctor, as far as his own experience was concerned, had every reason to congratulate himself upon results.

Dr. Hamilton did not believe in harnessing up the muscles in such a way as to cripple their action, and thought that Dr. Sayre's mode of treatment possessed many advantages. He advocated a good trial of the milder methods before recourse was had to tenotomy. In cases of strabismus, dividing the muscles proved of doubtful advantage until the principle which governed it was better understood. For some years past he had himself ceased to be an advocate for tenotomy, except in rare cases.

Dr. Sayre had made it a rule not to expect much from the muscles implicated in these cases, if they did not respond to the stimulus of electricity. It was in such instances as these that the knife should be employed.

The paper was referred to the Committee on Publication, with instructions to publish.

Dr. Taylor, of N. Y., also exhibited an instrument for the treatment of club-foot, in which the support came from the *inside* of the leg—the lever acting against the end of the foot. He was not, however, prepared to say that the loss of tonicity in the case of the muscles involved was due to a paralysis from disuse. He believed in the method of Dr. Wm. Adams, of London, who converts the varus or valgus into an equinus, and then cuts the tendo Achillis; when this is thoroughly done but little flexion is required. Dr. T. also explained his modification of Davis's and Sayre's splint, in which there were *two* perineal straps to control the abduction and adduction of the limb. Much of the extension is here dispensed with, and the patient relieved of the fear of concussion.

RULES FOR THE COURSE TO BE FOLLOWED BY THE BY-STANDERS IN CASES OF RAILROAD INJURY WHEN SURGICAL ASSISTANCE CANNOT BE AT ONCE OBTAINED.

Dr. Packard, of Phila., distributed printed forms with the above caption which were printed at a cost of about $30 per 1,000. These were designed to be displayed in freight stations and other places accessible to railroad employees, and, not being copyrighted, might be duplicated by any physician living in a manufacturing district, or along the route of a railroad.

These instructions were, on motion, ordered to be entered at length in the minutes of the Section.

The meeting then adjourned until Wednesday at 3 P.M.

SECOND DAY—MAY 6, 1868.

The Section was duly organized at 3 P.M., with Dr. John T. Atlee, the President, in the Chair.

Dr. Buck, of N. Y., then described his method of constructing the lower lip after its destruction by disease, and providing for it a vermilion border from the mucous tissue in the vicinity. The two cases which he adduced in illustration of his plan were shown by a gypsum model, several diagrams, and two photographs.

The paper was referred to the Committee on Publication, with same recommendation as in the preceding case.

INTERNAL EXHIBITION OF ARSENIC IN CANCER.

Dr. W. L. Atlee related a case of epithelioma upon which he had operated at intervals several times, in consequence of the return of the disease in the cicatrix. As long as his patient took the *liquor potassæ arsenicalis*, in three-drop doses thrice daily, his disease appeared to be under control, but a few months after its suspension it would return. At last the patient came with a frightful development of his malady, for which an operation requiring twenty-seven silver sutures to keep the raw edges of the wound in apposition, was performed. The wound healed kindly by the first intention, and the patient was put on the constant use of arsenic. He is now between seventy and eighty years of age, and, from having been broken down and decrepid from the cancerous cachexia, he has become a hale, hearty gentleman, without any inclination to desert his old friend.

APPARATUS FOR THE ADMINISTRATION OF ANÆSTHETICS.

Dr. Hamilton exhibited Dr. Goodwillie's apparatus, which he highly commended as being simple in construction and economical in the use of anæsthetics. He stated that with this contrivance two ounces of ether could produce complete anæsthesia in five minutes.

Dr. Bozeman, of New York, read an interesting and exhaustive paper, entitled "Remarks on some of the Operations for Vesico-Vaginal Fistule, with an account of a new self-retaining speculum and a new mode of securing the patient."

This was accompanied by models of speculums, diagrams, etc.

On motion, referred to Committee on Publication, with recommendation that the same be published in the Transactions.

Dr. Elsberg, of New York, demonstrated in an adjoining room the advantages of the laryngoscope, invented by Dr. F. A. Burrall, of New York, and also exhibited in the person of a former patient, the favorable results of a case previously published in a Prize Essay, awarded by the Association.

Dr. Whitehead's paper "On the Best Methods of Treatment for different forms of Cleft Palate," was, by request of the author, made the subject of a special committee report. The Chair appointed Dr. Whitehead said committee, with instructions to report at the next Convention.

The meeting then adjourned until Thursday, at 3 P.M.

THIRD DAY—MAY 7, 1868.

Meeting was called to order at 3 P.M., Dr. Atlee, President, in the Chair.

Dr. Quimby, of Jersey City, N. J., demonstrated his treatment of Talipes Varus, with adhesive straps and bandages.

On motion, Dr. Quimby was requested to furnish the Committee of Publication with a brief abstract of his remarks.

Dr. Elsberg, of New York, read a paper upon the "Treatment of Syphilis by Hypodermic Injections."

Dr. Krackowizer, of New York, had employed Dr. Levine's method in only a few cases, and could not therefore say that he had fairly tested it. In the New York Hospital, for instance, he had begun to put it upon its merits, just as his term of service was on the point of expiration. He then adopted it at Mount Sinai Hospital in the case of a young man, saturated with syphilis, who, owing to the irritability of his stomach, could not endure corrosive sublimate as usually administered. After the fifth injection he congratulated himself with the assurance of its efficacy, inasmuch as the sores began to assume a healthy aspect, and there was no ptyalising. But, notwithstanding he persisted in this plan, injecting one-eighth of a grain daily, there was no permanent impression made. He regarded five grains to the two fluid drachms of water, which Dr. Elsberg used, as a rather caustic dose—his own formula only called for four grains to the fluid ounce. Doctor K. used fifteen drops of this latter solution. The treatment was a rational one, and worthy of being put upon its own merits. The only precaution to be kept constantly in mind was the avoidance of those parts abounding in lymphatic glands; for this reason the thorax in the mesian line was his own point of election, as being sufficiently distant from the axilla.

Dr. Elsberg admitted that his treatment involved a greater or less amount of local inflammation, but that, *cæteris paribus*, this hardly rose to an objection. He would state, however, that he had never exactly known Dr. Levine's formula, and was therefore thrown upon his own resources.

In reply to a question of Dr. Atlee's, he stated that a subcutaneous injection of morphine in a case of his own, had given a much greater amount of local trouble.

Dr. Robert Reyburn, of D. C., thought that the 81 per cent. of relapses which are said to occur in this method ought to reflect somewhat upon its efficiency.

Dr. Krackowizer said that Dr. Levine probably meant by relapses those cases which return to us with a mild form of the disease for further treatment. This was his own experience, and in all likelihood that of others, it being immaterial what plan of treatment was followed. An important element in the consideration of the question, however, had been overlooked, and that was the fact that Dr. Levine was preceded by Dr. Berangsburg, who ignored the mercurial plan of treatment.

Dr. Atlee had, he thought, succeeded very well by the received plan, although his experience, representing as he did a moral rural district, was necessarily not very extensive.

Dr. Ely had observed Dupuytren's law of continuing the treatment a certain time after the cure was apparently effected. In other words, if all the symptoms disappeared in a month, he would ply his remedies one month longer.

Dr. Buck, of N. Y., rather confirmed the view of frequent relapses. He used the *Hydrarg. Bichlorid.* in doses varying from $\frac{1}{12}$ to $\frac{1}{8}$ of a grain, continued for several weeks, followed by the *Potass. Iod.* in doses of from five to ten grains. Dr. Elsberg's paper was then, on motion, referred to the Committee of Publication with the usual recommendation.

The paper entitled "A case of the Extirpation of a Scirrhous Uterus *in situ* by Abdominal Section," by Dr. A. B. Jones, was then called for, but not presented.

A CASE OF ANEURISM.

Dr. Post, of N. Y., on behalf of Dr. E. W. Latimer of D. C., presented Mr. S. B., a native of Bavaria, aged fifty-two; a resident of Washington for 16 years, and suffering with an enormous aneurism supposed to be of the arteria innominata. Patient first noticed a tumor about the size of a filbert immediately above the sternum three and a half years ago, increasing very slowly until about six months since, from which time it has increased rapidly. It now occupies the greater portion of right side and front of neck, pushing the trachea and œsophagus over to left side, interfering greatly with respiration and deglutition. It is about the size of an ordinary child's head at birth, and extremely painful. Dr. P. called attention to the remarkable expansive pulse, the vibratory thrill, and the apparently still fluid contents of the sac.

Dr. Reyburn related several cases of aneurism, surgically treated by himself. Gradual pressure had been kept up for three weeks without success, and quick pressure had been tried with a like result, as far as any benefit was concerned other than a rather rapid establishment of the collateral circulation.

Dr. Palmer, of Mich., recalled a case of Aneurism of the aorta so extended as to point *below the nipple*, and which at the time gave rise to quite a diversity of opinion. One had pronounced the tumor an aneurism of the internal mammary, and another at first, from its unusual situation, mistook it for an abscess. The patient finally died from internal hæmorrhage, the serum of the blood oozing into the right bronchus.

OTHER PAPERS PRESENTED.

Dr. Eve read a paper upon "A safe and effectual operation for the Radical Cure of Varicocele." Referred, on motion, to the proper Committee, with a recommendation for publication in the Transactions.

Dr. Eve also presented a treatise, statistical in character, and containing several illustrations in water colors. This was entitled "Investigations upon Pyæmia, with Observations upon Associated Diseases, supervening upon Gun-shot wounds." By Dr. Joseph Jones, of Tenn., Prof., etc.

Dr. Palmer, after an animated debate, mainly upon the question of its mode of publication, offered the following, which was unanimously adopted:

Whereas, In the present financial condition of the Association, it is impossible to incur the expense of publishing the contribution of Dr. Joseph Jones, and

Whereas, Its presumed great value as a scientific paper justly entitles it to a permanent place in the medical literature of the country,

Therefore, Be it resolved, that said treatise be referred to the Committee of Publication, who shall be empowered to bring it to the notice of the Medical Department of the U. S. Army. The Session then adjourned.

John Shrady, *Secretary of Section.*

Section of Practical Medicine and Obstetrics.

May 7, 1868.

The Section organized by appointing Dr. McIlvaine, of Ohio, Chairman, and C. M. Finch, Secretary.

Dr. J. P. Garrish read a paper on "Tsa-tsin" or "Rhynchosa Excavata," as an agent of value in Amenorrhœa and Dysmenorrhœa, which elicited considerable discussion.

Dr. M. B. Wright, of Ohio, moved the paper on the treatment of Amenorrhœa, by Dr. Garrish, be referred to the writer to report more fully at the next meeting of the Association. Carried.

On motion of Prof. Palmer, of Mich., the Section adjourned. C. M. Finch, Sec. of Section.

Section on Meteorology, Medical Topography, and Epidemic Diseases.

First Day, May 5, 1868.

The Section met in the Basement-room of Carroll Hall, and was called to order by the President, Dr. B. N. Catlin, of Conn.

The Secretary, Dr. N. S. Davis, read the minutes of the meetings of the Section at the previous Annual Meeting.

On motion the present Officers were re-elected as President and Secretary for the ensuing year.

The Secretary read a letter from Dr. R. C. Hamill, member of the Committee on Climatology and Epidemics, for Illinois, asking for a longer time to complete his report.

On motion his request was granted.

Dr. E. A. Hildreth, of West Virginia, member of the Committee on Climatology and Epidemics, read in full his report. It elicited an interesting discussion, which was participated in by Drs. E. Harris, of New York, T. Antisell, of D. C., J. F. Hibbard, of Indiana, Ezra M. Hunt, of New Jersey; after which the report was referred to the Committee of Publication to be published in the Transactions of the Association.

Dr. Thos. Antisell, member of the Committee on Climatology, &c., for the District of Columbia, read his report in full. On motion of Dr. Harris, of New York, Dr. Antisell was requested to add to his report an analysis of the water used in the City of Washington.

A discussion followed, participated in by Drs. Prentice, E. Harris, of New York; J. F. Hibberd, of Indiana; Hooper, of Mass.; and Antisell of D. C., after which the report of Dr. Antisell was referred to the Committee of Publication. The Section then adjourned until 3 o'clock, P. M., of the morrow.

Second Day—May 6, 1868.

The Section was called to order by the Chairman, and the Secretary read the minutes of the previous meeting.

A short paper, in reference to the advantages of Aiken, as a resort for consumptives, was read by the Secretary, and on motion referred back to its author, with a recommendation that he cause it to be published in some one of the medical periodicals.

Dr. N. S. Davis, of Ill., read a paper on the influence of local causes over the prevalence of epidemic cholera and other bowel affections, with some microscopic examinations of the cholera dejections.

It was followed by a very interesting discussion, in which Drs. Ohr, of Cumberland, Md.; Antisell, of Washington, D. C.; Harris, of New York; C. A. Lee, of New York; Hooper, of Fall River, Mass.; R. R. McIlvaine, of Ohio; and Hunt, of New Jersey, participated.

Dr. Ohr moved that the paper read by Dr. Davis be referred to the Committee of Publication; but, on the special request of the latter, the motion was so modified as to authorize Dr. Davis to publish the paper in some medical periodical, and that he be requested to continue his investigations.

The report of Dr. T. J. Heard, on the Climatology and Epidemics of Texas, was examined and presented to the Section by the Secretary, and, on motion, referred to the Committee of Publication for the Transactions.

The report of Dr. D. F. Condie, on the Prevalence of Diseases in Pennsylvania, was presented in the same manner by the Secretary, and, on motion of Dr. C. A. Lee, was referred to the Committee of Publication for the Transactions.

Dr. N. L. North, of Brooklyn, N. Y., presented and read a short paper "On the Use of Disinfectants, for the Prevention of Scarlet Fever."

The subject was discussed by Drs. Garrish, of New York; Hooper, of Fall River; and North, of Brooklyn, after which the paper was referred to its author, with the request that he would cause its publication in some widely circulated medical periodical.

On motion the Section adjourned.

THIRD DAY—MAY 7, 1868.

Section was called to order by the President, Dr. B. N. Calton; and the Secretary read the minutes of the previous meeting.

Dr. Lee introduced to the Section Dr. J. C. Peters, of New York, who gave an interesting account of the lines followed by cholera in spreading from India to other countries, illustrated by maps.

On motion, Dr. Peters was requested to furnish a copy of his remarks, accompanied by a map or diagram, for publication in the Transactions of the Association.

Dr. E. Harris, of New York, presented a brief plan for procuring more brevity and uniformity of reports on Climatology and Epidemics, which the Secretary of the Section was requested to print and distribute to the members of the Committee on Climatology, etc.

Dr. Thoms, of New York, read his paper "on plans for systematizing the records of meteorological observations and prevalence of diseases, accompanied by diagrams."

On motion, the paper of Dr. Thoms was referred to the Committee of Publication for the Transactions.

The Section recommended Dr. H. I. Bowditch, of Boston, as a member of the Committee on Climatology and Epidemics for Massachusetts, in place of Dr. A. C. Garrett, resigned.

The Section appointed Dr. Elisha Harris, of New York, a Special Committee to report at the next annual meeting of the Association, "On the Influence of Quarantine in preventing the Introduction of Diseases into the ports of the United States."

The Section, having completed its business, adjourned until the next annual meeting of the Association.

N. S. Davis, M.D.
Secretary of Section.

SECTION OF CHEMISTRY AND MATERIA MEDICA.

MAY 7, 1868.

The Section organized at 3.30 P.M., by electing Dr. J. E. Morgan, of Washington, Chairman, and Dr. L. J. Deal, of Philadelphia, its Secretary.

Dr. Noel, of Baltimore, wished to bring before the notice of the Section some new ideas with regard to the decomposition of urea in uræmic poisoning.

Dr. John Toner, of D. C., moved that a committee be appointed consisting of Drs. Noel, Antisell, and Beatty, of Baltimore. Adopted.

The report of the Committee "On the Cultivation of the Cinchona tree," was then read by Dr. J. M. Toner, Chairman of the Committee.

After a considerable discussion of this matter by Drs. Noel, Deal, J. E. Morgan, and Toner, the following resolution was adopted:

Whereas, It is known that the supply of Cinchona, heretofore received from South America, is steadily and rapidly decreasing in quantity; and,

Whereas, Successful attempts have been made at various times to cultivate the Cinchona tree in other localities; and

Whereas, It is believed that the climate and other conditions necessary for its production exist in this country; therefore,

Resolved, That this Association appoint a committee to memorialize Congress with regard to this matter, urging upon it the great advantages which would result from the cultivation of this plant in the United States.

The Section nominated the following Committee, subject to the approval of the Association: Drs. Lemuel J. Deal, of Philadelphia (Chairman); Logan, of California; and J. M. Bigelow, of Detroit, Michigan.

There being no other business before the Section, on motion, it adjourned.

LEMUEL J. DEAL, *Secretary of Section.*

MEDICAL COLLEGES AND MEDICAL STUDENTS.—The *Western Journal of Medicine* thus discourses on this subject: Medical students should bear this in mind, that it is not the school, nor the men who teach, that should be regarded as most important, but whether you shall indeed be physicians, or shams; it is not the opportunities, limited or extensive though they may be, but the wise use of them, that settles this question; and when a man offers himself to the public in the capacity of a physician, and when he associates himself with other physicians claiming peership where he graduated, and whose names are attached to his diploma, are minor questions compared with the greater one, What is he? The *matres medicorum* of our country are remarkable for their brief term of pregnancy, and for the facility with which parturition takes place; in some rare instances the fœtal M. D. is not strong enough to be thrust upon the world when he desires to be, and is sorely tried by questions he cannot answer, a sort of *cephalic version* being performed, and delivery postponed six months or a year. These, however, are rare exceptions, and the vast majority of those who offer themselves as candidates for graduation do not find themselves in a "strait" they cannot "pass." An effort has recently been inaugurated by some of the most skilful and intelligent accoucheurs to induce these prolific mothers to prolong their period of uterogestation—making it four years instead of two, or two years and a half, as it often now is. But earnestly as we wish this reform, we dare not hope to see it succeed for some. We assure students that wherever they go, they will have more work than they can do well, more aliment than they can thoroughly digest, or completely assimilate; and *mental dyspepsia*, with subsequent professional marasmus, sometimes results from our system of cramming. How are such consequences to be guarded against?

A NEW AND IMPROVED OPERATING THEATRE.—The trustees of the Massachusetts General Hospital have built within the past year an improved operating theatre, costing $50,000. The theatre proper is fifty-seven and a half by forty-seven and a half feet, and forty-two feet high. Comfortable seats are provided for three hundred and eighty persons, so arranged that each one will command an uninterrupted view of the table. Great care has been taken to secure light, heat, and ventilation.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEEMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, May 15, 1868.

THE EFFECT OF AN ENLIGHTENED SANITARY ADMINISTRATION.

A RETROSPECT of the history of Health Boards, as illustrated in those which have existed in New York, leads one to concur fully in the sentiment that "sanitary science is of slow growth, and time and patience are necessary in securing any important sanitary reform." That the inhabitants of the Metropolitan District have at last gained much by the exercise of this "time and patience," no one who will peruse the second annual report of our Metropolitan Board of Health will deny.

If we were to go no further than assert, upon the stubborn authority of figures, that there has been, during the year ending Dec. 31, 1867, a decrease in the mortality of New York of three thousand six hundred and fifty-six, and a proportional decrease in Brooklyn, we should offer the strongest possible argument in favor of an intelligent and trustworthy sanitary administration.

In our present remarks, concerning the practical workings of this board, during the past year, we shall be enabled only to glance at some of the principal topics treated of in the volume before us.

In the first place, the tenement-house system, that bane of all sanitary progress, has been wonderfully modified to reward the results of well directed efforts. In the language of one of the inspectors: "The public halls and stair-ways, with their floors, ceilings and sidewalks, together with yards, privies, and cellars, form a very considerable part of every tenement house, and constitute that portion in which filth most abounds, because they are used in common by all and cared for particularly by none. By holding the landlord responsible for the condition of these parts of the house, and by bringing home to him a sense of this responsibility, the Board of Health have succeeded in demonstrating that a very considerable part of the filth, of even the worst class of tenement houses, is not inevitable. The cleansing, whitewashing, and scrubbing that have followed in the wake of the inspectors, have been so many lessons in practical hygiene to the occupants of these houses; and although filth still flourishes in a large majority of our low tenements, enough has been effected to prove that it is not a necessary evil." From another: "I know of very few houses in my district which are not at present kept in a more uniformly cleanly and orderly condition than they were two years ago." And still another reveals a very important fact: "Under an impression that the ordinances of the Board of Health and the new Tenement House Act forbid it, the use of basements or underground rooms as dwellings has been almost entirely abandoned. Only people of the most indigent class, whose means do not admit of a better habitation, are found in them. In several instances, where these basements have been found damp, or so dark and badly ventilated as to be detrimental to health, the owners have been satisfied to have them vacated as dwellings, which has been done."

We pass to positive statements as to the outbreak and control of zymotic diseases in institutions:

"In several crowded institutions in the city there were, during the winter, outbreaks of typhus and typhoid fever, but they, in each instance, *were quickly checked* by the evacuation of the buildings, and subsequent disinfection, whitewashing, etc. In the most conspicuous case, the details of which were duly brought to the attention of the Board, improved ventilation and the introduction of Croton water has *rendered entirely healthy* a large educational institution which for years had been subjected to annual epidemics of typhoid fever." It is this wholesale treatment of disease, which, although often requiring but simple measures, effects most satisfactory results, and affords the strongest facts in favor of an enlightened sanitary control over large cities.

The Report of the Registrar of Vital Statistics constitutes the greater part of the volume. Dr. Harris has accomplished a work which commends itself to the profession, while conferring a vast benefit upon the community, in the thorough organization of the valuable department over which he presides. Sanitary labors are to a great extent lost, unless the results of them are studied and recorded, while it is only by bringing together and skilfully analyzing all the facts which stand in immediate relation to the causes of disease and death, that the methods by which life may be guarded and prolonged can be adopted. Until the present Board of Health had commenced its labors registration was exceedingly defective. It conformed closely to the style of the poet's memorial of the unhonored hero who had no other record than that he was

"Born on such a day and died on such another."

At last this discreditable state of affairs is all changed; yet there remains much to be done, for, as the Registrar remarks, "death is the only fact in the vital records of the population of New York and Brooklyn that is publicly registered with *unexceptional completeness*." Marriages are as yet incompletely recorded, though the marriage-rate is shown to be 20 per 1,000—registered.

Only about forty per cent. of the actual number of births in the two cities is returned by physicians for public registration. These facts are clearly set forth: and, for the enforcement of regulations for marriage registration, a system similar to that in the *Code Civile* of France is recommended, so that every marriage may be placed on record with as much business-like forethought and care as any important civil transaction. Also, in order that the actual number of births may be accurately ascertained and recorded, the Registrar advises that henceforth, in the months of May and November, every ward and town in the Metropolitan District be properly canvassed, so that all the unregistered births may be discovered and placed on record. Those who have seen the blanks prepared by the bureau for registering marriages and births will remember that they are so arranged as to ultimately furnish very valuable results. The marriage, birth, and death rates of any community all bear very close relations to the prosperity, intelligence, and morality of the people from which they are taken, and hence the necessity for an accurate registration of them. It may here be stated that the death-rate in the county of New York, estimating the population at 1,000,000 inhabitants, is 23·44 to 1,000 living. This report sets forth and explains with great clearness the death-rates and the share that each ward, and each class and cause of deaths, had in the general mortality.

One of the most gratifying circumstances connected with the employment of sanitary measures consists in the fact that, by the adoption of them, diseases which seem essentially distinct in pathological characteristics are diminished in a similar ratio. For instance, we find upon the cholera map, page 146, that the chief weight of that pestilence (in 1866–67) fell upon those districts which are emphatically the sickly quarters of the city. Sanitary drainage and sanitary cleansing directed against cholera diminish the mortality from scarlatina and measles, diphtheria and phthisis, in fact from all diseases. They break the thread which "runs through all and doth all unite." Who would be likely to associate for study pulmonary phthisis and Asiatic cholera? yet Pettenkofer has shown that the ground water or surface moisture is the most constant and essential agent in the nourishment of the cholera germ, and Dr. H. J. Bowditch in 1862 (and this report urges public attention to this great etiological study of phthisis, as well as of the epidemic diseases) reached the following conclusions with regard to consumption:

"Its greater or less prevalence depends very much upon the characteristics of the soil on or near which the patients affected with it have resided.

"*Moisture of the soil* is the only known characteristic that, so far as our investigations have gone, is connected with consumptive breeding districts."

This report by the Registrar of the Board also states with regard to the connection of phthisis with an undrained soil: "Already our records show that the death-rate by consumption is much greater in some districts than in others, and also in some classes of dwellings than in others. For example, we find that in the southern half of the twenty-first Ward (the wet flank of Murray Hill), the phthisis mortality bears a ratio to that in the northern and elevated half of the same ward, which in 1867 was expressed as 75 to 55; Bellevue Hospital being excluded from the records of the former section. Again we find that in particular blocks of dwellings the consumption death-ratio is thrice greater than in other and better blocks, the census of the population being the basis of the calculation." It is very desirable that this study of local conditions which promote the production of tuberculosis should be extended throughout every section of the Metropolitan District. One word more with regard to cholera. The map of the cholera and diarrhœal fields, among the five maps and charts which adorn the volume, is perhaps the most important. It presents in a very striking manner the cholera nests, and illustrates the force with which that disease falls upon the damp and crowded districts of the city.

There were one hundred and twenty-one deaths of seamen registered in New York during the past year. The report refers to the fact that sailors are short-lived, and suffer from many forms of "fatal disease that are both agonizing and preventable." Nearly half these deaths were from phthisis; and rheumatic and heart diseases killed many others. The unhealthfulness of the forecastle is referred to, and any one who has ever been in that close abode for the smallest space of time will coincide with the appellation which characterizes it as a "reeking slum." The Registrar states that of vessels quarantined for sickness on board, during the past year, there were 250; and 1,030 cases of sickness, and 380 deaths, occurred in those vessels during passage and in port. And in an appended statement concerning the public institutions, he remarks that the death-rate in the total number of the sick was 37·28 per cent., while of 257 patients treated in the Floating Hospital the death-rate was 23·34 per cent. on the admissions. There were 390 cases of yellow fever on the passage and in port, with 112 deaths, yet but three fatal cases occurred in New York and one in Brooklyn. These were traced directly to the ships which brought them. In view of the fact that pestilential disease may fall upon seamen or other homeless persons while in *ships at the wharves*, or in *boarding-houses*, and that the accommodations for such unfortunates are defective or wanting, the Registrar very properly recommends the establishment of a convenient fever-refuge for the immediate care of such homeless sick, and also a sanitary inspection of wharves and such vessels—at or near the wharves—as are likely to engender or carry dangerous diseases. It is believed that these measures would add greatly to the public safety, and lead to prompt and humane treatment of many sick seamen. The consideration of those diseases which are termed quarantin-

able comes most emphatically within the scope of this report. Such diseases are like the lion in the lobby, and experience has fully shown whether, in the oft-quoted words, it is better to

> "*Shut* the door,
> Or open wide and let him in,
> To see if we can get him out again!"

The report truly says that "Upon no other class of facts relating to the protection of the public health is there more urgent necessity for the adoption of comprehensive and scientifically correct methods for insuring the highest degree of protection to the public health, together with the greatest general benefits to society at large."

The report of the Deputy Registrar is concise and interesting, and presents many valuable observations. We were surprised to find that the mortality from phthisis is relatively less in Brooklyn than in New York, a fact which we believe is contrary to the popular impression. The putrid disease which infested the Italian brig Chiara, and which the Registrar and Deputy thoroughly investigated, is touched upon, and the coincidence observed that the only cases of yellow fever, or of a disease closely resembling yellow fever, occurred among those workmen employed within an inclosure, of the four sides of which the Chiara had formed one, for several weeks before the outbreak. Yet this was in a region populous with workmen. Dr. Stiles's report, like that of the Registrar, of which it forms a part, is stamped with a desire for the scientific study of disease.

We must pass over the appended section devoted to the vital statistics of the hospitals and other benevolent institutions in the cities and towns of the Metropolitan District, with the following statement:

"The six general hospitals in the city have a total capacity equal to 1,841 beds. About 65 per cent. of this nominal capacity is constantly occupied, and during the winter season more than 75 per cent. is occupied. There were admitted to these six hospitals, during the year, 10,216 patients, which, together with the 1,777 patients that on the 1st of January, 1867, were remaining in the wards, make up an aggregate of 12,093 persons receiving medical and surgical care in them in twelve months. The mean death-rate was 92·88 per 1,000 patients, or 9·28 per cent. of all that received care." This section closes with a quotation of the two principles upon which Florence Nightingale and the British Army Commission have founded the great reform in hospital hygiene:

"1. *The very first requirement of a hospital is that it should do the sick no harm.*

"2. The object sought in the construction of a hospital is the recovery of the largest number of patients to health in the shortest possible time, and to this end everything else is only subsidiary."

There is much for study in the meteorological report as well as in that of the sanitary engineer, Mr. W. E. Worthen. And the mechanical means by which cleansing and drainage are accomplished calls to mind the quotation "Deus ex machina;" but we pass to the investigation of the water-supply of this great metropolis with feelings of deep interest.

Prof. C. F. Chandler of the School of Mines, Columbia College, has labored in this department with scientific zeal, and the different analyses in this "appended statement" are of much value. It is well known by those who have given attention to this subject, that a supply of pure water is one of the most important conditions for maintaining the health of any community. Organic deposits, in short, all kinds of impurities, as they are found in certain potable waters, are a fruitful source of illness, and it has been observed that the public health has often shown a marked improvement when a supply of pure water has been furnished, in place of that contaminated by adventitious deposits, organic or inorganic. The section devoted to this topic is full of interest, and leads us to be most thankful that our supplies of Croton and Ridgewood are so pure. There is still, however, an insufficient quantity, and in some houses the water scarcely ever runs above the second story. This report shows that the average supply to the people is at the rate of only about 33 gallons daily to each person. If some plan could be devised, and it certainly does not seem an impossibility, by which the salt water of the Sound could be introduced to the city and used for *flushing* sewers and for street-washings and bathing, it would lead to a great saving of the Croton water, and a consequent improved state of the public health.

It is in reading the reports of such bodies as this, in finding how all about us organizations are springing up to help the poor and suffering, that we thank God and take courage. Man is beginning to find that *he is* his "brother's keeper," and that in so far as he neglects this trust, in so far does the penalty, with all the terrible precision of a violated physical law, fall back upon him. The tenement house is neglected, but scarlet fever breeds there, and escapes thence into the fancied security of the stately mansion, to sweep away those who are surrounded by every comfort.

We learn from the *Medical Press and Circular*, that hereafter no physician or surgeon in Dublin will be permitted to hold appointments in two hospitals in which clinical instruction is given to students. This movement was set on foot by the Superioress of the Convent of Mercy, and made more effectual by resolutions passed by the Board of Trinity College, and by the President and Fellows of the King and Queen's College of Physicians. The arguments urged in favor of the movement are, "that a man cannot be in two places at one time; that he cannot teach two clinical classes properly; that sometimes circumstances will arise in which the pluralist can hardly act rightly with reference to one institution, except by preferring its interests to those of the other; and that by the system

of pluralism young men of promise and ability are debarred from rising in their profession and throwing the energy and zeal of younger years into the cause of medical science." We hope that the day is not far distant when the necessity for such a reform will be recognized in this and other large cities.

In accordance with our custom, we present our readers with a full report of the late meeting of the American Medical Association, and trust that they will be interested in its perusal. The session, as a whole, was an unusually profitable one, many subjects of much importance were discussed, and a great deal accomplished in the shape of scientific work. If space would permit, we should take the opportunity to refer to some of the more important matters of medical legislation brought before the Association, but shall be obliged to defer them for the present. The choice of a president from the extreme South, and one who may be considered a true representative of the profession of Alabama, is not only politic but just. The entertainments were, as might have been anticipated, brilliant, creditable, and entertaining affairs.

Progress of Medical Science.

A New and Effective Method of Treating Phthisis Pulmonalis.—Dr. Carl Both, Boston, Mass., has written a monograph, in which he pronounces the curability of consumption with the greatest confidence, through *artificial calcification*. It is a practical application of the cellular pathology, announced by Virchow; and the author's theories may be given in his own words:

"As a nation consists of millions of single individuals, each holding a superior or inferior position, each dying and being replaced without injury to the whole, so is our body a commonwealth of cells, each of which has its office; each may die and be replaced by another. As a statesman watches over each individual, and tries to improve each for the benefit of the whole, so the physician should know all cells of the body, their office, and their place. He should cause their removal in case of unfitness or decay, and prevent such cells as do not fit its general structure from entering the body."

The cells composing our body live and are sustained by the food we eat, and if we cut off our food, we cut off the nourishment of the cells. By giving different food different effects on the cells are produced. The blood requires time for cadetying displaced or degenerated cells by depositing that substance in them.

He wishes to be understood, *that tubercles in the lungs are composed of, and originate from, blood globules which have escaped out of the general circulation, through the bursting of an obstructed capillary vessel. That this obstruction takes place where the respiration is suppressed.* From this the conclusion is drawn *that tubercles can nowhere originate in the lungs, except in those parts where respiration has been oppressed or has ceased.*

The natural healing process consists in the calcification of the diseased part, so that they appear as if made of chalk, though the original cells and tissues can yet be detected by the microscope. It is evident, therefore, that in such cases, the blood must have been able to furnish a considerable quantity of lime, to provide for the calcification of the decayed parts. His treatment is divided into three sections, each of which finally support the other in their effects:—

1st.—The *extension and cleansing of the lung by pressing air into it.*

2d.—The *introduction of lime into the blood* in sufficient quantity for the calcification of the tubercles; and the *purification of the blood by higher oxidation.*

3d.—The *determination and regulation* of a diet to suit the particular form and degree of disease.

The direct treatment of the lungs consists in pressing the air into them by natural inspiration, powerfully stimulated by certain muscular exercises which are calculated to effect this object. If, in the case of a collapsed lung and chest, the pressure of air in the lungs is increased, that organ and the thorax will necessarily be extended; and the air will pass gently and gradually into the smallest bronchi. The air vesicles and obstructed bronchi being opened, the pus and mucus contained in them will be expelled by the increased ciliary motion, by the revolving air, and by the action of the cough. At the same time the capillary circulation will be increased, diosmosis of the cells renewed, and many of them rescued from fatty degeneration and decay.

To increase the nervous action of the lung, and to produce at the same time an increased pressure, tension of the respiratory muscles must be resorted to, as a pumping force on one side, and as an irritant on the respiratory nerves by reflex irritation on the other.

To demonstrate the result the following practice will be found of service: Let a person rest the whole of his weight on the ends of his toes and fingers in a horizontal position. He will find, on rising, that he must take larger and more forcible inspirations than were otherwise possible. By means of the forced inspiration effected in this way, air is driven into the diseased part of the lungs, and distends them in consequence.

The treatment of the blood consists, *first*, in purifying it from those substances which cause the profuse perspiration. The food is divided into two classes, respiratory and plastic. The first is that which contains no nitrogen. The second is that which does contain nitrogen, and which replaces the materials consumed by the action of the body.

The treatment of the blood consists, *second*, in the introduction of *phosphorus* and *sulphur*.

Having provided for the introduction of sulphur and phosphorus into the blood, we are, *third*, to obtain a sufficiency of *lime, silica*, and *magnesia*.

These materials are abundantly found in the hulls of oats, barley, wheat, and rye; but in the early stages of the treatment these cannot be readily digested. Extracts of herbs and plants, known to be rich in these three substances, such as *Triticum repens, Achillea Millefolia, Marrubium vulgare, Leontodon taraxacum*, &c., serve as a proper substitute. The general rule for the administration of food, in every case, should be the following: to *adjust the quantity given to the amount of oxygen to be absorbed.* For *respiratory* food, make use of whey, freshly made of boiled milk, from which the caseine has been separated by adding a little cream of tartar; malt sugar, honey, fresh butter; in the spring and summer, milk, after it has become thick by the formation of lactic acid. For *plastic* food, give Liebig's extract of meat, when the digestion is very bad! Raw meat, chopped fine, given in the form of a salad, is excellent. When the digestion is good, beef, mutton, game, and fresh fish, are the best articles of food.

The bread should be made of rye meal and corn flour (not sifted too finely). Sago, cracked wheat, tapioca, rice, corn and oatmeal, tomatoes, and all kinds of fresh and acid fruits, may be given as the case requires it.

A detailed statement is added of the history and treatment of twenty-one patients, between the ages of nineteen and forty-seven, who have been benefited, or entirely cured; with the exception of those who had diseases of the bowels. The author believes that by following the method described, every tubercular affection of the lung can be arrested without fail—only there must not be large open caverns.

Treatment of Intermittent and Remittent Fevers.—Dr. James W. Clemens, attending physician of the St. Louis (Sisters) Hospital (St. Louis *Med. and Surg. Journal*), advocates the use of quinine in conjunction with acetate of potash in the treatment of these fevers. This latter remedy has seemed to be of wonderful service, not in cutting short the disease, but apparently in rendering the system more susceptible to the peculiar influence of quinine. Dr. Golding Bird was the first to point out its efficacy as an eliminative. If used at all, it should be in large doses, frequently repeated and largely diluted with water. In the ward it is usually given in half-drachm doses every two hours, and diluted with five or six ounces of water. In intermittent fever it may be given at any time, either during the pyrexial or apyrexial stage, and continued until the urine becomes not only free but high-colored. In remittent fever the remedy can be given at any time, but a remission is usually selected.

Treatment of Cholera in St. Louis, Mo., in 1866 and 1867.—Dr. Frank G. Porter (St. Louis *Med. and Surg. Journal*) places great reliance on injections of the essence of meat with pure brandy, every three or four hours, as soon as the discharges from the bowels are sufficiently controlled to admit of it. For this purpose a tablespoonful of the essence of meat, mixed with a teaspoonful of brandy, is sufficient for one injection. These injections should constitute the patient's only food until the stomach has gained sufficient strength to perform its function properly. In 1866, he treated 113 cases of cholera; 6 of those died and 107 recovered. In 1867 he treated 26 cases; 1 died and 25 recovered; making a total, in the seasons, of 139 cases treated, with 7 deaths and 132 recoveries, a fraction over 5 per cent. of deaths. These cases were made up of all ages and conditions, and exemplified every phase of the disease, from painless diarrhœa to cold, clammy, shrivelled, pulseless collapse.

A Case of Congenital Malformation of the Female Urethra.—H. Beauchamp, M.D., of Hamilton, Ohio (St. Louis *Med. and Surg. Journal*), reports that a few hours after the birth of a female child, October 15, his attention was called to the fact that she had not urinated. On examination he could detect no opening in the normal site of the meatus urinarius, and at once suspected an absence or malformation of the urethra. By advice of Dr. J. S. McNuley, it was decided to postpone any operation until the next morning, in the hope that possibly a passage might discover itself.

During the early part of the morning of October 16, urine was voided. At the next visit an ear speculum was introduced into the vagina, and urine was discovered flowing from an opening in the anterior wall of the passage about three-fourths of an inch within the vulva; no obstruction existed in the vagina. No dribbling of urine has occurred, and up to December 14, no trouble has been experienced from the malformation.

Treatment of Obstruction of the Bowels.—Dr. Thomas Head, Carlisle (St. Bartholomew's Hospital Reports), says: In cases of obstruction resulting from the lodgment of undigested articles of food, observation has led me to regard the lower portion of the ileum or the ileo-cæcal valve as the locality of the disease, and having seen such frequent instances of disappointment in the use of enema of the ordinary quantity, I have been led to place my chief reliance in those of large volume. For constipation limited to a loaded state of the colon, injections possessing stimulating properties will generally prove successful; but in cases similar to that described, they will most frequently be found inefficacious. A pint enema, with a few drops of laudanum, may indeed, with advantage, be injected, and upon it inject three pints of warm oil; the oil ascends through the watery fluid, and is thereby more certain to reach the seat of disease.

Local Anæsthesia in the Treatment of Traumatic Tetanus.—J. C. Whitehill, M.D., reports having been called to a case of tetanus, in a boy of about sixteen years, who had trodden upon a rusty nail. The wound, although temporarily painful, healed over in a few days and gave no further trouble. In about ten weeks he complained of slight stiffness of the muscles of the neck and a difficulty in swallowing, which increased until well marked tetanic symptoms were recognized. The usual routine of treatment was tried without any apparent benefit. The inhalation of chloroform was thoroughly resorted to, and afforded relief *only* when total anæsthesia was produced.

The application of chloroform to the entire spinal column was then made by means of a cloth saturated with it, and evaporation prevented by covering the cloth with oiled silk. The application was made just at the approach of a paroxysm. As a result of the application, the paroxysm was averted, and in a very few minutes the patient fell into a calm and natural sleep, lasting several hours—the longest interval between the paroxysms he had yet enjoyed. On feeling a returning paroxysm, he asked for a reapplication; and a second time the spasm was averted, and a comfortable sleep followed. For the next forty-eight hours occasional tetanic symptoms immediately yielded to the application of chloroform. The subsequent convalescence was rapid. Three cases reported by Dr. Hinkle give a like favorable result from the same method of treatment.—*Humboldt Medical Archives.*

Bromide of Ammonium in Pertussis.—Bromide of ammonium is one of the best remedies we have ever used in this disease. To a child two years old, two or three grains may be used three times a day. Its value is enhanced by the addition of hydrocyanic acid and stramonium. We use a formula like this: bromid. ammon. gr. lx; acid. hydrogen. m xx; tr. stramon. m xx; aquæ and syrup ℥ iv. A teaspoonful of this mixture three times a day to a child of two years, will seldom fail to produce a marked impression within twenty-four hours.—*Humboldt Medical Archives.*

A New Property of Bromide of Potassium.—A. J. Stone, M.D., of Boston, in an article on this drug, calls the attention of the profession to its efficacy and "its power in checking the reflex nau-ea induced by the administration of anæsthetics." The good effects of this article were first suggested to the writer by Prof. H. R. Storer. A large proportion of cases after anæsthesia by ether, especially, are affected with functional derangement of the stomach. According to Dr. Josiah Hale, of the Massachusetts General Hospital, nausea is invariable after the administration of ether, and in nine-tenths of the cases vomiting takes place. The same results have been observed in the hospitals of New York, Philadelphia, and other places. Dr. Stone recommends that the bromide be given after the use of ether in the doses of from thirty to forty grains every thirty, forty-five, or

sixty minutes, as may be found advisable. In one case it was used with the most pleasing results as a prophylactic. In its exhibition it was the aim to have the patients as nearly resemble one another in their hygienic condition as possible, always, when able, having ordered the meal last preceding the etherization as light as possible, that the anæsthetic might be given upon an almost empty stomach. There seems to be little or no risk of gastric, nervous, or other irritation from its uses, even in large doses, provided it is exhibited in at least twice the amount of water required to dissolve it. Thirty cases are given in which the bromide was used after etherization. In all the cases except one there was more or less nausea, and in many there was free emesis. In the exceptional case the patient had without advice taken thirty grains of the bromide about half an hour before etherization. In almost all the cases the relief afforded was marked, and the nausea and vomiting were speedily relieved.

Electricity in Poisoning by Opium.—The *Annales de l'Electricité* calls attention to the value of this agent in opium poisoning. It narrates four cases where it was successfully employed when the patient was *in extremis*, and when all the usual means, vomiting, stomach-pump, coffee, tannin, etc., had been tried, and had failed. One pole was placed at the nape of the neck, and the other at the perineum, and in a quarter of an hour the improvement was such that the patient was out of danger.

Nitrous Oxide as an Anæsthetic in Surgery.—A case of the use of this anæsthetic, by Dr. Marion Sims, in Paris, is reported, where a cancerous breast was removed, the agent acting with perfect success. The patient was sixty years of age. Anæsthesia was produced in two minutes, and was kept up for sixteen minutes. In less than one minute after inhalation ceased consciousness was complete, and there was no nausea or vomiting. The patient declared, after the operation, that while inhaling the gas she could see those who administered it, but felt no pain, though she experienced a kind of "pushing sensation."—*Boston Med. and Surg. Journal.*

Charcoal as a Hemostatic.—In a severe case of epistaxis pressure externally and internally was applied, and this failing, a cone, saturated with liq. ferri subsulph., was pushed up the nostril as far as possible. This controlled the hemorrhage for forty-eight hours, when oozing commenced, and sufficient blood was swallowed to cause nausea and vomiting. Cork charcoal was then used by being snuffed up, and by means of a quill, blown into the nostril. Four repetitions had the desired effect. The hæmorrhage was stopped, while no pain or distress was experienced.—*Ex. from Trans. of Med. Soc. of Pennsylvania.*

A Lead Pencil taken from the Urinary Bladder.—Dr. Edward Whitmey reports, in the Iowa *Medical Journal*, that he was called to see what was supposed to be a case of stone in the bladder. A careful examination satisfied himself and others that there was a calculus present, and an operation was determined upon. The necessary incisions were made, and the offending body removed, which proved to be a common lead pencil, nearly four inches long, and bluntly sharpened at one end. Nearly its whole surface was incrusted with a calculous deposit, from a thin scale to about two lines in thickness. The patient made a good recovery.

Dr. John P. Nash, surgeon in the Madras army, details, in the *Lancet*, a number of cases of intermittent fever which he treated successfully with strychnia, after quinine had proved unavailing. His observations relate to the most unhealthy regions of India. The strychnia was given in doses, varying between the sixteenth and thirtieth of a grain.

Prognosis of Insanity in Females.—Dr. Yellowlees, in his annual report of the Glamorgan County Lunatic Asylum for 1867, notices the remarkably small mortality amongst the female patients, there having been but five deaths during the past five years on the female, as contrasted with thirty-four on the male side. The recoveries, too, are more frequent amongst women. This is explained on the ground that the insanity of women is often due to transient functional causes, and less frequently connected with organic disease.

Reviews and Notices of Books.

Studies in Pathology and Therapeutics. By Samuel Henry Dickson, M.D., LL.D., Professor of Practice of Physic in Jefferson Medical College, Philadelphia, etc. New York: Wm. Wood & Co., 1868. Pp. 201.

The author of these essays, favorably known for half a century as a successful medical writer and teacher, some of whose views, long ago promulgated, anticipated the current of professional sentiment by many years, possesses one of the most philosophically scientific minds devoted to medical pursuits; and we regard the volume before us as, in some sort, the summary of professional impressions stamped upon that mind by an extended course of inquiry, ratiocination, and experience. As such we conceive these studies to be better suited to the comprehension of the practitioner, practically acquainted with disease, and more or less familiar with the literature of his profession, than adapted to the wants of the medical student as yet unqualified by professional acquirements and method in collegiate instruction to appreciate a course of argument often requiring a trained mind to follow. That essays of this character should have constituted part of the regular course of instruction in the institution in which the author is Professor of Practice, intimates that he places a higher estimate upon the mental capacity of the American medical student than is usually accorded in the lecture-room; and shows that he suggests generalizations for thoughtful study, in addition to the usual instruction in the detection of disease and its management.

Several prominent ideas pervade the volume. These are, chiefly, that disease is rather a normal condition of humanity than abnormal, as is shown by the rare encounter with a perfect state of health, due in part to the constant promotion of new forms of disease as a result of domestication and the luxuries of civilization, as well in their production as in their enjoyment. That the tendency of disease is to destruction, and not to restoration; and that, where permanent injury does not ensue, "it is because the force of ordinary action and the current of habit have been too strong to be obstructed or turned aside by the obstacle."

Hence our author is never an advocate of complete reliance upon the *vis medicatrix*; he combats disease wherever he detects it; and in those cases where the indications for treatment are obscure, he prefers perturbat on to inaction. In resisting disease, he endeavors to preserve the residual powers of function in the organ affected, rather than attack the portion diseased with a view of counteracting morbid results which have already ensued.

A sworn enemy to pain, he inculcates the propriety of always relieving suffering in any of its forms, and preventing its recurrence wherever practicable.

With all respect to the statistics and special reports of others, he claims the right to place such estimate as his means of judgment provide him with, for making allowance for interest, enthusiasm, capability, and the various contingencies of time, season, climate, etc.; and thus he endeavors to extract the full value of conflicting statements from sources of equal reliability.

The initial essay is entitled "Disease; its Character and Tendency." The relevancy between cause and effect in the production of disease is referred to predisposition, rather than to exciting and immediate causation; for an impairment of perfective organization opens an inlet to evil, the nature of which will become determined by the specific function or adaptation of the tissue or fluid affected. Elimination, when it occurs, is not referred to the progress of disease, but to the vigor of the remaining healthy functions.

In discussing the various modes of death, our author tells us in reference to chloroform, that "none die of it except those who take it as a mere preventive, while free from pain." If this be the case, careful administration with a pure article being understood, we would suggest to surgeons, in the performance of any operation in which it is intended to use chloroform, that they should make their first incision through the skin before administering the anæsthetic; and thus, by producing pain, diminish the risk of a fatal result from its employment as a mere preventive of pain.

The second essay is entitled "The Causation of Diseases;" and is principally confined to the consideration of specific causes—poisons known to affect numbers at once. Prominence is given to the occupations of civilized life, as entailing the origination of many diseases. In the study of endemics, the difficulty of ascribing the proportionate share of production to social condition, and peculiarities of race and climate, is commented upon. With regard to the production of intermittent fever, attention is directed to the researches of Professor Salisbury, who claims to have discovered the ague poison in an alga of the species palmella, a minute, but visible sporule; but although admitting that the relation between the poisonous palmella and the febrile attacks may be causative, and not merely coincidental, it is by no means regarded as proved that these algoid spores constitute malaria, or are to be considered as the exclusive producers of periodical fevers; the confirmation of these statements, by further repetition and in the hands of other observers, is to be awaited before definitively concluding that one source of malarial fever has been fairly detected. The question is asked as to the influence and mode of action of these sporules in the changes of intermittent from quotidian to tertian, and from tertian to quartan, and in the recurrence of periodical fevers after removal of the individual from their source. The idea is thrown out that there may be some connection between these fungi of Salisbury and the bodies found in the blood in marsh fever by Frerichs, and described as pigment granules; for if fungous sporules are diffused through the blood they must die and change to carbon, assuming a dark color; and thus, perhaps, they may give rise to the minute, opaque particles of blackish color, irregular in shape, and with angular edges, supposed by their describer to be the red matter of destroyed blood-globules converted into black pigment.

The doctrine of contagion is strongly argued, and the employment recommended, at least on trial, of reputed prophylactics, such as belladonna against scarlatina, saracenia purpurea against small-pox, quinia against typhic and malarial fevers, sulphuric acid lemonade against cholera.

With regard to quarantine, our author is much opposed to the systems at present employed. He denounces bitterly the method pursued in this city during the recent epidemic of cholera. He would establish a "rational quarantine" at some insulated point, with a comfortable hotel for the sound, during the latent period of infection, at a distance from the hospital for the sick, and the residence of the officers; with a separate house for convalescents; but he thinks that under any circumstances the facilities for evasion of quarantine in individual cases are always sufficient to spread contagion in spite of quarantine, which thus becomes an unnecessary restriction on those who submit without effort to escape, and in many instances cruel in its results, and without counterbalancing benefit. He would, everywhere, and at all times, place greater dependence upon the general institution of scientific and enlightened hygiene.

The essay following is on "Certain Morbid Conditions of the Sensorial System," and treats of pain, insomnia, and coma, and spasm and convulsion. Professor Dickson believes in the universal distribution and diffusion of nervous matter; the alternative of which belief is with him simply the admission that the property or quality of sensitiveness belongs to all the solid textures, promiscuously and independently of the presence of nerve or nerve-fluid. An exact definition of what is known as pain is declined; it is described to be "a simply idea, therefore undefinable—an inexorable fact, undefined;" though we know very well what is meant by the term, and distinguish its characteristics by epithets conventionally descriptive. It is viewed as the result of diseased action, which it excites and exasperates, and its uses as a warning and protective against lesion, as precedent to destruction of organs, are denied, because it always comes too late. The value of exciting pain occasionally as a stimulant in medical emergencies is referred to.

Insomnia is next considered, and the necessity for sufficient sleep insisted on. The supervention of sleep is considered due to the concurrence of a suspension of the activity of the cerebral organs, and a coincident vascular fulness, probably venous, perhaps in part capillary, by which a gentle degree of pressure, passively submitted to, is made upon the cerebral substance. Attention is called to the analogy between deep sleep and coma; and the wakefulness of delirium tremens from cerebral anæmia, as maintained by Solly; and the awakening of the apoplectic from stupor, by venesection or strong derivatives, is accounted for by this view. Hammond's denomination of sleep as a "function" is objected to, because sleep is most perfect when the functions of the brain are least active in their performance. Pressure upon the carotids has been found, in the author's own person, to lessen or diminish pain in the head, but never to induce sleep. Dreaming, somnambulism, etc., are treated of in this connection, and two curious instances of a sort of duplicate existence mentioned, in one of which the power of vision was so intensified that the room which the patient occupied could not be darkened so as to render it difficult for her to discern any object, or even to read the most obscure manuscript.

Attention is called to the popular error of employing the terms spasm and convulsion as synonymous; spasm being always painful, and convulsion not painful, nor always morbid. Convulsion is looked upon as a symptom merely, not a distinct disease in any of its forms, and therefore an improper term in our registers and bills of mortality.

Vertigo, chorea, epilepsy, catalepsy, and hysteria are treated of, and the essay closes with a most interesting

account of "psychical convulsion"—the emotional, sympathetic, religious, political, the true morbus comitialis.

An essay on "Pneumonia" constitutes the fourth of the series, and is richly illustrated by statistical compilations drawn from various sources. Although this disease is habitually spoken of as among our most curable and least dangerous maladies, it appears, from these tables, that its mortality, at least in cold and temperate climates, is second only to that of consumption. The views of Bennett, Caldwell, Aitken, Flint, and others, are discussed at some length by the author, who concludes that either the term pneumonia is wantonly or ignorantly misapplied in a vast number of instances, or it is emphatically one of the widest outlets of human life. A comparative table of the results of treatment seems to show that management by any course, the effect of remedies, is by no means uniform. Treatment the most varied and opposite in character has received equal commendation, and favorable results have ensued under the most divergent conditions of climate and access to remedial influences. Special treatment, considered on a large scale, is regarded as of less importance than insisted upon by Bennett and others; the "mixed method," "more easily conjectured than defined, the elements of which, in our own country, are venesection, cups wet and dry, tartarized antimony, calomel, opium, veratrum viride, ipecacuanha, quinia, and counter-irritants, such as mustard, iodine especially, turpentine, cantharides," properly selected, with good nursing, claims a higher success as shown in the U. S. Army Reports, and other examples cited, than even the "restorative course" of the Edinburgh professor.

The lecture on "Scrofulosis and Tuberculosis" is intended to show that, however these may closely assimilate, there is no identity between scrofula and tubercle. This is deduced from the circumstance that tubercle may become suddenly developed in a constitution previously healthy, and uncontaminated by hereditary predisposition, while scrofula is of slow development, requiring at least one generation for its production—that is, that the foundation is established in a parent before it can occur in an offspring. The change going on in a scrofulous gland is shown to be quite different from that ensuing from tuberculous deposit, to which it is so frequently likened by those who contend for an identity of constitution. Marriages of consanguinity are considered conducive to scrofulous degeneration, only in so far that hereditary predisposition to disease is more likely to be participated in by both parties, and thus, when existing, may result in impaired offspring in the same degree as marriages between strangers similarly predisposed, but not more so. In the treatment of scrofula, iodine is highly recommended, especially in cases of external manifestation, and the preparation preferred is Lugol's solution, very weak, a grain to the quart of water, and administered in doses of a wine-glassful two or three times a day. In mesenteric complications, mercury, in small quantities, is recommended; though, as a rule, not applicable to other manifestations of scrofula. The alkaline salts are considered valuable, especially as found in the natural mineral waters. Reference is made to the thermometrical investigations which are being made in cases of tuberculosis, and it is suggested that similar observations made during the inflammation of a scrofulous gland would much assist in determining the question of identity.

The final essay is on "Therapeutics." Our author is a believer in change of type, at least in so far that diseases, as a class, are much more asthenic than they were in his younger days. He dates the commencement of this change more than forty years back, and attributes it, in this country, to the invasion of typhoid fever; and calls the attention of practitioners old enough to recall the history of that time, to the fact that constipation was then far more uniformly an annoying element in fever than it is now. He believes the present prejudice against venesection is wearing away in part as a natural consequence of a revulsion from one extreme to another, and because recent military experience has demonstrated that the loss of blood, even under the most adverse contingent circumstances, is less impressive for evil than had been supposed, repressing the timidity of resort to it when called for. He does not allude to the introduction into practice of various vascular depressants, as aconite and veratrum viride, which were not employed for this purpose during the reign of the lancet, but which are now often resorted to as substitutes for venesection. The necessity for resorting to systemic impression for the relief of local maladies is regretted, and hope of improvement in this direction is deduced from the increasing resort to hypodermic medication, atomization, and local anæsthesia. The plan of treatment most in vogue at the present day seems to be the restorative plan, "well represented by Chambers and Bennett."

With regard to the acceptance of conflicting statistics, our author advises considerable reserve. He believes that results are less due to a selection of medicaments than to competency in their employment.

The essay concludes with some general remarks on narcotics, as employed by different nations, to moderate suffering, and increase the powers of physical endurance.

We have been led to give a synoptical review of the more prominent portions of these essays, rather than a criticism, believing that such a course would better acquaint our readers with the design and scope of these essays. Philosophical essays upon general points of medicine, especially when emanating from men of erudition and great practical experience, have a peculiar value, essentially different from that attached to treatises on special diseases. The "Medical Notes and Reflections" of Holland was very successful, and extensively perused, as evident from several editions in England and its republication in this country. This sort of literature affords a fruitful field for home enterprise, and we shall ever welcome efforts of the kind. With these sentiments, it is almost superfluous to say that we advise our readers to procure this little volume of Professor Dickson, and give it a careful perusal. It will afford them food for profitable mental digestion.

The book forms a very compact volume, is neatly printed, and the proof has evidently been read with great care. This is the second production of a Philadelphia author which has this year been published in this city.

Transactions of Medical Societies.

The Seventeenth Anniversary Meeting of the Illinois Medical Society was held in Springfield, June 4th and 5th, 1867. The most important papers presented to the Society were the following:

1st. *Report on Cholera in Chicago*, in 1866, by Wm. R. Maith, M.D. This gives a very full and satisfactory history of cholera in Chicago during the summer and autumn of that year. The first case occurred July 21st, the last November 24th; total number of cases reported, 1581; deaths, 970; population, 200,330; mortality, 1 to 206 inhabitants; number attacked, 1 to 126; mortality, 61.5 per cent. In July, 1 case; August, 215; September, 268; October, 1,082; November, 15.

These statistics undoubtedly give a very erroneous idea as to the true facts of the case. In all probability, the number of cholera cases was ten or twenty fold greater than the number reported; for the cases of *choleraic diarrhœa* were as truly epidemic cholera as those severe cases of which record was kept. It is a singular fact that the registry laws regarding deaths and burials in Chicago, and possibly the entire State, do not require a physician's certificate; the cause of death being obtained from the friends or other parties. Hence, in the last Annual Report of the Chicago health officer 112 deaths are attributed to "cramps," which probably means cholera; many to "fits," "disease of the bowels," "fever," etc., etc. Statistics thus kept have little, if any, real value; indeed they give rise to very erroneous opinions, and prejudice the profession in the eyes of the public, as must necessarily be the case where the people are told that more than half of those attacked with cholera die, when, probably, not 1 in 25 perish. No new light is thrown by the Report on the pathology or treatment of the disease. Chicago has 600 miles of streets, of which less than one-seventh have any drainage, and the sewage is mostly carried into the river, much of it settling to the bottom, to be agitated by the movement of vessels, and escaping by evaporation into the atmosphere; considering, too, the imperfect supply of pure water, and the nuisances of a thousand stables, privies, and the cemeteries of the dead, we shall be surprised that a larger number of the inhabitants were not swept off by this malady. As usual, the facts all point to the introduction of the disease by *infection* from abroad, although intensified and made more fatal and malignant by such local causes as corrupt the atmosphere.

The second article is *a Report from the Committee on Practical Medicine*, by L. T. Hewins, M.D.

This report is chiefly confined to the eastern and southern portions of the State, and gives a very lucid account of the topography and geology of these sections. The diseases most frequently met with are said to be *bilious intermittent and remittent fevers;* the milder forms prevailing mainly on the table lands and the more malignant in the low lands and bottoms. In the higher portions, it is stated that *malignant or congestive chill* is quite unknown. The treatment generally adopted for autumnal fevers in that State, we are told, is *evacuants, antispasmodics, calomel, followed by oil or vegetable pills*, and during the intermission of fever, the *free use of quinine and opium*. The quinine is generally given in doses of four, six, or eight grains, often repeated.

A dangerous form of remittent fever, attacking both children and adults, is said to have been treated with *emetics, antimony and ipecac, evacuants, calomel*, followed by *castor oil*, and when there was a remission of fever, *quinine, ice to the head*, etc. Those neglected or poorly cared for, it is stated, invariably died in from four to eight days. We cannot but think that a more successful treatment would have been to give quinine freely, omitting all the other remedies. The Report, however, is a very able one, and does much credit to the writer.

The next paper is on the *Radical Cure of Hernia*, by Geo. T. Allen, M.D. This consists in pushing a portion of the scrotum of the side affected through the external inguinal ring into the canal, and, when possible, up the canal as far as the intestinal inguinal ring, and to retain it there until firmly adhered to the surrounding tissues. The instruments for accomplishing this are fully described. In nearly every instance in fifty cases the operation is said to have proved perfectly successful, and the writer concludes his article as follows: "My experience now warrants me in promising a perfect cure in all cases of oblique, and in most cases of direct inguinal hernia, that I may operate on from this date."

The fourth paper is by Dr. N. S. Davis, of Chicago, *On the Physiological Effects of Alcoholic Drinks on Man.*

The experiments of Prof. D. confirm the conclusions arrived at by Prout and Chambers, of England, and Boecker, of Germany, viz.: 1st. That alcohol is absorbed into the blood, and so far retards those atomic and cell changes which constitute nutrition and disintegration, as to diminish the sum total of eliminations from the body. 2d. That its presence diminishes and disturbs innervation or nerve force. 3d. That alcohol taken into the system is neither digested nor appropriated as food, nor chemically changed in any way in the system, but is excreted or eliminated as alcohol through the lungs, skin, and kidneys.

Prof. D. has extended his inquiries in regard to the influence of alcohol on the *circulation and calorification;* the first chiefly by means of the sphygmograph, the second by the thermometer, with the following results:

1st. That alcohol directly interferes with the normal play of vital affinities and cell action in such a manner as to diminish the rapidity of nutrition and disintegration, and consequently to diminish the dependent functions of elimination, calorification, and innervation; thereby making alcohol a positive organic sedative, instead of a diffusible stimulant, as is popularly supposed.

2d. That the alcohol acts in the system exclusively as a foreign substance incapable of assimilation or decomposition by the vital functions, and is ultimately excreted or eliminated without chemical change.

The Report on Obstetrics, by Delaskie Miller, M.D., of Chicago, contains several interesting cases, furnished by different writers; some remarks in opposition to the too frequent use of the speculum; and the injurious effects of vaginal injections of cold water by Dr. Allen, such as uterine congestions, and interfering with the normal changes of gestation and parturition, etc.

The next paper is an *Essay on Drugs and Medicines*, by Dr. Baillhache, of Springfield, Ill.

The articles commented on are as follows: *Rhigolene, Syrup of the Phosphates of Iron, Quinia, and Strychnia, Carbolic and Crosylic Acids, Narceine, Bromide of Potassium and Bromide of Ammonia, Glyconine, and Xylostyptic Ether Spray.*

The remaining papers are on *Panniform Corneæ*, by Dr. Hildreth; *Report on Surgery*, by Dr. H. W. Davis, M.D., of Paris, Ill.; on *Medical Specialties and Advertising*, by Drs. Fitch and N. S. Davis; a minority report on the same subjects, by David Prince, M.D., of Jacksonville; on the *Sphygmograph*, by Dr. Johnson, of Chicago, with diagrams; concluding with a very able and elaborate report on *Plastic Surgery*, by Dr. Prince, occupying some hundred pages, illustrated with well-executed wood-cuts; altogether the volume does great credit to the medical literature of Illinois, and will compare very favorably with the Transactions of the best of our State Medical Societies.

ATLAS OF VENEREAL DISEASES, by A. CULLERIER, Surgeon to the Hôpital du Midi, Member of the Surgical Society of Paris, Chevalier de la Legion-d'Honneur, etc., translated from the French, by FREEMAN J. BUMSTEAD, M.D., Prof. of Venereal Diseases, in the College of Physicians and Surgeons. New York. Complete in 5 parts.

THIS work, by a leading French syphilographer, for many years chief of the Lourcine Hospital of Paris, and the successor of M. Ricord at the Hôpital du Midi, is well worthy of the distinction it has received at the hands of Dr. Bumstead, and of the consideration of all in this country who are interested in the study of venereal diseases. The first and second fasciculi, just

received, are handsomely printed quartos, of about 150 pages each, finely illustrated.

In the introduction to the work, which occupies some 80 pages of the first fasciculus, M. Cullerier gives a history of syphilitic disease, and discusses important practical and theoretical points, in regard to its nature, progress, and treatment.

The remaining part of this fasciculus is devoted to the consideration of blennorrhagia, and its complications.

In the second fasciculus, the subject of blennorrhagic disease is continued, concluding with the introduction of the "soft chancre."

In a work of the magnitude of the one under consideration, by the man who occupies the place of physician in chief to the first venereal hospital in Europe, we naturally look for a distinct, if not an exhaustive exposition of the leading doctrines settled, or still held *sub judice* among leading writers on venereal disease at the present day; and—not of least importance—a decided personal attitude in regard to each. While M. Cullerier holds some essential points in abeyance, to be considered in the later portions of his work, a complete review of his own opinions must be deferred until its issue in a complete form. Yet we can safely commend M. Cullerier for the frankness with which he has presented the essential doctrines held by modern syphilographers, such as Ricord, Bassereau, Clerc, Diday, etc., and accepted by the great majority of our profession, both in Europe and America; and we are the more bound to do this, inasmuch as M. Cullerier asserts a theoretical antagonism to some of the most important of them.

His attitude may be briefly stated as follows:

1st. He holds to and supports the doctrines of Ricord, enunciated in 1836, in regard to the non-syphilitic and the non-specific character of blennorrhagia or gonorrhœa, claiming it to be a simple inflammation.

2d. He disputes the doctrine of duality, advanced by M. Bassereau, in 1852, which claims distinct origin for the true chancre and for the chancroid, claiming that the two diseases are the product of the selfsame poison, producing, by reason of some constitutional peculiarity in the persons affected, in one case an infecting sore, always followed by constitutional syphilis—in another the local non-infecting ulcer, known with us as the chancroid. Now, this doctrine of M. Bassereau, being one of vital importance, at first warmly combated by M. Ricord, though after thorough experimental scrutiny adopted by him some time since, and soon after by the bulk of the profession, is assailed by M. Cullerier.

It would be naturally inferred that M. Cullerier would, in opposing this important doctrine, bring forward numerous practical illustrations of the fallacy of the dual theory; that he would give positive, indisputable proofs of the truth of the unicity of the venereal poisons, in support of so conservative a position. Nothing of the sort. He says that when the dual theory was advanced by M. Bassereau, and supported by M. Clerc, he was *almost persuaded* to become a dualist (page 30), "but a case soon after occurred in his practice, which caused him perplexity," and going on with the relation of this case, he says, "*he was by no means certain that he had not made a wrong diagnosis*" (page 31); and then goes back from his sudden *almost* conversion to the doctrine of duality, to the doctrine of unicity, where he claims to have remained ever since. The translator, a well-known dualist, follows M. Cullerier very closely, and exposes his weak points in an amiable but very effectual way, showing the fallacy of M. Cullerier's deductions from the cases cited and, *mirabile dictu*, showing, as the work advances, and M. Cullerier comes to prognosis and treatment, that M. Cullerier does not differ in the least from the dualists, and, that while *professing* the doctrine of unicity, he is *practically* a dualist.

The existence of the mixed chancre is denied by M. Cullerier. We have not space to quote the admirable dissection of M. Cullerier's objections to this form of venereal ulcer, by Dr. Bumstead. M. Cullerier is evidently a conservatist of the first water, and clings to the old ideas in theory, while he is too sensible a man to allow himself to disregard the advantages offered by the modern practice. We deem it a fortunate circumstance that this work of M. Cullerier, a veteran in venereal science, has had, for us, a translator who, fully up to the mark in the earlier theory and practice in venereal disease, is still imbued with the spirit of progress, and that he follows the text closely and intelligently, guarding and informing the reader against the conservative notions of the author.

The chapter on treatment of blennorrhagia is quite full, but does not materially add to the information conveyed by the standard text-books.

M. Cullerier does not seem to be well settled as to the best mode of treatment among all the methods he recites: First, he does not believe in the efficacy of injections; he does believe in anti-blennorrhagics; a little further on, he is not certain about the efficacy of anti-blennorrhagics, and thinks it worth while to slip in an injection now and then; in short, M. Cullerier is not unlike most of us, and cannot find any specific treatment for the disease.

There is not, it seems to us, enough of novelty in M. Cullerier's work, or superiority in written matter, or style, over other venereal treatises in our own language, to warrant the translation; except for its *illustrations*, of which there are no less than 24 examples in the first fasciculus, and 37 in the second. These are, without doubt, superior to any book of the kind ever before presented to the public. They are executed by the litho-tinting process, after originals of great merit, and must impress every one familiar with the appearances in venereal disease, with their truthfulness and elegance of mechanical execution and finish, furnishing to the student clinical lessons scarcely less perfect than the original cases of which they are transcripts. The copies in Dr. Bumstead's translation of these admirable plates are in no respect inferior to the original, and reflect very great credit—not only on the artists who have demonstrated through them that the American litho-tint is capable of favorable comparison with the French—but on the enterprise of the publishers, who have evidently spared no expense in their execution; and it seems to us that on account of these numerous and beautiful illustrations alone, the translation of M. Cullerier will meet with a cordial welcome from the profession in this country, especially from those who are deprived of the clinical advantages afforded by a hospital and city practice.

The translation is executed in a masterly way, and the book is altogether unexceptionable in style and typography, and will be likely to prove a success, without particularly interfering with the sale of Dr. Bumstead's own work.

ELECTRO-PHYSIOLOGY AND THERAPEUTICS. Being a study of the Electrical and other Physical Phenomena of the Muscular and other Systems during Health and Disease, including the Phenomena of the Electrical Fishes. By CHARLES E. MORGAN, A.B., M.D. Illustrated octavo., pp. 714. WILLIAM WOOD & CO., 61 Walker st., 1868.

WHEN the ancient warrior, fighting in the heat of battle,

ceived a wound that he knew would be fatal, he esperately hurled his spear into the opposing ranks in e hope that it might slay his enemies as he himself as dying.

Thus many authors have given to the world their best fforts just on the eve of death, so that their influence as only been truly felt after they have passed from rth. Thus Dr. Morgan gave to science this elaborate d valuable treatise just before he was called away, and as not even permitted to live to see the manuscript at long years of study had arranged, published to the orld in a permanent and impressive form.

If it had been revealed to Dr. Morgan that he was to the victim of fatal disease in the very bloom and eshness of his early manhood, and that all his bright opes and all his life mission were to be fulfilled in less an half the allotted term of human existence, he could ot have labored more patiently and perseveringly, or a cause better worthy of the devotion of a man science.

Whatever the deficiencies of this book may be, it ould have been an honor for any man to have nown enough to compile it, and it is in the vanguard the cause of electro-therapeutics that is hereafter to ssume a dignity, an importance, and a usefulness second o no other branch of medical science.

But, on the whole, this work has disappointed us. The ery title itself is a misnomer. It should have been alled a "*Treatise on Electro-Physiology, with some Account of the Electrical Fishes*," for of practical Electro-herapeutics it contains next to nothing at all. It contains nothing of the use of electricity in the relief of ain, nothing of its power as a constitutional tonic, nothing even of its employment in rheumatism or in the arious types of inflammation. One might be able to cite the book by heart, accurately and understandingly, rom the beginning to the end and yet be utterly at a ss when called upon to treat a case of St. Vitus's dance, f dyspepsia, of paralysis, or even of common facial euralgia, by the electric currents.

As a matter of fact, however, there are probably not ore than ten men in the country who could compre-nd the whole of this exhaustive treatise, and of these en there are not five who would be found in the ranks f our practising physicians, and of those five there is ot *one* whom we could name.

This is not a criticism, but a compliment, for Dr. Morgan was in advance of his countrymen. But yet he book will always be better adapted for the scholar han for the practitioner, for the physicist than for the hysician.

The style of the work is thoroughly Germanesque, nd displays all the comprehen-iveness of learning and atience of investigation, all the nicety of detail, and ryness, angularity, and confusion of style, that make the erman scientific writers at once so accurate, so exaustive, and unreadable. Whoever reads this book *in extenso* must be deeply in love with abstract science for s own sake alone, and should bring to its perusal a areful elementary study of the subject it discusses.

But though this treatise of Dr. Morgan is not directly ractical, it is yet indirectly so, and we are heartily roud that the honor of compiling the most elaborate nd complete work yet written on *Electro-Physiology* as reserved for an American. As a record of the experiments of Du Bois Reymond, with whom Dr. Morgan studied, and for whom he justly entertained a high ersonal regard; as a *resumé* of what has been attempted nd discovered in this rapidly growing department by Weber, Fick, Matteucci, Brown-Séquard, Mundt, rücke, Pflueger, Helmholtz, Rosenthal, Ranke, eissner, Cohn, Budge, Baierlacher, Funke, Bernard, and other investigators; in a word, as a cyclopædia of electro-physiology it is far, very far, in advance of any work that has yet appeared on the subject in any language.

Within the past decade there has been developed a rapidly increasing interest in electro-therapeutics, even more than in electro-physiology, not only throughout Europe, but in our own land, and we regret exceedingly that Dr. Morgan had not devoted more attention to the practical application of electricity in the treatment of the large variety of diseases in which it has been found to be of service. A large number of monographs based on the methods of localized, partial or general, electrization, have appeared in this country and Europe, and every year will add largely to their number, until all physicians everywhere understand the indications for its use just as they now understand the indications for the use of opium and quinine, cold bathing and physical exercise.

We would that Dr. Morgan had added to his scientific *resumé* of electro-physiology a practical exposition of the general principles of electro-therapeutics. We would that his rare scientific enthusiasm, his patient industry, and his earnest love of truth had been brought to the investigation of the various methods of using electricity for the relief of pain and the cure of disease that in far less able and faithful hands have been found so remarkably efficacious.

We would that his young life might have been spared to have made his work even more valuable by embracing in it the experience of electricians during the past two years, and to have given to it during its passage through the press an author's revision and an author's care.

As we have stated, this is not a book for the great mass of physicians; but it will be appreciated by a certain few for a long time to come, and among this select circle Dr. Morgan has won for himself a name and a fame that shall be bright, and pure, and abiding, and every reference to its pages will inspire the regret that the silver cord was so early loosed, that the golden bowl was broken, that it was not reserved for the author to share in the progress and triumphs of that cause in which he was so faithful and laborious a pioneer.

He espoused the cause of electricity when it was sunk in darkness and obscurity, he died just at the dawn of its early twilight; but this work will live until the morning shall have brightened into the fulness of day.

Correspondence.

HOLT'S OPERATION FOR STRICTURE OF THE URETHRA.

To the Editor of the Medical Record.

SIR—In connection with the history of a specimen of stricture of the urethra ruptured by Holt's instrument, which I exhibited to the New York Pathological Society on the 26th Dec., ult. (*Vide* Medical Record, *April 15th*, 1868), I stated that I had been informed by Prof. Rawdon Macnamara, one of the surgeons to the Meath Hospital, Dublin, that he had practised Holt's operation for stricture in 250 cases without a single bad result; that his colleagues, Messrs Collis, Porter, and Smyly, informed me that they were constantly practising it with results equally satisfactory, and that those gentlemen, I had reason to believe, had operated successfully in all of 500 cases.

My distinguished friend, Prof. Willard Parker, expressed his surprise (very naturally) that a single in-

dividual should have met with 250 cases of stricture in the short space of seven or eight years. In order to be sure that I had not misrepresented Prof. Macnamara, I addressed him a note stating the above facts, to which he replied in the following extract from a letter, dated

95 Stephen's Green, Dublin, March 20th, 1868.

"So far as my experience goes, you have, if anything, understated the number of cases operated on by myself. My colleagues have not operated on so many as we imagined, about 100 cases would represent fairly their experience. To account for this great number of cases, you must remember the position that our hospital holds in public estimation, and that cases of every kind seek admittance into our wards from the most distant parts of Ireland. At this very moment we have two cases of stricture in the house, which came up for treatment from the town of Ballina, in the Co. Mayo, a town far distant (150 miles) from Dublin. I feel as satisfied as ever with the results of my cases, and hope to hear of your success in the employment of the immediate plan.

"Faithfully yours,

"Rawdon Macnamara.

"Dr. J. C. Hutchison, Brooklyn, N. Y."

I may add that my experience in the treatment of stricture of the urethra by the "stricture dilator" of Mr. Holt, embraces 8 cases, and I have as yet seen no reason to doubt that the operation will accomplish all that has been claimed for it by the eminent surgeons of the Meath Hospital, and the distinguished gentleman who originated it.

Very respectfully,

J. C. Hutchison, M.D.

Medical Items and News.

Professor Ludwig Türck, M.D., of Vienna.—Prof. Türck, the eminent German laryngoscopist, died in Vienna, February 25, 1868, after a short illness from typhus, in the fifty-eighth year of his age.

The *Allgemeine Wiener Med. Zeitung*, of March 8, contains a lengthy obituary notice of this distinguished physician, from which we extract the following:

"The man whom inexorable death snatched from us, died in the full vigor of manhood. He was an ornament of our science and of our school. Through him the ancient lustre of the Vienna Medical School was brightened anew in the last centenary; he was the embodiment of progressive medicine; laryngoscopy will at all times, in the history of our science, be connected with the name of Ludwig Türck."

Türck was born July 22, 1810, of parents in very comfortable circumstances. He pursued his classical and medical studies in Vienna, where he obtained his doctorate in 1836. Soon after this he devoted himself chiefly to the study of the anatomy and pathology of the nervous system; in 1844 he went to Paris, to avail himself of the superior advantages of that place. In 1857 he was appointed one of the first physicians to one of the largest hospitals in Vienna. He first established his scientific reputation by his thorough investigations of the nervous system, and by the many excellent memoirs which he wrote on this subject. Hasse, in his work on the diseases of the nervous system, quotes Türck on almost every page of his work. He commenced his laryngoscopic studies in 1857, and published his great work on the diseases of the larynx in 1865. Since 1860 he uninterruptedly lectured on laryngoscopy, and in 1861 he was appointed Professor in the Royal University of Vienna, on the recommendation of the faculty.

"Earnest devotion to science, acute powers of observation, untiring zeal, strict truthfulness and conscientiousness, distinguished Türck as a scientist. As a companion, he was modest, amiable, obliging. His heart-winning kindness will never be forgotten by those who knew him."

Contagious Diseases in New York.—The reports of contagious and infectious diseases made to the office of the Metropolitan Board of Health by practising physicians in this city, from April 16 to April 30, 1868 (inclusive), show 142 cases of scarlet fever, 121 of which were under the age of 10 years; 7 cases of typhus fever, the ages varying from 12 to 52 years; 7 cases of typhoid fever, between the ages of 16 to 45 years; 7 cases of diphtheria, 5 cases of which were under the age of 6 years; 3 cases of varioloid, between the ages of 9 and 21 years. The reports do not indicate the special prevalence of any of the above diseases in particular localities.

Pirogoff.—We have just received the very sad intelligence of the sudden death of the famous surgeon, M. Pirogoff, at Odessa. Pirogoff had been called to a consultation in the neighboring village, and on his way back to town he was attacked by highwaymen. He defended himself, killed two of them, and happily escaped this danger. Shortly after his return home he was seized with congestion, and died but a few hours after the attempted assassination.—*Allgemeine Wiener Med. Zeitung.*

M. Serres.—The recently deceased French surgeon, M. Serres, left to the Paris Academy of Sciences the sum of 60,000 francs, of which the interest is to be applied as a prize for the best essay on Embryology. A second legacy of 75,000 francs is designed for the enrichment of the scientific collection of the Museum.

Dr. H. R. Storer has resigned the chair of Obstetrics at the Berkshire Medical College.

Death of Prof. Von Bezold.—Prof. Von Bezold, the distinguished Professor at Würzburg, died recently.

New Publications.

Therapeutics and Materia Medica: a Systematic Treatise on the Action and Uses of Medicinal Agents, including their Descriptive History. By Alfred Stillé, M.D., Professor Theory and Practice of Medicine and Clinical Medicine in the University of Pennsylvania, etc., etc. Third Edition, revised and enlarged. In two volumes. Vols I. and II. Phila: H. C. Lea. 1868.

On Diseases of the Skin: a System of Cutaneous Medicine. By Erasmus Wilson, F.R.C.S. Seventh American, from Sixth and revised English Edition. With 20 plates, and illustrations on wood. Phila.: H. C. Lea. 1868.

The Indigestions or Diseases of the Digestive Organs functionally treated. By Thomas King Chambers, Honorary Physician to H.R.H. Prince of Wales, etc., etc. Second American, from Second and revised London Edition. Phila: H. C. Lea. 1868.

The Variation of Animals and Plants under Domestication. By Charles Darwin, M.A., F.R.S. Authorized Edition. With a preface by Prof. Asa Gray. In two volumes. Vols. I. and II. With illustrations. New York: Orange Judd & Co., 245 Broadway. 1868.

Atlas of Venereal Diseases. By A. Cullerier, Surgeon to Hôpital du Midi, etc. Translated from the French, with Notes, and Additions, by Freeman J. Bumstead, M.D., Professor of Venereal Diseases College Physicians and Surgeons, New York, etc. Part III. Phila: H. C. Lea. 1868.

Original Communications.

ON A CASE OF TREPANNING OF THE SKULL FOR THE RELIEF OF EPILEPSY, WITH REMARKS.

By M. GONZALEZ ECHEVERRIA, M.D.

SUPERINTENDENT OF THE MAHOPAC HOUSE FOR THE RELIEF AND CURE OF NERVOUS DISEASES, AT LAKE MAHOPAC, N. Y.—LATE PHYSICIAN IN CHIEF TO THE HOSPITAL FOR EPILEPTICS AND PARALYTICS, BLACKWELL'S ISLAND, NEW YORK, ETC. ETC.

Epilepsy occurring fourteen years after injury to the skull, with incomplete paralysis of the left facial and sixth nerves, and diminished sensibility and temperature of the skin extending to the arm on the same side; tonic contraction of the right muscles in the cervical region with lateral distortion of the head; great frequency of the pulse, and polyuria. Removal of part of the occipital bone with inner exostosis pressing upon the brain, violent epileptic convulsions when the trephine penetrated the diploic tissue

THE following notes are taken from records carefully kept by Dr. L. B. Edwards, Assistant Physician to the Institution.

The patient, male, 21 years of age, born in Johnston, Rhode Island, unmarried, and by occupation a clerk, entered the Institution the 15th of January, 1868. Height five feet ten inches, weight 145 pounds. Complexion dark, eyes and hair black, beard thick. Head regularly shaped, high forehead, limbs well proportioned, muscular system strongly developed. Parents both living now, in good health, and none of their family have had epilepsy or insanity. Has since childhood a right oscheocele. Infantile and adult health perfectly good, with the exception of an attack of typhoid fever in the autumn of 1863. Habits regular. No venereal excess, or syphilis.

In August, 1852, being six and a half years old, he fell from a low swing and deeply wounded the scalp, just on the left of the occipital protuberance. Remained unconscious for a while, but apparently recovered completely. The cut bled very freely, did not heal up in six weeks, on account of exuberant fungosities, and left a transversal cicatrix, extending about two inches to the left of the occipital protuberance, rather abundant with inodular tissue of a dull rose color, painless, and of a fibrous consistence and hardness. Suffered from severe and persistent headache after the fall, and has since continued subject to it, the ache being general over the head. In 1862, was troubled with seizures of sudden jerkings and spasms of the arms, they being stretched out and involuntarily thrown above the head, making objects fall out of the hand. These seizures were particularly observed in the morning, after arising from bed; is unable to recollect if they troubled him on any date prior to the above. Has never had giddiness or vertigo, nor does he remember having ever awaked with headache or sore tongue, or wetting his bed at night. The first epileptic attack happened early in the morning in July, 1865, without any circumstance which can be regarded as its exciting cause. It was ushered in by the acute cry which has invariably preceded all subsequent attacks. These were repeated five times during the three years following the initial one, but now come on every third or fourth day. The jerking and twitching of the arms never ceased during the period intervening between the attacks, and always with its morning character. Originally the convulsive paroxysms took place also in the morning, whereas at present they fall upon him at any hour of the day or night; the earliest four or five were immediately followed by vomiting, not now present, and on no occasion has he had the least premonition of the coming convulsions.

When I first examined him, the 15th of January, he had just got over two severe attacks, which occurred in the course of the previous twenty-four hours, and his condition was as follows: countenance rather pale, pupils of equal size and enlarged, slight though perceptible converging strabismus of the left eye, minute ecchymoses on forehead and eyelids. Incomplete left facial paralysis, with distortion and elevation of the right angle of the mouth. Muscles of the paralyzed side flaccid—if an attempt is made to blow with mouth shut the left cheek soon yields to the effort; the saliva does not dribble, however, from the mouth, and he can whistle without difficulty. But the tongue—not furred—when protruded deviates to the left. Soft palate, firm and natural. Speech never embarrassed. Hearing, smell, and taste unimpaired. Excepting the occasional double vision from the strabismus, there is no other derangement about his eyes. The æsthesiometer shows sensibility deadened on the left side of the face and throat, no loss of feeling in either half of the tongue, with papillæ small and red. The temperature (90° Fahrenheit) is two degrees lower on the left than on the right side of the face and neck. Head inclined to the right; on this side, the trapezius, splenius capitis, and complexus, are in rigid contraction determining the lateral distortion, with prominency of the integuments on this part of the cervical region. No evidence of paralysis, numbness, or abnormal sensations in the upper or lower limbs, nor is there any difference in the comparative size of their respective muscles; but when the epileptic paroxysm is over, the arms remain powerless for a shorter or longer time. Sensibility and temperature are less on the left than on the right arm, which is two degrees warmer (88° Fahrenheit). This difference is more evident at the hands, usually cold, and inclined to turn livid. No such diminution of sensibility and temperature is detected on the legs, excepting, however, the feet, which are cold. Walks steady even with eyes closed. The temperature over the cicatrix of the scalp is three degrees more (92°) than that of the rest of the head. The increased heat is quite perceptible to the hand laid over the spot. The cicatrix, as already remarked, is not painful; in fact it has never before attracted his attention. Three quarters of an inch above the superior curved line, and more than one inch to the left of a line prolonging the occipital crest, directly under the cicatrix and firmly united to it, the cranium presents an irregularly delimited elevation, rough to the touch and painless upon pressure. If this spot is sharply percussed with the fingers the patient experiences a sensation as if it were "a large white plain with a central black spot"—this percussion, even though tried several times, does not awaken such a sensation on any other part of the cranium, but always starts it when repeated over the cicatrix. Pulse quick, firm without tenseness, not uniform, and ranging from 108 to 120, according to different observations at distinct hours of the day. This frequency greatly abates after the paroxysms; I found it 87 after the attack shortly to be described. Heart sound, increased in activity, there is no oppression, nor feeling of faintness, chest well formed, lungs equally sound, respirations 20 per minute. Digestive functions regular, seldom inclined to costiveness. Appetite good. Drinks considerable quantity of water. Remarks that he passes a large amount of urine, and that he has done so long before this. Has been on a

few occasions troubled with erections after the attacks. Careful measurement and investigation, carried on by Doctor Edwards, show the quantity of urine voided in twenty-four hours to be 210 fluid ounces. The liquid at a temperature 82° Fahr. was perfectly transparent, of a pale amber color, without any flocculi. Specific gravity 1010. Acid reaction. No evidence of sugar with Trommer's test. Abundance of chlorides.

The foregoing description needs to be completed with an account of symptoms during the paroxysm. I will presently narrate them as they were during one attack he had, the fourth evening after coming to the institution. He was at the moment playing whist, and I happened to engage him in conversation as he was shuffling the cards. Suddenly he stops his discourse; the cards drop out of his hand; becomes pale, unconscious, eyes fixed and converging, with pupils largely dilated, and then gives out a prolonged expiratory cry, concomitant with increased lateral distortion of the head, and rotatory movement of the body to the right, with arms firmly flexed on the chest, and mouth wide opened by spasmodic contraction of the muscles of the neck. Cold water dashed on the face roused him at once out of this condition; but the arms remained twitching, his countenance lost all expression, the eyes rolled continually, did not hear what was said, smacked his lips, and there was a strangeness in his manner as consciousness gradually returned, with relapses into momentary oblivion, to be entirely recovered in about twenty minutes. Along with this last stage there was profuse perspiration of the face and hands, and repeated contractions of the diaphragm, with efforts at deglutition and raising of frothy mucus. There was, in addition, an increase of facial paralysis, strabismus, and lateral distortion of the head, and the arms hung powerless for some time after the paroxysm passed over without leaving any headache or drowsiness. The pulse was 87, extremely irregular and at moments imperceptible. As on former occasions, there was not the slightest premonition of the attack, neither knowledge nor remembrance of it, and every symptom corresponded with those related by his father in connection with the other fits. Furthermore, Dr. Edwards had a new opportunity of observing again identical phenomena during another attack, which occurred the next morning, while the patient was about being packed in the wet sheet. In reference to the attacks, I must add that their frequency has made memory defective, and the patient's disposition very irritable and overbearing. It is unnecessary to state that he has resorted to every kind of remedy for epilepsy. From August, 1866, to last January, he discontinued eating meats; also went on a long pedestrian journey during which all rules as to diet were disregarded, and for eleven months before July, 1867, he had no fits, although the morning twitching of the arms persisted. Meantime he used bromide of potassium, and has faithfully continued with it to the present day, now exhibiting on the face and body the peculiar eruption induced by the salt. Since the above date, the attacks, with increasing tendency and detriment to the mind, have incapacitated him from any pursuit.

From the preceding symptoms, I judged without hesitancy that the injury sustained by the skull was the suspected origin of the epilepsy in question. I supposed that a growth on the inner table of the occipital, corresponding to the external cicatrix, was the very source of all derangement; consequently, persuaded that no medical treatment could ever be capable of eradicating the structural changes undergone by the bone, I thought the best course would be to remove the evidently diseased portion of the occipital, and expressed candidly this view to the patient and his father, with the serious risks of the operation, which I would not, however, undertake unless acknowledged justifiable on consultation with some other physician. Waiting for further decision, the case was kept on observation, and ordered:

Potass. bromidi gr. xxx., ammon. brom. gr. vj., liq. potass. arseniti m. iij., Aquæ dest. f. ʒ ss. M. To be repeated three times a day; in addition, to take morning and evening, one pill: Ergot., ext. gentianæ aa gr. ij., pulv. acaciæ q. s. M.

He was to be packed every morning in the wet sheet for three-quarters of an hour, before going under a cold shower bath for six or eight seconds, and which should be repeated in the evening.

I will depart from the main subject to remark, that the association of liq. potass. arseniti, m. ij. to m. v., seems to prevent the unpleasant eruption of the bromide of potassium. I have tried it for about two years on several occasions with private patients and at the Hospital for Epileptics and Paralytics, New York, and tested it when there was quite an extensive eruption in large conglomerate pustules, the results being in every case satisfactory. Under the latter circumstances, I discontinued the bromide for a few days, gave the patient some alkaline baths, and then exhibited the mixture as above. In instances like the present of an ordinary eruption, the bromide needs not be suspended, as with the addition of the arsenite of potash the eruption gradually vanishes, and the salt is carried to its highest doses without causing trouble on the skin. I am not aware if any other has pointed out before the counteracting efficacy of this combination.

On February 2d, my friend Dr. L. A. Sayre, of New York, was called in consultation, to which Dr. Edwards also assisted. Having heard the history of the case, and carefully investigated the condition of the patient, Dr. Sayre observed the very same symptoms before detailed. He distinctly detected the irregular elevation on the left side of the occipital, under the cicatrix of the scalp, and corresponding to a smooth surface on the opposite side. The heat of the part was most manifest to the hand, the thermometer marking at this examination 94°, whereas it did not go beyond 90° in other regions of the head. The diminished sensibility and temperature on the left side of the face and hand, the facial paralysis, strabismus, and lateral distortion of the head with contraction of the muscles on the right side, were again noticed. The patient was equally explicit as to the sensation experienced when the cicatrix was tapped with the ends of the fingers. His pulse was 110. Respirations 18 per minute.

I was gratified to find that my diagnosis agreed in every respect with that of Dr. Sayre; consequently, he asserted that, in his belief, no medical treatment could be available unless the degenerated portion of bone—which was the true source of trouble—were removed from the skull, and that this operation, though serious, was, however, the only way capable of reaching and most probably curing the disease. Endorsed by such an unreserved opinion, and with previous consent of the patient, I determined to operate. Therefore, assisted by Dr. Edwards, I proceeded to remove the portion of bone affected, on February 10th, at 3 o'clock P.M., weather being very clear and cold. The patient took a light breakfast in the morning, had bowels thoroughly relieved by an injection, and the hair from the back part of the head cleanly shaved, previous to the operation. Æther was administered, and anæsthesia shortly completed after the usual period of excitement. He was laid on the right side, with head resting on a hard pillow. A perpendicular cut, about two inches, was carried down to the bone, and crossed at right

angles by another horizontal incision of nearly three inches, running from the external occipital protuberance to the left. The incisions thus made bled quite freely, the flaps were dissected, a small branch of the occipital artery twisted, but hæmorrhage from other vessels continuing required us to mix alum with the ice-water in which the sponges were wrung out, and to use compression to arrest the loss of blood. On exposing the periosteum, it was found very much thickened, highly vascular, firmly adhering to the cranium and interspersed with hard granulations of a dark crimson color. The bone was scraped, and Galt's trephine applied, fixing the perforator in the middle of the bony eminence. No sooner had the instrument bored through the hard outer table and penetrated into the diploe, than the patient was suddenly thrown into an epileptic fit. He did not utter the peculiar cry of other attacks, but the limbs were rigidly stretched out, his body rolled over to the right, bit his tongue, had a great deal of froth at the mouth and venous congestion of the face, with deep snoring and, las ly, relaxation of the limbs. During this time, the operation had, of course, to be suspended: the bone was then bleeding most profusely. The stertor and other signs of the fit over, the trephine was reapplied: most of the cone penetrated through without loosening the bone; on attempting to raise the disc with the elevator it gave way, leaving behind a resistant portion at the bottom of the perforation. Hæmorrhage increased at this moment, and, in bed, blood gushed out with violence from the vessels of the diploe. Cold alum water had to be steadily applied, and the opening plugged before application of the trephine to the portion left could be renewed. The elevator was then again and again tried after gentle turnings of the trephine; but the irregular shape of the protrusion made the bone, less and less resistant as we approached the dura-mater, break at every effort, and it was in this wise removed in small fragments. The last of these fragments were united by adhesions to the dura-mater. At the internal part of the opening made by the trephine, there was a conical indentation, pressing on the brain, and close to the superior longitudinal sinus. To take away such indentation, with its broad base and the abnormal looking bone around the perforation, was the most tedious stage of the operation. It had to be achieved with the bone nippers and the lenticular knife, in a very slow, careful way, holding up at every cut to stop the incessant hæmorrhage. Finally, all the apparently unhealthy structure was pared off from the occipital bone in an oval space, two by two and a half inches in diameter, and the finger gently slipped around between the membranes and the bone, showed no irregularity of the inner table pressing on the brain. The membranes looked healthy and uninjured, excepting at the very small site of the eros on, caused by tearing the adhesions to the exostosis. The longitudinal sinus, uncovered about an inch, could be seen projecting inside the cranial opening, and along the lower edge of this opening the lateral sinus could also be felt. Every portion of thickened periosteum was excised, and when the raw surfaces ceased bleeding, the flaps were brought together by deeply inserted silver sutures, exclusive of the lower incision, that was closed with serrefines. The operation was completed in three hours and a half, and no more than six fluid ounces of æther were inhaled by the patient. The anæsthetic effects were soon dissipated, bringing about vomiting, which, with intermissions of from twenty to thirty minutes, persisted until two o'clock in the morning. Ice was constantly applied to the wound, and the following mixture exhibited:—Sp. ammon. arom. ℥xx., aquæ f. ℥ ss.M.

February 11th.—Slept tolerably well, after vomiting discontinued. Pulse this morning, 132-136, irregular and full. Skin dry and hot. Tongue slightly coated in the centre. Complains of being very thirsty, and finds great satisfaction in swallowing small pieces of ice. Urine in nearly equal quantity and with same reaction as before the operation. Ice bag kept all the time to the head. Wound dry, with lips of a slightly red color. Diet: beef-tea, every two hours.

February 12th.—Was restless last night, frequently wishing to be turned in bed, and talking in his sleep. Pulse 140, full but not firm. Tongue furred with red edges. Skin hot and moist; has perspired during the last hours, and at 11 o'clock A. M., had a long chill. No pain in the head; wound sensitive, but without redness, swelling, or heat. Ordered the same diet, and to take in the evening: Potass. bromidi ℥ ss., sp. ammon. arom. ℥x., aquæ dest. f. ℥ ss. M.

February 13th.—Four o'clock A.M. Pulse 143, after disturbing him in bed. At eight o'clock A.M., it was 115, irregular and soft, and came down to 105 during the evening. Ice bag continued to the head. No discharge as yet from the wound; the edges seem united by first intention, excepting where the serrefine was inserted. Diet: beef tea, soup, gruel.

February 14th.—Has slept well through the night; at nine o'clock A.M., pulse 105, and weak. Sutures removed—wound gives no pain; ice has been incessantly applied to it, and the patient is in excellent spirits. Bowels moved with turpentine and assafœtida injection. Tongue clean and natural; appetite good. Diet: eggs, soup, rice.

February 15th.—Pulse 102, soft. Bowels opened through the day. The incisions are healed up, excepting at the very point of their crossing, through which oozes a sero-purulent discharge. Continue ice to the head.

February 16th.—Same treatment. Pulse 98, soft. Bowels moved naturally.

February 17th.—Pulse 92, weak, not uniform. Wound still discharges a limpid serosity from the centre. Treatment and diet as above; bowels operated once this day.

February 18th.—Pulse 80, regular and soft. Can now lie on back of head without discomfort. Central crossing of incisions still open. Wound dressed with glycerine and Venetian turpentine. Local application of ice discontinued; same diet.

February 19th.—Pulse 71, soft and small. Wound dressed as yesterday; slight discharge. Bowels moved to-day. Urine reduced to three pints in twenty-four hours. Sat up for an hour in the afternoon. Diet: soup, roast beef, and coffee.

February 20th.—No change to be noticed. Pulse 73, firmer and regular.

February 21st.—Pulse 75, regular and larger than before. Slept very well all night. Opening of the wound completely closed. Same diet. In the afternoon gets irritable and fretful, from not having his own way.

February 22d.—Was restless last night. Wound feels sore. Pulse 92, contracted and irregular. Felt better in the afternoon; sat up, and being alone with his assistant, took a whim to go out of his room to converse with other patients. Complained that such undue over-exertion "tired him out." Had a chill, headache, and convulsions at three o'clock P.M., whilst sleeping in an easy chair. The wound, which had been swelling, bled considerably, and became excessively painful and hot. Had great pains across the head. Pupils dilated, cheeks congested, tongue moist, and furred in the middle. Pulse, after convulsions, 81, irregular

and soft. Ordered *illico*: turpentine and assafœtida injection, ice to the head, and mixture of potass. bromidi gr. xl., sp. ammon. arom. ℥ x., aquæ dest. f. ℥ss. M., to be repeated in the evening.

February 23d.—The above symptoms persisted until this morning. Has been very fidgety; the convulsions returned twice—at ten o'clock last night, and this morning at 11 o'clock, but less severe than the first. The wound being quite distended, I opened it at the middle, with a probe; a dark, bloody, purulent discharge came out, and from this moment the general irritability, headache, and other symptoms abated. Ordered: ergotine pill, and mixture brom. potass., as before the operation; turpentine and assafœtida injection; ice continued to the head; light diet and coffee.

February 24th.—Pulse 78, regular and small. Says "he feels all well." Same treatment. Diet: soup, beef, and coffee. Wound discharged this morning about half an ounce of pus, and has run all day.

February 25th, 26th, 27th.—The suppuration is lessening every day. Pulse from 76 to 78, regular and firmer. Same treatment, and nutritious diet. Head bathed every morning with cold water, and local application of ice maintained to the wound. Urine has not exceeded 72 fluid ounces in 24 hours. It is transparent, acid, without sugar, still abundant in chlorides, and with specific gravity 10.20.

February 28th to March 6th.—The improvement progresses. The discharge decreases, and it only amounts to a few drops of lymph and pus. Incisions entirely cicatrized, with the exception of the small fistulous opening at their crossing. Pulse regular, 76; bowels act every day. Continue with ergotine and brom. pot. Nutritious diet. Says that he feels more the impression of cold water on the right than on the left of the top of the head. This morning, whilst pressing out the discharge from the wound, had a strange feeling in his head, as though the blood rushed to it, without, however, losing consciousness, and burst into a fit of crying, with deep sighing. This condition passed away in a short while, and was certainly the result of the cerebral pressure. The signs of facial palsy, strabismus, and distortion of the neck, have disappeared. The quantity of urine remains unchanged.

May 7th.—On March 18th an abscess appeared under the old cicatrix of the scalp, with drowsiness, vomiting, and convulsive symptoms. A free incision let out a large amount of pus, the symptoms subsided, and the sinus left was dressed with Peruvian balsam. The parts soon healed up, and counter-irritation was applied to the back of the neck. However, the uncontrollable disposition of the patient, with the excitement due to a visit of his friends, brought about the recurrence of headache and convulsions on the evening of April 13th. No further derangement has occurred since that date; the cicatrix of the scalp is quite firm and painless, and the paralytic symptoms and polyuria have no longer existed. It being impossible, on account of his unwillingness, to manage the patient properly, he left for home on May 5th. He was directed to continue the same course of treatment. The bromide of potassium has been raised lately to a dose of forty grains, to be taken three times daily.

It is not my purpose to enter here into the merits of trepanning the skull for the relief of certain forms of epilepsy. Let me, however, state that the analysis of several cases confirms, as established by Dr. Wm. H. Van Buren (Philad. Med. and Surg. Rep. Dec. 29, 1860), that this operation is comparatively a simple and harmless one, its seriousness being explained by the fact that it is usually performed in cases which, from their nature, are fatal. Nor do I give hastily this case as one of recovery; for, though the operation has succeeded to remove the cranial exostosis and some of the symptoms, yet it does not follow necessarily that the epileptic *habit*, or predisposition of the nervous system to the disease, has also at once been eradicated by taking away its exciting cause. To the confirmation of this result I now look forward with anxiety. Incomplete as it has to be on this account, the case, nevertheless, affords a peremptory demonstration of how peripheral excitations may cause epileptic convulsions. It might be perhaps adduced that such convulsive spasms, during the perforation of the bone, could have been as well determined by the anæsthesia itself. The fact is not unfrequent; I have myself witnessed it on many occasions, and particularly remember one in which chloroform was administered to a young epileptic, under my care, for the operation of phymosis. Scarcely had insensibility been prolonged some minutes, when animation was suddenly suspended. My friend Dr. Wm. H. Van Buren, who was performing the operation, and myself, had to resort to Marshall Hall's and Sylvester's plans to restore the heart's action, and only after persevering endeavors respiration was re-established, along with the spasms of an epileptic paroxysm. The operation was finished without further inhalation of chloroform. This and similar observations would have but little weight, if we consider that in this instance the inhalation of æther lasted more than three hours, and that it had to be resumed and prolonged after the epileptic attack, without, however, inducing its renewal. Therefore, it seems legitimate to suppose that irritation with the trephine in the diseased bone was the true cause of the convulsions, most assuredly helped by the condition of the nervous centres in anæsthesia. I have not been able to examine with the microscope any of the bone removed. The portion of disc divided with the trephine has an uncommonly dense external lamina about four lines thick, covering a cancellated structure containing the canal of a large blood-vessel, about two lines in diameter. Putting the different fragments together, the disc of bone is nearly an inch from the outer to the inner lamina, a thickness, indeed, considerable, when we remember that at the site of injury the tables of the occipital run closer and closer to each other, until the middle of the fossa for cerebrum, where there is scarcely any diploic tissue.

Now, as to the nature of the paralysis. Was the incomplete paralysis of the facial and sixth nerves *reflex*, as Brown-Séquard admits to be frequently the case with cerebral affections. It is unquestionable that the peripheral extremities of the trigeminal, distributed to the dura mater and bone, were implicated in the modification of structure discovered at the injured spot. The frequency with which irritations of this nerve, like those of the sympathetic, are apt to originate incomplete, and the so-called direct paralysis, has also been pointed out by the above distinguished physiologist. When we consider the relations between the origin of the trigeminal, the facial, and the sixth nerves, we can easily understand how excitations conveyed through the first, may as well involve the origin of the two other nerves, and impair their functions, by modifying the action of their common ganglionic cells. Stilling and Lockhart Clark have shown that the sixth and facial nerves arise from the same nucleus in the oblong medulla. Vulpian has also demonstrated by his interesting researches on the origin of the facial, its intimate connections with the sixth pair in the floor of the fourth ventricle. More recently yet, John Dean, in his valuable work "On the Gray Substance of the Medulla Oblongata and Trapezium," Smithsonian Contributions of Knowledge, 1864, p. 66, alluding to the nucleus from which the facial arises, says: "Several other cell groups are found, both on the

outer and inner side of the upper olivary bodies, and very many cells are found scattered throughout the whole anterior and antero-lateral network. Among these groups, the largest and most constant are, one on the inner side of the olivary body in the vicinity of the roots of the sixth nerve, consisting of stellate, multipolar cells of moderate size, and another on the outer side of the olivary body, near the entrance of the facial roots, consisting of quite large multipolar cells, and sometimes, as noticed by Schroder Van der Kolk, forming two distinct groups, the cells of which become more and more numerous, and at the same time are pushed inwards as we reach the upper part of the course of the facial, continuing to increase both in size and number as we approach the fifth nerve, to the motor root of which I suspect this group is related, as well as to the facial." The evidence of these statements suffices to account for the paralytic symptoms, without the necessity of the ingenious hypothesis put forward by Brown-Séquard, to explain the nature of reflex paralysis. It may be questioned how such a derangement in the oblong medulla can reach the facial and sixth nerves, sparing those of the limbs. The special influence of the nucleus belonging to each of the above nerves, the narrow limits of the relations just pointed out, as much as the nature of the local excitation restricted to the trigeminal, and the incomplete character of the paralysis, explain why the limbs were not affected, and why, for these very motives—when the disturbance in the circulation of the medulla oblongata reached its maximum during the epileptic paroxysm, and the trouble became more extensive—the arms were also temporarily paralysed.

Concerning the rotatory movement of the body during the epileptic attack, it evidently was the effect of the local irritation to the cerebral hemisphere. It is well acknowledged that lesion of the cerebral hemisphere and other regions of the brain originates a rotatory movement of the body, the real cause of which is not yet satisfactorily explained. The deviation of the eye in this case was due to paralysis and not contraction, for I could ascertain its persistence when the head was raised or moved in any direction. It was most interesting to observe, after the epileptic paroxysm and before consciousness was recovered, the rolling or oscillating state of the eyes, reproducing the nystagmus that accompanies the strabismus and rotatory movement of the body noticed on animals, upon injury of those parts of the brain capable of determining such a peculiar movement.

In conclusion, the case is a curious instance of polyuria due to traumatic lesion of the head. The researches of Bernard, Schiff, Pavy, and others, have brought to light the influence of the vaso-motory nerves in the production of diabetes. From the striking coincidence here of polyuria, converging strabismus, facial palsy, and other trouble with the vaso-motory nerves, I cannot avoid surmising, what is perhaps a mere speculation, *i. e.*, the possibility of a disturbance in the floor of the fourth ventricle, where is the origin of the nerves involved by the above paralysis, the diabetic centre (*centre diabétique*) of Bernard, and besides the centre of the visceral vaso-motory nerves, as demonstrated by the interesting anatomical investigations of Jacubowitsch. Cases are not rare of injury to the brain, spinal cord and nerves, as also to the sympathetic system, attended with diabetes. It has been remarked, as regards injuries to the head, that this condition happens sooner or later upon the accident, and that it may change most suddenly from diabetes mellitus into polyuria. I have been unable to ascertain if such change did occur in this instance. Muscular disease of the neck and polyuria have been seen together by Vogel. Whether such relation existed in this case I will not venture to deny; but I rather think that the cervical contraction was induced by the permanent cerebral irritation. To this irritation may also, in a great measure, be ascribed the great frequency of the pulse.

ABSTRACT OF A PAPER ON

THE DISEASES OF SYRIA, AND THE NATIVE MEDICAL PRACTICE.

READ BEFORE THE NEW YORK ACADEMY OF MEDICINE, THURSDAY EVENING, APRIL 16, 1868,

BY GEORGE E. POST, M.D.,

PROF. ELECT OF SURGERY IN THE MEDICAL COLLEGE AT BEIRUT, SYRIA.

AFTER a sketch of the physical geography and climate of Syria, and an account of those features of the social life of its inhabitants which give rise to disease, Dr. Post proceeded to say that, owing to the even temperature and high range of the thermometer, all bronchial and pulmonary diseases are rare, and when they occur, are of less severity than in our colder and more changeable climate.

Diphtheria and diphtheritic croup are almost wholly unknown.

Scarlatina is rare.

Measles, which in our climate is prone to be followed by bronchial sequelæ, there brings on cerebral and abdominal lesions.

Among the common diseases of the country is dyspepsia. This is almost universal. It is due to the vicious diet of the people, which consists of indigestible substances, such as cracked wheat, boiled with large quantities of butter or fat until it becomes coated with the oleaginous material. Onions fried in butter, meat fried until it is quite indigestible, large quantities of sour milk, in addition to unripe fruit, which they prefer to ripe, and a preponderance of oil and salads during the long fasts, are among the causes of this disordered action of the stomach.

The time of eating is also an element of disturbance. Laborers go out to their work on an empty stomach in the morning, and work for several hours without eating. They then eat lightly, and not until night do they partake of hearty nourishment. This evening meal is inordinately heavy, and immediately after it they retire to sleep.

The sedentary habits of the people, and their constant use of horseback travel, which is the only facility the country affords, give rise to hæmorrhoids, which afflict almost every resident, native and foreign.

Diarrhœa and dysentery are very prevalent and fatal. They result from the inordinate use of green fruit and unripe vegetables, and other dietetic imprudences, coupled with the foul state of their streets and houses. The filth of Oriental streets and houses cannot well be described or imagined. The streets are a receptacle for every foul and worthless thing. Garbage is thrown into the public ways, and the latrines in many places empty into the streets, where the fecal matters putrefy under the blazing sun and diffuse an abominable stench, and multifarious sporules of fungoid elements of disease. When the cholera breaks out in such localities, its ravages are frightful.

These abdominal disorders are specially fatal to children. It is probable, in the absence of statistics, that births, in Syria, are more numerous in proportion to the population than here. This is due to early marriages, and a universal and intense desire for offspring.

Yet so large a proportion of children die, that population does not increase there as here.

Calculus is a somewhat common disorder. It is treated by native stone-cutters, who succeed in saving about fifty per cent. of their cases.

Syphilis is prevalent, particularly the secondary form, which is extensively conveyed by the use in common of a single pipe at their social gatherings.

The ophthalmiæ are among the most common and characteristic of the diseases which afflict Syria. The clouds of filthy, irritating dust which the stormy winds raise from the streets, the swarms of flies, and the glare of the sun, combine to produce the most virulent form of purulent ophthalmia. This is not treated, and hence there result the well known sequelæ. Ulceration and perforation of the cornea, staphyloma, opacity, and the most exaggerated forms of granular lids, are daily and hourly phenomena of medical practice in Syria.

Iritis is not recognized in its specific character by native physicians, who treat it as a simple ophthalmia, and with, as might be expected, a disastrous result. It is estimated that over a thousand persons lost one or both eyes in Syria last year, during an epidemic of purulent ophthalmia, for want of appropriate treatment.

Diseases of the deeper tissues of the eye are not specially common. Cataract occurs. It is treated by Persian specialists, by the operation of depression.

Diseases of the ear are not common. This is probably due to the mild climate.

The class of skin diseases is multiform and difficult to treat, owing to the uncleanly habits of the people and the impossibility of regulating their diet.

Female diseases are common and numerous; aberrations of the menses, in the direction both of excess and deficiency, are among the commonest complaints. Prolapsus and procidentia uteri occur from the early return of parturient women to their work. But the most general disease of married women is ulceration of the neck of the uterus. This disease is induced by the use of various irritating applications to the cervix and mucous membrane of the vagina, with a view of stimulating the menses, or promoting leucorrhœa, which is supposed to favor pregnancy. A case occurred in which a woman introduced serpents' eggs into the rectum, where they were hatched by the warmth of that receptacle.

Vaccination has been introduced, but as yet it has not been enforced, and occasional epidemics of great severity occur.

Continued fevers of the typhus and typhoid varieties occur with great frequency, and inasmuch as they are treated by copious depletion, the results are either death or prolonged convalescence. Remittent and intermittent disorders are highly characteristic of the country.

Owing to the small quantity of rain which falls, irrigation is practised extensively for the cultivation of fruit and vegetables, especially in the neighborhood of the towns, which are surrounded by gardens, through which flow canals and rills in every direction. At certain hours of the morning and evening the whole harbor is obscured by the misty exhalations from these extensive swamps, and at such times the malarious influence is very concentrated and deadly.

Among the types of remittent are those for use of congestive fever in which the stomach, brain, and liver are involved. These forms frequently terminate in death at the first or second paroxysm, by the violence of the shock.

That form in which the meninges of the brain are complicated, is marked by sleepiness, which is relieved by hydrochlorate of quinine. As large a quantity as four drachms has been given during the twenty-four hours. Even the acclimated suffer from these fevers, or from derangements of the system referable to malarious causes, such as neuralgia, dyspepsia, etc. The natives, who sleep out of doors, in the gardens, during the season of harvest, suffer much from intermittent disorders.

The number of articles of the materia medica found in Syria is large. The colocynth, scammony, aloe, senna, elaterium, ricinus, squill, conium maculatum, hyoscyamus, galls, poppy, lemon, rue, tragacanth plant, liquorice, beech, and sponge, are among the medicinal substances found native in Syria. Few geographical areas, of equal extent, furnish so large a proportion of medicinal agents of established virtues.

The Oriental constitution is peculiarly susceptible to the action of the mercurials. A single cathartic dose of calomel or blue-pill has been known to cause excessive salivation.

There are not wanting native practitioners in Syria. But they are ignorant quacks, usually superadding to the business of a barber, blacksmith, or priest, the knowledge of the art of venesection, and of a few cathartics and emetics.

A large number of diseases are not understood or distinguished by these practitioners, *e. g.* the whole category of nervous disorders, diseases of the internal eye and ear, and most diseases of children.

Moreover their knowledge of remedies is slight. All of our more refined and valuable preparations, such as the vegetable alkaloids, are unknown. But it would be well for the country if ignorance of disease and remedial agents alone characterized these practitioners. But the gravest errors in the theory of disease reproduce the most baleful fruits in practice. Mania and convulsions are treated by severe depletion, and extensive applications of the actual cautery over the scalp and in the roof of the mouth and fauces, and this empirically. Aphthous spots in the mouths of children are treated by cauterization of the fauces with the hot iron.

Intermittents are combated by the lancet at each recurring paroxysm, or left to wear themselves or the patient out. Necrosis and caries are treated in a similar manner, by the hot iron. An instance was adduced in which for necrosis of the femur, the physician had drawn a line of fire on either side of the limb for its whole length, and surrounded the knee-joint with rings of ulceration made by the actual cautery.

Purulent ophthalmia is not treated until the subsidence of the inflammation, and the reopening of the lids, owing to an idea that the eye will be injured by meddling with it before it is *ripe*. Granular lids, among the Bedouins, are scarified by the hooked prickles found on the legs of a species of fly which infests the bodies of cattle.

Fractures are set by goatherds, being put up in a bandage moistened with the contents of an egg beaten up with flour. They bandage only over the seat of injury, and subsequent swelling of the limb, and mortification, are common results.

There is but one medical college for the whole Arabian race. It is situated at Cairo, distant 500 miles from Syria, which is equivalent to 3,000 miles in America.

The Dr. mentioned that through the efforts of Americans a medical college has been opened in Beirût, and he bespoke for it the sympathy and aid of the Fellows of the Academy.

A Narrow Escape.—Addison Bean, of Mason, Mex., fell on a pitchfork in his barn the other day, and the time passed through his neck, between the windpipe and the jugular vein, marvellously missing both.

Original Lectures.

ABORTION:

REMARKS MADE BEFORE THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK, FEB. 3, 1868.

By FORDYCE BARKER, M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN, AT BELLEVUE HOSPITAL MEDICAL COLLEGE.

MR. PRESIDENT AND GENTLEMEN—In the following remarks I shall attempt to formulate the rules of practice, which the science of the present day has established, as to the prophylaxis, management, and treatment of abortion, and its consequences. In order to bring the paper within the limits of time which I feel at liberty to occupy, I shall be compelled to avoid minute discussion of points where authorities differ; to omit references to and quotations from others; and content myself with a simple statement of what I believe to be sound doctrine and correct practice. I shall ask the indulgence of those members who may find some parts of the paper too elementary for a learned society; as it has seemed to me that a concise statement of the premises is necessary, as a preliminary to a clear comprehension of the deductions. I must also add that, in order to give expression to all that I think it necessary to say to fulfil the end of the paper, I must make use of a more aphoristic style than taste or judgment would dictate under other circumstances.

The causes of abortion have been classified under these four general divisions: 1. *Accidental*, which include all those causes, whether physical or emotional, which have a direct tendency to separate the ovum from its uterine connections. 2. *Constitutional*, or those due to a deranged state of the mother's health, the most frequent of which are the exanthemata—typhus fever, small-pox, measles, scarlet fever, etc.—and other toxæmic, especially uræmia and syphilis. 3. *Diseases of the uterus and its appendages*, which prevent the development of the organ simultaneously with the growth of the ovum; such as displacements, fibrous tumors, chronic inflammatory indurations and hypertrophy, cervical endometritis, ulcerations, old inflammatory adhesions between the uterus, or its appendages, and the other pelvic viscera, ovarian tumors, dropsy of the Fallopian tubes, and vaginitis. 4. *Diseases of the ovum*. Not only may the maternal diseases be transmitted to the fœtus and cause its death, but it may be primarily affected with almost every form of disease which is liable to attack the new-born child, as pulmonary, hepatic, and cardiac affections, peritonitis, ascites, hydrothorax, and hydrocephalus. The ovum may also be destroyed, and abortion result, from organic alterations of the membranes; especially vesicular or hydatidiform disease of the chorion, inflammation of the amnion, effusion of blood into the structure of the decidua, knotting or compression of the funis, and diseases of the placenta. This last organ is especially liable to a variety of pathological changes, such as atrophy, hypertrophy, softening or induration, extravasation of blood in its structure constituting placental apoplexy, acute inflammation, and fatty degeneration.

The symptoms of abortion vary according to the period of gestation when it occurs and the cause which produces it. When it occurs in the early days of gestation, it is not generally attended with any marked phenomena except such as are common in many cases of dysmenorrhœa. There may be pain about the loins and the sacrum, a few bearing down pains, and the ovum escapes, either in mass or in shreds, usually surrounded by fluid or half coagulated blood. It is often mistaken for a clot, the woman supposing that she has had a postponement of the menses, followed by a more difficult and abundant flow than usual.

At a more advanced stage, the symptoms are more marked and vary with the cause of the abortion. Those arising from the accidental causes, whether physical or emotional, differ somewhat, according to whether the cause has affected the mother's organs, or has directly influenced the fœtus. If the ovum be suddenly and totally detached by violence, from blows or falls, its expulsion usually closely follows the accident, accompanied with profuse hæmorrhage. But if the detachment of the ovum be only partial, there may be sharp pain at first, either in some part of the abdomen or about the loins, which may diminish or entirely cease for a few days; it is then violently renewed; followed by uterine contractions and pains, accompanied by some discharges of serosity from the vagina, and subsequently by hæmorrhage, more or less profuse. The expulsion of the ovum, under these circumstances, is generally slow. The cervix, not having been prepared by the physiological process of softening, is dilated with slowness and difficulty; and the ovum is retained, often for several days, at the orifice, unless the resources of art assist its expulsion.

If the accidental cause has acted directly on the fœtus—whether mechanically, as by blows or concussions, or physiologically, by destroying its vascular connections with the uterus—the death of the fœtus results, and no symptoms appear at first except those which announce this death; until the ovum, having become a foreign body in the uterine cavity, irritates the organ, and excites the necessary contractions for the expulsion of its contents. This result does not ordinarily follow until eight or ten days after the accident; and in some cases the time is prolonged two, three, or four weeks. In these cases, the utero-placental circulation having ceased some time prior to the expulsion of the ovum, there is no danger from hæmorrhage. But in some rare cases the death of the ovum may occur, and the placenta still retain its vascular connection with the uterus.

When the abortion arises from causes which operate slowly, such as those due to a deranged state of the mother's health, or diseases of the uterus and its appendages, or diseases of the ovum or the placenta, it is preceded by symptoms of more or less disturbance of the health of the maternal system, and by those indicative of the death of the fœtus. There are ordinarily lassitude, depression of spirits, pallor, tumefaction and lividity of the eyelids, cold extremities, anorexia, thirst, shiverings followed by heat, a sensation of cold and weight above the pubes, pain in the loins, vesical tenesmus, and flaccidity of the breasts. The symptoms which are indicative of the probable death of the fœtus are the cessation of the sympathetic disorders of pregnancy which have previously existed, absence of the fœtal movements, a decrease in the size of the abdomen, a sensation of coldness and weight in abdomen, flabbiness of the breasts, and (after the fifth month) the absence of the auscultatory signs of pregnancy.

Prognosis.—In the first and second months of pregnancy, the ovum and its appendages may be thrown off without any serious illness. But in the third and fourth months there is considerable danger from hæmorrhage. This is especially the case when the abortion is the result of any of the accidental causes, and most emphat-

ically when it is the result of irritating medicines or of puncturing the membranes in criminal abortion. In thirty-four cases of criminal abortion, Tardieu reports twenty-two deaths. Abortion is also very dangerous when it occurs in the course of an acute inflammation of any important organ, or as a result of the exanthemata. But when it results from any of the chronic maternal or fœtal diseases, the consequences are much less serious, as in these cases there is very little liability to hæmorrhage. The danger from hæmorrhage may be the consequence of a sudden and profuse loss of blood, or of its continuance for a long period of time. When a portion, but not the whole, of the ovum and its membranes has been expelled, the patient is liable to repeated attacks of hæmorrhage, which may ultimately destroy her life. But the danger from retention of some portion of the membranes or of the placenta is not alone that of hæmorrhage. The decomposition and disintegration of the retained portions, in some cases, it is true, only produce very slight local and constitutional disturbance, the offensive and fœtid discharge from the vagina being the principal inconvenience. But not unfrequently they are the exciting cause of severe and dangerous local phlegmasiæ, as peritonitis, phlebitis, metritis; septicæmia and the formation of abscesses; or a gastro-intestinal irritation which may terminate fatally by exhaustion. In some cases the vascular connection of the placenta remains intact after the expulsion of the ovum, and the morbid products called moles and the hydatidiform masses are developed. Another pathological result of abortion may be subinvolution of the uterus, and, as a consequence, sterility.

As regards the comparative danger from abortion and labor at full term, it is probably correct to say that the immediate consequences of the former are generally less serious, but the remote effects are undoubtedly more disastrous. If, however, I were to base a statement on the experience of my own personal observation, I should say that I had seen more instances of death resulting from abortion than from labor at full term, if the deaths from puerperal fever occurring in my hospital practice were excluded.

I now pass to the discussion of the practical points which I have had chiefly in view in preparing this paper, namely, the prophylaxis, management, and treatment of abortion.

Prophylaxis.—It is unnecessary for me to allude to the prophylaxis of the accidental causes of abortion. Prophylactic treatment can apply only to some of the constitutional causes, to the local affections of the uterus, and to certain diseases of the ovum.

Some authors have given great prominence to plethora, to local uterine debility, and to nervous irritation, as frequent causes of a tendency to abortion. But it seems to me that these states are generally symptoms of an antecedent primary condition, rather than causes; and therefore little success is attained in the treatment of plethora by a restricted diet, local or general depletion, or vascular sedatives; in that of local uterine debility by such stimulants and tonics as directly excite the uterine circulation, such as savine, lytta, and ergot; or in that of nervous irritability by the use of a-safœtida. The constitutional causes of abortion produce their effect by the failure of the maternal system to supply the ovum with a due amount of healthy nutriment; and so it dies either from starvation or from toxæmia. The nervous irritability, so often referred to, is a consequence, in very many cases, of either chloro-anæmia or toxæmia, the special form of blood-poisoning being uræmia, cholecythæmia, or constitutional syphilis (for in speaking of the prophylaxis of abortion, I shall not include the specific poisons of the exanthemata). My own conviction is that prophylactic treatment would often prove more successful, if chloro-anæmia and toxæmia were more generally recognized and more thoroughly appreciated as causes of abortion. The practitioner would then address his treatment philosophically to the improvement of the general health of the mother, instead of seeking for antidotes and specific remedies to prevent abortion. It should not be forgotten that in chloro-anæmia many of the prominent symptoms might easily be mistaken, by a careless observer, for those of plethora; and particularly is this the case in pregnant women.

The fear, also, of detachment of some portion of the ovum often leads to restrictions upon the general habits of the patient, particularly as regards exercise in the open air, which add to the general deterioration of the health. A healthy ovum is not easily separated from a healthy uterus. I believe that often a great error is committed in confining pregnant women to their room and a recumbent posture for weeks, when they really require active exercise in the open air. I have secured success, in a number of cases, by adopting the contrary plan, sometimes in strong opposition to the fears and prejudices of the patients; although they had repeatedly miscarried before, when they had conscientiously and persistently confined themselves to the recumbent posture. A nourishing diet, the moderate use of stimulants as wine or beer, daily exercise in the open air, the stimulus of confidence and hope, and such tonic medicines as the special nature of the case may indicate, will often prove a most successful prophylactic course in cases which look the most unpromising, and which have before, in former pregnancies, resulted in abortion.

One agent, the chlorate of potash, I have found eminently useful in this class of cases. Its use was first suggested by Sir James Y. Simpson, on the theory that it would add oxygen to the system, for the restoration and arterialization of the blood. Now, whether the chemical theory which suggested its use be well founded or erroneous, I am thoroughly convinced of the clinical fact of its great value, from my experience in its use in a great number of cases. Patients who have had no theory, and who were entirely ignorant, of the effects of the agent, have spoken of the perceptible influence of the medicine they were taking on the motions of the fœtus, and have remarked the feebleness or absence of these motions when the use of the medicine was suspended. I may be allowed briefly to allude to two or three illustrative cases.

A lady came under my care in her eighth pregnancy. Her seven former pregnancies had ended with the death of the fœtus and its premature expulsion. In five of them she had been under the care of eminent physicians in this country; in two of them she had gone to London and placed herself under the charge of Sir Charles Locock. Instead of confining her to her couch or her bed, as had been done before, I directed her to be out in the open air every day that the weather would permit; I carefully watched and managed the general functions of the system; and I put her on the constant use of the chlorate of potash. Without any suggestive inquiry from me, she frequently remarked the feebleness or absence of the fœtal motions if she forgot to take her medicine. During her pregnancy, taking at the rate of a drachm a day, she took over twenty ounces of the chlorate. At full term, with the assistance of Dr. Foster Swift, I delivered her by forceps, of a strong, large, and healthy boy.

Another lady had miscarried four times. Her general health was very feeble during her pregnancy, but she

would rapidly recover after the expulsion of the fœtus. In her fifth pregnancy she came under my charge, and commenced early the use of the chlorate of potash. At about the eighth month of gestation, she gave birth to a small, feeble child. There was, to a remarkable degree, fatty degeneration of the placenta and the umbilical cord. On the second day after birth, umbilical hæmorrhage occurred, which was followed by umbilical phlebitis and trismus. The child recovered—the only instance of recovery that has occurred, under such circumstances, in my experience,—and is now fourteen months old, well grown, and healthy.

Another lady, who had miscarried three times, went through her fourth pregnancy, and gave birth to a living child, taking the chlorate daily during the last six months of gestation. She was a lady of great intelligence, who liked to understand the principle on which she was being treated. In her fifth pregnancy she had removed to another city, and was under the charge of an eminent physician, who told her that the chlorate could have had no influence in carrying her through her former pregnancy, because it was excreted by the urine in an unchanged state. She expelled a dead fœtus at the end of the fifth month. The same physician gave her the chlorate in her sixth pregnancy, which terminated with the birth of a living child.

I might mention many other striking cases, but the above are sufficient for illustration. Now, whether the chemical views which suggested the use of this article be sound or fallacious, I cannot resist the logic of such clinical facts.

The prophylaxis of constitutional syphilis, as a cause of abortion, is so generally understood that I need not occupy any time at present in its discussion. But its existence as a cause is frequently overlooked, from the absence of all manifest symptoms in the system of either parent. The husband may possess so healthy and vigorous a constitution as not to be affected by the small amount of latent syphilis which he retains as the result of some antecedent conflict with Venus in which he has been worsted. But he poisons the ovum in its conception, and the maternal system is contaminated by the ovum, and the poison is accumulated by repeated pregnancies resulting in abortions, until syphilitic cachexia may be developed in the mother.

In regard to diseases of the uterus as causes of abortion, I will only say that many of them may be successfully treated during pregnancy; and this is, of course, the only effective prophylaxis. I can offer no suggestions concerning the preventive treatment of abortion when it is threatened on account of the diseases of the ovum and placenta.

Treatment.—As to the treatment of abortion, I will endeavor to be as brief and concise as possible, omitting everything where the details of practice have been settled and accepted by the profession. The first point to determine is whether the abortion is inevitable. When it is threatened from any one of the accidental causes, it is always safe to assume that it may be averted if the cervix retains its normal length, shape, and thickness; if the ovum cannot be felt through the cervix; and if the liquor amnii has not escaped,—no matter how great the hæmorrhage may have been. I have repeatedly known women to give birth to a living child at full term, after such profuse hæmorrhages in the early months of pregnancy as, it would seem, must inevitably result in the death of the fœtus.

To prevent the abortion, the indications are to arrest the uterine contractions and to stop the hæmorrhage. Absolute repose and perfect tranquility of body and mind are the first requisites to accomplish this end, and next I rely upon opium. If the uterine contractions are effectively stopped, the hæmorrhage ordinarily does not long continue. I generally prefer to administer the opium through the rectum, either in enemata (laudanum in cold starch) or in suppositories, because the effect is produced more speedily, and it is less liable to cause sickness and vomiting. I have not much faith in the efficacy of astringents in arresting the hæmorrhage of abortion; but such agents as the gallic acid or the acetate of lead are recommended by most authorities, and may prove serviceable. The former should be given in frequently repeated doses of ten grains, and the latter in five-grain doses combined with opium. *The tampon should never be used where there is any hope of preventing the abortion;* as the retention of the coagula within the cavity of the uterus, and the pressure of the tampon, have a tendency to excite uterine contraction and detach the ovum still more.

If the abortion is inevitable, as proved by the soft, patulous, distended os; the protrusion of some portion of the ovum in the cervix; the escape of the liquor amnii; or hæmorrhage, when we have all the concurrent signs of the previous death of the fœtus,—then the indication is to effect the removal of the entire ovum as speedily as possible. Under these circumstances opium should never be given, as its effect would be to retard the expulsion. Neither do I regard the ergot as a safe or efficient agent for this purpose. In the early months of pregnancy it is not always effective in exciting the uterine contractions; and when it does this, the contractions are sometimes partial and irregular. I have seen the os, which had been soft and partially dilated, rapidly closed by the influence of the ergotic contraction; and thus the difficulties in the case have been greatly increased. If the hæmorrhage is at all profuse, the tampon should at once be used. In these cases I think the tampon should always be applied *in the canal of the cervix*, as this is much more effective than a vaginal tampon. The only tampon which I use in the early months of pregnancy—that is, before the third—is the compressed sponge. Those who have not acquired the dexterity which experience only gives, should introduce it through the speculum, as they will thus be more certain of applying it effectively, and it demands but little more time or trouble. The tampon not only saves the patient's strength, by preventing the loss of blood, but it dilates the cervix, excites the uterine contractions, and favors the entire detachment of the ovum. At this early period, the uterus is not sufficiently developed to permit any danger from the accumulation of blood within its cavity. After introducing the tampon, I am accustomed to direct an enema of turpentine to be thrown into the rectum, which acts not only as an effective oxytocic, but also as a hæmostatic. Very frequently the entire ovum and the tampon are expelled together, and the hæmorrhage ceases. Or if this does not follow, the os is so dilated that one or two fingers may be introduced and the remaining portion of the ovum be detached and removed. The patient is not safe while the smallest part of the placenta or membranes remains, and the physician should not leave her unless the cervix is effectively tamponed. Some have recommended the introduction of instruments, such as placental hooks and forceps, for the removal of retained portions of the ovum; but for myself I must say that I regard this method as dangerous, and I have never found it necessary. It is also condemned by most of the highest obstetric authorities. When the abortion occurs in the more advanced months of pregnancy, the tampons which I prefer are Barnes's dilators; they are the most effective, as well as the most convenient, agents for this purpose. In these advanced cases, somo-

times great trouble arises from adhesion and retention of the placenta; and the cord is too small and too frail to permit of traction by it. It is unnecessary to remove the placenta so soon after the expulsion of the fœtus as in labor at full term, but not more than six or eight hours should be allowed to pass before its removal. I commonly place the patient under chloroform before attempting the extraction, and then proceed by the usual method.

Progress of Medical Science.

Muscular Rheumatism.—In the *Lancet* of March 14, considerable space is devoted to the management in the various London hospitals of the painful and often troublesome affection commonly described as muscular rheumatism. This complaint resembles rheumatism only in being attended by pain, generally consequent on exposure to cold and damp. In St. Mary's Hospital it is treated by stimulants and anodyne liniments, accompanied by vigorous rubbing and kneading of the muscles affected. In the Middlesex Hospital, the management is similar, and alkalies and purgatives are believed to do more harm than good. Belladonna plasters are used sometimes with advantage, together with rest and abundant food. In the Charing-Cross Hospital, Dr. Headland administers bicarbonate of potash freely, and has also much faith in minute doses of belladonna or atropia, but never gives iodide of potassium. Warm baths and vapor baths are found of service, with purgatives of aloes, turpentine, or croton oil. As a last resource, Dr. Headland blisters and sprinkles morphia over the raw surface. In the King's College Hospital, counter-irritation and diaphoretics constitute the principal treatment. Iodide of potassium is thought favorably of, but the alkalies are not approved. Tonics of iron are found of service in some cases. In St. Thomas's Hospital, saline cathartics, followed by diaphoretics, are found serviceable, aided in severe cases by colchicum, with potash or iodide of potassium. Where there is pleurodynia, quinine and henbane are generally given, in conjunction with stimulating local applications.

Odontomes.—M. Broca, the distinguished surgeon and physiologist, has just elucidated the pathology of the follicles of the teeth, the normal evolution of which had already been described in works on histology. M. Broca does not think that the deviations from this normal evolution give rise to peculiar products, but only to tumors made up of the general hypertrophy of the dental substance. These tumors, to which the author gives the name of "odontomes," present two forms: some always remain in the state of more or less soft tumors; whilst others, either wholly or in part, assume the hardness of teeth, producing shapeless, irregular dental masses, sometimes growing to a very large size. In fact, any tumor formed in one or more of the substances entering into the formation of a tooth, is due to the dentification of a soft tumor of the same form and volume which originally contained only hypertrophied odontogenic tissues. This hypertrophied tumor stands in the same connexion, with regard to the dentified tumor, as the normal dental bulb does to the healthy tooth.—*Lancet.*

Development of Parasitic Forms.—Dr. J. H. Salisbury contributes a paper to the *Amer. Journal Med. Science*, "On the parasitic forms developed in parent epithelial cells of the urinary and genital organs, and in their secretions,"—with thirty-four illustrations. He states that the parent epithelial cells, lining the genital and urinary organs, under certain conditions, afford a fertile soil for the development and propagation of some low cryptogamic forms. The following are the names of some of these *cryptogamic parasites.*

Penicillium pruriosum.—This variety is sometimes found in and on the epithelium of the womb, bladder, ureter, kidneys, and urethra, and occasionally in and on that of the vulva and prepuce. When existing to any extent in the cells of the vulva and prepuce it produces severe pruritus. In the latter locality it becomes the cause of one form of balinitis.

Penicillium glaucum.—This is occasionally found in the urinary apparatus. But he found it mainly in patients recovering from long continued attacks of miasmatic fevers.

Torulus aggregatus.—This vegetation is developed in and on the epithelium of the womb, producing a copious discharge of a thick, ropy mucus.

Torulus catarrhalis.—The spores of this plant are found in the mucous and epithelial cells of the womb, producing irritation, catarrh, and gradual enlargement of the organ.

Trichina cystica—(An animal parasite). This is a small species of trichina, which was found in the human bladder, in persons who had rheumatism.

Simple Form of Ophthalmoscope.—Dr. Wm. Warren Greene (*Boston Med. and Surg. Journal*) improvises a simple form of ophthalmoscope in a short time. He goes into a tin shop, and with a punch about the size of the ophthalmoscope mirror he cuts a circular piece of polished tin. The instrument is completed by making, with another small punch, the little perforation in the centre. With such an instrument, and the addition of a pocket lens, the vessels, optic papilla, macula lutea, &c., are clearly defined.

Elephantiasis.—A case of Arabian elephantiasis was reported to the Royal Medical and Surgical Society, on March 25th, in which a cure was effected by compression of the femoral artery, and the application of simple and starched bandages.

Asphyxia from Explosion of Gunpowder.—An interesting paper on asphyxia, occasioned by gases resulting from burnt gunpowder, is given in *Gaz. Med. de Lisbon.* From this it appears, that in a mine or quarry, where an accidental explosion of gunpowder occurred, asphyxia was instantaneous in those who breathed the sulphurous air, owing doubtless to entire absence (or displacement) of oxygen.—*Gazeta Medica da Bahia.*

Mechanical Obstruction of the Bowels.—An extraordinary case of mechanical obstruction of the bowels is recorded in the *Lancet*, by Dr. Jeffreys, of Chesterfield, England. The patient was troubled for eight days with a mysterious tumor in the left iliac region, which proved to be due to a plug of wood, five inches in length, five in circumference at one end, and four and a half at the other. A large nail projected two inches, making the entire length of the object seven inches. This plug had been introduced per anum, by the man, to cure an attack of diarrhœa. He recovered, and went to work two days after the plug was removed.

Epilepsy.—M. Demeaux, in a paper read at the Academy of Sciences, adduces a new series of cases to prove that when conception takes place during drunkenness it is a cause of epilepsy, and of other affections which take their source in the nervous centres. To the same course he attributes a great number of monstrosities, of vicious conformations, and of congenital lesions of the

nervous centres, etc., which prevented the fœtus from attaining its full development, or from living beyond a few weeks or a few months.—*Paris Correspondent, Lancet.*

Retro-Uterine Hematocele.—Dr. T. F. Da Silva Luiz, physician to the Hospital da Caridade, in the *Gazeta Medica da Bahia* (30th November, 1867), records a case, happening in his practice, of *retro-uterine hæmatocele*. There was spontaneous rupture by the vagina, suppuration of the cyst, and final cure. The case occurred in a young woman, 22 years old, unmarried. The Doctor's treatment consisted in tonic and emollient injections.

This paper is not a mere clinical report, but is one of the most exhaustive articles on the above subject we have ever been privileged to examine.

Was the Nerve Regenerated?—Two interesting cases have recently occurred at Strasbourg. In one, the details of which are strikingly similar to the case lately observed in Professor Richet's ward, we read that MM. Bœckel and Hergott have had under their care a little boy, aged five years, who fell upon a shoemaker's knife, and received such a severe cut at the wrist that the radial artery, the median nerve, and the tendons of the various flexors, were completely severed. A suture was applied to the flexor of the thumb and the superficial flexor of the fingers, but the median nerve was left untouched, as well as the other muscles; only the hand was bent upon the forearm, and maintained in that position. Complete and immediate cure was the very fortunate result: motility and sensibility were completely recovered. M. Chereau, whose able "Chronique Dégarterementale" in the last number of *L'Union Medicale* furnishes me with the above details, concludes his notice of the case with the following points of interrogation: Was the median nerve regenerated? or have the severed extremities remained apart? and in the latter case has the nervous fluid continued to circulate through the capricious meanderings of anastomoses?

With regard to the other case, I cannot do better than translate M. Chereau's graphic description: "A girl of eighteen, an epileptic sufferer, seeks to enter a chamber; the key placed in the lock, within the chamber, projects forwards nearly its whole length. With the left arm she draws the door towards her, half opens it, is taken with a fit, and falls with all her weight, the right eye striking the handle of the key. She is immediately taken up: a little blood is seen to ooze between the eyelids. The whole of the right eye is unimpaired, having only its muscles divided at a few millimetres from their ocular insertions, and the optic nerve, torn away evenly at the ocular surface, is found in the ring of the key handle, hanging by the conjunctiva."—*Paris Correspondent, Lancet.*

Subcutaneous Injections of Quinia.—In No. 31 of the *Gazeta Medica da Bahia*, we find one of the most complete articles, embracing everything of importance in a nut-shell, on subcutaneous injections of sulphate of quinia. It is from the pen of Dr. Pires Caldas, Surgeon of the Hospital da Caridade. Among the authorities quoted are the following:

Dr. Bulkley, N. Y.; Dr. Chassaud, Smyrna; Dr. Goudas, Dr. T. M. Craith, M. W. T. Morre, of Bombay; Arnould, Maury (U. S. Army), Elenbourg, Erhenmeyer, etc., etc.

The learned gentleman endorses the treatment in intermittent and other fevers.

Granular Lids.—Mr. Hutchinson, of the Ophthalmic Hospital, Moorfields (*Medical Times and Gazette*, Dec. 21, '67), comments upon the rarity of this affection. Most of the severe cases are either in *Irish* persons or in those who have lived in *Egypt, Australia*, etc.

Mr. Hutchinson applies rather strong solutions of nitrate of silver (twenty grains to the ounce), which appears to be successful. He frequently uses in addition two grains of the chloride of zinc to the ounce.

Treatment of Opacities of the Cornea.—Dr. Raphael Castorani presented a paper to the Academy of Sciences, September 23, 1867 (*Gazette Medicale de Paris*, Oct. 26, '67), from which he draws the following conclusions: 1st. The cornea reproduces itself. 2d. Stimulants cure wounds and ulcers of the cornea without opacity, which also modify the secretion of the conjunctiva, and at the same time promote the reproduction of the cornea. 3d. Opacities of the cornea must be transformed into wounds or ulcers and treated like the latter, in order to cure them. 4th. By a collyrium of iodide of potassium, and by the means of an operation, opacities may be transformed into wounds or ulcers. 5th. The action of the saturated solution of iodide of potassium appears to be caustic, dissolvent, and astringent.

Treatment of Prolapsed Funis.—Dr. K. F. J. Birnbaum (*Mon. f. Geburtsk*, Oct., '67) gives an historical *résumé* of the plan of replacing the cord by putting the woman in the knee-elbow position. He quotes Deventer, 1701; John Mowbray, 1724; Henry Bracken, 1737; and others, as having recommended this practice; and more lately V. Ritgen (1848). He says when a loop of funis is still high in the cervical canal, and the cervix scarcely admits the examining finger, it may be that the knee and elbow position is useful; but when the loop has once passed through the os uteri, whether head, trunk, or foot present, it will be vain to expect any good from this position. In addition to the knee-elbow or side position to replace the cord or to extract the child, he remembers no case where manual aid was not also necessary.

Contagiousness of Phthisis.—M. Fonssagrives, Professor of Hygiene at the faculty of Montpellier, gives excellent reasons, in an article published in the *Gazette Hebdomadaire*, for considering phthisis somewhat contagious. He cites several striking examples of the disease being brought into families by new-comers, and dwells especially on the dangers of conjugal intimacy. The author thinks that special hospitals for consumption, as existing in England, tend to frighten patients, the latter being convinced of the incurability of the disease.—*Lancet.*

Intra-Uterine Injections.—M. Avrard (of La Rochelle, France) lately went to Paris in order to read a paper before the Academy of Medicine on these injections. He uses a double-current apparatus, and thus obviates the objection that fluids after injection may remain stagnant in the uterus.

Treatment of Pertussis.—W. D. Martin, M.D., of Mina, Chautauque County, N. Y. (*Am. Journal Med. Science*), being favorably impressed by the *modus operandi* of the following remedy, used at the St. Thomas Hospital, London, made a fair trial of it when the epidemic prevailed in his town:—The formula used is a solution of ammon. acet. f ℥ ss., spt. nit. æther f ℥ j., chloric æther f ℥ ss., oxymel scillæ f ℥ iss., syr. tolu f ℥ ij., and aquæ q. s. for f ℥ iv., of which f ℥ ij every six hours were administered to a child of four years of age, and a liniment composed of chloroform one part, and olive oil two parts, rubbed on the chest, over the scapular region, and on the back of the neck, morning and evening. Towards convalescence, small doses of fluid

extract of hyoscyamus or liq. morph. sulph. were employed, in combination, instead of chloric ether, and no notable cough lingered in any case. He states in conclusion, that in the use of chloric ether, the effect has been to modify the cough gradually and surely.

Chloroform in Intermittent Fever.—Dr. D. Scott, of Bellefontaine, Iowa (*Chicago Med. Journal*, Feb. 1868), has given chloroform in intermittent fever, as first recommended by Dr. E. McClellan, and has carefully noted its effects in fifty cases, with the following results:—In twenty cases, after the administration of one fluid drachm each, the chill was immediately arrested, with the exception of one case, in which the above dose was repeated in one hour; in eleven of the above cases the febrile stage was probably abridged; of the remaining cases the fever ran about as usual, all, with few exceptions, terminating in profuse perspiration; in eight of the cases the paroxysm returned on the succeeding day, and nine on the second day, and three escaped, but were subsequently attacked in from seven to twenty days; of the remaining cases no reliance was placed in the curative properties of the chloroform, but it was followed by large doses of sulph. quinine as soon as the sweating stage was established. Dr. S. states in conclusion, that chloroform is a valuable and safe hypnotic in the dose of one fluid drachm, in the cold stage of intermittent fever, and never fails to arrest the chill, the patient falling into a refreshing slumber.

Excision of the Entire Clavicle.—Dr. W. W. Dawson, Surgeon to the Commercial Hospital, Cincinnati, Ohio, relates (*Cinn. Lancet and Observer*, Jan. 1868) a case of a man twenty years of age, the whole of whose right clavicle was removed. An incision was made by Dr. D. over and down to the bone, and it excised. A small point of caries was found on the outer surface of the first rib, which was removed with a chisel. The wound healed slowly, and forty-six days after the operation had entirely closed.

A New Alloy of Aluminum, consisting of one-third silver and two-thirds of aluminum, has been introduced into the arts. It is said to be harder than silver, but more easily engraved.

Sore Gums or Throat.—Refined saltpetre is very useful in the treatment of these affections. Take a bit as big as a pea, and let it slowly dissolve in the mouth, and from time to time repeat this, and great relief will be experienced.

Colica Pictonum—Alcohol its Exciting Cause.—Amos Sawyer, M.D., Hillsboro', Ill. (*St. Louis Med. Reporter*), has directed his attention to this subject, and from interviews with English and American painters at different times, he arrives at the following conclusions:—That he has yet to meet with a painter who has suffered with this affection, who has not used intoxicating liquors, more or less. Cases of this affection are more numerous among the workmen in England than in this country, and he suggests that it may be attributed to intoxicating beverages, but particularly *gin*, which they think acts as a preventive. Although a strictly temperate man is equally susceptible to lead poison, only he who indulges in intoxicating beverages is in danger of, or succumbs to lead colic. It has been stated upon good authority, that the extensor muscles of the hand and forearm are usually first attacked. This has not been his experience; for he has found that the affection is about equally divided between the muscles of the *anterior femoral* region and the extensor muscles of the forearm.

Iodoform, for Cancer of Uterus, etc.—Mr. Demarquay (*Bull. Gen. de Thérap.*) has employed Iodoform as a local application. He has applied it in the form of suppository with cocoa butter, which is to be placed in the rectum in the case of diseases of the bladder or prostate, or in the vagina, in contact with the diseased mass, in the case of carcinoma or epithelioma of the uterus. A plug of cotton, placed in the entrance of the vagina, will prevent the substance from running out.

Iodoform, in suitable conditions, is very useful, being very superior to opium as a local sedative, the iodine it contains producing its constitutional effects, while the organic functions, and especially the digestive, are undisturbed.

Dr. Richardson's Styptic Colloid.—Dr. John Lowe, Surgeon to the West Norfolk and Lynn Hospital, has published (*Medical Times and Gazette*, Jan. 25, '68) his experiences with this application. He contends that in old chronic ulcers, the odor is at once destroyed, and healthy granulations established. It is most serviceable in removing the odor and mitigating the pain, in cancer of the penis. In conclusion, he states that since using the tincture of iodine to the surface of the wound and styptic colloid externally, there has not been a single case of either erysipelas or pyæmia. The colloid is an expensive application, but the gain from the rapid cure largely overbalances the original outlay, and owing to the absence of septicæmia, there is a greatly reduced need of stimulants and extras.

Infusoria in the Air expired in Hooping-Cough.—M. Poulet (*Gaz. Hebdom. de Med. et de Chirurg.*) states that an epidemic of hooping-cough in the place where he resides afforded him the opportunity of examining the breath of many children affected with the disease, and that he found in the vapor collected, on microscopical examination, a world of minute infusoria, which were in all cases identical. The most numerous, as well as the most minute, belonged to a species described by some under the name of *Monas termo*; by others, *Bacterium termo*. He concludes that hooping-cough, by the alterations of the expired air, belongs to the infectious diseases, among which he has already studied under the same point of view, small-pox, scarlatina, and typhoid fever.

Zymosis—A new Antiseptic Salt.—Dr. Sansom exhibited to the Medical Society of London (*Medical Times and Gazette*, Feb. 22, '68), specimens of compound salts, the sulpho-carbolates, which are to be given internally; they are composed of the sulphites and carbolic acid, which combine the chemical and vital qualities of the former, and the powerful effects of the latter, on organized materials.

Extirpation of a Hypertrophied Spleen.—Mr. E. Koeberlé, September 21, 1867 (*Gazette Hebdom.*), extirpated an enormous spleen, weighing seventeen pounds and a half, from a female forty-two years of age, of good constitution. There were strong adhesions between the upper portion of the organ and the diaphragm, which had to be separated before the organ could be removed; numerous small vessels were ruptured; it was impossible to control the hæmorrhage, and the patient succumbed.

M. Koeberlé gives a *resumé* of the six operations of this kind previously performed, viz.: by Fantoni, Zacarelli, Quittenbaum, Kuchler, Spencer Wells, and Péan, in three of which the patients survived the operation, and three died.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, June 1, 1868.

EYE AND EAR HOSPITALS AGAIN.

In noticing our recent editorial review of some few reports of, and papers relating to, Eye and Ear Hospitals, the *Medical News and Library* complains that "Curiously enough, what has been done in Philadelphia in this respect, has been ignored."

Our distinguished contemporary is somewhat in error in supposing that our review was intended to furnish an historical notice of all the institutions for the especial treatment of the Diseases of the Eye and Ear that have been established in this country. We simply designed to make the reports at hand the basis for some remarks on such institutions, and the necessity for the establishment of similar ones in all our cities.

We however cheerfully give place to the valuable information afforded us by the *News and Library:* "The second Eye and Ear Infirmary was established in Philadelphia, under the title of the Pennsylvania Infirmary for Diseases of the Eye and Ear, in February, 1822. Drs. Geo. B. Wood, Isaac Hays, Robert E. Griffith, and John Bell."

In 1834, it was superseded by the "Wills Hospital, for the Blind and Lame." "As regards size, accommodation, advantageous situation, and pecuniary means, we think we are justified in saying, that this hospital is not, up to this day, second to any other ophthalmic hospital in this country. * * * Several dispensaries for the treatment of diseases of the eye and ear have subsequently been opened in Philadelphia."

The *News* thus claims that the Wills Hospital was the second Eye and Ear Hospital established in the United States. Inasmuch as it superseded the *second*, and was not itself the second, we hardly think our Boston friends will allow this claim.

In connection with the interesting paper on the diseases of Syria, read before the Academy of Medicine, and which is to be found in our columns of this week, we desire to call the attention of the profession to the fact, that a Medical College has been organized in the city of Beirut.

From the circular issued by the corporators of the University, of which this new college forms a department, we extract the following facts:

The faculty consists of three medical men, C. V. A. Van Dyck, M.D., John Wortabet, M.D., and George E. Post, M.D.

The student is required to pass a preliminary examination. Truly, Syria is teaching America. In view of the persistence with which our medical colleges in the United States refuse to require any preliminary knowledge of their matriculants, this is a fact which should cause us to blush.

A knowledge of grammar, arithmetic, geography, history, and natural philosophy, and of one of either of the following languages, viz., English, French, German, or Italian, together with evidence of good moral character, comprise these preliminary requirements. The course of study requires *four* years; embracing the studies usual to our colleges. The students are divided into classes, however; and we do not meet with the stupid system, that only obtains in our country, of huddling first, second, and third year men on one common bench to listen to lectures, intended for all, but perfectly adapted to none.

Any student who may have studied with a qualified physician two or more years, may have his course of study reduced to three years.

Daily or weekly examinations are held by the Professors. There are also examinations at the close of each session, of which there are two, as well as clinical examinations, and a final one for the degree of M.D.

The student may, if he chooses, divide his final examination, so as to pass the first part of his studies at the middle of the course, or he may, if he chooses, pass all at the end of the whole term.

It is intended to raise a sum of $30,000, with which to endow the college, and an English gentleman, Mr. John Heugh, has agreed to give half of this sum, provided the remainder is raised in America.

We have no doubt the cause of humanity and medical science will be advanced by this new enterprise. We are glad that our Syrian friends have copied the details of the college curriculum from some other than that prevalent in the United States.

We learn from the *Gazeta Medica da Bahia*, that the tribunal of Cassação has condemned a pharmaceutist of Beauquency, Luiz Carlos Mullot, to pay a fine of 500 francs, and legal expenses, for selling, without a prescription, a purgative of sulphate of potassa—senna, and manna. How would this suit many of *our* independent apothecaries, who sneer at physicians, and who defiantly sell strychnia, arsenic, belladonna, aconite, potass. bromide, laudanum, etc., in quantities to suit purchasers?

By the late mails we have received a small pamphlet, which is a Portuguese translation of the Code of Medi-

cal Ethics adopted by the American Medical Association. The code has met with much favor with our confreres in Brazil; and whoever had charge of the translation certainly performed the work most thoroughly.

If we mistake not, the code has been adopted by the faculty in Bahia.

Reviews and Notices of Books.

Felix von Niemeyer's Clinical Lectures on Pulmonary Phthisis. Translated by permission of the author, from the second German edition, by J. L. Parke. New York: Morehead, Simpson & Bond. 1868. 8vo, pp. 116.

In this work, which is by no means too voluminous for the perusal of the general practitioner, Von Niemeyer sets forth, clearly and tersely, his views with reference to the etiology, symptomatology, and treatment of phthisis. He denies, boldly and emphatically, Laennec's dogma that "every phthisis of the lungs is due to a new or morbid production;" Lebert's statement "that the popular saying that a neglected catarrh leads to consumption, is false;" and Laennec's view that "the tuberculous affection, like cancerous affections, is absolutely neural." Our author holds that every case, which, since the time of Laennec, has been regarded as *infiltrated tuberculosis* of the lungs, is, in reality, the product of some form of pneumonia; and the catarrhal and interstitial, or chronic, are the two varieties of inflammation of the lungs which most frequently terminate in phthisis. He admits that in the progress of a case of phthisis, tuberculosis not infrequently supervenes and hastens the death of the patient; and in this connection, calls attention to a passage of Laennec, in which that author states that "it is very common to find an excavation and some crude tubercles, already far advanced, in the apices of the lungs, and the rest of the organs, still expirating and healthy elsewhere, but swelled with an innumerable multitude of very small, semi-transparent miliary tubercles, scarcely any one of which presents as yet a central yellow spot." Laennec regarded this as a *secondary eruption* of tubercles in a lung in which those tubercles first deposited had already undergone softening and left a cavern. Von Niemeyer admits the fact, and the great frequency, of this condition of the lungs; but contends that the cavity and caseous infiltration in the apex of the lung is the product of a chronic inflammation, while the tuberculosis is a complication caused by the original disease, but not a necessary consequence of it. He is of the opinion "that the greatest danger for most phthisical persons is that they may become tuberculous," and says that the most reliable points on which to rest a diagnosis of this complication are, in young persons, the prominence of cerebral symptoms, due to tubercular meningitis; and in older persons, symptoms referable to the larynx and intestines.

The symptomatology of the different varieties of pulmonary phthisis is very fully and ably discussed. As to treatment, both prophylactic and curative, great stress is laid on exercise in the open air in a climate which is dry and where the temperature is even. During the progress of a given case, perfect rest in bed, cataplasms, local abstraction of blood, a diet rich in fat, free and abundant use of grapes, and the use of an alkaline mineral spring water, are recommended at the proper period.

A review of so important and so condensed a work as this is necessarily unsatisfactory, and every physician should read the volume for himself.

The American Journal of Insanity. Utica, January, 1868.

Biennial Report of the Superintendent of the Insane Asylum of California. Sacramento, 1867.

Twenty-fifth Report of the Managers of the State Lunatic Asylum. 1867. Utica.

Provision for the Insane Poor of the State of New York. By George Cook. 1866.

Twelfth Annual Report of the Trustees of the State Lunatic Hospital at Northampton, Mass. 1867.

Fourth Annual Report of the Directors and Superintendent of the West Virginia Hospital for the Insane. 1867.

The "*American Journal of Insanity*" has now reached its 24th volume. The first number was issued in July, 1844, by the late Dr. Brigham, its originator, at that time Superintendent of the New York State Lunatic Asylum, at Utica. Its object was not to benefit professional readers alone, but also to disseminate more accurate views of insanity among the people; both of which objects it has accomplished to a very satisfactory degree. More recently, it has assumed a more purely scientific and professional character, and may now be justly regarded as one of the leading journals on the important psychological subjects to which its pages are devoted. It is now under the able editorship of Dr. John P. Gray and the officers of the asylum, at Utica.

The Report of the Superintendent of the Insane Asylum of California, contains some very interesting facts. This institution is located at Stockton, and when completed according to the original plans, will accommodate some 800 patients. At present there are 769 patients, natives of almost every country in the world. The report states that many of the patients are proper subjects for an almshouse, rather than an insane asylum. The Directors recommend that the Legislature pass a County Poor House Law, making it obligatory on each county in the State to take care of its own insane paupers—thus securing, by legal enactment, the very evils which the other States are trying to get rid of.

The causes of insanity, as alleged in the report, rank as follows in efficiency: Masturbation, ill health, intemperance, religious excitements, perplexities in business, domestic unhappiness, puerperal state, etc. Frequent conflicts regarding land titles is stated to be a frequent cause; so that the increase of this class in California, in proportion to the population, is more rapid than in any of the other States, or in any part of Europe.

The State Lunatic Asylum, at Utica, in charge of Dr. Gray, is quietly pursuing the even tenor of its usefulness. We could wish it could be disencumbered of a large mass of chronic imbecile cases, which now crowd its wards, and their places supplied by acute curable cases, thus making the institution a *Hospital for cure*; not an asylum for an incurable class, who could be supported elsewhere at a moiety of the present expense, with equal comfort, and more favorable influences, as regard both health of body and mind. We know no good reason why labor, both agricultural and mechanic, should not be prescribed and enforced, if necessary, as a part of the hygienic and curative treatment, just as medicine is prescribed and given. Of the two, employment is much more useful and efficacious.

Provision for the Insane Poor of the State of New

York, by George Cook, of Brigham Hall, Canandaigua, is a very able pamphlet on this important subject. It was read before the Association of Medical Superintendents of American Institutions for the Insane, at the annual meeting, held at Washington, D. C., 1866. It gives a very full history of past lunacy legislation in the State; and then proceeds to speak of the new Willard asylum, now erecting at Ovid, for the special purpose of providing suitable accommodations for the chronic, incurable cases now in almshouses and jails. The plan of building is stated to comprise a hospital structure for the acute, the excited, and grossly demented cases, with sections of colleges, plain and inexpensive in their construction, for those whose condition is such as to permit of their being employed in agricultural, horticultural, or other industrial pursuits, with benefit to themselves and the asylum. The writer believes that the plan of building here indicated will materially reduce the costly construction, allow of a system of classification and general management which will considerably diminish the cost of maintenance; while, at the same time, the health and happiness of the patients will be in the highest degree promoted. The plan has another admirable feature, that of expansion in such a manner as to obviate the objections to a large establishment under one roof.

Dr. C. shows, that the laws of the State of New York have dug an almost impassable gulf between the *curable* and *incurable* cases; on the one side, all the care, comforts, and appliances of a modern hospital for the insane; on the other, all the neglect, confinement, and filth of the poor-house system; and that this separation has been made by the laws of its administrators. The establishment of the Willard Asylum is the very first attempt made in our State to equalize the lot of both; and yet it has been resisted by some, as if it was destined to open a Pandora's box of evils to flood the whole country. It is a step in advance of any heretofore made in any of the States, and we believe it will not only be crowned with signal success, but eventually be generally adopted.

Dr. Earl's annual report regarding the Massachusetts Insane Hospital at Northampton, like everything else from his pen, displays the hand of a master. He expresses the opinion that insanity, at the present time, whatsoever it might have been in the past, is a disease which has its origin in debility, or an exhaustion of brain-power and nervous energy. Hence stimulants and tonics are necessary to a large extent, in its treatment. Being often accompanied by excitement and loss of sleep, calmants, antispasmodics and soporifics, are of marked utility. In its acute forms the *liver* is very frequently, perhaps in a large majority of cases, implicated, requiring the use of cholagogues; alteratives also are often needed. To these, hygienic measures are most valuable adjuvants; sometimes, they will alone effect a cure.

In cases attended with epilepsy, Dr. E. speaks favorably of the *bromide of potassium*. "No case has been cured by it; but in several the epileptic paroxysm, formerly of almost daily occurrence, has been held for weeks, and in some, even months, in abeyance." Hence, in the early stages of the disease, this article may possess a curative power. Dr. Earl next takes up the subjects of "moral treatment" and "manual employment." Both he regards as of great importance, particularly the latter. He thinks all who are able to work should be employed daily. Three-fourths of all the labor performed on the premises is done by the patients, and when a patient begins to work, it is regarded as a very certain sign he will soon recover. The amount of the value of farm products exceeds $14,000 for the year, a fact which should not be disregarded by the superintendents of other asylums.

The Fourth Report of the West Virginia Hospital, made by Dr. R. Hills, its able Superintendent, formerly of the Central Ohio Asylum, states that there are but forty-five patients in the institution, only one story-wing of the building having been completed. Additional accommodations, by the extension of the building, will soon make room for about 180 more. The building was commenced before the division of the State, and seems to have been planned on a very large and expensive scale; we should judge altogether too expensive for the objects in view. All the signs of the times go to show, that the time is near when such very huge and costly buildings for the insane will be abandoned, and a more humble, less expensive, but equally comfortable style of structures be adopted. The rapid increase of this class, the best interests of humanity, and the very necessities of the case, will ere long bring about such a change. In the future, also, no doubt, many of the chronic cases will be boarded out at the expense of the State, as at Gheel, and in Scotland, at a very moderate cost; or, in many cases, a small allowance will be made to families, thus afflicted, to take care of the demented at their own homes.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Feb. 12, 1868.

Dr. Wm. B. Bibbins, President, in the Chair.

REPORT COMMITTEE ON MICROSCOPY.

Dr. Rogers, in behalf of the committee on microscopy, stated that the portion of diaphragm presented at the previous meeting by Dr. Finnell, had been examined only by himself, and had been found to be fatty. The specimen was lost immediately after, and the other members had no opportunity of confirming his views.

EXTIRPATION OF CLAVICLE.

He then exhibited the little patient from whom he had removed the scapula about two months since, for the purpose of showing the result of the operation. He premised the exhibition by rehearsing the history of the case, already familiar to the members.

The child was in a reasonably good condition, and the appearance of the side upon which the operation had been performed was such as might be expected. The rotundity of the shoulder was lost, and the arm hung down from the top of the thorax. Behind the shoulder there was a large vertical scar which marked the seat of the original incision. This wound had healed kindly, some portion of it uniting by first intention, the only complication to the process being a superficial slough over the distal extremity of the clavicle, caused by undue pressure of the bandages in the first dressing. This, however, subsequently healed. The motions of the limb were of course quite limited, the child could raise the hand with some effort so as to reach the eye of that side with the fingers, could swing the arm backwards to the extent of four or five inches from a perpendicular, and could bring it across the front of the chest and nearly touch the opposite shoulder. She could raise an ordinary blank book a short distance from the table, but when rotation of the arm was attempted by another she experienced considerable pain. A small nodule, evidently cancerous in character, had ap-

peared at the root of the neck of that side and was slowly progressing in growth.

He stated that this was the fifth operation of the sort on record. The first had been performed in 1855, by Langenbeck upon a boy twelve years old. In this instance two inches and a half of the clavicle were first removed, but it was found necessary, in consequence of the supervention of necrosis, to take away an inch more of the end of that bone. The next case was operated upon by Mr. Syme, in 1856. The patient was a female, eighty years of age. The clavicle was not removed in that case, and at the end of two months, the operation having succeeded and the promise of a useful arm being given, the patient died of some other disease. The third case was by Jones, of Jersey, in '58, performed for necrosis of the scapula. The patient was a young woman, sixteen years of age; and five months after the operation the patient could perform all the movements made by Dr. Rogers's patient. Dr. Jones removed three-quarters of an inch of the clavicle. The fourth case was by Hammer, of St. Louis. The operation was at first an explorative one, and terminated at the end of a few days in the removal of the scapula. The disease was cancer. A small portion of the end of the clavicle was likewise removed in this case. Dr. Rogers stated that his own case, as far as the relative size of the tumor was concerned, was unprecedented. Of course the cancerous element in the patient precluded the hope of an ultimate recovery, but still he believed that he had benefited her in so far as he had removed the diseased mass, and given her a comparatively useful limb.

Dr. Krackowizer thought that the cases reported by Dr. Rogers were not all that had been recorded, as he had lately heard that three others had been operated upon, two by the same French gentleman, a provincial surgeon. He believed that the cases were referred to in the Archives de l'Académie.

Dr. Rogers remarked that he had heard that one of these operations was by Jackson, of Miss., in 1848, and that Mr. Jones had referred to the two by a provincial surgeon, but that according to his statement they had not yet been placed upon record.

EXTIRPATION OF UTERUS AND OVARIES BY ABDOMINAL SECTION FOR FIBRO-PLASTIC TUMOR.

Dr. James B. Cutter, of Newark, presented a specimen of extirpated uterine tumor, with the following history:

Mary Jane Gentry, of Leeds, Yorkshire, England, first came under my notice in the month of September, 1867, in consultation with Dr. Coles of Newark. She was twenty-five years of age, married, mother of one child four years old, which is still living, and suffering with Pott's disease of the spine.

The mother has enjoyed good health up to within the last two years. First became conscious of the existence of a tumor two years since. The early history of its growth is unsatisfactory, she being unable to state whether it appeared first in the iliac region or not; was conscious, however, of its having first made its appearance below and steadily enlarged, and in Oct., 1866, she consulted Drs. S. Wilson and Scott, of Petersburgh. They pronounced it ovarian dropsy, and held out to her an operation as the only means of relief.

At the time of my seeing her, in connection with Dr. Coles, she was nearly as large as a woman at full term of pregnancy. She was suffering with peritonitis and vaginitis, and owing to the circumstance we were unable to make a very satisfactory examination. She was very much emaciated and run down in health, and anxious to have an operation performed, even if the chances of recovery were slight, as her suffering was almost intolerable.

It was with some difficulty that I made a vaginal examination, owing to the vaginitis. Still I succeeded in introducing the uterine sound to the depth of one inch and a half; this appeared to be the depth of the cavity. Her catamenial periods had been regular, and not unusually abundant at any time; no dysmenorrhœa. By external palpation the abdomen was discovered filled with a perfectly symmetrical mass, almost of a solid feel. The outline of the tumor was regular and uniform, the mass freely movable. Owing to the condition of the patient, the examination was not as satisfactory as I should have wished, and I was very guarded in my diagnosis; but stated to Dr. Coles, that my impression was that the tumor was uterine, but when her condition would allow it, and were she willing to take the risk, I should attempt its removal, prove what it might. I said I would prefer seeing her again in the course of a few weeks, before arriving at any definite conclusions.

I did not see or hear from her again, until January 25th, when she was sent to me by Dr. Warren of Newark, stating that she wished to place herself under my care for surgical treatment. I recognized her as the same patient I had seen with Dr. Coles some months previously. She was evidently in much better health than when I saw her before with Dr. C., and she expressed herself as having rapidly improved after her attack of peritonitis; that the tumor had increased in size and was still growing, and she wished its removal without delay.

On the following day, Dr. John F. Ward saw her with me, and the examination then made was of a more satisfactory character than the one made some months previously.

Owing to some peritoneal effusion it was with difficulty I could satisfy myself with regard to fluctuation. Were it a monocystic tumor, I took it that its walls must have been very dense, the wave being neither distinct nor obscure, evident enough to afford no doubt of the existence of fluid, but yet by no means strikingly decided. By the vagina the cervix was found perfectly normal, perhaps a little elongated, the uterus seemed to be in its true position, not at all elevated, but perhaps a little anteverted. I introduced the uterine sound without difficulty to the depth of about two inches and a half, and the impression was given after careful manipulation with both the sound and uterine probe, that this only was the extent of the uterine cavity. The uterus could not be moved by the sound, and no impression made upon it by manipulating the tumor externally. The diagnosis was therefore decided that the tumor was ovarian, monocystic or polycystic, with dense walls, or it might prove a semi-solid tumor of one of the ovaries.

Dr. Ward was also of the opinion that the disease was ovarian, but to be more positive in our opinion, it was decided that she should consult Drs. Emmet and Peaslee, of New York.

Accordingly, on the following day Dr. Emmet saw the patient with me, and he made a most careful examination. With some difficulty a gum elastic bougie was introduced into the uterine cavity to the depth of about five inches; this was afterwards confirmed by the introduction of the uterine probe. Dr. E. came to the conclusion that there was an ovarian tumor. The unusual depth of the uterus he accounted for by thinking that there must exist a fibrous tumor of the uterus in connection with ovarian disease. The whole history of the case and the general appearance of the patient seemed to bear him out in these conclusions. An operation he considered eminently advisable, were the pa-

tient's consent obtained after having explained the dangers attending such a formidable operation.

Dr. Peaslee next saw the patient, and after making a general and thorough examination, confirmed the conclusion of Drs. Emmet, Ward, and myself.

In regard to the character of the tumor, he thought it might prove a unilocular cyst with dense walls, or it might prove polycystic. He thought the tumor too symmetrical for fibrous diseases of the uterus, and he did not feel a tumor spreading out from the uterus, as would most likely be the case were the disease uterine. He found the uterus in its normal position, and thought the depth of the cavity not much more than normal. He believed it would turn out a much more favorable case for an operation than appearances would lead us to indicate. In regard to fluctuation in the tumor, he thought if we bore in mind the presence of ascites and struck the tumor more decidedly, the wave was perfectly decided and well marked; and being able to get it uniformly at all points, made him think the tumor was monocystic.

The full consent of the patient, husband, and friends having been obtained, after having laid before them the dangers probably attending such an operation, she was placed under the usual course of preparatory treatment.

February 1st.—The operation was performed in the presence of Drs. Newman and Goodrich, of New York, Dr. Wolf, of Plattsburgh, Drs. O'Gorman, Dougherty, Brumley, Clark, Osborn, Tuchnor, Woodhall, and Warms, of Newark. I am under obligations to them all for efficient aid and assistance throughout, and especially to my friend Dr. R. W. Clark, for his interest and attention in the after-treatment of the case.

An incision four inches in extent was made in the median line of the abdomen, cutting rapidly down to the peritoneum, which was divided upon a director the full length of the wound; about two quarts of serum were let out of the cavity of the abdomen, and the tumor brought into view. It was of a dark purple color, so entirely different from the white, shining, glistening appearance of ovarian tumors. I mistrusted its character at once, and, before puncturing it, took the precaution to encircle it with my hand, introduced into the cavity of the abdomen. I found it adherent to the abdominal walls anteriorly, on the left side, and to the omentum above; its pedicle was large, but it was impossible to say from what point it originated.

Owing to its vascular appearance, I took the precaution to use a small trocar, such as is employed to puncture the bladder through the rectum; this I pushed into the tumor to the depth of about a quarter of an inch; there being so much resistance, I hesitated to introduce it further, and withdrew it; upon its withdrawal there was a spirt of dark venous blood. I then seized the opening with the sharp-toothed bullet-forceps of Tiemann, passed beneath it and through the tumor an acupressure pin, tied stoutly behind it. This controlled the hæmorrhage completely. I then extended the incision with the scissors as far as the umbilicus, so as to get a fairer view of the tumor and its surroundings. In doing so, the point of the scissors, unintentionally, slightly wounded it; it bled very freely and had to be secured in the same manner as the former opening. One or two present insisted upon there being fluid within the tumor; that it might be drawn off, its size diminished, and that, in this way, it could be removed through the opening already made. This, I persistently refused to do, having had sufficient evidence that the tumor was very vascular.

Having ascertained that no adhesion existed below, in the pelvis, I decided to remove the tumor *en masse*, and therefore extended the incision, by means of the scissors, the whole length of the abdomen, using my fingers as a director. Upon attempting to separate the adhesion that existed between the tumor and the abdominal walls, the hæmorrhage was considerable. I therefore used the écraseur, notwithstanding which the hæmorrhage was so abundant that I was obliged to use the persulph. of iron.

I found the omental adhesion so extensive and its vessels so large, that I did not think it prudent to separate it without first applying a ligature to the part nearest the tumor, and a clamp beyond, dividing between.

The tumor was then lifted out of the cavity of the abdomen, and its origin discovered to be the fundus of the uterus, very extensive, being some nine or ten inches in circumference. Both ovaries were found enlarged and diseased, the broad ligaments containing a mass of ruin of immense size. I then with a great deal of difficulty passed a stout ligature around a portion sufficient to include the left broad ligament; this was tied very closely. The right was treated in like manner, thus leaving the third section (the uterus) yet unsecured. I then carried another stout ligature through about the same point through which the first was carried. This I brought over to the right side, ligaturing the uterus just above the internal os, as it was impossible to go lower on account of the limited space in which I had to manipulate.

The tumor was then cut away pretty well in advance of the ligatured portion; fortunately no hæmorrhage, not even oozing, took place from the stump, although it contained a number of very large vessels.

I then secured one small bleeding point in the abdominal walls with fine silk, cutting the ends close.

The omentum was then secured with a stout ligature, the clamp removed, and the stump subsequently secured in the wound. I now discovered that a portion of the omentum had become adherent to the under surface of the liver, from which there was a pretty free oozing. I secured the mass with a ligature of silk, and cut the ends close. After waiting some fifteen or twenty minutes, and finding that all oozing had ceased, I closed the wound with silver wire sutures. The ligatures upon the pedicle were left hanging out of the lower corner of the wound.

The patient came out nicely from under the influence of the æsthetic, the pulse becoming as full and as strong as before its administration. She recognized her husband and friends, and expressed great delight at the successful removal of the tumor.

The operation occupied two hours and a half, the patient having been under the influence of the anæsthetic three hours.

The patient complained of great thirst, and ice and ice water with whiskey, and beef tea, were administered in small quantities, often repeated.

Saw her again about nine o'clock in the evening. Pulse, 125, quite weak. Complained of some pain, thirst incessant and excessive; called for ice and ice-water constantly, having complained of some nausea. The whiskey and beef tea were discontinued, and an injection substituted, of beef tea, whiskey, and McMunn's elixir of opium. Left her comfortable.

Revisited her about 12½ o'clock midnight, in company with Dr. Clark, who kindly accompanied me on my former visit. Found her very restless, and somewhat delirious, requiring force to keep her upon her back. Pulse almost imperceptible; nausea persistent, injection repeated. Patient remained in this restless condition until two in the morning, when she died, having survived the operation ten hours.

Post-mortem was made in the presence of Doctors Woodhull, Clark, Titchnor, Dougherty, and Brumley, fourteen hours after death; rigor mortis well marked. Upon opening the cavity of the abdomen, about one quart of bloody fluid was found, with numerous clots, one very large one in the right hypochondriac region. The ligatured mass that was attached to the liver was covered with a dark clot, the haemorrhage having undoubtedly come from that point. There had been no haemorrhage from the pedicle or from the attachment to the abdominal walls. The tumor was sent to Prof. Flint, Jr., who made the following report:—

"I examined the tumor you sent to me yesterday with the following result:

"As you will see, I cut into the mass in several places. I found it of apparently nearly the same structure in the different parts which I examined. It felt hard and fibrous to the edge of the knife, and was traversed by numerous large sinuses. It was evidently very muscular.

"Upon microscopical examination of scrapings of the cut surface, I found nothing but blood, leucocytes, a few fibro-plastic nuclei, and a little detached fibrous structure. On tearing up a portion and examining it, I found hardly anything but inelastic fibrous structure.

"I examined a portion of the uterus which had been removed with the tumor, and its structure appeared normal.

"On scraping the cut surface of the liver, I found the liver cells, most of them filled with rather small globules of fat. In many of the cells the nuclei and nucleoli were distinct; but most of them had decidedly more fat than is normal, though more were filled with the large drops which are observed in specimens of excessively fatty liver.

"The ovaries and that portion of the uterus which was removed after death, I did not examine."

Dr. Peaslee wished to call attention to a fact in regard to diagnosis which he had heard for the first time that evening. He remarked that if Dr. Cutter had told him that the uterine sound had been passed to the distance of five inches, the question of the existence of a uterine tumor would have been cleared up in his mind at once. As the case was, being much pressed for time, he had only been able to pass in the instrument three inches. He also stated that he suggested to Dr. Cutter, when that gentleman left the office, that it would probably be advisable, on account of the thickness of the abdominal walls and the comparative good health of the patient, not to precipitate an operation.

Dr. Cutter remarked that he informed Dr. Peaslee of the result of Dr. Emmet's examination, but probably did not lay stress enough upon the facts to impress them upon the mind of his adviser.

Dr. Peaslee stated that he had made the same mistake fifteen years ago, in the case of a fibrous tumor springing from the uterus, where the depth of the uterine cavity was precisely normal in every respect. The organ could be moved apparently independently of the tumor, and yet, on cutting down, the same condition of things as exhibited in the specimen that evening, obtained. He did not know how to guard against such mistakes as the one referred to, excepting by declining in the first place to operate upon any case until the patient's health became reduced, and the walls became sufficiently thin to enable the tumor to be distinctly felt and thoroughly examined; and secondly, always tapping the case before the operation is decided upon.

Dr. Cutter believed it would have been very hazardous to have plunged a trocar into the tumor in question, as the patient would have died of haemorrhage as the result.

Dr. Peaslee thought that any one was warrantable in running such a risk, and if the case proved not to be ovarian, and the patient bled to death, the conscience of the operator would be calmed with the thought that it could not be helped.

METASTATIC ABSCESS OF LUNGS IN A YOUNG INFANT.

Dr. Lewis Smith exhibited a specimen of lung taken from a young infant, a fourth child, of apparently healthy parents. The two oldest children are alive and in good health; the third child died at the age of two years, having had a decidedly scrofulous aspect, and having suffered during a considerable part of its life from eczema of the head and face in a severe form.

The infant from whom the specimens were taken, was born on the 22d of last month. There was nothing unusual in the birth, and the child cried vigorously after entering the world. At the second visit to the mother, the physician was told that the child was fretful, but an examination failed to detect any cause for it. It nursed well, and appeared to be doing finely, aside from its fretfulness, until it was twelve days old, when it became more peevish than usual, and, as the mother states, the limbs would at times grow cold. On the following day Dr. Smith's attention was called to a swelling on the left leg of the child, and on examination there were found evidences of an inflammation extending along the anterior portion of the limb, from the patella half way down to the ankle. The inflammation appeared to be strumous in character, affecting the skin and cellular tissue. A poultice was applied, and on the following day the inflammation had extended so as to involve the whole anterior surface of the leg to the ankle. The whole of that part was indurated, red, and apparently tender on pressure. On the following day suppuration had evidently occurred, and by the prick of a needle pus was evacuated. On the same day a similar inflammation was discovered upon the dorsal aspect of the right foot, and about the same time also upon the right leg just below the patella, and another inflammation of the same character was noticed in the right infra-mammary region. On the following day, which was Thursday, there was no material change, the inflamed parts being poulticed. On Friday there was evident suppuration in the thoracic tumor, and there was also a spontaneous discharge of pus from the right foot. The child continued to nurse well and thrive, being of course fretful, until Saturday morning, when the mother, in lifting it, noticed what appeared to be a rustling sound of liquid in its body, which was attributed by Dr. Smith to the escape of air from the right lung into the right pleural cavity. There had been no cough up to this time, nor during the whole sickness. Immediately after the mother noticed this change in her infant, the respiration became very much accelerated and embarrassed. During inspiration the infra-mammary region of each side became very much depressed. The doctor did not see the patient until some hours afterwards, when it was rapidly passing into a collapse, and death occurred in the evening of the same day.

Dr. Smith supposed when he saw the change that occurred, that probably the abscess of the thorax had perforated the pleura and that there had been a discharge of pus in the pleural cavity, and that pleuritis had been the result. On examining the abscess, however, it was very evident that pus was still there. Then the idea was suggested that very likely a metastatic abscess had occurred. On making the post-mortem examination, and dissecting away the skin from over the

rib, about a drachm of pus was discovered at the seat of inflammation, on the right side, in the infra-mammary region, but the abscess was entirely in front of the ribs, except at one point, where a little opening extended down to the pleura, but not through it. On removing the sternum, the right lung was found perfectly collapsed, and non-crepitant, and outside of that the pleural cavity was filled with air. The volume of air to that of the lung was as four to one. On the other side, the lung, though not collapsed, did not seem to be fully inflated. On removing the organ, the middle lobe, on the right side, was found to be adherent by recent exudation of lymph to the parietal pleura, and there had been evidently a circumscribed pleuritis to the extent of perhaps an inch in diameter. On attempting inflation, with the lungs under water, the air was found to escape at a point where this pleuritic inflammation had occurred. In both lungs there were several collections of puriform matter; some of these were not larger than a pin's head, while others were as large as a pea. It was evidently a case of metastatic abscess, occurring in the lungs of an infant at the age of eighteen days.

In connection with the subject of metastatic abscesses, he referred to the well-known views of Virchow, as to their cause, that the inflammation in the distant part produces a stasis of blood in the veins of that locality, that the fibrine in these vessels becomes coagulated, softens, and the debris is carried along to be lodged in the parenchyma, and produce inflammation. Dr. Smith had examined these specimens, and was thoroughly convinced that Virchow's views were correct; there being discovered the broken down globules of scrofulous pus and the molecular debris of the fibrinous clots.

Dr. Krackowizer did not think that the production of the sound, as described by the mother, was possible, under the circumstances.

Dr. Jacobi wished to know how scrofulous pus could be distinguished from healthy pus under the microscope.

Dr. Smith stated that scrofulous pus was ill developed, and did not, on the addition of acetic acid, give the thickened appearance.

Dr. Jacobi said that pus not fully developed, was simply in the first stage of its development. He further remarked that it was not uncommon to find pyæmia in a very young infant, but, as a rule, we could trace a certain spot from which it originated. He asked if such a spot had been found, because no mention had been made of the condition of the liver and of the umbilical veins. In the large majority of cases, the disease originated in umbilical phlebitis, and the number of cases not having this for the cause was exceedingly small.

Dr. Smith remarked that the first signs of inflammation showed themselves in the leg, and that the umbilical veins appeared to be healthy.

Dr. Bibbins, in confirmation of the remarks of Dr. Krackowizer concerning the absence of sound upon the occurrence of a perforation of the pleura, referred to the case of a young woman who was admitted to Bellevue Hospital with phthisis. An attempt was made to raise her from her bed, in order to examine her chest, when she was suddenly seized with collapse. She shortly after died, without having given any evidence, during life, of the existence of any perforation of the pleura.

Dr. Finnell presented five pathological specimens on behalf of Dr. Wooster Beach, Jr. They were all coroner's cases, and the histories were consequently very brief and incomplete.

DISEASE OF HEART, SUDDEN DEATH, ETC.

The first one was a portion of the aorta, from a man 46 years of age, which simply showed an atheromatous condition of the vessel. The deceased, at the time of his death, weighed 200 pounds, was strong, muscular and well-developed. He had been ailing for the last three years, and his medical attendant stated that one year ago he was so anasarcous that he was compelled to remain in his room. Under the influence of diuretics, he finally recovered sufficiently to attend to his business. He died suddenly, while in a dining-saloon down town. The autopsy was made the next day; the liver was found cirrhosed, the kidneys granular and the heart enlarged. The latter organ weighed two pounds. On the tendinous cords of the mitral valve, just as they leave the free margin of the latter, were bead-like projections which, during life, gave rise to an organic mitral murmur.

The second specimen was a heart taken from a man, 40 years of age, who died suddenly, with symptoms of heart disease, nothing having been previously known of his history. The heart showed the existence of formidable mitral disease.

ANEURISM OF ASCENDING AORTA BURSTING INTO STOMACH.

The third specimen was that of an aneurism, which had burst into the stomach. The aneurism, which was one of the descending arch of the aorta, became a descending one, and when it descended below the diaphragm, emptied itself through a perforation in the walls of the organ referred to. The deceased was a female, 36 years of age, who, just previous to death, had vomited a large quantity of blood.

The fourth specimen was a uterus showing a large fibrous tumor springing from the left side of the fundus and apparently obliterating the os.

The fifth specimen was the stomach of a man who committed suicide by taking arsenic. The organ presented the ordinary lesions of this poison.

PROBABLE EFFECT OF PEROXIDE OF IRON AS AN ANTIDOTE TO ARSENIC.

Dr. Newman presented, on behalf of Dr. Leo, the stomach of a woman who committed suicide by swallowing an acrid poison. A physician was called to her shortly after the commission of the act, and, supposing the substance to be arsenic, administered at once a large quantity of the peroxide of iron. The fluid contents of the stomach were accidentally thrown away by some one during the post-mortem examination. The internal surface of the organ did not present exactly the appearances of poisoning from arsenic, there being an absence of the intense redness so uniformly noticed; this he thought might be explained on the supposition that the antidote had been at work before death.

He also exhibited from the same subject the uterus and appendages. The womb itself was the seat of a small fibrous tumor; the ovaries showed a congested state, as usual after menstruation; but the most interesting point to be noted was the existence of a perfect hymen at the age of 28 years!

Dr. Post exhibited on behalf of Dr. Quimby, of Jersey City, a specimen of invaginated intestine from a child two months old. The greater part of the large intestine, and the termination of the ileum, were invaginated in the lower part of the colon and upper part of the rectum.

PRIMARY CANCER OF THE SKIN AND SUPRA-CLAVICULAR REGION.

Dr. Buck presented a specimen of primary cancer of the skin of the supra-clavicular region of the neck. It showed itself in a group of nodules giving an uneven and tubercular patchiness of the skin in that locality. Some portion of the mass was situated over the termi-

nation of the external jugular vein, which vessel was partially di-tended and compressed by it. It could be lifted up from its bed and moved to a certain extent upon the deep tissues with which it was connected. It was removed and found to penetrate to a certain depth anterior to the edge of the trapezius muscle, exposing in the wound the tract of the omo-hyoid muscle, its posterior belly, and the commencement of the tendinous belly which joins it to its anterior portion. There were no neighboring glands contaminated.

The patient was a woman, forty-nine years of age, in apparent robust health, and her statement was that the disease first appeared in 1855, but that it had never given her any pain or inconvenience.

It so happened that during Dr. Buck's attendance in one of the hospitals, another of the same sort of disease showed itself in the shape of salient mushroom-like tumors in the submaxillary region of another patient. The diseased surface was about two inches in circumference, and was cup-shaped, the concavity being ulcerated. It was found to extend deeply into the submaxillary region, and to be closely adherent to the submaxillary gland, which was removed along with the growth. The wound was in progress of healing when his attendance terminated. This latter was a male patient, thirty-five years of age, whose history showed that other members of his family had died of cancerous disease. There was no secondary contamination in that instance.

He next exhibited a portion of the spinal column removed at the post-mortem of a lad eleven years old, who, while attempting to get off a Ninth Avenue car, was run over by a sleigh. He was able to walk after the accident to St. Luke's Hospital, and appeared to be perfectly intelligent, although suffering at the time from the shock of the injury.

On the right side of his face was a lacerated wound involving the facial artery, which vessel was in time duly secured. One humerus was fractured high up at the juncture of its shaft with its head. Several hours were required before reaction could be established, yet he passed his first night without special disturbance. On the following afternoon he began rather suddenly to lose his voice, which became reduced to a whisper, and he also lost the power of his limbs, the respiration becoming hurried and difficult without any corresponding motion of the thorax. He still, however, retained his consciousness. Dr. Buck saw him about 7 o'clock that evening. He could articulate then only in a very indistinct whisper, which was accompanied with a certain hissing sound. He evidently understood the questions propounded to him by his attempts to answer them. The wound of the right side of the face was covered with dressings and was not disturbed; on the left side of the cheek a superficial abrasion was left exposed.

It was at once inferred from the symptoms that there was an injury of the spine, high up. No pressure of the part elicited any pain.

The patient died at 9 o'clock that evening. On post-mortem examination the spinal canal was found filled with blood. The chain of cervical vertebræ was removed and exhibited. The injury was found to involve the second and third cervical vertebræ, which were freely movable upon each other, the intervertebral substance being entirely separated from the lower portion of the body of the second cervical; the articular surface of this bone being fractured across. There was no evidence of any depression of the substance of the cord from pressure of bone, although at the point of injury it was somewhat softened.

It was a little remarkable that the cord should not have suffered from any symptoms of compression until twenty-four hours after the injury, but this was explained by the final separation of the fractured portions and the subsequent occurrence of the hæmorrhage into the sheaths of the canal.

Dr. Krackowizer thought that the tumor of the skin reported by Dr. Buck was fibro-plastic in character.

Dr. Buck stated that no microscopical examination of the growth had been made, and that he relied in his diagnosis upon the gross appearances presented, which as far as they went were unequivocal.

At the suggestion of the President, the specimen was referred to the Committee on Microscopy.

Adjourned.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, February 3, 1868.

Dr. E. R. Peaslee, President, in the Chair.

The President announced the admission to membership of the following gentlemen: Drs. Wm. H. Hall, Henry Le Baron Hart, Joseph E. Janvrin, and Fred. A. Castle.

Dr. Stephen Rogers presented a report, accompanied by photographs, of a case in which he had removed the entire scapula. [We have reported this case in the proceedings of the Pathological Society, Record, vol. 3. p. 65.] Voted that the report be accepted, and sent to the approaching meeting of the State Society.

ABORTION.

Dr. Fordyce Barker read a paper upon this subject. *Vide* p. 151.

Dr. Elisha Harris wished to call special attention to the statement that the risk of death from abortion is greater than that from labor at full term. In New York and Brooklyn, about one burial in every ten and a half is of a still-born child, about one-eighth of these still-births being reported as occurring at the seventh month; and following close upon these dead births come the deaths of the mothers. This great loss of life, maternal as well as fœtal, demands the closest investigation into its causes. The profession justly congratulates itself upon the diminution in the risks of maternity effected by the improvements in obstetrics; but in this city fully one-third of all the births have not the benefit of scientific medical attendance. They are under the care of ignorant midwives, or uneducated men practising without proper license. Were this matter thoroughly overhauled, the facts disclosed would be so startling that they could hardly fail of arousing organized effort to provide some safeguard for the hundreds of mothers, victims of poverty, ignorance, or mistaken popular notions in regard to the importance of proper medical attendance in confinement. The sanitary authorities have already begun to look into the subject, and the medical societies should aid them.

Dr. George T. Elliot, being called upon by the President, said that he had intended to remain a listener; and that, in essaying to speak, he was puzzled where to begin, the subject opened such an exhaustless variety of important questions. He would allude to a topic not yet touched upon, the unfortunately wide-spread tendency to the procurement of criminal abortion, not only in illicit pregnancies, but among the married of the highest social standing, to prevent inconvenient increase in the size of their families. Appeals with this object were constantly made, not only to the unscrupulous practitioner, but as well to the most honorable members of the profession, who would scorn to aid or coun-

enance the practice. It was customary to speak of his practice as more prevalent in this country, and particularly in New England, than elsewhere; but such statements were to be doubted. It has come down to us from antiquity; it seems to have been more widespread under the Roman Empire than even at the present time; and it is not confined to civilized communities, but is found also among savages. Everywhere and at all times the tendency to this evil can be seen cropping out. The duty of the profession is clear and imperative.

In regard to the introduction of instruments into the uterus in abortion, Dr. Elliott could not fully agree with Dr. Barker. He had formerly, following Dubois, rigidly avoided their use; but experience had now convinced him that they must sometimes be employed, if we would save the woman's life. Still this should only be done by experienced hands; and in dealing with students, one could not be too cautious about recommending it. He would sketch a case from his own experience, and it was but the type of many. The woman has bled profusely; the cervix has been tamponed, and the opportunity seized to feed and stimulate her; her head is kept low, her limbs in the air, their arteries compressed; the windows are open, the patient being warmly covered. At last, after some hours' rest, you hope that if the tampon is withdrawn, the ovum may come with it. You find the cervix well dilated; but a portion of the ovum remains in the womb, where you can just touch it with the finger. What are you to do? Go over the whole ground again, with the prospect of finding yourself, hours afterwards, confronted by exactly the same conditions? You carefully introduce a pair of delicate, well-polished uterine forceps, cautiously seize the ovum, and lightly draw upon it; it comes away, and the whole thing is over. Only the gentlest tentative traction should be employed. This failing, resort must be had to other measures; for the risks of careless or violent manipulation have not been over-stated. But where the ovum has come away, leaving behind only a small portion of the placenta, perhaps not larger than the finger-nail, what is to be done? Such a case is, to the obstetrician conscious of the dangers of hæmorrhage and septicæmia that attend leaving the fragment, conscious also of the dangers of violent interference, a source of the most terrible anxiety. If the woman can bear an anæsthetic, it should be given. Then, if the fragment cannot be detached by the finger, the question recurs concerning the use of instruments, not, as before, to seize a portion of the ovum large enough to lay hold of satisfactorily, but for the removal of this minute fragment. Dr. Elliott thought it better to refrain from their use, rather than incur the risk of sciring and lacerating a portion of uterine tissue. Some cases of the kind, where he had decided to leave the fragment, had resulted in septicæmia, cellulitis, and death; others precisely similar, in which he had come to the same decis on, had issued most favorably.

The speaker had desired to hear Dr. Barker's views on the application of remedies within the uterine cavity, during the intervals of pregnancy. Dr. Kammerer considered fatty placenta due to endometritis, and regarded this as the best method of treatment. For his own part, he was opposed to it. It was too much the fashion to think nothing of injecting iodine into the womb, and letting the patient go home after it. He should be reluctant to have a patient die from iodine or chromic acid applied for a simple metritis, which would never have killed her. As to the chlorate of potassa, his own experience—and he had used it in many cases—had not been so fortunate as Dr. Barker's. In illustration was related a case of repeated miscarriage from fatty placenta, where the drug had proved of no benefit. But Dr. McLane had gained the happiest results from it in a case very similar. Diseases of the ovum, as had been said, could not commonly be diagnosticated or treated. But if physicians would oftener make careful examination of the ovum after abortion, they might, in these cases, have the satisfaction of proving to themselves and the patient that the miscarriage was not preventable. The details of two cases were given.

Dr. Weisse could speak only from a limited experience, but that had taught him to rely somewhat, in cases of inevitable abortion, upon the exhibition, by the stomach, of belladonna, as favoring dilatation of the os. He had first observed this effect when happening to give the drug for some intercurrent headache, during the progress of such a case; and further trials had satisfied him it was not a mere coincidence. To detach a remaining fragment of placenta, he had once successfully used a spoon-handle, bent to fit the uterus, introducing it, little by little, between the fragment and the uterine wall. He thought a serviceable instrument might be made for this purpose.

Dr. Peaslee said it is very frequently the question, when called to a case, not whether the woman will or will not abort, but whether she has or has not aborted. In a case at the second or third month, where there has been profuse hemorrhage, with more or less uterine contraction, as indicated by the pains, and where the os is considerably dilated, this is certainly the question to be answered; for abortion, if not already accomplished, is inevitable. The answer may not be easy. Even if the finger can be passed through the cervix into the uterus, it demands much experience to determine whether what is felt there be an ovum, or a firm clot that has taken its place. In either case, however, it would be proper to attempt its removal; and if the attempt were successful, the doubt would soon be solved. But, under such conditions, can the finger be passed far enough to learn much? A short fore-finger perhaps not, but the middle finger almost always, if the vagina be distensible, and the woman placed in the best position. Where the neck is insufficiently dilated for this, and it is necessary to leave the patient, this may safely be done after introducing, by means of the uterine forceps, a piece of dry sponge (not compressed sponge). The sponge should be long enough to reach entirely to the upper end of the uterine cavity, and be introduced so as to fill it, a thread, of course, being attached. You may then leave for an hour, or two, or three, with instructions to be sent for if the sponge come away and there be any bleeding. Often the sponge and the ovum are thrown off together.

Dr. Barker, in response to a question, said there is a class of cases, with profuse hæmorrhage, in which the woman's only safety lies in the removal of the whole of the placenta, though it be necessary, for this purpose, to use some slight force in the introduction of one finger, or even three. He had spent an hour in getting the first finger through the cervix, and an hour longer in dilating it sufficiently to effect the object. Hæmostatics are not to be trusted; nor can the tampon be wholly relied upon, for it will so dilate the cervix as to allow the escape of blood.

New Hospital in India.—The Sassoon General Hospital at Poona, founded by the late Mr. David Sassoon, a charitable Jewish merchant, was opened on Oct. 7, 1867, by the Right Hon. the Governor. Mr. Sassoon contributed over $105,000 towards the cost of the hospital.

Correspondence.

A CONVENIENT AND USEFUL FEMALE CATHETER.

To the Editor of the Medical Record.

Sir—I desire through the medium of your columns to introduce to the profession a very simple expedient which has been of great convenience to myself. It may be that others are in the habit of using the same thing, but I will risk the opprobrium of mentioning an old affair if I can thereby aid the fraternity. I have found that in the introduction of the catheter for the relief of the female, great annoyance and disgust have resulted from the soiling of the linen, as must necessarily occur where a cup or any vessel receives the secretion under the bedding. To relieve this difficulty, I have caused to be constructed for me, by Messrs. Otto & Reynders of your city, an ordinary female catheter of hard rubber, having a stop-cock near its free extremity, to the latter point of which is attached a tube of elastic rubber, which may be conveyed to the floor or any convenient place where a receptacle for the urine is placed.

Yours very truly,

HENRY R. BALDWIN.

New Brunswick, N. J., May, 1868.

THE NEW SYRINGE.

To the Editor of The Medical Record.

Sir—The new syringe described in the last number of the Record we made at a suggestion of Dr. J. C. Hutchinson, of Brooklyn, designed to apply ointments to the prostatic portion of the urethra in case of spermatorrhœa.

We made some additions to the original instrument, which facilitate its working and adapt it to the application of ointments to the cavities of the uterus, ear, throat, as well as to the urethra.

Please make these corrections in justice to Dr. Hutchinson, who deserves the credit of its introduction.

Respectfully yours, Geo. Tiemann & Co.

Medical Items and News.

The Brooklyn Eye and Ear Infirmary is in successful operation. The surgeons are Drs. C. R. Agnew and E. G. Loring, of this city; assistant surgeons, Dr. A. Mathewson and H. G. Newton of Brooklyn.

Dr. C. R. Agnew has been elected ophthalmic surgeon to the Nursery and Child's Hospital.

Famine in Eastern Prussia.—In the centre of the country suffering from hectic typhus fever prevails extensively. The medical men in Germany, who are in the habit of visiting the poor, find it very useful to carry with them a small jar of Liebig Company's extract of meat, to dispense beef tea at once where they find it necessary.

Died.—In Boston, Mass., on Saturday, March 21, 1868, Hon. Henry H. Childs, M.D., of Pittsfield, aged eighty-four. He was the founder of the Berkshire Medical College, of which he has always been the President.

Contagious Diseases in New York.—The reports of contagious and infectious diseases made to the office of the Metropolitan Board of Health by practising physicians in this city, from May 1st to May 15, inclusive, show, 279 cases of scarlet fever, 249 of which were under the age of 10 years; 9 cases of typhus, the ages varying from 6 to 48 years; 16 cases of typhoid, between the ages of 15 and 51; 25 cases of diphtheria, 21 cases of which were under the age of 10 years; 1 case of small-pox, age 17. The reports do not indicate the special prevalence of any of the above diseases in particular localities.

Examination for the Degree of M.D., by a Disinterested Board.—The question whether the degree of M.D. should be granted to all who present themselves for examination and stand the test, has been fully discussed before the Medical Teachers' Association, in England. The illustrious Baron von Humboldt long since advocated the test of a thorough examination by a disinterested board, as a substitute for any other requirements whatever, except that the candidate should have attained the age of twenty-one years; and this view is supported by J. S. Mill, in his Essay on Liberty. Among its strongest advocates at present are Mr. Simon and Dr. Charles Drysdale.—*Med. Press & Cir.*

Medical Congress in Brazil.—It seems that our medical brothers in the far away sunny land of the Emperor Pedro are making strenuous efforts for the foundation of a medical congress in Brazil. In the March No. of that excellent journal, the *Gazeta Medica da Bahia*, we find a most interesting and powerful letter on this subject, from Dr. Jaio R. de Moura, to Dr. Virgilio Climaco Damazio, both of Bahia. Dr. M. certainly puts the matter in a strong light.

Ricord.—We condense the following account of the famous Syphilographer from the columns of *L'Etendard Medicale:*

Philip Ricord was born in Baltimore, U. S., December 10, 1800. At twenty years of age he went to Paris to complete his education and study law. Having one day accompanied a friend to the Hôtel Dieu, he became so enamored of a lecture of Dupuytren, that at once, without consulting his father, he deserted the benches of the School of Law for the amphitheatre of the School of Medecine. At the end of three years of diligent study, he was appointed interne, and entered the service of Dupuytren.

In 1826, young Ricord received his degree of doctor, and settled himself at Paris, to continue his studies and prepare himself for future eminence. Shortly after, owing to pecuniary embarrassments of his father, he was compelled to seek remunerative practice, and repaired for this purpose to Oliver, near Orléans, but with the determination to return to Paris at the first opportunity. Two years afterwards a public concourse was held at Paris for several public positions as surgeon; Ricord entered the lists, and received the highest honours. Three years afterwards he was appointed surgeon-in-chief to the Hôpital du Midi, which position he retained until his retirement in 1860.

Ricord is, perhaps, the most busy physician at present in Paris. His motto is *Expectatis cunctum in recentiore cura.* Rising at seven o'clock, he takes a cup of coffee, and then enters his coupe to pay his professional calls. About three o'clock he returns to take his only meal for the day. Then begin his office consultations, which continue without interruption until midnight, and sometimes longer.

The beautiful dwelling which he occupies in the *Rue de Tournon* is divided into two distinct portions; at the left are the household apartments, at the right his professional apartments. The latter compose the doctor's study, and five rooms, always full during consultation hours. The first is the common reception-room. It is

literally packed with men, each one with a card, upon which is a number telling the order in which he will be attended to. The second apartment is a reception-room for ladies, who ascend by a separate and private staircase. Into the third apartment are introduced those who require to announce themselves at once, and those who have letters of introduction. The fourth apartment is reserved for the doctor's friends and professional visitors. All these rooms are furnished with curiosities, paintings, statues, and other works of art.

The library in the study is surmounted by a gallery of busts of eminent medical men of all times, and with glass cases at the bottom, in which are kept the most beautiful collection of instruments it is possible to see, occupies three sides of the apartment. The fourth side is decorated by three portraits, that of Dupuytren in the centre, with one of Orfila on the left, and one of Ricord himself on the right. Ricord has received more decorations than any other man in France, except Alexander Dumas.

Cerebro-Spinal Meningitis.—We understand that some examples of cerebro-spinal meningitis have appeared among the soldiers at the camp at Shornelife, two of which proved fatal.

Necessity of Abolishing Lying-in Asylums.—The profession is now pretty unanimous in its opinion as to the necessity of abolishing as much as possible the old system of lying-in hospitals. The public, too, are becoming alive to the advantages of encouraging attendance on the lying-in women amongst the poor at their own homes. At the 111th anniversary of the Royal Maternity Charity, held at the London Tavern on Tuesday last, under the presidency of Sir John Lubbock, F.R.S., it was stated that the number of deliveries during the year 1867 was 3650, and the average mortality was only one in 750 labors—a very satisfactory result. Not only in a hygienic but in a financial point of view is the advantage greatly in favor of home attendance when this is practicable.

The Action of Medicines.—The Therapeutical Committee of the Harveian Society has resolved to circulate the subjoined questions amongst the medical men of the United Kingdom, and to ask the co-operation and assistance of the profession generally in carrying out the objects of the Committee:—

1. Have you found any of the following drugs—namely, digitalis, cantharides, chlorate of potash, belladonna, arsenic, quinine, and the tincture of the muriate of iron (as distinguished from the other forms of iron)—particularly useful in any special form of disease?

2. In what form of preparation, and in what doses, are you in the habit of administering these drugs? And what results have you observed to follow their administration in the diseases to which you refer?

3. Can you, from your personal knowledge, give any information respecting the use and doses of any drug not commonly employed? Or respecting any method of treating any disease which you have found particularly useful in your practice? Or can you give information as to any fact in therapeutics not commonly known to the profession?

Answers to any of these queries will be gladly received by the honorary secretaries, J. B. Curgenven, Esq., 11, Cravenhill-gardens, W., and W. Hickman, M. B., Dorset-square, N. W., from whom copies and any further information may be obtained.—*Lancet, March* 28.

Improved Mode of Embalming.—A probably exaggerated account of M. Marini's discovery has been published by a French paper, *Les Mondes*. It would appear that M. Marini succeeds in preserving parts of or the whole body, with all the solids and fluids of the living organism, such as muscle, blood, brain, &c., either in a mummified or petrified state. He can, besides, when the desiccation has not been carried too far, bring the mummified portions back again to their original volume and look, so that an arm, for instance, may be transformed after many months into the same state as that observed a few hours after death. Indeed, the paper above alluded to gravely says that, in Corsica, M. Marini preserved the body of a deceased far-famed historian to such a degree that, four months after death, he managed, by his reviving fluid, to give again to the corpse all the appearance of life, so much so as to place it in a chair for photographic purposes. The Emperor and Empress of the French are said to be delighted with the discovery, which statement will in all likelihood be taken by most people *cum grano salis.—Lancet, April* 11.

An Expectorated Buck-shot.—A. N. Rossiter, the oldest of a trio of brothers from Richmond, Mass., who enlisted in the Forty-ninth Regiment, one of whom was killed at Port Hudson, and the other at Baton Rouge, was wounded in the retreat from Port Hudson on March 14, 1863. Since that time he has been troubled with a cough and bleeding at the lungs. Last week he coughed up a rebel memento in the shape of a flattened buck-shot, which it seems he has carried more than four years. He is thereby wholly relieved from his disagreeable symptoms.

An Old Relic.—On the 8th of February last M. Convreux, a surgeon of St. Hilaire (Meuse), was successful in extracting a musket-ball from the leg of M. Goubeaux, a retired grenadier of the Old Guard of Napoleon I. M. Goubeaux had received his wound at the battle of Waterloo, and several previous attempts had been unsuccessfully made to extract the missile.

Royal Infirmary.—A movement is on foot to raise a fund for rebuilding the Medical Hospital of the Royal Infirmary of Edinburgh, Scotland. The estimated cost of the work is about £100,000. Nine subscriptions of £1,000 each, and several of £500, have been announced.

Abolition of Capital Punishment in Saxony.—The opponents of capital punishment will be gratified by a resolution that has just been adopted by the Second Chamber of the Saxon Diet, that for the future the punishment of death shall be abolished in Saxony.

The Paris Sewers.—It has been proposed to direct the contents of these to large reservoirs, at a distance, and to mix the fluid mass with alum; thus, phosphoric acid and the organic matter (nine-tenths of the whole) would be precipitated—the deposit to be used as manure, and the remaining liquid for irrigation.

St. Mary's Hospital, corner Frankford Road and Palmer street, Philadelphia, was founded by the Sisters of the third order of St. Francis (a German sisterhood) in August, 1866; lot, 80×120 feet; Hospital building, 40×100 feet; four stories high, built of brick. The building was originally built for hotel purposes, and has been altered as far as practicable for its present use. The present medical, surgical, and obstetrical boards were organized about one year ago. The capacity is about seventy-five beds (75), and the average number of patients has been 60. The situation of the hospital is in the manufacturing portion of the city, which is fruitful of accidents of all kinds. Like most of our charities, it was started, and is conducted entirely

through the voluntary contributions of the charitable, and in the space of less than two years, the good Sisters of St. Francis have almost cleared the debt, besides having supported gratuitously many indigent sick. An appeal was made this winter to the Pennsylvania legislature for an appropriation, but it was not listened to. The following named gentlemen compose the several staffs.

Physicians—Drs. Cummiskey, Wells, and Laroche. Surgeons—Drs. Hall, Harlan, and Keen. Obstetricians—Drs. Van Pelt and Dougherty. Resident Physician—Dr. Hargadine. Resident Chaplain—Rev. Father Gerucinde.

Singular Accident.—A gentleman sat in his office, in Hartford, Ct., a few days ago, sharpening his penknife on a stone. He had opened a blade at each end of the knife for convenience. While so engaged, his wife suddenly spoke to him and he dropped the knife between his legs. Instinctively he closed his legs to prevent the knife falling to the floor. The consequence was that a blade entered each leg a considerable distance. The tibial artery in the right leg was cut, and before the wound could be dressed the gentleman had lost a considerable amount of blood.

Health of London.—The Registrar-General, reporting on the health of London during 1867, shows that, so far as the rising and falling of the mortality-rate may be accepted as a criterion of health, last year was the healthiest that London has enjoyed since 1860. Through the four years that followed 1860 the mortality uninterruptedly rose, and reached 2·653 per cent. in 1864; it then began to decline until 1866, when the cholera epidemic caused its augmentation; but the return of last year indicates that the effect of the sanitary measures adopted during the epidemic has been to improve the general hygienic condition of the population.—*Lancet.*

Death from Nicotine.—A case of death from nicotine recently occurred at Cohoes, N. Y., under the following circumstances: The father of a little girl, in an endeavor to "heal a sore on her lip," applied to it the contents of a "rank" pipe stem. The victim was almost immediately seized with the peculiar symptoms of tobacco poisoning and died a few hours afterwards.

Irritative Epilepsy.—Dr. G. E. Paget, in a recent lecture on gastric epilepsy, cited the following instance of characteristic fits caused by local irritation: In a case published by Dr. Greenhow, a girl had run a splinter of wood the distance of an inch underneath her left thumbnail. Much pain and irritation ensued, and at the end of a week she had an epileptic fit. She had four more fits at irregular intervals in the next four months. The wound remained open, and painful on pressure. The fits were preceded by a sense of numbness in the thumb, rapidly extending up to the shoulder. They were complete epileptic fits; the tongue was usually bitten, and she fell asleep after them. She had not suffered from convulsions while teething, and was not subject to hysteria. Dr. Greenhow ordered the thumb to be poulticed; and for medicine gave solution of perchloride of mercury and tincture of cinchona, of each one drachm and a half thrice daily. Nine days afterwards a sixth fit occurred. The wound was now healing, and soon after healed. The sixth fit was the last. Four months afterwards the patient remained well.

The Pendulum of Fashion.—Dr. E. J. Tilt, in a paper published in the *Lancet* of April 11 on therapeutics and the natural history of disease, says: "The natural history of diseases!" I have insisted over and over again that the right way of studying diseases of women was to do so by the light of the natural history of menstruation, showing the way in one of my works. If for thirty years of her life woman is bled every month moderately, and often exorbitantly, with impunity, that should at least teach the present generation of medical men that it is absurd to be afraid of damaging a patient's constitution by taking away ten ounces of blood in cases of inflammation. The perfect innocuity of vomiting, in most cases of pregnancy, will some day teach medical practitioners how foolish it was to give up the use of emetics in many cases of dyspepsia and biliary derangement. If I take the liberty of pressing on others to hasten as much as possible the process by which they are attempting to make up their minds as to the extent of the powers of nature in the cure of disease, it is for the sake of our patients and for the credit of our art. It is no consolation to men of moderate opinions to know that when the pendulum of the human mind has violently swung in one direction it will assuredly, after a certain lapse of years, swing back with equal momentum in the opposite direction. There is so little rest between extremes; we have only just escaped from the reign of exorbitant doses and overstringent pharmaceutical formalism, and we are now menaced with a rapid return to that slough of expectant medicine which, centuries ago, was rightly stigmatized as "a meditation on death." Only a few years back and we were outrageously frightened by the bugbear of inflammation, and already our utility is often paralyzed by the bugbear of debility.

Curious Accident.—At a meeting of the London Pathological Society, on April 7th, Dr. Farquharson exhibited for Dr. Spry a specimen of perforation of the arch of the aorta produced by swallowing a piece of bone. At first the trooper complained of nothing except a sensation of having swallowed a piece of gristle, which was not removed by an emetic. The man died suddenly in a few days after vomiting a large quantity of blood.

The Use of Raw Meat.—The use of raw meat in debility and phthisis is in the ascendant in France; but nothing will go down with the French unless the shape and taste be made pleasant. Thus they now have what is called musculine tablets, made of raw fillet of beef, and covered with fruit-jelly and candied sugar.—*Lancet.*

The Fee for Testifying as Expert.—Dr. Bebee, of Chicago, was called to testify in a case before the United States Circuit Court at Chicago, not long since, as a medical expert. He refused to testify unless he received fees as an expert, to the amount of $25. The Judge decided he was right, and the fees were paid.

New Publications.

Books Received.

Man: Where, Whence, and Whither? Being a Glance at Man in his Natural History, and Relations. By David Page, LL.D., F.R.S.E., F.G.S., Author of Past and Present Life of Globe, etc. First American edition. New York: Moorhead, Simpson, & Bond. 1868.

Materia Medica for the Use of Students. By John B. Biddle, M.D., Professor of Materia Medica and General Therapeutics in Jefferson Medical College, etc. Third edition, enlarged. With Illustrations. Philadelphia: Lindsay & Blakiston. 1868.

The Neuroses of the Skin, their Pathology and Treatment. By Howard F. Damon, A.M., M.D., Fellow Massachusetts Medical Society, etc. Philadelphia: J. B. Lippincott & Co. 1868.

Original Communications.

EPITHELIOMA OF THE EXTREMITIES.

THE DANGERS ATTENDANT UPON THE IRRITATION OF WARTS IN OLD PEOPLE.

By Prof. FRANK H. HAMILTON, M.D.

NEW YORK.

Case 1. *Epithelioma of Leg—Amputation.*—Ann H., æt. sixty, admitted to Bellevue Hospital Jan. 6, 1866. In childhood she had noticed a small tubercle or lump on the back of the right heel, which after some years ulcerated. It has remained in this condition ever since, never having entirely closed over. At the period of admission, the sore was two and a half inches in diameter and nearly circular, its edges elevated, irregular, and everted. The surface was covered with pale red granulations, very unequal in their elevation. The os calcis was slightly involved in the disease.

After consultation with the visiting surgeons of the Hospital, the disease having been pronounced epithelioma, I made, on the 13th of January, amputation of the foot before the class of medical students. A careful examination of the specimen after amputation showed it to be, as we had supposed, true epithelioma. Her recovery was slow, but complete, and after two or three months she was discharged cured.

Case 2. *Epithelioma of the Leg*—Mary Morris, Irish, æt. seventy, was admitted to ward 18, third surgical division, Bellevue Hospital, April 18, 1868. She states that about two years ago she discovered a small wart on the inner side of her ankle. By the advice of a friend she tied a horse-hair around it and sloughed it off. It was followed by an ulcer, which has remained open ever since. On admission, the sore was five or six inches in diameter, and presented the characteristic features of epithelioma. It gave her great pain, and she was compelled to take opiates freely.

April 22d, the ulceration opened a blood-vessel, and the bleeding was profuse until arrested by the persulphate of iron and a compress.

In consultation with Dr. Gouley it was decided to amputate, but she refuses to have it done at present.

Case 3. *Epithelioma of the Hand—Amputation.*—Thomas Cain, æt. 40, admitted to ward 16, 3d surgical division, Bellevue Hospital, April 17, 1868. This man had been twice before in my service, once at Bellevue and once at the Charity Hospital, but he had up to the present time refused to submit to amputation.

He stated that about two years before, he had noticed a wart on the back of the right hand. That he tied it off with a horse-hair; it returned, and he continued "to work at it" until it became an open sore.

I amputated the hand just above the wrist, before the class, April 17, 1868. The disease then covered nearly the whole of the back of the hand, presenting all the external signs of epithelial cancer. Under the microscope there were found abundant epithelium and cancer cells. The wound made by the amputation is doing well.

Case 4. Solomon L. Smith, a farmer from Elmira, Chemung Co., N. Y., æt. fifty, had a wart on the back of his fore-finger ever since he was thirty-six years old, but had paid no attention to it. One year before I saw him, which was in December, 1840, he had attempted to remove the wart by a ligature, and at the time he called upon me the whole finger was involved, including the bone. I made an amputation at the metacarpophalangeal articulation, and although he survived the operation ten years, the disease did not return. He died finally of an attack of erysipelas.

Case 5. A man from Niagara Co., N. Y., aged seventy-seven; cancer hereditary in the family. Had a wart on the back of his thumb many years, which had twice fallen off spontaneously and left a small ulcer which healed readily. About two years before he called upon me it fell off, or he removed it himself, I cannot say which; but the sore left never healed, and it was then about one inch in diameter, presenting the characteristic features of an epithelioma. He refused to submit to amputation, but went from me to an empiric, who applied caustic and removed the diseased surface. Two years later he called upon me, and I found the fingers perfectly sound.

Case 6. A gentleman æt. sixty, of Monroe Co., N. Y., called upon me with an epithelioma upon the back of his hand. He stated that three years ago he removed a wart from this part with a ligature. This resulted in a sore which would not heal; and two years ago he had caustic applied, but to no purpose. The disease now involved nearly the whole of the back of the hand, and I amputated the hand above the wrist. The wound healed kindly, but I have not heard of him since his recovery. His brother died with a disease of the jaw supposed to be cancerous.

Epithelioma of the extremities is very rare, but it will be observed that I have reported six examples; four occurring on the hand, and two on the legs.

There are several points of special interest in these cases:

1st. That all of them were presented in advanced life. One patient, an Irishman, reports himself as being only forty years old. In my opinion he is fifty.

2d. Four of the six originated from warts, hypertrophied papillæ.

3d. None of these warts assumed a malignant character until they were molested. No doubt a thorough excision of them, taking care to include sound skin, would have resulted differently; but we are taught by these lessons that, in old persons, warts must not be irritated or disturbed unless by free excision.

4th. Of those occurring upon the hand, all presented themselves upon the back of the hand.

5th. One was cured by caustic; three have recovered completely after amputation. One bids fair to recover after amputation, and the result of the remaining case is not yet determined. Caustic failed in one case, where amputation was subsequently successful.

6th. Surgical interference, and especially amputation, offers a just expectation of recovery.

Two of the cases above enumerated were reported originally by me in the "Transactions of the American Medical Association," vol. vi., 1853, in a tabulated report on the "Results of Surgical Operations for Malignant Diseases," which tables, together with Dr. Warren's, were embodied in Dr. Gross's able report on the same subject; and it ought to be known that this paper of Dr. Gross's is probably the most complete and careful digest of the opinions and practice of surgeons, relating to operations in malignant diseases, ever published in any language, and it is to be regretted that it has not been put in a form which would render it more accessible to surgeons and physicians.

The Yellow Fever still continues to rage in *Callao* and *Lima*; it was thought to be diminishing in the former, and on the increase in the latter place. The interments in the cemetery in *Callao* averaged about twenty-five daily, and in the *Lima* country about fifty daily, but it is said that many deaths occurred among foreigners who were not interred in the cemeteries. Great fear was felt in *Lima* that the disease would prove still more fatal.

REMARKS ON ACUPRESSURE.

By JAMES ANDREW MILNE, M.D.,

OF ALEPPO, SYRIA.

About 300 years ago, Ambrose Paré conceived in his mind that the application of a thread to a severed artery was a preferable method for arresting hæmorrhage to that of the hot iron or cautery. But for 100 years it was but sparingly employed; and fifty more may be added to that; even 200 years from its first use we find that in the principal hospitals in the city where Paré had lived and practised the hot iron was still employed to arrest hæmorrhage in surgical wounds.

This shows how well satisfied the surgeons of those days were with their mode of practice, and how slow they were to abandon it for a better.

Eight years ago Sir James Simpson begat in his own mind an idea that there was still a chance for improvement in this important part of surgery, and offered to the profession acupressure with well grounded reasons as a substitute for the ligature. During the eight years that have elapsed since Sir James announced his discovery, acupressure has been steadily gaining ground; but the ligature, like the hot iron, seems to be closely adhered to. In Great Britain acupressure has come into quite general use; but on the Continent and in America it has not received a fair trial.

Dr. Hutchison, of N. Y., has recently conducted a series of experiments which give additional proof as to the claims of acupressure; and I trust will be a means of bringing the profession in his country to give it an impartial test. The subject has been brought before the profession at various times, but more needs to be said. I shall attempt to present nothing new, but simply bring up the relative merits, and ask that it may have a fair trial.

When a ligature of silk or hemp is passed around an artery and secured in the usual manner, the two middle coats are lacerated, and the external—I may say, all, strangulated; this strangulation *inevitably* produces ulceration and mortification at the tied point, and usually below, thus acting upon the end of the vessel the same as a thread upon a polypus or wart, causing it to slough and remain as a foreign body in the wound; hence, for every artery tied, there are so many dead sloughs and so many points of ulceration. The ligatures themselves absorb the animal fluids, which speedily decompose in them, and they then act like so many setons; producing irritation and inflammation in the surrounding tissue, and ulceration in their tracks. If the ligature be applied loosely, but little is gained; the end of the vessel may not be thrown off as a foreign body in the wound, but the ligature itself must remain until the artery has been severed at the point of ligation by ulceration. From these conclusions we can safely say that wounds containing a series of ligatures never completely unite by first intention, and that ligatures in all cases retard union.

But these ligatures and bits of dead flesh do more than simply retard union; they place the patient in great danger of constitutional poisoning. The surfaces of wounds must readily absorb any poison that comes in contact; and I feel quite confident in stating that pyæmia and surgical fever after amputations, in a great majority of cases, is due to the poison that is generated by the influence of the ligature. Care is always exerted to prevent a patient from inhaling atmospheric poisons after an operation, but how much more important that a greater amount of care should be exercised to prevent poisons from coming in contact with the surfaces of a wound. The placing of a ligature upon a vessel after an operation, and closing the wound, is an equivalent to inserting a bit of dead flesh and a seton. Sir James Simpson once said to me: "Your surgeons treated those rebel prisoners badly; they used to put pieces of dead flesh and poisons in their wounds." The statement had its truth, and gave Sir James a chance to bring his favorite theme to reveal his joke after being assailed for his assertions.

Many of the surgeons in our army found that when the flaps were closed together after an amputation ulceration and gangrene ensued; and upon this they wisely adopted the practice of leaving the flaps apart, which enabled these bits of dead flesh and poisons to be easily carried from the wound, and the effects that would have been produced had they been shut in the wound, were obviated.

John Bell, in his Principles of Surgery, says: "In wounds and operations there are but two great points to be attended to; first, the securing the arteries so that the patient may be in no danger from bleeding, and then the procuring a *speedy adhesion* by which the pain, suppuration, waste of substance, and all the other bad consequences of the wound, are prevented. Upon this principle we are able to perform things in the regular way of surgery as surprising as those which passed for miracles in the times when the sympathetic cures were in vogue." Acupressure is the quickest and easiest mode yet devised for securing arteries; when applied it holds the walls of the vessel in coaptation in such a manner as not to tear the coats or produce irritation, as when a thread is applied. It can be removed in a day or two, leaving the wound, free from all foreign bodies, to accomplish a speedy and complete healing. Therefore it accelerates the healing of wounds and does away almost completely with the danger of pyæmia, surgical fever, and secondary hæmorrhage. When applied in cases of amputation a more perfect union is the result, and a better shaped stump secured. As proof, Prof. Pirrie, of Aberdeen University, has reported over 200 cases of major operations and a large number of minor where he has employed it; eight of these cases have been amputation of the thigh. In thirty-two detailed cases fifteen united, and healed without a *single drop* of pus; of these thirty-two cases, seven were amputations of the thigh. Prof. P. says, "I have as yet not seen an instance of pyæmia, surgical fever, or secondary hæmorrhage where acupressure has been applied." Dr. Keith reports forty cases, ten major operations, no pyæmia; no surgical fever; no secondary hæmorrhage; although in one case of amputation of the thigh the pin compressing the femoral artery was accidentally removed by the patient four hours after it was applied, yet no hæmorrhage ensued.

Dr. Heron Watson, of the Royal Infirmary, Edinburgh, and Dr. Fiddes, of Aberdeen, have reported a large number of cases of equal success. I have employed acupressure in twenty-two cases with the utmost satisfaction. In my first cases I was afraid of hæmorrhage, and allowed the pins to remain for three or four days; this, I soon found, was very bad practice, as quite a degree of suppuration occurred in the track of the pin. I now remove it in from thirty to forty-eight hours. I obtain the most satisfactory results when no dressings are applied—not even cold water; simply closing with metallic sutures, or silk ones that have been boiled in wax, which I remove usually at the same time I do the pin, sometimes substituting a few strips of isinglass plaster. It is very important that perfect rest be secured for the wounded part.

I have employed a variety of modes of acupressure, but am most partial to the following: Pass the point

of the pin under three or four lines of tissue, out and over the vessel, then raise the head and carry to the opposite side and thrust the point into the tissues under the vessel. In large vessels other modes would be preferable. From the results that have been procured, I am safe in saying that it needs only a fair trial to prove to any one the superiority of acupressure to deligation.

ALEPPO, Syria.

SUB-PERIOSTEAL EXSECTION OF THE OS CALCIS.

By M. A. McCLELLAND, M.D.,

KNOXVILLE, ILLINOIS.

THE following case is reported for the sake of illustrating the value of conservative surgery in treating diseases of the tarsal bones. I was consulted by the patient, aged 50, a wagon-maker by occupation, on account of two fistulous openings on opposite sides of the heel, just beneath the malleoli. He had, two months before, stepped on a nail, which penetrated to the bone. The external wound soon healed, but in a short time abscesses formed and were opened. After discharging for some time, efforts were made by a homœopathic gentleman to *close* the wounds, by introducing into them portions of *nitrate of silver*. The probe revealed the presence of carious bone near the cuboid articulation. The foot in early youth had been crushed by a heavy sack of timber, and the normal relation of parts had, by this, been somewhat disturbed. The paramount duty was to remove the diseased portion of bone, and for this purpose, hoping the caries was only superficial, I carried down a one-third inch tooth burr to the lower and outer aspect of the calcaneum, and with it removed all the dead bone within reach. I then carried a tent to the bottom of the fistula, to secure free drainage. No caries could be discovered through the internal fistula. A large bread and water poultice was directed to be kept constantly applied. This treatment was continued till the tent could not be carried down more than half an inch, on account of granulations. The poultices were then left off, and the sores were dressed with simple cerate, and pressure was brought to bear by means of two pieces of coin and a bandage. Before these were applied all discharge had, in a measure, ceased, and the probe could not be introduced, but for a short distance, without breaking down healthy granulations. For the first week the sores contracted and were apparently healing, when all at once profuse discharges again began to take place, the fistulas opened, allowing the probe to be again carried down to the calcaneum, and from both sides carious bone could now be detected. Heel badly swollen, red and painful. Reapplied bread and water poultice, and commenced preparing my patient for an operation, the nature of which I had not yet determined, although I was inclined to excision of entire calcaneum. On consultation, it was decided to cut down on diseased bone and be governed by its condition as to extent of operation.

On the 4th of February, assisted by Drs. Duncan and Call, I made an incision on the outer aspect of the calcaneum, extending from the centre of the heel forward to the assumed calcaneo-cuboid articulation, cutting through the external fistula. I then cut down to the margin of the sole, entering the scalpel at the fistula, thus making a T incision. I then reflected the posterior flap, and finding the bone thin I applied the trephine and cut out a disc. The removal of this revealed a large cavity filled with pus and broken-down osseous material. Reflecting the anterior flap, I enlarged the opening made with the trephine, and through it extracted two sequestra, the largest being an inch long by half an inch in diameter. With forceps and finger I detached numerous smaller fragments. After smoothing the cavity and syringing it well, I approximated the flaps with adhesive plaster, leaving a large tent, composed of four strands of candle-wicking, in the most dependent part of the wound. I then placed the patient on Tinct. Ferri Chloridi and directed the cavity to be well washed and kept constantly wet with a solution of Permanganate of Potash. On the 10th, chills, fever and profuse perspiration supervened, appetite became impaired, and wound ceased discharging pus, but instead a thin offensive sanies. Ordered patient to be put on essence of beef, egg-nog, and to continue Tinct. Iron, to which I added quinine. On the 12th, the chills, fever and sweats had disappeared, and the appetite had again returned. At the same time the discharge from the cavity had become more laudable. A little puffiness made its appearance at the anterior termination of the longitudinal incision which, by the 15th, developed into an abscess, at the bottom of which there was a fistula through which the probe could be carried to what was supposed to be the posterior face of the cuboid. No caries could be discovered. On the 20th, I made a free opening through the fistula, and directed it to be kept open with a tent. By the 28th it inclined strongly to heal. March 10th, completely filled up and scabbed over. The cavity in the calcaneum, which immediately after the operation was about an inch in diameter by two inches in length, had during this time become gradually obliterated, and by the 18th was fully closed. March 30th, the patient walked half a mile with only the aid of his cane, the heel being protected somewhat by a soft compress. No tenderness on handling. May 1st.:—The patient has been at work for the past month, walking to and from his shop, a distance of half a mile, without any assistance. No soreness whatever; and motion of ankle-joint preserved.

CASES OF HYDROPHOBIA.

By WM. T. PLANT, M.D.,

SYRACUSE, N. Y.

WE have recently had in this city two cases of hydrophobia. The first in an Irishman, æt. 24, occurred in the practice of Dr. A. J. Dallas. The patient had been bitten by a small dog on the back of the right hand about four months before the accession of hydrophobic symptoms. No notice was taken of it at the time, and when, at the outset of the attack, complaint was made of "rheumatism" in the right hand and arm, no cicatrix or inflammatory redness could be discovered.

The symptoms in this case were well marked. Attempts to drink excited spasm of the pharyngeal muscles and immediate ejection of the fluid from the mouth. The quantity of frothy saliva and mucus was so great that the administration of chloroform had to be suspended to prevent death from asphyxia. Though the mind was clear, the patient carefully avoided all allusion to the bite which he had received. When spoken to on the subject, he averred that he had killed the dog, so that no harm could come from the bite, and forbade the physician to speak of it again, as it nearly made him crazy. In this case, priapism and satyriasis were marked symptoms for which the poor fellow apologized, remarking that he "could not help it."

As the patient was able, with some difficulty, to swallow solid food, sleep was induced by morphine given on bread. Convulsions became more frequent until death, which took place on the third day of the disease.

The second case occurred in the practice of Dr. J. P. Dunlap. The patient was a little girl aged five years. Five weeks before the disease appeared, she had been bitten by a large Newfoundland dog about the head and face. The wounds were so extensive that it was judged impossible to excise or cauterize them. Her first complaint was of weariness. The next morning she had difficulty in swallowing her breakfast. Perhaps the most notable symptoms in this case were the cutaneous hyperæsthesia, and the most exquisite exaltation of the sense of smell. She dreaded to be touched, and when asked by one of the medical attendants if he might lay his hand on her head, she darted up in the greatest alarm, begging her mother to take her away. On the approach of another practitioner to her bedside, she shrank away with a terrified look, crying "tobacco." The doctor had, some time before, smoked a cigar, and nothing could induce the little sufferer to have him near her again; and when Dr. M—— saw her next day, it was only on condition that the "tobacco man" should not come again, that he could obtain permission to lay his hand on her pulse.

The restlessness and anxiety increased, the saliva became more abundant and viscid, the sighings and convulsions more frequent, until the afternoon of the fourth day from the time she first complained, when she became unconscious. Chloroform was given at intervals with some relief to the opisthotonos, until 10 P.M., when she died.

Original Lectures.

LECTURES ON TUMORS:

BEING A PORTION OF THE COURSE OF SURGERY AT THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

SESSION 1867–8.

BY S. D. GROSS, M.D., LL.D.,

PROFESSOR OF SURGERY.

(Reported expressly for THE MEDICAL RECORD.)

VI.

(Continued from page 57.)

EPITHELIOMA.

This is likewise known as epithelial cancer, or cancroid. I have already had at the clinic a number of cases, during the progress of the session, illustrative of this affection, and I shall therefore not enter largely into the consideration of it.

I will simply state again that the most common seats of epithelioma are the junctions of the mucous and cutaneous parts of the body, where the mucous membrane unites with the skin, or the skin with the mucous membrane; hence, it is most frequently met with in the lip, especially the lower, seldom in the upper; it is also met with in the penis, the foreskin, the vulva, the labia, the nymphæ the vagina, the uterus, the tongue, the tonsils, the fauces, the œsophagus, the pyloric extremity of the stomach, the ileo-cæcal valve, the rectum, the anus; these are the parts of the body where it is developed in preference to any other structures. It has been said to be found in connection with the osseous tissue, as well as in some of the interior organs not mentioned. I have never seen such a specimen. Sometimes it exists in different parts of the body, or, during the progress of its development, other tumors of a similar character are liable to arise.

It begins usually in the form of a wart, excrescence, chap, or tubercle on the surface of the mucous membrane, or on the mucous membrane and the skin. This gradually takes an ulcerative action, which spreads in different directions until at length a large surface is exposed in this way, covered by unhealthy granulations, or encrusted with greenish, yellowish, or drab-colored aplastic lymph, and bathed by a foul, fetid, sanious, ichorous, unhealthy discharge. As the disease progresses, the lymphatic ganglions around become involved; thus in cancer of the lip, those of the chin, face, and jaw, invariably suffer to a greater or less extent; in cancer of the penis or prepuce, the lymphatic ganglions of the corresponding groin become affected; in cancer of the vagina or uterus, the lymphatics of the groin, or of the groin and pelvis suffer. There is the same tendency to secondary formations, precisely as in scirrhus, encephaloid, and melanosis. I show you a specimen developed in the cicatrix of a burn or scald.

This tumor consists of a stroma, precisely like the other formations, fibroid in its character, generally composed of the preexisting tissues, but likewise of new formation; and the cancer cells here are numerous and of a rounded, ovoidal shape, or fusiform, or caudate, as the case may be; the older cells are frequently flattened or compressed in consequence of the pressure of the surrounding tissues. In specimens of long standing we find a large quantity of epithelial matter mixed up with them, and likewise fatty matter or oil globules.

If the patient is not relieved by the timely interposition of the knife, the only remedy, by the way, at all available in such a case, it will go on from bad to worse, until at length life is destroyed, at a period varying from six to eighteen months. Very many patients die under the first year, some not under two years, a few indeed not under ten, fifteen, or it may be twenty years. I am acquainted with an eminent physician who has been the subject of an affection of this kind, commencing in the cheek in the form of what is known as a noli-me-tangere, gradually going on involving the eye, the frontal and nasal bones, producing horrible ravages, and yet life has been preserved for nearly a quarter of a century. This is an exception to the rule.

When extirpation is performed, no matter how carefully the operation may be conducted, there is great liability to relapse, either at the cicatrix, or in a neighboring or more remote organ; precisely as in the other heterologous formations. The disease is, therefore, malignant. *My own conviction is, that this affection is nothing but a form of scirrhus.* It derives its term epithelioma from the fact that, when we examine its structure, we find a great many epithelial cells, arising from an admixture of mucous and epidermic tissue. I regret, for the sake of the progress of science, that the word epithelial has ever been mentioned in connection with it.

DIFFERENTIAL DIAGNOSIS OF MALIGNANT TUMORS.

In the first place, we know a scirrhous tumor to be of that character from its hardness, from its gradual increase, and from the peculiar nature of the pain which accompanies its development. It is hard, firm, inelastic; gradually increases in volume; never attains a great bulk; and the pain by which it is characterized is of a sharp, lancinating, shooting, darting character, as if needles were thrust into the parts. Gradually, as development progresses, there is a tendency to the formation of adhesions, below, around, and above; the skin becomes firmly attached at one or more points, more or less extensively; and as it does so, the vessels in the skin become congested and somewhat enlarged, but never very much so; the skin becomes tender, and looks "angry;" by and by ulceration takes place,

and in this way a sore, or a cavity, or an ulcer having particular features, is formed. We have seen that the ulcer has everted, jagged, or ragged edges; that the ulcer itself is steep, as if it had been excavated; that the bottom of it is incrusted with aplastic lymph of a yellowish or greenish aspect, and bathed with a discharge, sanguinolent, ichorous, more or less offensive, and more or less abundant; and during this stage of the affection, sometimes before, there is involvement of the lymphatic ganglions around. If you see a tumor of this kind in the mammary gland, or on any external part of the body, you can have no difficulty in the diagnosis.

A tumor occurs, we will suppose, in the mammary gland, which commences at one or more points of that organ; it is comparatively soft in its consistence, rapid in its development, and has attained a great size at the time of the examination, although only a few months may have elapsed since the attention of the patient was directed to it. There is perhaps as yet no involvement of the surrounding lymphatic ganglions; there is no discoloration of the skin, and you notice marked enlargement of the subcutaneous veins, a circumstance which you do not witness in scirrhus of the mammary gland, or scirrhus as it occurs in other parts of the body. Scirrhus takes place late in life as a general rule, after the age of forty, forty-two, or forty-five—rarely under forty-five; encephaloid takes place at a comparatively early age, and may exist as an intrauterine affection, but is most commonly met with between the ages of twenty and forty. When such a tumor, therefore, presents itself in the mammary gland, or underneath the skin, or in any organ, soft in its consistence, rapid in its development, of great bulk considering the time during which it has existed, comparatively free from pain, with enlargement of the subcutaneous veins, then such a tumor may be assumed to be malignant in its character, and represent what I have described to you under the name of encephaloid, soft cancer, fungus hæmatodes, or medullary sarcoma. When ulceration takes place, then the bottom or the surface of the ulcer presents a peculiar appearance; the discharge is copious, thin, ichorous; frequently there are copious effusions of blood, rapidly undermining the patient's health—a characteristic condition of the ulcer, you observe, with sharp edges, more or less undermined, not everted, not having an excavated appearance, but its surface frequently projecting beyond the surrounding level; an appearance altogether different from that shown by scirrhus, which presents an ulcer with an excavated appearance, as if the parts had been cut out with a punch.

In colloid, the diagnosis will generally be obscure. It is most commonly met with in connection with the peritoneum, or the omentum—in other words, it is developed in the cavity of the abdomen; sometimes in a bone, sometimes in connection with the liver or in the lung. In the abdominal cavity it may be confounded with enlargement of the liver, or enlargement of the spleen. The diagnosis is always difficult. I do not know that it can be positively determined even when situated underneath the skin, or among the muscles, or in connection with a superficial bone. Such a tumor would be liable to be confounded with a fibroid tumor, with an enchondroma, or a growth having a very strong, firm, dense consistence; not likely to be confounded with a cystic, hydatic, or fatty tumor; the difficulty would be in regard to the question whether it was a growth of a fibroid or enchondromatous character, or of the nature of the colloid.

In regard to the diagnosis of melanosis, that is sufficiently easy when the tumor is situated superficially as for example, when it lies immediately beneath the skin; and when it has been developed in connection with the lymphatic ganglions of the groin, the axilla, or the neck—situations in which its occurrence is by no means uncommon; we observe, under such circumstances, a peculiar discoloration of the skin, which at once determines the nature of the case. There is nothing else, as far as I know, by which the diagnosis can be established.

In regard to the diagnosis of an epithelioma, an exceedingly common form of cancer, it can generally be determined, even in the earlier stages of its existence, by its great hardness. You grasp it with the thumb and finger when no larger than a cherry pit or a small pea, and you find at that period that it is firm, hard, incompressible, in a great measure inelastic, feeling like a firm scirrhous body between the thumb and finger. Gradually, as the disease progresses, it enlarges in every direction and ultimately yields to ulceration—the ulceration being of a peculiar character, irregular on the surface, with hard edges, generally everted, sometimes inverted at one point, but always hard; the bottom always foul, the discharges thin and sanious, the pain of a sharp, lancinating character. You have here all the characteristics of the ordinary scirrhous ulcer, as it manifests itself during the development of this disease in the mammary gland. Its characteristics are unmistakable. In some situations, as upon the head of the penis, the vulva, vagina or uterus, or on the lip, the surgeon might, if he were at all careless, mistake such an ulcer, especially in the earlier stages of its existence, for a chancre, or a syphilitic ulcer of secondary formation; but the history of the case will prevent the commission of such an error, for in an ulcer of a syphilitic character, no matter where it occurs, you have always the history to guide you, and in the secondary form of the disease there are usually evidences of its action in different parts of the body.

THE TREATMENT OF MALIGNANT TUMORS.

In regard to the treatment of these growths or formations, these malignant diseases—they are all unforgiving, unrelenting; they are absolutely, atrociously malignant, and there is not one article of the materia medica, or any combination of remedies of which we have any knowledge at the present day, which, no matter how judiciously administered, or how carefully applied as local agents, will exercise the slightest influence in arresting the morbid action. Nothing can be done in the way of local treatment. We may improve the general health of our patients, and in this way, perhaps influence the progress of the disease somewhat; but we cannot by any possibility exercise a direct healing or sanitary influence on the morbid mass. This is the result of the observation of the profession from the earliest records down to the present moment.

When an affection of this kind is situated externally, as, for example, in the mammary gland, we may make use of compression, as originally suggested by Sir Charles Bell during his connection with the Middlesex Hospital of London, and as subsequently practised by Dr. Arnot, another eminent surgeon of London, in a modified form, by means of gum-elastic contrivances, so as to render the compression gentle, equable, and uniform, regulating it according to the tolerance of the parts; but these remedies have been found to be unavailing; they might exercise perhaps a temporary influence in retarding the morbid action, but not a curative agency at all; the attempts which have been made to test this mode of treatment have utterly failed in effecting anything like a radical cure.

The pain which attends a malignant growth, especially the scirrhous form of the affection, may be very

essentially relieved by certain applications, as, for example, lotions, liniments, ointments, or plasters, all of them containing opium, morphia, hemlock, or some anodyne substance as the base, but these exercise no curative influence; they are simply designed to relieve local suffering and to enable the patient to sleep.

(To be Continued.)

Progress of Medical Science.

A Rational Treatment of Phthisis Pulmonalis.—Dr. H. G. Davis, of this city (*Obstetrics* or *Surgery*), advocates an original plan for the treatment of pulmonary consumption, which commends itself to the attention of practical men. Starting with the assumption that phthisis is a disease of nutrition, that its converse is healthy nutrition, and that this healthy nutrition is proportioned, other things being equal, to the amount of air respired, he looks for the rational remedy in a philosophical development of the chest, walls, and lung tissues. He gives it as a law of the animal economy that, "other things being equal, persons assimilate food just in proportion to the amount of air they respire." He also maintains that, "with a well developed chest, man has twice the volume of lungs necessary to support life." The introduction of air into the lungs is considered as purely mechanical. The ribs are raised, the diaphragm drawn down, thus producing a vacuum into which the air enters. Hence it follows that the amount of air received into the chest at one inspiration, depends upon the difference between the minimum (expiration) and the maximum (inspiration) capacity of the chest.

After describing the various respiratory muscles and their action, he alludes to what may be styled the accessory respirators; those muscles of the shoulders attached to the chest, and used in voluntary respiration. He maintains that these muscles have two sets of actions, according as they contract from the shoulder or the chest. Of the pecto-humeral muscles, of which the pectorales may be taken as the type, contract from their attachment to the thorax as fixed points, of course the chest is held stationary during the action, therefore the chest cannot be enlarged by this use of the muscles, as in lifting weights, etc.; but if the same contraction takes place from the shoulder as the fixed point, the action is reversed, and the chest is aided in its expansion, as in involuntary efforts at respiration. It is by taking advantage of this latter principle that he is enabled to treat pulmonary phthisis with success. In accomplishing this, however, he does not aim to support Nature, but to aid her; not to induce forced expansion of the lungs, but to render the involuntary respiration easier by elevating for the time being the ribs and consequently a tension of the pectorals. To accomplish this end he advises that a portion or the whole of the weight of the body be suspended by the hands grasping a horizontal bar, or its equivalent. By this means the chest, being free, can be enlarged to the full extent which is allowed by the ligaments, and these latter tissues, by repeated distension, increase in length by the consequent expansion of their functions. The plan of drawing a full inspiration, retaining it, and by its rarefaction expanding the air cells, he says is not only open to the objection that it interferes with the physiological respiratory act, but it exhausts the patient, who is deprived of the benefit of fresh air during the time it is retained in the cells beyond the usual period required by nature. In his method, however, the only expenditure of nerve or muscular force is through the hands in holding upon the bar. Even this small outlay of nerve power he has been enabled to obviate in patients much debilitated, by securing a band or handkerchief around the bar as close as the hand can be forced through it, thereby supporting the patient by the wrists. The good effects of this method of treatment, he affirms, are to be seen in the lengthening of the respiratory ligaments, the increased size of the chest, and the augmentation of volume and substance of the lung tissue. More air is received, nutrition is stimulated, the appetite is increased, and the patient has laid the only sure foundation for permanent improvement. He particularly recommends this course of treatment in persons hereditarily predisposed to phthisis as the surest preventive against an attack. As an example of the beneficial effects of a modification of the same principle of gymnastic treatment, he instances the good effects upon the difficult respirations of asthmatic patients which result from leaning the head forward and resting it upon the hands on the back of a chair. In further support of this physical development of the chest, he alludes to the well-known law that when any particular part is restrained in its action, the ligaments and muscles attached to it become shortened and atrophied in consequence of the absence of the proper stimulus to nutrition, which they would receive if they were allowed to properly perform their functions.

The exercises in expansion, with but a slight increase of the nerve-power, give the patient benefit of full, free and deep inspirations, and can be continued for a number of minutes in succession when made by the hands, but when from the wrists it can be continued by the hour, without any danger from exhaustion. When the patient feels adequate to the task, a voluntary effort at expansion can be superadded with positive benefit. The immediate effect of this plan of increasing the amount of respiratory power, is that the individual takes from one to two hundred per cent. more air into the lungs than would be naturally the case. The process should be continued until the chest has become permanently enlarged, and the lungs have developed until they fill this capacious cavity. In connection with the development of the respiratory power, nutrition is sedulously cared for, the cough being considered only as a mere symptom.

Hydrocele cured by Faradization.—A patient, aged 54 years, had a hydrocele of many years' standing, which had been treated three times by injection without effect. The tumor was large and very sensitive. To effect a radical cure electricity was used; a needle, connected with the negative pole of Daniell's pile, was introduced into the anterior portion of the tumor, and the other pole, by means of a damp sponge, applied to the opposite part of the scrotum. The current, which caused little pain, was continued for five minutes, and repeated three times every other day, after which the parts gradually returned to their natural size. Nine months after the hydrocele had not returned.—*Richmond Medical Journal.*

Four and a half inches of Whalebone in the Uterus.—A woman in using a piece of whalebone to bring on a miscarriage, lost it in the womb. The foetus and after-birth came away, leaving the whalebone in utero. Three days after an examination revealed to the touch nothing abnormal, save that the uterus was enlarged, the os somewhat dilated, and a general relaxed condition. The next day the patient was found almost speechless and pulseless, the bed saturated with blood, which was still flowing. A vaginal examination revealed very high up in the uterus the piece of whale-

bone. The os was not large enough to admit the forceps being used at the same time. The whalebone lay transversely in the uterus, and I finally succeeded in hooking my finger over one end and bringing it down; but it doubled upon itself, and I removed it forcibly, without letting go my hold. The whalebone was such as is used in umbrella frames, four and a half inches long, and slightly pointed at both ends. Ergot was immediately given, followed by stimulants and tonics, and the patient recovered.—M. M. Eaton, M.D., in the *Chicago Med. Examiner.*

Prolonged Gestation.—Dr. Rivers, of South Carolina, relates a case in which a hydrocephalic fœtus was retained in utero until the completion of the twelfth month. The mother was troubled with abdominal pains at term, but these subsided after three days.—*Richmond Medical Journal.*

Cannabis Indica in Delirium Tremens.—Dr. Beddoe, of the Edinburgh Royal Infirmary, thus speaks of his method of treating this disease: "I usually begin with a grain of *good* extract, or 20 minims of the tincture; wait for 4 or 6 hours, and then, if the patient be awake, give a double dose. If this also prove fruitless, 6 hours later, I give 3 or even 4 grains; then allow 6 or 8 hours to pass, and, if necessary, try a larger dose. Longer intervals are needed for extract than for tincture." In one case Dr. Beddoe proceeded as far as 2 drachms (= 6 grs.), before the patient succumbed to the hypnotic influence. He slept several hours, and awoke almost well. This plan he thinks far better than the ordinary one of giving moderate doses every 2 or 3 hours, whereby a second or third dose is given before one can tell whether the first would not take effect. He has always given as much soup, milk, or other digestible food as the patient's appetite and stomach could receive, and has never given alcoholic stimulants, except when the quality of the pulse distinctly indicates them. —*Ranking's Abstract.*

Case of Acute Phthisis Complicated with the Presence in the Lung of the Parasite Pentastome Constrictum.—In 1863, a soldier of an Ohio regiment, and in the last stage of acute phthisis, was admitted to Hospital No. 1, Gallatin, Tenn., and survived about two weeks after admission. During the last week of his life, rapid disintegration of the lung tissue supervened, evinced by copious expectoration. The odor of this became rapidly very offensive, although the freest ventilation was used, and chlorine judiciously supplied. Two or three days before death, there was observed in the sputa a parasite of curious and unusual aspect. Five or six of these animals were discovered, varying but little in size, one only being alive and indicating vitality by frequent lateral contortions. The length of this was about a quarter of an inch, breadth about one line, body worked by consecutive constrictions, some 7 or 8 in number; head rounded and transparent, and tail obtusely pointed. This was placed in a vial of glycerine for preservation. Twenty hours after death, examination revealed extensive destruction of both lungs, evidently from the ravages of phthisis, while much of the remaining tissue was gangrenous, being dark greyish in appearance, very friable, and insupportably offensive. None of the parasites were found entire, but in the large cavern, containing dark greenish purulent matter, were observed portions of these animals, as also some calcareous particles. No further examinations were made.—J. A. Fitzgerald, M.D., in the *Western Journal of Medicine.*

Narceine.—The dose of this drug is from one-sixth to one-half a grain. At the outset it diminishes the pulse, but subsequently accelerates the pulsations. It does not seem to produce constipation, but rather a free action of the bowels. It is said to retard menstruation. Dr. Eulenberg prefers it to any other narcotic, and gives it in neuralgia, in painful affections generally, and in articular diseases, iritis, cystitis and orchitis, stating that it produces sleep, "which is soft, tranquil, uninterrupted, and followed by a quiet awakening." Narceine is reported to be preferable to morphia, as a general rule, and to act effectually in those cases in which morphia fails.—*St. Louis Medical Rep.*

Intestinal Puncture in Tympanites.—Under the advice of Dr. Boussagrives, 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'Union Medicale.*

Disinfectants.—M. Bonjean, an eminent pharmacien of Chambéry (Savoy), has published a book on the means of preventing cholera, etc. Of course, his system rests on the use of disinfectants, among which he mentions: charcoal, well pounded, two pounds; sulphate of iron, one pound. Two or three tablespoonfuls should be placed in the night vessels used by the sick. The author contends not only that carbolic acid is overrated, but that its virtues are *nil*.—*Lancet.*

Preservation of Anatomical Specimens.—M. Van Vetter, of Boulogne, preserves anatomical specimens as follows: He takes 7 parts of glycerine, 1 part of brown sugar and half a part of nitre, and mixes them. The pieces to be preserved are then plunged into the mixture. Parts that have been in the glycerine are difficult to dissect. The pieces are macerated according to their size; thus a bone ought to remain in eight days. When after a little time the preparation is as hard as wood, he suspends it in a dry and warm place. The glycerine disappears after a little, and perfect suppleness remains. Specimens prepared in this manner, not only preserve their softness and natural color, but the proper action and mechanism of the muscles may be demonstrated from such specimens.—*Jour. de Pharm. et de Chemie.*

Prairie Itch.—The well-known pestiferous affection, so common in the West, and universal in the army, variously known as prairie itch, ground itch, army itch, etc., may easily be cured by such irritants or caustics as dilute sulphuric acid, corrosive sublimate, or white vitriol; or, what is more certain, the three combined, in the form of ointment, or solution; while all such applications as blue ointment or Fowler's solution are useless, or nearly so. This fact may be of use to many physicians, or all who use the latter remedies. This disease, which is so exceedingly annoying, can be cured only by being killed in this way, and cannot be neutralized, or driven from the system, or cured by alteratives, as many suppose. It is only second cousin to scabies, and sulphur has no effect upon it.—*Chicago Medical Journal.*

Sulphate of Nickel in Neuralgia.—J. D. Palmer, M.D., bears testimony to the good effects of this drug

in a case of neuralgia of more than three years' standing. For the last two months the paroxysms had been very violent, and had occurred every few minutes. Very many remedies had been used with only temporary relief. The sulphate of nickel was then commenced in half grain doses three times a day. In less than a week the paroxysms were reduced to only one in twenty-four hours, and this came on at noon. In three days after, it came on at 3 P.M.; on that day a grain of the sulphate was given, besides the regular dose. Its sedative action was speedily manifested in reducing the pulse and producing sleep. The medicine was continued, and gave more permanent relief than anything else. It soothes quicker than morphine, and is not followed by any unpleasant effects.—*Richmond Medical Journal.*

USE OF PAPER FOR SURGICAL DRESSINGS.—Dr. Addinell Hewson (*Penn. Hosp. Reports*), struck with the fact that paper had been used in the place of lint as a surgical dressing, in the recent campaigns of the Prussian army, tested its practicability at the Pennsylvania Hospital, and, after numerous experiments, has settled on the common newspaper as being the best and the cheapest substitute for lint, linen rags, or muslin.

The advantage of economy is no small consideration, as a yard of good parent lint costs thirty-three cents, while a sheet of paper which equals that article in usefulness as a surgical dressing, costs only one cent.

Dr. Hewson uses also Manilla paper coated with a thin layer of yellow wax, in the place of oiled silk. In this way a saving of from four to six hundred per cent. is gained; besides affording the advantage of discarding everything appertaining to the dressings each day, by which one source, at least, of receiving contamination experienced in the employment of oiled silk is avoided.

POISONING FROM ATROPIA TREATED BY OPIUM.—Dr. Hayes Agnew, M.D. (*Penn. Hosp. Reports*), treated a woman who had had administered to her, through mistake, one grain and a half of the sulphate of atropia in solution, by giving, in a period embracing eighteen hours, two hundred drops of the tincture of opium, thus counteracting the toxical effects of the alkaloid.

AMAUROSIS SUPPOSED TO BE DUE TO TOBACCO.—Jonathan Hutchinson, F.R.C.S., etc. (*Medico-Chirurgical Transactions*), has collected together thirty-seven cases, all except three being in the male sex. Of the three women, only one used tobacco (in the form of snuff), one had suffered from constitutional syphilis, and in the remaining one no cause whatever for the amaurosis could be ascertained. Of the thirty-four cases among men, tobacco was the only apparent cause in twenty-six; five others were smokers, but in them the amaurosis was attributable to other sources, and in the remaining three, Mr. H. considers it scarcely possible that tobacco could have been the cause of the disease.

OVARIOTOMY.—T. Spencer Wells, F.R.C.S., etc. (*Medico-Chirurgical Transactions*), has operated two hundred times. Of the first hundred cases, he lost thirty-four; while the mortality in his second hundred has been reduced to twenty-eight. The most favorable ages for the operation are below twenty, and between forty and fifty. The mortality is about nine per cent. less among single women than the married.

Mr. Wells has found that the length of incision has an influence upon recovery, as the mortality has been 12 per cent. less when the incision has not exceeded six inches in length. He uniformly makes his incisions in the linea alba, and condemns the practice of making the incisions in the track of one of the rect. muscles.

TREATMENT OF CHOLERA AND EPIDEMIC DIARRHŒA.—Geo. Johnson, M.D. (*Medico-Chirurgical Transactions*), has communicated a paper showing the correctness of his views of the treatment of cholera. The number of cases treated was 375. Of those treated with castor oil alone, 30.45 per cent. died; of those treated with castor oil and the liberal use of stimulants 41.37 per cent. died; of those treated with astringents, stimulants, ice, hypodermic injections, camphor, etc., 71.42 per cent. died. In no case is there reason to suspect that there was any selection of cases made.

The conclusion is drawn, of course, in favor of what is known as the eliminative plan of treatment.

EUCALYPTUS GLOBULUS AS A FEBRIFUGE.—Dr. Ullersperger (*Schmidt's Jahrbucher*) mentions the eucalyptus globulus—a tree growing in *New Holland*, belonging to the order of myrtaceæ—as useful in the cure of intermittent fever. An infusion of the leaves, like tea, is the mode of administration. He mentions cases of the double tertian type, which were cured immediately by this tree after quinia was abandoned. It grows in temperate as well as in hot climates, but not in cold ones. Besides its use in intermittent fevers, Salarich recommends it as the best anodyne in nervous headache and in other pains of the head which are not of a periodical type.

BROMIDE OF POTASSIUM.—Messrs. Damourette and Pelvet, of Paris, have largely experimented with this salt upon animals, and find that, by its anæsthetic and amyosthenic properties, it acts on general nervous affections, such as epilepsy, chorea and hysteria; also, on the local varieties of nervous complaints, as dysphagia, asthma, hooping-cough, spasmodic dysuria, spermatorrhœa, palpitations, etc.; and, finally, on isolated pathological states, such as pain in headache, neuralgia, rheumatism, etc. The sedative action of the bromide on the whole capillary circulation causes it to control hyperæmia, whatever its nature and seat, as well in meningitis, inflammations of the eye, uterine, rheumatic and gouty phlogosis, as in cynanche, coryza, bronchitis, cystitis, urethritis, skin diseases, and perhaps scrofula and syphilis.—*Lancet.*

HEMORRHAGE FOLLOWING ABORTION.—Dr. C. M. Ford (*Am. Jour. Med. Sciences*) has treated uterine hemorrhages with great success, with injections of one drachm of persulphate of iron to four ounces of water, or the solution of the tincture of perchloride of iron of the strength of one drachm to three or four ounces of water, into the cavity of the uterus. He made use of the long leaden tube belonging to Tiemann's universal syringe.

ON THE CAUSES OF ALOPECIA.—Dr. A. F. A. King (*Am. Jour. Med. Sciences*) made some remarks before the Clinico-Pathological Society of Washington, D. C., endeavoring to establish the proposition *that the impediment to the circulation through the textures of the scalp was due to compression—either partial or complete—of the arteries supplying the scalp, by pressure of tight-fitting hats.* He mainly relied upon the greater frequency with which the disease occurred in males than females, in support of this statement, hats being worn as a general rule only by the former. The reason why baldness occurred in different localities in different individuals was, probably, due to a difference in the shape of the head. A long skull, when the pressure would be most exerted on the forehead (and, consequently, on the anterior temporal arteries) and occiput, would lose its hair sooner from the top and anterior portion. When a patch of baldness exists about the vertex, we might expect to find a *wide* head, the posterior temporal arte-

ries, which supply the locality referred to, being compressed against the parietal bones. Below the hat rim, when the circulation is not impeded, we invariably find the hair to remain good, though the top of the head may, at the same time, be entirely bald.

Dr. K. recommended as a prophylactic measure, the manufacture of hats made so as to embrace the head at points or surfaces where no considerable vessel would be compressed, or hats made to order for each individual might be arranged with a notch or semi-circular concavity in the rim over the spot of skin under which the artery passed.

Manufacture of Sugar.—L. Pierre and R. Massey have invented a new process of refining sugar, which has been patented. The saccharine juice, after being clarified in the usual way by means of lime and carbonic acid, is precipitated at boiling temperature with caustic baryta (60 parts of the latter for every 100 of sugar), the precipitate suspended in water and decomposed with carbonic acid. A pure solution of sugar is obtained, which only requires to be evaporated.—*Zeitschr. Chem., N. F., iii.*, 667.

Greek Fire.—What is commonly called Greek Fire, consists of a solution of phosphorus, or of sulphur and phosphorus, in a very volatile liquid, the bisulphide of carbon, to which some mineral oil is added, to increase its incendiary powers. To extinguish the flame produced by this agent, throw upon the burning surface some wet or damp sand, ashes, sawdust, lime, or wet sacking or carpeting, any material by which the flame can be stifled by exclusion of air. No attempt should be made to remove the covering for some time after the flame has been extinguished. A powerful jet of water should be played upon the place afterwards.—*Chemical News.*

Absence of Corpus Callosum.—Before the Royal Medical and Chirurgical Society, on March 24th, Dr. Christie reported a remarkable case: A patient, aged twenty, died; and it was found at the autopsy that the corpus callosum was wanting. He had been idiotic and without the power of speech from birth. The calvarium was small, dense, and shelving off considerably in the anterior portion. The encephalon was very small, and weighed only 28¾ oz. The specific gravity of the grey matter was 1040, and of the white 1045.—*Lancet.*

Hip-Joint Injuries.—Dr. S. W. Gross (*Am. Jour. Med. Sciences*) has collected 58 cases of *excisions of the hip joint* for gun-shot injury. 42 operations were practised by American surgeons; 9 by German surgeons; 6 by English surgeons; and 1 by a French surgeon. Of these 58 cases, 7 recovered and 51 died, thus affording a mortality of 87.93 per cent. The results of the procedure in army surgery may, therefore, be thus expressed:

	Per cent.
Mortality of all excisions of the head of the femur	87.93
" primary " " "	92.50
" secondary " " "	86.66

He also collected 166 *hip-joint amputations*, to estimate the advantages of excision and disarticulation.

Of these, 53, with 9 recoveries, were performed by American surgeons in the late war. From 166 operations, 24 recovered and 142 died, thus affording a percentage of mortality of 85.54.

The results of the operation in army surgery may, therefore, be expressed as follows:

	Per cent.
Mortality of all amputations at the hip-joint	85.54
" primary " "	95.58
" secondary " "	76.05

From these statements excision of the hip-joint is attended with greater risk to life than disarticulation at the joint. Primary excision is 3 per cent. less fatal than primary amputation; but secondary excision is 10 per cent more unfavorable than secondary disarticulation. From a statistical point of view, the chance of saving the patient is manifestly on the side of secondary amputation, the mortality being 16.25 per cent. less than that of primary excision, 10.61 per cent. less than that of secondary excision, and 19.53 per cent. less than that of primary amputation.

Hippuric Acid Deposited Spontaneously in Large Quantity in the Urine of a Man Suffering from Cancer of the Pylorus.—Dr. J. J. da Silva Amado, Surgeon to the Hospital of San José, Lisbon, reports: This man was diagnosed to have pyloric cancerous affection. He passed a large quantity of urine, which was found to contain, in great abundance, crystals of hippuric acid. This was demonstrated by the microscope, by chemical reagents, polarized light, and by carbonization.

The author enters deeply into a most learned and searching consideration of the physiology and pathology of hippuric acid in human urine.

The work is very instructive, and the following are the conclusions at which the author arrives:

1. In the normal condition of man, there may be found in his urine, an approximation to two grammes of hippuric acid, in twenty-four hours.

2. This quantity may be increased: *a.* By an exclusive vegetable diet; *b.* By the administration of benzoic acid, the essence of bitter almonds, the balsam of Peru, or any substance belonging to the benzoic series; *c.* By undue exercise; *d.* In pyrexias; *e.* In diabetes.

3. The quantity of hippuric acid excreted in urine diminishes or is lacking: *a.* Under the influence of an exclusive animal diet; *b.* By prolonged repose; *c.* By abstinence; *d.* In jaundice.

4. The increased production of hippuric acid, after the administration of benzoic acid, or one of the benzoic class, appears to be the result of the reaction of those substances on the glucose contained in the liver.

5. When the increased excretion of the said acid is not due to the administration of benzoic acid, it appears to be attributable to the oxydation of tyrosina.

6. If this is not the case, it proves the existence of a special disease, characterized by increased excretion of hippuric acid.

7. Hippuric acid may appear in the urine, in the form of sediment.

8. Organic affections of the stomach appear to establish a relation between vomiting and increased excretion of hippuric acid.—*Gazeta Medica da Bahia.*

The Milk of Syphilitic Nurses.—Dr. Padova has inoculated this milk on some healthy individuals; and, as the result of the operation was negative, he hastily concludes that this fluid has no infectious properties; forgetting that the milk placed under the skin, and the same secretion obtained by suction, and reaching the stomachs of children, are widely different in their effects.

The Effects of frequent Venesections.—In the Carmelite Convent of Mataro, Italy, there died, a short time ago, a nun, at the advanced age of eighty-seven, who had taken the veil seventy-two years before. She had been a great martyr to rheumatism, and had, for attacks of this complaint, been bled 317 times.—*Tribune Medicale* (of Paris), April 5th, 1868.

Ovariotomy.—Dr. Nussbaum, of Munich, whom we

recollect seeing in London when he performed the journey to witness ovarian operations, has published the result of his own practice. Out of 34 cases of ovariotomy, he had 18 recoveries and 16 deaths. These figures are not so favorable as those published in this country; but the particulars of the cases would probably give the clue to the differences.—*Lancet, April* 18.

Gas House Odors for Hooping-cough.—The Hartford physicians are in the habit of sending their patients with hooping-cough to breathe the air of the gas-works. They seem to be well satisfied with the effects.

Low Temperature of the Fluid of Hydroceles.—Prof. Benno Schmidt of Leipsig, in the *Archiv der Heilkunde* for February, 1868, details his observations respecting the temperature of the fluid of hydroceles, from which it appears that the temperature of this fluid is strikingly lower than that of the integument, and that it is not perceptibly influenced by variations in the temperature of the parts external to it.

A New Poultice.—It appears from trials made at the Charité with the pulverised Mexican *Cactus opuntia*, that a very small quantity of this material suffices to make a large poultice, and that it retains heat and moisture for a long time.—*Zeitschrift fur Med. Chirurgie und Geburtsh.*

Arsenic in Filtering-Paper.—It is stated in one of our German exchanges that a kind of grey filtering-paper has recently been introduced into commerce, which is made of paper-cuttings and wall paper; the latter of which is rarely without some admixture of arsenical copper colors and compounds of lead. A chemical examination of this paper has shown that a quire of the same contains about 25 grains of white arsenic and oxides of copper and lead. As this paper is very cheap it is likely that it will be extensively used in the arts, and be productive of serious accidents.

Chemical Analysis of Human Skin.—M. W. Schmidt has made a chemical analysis of human skin with the following result: Carbon 44.25. Hydrogen 6.75. Nitrogen 12.29. Sulphur 1.14. Ashes 2.81. Oxygen 32.76 parts in a hundred.—*Zeitschrift fur Chemie.*

Trichina.—The obligatory microscopical examination of all swine slaughtered in a province of Saxony during the last year resulted in the discovery of 42 trichinous hogs.—*Zeitschrift fur Medicin, Chirurgie und Geburtsh.*

Glycerin.—*Price's* solidified glycerin is the best compound in the form of soap yet introduced, as it is an article of really definite composition. It wears well, gives a rich lather, and contains over half its weight of *Price's* distilled glycerin, the accuracy of which statement is verified by the following analysis:—water 21.5, fatty acids 29.5, soda 3.7, glycerin 45.2—100.—*Lancet.*

Detection of Aniline in presence of Toluidine.—A. Rosenstiehl finds that chloride of lime produces a blue color with aniline, and a brown one with toluidine, but a mixture of the two only shows the latter reaction. If, however, ether is added, the brown substance is taken up by the latter, and the blue color of the aqueous solution becomes visible.

The test is: Dissolve the base in ether, add an equal volume of water, then, drop by drop, a solution of chloride of lime, shake, and observe the color of the aqueous layer. (*Zeitschr. Analyt. Chem.*, 6, 357.)

Extra-Uterine Pregnancy.—In an able paper of considerable length in the *Gazeta Medica da Bahia*, 25th of May, 1867, Dr. J. F. da Silva Luvia records an extraordinary case of extra-uterine pregnancy. It was of eighteen months' duration, and occurred in a young woman eighteen years of age. The Doctor gives very minutely the interesting previous history of this case; and then refers *seratim* to *actual condition, palpation, percussion, auscultation, vaginal examination, diagnosis, operation,* and *subsequent history;* concluding his learned paper with *reflections* and *summary of similar cases* in Brazil. The operation performed was by regular incision through the abdominal walls, and in itself was entirely successful. The mother died on the nineteenth day after the operation.

The fœtus extracted was of the male sex, weighed eight and a half pounds, and was perfectly developed. There was an entire absence of hair, and through the anterior fontanelle protruded a large part of the cerebral mass. The Doctor instances four cases analogous to this, all occurring in 1859. In the fourth case mentioned the child continued to live.

The Epidemic in Bahia.—In several numbers of the *Gazeta Medica da Bahia*, of late, Dr. J. F. da Silva Luvia, of Bahia, has been contributing a series of papers giving the "History of a disease which exists in Bahia, under the form of an epidemic, and characterized by paralysis, œdema, and general debility." His description of the disorder is very interesting, and from the light we have now, we must confess we would not like to decide as to diagnosis.

Amputation of the Tongue.—Dr. Salzer stated in a recent meeting of the Vienna Royal Society of Physicians that according to his experience the hæmorrhage usually attending amputation of the tongue can be prevented by amputating with the galvano-caustic loop, which should be tightened very gradually so as to allow of the formation of a thick scab upon the cut surface.—*Allgemeine Wiener Med. Zeitung.*

Action of Belladonna and Hyoscyamus.—Dr. J. Harley, in a recent lecture in the Royal College of Physicians on the therapeutic action of belladonna, said:

The simplest view to be taken of the operation of belladonna is that of direct and powerful stimulation of the sympathetic nervous system, of which the increased force and action of the heart may be taken as the exponent. In children, and in many of the lower animals, this is so far the chief effect that, in medicinal doses at least, it may almost be regarded as the only one.

Adverting then to the medicinal use of belladonna, the lecturer placed this plant at the head of all stimulants; and having illustrated its use as being at one and the same time the most potent cardiac stimulant and diuretic that we possess, advocated its use in cardiac asthenia and syncope, in the collapse of cholera, in suppression of urine, and in diseases attended by imperfect oxydation—viz., rheumatic fever and gout.

In chronic nephritis he regarded it as being a most hopeful means of restoring the kidneys to healthy action, and he adduced several cases to show that belladonna had been beneficial in exciting a healthy tone in the renal blood-vessels, and so diminishing the quantity of albumen in the urine.

The same authority, in a subsequent lecture on the action of hyoscyamus, expresses the opinion that hyoscyamine in combination with opium produces the most powerful hypnotic action possible. Each increases the effect of the other. Quantities of morphia and hyoscyamine, which of themselves are insufficient to cause sleep, will, when combined, speedily induce that condition.

Like atropia, hyoscyamine is eliminated by the kidneys, and the lecturer stated that he had detected it in

the urine twenty-two minutes after the subcutaneous injection of the one-fifteenth of a grain of hyoseyamine.

Treating of its therapeutical use, the lecturer stated that he had found it serviceable in certain cases of epilepsy and enuresis, and extremely valuable in irritable conditions of the brain and heart; and that it is especially useful in often determining and invariably increasing the hypnotic action of opium.

In treating of the combined operation of belladonna and opium, the lecturer, having previously determined the separate effects of atropia and morphia upon the horse, the dog, and man, gave the results of their operation when simultaneously administered, or when the one remedy was allowed to precede the other by a variable time.

Aneurism of Femoral.—Dr. M. M. Pires Caldas reports, under head of "Clinical Register," in the *Gazeta Medica da Bahia*, June 25, 1867, an interesting case of aneurism of the superior third of the left femoral artery. The patient was a man 33 years of age. When he entered the Infirmary of San Fernando (10th February, 1867) "his features were discomposed; pulse beating 120 strokes per minute; excessive heat; dry skin; tongue dry and sticky; conjunctive yellow; belly tympanitic, and painful upon pressure, chiefly in the left iliac region, and presenting a tumor in the superior and anterior part of the left thigh, occupying two-thirds of the size of the limb, and extending from three centimetres below the crural arch, to the middle of the thigh, the circumference of which, including the tumor, measured in the highest part sixty-one centimetres—the *right* thigh measuring but forty-two."

On the next day (10th), the doctor, accompanied by two assistants, proceeded to tie the external iliac artery. He met with many difficulties which were unforeseen, the chief of which was peritoneal adhesion. A terrible wound was necessarily made. The man rallied, but finally sank, and died on the 26th March of the same year, attributable to excessive lesion.

Morning Sickness of Pregnancy.—Dr. D. W. Hodkins, Waldoboro, Me., (*Boston Med. and Surg. Journal*), advocates the use of bromide of potassium in morning sickness. He gave it to a patient advanced to the fifth month of pregnancy, who suffered constantly from nausea, and severe cramps in the limbs and bowels; she never vomited again, from the taking of the first dose. The cramps ceased entirely, and she went to the full term without an unfavorable symptom.

Impure Glycerin.—The presence of oxalic and formic acids is the great cause of irritation in glycerin; these acids are produced by the action of sulphuric acid upon the glycerin, forming the first mentioned acid, and this in turn acts upon the glycerin, giving rise to formic acid. The most reliable test is nitrate of silver. Glycerin which shows no reaction with this salt is considered suitable in all cases, as it indicates not only the presence of chlorine or chlorides, but is, as well, reduced by acids, which may exist in the glycerin.—*Chemical News.*

Detection of Kreatinine.—M. Roussin has prepared the use of bichloride of mercury for the detection of kreatinine in urine; kreatinine is precipitated from its solutions by the mercurial salt.—*Chemical News.*

Prophylactic against Hydrophobia.—The employment of cantharides has been proposed by Dr. Minjo, of Turin, as a preventive against this terrible evil. Instead of cauterization he applies to the bite of the animal, for the space of forty days, a pomade composed of powdered cantharides and tinct. cantharides, each six grammes, to be applied three times a day. As yet the treatment has not been sufficiently tested.—*Gazeta Medica da Bahia.*

A Singular Fistula.—In the *Bulletino delle Scienze Mediche*, published at Bologna, there is an interesting extract (from *l'Imparziale*, October 1st, 1867), in regard to a singular fistula. It was utero-intestinal in its character, and followed a difficult labor.

Extirpation of Large Fibroma from Orbit—Vision Preserved.—Dr. Pietro Nob. Gradenigo, a celebrated Venetian surgeon (oculist), gives an interesting account, in the *Giornale Veneto di Scienze Mediche* (December, 1867), of the extirpation of a large fibroma from the orbital cavity, with complete preservation (and undisturbed) of vision. The operation was tedious, but wondfously successful. The patient was a woman, aged 25 years.

The microscope revealed that it was a genuine fibroma.

Ozone and the Cholera.—When the cholera was severely felt in *Turin*, last year, Father Denza studied the meteorological condition of the atmosphere: the connection between the prevalence of the disease and the absence of ozone. The observations were made at *Moncalieri*, more than half a mile from the town: the electricity was measured as well as the ozone. During the days of August and September, when the cholera was at about its height, the amount of ozone present was variable, but considerable—perhaps about the average. The electricity, however, during these days almost entirely disappeared.—*Chemical News.*

Zylic Acid.—An acid has been separated by M. Lefort, from substances in the trunks of old trees, to which he gives the name zylic acid. This acid possesses the formula $C_{12}H_{11}O_{10}+HO$; it presents itself in the form of a vitreous, black, hard substance.

This is undoubtedly the basis of all compounds studied up to the present time, under the name of ulmic and humic acids.—*Chemical News.*

Diabetes.—A correspondent of the *Lancet* reports a case of diabetes successfully treated by the ethereal solution of peroxide of hydrogen. The patient had continued free from all distressing symptoms for four months.

Cure of Traumatic Tetanus.—Dr. Eben. Watson reports, in the *Lancet*, five cases of traumatic tetanus cured by the calabar bean.

Milky Urine.—Cured promptly by Cod-Liver Oil.—Dr. M. M. Pires Caldas gives, in the *Gazeta Medica da Bahia* (September 15th, 1867), two interesting cases of milky urine, with treatment in each case. He first tried iodide of potassium. This gave temporary benefit, promising, in fact, a cure; but the disorder soon re-appeared.

At the suggestion of a colleague, he then had recourse to benzoic acid. This likewise gave temporary relief.

The cases were then submitted to the opinion of several physicians, and finally it was decided (by Dr. Caldas) to exhibit cod-liver oil. This he did with the most flattering result. The cures were permanent.

Stricture of the Urethra.—In King's College Hospital a severe case of traumatic stricture of the urethra has been successfully treated by the direct application of potassa fusa, which was placed in a depression made in a bougie, and kept in contact with the stricture for two minutes, the treatment being repeated every alternate day.

Case of Hydrophobia.—Dr. J. F. de Bittencourt, Sr., records in the *Gazeta Medica da Bahia*, July 15, 1867, a singular case of hydrophobia in a man, occasioned by the bite of a she-cat.

It seems the man was caressing the animal, when it turned and bit him, playfully. The wound was trifling, and did not even create any notice. But just two months afterwards he was taken suddenly with a fit of extreme nervousness. This was but a precursor to the other ordinary, horrible symptoms of the malady. Dr. Bittencourt watched these symptoms closely, and makes a minute report of them; but as they do not differ materially from those in general incident upon hydrophobia, we forbear to give them.

The man died in twenty-four hours after the agitation commenced.

Peroxide of Hydrogen in Diabetes.—Dr. John Day (*Lancet*, Jan. 11, '68) mentions a case of diabetes which had resisted ordinary treatment for three years, and now under the influence of the ethereal solution of the peroxide of hydrogen, given in half drachm doses mixed in an ounce of distilled water, three times a day; it is rapidly yielding.

Phosphorus in the Treatment of Paralysis.—M. Delpech (*American Journal of Medical Sciences*) has obtained the best results from the use of phosphorus in paralysis. He mentions three cases in his ward submitted to this mode of treatment. In one case the disease had been brought on by the employment of sulphide of carbon; in another, by the effects of cold; and in the third, by an attack of apoplexy. The phosphorus acted at first as an aphrodisiac, producing erections, and thus its action was manifested on the genital organs; mobility and sensibility were then favorably modified, without any apparent inconvenience attributable to the use of the remedy.

Bromide of Potassium in Hooping-Cough.—Dr. De Beaufort (*Bull. Gen. de Therap.*) uses bromide of potassium, syrup of balsam of Tolu, and an alcoholic preparation of aconite, combined together; and by the aid of these three remedies he has seen this affection cured in twelve days on the average.

Insect Stings Treated by Collodion.—M. Latour (*British Medical Journal*, Nov. 16, '67) insists greatly upon the value of impermeable coating of the skin as a means of combating inflammation. For insect bites, he considers and finds by experience that the collodion coating is very serviceable.

Digitalis in Suppression of Urine.—Mr. J. D. Brown mentions (*Medical Times and Gazette*, Jan. 25, '68) six cases of suppression of urine treated by the external use of digitalis. He used the leaves, bruised and warmed in boiling water, as a poultice; also the tincture of the plant mixed with a warm linseed poultice and placed on the abdomen. He states that the rules of management must depend on the pulse. No good results have been seen till the pulse fell in number; it matters not from what figure: fall it must before any change occurs. In one case it fell from 109 to 70, in ninety minutes; in another, from 80 to 65, in three hours and a half. He advises 60 as a standard from a high number; 40 to 50 from a lower figure—say from 80.

Hot Bath in Erysipelas Ambulans of Young Infants.—Prof. Abeling, of Stockholm (*Journal für Kinderkrank.*), treats this form of infantile erysipelas by means of hot water. The infant is put into the bath at a temperature of 100° F., and hot water is gradually added until a temperature of 105° to 110° F. is attained. After from ten to thirty minutes, according to the age of the child, it is removed and wrapped in warm linen, which is covered over with a warm blanket. In this it is allowed to remain for two hours. The child falls generally into a tranquil sleep; and when this is not the case, a teaspoonful of cold water is repeatedly given. The bath is given twice a day in bad cases, but in ordinary cases only once, continuing it until improvement is effected.

Cases of Ovariotomy.—Dr. Wm. Warren Greene has contributed to the *Boston Medical and Surgical Journal*, a record of eight cases of ovariotomy; of which six cases were perfectly successful, including one in which both ovaries were removed. In one of the unsuccessful cases the death was purely accidental; in the other, there was no relation of cause and effect between the operation and the death. He draws from his own cases and those of others the following conclusions:

1st. When the tumor is large, it is impossible to form any accurate estimate of the extent or strength of adhesions that may exist, before reducing the bulk by tapping. 2d. The existence of adhesions is no contra-indication for an operation, but such cases, even when the bands are strong and numerous, do the best. 3d. Great care should be taken to secure a healthy state of the secretions in preparing the patient, and muriated tincture of iron should be given to insure plasticity of the blood. 4th. Great gentleness and delicacy should be observed in all manipulations by the surgeon and assistants. 5th. A powerful prophylactic against shock and inflammation is the free use of artificial serum (common salt ʒj, albumen ʒj, pure water ℥j) *at blood heat*. Keep the parts thoroughly and constantly moist with it. Much importance is attached to the heat of the serum. He prefers an elevated temperature of the room, but considers the moisture of the atmosphere of little importance. 6th. The use of the clamp for the fastening of the pedicle in the external wound by any means is only applicable to long pedicles. The actual cautery is unreliable, and so is the écraseur. By carrying the ligatures down through the posterior *cul-de-sac* of the vagina all danger from sloughing is obviated; besides, the pedicle is more effectually secured than by any other means. Another great value of the opening into the vagina is the facility which it affords for washing out the abdominal cavity.

A Fatal Case of Ovariotomy.—John B. Bond, M. D., Duvall's Bluff, Ark. (*St. Louis Medical Reporter*), mentions an unsuccessful operation for the extirpation of an ovarian tumor, in a married lady, aged forty-five years. The incision was made five inches long in the linea alba, through the integument and muscles, leaving the peritoneum intact until the last, which was divided on the director. The tumor was seven inches in diameter; was free from adhesion, except at the posterior portion, where it inclosed the aorta and a considerable space of the vertebral column. After striving to detach these adhesions for thirty minutes, the attempt was abandoned, the tumor was evacuated, and the incision closed with the interrupted silk suture. The patient was under the influence of chloroform one hour. Not over eight ounces of blood were lost. On the fifth day she died.

The chief interest of this case, he concludes, was the impossibility of ascertaining *until too late*, the great adhesions which had taken place. The perfect mobility of the tumor led him and others to the positive conclusion that the pedicle was small.

Cinnabar is found in an unusual form in Idaho; it is of a beautiful vermilion color. Being so compact, specimens may be cut and polished like marble.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, June 15, 1868.

THE SCARCITY OF SPEAKERS IN THE PROFESSION.

WHEN so much depends upon holding a professorship in a college, so far as practice is concerned, it is a wonder that there are not more speakers in the profession. As one of the three representative professions, ours is certainly very much behindhand in this matter, because it is not generally considered necessary to the prosecution of our calling. The minister must make some pretensions to oratory, or his congregation will dwindle down, and with it his income; the lawyer must plead, or his reputation and patronage are also on the decline; but the physician can go through a lifetime of hard work, and collect good fees, and have a large practice, without being guilty of one decent speech during his whole career.

Viewed, however, in the light of an accomplishment, the art of speech-making should not be underrated. The physician may get along without it, but he can undoubtedly do a great deal with it. The accomplished lecturer, in these days when so much knowledge is received through the ear, has an immense advantage over him who allows all his good points, his practical ideas, and his reasonable suggestions, to be veiled by an impenetrable reticence. The old proverb that "a still tongue makes a wise head," is hardly applicable to the question at issue; let us rather recollect that there is much more truth in the saying that "we learn by teaching." The professor who accustoms himself to impart his ideas to his hearers has an advantage of schooling his thoughts, of analyzing his subject, and of impressing facts upon his own mind, that is immense, considering what it would otherwise be if he compelled himself to hold his tongue. Again, he makes himself a sort of authority with his hearers, and has the best possible chance of impressing a fact with his own peculiar views. In a word, he, by virtue of the position of lecturer, teacher, or professor, is head and shoulders above his less fortunate fellows; his advice is always sought after, his counsel is valued, and his fees are almost always in proportion to his merit and his popularity.

The professor does not, however, need any arguments to prove to him the advantages of his position; they are well enough appreciated by him not even to invite any; but there are others who want urging to swell the ranks of teachers. Those who are, all things being equal, abundantly able to teach, but who from modesty or from a lack of the accomplishment of expressing themselves upon their feet, are depriving not only themselves but others of many opportunities for improvement. There is many a man now quietly prescribing for his patients from house to house, or in the wards of our hospitals, who, if he were more trustful of himself and his qualifications, could grace the college hall with the best of teachers. It is with such we would plead for the cultivation of the one faculty, which most of them acknowledge they do not possess—that of extemporaneous speaking.

Very few possess this faculty naturally, a fact which should comfort every one who has a determination to fit himself not only for a teacher but a useful member of his profession. It requires no little training to arrive at any point of excellence, and every one must make some sort of a beginning. We have many striking illustrations of this fact, and many examples of what perseverance and determination can accomplish. One of the most accomplished lecturers it has ever been our pleasure to listen to, who for elegance of diction, ease of manner, and power of illustration, is unsurpassed, had a very hard struggle to arrive at his present enviable reputation. Embarking first as a lecturer on trial, he found it almost impossible to fill out his hour without stumbling over awkward sentences, and hesitating in a painful manner. With a disposition to succeed in any event, he finished his course. The following course was hardly an improvement on the first, and at the end he was asked if he had not better resign, and give up the affair as a bad job. This he was hardly inclined to do, and asked for one more trial, which should be the final one, and the result was as we have stated: he secured his position, went on improving, and now as a lecturer and teacher has no equal. There are many other instances of the sort. We know of two or three gentlemen who accustom themselves to rehearse their lectures in their libraries before daring to deliver them, and yet this would hardly be believed by any one who listens to them. One gentleman told us that although he had been lecturing for many years, he never entered the class-room without some misgiving that he might not do credit to himself or his subject.

Lecturing is an art which is never developed without great diligence, and no one should be discouraged because his first essay may not be a brilliant one. The lesson which our representative lecturers teach us should not be lost, and those who would make a beginning must expect to do no more than begin, and not jump into the accomplishments of a finished speaker at once. It is doubtless this that keeps many an otherwise worthy man from making a commencement.

The necessity that every one should be a lecturer is not so urgent, but it is incumbent upon all who have information to impart to do it passably well, whether in the society-room or college-hall. In order to accomplish the most good in doing this, it is necessary to deliver the thoughts extemporaneously; the mere reading of a written discourse is stupid in comparison to it. A lecturer or speaker can always make himself more interesting, can have his audience at a better advantage, and can be more impressive, if he trusts rather to the inspiration of the moment than to the careful and cautious elaboration of his thoughts in his study. Many a fine lecture has been ruined by a monotonous reading, and many a poor subject has been redeemed by a well-put speech. Most, if not all, of our model lecturers adopt of necessity the extemporaneous plan; and despite the objection that there may be danger that the subject is not as properly studied as if the lecture were written, very general satisfaction is given, and all the real requirements of the case are met.

But to return to the necessity of being at least speakers if not lecturers, we are led to refer to such as do not expect to be professors or care about the position. As every one cannot be a professor, it is comforting to think that there are some who are satisfied without the title. Such can be as useful in their sphere as others who occupy the higher places; and their spheres are to be found in our societies. There are comparatively few who speak in our societies; that is to say, there are many more who should. It is not because there is a lack of ideas, but of self-confidence to deliver them; and many an opportunity is allowed to pass by unimproved, never perhaps to recur.

We would advise every one for the sake of the subject, and for the sake of themselves, not to be so derelict in the performance of a duty. It is by no means necessary to do more than stick to the plain facts of a case, for one may err just as much by excess as by diminution. Of the two, commend us to the man of few words. We deem it advisable to caution beginners to count brevity in their remarks; for it is a strange fact, that as soon as they discover that they are possessed of peculiar qualifications for speech-making, they seem determined to ventilate their talent on every opportunity, much to the gratification of themselves, and much to the annoyance of their listeners. There is hardly a society that cannot number some such among its members; gentlemen who at all times, and under all circumstances, are determined to be heard, and who will not sit down until they have satisfied themselves with some very lengthy and very tedious remarks. The consequence is, that much which they might say that might be a benefit is entirely lost upon their hearers, whose whole thoughts are directed towards the time when the member shall cease.

While there is sometimes danger of saying too little, there is always danger of saying too much. Every one who has anything to say should consider it a duty to do so; but for the comfort of those who from courtesy must hear him, for the sake of those who must follow him, for the sake of the reputation of an agreeable and interesting speaker, which he may otherwise lose, let him not say more than is necessary, that his hearers, when he takes his seat, may rather wish that he would continue than stop. Generally our tedious brethren are not those who are our deep thinkers, and who are really the practical men; they seem to waste their powder in squibs rather than occasionally fire a cannon.

It is rather a curious fact that our profession, while so earnestly and constantly preaching to their patients the benefits growing out of rest, change of scene, and pleasurable exercise, should be so neglectful of their own health. Medical men need relaxation as much if not more than do the clergymen, and they should not lose any opportunity, at least once a year, of running out of town, for a good old-fashioned rural vacation. There are too many among us who are actually below the par of good health, whose need for just such a recreation is imperative. There is a necessity for such to be shut out for a time from their little world of patients, to be able to sleep far away from the startling sound of the midnight bell, and to enjoy that refreshment which regular hours, regular meals, and regular rest can alone give. We hope that many of our readers will be able to enjoy the tempting opportunities which the present summer may afford.

The dentists of this State have reason to congratulate themselves upon the passage of an act according to them the privilege of granting diplomas, thus making a visible distinction between the skilled and the unskilled practitioner. As we understand it, there is power granted for the formation of a State Dental Society, under the same auspices as those enjoyed by the Medical Society of the State. If such an association be brought to life, it can count upon the hearty support of the profession at large.

Reviews and Notices of Books.

The Variation of Animals and Plants under Domestication. By Charles Darwin, M.A., F.R.S., etc. Authorized edition, with a preface by Prof. Asa Gray. In two volumes, 12mo., with Illustrations. New York: Orange Judd & Co., 245 Broadway.

The subject treated of in the work before us is always invested with more or less interest to the scientific mind. The author, although professedly wedded to a theory, has done a real service to science in the very collection and discussion of the immense number of facts used to substantiate his views. The theory itself, which binds all these data into a reconcilable, harmonious, and ingenious speculation, rests upon an assumption that the present species of animals and plants are older and stronger marked varieties originated under a natural selection of the sorts best adapted to the circumstances and condition of each place and time,

in a way which may fairly be compared with the development of our domesticated animals and plants under artificial selection and care.

Domestication, according to his idea, is nothing more than the continuation of an experiment which Nature has initiated in the several species ages ago; the changes brought about being more or less intensified by the increased change of climate, variety of food, crossing, correlation, etc., etc. The various arguments which he brings forward are ingenious if not conclusive. The subject of hereditary transmission, as well as the peculiar effects of breeding in and in, and of crossing, are of especial interest to medical men, who cannot fail to obtain many a useful hint regarding anomalies in nature, and the penalties of transgressing her laws.

It is written in a remarkably pleasant and entertaining style for a work upon such an abstruse subject.

LECTURES ON ORTHOPEDIC SURGERY, delivered at the Brooklyn Medical and Surgical Institute. By LOUIS BAUER, M.D., M. R.C.S. Eng., Prof. Anatomy and Clinical Surgery, Licentiate of the N. Y. State Medical Society, Member of N. Y. Pathological Society, etc., etc. Second Edition, revised and augmented, with 81 illustrations. New York: William Wood & Co. 1868. 8vo. pp. 336.

THE second edition of Dr. Bauer's published lectures is a marked improvement over the first, in that the various subjects are not only treated of more in extenso, but new ones have been added. Among the latter, that of hip-joint disease may be particularly mentioned. The attention which he pays to the pathological anatomy of the different affections is a very commendable feature of the work, and is the only one upon which sound views of treatment can be based. Although some of his views in regard to the causes of spinal and joint diseases are those not generally held by authorities, still his right to differ from their dicta is as well supported as the relation of a few typical cases will admit. In the treatment of the various deformities he is eminently rational, and when convinced of the correctness of his diagnosis as to the precise cause of the various deformities, he is as ready to use the knife for the correction of some as to advise mechanical appliances for others.

The summing up of his views in regard to diagnosis, prognosis, and treatment, in the form of axioms, is a very useful feature of the work, and effectually lightens that ambiguity of expression through various parts of the work which is pardonable in one who has not yet thoroughly emancipated himself from the German idiom.

In regard to the treatment of hip disease and the use of apparatus, we are glad to see but very little space devoted to the discussion of the claims of the different inventors of the hip splints—a subject upon which the profession have become heartily tired long ago.

The work, though small, contains much that is of real value, both in a pathological and therapeutical point of view, and is deserving the careful study of the practical man.

YELLOW FEVER IN THE MAURITIUS.—The *Lancet* says editorially of the prevalence of malarious fever in the Mauritius:

It does not say much for our humanity, nor is it very creditable to the Government, that a colony forming part of the British dominions should have suffered from such a disastrous epidemic without there having been any official inquiry into all the circumstances, as we had long ago urged, instituted by persons untrammelled by local interests, and not by those who, with every desire to get at the truth, are tied and bound by insular prejudices, or distracted by conflicting interests.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, FEB. 26, 1868.

DR. W. B. BIBBINS, PRESIDENT, in the Chair.

DR. FINNELL presented a series of specimens removed from Coroners' cases, the first four being on behalf of Dr. J. Hamilton.

GRANULAR KIDNEY AND SUDDEN DEATH.

The first were two specimens taken from a female, aged thirty-five, who for the past thirteen months had been a hard drinker, and had suffered with general œdema of the lower extremities for the last six months. She was found dead in her bed on the morning of the 22d ult. The post-mortem showed granular kidneys, an extremely fatty liver, and cystic disease of the ovaries. She was a widow woman, and had never had any children. The appearances of the uterus were such as gave evidence of recent menstruation.

DR. KRACKOWIZER thought that the cyst said to be ovarian, was really nothing more than a dilatation of one portion of the Fallopian tube, its fimbriated extremity having become adherent to the ovary.

DR. MASON stated that he had met with a precisely similar case in a dissecting-room subject, not long since.

MITRAL LESIONS AND ANGINA PECTORIS.

The second specimen was one of mitral lesion. It was removed from a female forty-eight years of age, who had suffered during the past three years with severe angina pectoris. She died suddenly in the street cars. At the post-mortem examination there was found thickening of the mitral valves, and ossification of the coronary artery. All the other organs of the body were healthy.

DR. WATTS was disposed to think that the latter lesion (ossification of the coronary artery) was the cause of the angina pectoris; and Dr. Loomis, concurring in that view, called the attention of the members of the Society to a case of a similar sort, which he had presented some time ago.

CALCIFICATION OF THE AORTA—SUDDEN DEATH.

The third specimen was also one of a heart removed from a female forty-eight years of age, who had suffered with chest symptoms for several years. Death was sudden, and the post-mortem examination disclosed extensive calcification of the aorta, with dilatation. All the other organs of the body were healthy. In that case the atheromatous degeneration began immediately above the aortic valves, and was found in the opening of the coronary artery.

The fourth specimen showed pericardial adhesions. No history of the case could be obtained. The man died suddenly in the street. At the post-mortem it was discovered that he had double pleurisy, with fibro-serous effusion in the pleural cavities, to the amount of a quart in each. The pericardium was adherent to the entire surface of the heart. There was dilatation of the aorta, which was covered over its internal surface with atheromatous patches. The manner of death was evidently slow, as the fibrinous clots which filled the left ventricle were so intimately and intricately connected with the cordæ tendineæ.

ANEURISMAL DILATATIONS OF AORTA.

He next exhibited two other specimens on behalf of Dr. Wooster Beach, Jr. The first of these was an aorta, showing three aneurismal dilatations. The deceased was

a German, forty-six years of age, who was seemingly in the enjoyment of fair health, and being a compositor, was able, when not too intemperate, to follow his calling. He retired at twelve o'clock on a certain night, and was found dead beside his wife the next morning. At the post-mortem an aneurismal pouch, covered by the external coat of the artery, and almost ready to rupture, was found just above the semilunar valves. Two inches further on in the course of the vessel, another dilatation was discovered, with fibrinous clots in its interior, and still further on was the sac which had burst, discharging its contents into the pericardial sac.

The last specimen was simply a portion of the lung tissue, showing pulmonary apoplexy, taken from a man who in a state of intoxication had resolved to hang himself. He came home late one night, and stayed below stairs, and, bent upon suicide, evidently attached a rope to his neck, and attempted to fasten another end of it to the mantel-piece. The rope must have slipped when he attached it to a post, but just as he was about to "shuffle off the mortal coil" he fell, and as the result of the fall the rope loosened itself around his neck. No marks of constriction of the neck by the cord were noticed after death. The brain was pale, but the vessels upon its surface were turgid with blood. A portion of one lung was the seat of apoplexy, as already stated. It was supposed that the patient met his death from intemperance, coupled with the immediate results of the fall, rather than from hanging.

Dr. Rogers stated that Dr. Finnell's specimen of so-called cystic disease of the ovary reminded him of a case recently published in the *Obstetrical Transactions*, in which it was supposed that the dilatation of the tube was due to a retention of a portion of the menstrual fluid. Dr. Finnell's cyst presented the same sort of contents as described in that case.

Dr. Krackowizer hardly believed that the effusion could have been the cause of the dilatation, but was rather disposed to think that it was the effect, the said effusion, according to his idea, taking its origin from the walls of a recently formed sac becoming mixed with blood, in consequence of a rupture of the vessels, attendant upon the expansion.

INTERESTING CASE OF REMOVAL OF UTERINE TUMOR.

Dr. Peaslee presented an intra-abdominal tumor with the following remarks:

Four weeks ago, I presented an ovarian tumor, which was remarkable for being the occasion of so much mischief to the general health of the patient, the tumor itself being comparatively small. As I could not then complete the history of the case, I take occasion to say now, in passing, that the patient has entirely recovered, and is in much better health than she has been for many years.

I show you a tumor to-night which has just the opposite properties in that respect, that is to say, it was a very large one, and yet had not produced much disturbance. The patient was a married lady, twenty-seven years of age, when I saw her for the first time, a little over a year ago; she measured at that time in the largest circumference of the abdomen, forty inches. She had noticed an enlargement for three years. On examining the case, the history and appearances were such as referred to ovarian tumor, and I gave my diagnosis accordingly. I advised her, however, to wait until the fluid in the sac had accumulated sufficiently to interfere with respiration and digestion, or both, before preliminary tapping was performed.

In accordance with that advice she delayed applying for relief until last July, when she being forty-five inches around, began to suffer considerably from dyspnœa and indigestion.

I then tapped her, and obtained thirty-six pounds of a very dark-colored fluid, resembling strong coffee. The abdominal walls collapsed to that degree as to leave only a slight prominence in her right side, extending nearly to the lower edge of the liver, apparently flat and saucer-shaped, which I took to be another sac connected with this. I introduced a uterine sound, and found that it passed in to the depth of two and a half inches, and in every other respect that organ seemed to be normal. At the time of tapping her, she passed over one menstrual period, but failed little in health afterward. I expected that she would refill about the first of the October following, but she was not as large as before, until the first of January. I saw that her health began to fail, and so advised an early operation, thinking it best not to wait longer than two months more. She, however, appointed Washington's Birthday as the time, and the operation was done last Saturday. I should state that her health began to fail more rapidly just before the operation than at any previous time.

I made an opening three inches in length, and came down to the sac, and was at once struck with the peculiarly ugly appearance which it presented. Just at the point of tapping, there was an exudation of a bright and angry color, the vessels in the vicinity being much enlarged. I at once had my suspicions aroused that the tumor was uterine. There were adhesions in great number over its surface, and of a peculiar character. They were only to be compared to the chordæ tendineæ of the heart. As they came from the parietal peritoneum, they were about an inch in length, and were seemingly inserted by a perfect tendon on the free surface of the mass. Many of these were not larger in circumference than an ordinary pin, but they were so strong and tough that they could not be easily broken.

I proceeded to evacuate the sac by tapping. I obtained about thirty pounds of a fluid a little darker than had been before obtained; still the sac could not be drawn off. I then broke up the adhesions, one at a time, but in order to prevent alarming hemorrhage I separated them through their tendinous portions. At length, a considerable portion of the tumor being displaced, another sac was brought into view—the one ascertained to exist at the first tapping. It had, however, become considerably enlarged since then. Finding that the difficulties in the way of removing the growth were much increased, I enlarged the incision two inches above the umbilicus, and after tapping another sac, which contained a clear, transparent fluid, which was unmistakably ovarian in character, I found an adhesion to the right side of the main tumor the width of my hand and half as thick, coming up from the iliac fossa and lying upon the tumor. That I at first supposed to be the pedicle, but on examining it I found that isolating it from the left portion of the tumor I was able at once to trace it down to the uterus. The uterus itself was somewhat enlarged, and took on a peculiar form. The top of the body was depressed, while the two angles were much exaggerated, and from the centre of this depression the tumor rose by a pedicle which was cylindrical, precisely three-quarters of an inch in diameter, and only a quarter of an inch in length. It was very easy to make out the case as one of fibro-cystic tumor of the uterus. It was simply an outgrowth from the organ, not involving its cavity at all. I applied two double ligatures respectively through the adhesion and the pedicle, passing them through the centre of the substance of each,

tying on both sides, and then cutting the threads off short.

I proceeded at every step on the supposition, from the appearance of the sac and its peculiar adhesions, that it might turn out precisely what it did turn out to be. I proceeded in such a way that I might be able to retreat at any moment. The trocar used was not a very large one, I preferring that size, so that if forced to back down from the operation I might the easier close up a small hole than if it were larger.

I found that I could take the tumor away from the uterus without involving any injury to its cavity, and accordingly did so. In my opinion I do not think that there is any more danger in doing that than in an ordinary case of ovarian tumor with a fleshy pedicle. It required three hours to feel my way along before I could get the tumor out, and an hour more to stop the hæmorrhage, which came from every one of the little adherent bands. The vessels of the omentum were very much developed: one artery was as large as the femoral, and there were several veins of the same size in the neighborhood. The whole amount of the omentum brought down was only four inches in width and six or eight in length. All these were duly secured. The adhesions were all tied and the hæmorrhage ceased, except at a little point on the uterus, which seemed to have been occasioned by a mere scratch. That kept constantly oozing to the amount of a drop or two per minute. Of course the parts being very vascular it became a matter of much importance to arrest the bleeding in the proper way. I knew if I should pass a needle through the part, that while stopping the oozing from this point, I might transfix some other neighboring vessels that would give me more trouble. The mischief was, however, soon put a stop to by applying to the point a little persulphate of iron on the end of a probe.

In closing up the wound, I left a tent in its lower portion, in order that I might with ease wash out the peritoneal cavity, in case there should be any hæmorrhage after reaction was fully established.

I have only to add, that no such anticipation has been realized, and up to this afternoon she has had no unpleasant symptom.

I bring this case before you more for the sake of insisting, as I have often done before, that no operation for ovariotomy should be performed without a preliminary tapping, and not until the patient's health begins to fail. The mistake made in the diagnosis of this case is such an one as I believe could not be guarded against by any one.

In conclusion, he gave it as his opinion that when the pedicle of a uterine tumor was very large—so large indeed that it could not be separated without carrying the greater part or the whole of the uterus with it, and not opening into its cavity—the operation ought to be abandoned, unless complication should arise in its course that made it impossible to do so. He believed that on the whole the patient stood as good a chance to recover under such circumstances as if the formidable mass were removed. In this connection he referred to a case in which he was forced to abandon the operation, but in which the woman sank within twenty-four hours after having learned that nothing had been done for her in the shape of removing the mass.

A NOVEL METHOD FOR CRUSHING STONE.

Dr. Post exhibited a specimen of calculus removed from the bladder of a child three years old. The main point of interest connected with the case was the impossibility of detecting the existence of the stone until the third examination, it being situated high up on the anterior portion of the bladder. The stone was of large size, of rough exterior, and weighed fifty-nine grains. It had been removed entire, but had become broken in pieces by his youngest son, who had bitten into it, mistaking it for a large sugar almond!

Dr. Post lastly exhibited a portion of sequestrum which he had removed from the tibia of a boy fourteen years old, which was the result of a contusion of the part some years before.

The Society then went into Executive Session.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Reunion, Friday, Feb. 7, 1868.

Dr. Gurdon Buck, President, in the Chair.

SPINAL DISEASE AND HIP-JOINT DISEASE.

Dr. Chas. F. Taylor gave an account of his observations upon the state of orthopedy in Europe, the substance of which has already appeared in our correspondence. (Record, vol. iii., p. 44.) He exhibited and explained his apparatus for club-foot, for hip-joint affections, and for spinal curvature. (A description of the spinal apparatus may be found in Record, vol. i., p. 369; of the hip-joint apparatus in vol. ii., p. 289.)

The speaker proceeded to state his views upon the pathology of Pott's disease. He had many years ago advanced the doctrine that this disease often begins as a simple inflammation, unattended by caries; he could not otherwise explain the frequent cases of recovery. Two classes of cases were to be distinguished, the traumatic and the strumous,—the former almost always curable, the latter often susceptible only of palliation. He had once heard Dr. Sayre remark (if he remembered rightly) that all cases of hip-joint disease were of traumatic origin. Though he could hardly admit so sweeping a statement, yet this was certainly true of the great majority, and still more emphatically so of cases of spinal disease. Cases clearly traumatic, occurring in subjects previously healthy, progress in exactly the same way as those in which no initial injury can be traced. Hence it is fair to infer that many, or the most, of these latter owe their origin either to some decided injury which has been forgotten, or to a succession of slighter ones, each too trivial to attract notice. This might easily be the case, owing to the feeble sensibility of the spinal column. If the ankle is sprained, it at once becomes acutely painful; it gets rest, and gets well. But if the spine is injured by a fall or a blow, it may give no protest, either immediately or throughout the course of the resulting disease; or, if pain be present, it may not be referred to the back. Hence the inflammation consequent upon such injuries is often allowed to go on, subject to constant aggravations, unchecked and undiagnosticated, until the projection of one or more of the spinous processes becomes marked; though the means of diagnosis are sufficient where the disease is suspected. These traumatic cases, if taken early, can be completely cured; and at any stage their further progress may commonly be arrested by efficient mechanical support. But in the strumous cases, where abscess has been formed or the vertebræ are perhaps tuberculous, there will usually be a certain amount of progress of the disease, in spite of the treatment, and we can only expect to alleviate.

In Rokitansky's extensive collection of specimens of this disease, Dr. Taylor had found the cases classified into "carious" and "non-carious," the latter exhibiting simple absorption of the vertebræ, with no evidence of caries. He had himself made no post-mortem examina-

tion of patients in the first stages of the disease, but a friend of his had had the opportunity in a case dead of scarlatina. On placing the hand beneath the back and raising the body, one of the vertebræ split open; it was very red, but not carious. In reply to a question by Dr. Post, the Doctor said that cases may often run through their whole course, with absorption of one or more of the bodies of the vertebræ, and yet exhibit no caries at any stage; Rokitansky's specimens established this. He referred also to a specimen in Guy's Hospital Museum, where seven vertebræ were so completely ankylosed that no lines of division could be distinguished. This, in Dr. Post's opinion, implied antecedent caries. Dr. Beck thought it indicated that there had been softening of the vertebral spongy tissue. Dr. Taylor said that not one in twenty of his own cases had abscess after applying support. Dr. Post had found evidence of suppuration comparatively rare. Dr. Beck believed that a tubercular origin of this disease was now ascertained to be the rare exception. That was Lebert's conclusion from his researches. Dr. Sayre asked if Dr. Taylor had meant to say "carious" and "non-carious," or "tuberculous" and "non-tuberculous;" and if the former, what were the diagnostic marks? Dr. Taylor had meant "carious" and "non-carious." In the former class would be found the scars of old caries; and there would be points of caries, not healed, on the vertebræ above and below those most affected; while in the non-carious cases the vertebræ above and below the point of curvature would be sound.

Dr. Sayre said this agreed with his own view, that Pott's disease, hip-disease, and all affections resulting in diseases of the joints, were not tubercular. All the cases of hip-disease which he had *yet seen* could be traced to a traumatic origin, more or less extensive; though he would not assert that *all* cases were necessarily traumatic. Of course a child with feeble constitution would require a less severe blow to produce the disease than would a stronger one. But most of his cases had been in those of strong constitution, because such were more exposed to injury. A sickly, tuberculous child would not run and risk it-elf. So far as his experience went with regard to Pott's disease, it was the same. Nine cases out of ten begin as periostitis. The numerous muscles attached along the vertebral column may, in the various gymnastics of children, wrench and strain the fibrous tissues; or, with their powerful leverage, even tear the muscles from the periosteum. This in cases where the disease begins externally. The periosteal inflammation may lead, sooner or later, to extensive suppuration; and the pus, being deep-seated, cannot escape, and you have a large abscess. All these abscesses that he had seen had been connected with necrosis of some portion of the spinous processes; and all could be traced to injury resulting, in this manner, in exfoliation of a portion of bone. Where the disease begins in the body of the vertebra, concussion, or some similar cause, may start the inflammation, which may go on to absorption or abscess. The reflex muscular contraction presses the bones closer and closer together, and in many cases complete ankylosis takes place, and recovery with deformity. The very fact that hundreds of cases of Pott's disease recover, where one dies, shows that it is not tubercular. No deposits of tubercle are found elsewhere in the system. It was this which had first led the Doctor to doubt the tubercular origin of the disease. The patients recover of themselves, but they recover deformed; and the absolute importance of mechanical treatment is to prevent deformity.

Dr. H. G. Davis had found the most common cause to be concussion,—a fall bringing the weight of the body upon the spinal column,—though in some few cases a blow upon the back had been the cause. The patient will complain more of such concussions as press the vertebræ together than of anything else. Dr. Sayre and Dr. Taylor both agreed with the speaker. He continued, relating the case of a patient under treatment for hip-joint disease, many years ago, who had kept his hand constantly under the hip, for support and protection, and could not be induced to remove it. The result was that he utterly lost the use of the whole side, simply from rest and confinement; all the joints were ankylosed.

Dr. Sayre.—Absolute rest will produce joint-disease. That is traumatic; that is an abnormal condition for the joint, to be strained and kept in one position.

Dr. Taylor, in reply to a question, said that, relatively speaking, one class of cases was only to be alleviated. The great number of the cases occurring in healthy constitutions can be cured. In feeble constitutions, the disease, whether due to injury, or, as rarely, to tubercle, can commonly be arrested where it is; but we probably cannot straighten the spine. And in these feeble cases, we must be a little more careful how much straightening we attempt. Moreover, there may be some further progress of the disease.

Dr. Davis.—If the treatment were begun early enough, there would be no deformity. I have never seen a case yet in which, if properly treated from the commencement, the form could not be kept good, no matter how far the disease went; except, perhaps, in the upper dorsal vertebræ, where you have no leverage. In other portions of the spine, no matter how many vertebræ may be involved, if you continue the treatment, while one vertebra is becoming diseased the other will be repairing, and bony deposit will straighten it. I frequently have cases where the patients get well, apparently, and can jump, or put themselves in any position; and after two or three months they complain again; and the same process is gone through, at intervals, with three or four vertebræ. If kept in the right position, they recover with straight spines.

Dr. Taylor.—That is exactly what I meant to say. In certain cases there will be *progress*, but there may be no deformity.

Dr. Davis.—The youngest case in which I have seen the disease stopped at once was that of a child nine years old; but frequently, in older patients, it stops at once upon applying pressure. I think the profession do not consider what can be done in Pott's disease, if they will take action immediately; if, where diagnosis is doubtful, they will call an expert, and apply apparatus in the first stages. It would save the patient a great deal of trouble and much loss of vitality; and equally so with hip-disease. One point may be mentioned regarding the treatment of Pott's disease. In the spine we have two seperate means of support, the bodies of the vertebræ and the lateral processes. In the treatment, the design is to take the weight off from the bodies, and throw it upon the oblique processes, which are never, so far as I know, diseased. This gives us every advantage in the treatment.

Dr. Beck described a new chiloplastic operation, illustrating it by means of a beautifully made dissection, and by drawings and photographs. He prefaced the description by a review of some other operations with the same object. The substance of the Doctor's remarks was given as a clinique at the New York Hospital, and will appear in our Clinical Department.

STATED REUNION FRIDAY, FEBRUARY 14, 1868.

DR. OLIVER WHITE in the Chair.

INSTRUMENTS FOR THE STUDY OF NERVOUS AFFECTIONS.

DR. WM. A. HAMMOND presented and remarked upon the Æsthesiometer, the Dynamometer and the Dynamograph, and a new invention of his own which he had termed the Encephalometer.

The first of these instruments (figured and described in MEDICAL RECORD, Vol. I., p. 510), though known for several years, has not received sufficient attention in this country, where it is very little used. It is valuable not only in cases of hyperæsthesia, or of well marked paralysis, to determine the degree of the affection, and its progress towards recovery or the reverse, but also in doubtful cases, as a means of diagnosis. In two or three instances where the patient's sensations of numbness, formication, etc., had seemed to point to paralysis, Dr. H. had learned, by the æsthesiometer, that this was not present, and that some other cause for the sensations must be sought. A very good scale of the normal sensibility may be found in Dr. Seguin's little prescription book.

This instrument, an index of tactile sensibility, is properly supplemented by the next, which is a measure of muscular power. The dynamometer, with the dynamograph attachment for registering its indications, is a late addition to our means of positive diagnosis, the one here shown, made for the Paris Exposition, being the only one yet sent out by Mathieu. (Otto and Reynders have made one without the graphic attachment.) It is fully described, with illustrations, in the January number of the *Quart. Jour. Psychol. Med.* Suffice it here, that it consists essentially of a pair of elliptic springs to be compressed by the hand, and an index to show the amount of compression. By the dynamograph, which can be attached at pleasure, the regularity or irregularity of the pressure exerted is accurately recorded in a trace upon a card moved by watch-work, as in the sphygmograph. (*Vide* MEDICAL RECORD, Vol. I., p. 580.) This trace shows not so much the patient's strength as his muscular tone, his ability to maintain a steady muscular contraction for a given time. By comparison of the traces made from day to day, the effect of treatment in paralysis and some other affections can be better observed than in any other manner. The instrument has also some value in diagnosis, and will doubtless come to have much more. For it is to be hoped that, when observations are sufficiently multiplied, rules may be discovered for distinguishing, by the form of the trace, the different forms of paralysis.

The encephalometer is designed to show the relative amount of blood in the brain, and thereby to determine various questions of physiology, of the physiological effect of drugs, etc. It consists of two tubes, an outer and an inner; the first to be screwed into a trephined opening in the skull, the second partially filled with colored fluid, closed below by thin rubber, and ending above in a graduated glass portion of small calibre. The inner tube is carried down until the rubber presses upon the dura mater, so as to force the colored fluid part-way up the graduated scale. Any increase or diminution of the amount of blood in the brain is then instantly shown by the rise or fall of this fluid. The instrument might be applied without harm after trephining for surgical purposes, and Dr. H. was awaiting a suitable case. He had already tested it upon animals, and upon infants with open fontanelles, to which it could be readily adjusted. He had been able fully to confirm his previous observations, that the amount of blood in the brain is decidedly diminished during natural sleep. Under æther or chloroform the fluid rises rapidly at first; but when the stage of excitement has passed, it falls below the normal waking standard, and so remains until the animal wakes. Hence it is probable that these anæsthetics really induce sleep. But with opium the fluid does not fall, showing that the stupor it produces is not natural sleep. The bromide of potassium certainly diminishes very materially the amount of blood in the brain.

DR. BEARD had found the electric current a very good æsthesiometer, applying it by means of a metallic electrode, so that differences of pressure would not as with the hand or a sponge for an electrode, vary its intensity. The sensibility of the affected parts of the body should be compared with that of the corresponding healthy parts. He had found tests, whether of sensibility or of muscular power, liable to prove fallacious if made immediately after prolonged exercise, as in the movement cure, or a prolonged application of the electric current.

STATED REUNION, FRIDAY, FEBRUARY 21, 1868.

DR. GURDON BUCK, PRESIDENT, in the Chair.

THE TURKISH BATH.

DR. E. C. ANGELL read a paper upon the therapeutic uses of this agent. The Turkish bath, as most of our readers know, is that in which hot air, and not vapor, is employed to produce free perspiration, the patient drinking water freely; this is followed by the shampooing process, and this by the application of water, in spray or otherwise, at a graduated temperature; after which the bather is cooled off, and, perhaps, takes a nap. The paper gave the history of the bath; and spoke of its great value to persons of sedentary habits, as supplying the place of exercise, affording its benefits without its fatigue. The air-bath could be used at a much higher temperature than the water or the vapor-bath, without impeding perspiration, accelerating the pulse, or producing debility. Water could not be used advantageously much above 100° F., nor vapor much above 115°, while air at 250° might produce no bad effect. Its value in the treatment of the effects of alcohol, and in overcoming the desire for it, was dwelt upon, and illustrated by cases. Heat was the best substitute for the customary stimulus. Its prompt cure of a case of severe eruption from poisonous food showed its efficacy in purifying the system from noxious elements. The poison of rheumatism, and even malaria, could thus be completely eradicated; and nearly all fevers could be aborted, abridged, or greatly palliated. The diseased body was treated as a soiled sponge. The water first passed through it was much discolored, the perspiration being commonly offensive to the smell, acrid to the taste, and stinging to the eyes; but after a time it became perfectly clear and pure. The bath had produced the happiest effect in a case of diphtheria, which was related. It was very efficient in inducing sleep, probably by calling the blood from the brain to the surface, in accordance with Dr. Hammond's view. The perfect safety of the bath was shown by reports from the large establishments in London and Dublin, where, in an aggregate of two million bathers, not a single authenticated case of injury could be produced. In 1861 these baths were introduced into the insane asylum at Cork, more than doubling the percentage of cures, and diminishing the death-rate more than one-half. Dr. Robertson, of the asylum at Hayward's Heath, highly extols the baths in the treatment of insanity, and of the menstrual irregularities often found associated with mania. Dr. Angell had seen several cases in which supposed sterility had, after a few baths, given place to fruitfulness. The baths might be frequently used, in some cases as often as twice a day, with excellent tonic effect.

In response to questions by Dr. Buck, Dr. Foster, and other gentlemen, Dr. Angell said that a bath commonly occupied about an hour; that it should not be taken sooner than three hours after eating; and that for business men the evening was commonly the most convenient time. No danger was to be apprehended from exposure to cold after the bath; the skin was stimulated to withstand it; and the habitual bather could wear thinner clothing than others. There was little or no oppression on first entering the bath. The hot air, being dry, could be breathed with perfect ease. The head was commonly kept wet, and the hot foot-bath almost invariably used, to call the blood from the brain. At the Jermyn street bath, in London, a heat of 250 was sometimes employed. Low and moderate temperatures were used in England to prevent the night sweats of phthisis. In cardiac affections the bath was used to relieve the heart, by stimulating the surface-circulation. The doctor had seen no tendency to syncope in these cases. In acute rheumatism he had gained the happiest results. A patient had been sent him who had been unable to turn in bed for several days. He was put into the bath for one hour, at 175°, and that was the last of his rheumatism.

Dr. C. F. Taylor thought it important that it should be generally known that air could be borne at a much higher temperature than water. He always used hot air for paralyzed extremities, a child easily bearing this at 150°, where water could not be borne at 95°.

Dr. Carroll said that this had been settled more than fifty years ago, by the experiments in ovens. If the air were perfectly dry, a temperature of 400° could be sustained. As to the therapeutic value of the hot air bath, although Dr. Angell had not claimed it as a specific in any disease, he thought it might be so considered in desquamative nephritis. In the case of his own child, dangerously, and it was thought fatally, ill with this affection, following scarlatina, he had used only hot air and tonics, with decided benefit from the first, and complete ultimate success.

Dr. Angell called attention to a new system of heating, by passing the furnace flame through pipes composed mainly of sand, an excellent radiator. He had introduced it into his own establishment, and been gratified by its working. It was quite cheap, and could be introduced, at moderate cost, into the residences of those wishing to avail themselves of the bath at home.

Stated Reunion, Friday, Feb. 28, 1868.

Dr. Alfred C. Post in the Chair.

TINNITUS AURIUM.

Dr. O. D. Pomeroy read a paper upon this subject, of which we present a brief abstract.

Whenever an impression is made upon any nerve, whether it be a nerve of motion or of general or special sensation, it responds in accordance with its own proper function. The auditory nerve responds by the sensation of sound. This sensation, when excited by sonorous undulations, transmitted through the membrana tympani and the apparatus connecting it with the nerve, is called hearing; but if excited by other causes it is called tinnitus aurium. This tinnitus is not properly to be considered an "imaginary sound," but rather, as Watson styles it, "a depravation of the sense of hearing," the fault lying usually in the auditory apparatus and not in the hemispheres. The symptom presents itself in the greatest variety, the noises heard being compared to the hissing of steam, the roaring of water, the discharge of cannon, the playing of musical instruments, human voices, etc., etc.

The causes of the affection may be divided into: 1, hyperæmia of the auditory apparatus; 2, malposition of the membrana tympani; 3, anæmia; 4, causes dependent on the condition of the brain and auditory nerve; 5, causes not classified. 1. Of all these, hyperæmia is much the most common. It may act by producing hyperæsthesia of the auditory nerve; by causing pressure upon the nerve from intumescence of contiguous parts; or by creating a real murmur in some of the neighboring vessels. The hyperæmia may be acute or chronic, inflammatory, or due to such transient causes as a dependent position of the head, violent exercise or emotion, a full meal, or a glass of wine. Its agency may be shown by compression of the carotid, which will often relieve the tinnitus. 2. The most frequent malposition of the membrana tympani is its depression, increasing its concavity, and pressing inwards upon the ossicula, and so upon the fluid of the labyrinth. The abnormal concavity of the membrane may be due to inflammatory or other change in it, or to the pressure upon it of polypi or other growths, of cerumen, of foreign bodies, as a badly adjusted artificial membrane, or of air confined by some occlusion of the meatus externus. On the other hand, tinnitus may accompany flattening of the membrane from distension of the tympanic cavity. 3. General anæmia, upon whatever dependent, will occasionally cause tinnitus, probably both from the vascular murmurs which belong to this condition, and from the defective supply of blood to the auditory nerve. The latter mode of action is exemplified in the tinnitus and deafness which, like blindness, may occur in fainting. 4. Of the fourth class of causes our knowledge is very limited, and must doubtless long remain so. It includes nearly all the morbid conditions of the labyrinth; and when we consider the complexity and delicacy of the mechanism here found, it is not strange that even slight changes should produce decided functional disturbance. The diagnosis between disorder of the internal ear and that of the brain is always difficult and often impossible; either may give rise to the other; and either may have tinnitus among its symptoms. [The paper gave an account of the structure of the labyrinth, and of such pathological conditions as have been noted by Politzer, Wilde, Harvey, Troltsch, Toynbee, and Voltolini.] 5. Badly constructed hearing trumpets may occasion tinnitus. So may any foreign body, as a hair, resting upon the membrana tympani, though producing no change in its position. Kramer lays great stress upon irritation of the chorda tympani as causing this symptom through reflex action, and plausibly supports his view. Hyrtl states that the internal carotid occasionally sends a large branch through the stapes, whose pulsations move the bone and give intermittent sounds. J. Miller speaks of a snapping noise due to spasmodic contraction of the tensor tympani. Wilde deems non-vibratility of the membrana tympani the chief cause of tinnitus. Certain drugs produce the affection, probably by inducing congestion about the auditory nerve. It is a well known effect of quinine, and may follow its exhibition in very small doses, as half a grain thrice a day.

For an affection dependent upon such varied conditions, the treatment must be correspondingly varied. In inflammation, acute or chronic, leeches to the external canal and blisters behind the ear are the main reliance. Anodynes also are of material service. In acute cases, warm water poured into the ear gives great relief. In chronic, with considerable redness of the membrana tympani, a solution of nitrate of silver (gr. xx.-xl. ad aq. f℥j), brushed upon the membrane, has banished the congestion and the tinnitus. Where an acrid secretion bathes the tympanic cavity, irritating, as Kramer thinks, the chorda tympani, he expects relief from

syringing with warm water. Depression of the membrana tympani is often due to closure of the Eustachian tube, the air within the cavity being soon absorbed and leaving no counterpoise to the atmospheric pressure without. In such cases inflation of the cavity through the Eustachian tube, with proper treatment addressed to the condition of the tube itself, gives the happiest results. Where such inflation is impossible, it may be necessary to puncture the membrana tympani and so equalize the pressure. Puncture may also be required for the evacuation of pus in the tympanic cavity, when this cannot be effected by inflation. Total removal of the membrane may be justifiable in extreme cases. This would probably give complete relief (perhaps from its involving destruction of the chorda tympani), if we may judge from the cases in which the membrane has been destroyed by disease; for in these tinnitus is at least very rare. In the removal of foreign bodies or morbid growths, which may be pressing upon the membrane, the greatest care should be exercised, employing glycerin, alkaline washes, and the syringe when possible, and the forceps only under sight. Where the tinnitus depends upon disease of the internal ear or of the brain, there is little prospect of help. In the former case many plans have been tried, and occasionally the introduction of chloroform vapor into the tympanic cavity has proved useful; in the latter, such treatment as we have at command should be addressed to the cause.

Dr. Roosa thought that, in cases of chronic catarrh of the middle ear, the increased concavity of the membrana tympani was often due to its being drawn inward by traction upon the handle of the malleus, the mucous membrane being thickened. These patients complained much more of the noise than of the deafness. He had one under treatment who said this noise was driving him crazy; and, strangely enough, his deafness had been somewhat alleviated by inflation, forcing the membrane outwards, while the tinnitus was unrelieved. In these chronic cases he had tried nearly every form of treatment, only to be disappointed; and he now hardly advised treatment for the tinnitus, but simply for the deafness. In the subacute attacks, which such patients were constantly having, warm water within the ear and mustard behind it were as good as anything. Kramer's theory, that tinnitus is due to irritation of the chorda tympani, he thought its author had failed to sustain. It was commonly due to pressure or to disease of the labyrinth. The reason that we had no tinnitus in the absence of the membrana tympani was that there was then nothing to exert pressure upon the ossicula. That it might be excited by introducing an artificial membrane was evidence of this view. Quinine he thought the profession was coming to suspect as dangerous to the ear under all circumstances.

Dr. Beard had taken a very personal interest in the subject, having enjoyed the delights of tinnitus for some twenty years, owing, doubtless, to chronic inflammation of the middle ear. He had heard almost every kind of sound, even long conversations. Often the sounds were synchronous with the pulse. As to quinine, he could hardly imagine a dose so small that it would not increase his tinnitus, and a dose of three or four grains would annoy him for several days. He had had a patient made completely and permanently deaf in one ear by its use. With regard to treatment, subacute inflammation of the middle ear, and the tinnitus dependent upon it, would readily yield to the use of the catheter; but the chronic cases would yield to nothing. He had no faith whatever in counter-irritation. At the best, it could give but temporary relief, and this was more than counterbalanced by the annoyance of the remedy. For ten years he had been experimenting with electricity. In his own case it had produced no benefit whatever; with others he had sometimes succeeded, oftener failed. The current, passed through one ear, or both, would sometimes give decided relief, though he could not say to what class of cases it was best adapted. The electrode should not be applied to the external canal, where even a weak current would give great pain, but either just below or just in front of the auricle, where a pretty strong current could be borne and should be employed. In his investigations, in conjunction with Dr. Roosa, the doctor had found many deaf mutes troubled with tinnitus.

Dr. Peters thought we might sometimes be mistaken with regard to the action of quinine as producing this symptom. Some years ago, in an attack of intermittent fever, he had taken no quinine until after the first three paroxysms, yet experienced a most severe singing in the ears. After that he took quinine and watched the effect of every dose; it made no difference in the singing.

Dr. Foster had suffered about twenty years from tinnitus, which he considered mainly a sympathetic symptom of dyspepsia. It did not increase on him. In reply to a question by Dr. Roosa, he said there was no impairment of hearing in either ear.

Dr. Roosa thought the watch-test would probably show some impairment; this was almost invariable except where the tinnitus depended on cerebral affection or anæmia. He wished to know how dyspepsia should cause it; by congestion?

Dr. Burrall would account for this, in many cases, by the irritable condition of the throat apt to accompany dyspepsia. He was at present suffering from tinnitus which he thus explained.

Dr. Beard had always supposed it conceded that indigestion would aggravate tinnitus, doubtless by producing congestion. Tinnitus might probably exist without impairment of hearing, perhaps when caused by hysteria, which might exhibit almost any symptom. He thought he had seen one case, at least, in which this symptom was unattended by the least impairment of hearing.

Dr. Carroll asked if tinnitus might not be a mere symptom, without any abnormal condition of the ear itself, a central disturbance being referred to a peripheral nerve. In his own case, after severe mental exertion, he often had tinnitus for three or four days, with no diminution of his acuteness of hearing.

Dr. Roosa insisted upon accurate tests and wanted to know if the doctor had employed them. The distance at which the watch-ticking could be heard must be determined by approaching it, not by retiring from it. Wherever the tinnitus was referable to the labyrinth or to pressure upon the auditory nerve, the hearing was inevitably blunted. Dr. Carroll satisfied him that his tests had been sufficiently delicate.

Dr. Post and Dr. Beard thought the pulsating form of tinnitus the one most frequently due to dyspepsia.

Dr. Pomeroy regarded this and the venous hum as the only forms having any diagnostic value.

Microphytes.—Among the researches brought before the Academy of Sciences of Paris, a series of the highest interest, undertaken by M. Lemaire, should be mentioned. This ingenious investigator has found, by carefully conducted experiments in barracks, the open air, and upon people in good health, that upon the body, or from its emanations, microscopic beings may be collected, the existence of which will considerably assist those who study parasites.—*Lancet.*

CONNECTICUT MEDICAL SOCIETY.

FIRST DAY'S PROCEEDINGS.

The Connecticut Medical Society met in the Common Council Chamber, at the City Hall, New Haven, Ct., May 28, 1868, at 11 o'clock. The following is a list of the Fellows elected to represent the various Counties:

New Haven County.—H. W. E. Matthews, Stephen G. Hubbard, J. H. Beecher, Alfred North, John M. Aimes. *Hartford County.*—Lucian S. Wilcox, William Wood, George Clary, F. A. Hart, R. H. Tiffany. *New London County.*—Isaac G. Porter, George E. Palmer, F. S. Abbott, Ashbel Woodward, O. E. Miner. *Fairfield County.*—George L. Beers, George F. Lewis, George Blackman, M. B. Pardee, Ira Gregory. *Litchfield County.*—Jeremiah W. Phelps, Josiah G. Beckwith, D. E. Bostwick, Francis J. Young, Wm. Woodruff. *Middlesex County.*—Charles H. Hubbard, Rufus W. Matthewson, E. B. Nye. *Tolland County.*—Charles F. Sumner, Stephen G. Risley, Gilbert H. Preston. *Windham County.*—Wm. A. Lewis, Lewis Williams, E. Huntington, Samuel Hutchins, Lowell Holbrook.

The meeting was called to order, and after some unimportant business, the following were elected officers for the ensuing year:

President—S. B. Beresford, of Hartford.

Vice-President—Henry Bronson, of New Haven.

Secretary—M. C. White, of New Haven.

Treasurer—J. C. Jackson, of Hartford.

The President being absent, Dr. Bronson took the chair.

The Committee on Prizes reported that they had received five Essays in competition for the Jewett Prize of $200 for the best essay on the question, "By what Hygienic Means may the Health of Armies be Best Preserved?" Also that they had received seven Essays in competition for the Russell Prize of $200 for the best essay on the subject, "The Therapeutic Uses and Abuses of Quinine and its Salts." Finally, the Committee reported that they had awarded both of the above-mentioned prizes to Prof. Roberts Bartholow, of the Ohio Medical College. In order properly to appreciate the cause which this gentleman has for self-congratulation, it should be remembered that the prizes were extended to all physicians and surgeons of the United States and of the British Provinces of North America.

Dr. Bartholow appeared and expressed his surprise at the award of the Committee, and said the essays were, in a great measure, the result of his personal experience. He stated that while he was in the army, the health of the men became his duty, and necessarily involved the use of quinine. He had spent considerable time and study on these matters.

Dr. Wm. M. Cullum, of Vermont, and Dr. E. S. F. Arnold, of New York, as visiting delegates to the Convention, were introduced, and expressed pleasure in being present.

Dr. James McNaughton, of Albany, N. Y., an honorary member, was also introduced, and expressed the hope that he should be able to meet the Society often in his leisure hours. He had been a practitioner for fifty years, but was soon to return to a more easy life.

The freedom of the city was extended by the Mayor and Common Council, through the President, which was accepted.

The following Committee on County Resolves were appointed by the President for the ensuing year:

Alfred North, of New Haven County; L. S. Wilcox, of Hartford County; I. G. Porter, of New London County; George Blackman, of Fairfield County; Wm. Woodruff, of Litchfield County; C. H. Hubbard, of Middlesex County; G. H. Preston, of Tolland County; Lewis Williams, of Windham County.

Drs. Porter, Beckwith, and Blackman were appointed a special committee to consider a paper prepared by the officers of Yale College, on Medical Education.

Adjourned to 2½ P. M.

AFTERNOON SESSION.

During the afternoon session, the following committees were appointed:

On Examination for Degrees.—D. H. Hubbard, L. Williams, Ira Gregory, H. W. E. Matthews, C. F. Sumner.

Committee to Nominate Professors in Yale College.—H. Pierpont, of New Haven; H. P. Stearns, of Hartford.

Committee of Publication.—G. W. Russell, of Hartford; L. J. Sanford, of New Haven.

Committee on Registration.—H. G. Hubbard, of New Haven.

Dr. Willoughby, of Worcester, Mass., was introduced to the Convention and made an address.

Dr. H. G. Hubbard presented the report of the Faculty of Yale College in reference to an improved system of education.

Dr. Catlin made a report in reference to the registration of births.

At 4 o'clock, Dr. S. G. Hubbard, of New Haven, read a paper entitled, "Ante-Mortem and Post-Mortem Observations on the Case of the late President Day, of Yale College," showing that President Day, in 1833 or '34, had consumption, and was supposed to be near his death, but the disease was cured by tonics and iron. There were other features of great interest in the case that will be published.

At 5 o'clock the Mayor and civil authorities entertained the members of the convention with a drive through the environs of the city.

EVENING SESSION.

The Convention reassembled at eight o'clock in the evening, when Charles Woodward, M.D., the retiring President, delivered a very interesting address on "The Past and Present History of Medical Science."

H. A. Carrington, M.D., read a dissertation on "The Relation of Theories to the Practice of Medicine."

The Convention then adjourned to meet at 9 A. M., Thursday morning.

SECOND DAY.

The Convention, yesterday, spent their time from 8 o'clock to 9, in visiting the Yale Art building.

At 9 o'clock it met at the Common Council Chamber. Dr. Woodward presented the report of the committee on Honorary degrees, and Drs. S. F. L. Simpson, of Concord, N. H., and A. F. Woodward, of Brandon, Vt., were elected Honorary members.

Dr. M. McCullum, of Vermont; J. C. Hutchinson, of Brooklyn, N. Y., and Benjamin F. Catlin, of Massachusetts, were nominated for Honorary members.

Dr. John Gray, of Groton, was recommended to Yale College for an Honorary degree. A resolution of thanks to the Mayor, for the use of the Council room, and for attentions, was adopted.

The prize essay on Army Hygiene was read by Prof. R. Bartholow, of Cincinnati, Ohio.

Dr. H. Pierpont stated a case of ichthyosis. The subject was a girl ten years old. The skin in some parts of the body was covered with dark colored spines, three-quarters of an inch thick.

Dr. Gonzalez Echeverria, of New York, read a paper on the treatment of paralysis by subcutaneous injection of strychnine. He was voted the thanks of the Convention, and a copy of his paper was requested for publication.

Dr. Bartholow read the prize essay on quinine, after which a discussion followed on the same subject.

Dr. Beard, of New York City, read a paper on the treatment of certain nervous diseases, upon invitation of the Convention.

At 3 o'clock the Convention sat down to a fine repast with a number of invited guests, at the New Haven House, which was furnished by the New Haven Medical Association. After full attention had been paid to the dinner, toasts followed in the following order:

"The Medical Profession, fostered by the State, may it ever remain under her protecting care."

This was appropriately responded to by Ex-Gov. Buckingham and Lieut.-Gov. Hyde.

"Public health and public prosperity, one and inseparable, may the civil officers ever unite with the Medical Profession in the furtherance of this Union."

This was replied to by Mayor Sperry and Alderman DeForrest.

"The Medical Profession of the olden time, may we act up to our light as faithfully and successfully as they did to theirs."

Dr. Porter, of New London, made the response to this.

"Our Sister Societies, kindred tastes, kindred pursuits, and kindred sympathies are the natural bonds of our unity."

Responses were made by Drs. McNaughton, Hutchinson, Bartholow, Arnold, Roosa, and McCulloh.

"Our County Societies, active children of a healthy parent, may they emulate each other for the advancement of Medical Science."

Drs. L. S. Wilcox, of Hartford, and S. G. Hubbard, of New Haven, replied. This closed the festivities, which were of a very pleasant character.

STATE MEDICAL SOCIETY OF NEW JERSEY.

102D ANNUAL MEETING.

THE 102d Annual Convention of the State Medical Society of New Jersey, was held at Princeton on Tuesday and Wednesday, the 26th and 27th of May, and was a meeting of more than usual interest.

The address on Tuesday by the President, Dr. J. C. Johnson of Blairstown, was on "The Relation of Positive Therapeutics to our Profession," in which he ably and eloquently illustrated the importance of a careful study of the relations of remedies to disease, and magnified the value of that knowledge which is acquired only by the most careful clinical observation.

The reports of the Committee on Public Health, Dr. E. M. Hunt, Chairman, and of the Committee on the Establishment of a State Hospital, Dr. T. Ryerson, Chairman, were read and adopted, and both committees continued. A committee was appointed to confer with the Secretary of State, as to the method of tabulating vital statistics, and also a committee as to indecent and quack advertisements and criminal abortion. It was hoped that an appeal from the Society might influence the moral sense of editors, and that the Legislature might do something to restrain the frequency of child murder.

Interesting discussion was had as to the relations of physicians and apothecaries, and it seemed to be the prevalent feeling, that, until physicians refused to patronize uneducated druggists, or those dealing in nostrums, it was inconsistent and useless to appeal to the Legislature for more stringent laws, as mistakes in prescription would continue to occur, and the people continue to suffer from the vending of unreliable compounds.

At 8 o'clock A.M., on Wednesday, the Society, upon invitation of the College Faculty, visited the college grounds and buildings, and saw much of scientific and historic interest in connexion with the college.

The report of Dr. S. Wickes, Chairman of the Standing Committee, was, as usual, a terse and excellent abstract from the reports furnished by the reporters from the county societies. After referring to the unusual humidity of parts of the year, it noted an unusual prevalence of good health, and reported rubeola as the only epidemic at all wide-spread, with pertussis and scarlatina in a few localities.

The report noticed special cases of interest; the increasing use of chloroform as an internal remedy, the moderate value set upon the bromides in epilepsy, and yet their undoubted service in some cases of cerebral congestion and nervous excitability, and also the increasing use of the sulphites, of which the bisulphite of magnesia is the best.

The whole report is valuable, not only as a contribution to State medical records, but as full of general information, and is new evidence of the wisdom of having such a permanent chairman as Dr. Wickes, who has for several years performed so ably and successfully the duty confided to him by the Society.

The usual essay from a vice-president was read by Dr. Cullen, of Camden. It was a model monograph, with illustrative cases and photographs, showing what conservative surgery can do without tenotomy in cases of contracted tendons. The success attained by pressure, by bandaging, and by an apparatus devised and used by the doctor, was such as to interest the Society much, and drew forth remarks most favorable to the less frequent use of the knife in these deformities.

Dr. T. RYERSON, of Sussex, read an elaborate essay on "The Mechanism of Labor," demonstrating the wonderful adaptation of form to the object designed, showing how and why the fœtus assumed its usual position, and how the *modus operandi* of labor is determined. Some new views were expressed, and a careful *resumé* and review given of the opinions of obstetric authors. The paper, though long, was listened to with marked interest, and highly appreciated. The next issue of the State Transactions will be a valuable addition to any medical library.

The Society appointed as historian Dr. A. Coles, of Newark. The design of this new office is to secure a more careful record and preservation of the memories of those who from time to time are removed by death.

The other officers elected for the ensuing year were: *President*—T. J. Carson, Trenton; *1st Vice-President*—William Pierson, Sen., Orange; *2d Vice-President*—Thomas F. Cullen, Camden; *3d Vice-President*—C. Hasbrouck, Hackensack; *Corresponding Secretary*—Charles Hodge, Jr., Trenton; *Recording Secretary*—William Pierson, Jr., Orange; *Treasurer*—H. R. Baldwin, New Brunswick; *Standing Committee*—Stephen Wickes, Orange; J. E. Culver, Hudson; F. Gauntt, Burlington.

The State Society of New York was ably and eloquently represented by Dr. Hart, of Brooklyn.

The Society dined together as usual, and adjourned to meet on the fourth Tuesday of May, 1869, at Jersey City.

Medical Items and News.

Dr. Leroy Milton Yale has retired from the editorial management of the *N. Y. Medical Gazette*, and has been succeeded by Dr. A. L. Carroll.

Dr. J. Aitken Meigs has been elected to the Chair of Institutes of Medicine in the Jefferson Medical College, Philadelphia. The choice is an exceedingly good one.

Dr. Schweigger of Berlin has been appointed Professor of Ophthalmology in the University of Göttingen.

Massachusetts Medical Society.—The Annual Meeting of this Society was held in Boston, commencing on June 2, and remained in session three days. Dr. Charles G. Putnam was elected President for the ensuing year.

Association of Medical Superintendents of American Asylums for Insane.—The twenty-second annual session of this Association was also held in Boston on the 2d, 3d, 4th, 5th and 6th of June. Many papers of interest were presented relating to insanity, but our limited space forbids us referring to them in detail. We however shall take occasion in a future number to remark in extenso upon the meeting.

The Boylston Prize Essay for the current year has been awarded to Mr. Chas. B. Brigham, for an essay on Diabetes Mellitus.

Contagious Diseases in New York.—The reports of contagious and infectious diseases made to the office of the Sanitary Superintendent Metropolitan Board of Health by practising physicians in this city, from May 16th to May 31st, inclusive, show 285 cases of Scarlet Fever, 258 of which were under the age of 10 years; 21 cases of Typhus Fever, the ages varying from 8 to 56; 12 cases of Typhoid Fever, between the ages of 13 and 35; 24 cases of Diphtheria, 17 cases of which were under the age of 6 years; 3 cases of Small-Pox, between the ages of 8 and 25 years.

The reports do not indicate the special prevalence of any of the above diseases in particular localities.

An International Congress of Naval Surgeons is to assemble soon in Antwerp.

Tuck's work on the Diseases of the Tongue is being translated into English.

Richmond Medical Journal. — Dr. E. S. Gaillard, late of Richmond, Va., has removed to Louisville, Ky., in order to fill the Professorship of General Pathology and Pathological Anatomy in the Kentucky School of Medicine. He will continue to edit "The Richmond and Louisville Medical Journal," which will be published in future at Louisville, instead of Richmond, Va.

Missouri State Medical Association.—The first annual meeting of this body was held at the Polytechnic Institute, commencing Tuesday, April 21, 1868.

The new General Hospital for the Insane at Middletown, Conn., is partially completed; so much so, that it is ready to receive a small number of male patients.

Tennessee State Medical Society.—The thirty-fifth annual meeting was held at Nashville, Tenn., last month. Dr. J. D. Winston, of Nashville, was chosen President for the coming year.

A Powerful Lens.—Mr. Parker, of London, has just made a lens, three feet in diameter, three inches thick in the centre, and weighing 212 pounds. In the focus of this powerful lens the most refractory metals are almost instantly fused and dissipated in vapor, while unyielding stony substances are as readily vitrified.

The Death of Dr. Olcott.—At a meeting of the members of the medical profession of Hudson County, held in Jersey City, May 30th, 1868, Dr. A. A. Lutkins, Chairman, and Dr. M. A. Miller, Secretary, the following preamble and resolutions were adopted:

Whereas, Death has invaded the ranks of our profession, and one of the oldest of its members in this city has been called to go the way of all the earth; it is becoming in us to gather around his bier, showing our respect for the dead and our sympathy for the living, remembering that we too are mortal; therefore,

Resolved, That while we bow in humble submission to this dispensation of Divine will, in removing from our midst our late associate in medicine, Dr. Edgar Olcott, we feel that his death is sincerely mourned by the community to whom he had devoted a long and active life of usefulness, and to whom his scientific attainments and his ever ready response to calls of suffering were invaluable; and we offer our heartfelt sympathies to the bereaved family.

Resolved, That a copy of these resolutions be presented to the family of the deceased, and also be published in the *Medical and Surgical Reporter* the New York Medical Record, and the Jersey City papers.

Resolved, That we attend the funeral in a body.

J. W. Hunt, M.D.
T. F. Morris, M.D.
M. A. Miller, M.D.
Committee.

Detroit Medical College.—A Medical College has just been founded in Detroit. The sum of thirty thousand dollars has been already subscribed. The following members of the Faculty have thus far been elected:

Physiology, General Pathology and Microscopy—George P. Andrews, M.D.; *Chemistry*—Samuel P. Duffield, Ph.D.; *Surgery*—D. O. Farrand, M.D., and Theodore McGraw, M.D.; *Obstetrics and Diseases of Women and Children*—E. W. Jenks, M.D.

The remaining members of the faculty will be appointed before the College is opened.

Deaths in the Medical Staff during War.—During the wars of 1848, '49, '50, Austria, it is stated, lost no less than 1,500 individuals belonging to the medical staff. In 1866 during the so-called seven weeks' war, Prussia lost 16 military surgeons, whilst 8 others were wounded. Of the 16, the deaths from cholera were 14. The Russian armies, during the campaigns from 1853 to 1856, lost through war and disease 382 military surgeons. The ratio of military surgeons killed and wounded in the Crimean war was higher than that of other officers. In the Algerian campaign, the loss of French military surgeons was one in six, whilst that of the combatant officers was one in thirteen.

New Publications.

BOOKS RECEIVED.

Lessons in Elementary Chemistry, Inorganic and Organic. By Henry E. Roscoe, B.A., F.R.S., Professor of Chemistry in Owens College, Manchester. New York: W. Wood & Co., 61 Walker street. 1868.

Researches in Obstetrics. By J. Matthews Duncan, A.M., M.D., L.R.C.S.E., Lecturer on Midwifery in Surgeons' Hall Medical School, Physician for and Clinical Lecturer on Diseases of Women in the Royal Infirmary, etc., etc., etc. New York: W. Wood & Co., 61 Walker street. 1868.

Original Communications.

THE CLIMATE OF AIKEN, S. C.

BEING A PAPER PRESENTED TO THE AMERICAN MEDICAL ASSOCIATION AT ITS RECENT MEETING.

By W. F. PERCIVAL, M.D.,

OF AIKEN, S. C.,

AND RECOMMENDED FOR PUBLICATION IN A LEADING MEDICAL JOURNAL.

Believing that a thorough and more extended knowledge of the topography and climate of Aiken, as a winter residence for consumptive patients, would be interesting and useful to the profession, and that the large proportion of persons, who have accidentally been induced to visit the place, indicates that the medical profession generally are not aware of the peculiar advantages of the locality—

I have deemed that a short description of the topographical and meteorological condition of Aiken would be interesting, not only to physicians, but to thousands of sufferers who are now sent indiscriminately to the warm, moist climate of the South, or to the dry and very cold climate of the North. Of late years the adaptation and influence of climate in the treatment of tuberculosis, has attracted the attention of eminent men both in Europe and the United States. The peculiarities to be sought and the evil influence to be avoided have filled volumes.

With no wish to enter into a discussion on the treatment of tuberculosis, I beg leave to present to the attention, and for the consideration of this Association, a few facts relative to the climate of Aiken.

The town is in Barnwell District, S. C., 120 miles from Charleston, and sixteen miles from Augusta, Ga. It is situated at the western end of an elevated table land, containing an area of about twenty square miles. Its elevation is 600 feet above tide water, and 400 feet above the Savannah river at Augusta. The soil is sandy, with a substratum of siliceous red clay. This soil is exceedingly porous, no water being found at a less distance than from 80 to 125 feet. The water obtained from this depth is clear, with a temperature about 60° Fahr., slightly impregnated with iron, not enough, however, to affect its sensible properties.

The drainage of this table land is effected through creeks, located from four to six miles at the nearest point, and with a depression of from 150 to 300 feet below the level of Aiken. It is surrounded for many miles with a growth of long-leaf pine and dwarf oak. From its great elevation and distance from water-courses, it is exempted from all malarial diseases, endemics are unknown, and epidemics exceedingly rare; when they do occur the type is very mild. The mean temperature of the winter months is 44°; that of the summer months 77°; the annual mean about 52° Fahr.

The prevailing winds are from the south and southwest.

As the hygrometric condition of the atmosphere is of material importance, I regret that I can give no observations by means of instruments, and must rely on comparative means as illustrative of dryness of atmosphere. Steel instruments do not rust when exposed; mur. soda, nit. potas., sulph. mag., etc., etc., absorb but little moisture, and do not sensibly change, even when exposed for months. Facility of access and the avoidance of a long and tedious journey, are of great importance in the case of invalids.

Aiken is within forty-seven hours' travel by railroad of New York, the South Carolina Railroad passing through the centre of the town. There are daily mails and telegraphic communication with all parts of the Union; and the comforts and luxuries of the large cities are readily obtained. Tuberculosis being the result or symptom of lowered vitality, and a depressed state of nervous power, and from the fact that a warm, moist atmosphere conduces to the softening of tuberculous deposits, and the supplementary action of the skin, which is always greatest in dry, elevated localities, and always least in moist climates, it seems useless to dwell upon the necessity of an elevated, moderately cold and dry locality, for the climatic treatment of tuberculosis. I will here give a statement of the meteorological condition of places to which invalids are usually sent:

St. Augustine, Florida: elevation about 20 feet, situated on the shores of St. Augustine Bay. Winter mean, 58°; summer mean, 80°.

Palatka, on the St. John's River: elevation, 25 feet. Winter mean, 57°; summer mean, 80°.

Jacksonville, on the St. John's River. Winter mean, 58°; summer mean, 82°.

St. Paul's, Minnesota. Winter mean, 19°; summer mean, 68°.

A comparison of the meteorological status and accessibility of Aiken, with the warm, moist climate of Florida, and the dry, but exceedingly cold climate of Minnesota, will, I think, recommend it to the attention of the medical profession. A more extended publicity of its advantages would undoubtedly be the means of relieving much suffering; and should I succeed in calling the attention of members of this Association, who may not heretofore have known of this locality, my object will have been accomplished.

IMMENSE VULVAL AND VAGINAL VARIX.

By E. HOLDEN, M.D.,

OF NEWARK, N. J.

The following case is presented as interesting in two aspects: the first as rare, and perhaps unequalled by any on record as a case of vulval varix; and second, as illustrating in a striking manner the injustice and ingratitude liable to fall to the lot of a physician at the hands of those best served and benefited.

The patient, Mrs. ———, probably about twenty-five years of age, five months pregnant with a fourth child, was first seen March 17, 1868. She was suffering at times considerably from varix, extending from the toes to the abdomen, involving both limbs, and especially painful in the groins and about the vulva.

Examination showed a condition only to be designated as frightful. The internal saphenous veins were distended in many places to the size of the small intestine; the foot, of the right side especially, purple, as is frequently found in ordinary extensive varix of the extremity, while above the knee the convolutions and protruding masses of veins were found increasing gradually in size as they approached the groin, until in both groins they presented immense aneurismal sacs, varying from the size of the clinched fist to that of a small orange; the skin and cellular tissue thin as tissue paper. Had this been all, the patient's condition would have appeared a serious one; but, in addition to this, the vulva, perineum, and anterior pubic region, stood out as a knotted convoluted tumor, the size, when the patient stood erect, of a full-term fœtal head—the distended veins, contrary to expectation, *not* extending upwards in the abdomen, as is frequently the case in less severe forms of varix, but internally, and involving the vaginal veins to the depth of about five inches, and to some extent the os and cervix uteri.

The recumbent posture was painful, and, even when prolonged twenty-four hours, caused but slight diminution in the size of the tumor. After seventy-two hours' recumbence, they were found considerably diminished; pains in the right hypochondrial region, vomiting, etc., were, however, so constantly complained of, that all efforts to prolong this posture were necessarily abandoned.

She had borne three living children (and here is an important point); but although now five months advanced in pregnancy, she pronounced herself, and was pronounced by those who had seen her, to have been *worse at two months* than ever before at full term—the diseased condition, commencing with the first pregnancy, having grown gradually worse from that time. At the birth of the last child a long and hazardous delay of the head on the perineum had been allowed by the attendant (Homœopath), under the belief and assurance that any interference was too hazardous to be thought of. After a tedious recovery this same physician, who afterward saw fit to make a directly contrary statement, assured her that she could never live to bear another child.

The danger of chance rupture of the veins was immediately recognized, and the imminent peril also, should the patient chance to survive till full term. A meeting of the Essex Medical Union being at hand, the case was laid before that body for expression of opinion and advice. A consultation was also called at the house of the patient, with Dr. John F. and Dr. Arthur Ward, of Newark. It was decided that, while the chances of recovery were against her, yet forced abortion offered the only rational ground of hope, and the patient and relatives were so informed. Here occurred a division. Her mother and sisters in the city opposed it as outrageous and unnecessary (*they not having seen the condition of the diseased veins for some weeks, and most of them not at all*)—the husband and patient, together with all who were cognizant of the facts in the case, uniting in urging that relief, if any could be afforded, should be granted.

Accordingly, March 22, the first attempt to bring on labor was made with a Simpson's sound, introduced through a glass speculum of small size, the great protrusion of veins into the vagina rendering a Sims speculum useless. For one month various efforts were made without success, the delays being occasioned by a desire to appease the strong opposition of the mother, who could only see in the very word abortion a terrible crime, but more especially, perhaps, by the presentation and non-protrusion of membranes, and a peculiar want of sensitiveness on the part of the uterus itself, which failed to respond to any of the ordinary means usually resorted to in cases of such emergency, cold douche, extreme dilatation of os, etc., etc.

During this period the condition of the patient became more and more critical; the size of the veins increased, and the thinness of integumentary covering grew each day more alarming. The pain and distress also increasing, added a strong though silent appeal to the urgent entreaty of the suffering patient for relief. The membranes were at length with difficulty ruptured, and delivery occurred, April 23, 1868. Although a breech presentation, careful pressure over the distended veins, aided by continuous expulsive pains and the ordinary manipulation, was successful in preventing rupture.

Phlebitis followed on the second day, commencing in the vulva, and almost occluding the vagina with the now sodden and inelastic masses, gradually extended towards the uterus; severe pains occurred under the pubes, with sensations as of scalding water poured over the vulva and groins, and swelling of extremities. By the 1st of May the symptoms were those of ordinary puerperal fever, the tympanitis, however, very slight, and condition of the patient on the whole not unfavorable. A consultation, however, was held by request of the relatives, with Dr. Tichenor, of Newark.

It is here necessary to refer again to the opposition of certain of the relatives, and it is with reluctance that I place on record proceedings so abhorrent to every sensitive mind. They had been forbidden the house by the incensed husband, but called again by the wife, who, fearing lest she might not recover, wished to leave no unkind feelings behind. They filled and took possession of the house, and, as if anxious to verify their previous forebodings, persisted in not only telling the patient she would die, but, filling the room to suffocation, stood *fourteen hours* about the bed, and in spite of all indignant protest prayed with her, bidding farewell, neglecting proper stimulants, etc. Having left the house in disgust, I was recalled in a few hours with the assurance that, as I had predicted, she was not dying, and was better. The lochia had returned, pain was no longer intense, the pulse reduced to ninety and of reasonably good condition—in fact, really improved. The improvement being found to be permanent and real, the time appeared to have come for a plain opinion to the relatives mentioned, in regard to their most reprehensible conduct, which resulted in a transfer of the case at this interesting juncture into the hands of their own and the patient's former physician (Homœopath), who suddenly discovered that she could have had another child safely "*under Homœopathic treatment*" at full term, his former opinion to the contrary having been conveniently overlooked.

Thus were days and weeks of anxiety and unremitting attendance suffered to lose their fruits.

The subsequent history, however, furnishes a fitting sequel. Improvement continued until nature, unsupported and unstimulated by sugar of milk and infinitesimals, began to yield. The patient died of exhaustion on the 23d of May, one month after the delivery of the fœtus.

165 Orange street, Newark, N. J., June, 1868.

ON THE USE OF

DISINFECTANTS IN SCARLET FEVER EPIDEMICS.

By NELSON L. NORTH, M.D.,

OF BROOKLYN, N.Y.

BEING A PAPER READ BEFORE THE AMERICAN MEDICAL ASSOCIATION, IN MAY, 1868, AND RECOMMENDED TO BE PUBLISHED IN SOME WIDELY-CIRCULATED MEDICAL PERIODICAL.

It is certainly not greatly creditable to the medical profession of the present day, that while such rapid advances are being made in the general theory and practice of physic, still one of the most malignant and destructive diseases is rapidly increasing in prevalence.

Scarlatina, at once a contagious and infectious malady, often so malignant as to be terribly destructive to life, in its acute stage, and in its sequelæ so sadly effective in destroying the constitutional vigor, as well as bodily symmetry of such a considerable number of children in every community, is so constantly prevalent in most of our large cities and villages, at least, as to make it almost appropriate to speak of it as a *continuous epidemic*.

An epidemic of small-pox in a neighborhood is justly deemed a misfortune, and city authorities, health-officers, and Boards of Health, bestir themselves to have every known means employed to arrest the spread of the malady. An epidemic of cholera arouses to activity all classes of the community—preventives and disinfec-

tants are resorted to almost without limit—medical officers are very properly appointed by the authorities to watch over and care for the poor, and every effort is carefully and systematically made to quell the epidemic; so with yellow fever, and partly—but not enough—so with typhus and typhoid fevers.

In the *Transactions of the American Medical Association*, for the year 1864, Dr. Charles W. Parsons, of Providence, R.I., in his report on the medical topography and epidemic diseases of the State of Rhode Island, gives a statistical table, in which he shows that the deaths from *scarlatina* were many more than by any of the other zymotic diseases, and he found by statistics that a little more than *one-twentieth* of the deaths from all causes in the State of Rhode Island for ten years were from *scarlatina*.

In the same number of the *Transactions*, Dr. Cyrus Ramsay, of New York, gives a very full table of the deaths in New York city for thirteen years previous to 1864, from which I discover that the aggregate of deaths from scarlatina in New York for that time was far greater than that from any of the other zymotic diseases except cholera infantum, and this notwithstanding the fact that during the time the city had been visited by an epidemic of *Cholera Asiatica*.

In the report of Dr. R. C. Hamil, of Chicago, to this Association, in 1867, upon the epidemic diseases of Illinois, we find that the deaths from scarlatina in that State for eleven consecutive years averaged nearly four per cent.

In the report of the New York Metropolitan Board of Health for 1866, I find it stated that there were *five hundred and sixty-four* deaths in New York, during the first nine months of the year, from *scarlatina*.

In the report of the same body for 1867, Dr. Elisha Harris, Registrar of Vital Statistics, etc., says, "As a *persistent* and obstinate foe, scarlatina is more to be dreaded than Asiatic cholera." And Dr. R. C. Stiles, Registrar of Vital Statistics for Brooklyn, says, "There has been no intermission in the prevalence of scarlatina during the past year, every week having furni-hed its quota of deaths from this cause." And thus might be continued quotations and statistics almost indefinitely, and all would be found to show that scarlet fever in the aggregate has been for years, and is to-day, causing more deaths than any other zymotic disease.

Dr. Shrady, editor of the New York MEDICAL RECORD, in the number for April 1st, states that he has the promise from the Sanitary Superintendent of the New York Metropolitan Health Board, of semi-monthly reports of the contagious diseases of the district. The first report states that during the two weeks ending March 15th, 1868, there were one hundred and fifty-nine cases of scarlatina, fifteen cases of typhus fever, seven cases of typhoid fever, fourteen cases of diphtheria, and two cases of small-pox; nothing is said of the great number of cases of scarlet fever, as it is so common a thing that nothing is thought of it.

In the next report in the RECORD, dated April 15, 1868, we are told that from March 16 to March 31, inclusive, there were two hundred and sixty-eight cases of scarlatina, six of typhus fever, seven of typhoid fever, forty-five of diphtheria, and six of small-pox.

And now, gentlemen, as it is not my purpose at this time to go further into detail to prove what is so evident as not to require demonstration, viz., that scarlet fever is a very prevalent disease, and a very fruitful cause of death, I come at once to the suggestion, whether something more than is being done, might not be done to prevent the spread and mitigate the malignancy of this malady.

Could Boards of Health be induced to adopt plans for systematic and thorough cleansing of the apartments and houses containing the sick of scarlet fever, as well as carefully to disinfect the clothing and persons of the sick, I cannot doubt but great good would result. At present it is not too much to say, that *nothing* effective is being done in this direction.

Physicians note the frequent and still *more* frequent epidemics of scarlatina, observe its spread from house to house, and from street to street, evidencing its contagious and infectious character in all its course, and yet they *do nothing* but follow on in old routines.

Nothing *authoritative*, nothing *systematic*, is being done to prevent the onward progress of the malady. It certainly is not upon merely theoretical grounds that a systematic use of disinfectants is urged in zymotic epidemics—facts demonstrate the beneficial results from such a course; and did time permit, a very considerable amount of individual experience might be brought to bear upon this point, but I forbear.

Dr. Elisha Harris, of the New York Board of Health, from whom I have before quoted, says (Report for 1866): "But while it holds true that this malady is most prevalent, as it is also most infectious, among the tenant-house and cellar population, it is also painfully true that both its communicability and malignancy is increased by the foul local atmosphere of such domiciles;" and says the doctor, "from the first organization of the Board of Health, this bureau has made it a duty to forward to the family where scarlatina is reported fatal, plain advice to gather up and boil for an hour all infected clothing of the patients, or to immerse the things in dilute chlorinated soda, or in a well-colored solution of permanganate of potassa; and to ventilate the sick-room, etc., for days, very thoroughly;" "prompt action recently taken by the Sanitary Superintendent in regard to scarlatina will save many lives."

The Registrar-General of England says, "It should not be overlooked that prophylactic measures *are* available against scarlatina as well as small-pox."

The Metropolitan Board of Health of the State of New York, which includes within the limits of its district the cities of New York and Brooklyn and suburbs, demonstrated during the last cholera epidemic, how much could be and how much was done by that body to prevent the ravages of that dreaded pestilence, simply through the use of disinfectants, in connection with a careful plan of quarantining, and separating the well from near contact with the sick. I am glad to say they have recently taken another step in the right direction, and require the physicians of the district to report to them *all* contagious diseases, and *advise the use of disinfectants*, particularly in scarlet fever; and it is to be hoped that at no distant day they may see the necessity of adopting some yet *more decided* measures, looking to the prevention of the disease in question. If they would but *enforce* during epidemics of scarlet fever, the very excellent and complete set of rules which they now simply *recommend*, I feel certain that such good would result therefrom, as would be eminently satisfactory both to the profession at large, and to the general public.

And let us continue to hope and urge that not only the New York Board of Health, but that other governmental bodies and health authorities will follow in the course, until it shall be demonstrated beyond a cavil that zymotic diseases *may* to a very great extent be *prevented*, if not wholly exterminated, by destroying with disinfectants the subtle poisons which are the communicable causes of such diseases.

HEAVY BRAIN.—The brain of the late Hon. D'Arcy McGee weighed fifty-nine ounces.

REMOVAL OF

RIGHT ANGLE, RAMUS, AND ARTICULATING HEAD OF LOWER JAW;

WITH COMPLETE RESTORATION OF THE BONE AND TEETH.

By CHARLES N. HEWITT, M.D.,

OF RED WING, MINN.

In August, 1867, I was called to see a little Swede boy act. 11 years, said to have typhoid fever. I found that he had been sick three weeks; that now, with but little diarrhœa, his body was covered with dark colored petechiæ, some of them quite large. Pulse rapid and weak; tongue red and dry. By the use of quinine and acid. sulph. aromatic., with wine and proper food, hydr. c. creta and anodynes internally, and salt spongebath externally, he convalesced in four weeks. Giving his parents warning of the danger of exposure to damp and cold, I discharged him. In October I was again called, and found that a week before his face on the right side had begun to swell and pain him. When I saw him the swelling was so great as to obliterate almost entirely the features of that side. It extended over the temporal region and below the inferior maxilla. The skin was hot, red, and shining. Making a free incision just in front of the masseter muscle, about ℥ viii of pus were discharged, much of it coming from the temporal region under the zygoma. The poor little fellow was almost exhausted by the suffering which he had undergone; the jaws were closed and swallowing, even of fluids, was very difficult. Hot fomentations were applied, and tonics and anodynes resumed. Pus discharged freely from the wound, and from sloughs in the mouth, and externally under the eye. In ten days I was enabled to get a view of the cavity of the mouth. The posterior portion of the alveolar process of both superior maxillæ and of the inferior maxilla, right side, with a portion of its body and ramus, was necrosed, as was also the orbital plate of the superior maxilla of same side. After a severe struggle with exhausting purulent discharge and consequent hectic, he began to mend rapidly in December, and exfoliation as rapidly advanced. *I removed, before he was well, most of the alveolar process of the molar and bicuspid teeth,* with the teeth themselves; a good share of the orbital plate of superior maxillary bone, several pieces of bone, which I cannot exactly locate; and on January 28th, the patient being under chloroform, I removed the right angle, ramus, and articulating head of the lower jaw entire, with nearly the whole of its coronoid process. When he had recovered consciousness, I gave the boy a piece of spruce gum to chew. He masticated it easily on the right side, and I found he had every natural motion of the jaw, except that he could not open the mouth to the normal extent, because of the thickening and induration and of the jaw, caused by the exfoliation of the adjacent cancerous alveolar border, which was not yet complete. On the 4th of March he reported pretty well, *every motion* of the jaw perfectly performed. Careful examination revealed the existence of new bone so perfect as to differ, in no respect, except in a little increase of size, from that which it replaces. New teeth have succeeded the ones lost, and their mucous alveolar border is as perfect as ever. Breath sweet, the boy's health is returning, and he looks well. The deformity remaining consists of a slight retraction of the lower eyelid by the contraction of the infra-orbital cicatrix and the attached cicatrices about the right angle of the lower jaw. In my library I do not find a case of more complete restoration of bone on record. Having watched this case from the beginning, and having the specimens and their history, I venture to offer it for publication. As to the cause of so extensive necrosis, I am ignorant. I at first thought of mercurial salivation, but that was negatived by the fact that at no time during his sickness did he take mercury, except in the form of hydr. c. creta, and of that but little. Nor at any time did he manifest any symptoms of such effect. When I saw him in October I found the gums, except where necrosis was in progress, perfectly healthy, the teeth white and clean, and there was no unusual secretion of saliva, or mercurial fœtor of the breath, nor, as far as I could learn, had there been any.

I attribute the restoration of the bones and of motion to the jaw, and the regular eruption of the teeth, to the care taken not to interfere with the natural process of repair till it was evident that the separation of the dead bone was complete and its substitute nearly complete also. Except in the case of the angle and ramus of the jaw, this process was evident in the elevation and extrusion of the necrosed bone. As to the angle and ramus, when satisfied that the separation of living and dead was complete, and that the new bone was strong enough to permit the extraction of the old, I removed it by the exertion of considerable force.

Original Lectures.

LECTURES ON TUMORS:

BEING A PORTION OF THE COURSE OF SURGERY AT THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

SESSION 1867–8.

By S. D. GROSS, M.D., LL.D.,

PROFESSOR OF SURGERY.

(Reported expressly for THE MEDICAL RECORD.)

VII.

(Concluded from page 174.)

THE TREATMENT OF MALIGNANT TUMORS.

In regard to extirpation, or ablation, or excision, the profession is not agreed as to the propriety of the measure. Some surgeons advocate the removal of all tumors that are accessible to the knife, especially in the earlier stages of the affection; others, on the contrary, are opposed to this kind of interference even in the earlier stages of the disease. I suppose we shall find that a proper medium is at least the safest guide for the surgeon. There are cases, according to my observation, in which the knife should undoubtedly be employed; the only question that arises is as to the time for the operation, and the circumstances under which it should be performed; this is the great point for our consideration. Now there are certain contra-indications in regard to the performance of these operations. In the first place, when the disease is congenital or when it exists as an intra-uterine affection, or comes on within a short period after the birth of the child, such cases ought not to be interfered with by the knife, for experience has shown that these are not suitable cases for surgery; no matter how carefully the operation may be performed, how accurately the parts may be excised, there will be a return of the affection within a comparatively short period after the operation has been performed, either at the cicatrix, supposing the wound to heal, which is not always the case under such circumstances, or in some other part of the body more or less remote. The same is true when these diseases coexist

in different parts of the body, whether it be a scirrhous tumor, an encephaloid, or any other of the formations under consideration. Suppose you have a tumor in the mammary gland and in the uterus, or in the mammary gland and in the liver, or some other part of the body; under such circumstances the surgeon would not use the knife, if the accessible part is removed, the inaccessible part will perhaps increase with greater rapidity, destroying the life of the patient earlier than if the other tumor had not been removed. In the next place, rapid growth is unfavorable for the success of an operation. So also in regard to great bulk, as in the case of encephaloid; when it is very large, and at the same time rapid in its growth, the surgeon usually abstains from the use of the knife.

When the patient is laboring under what is called the cancerous cachexia, when the disease has made an impression of a peculiar character on the system at large, as evinced by the peculiar appearance of the countenance, rapid waste of muscle, disorder of the digestive apparatus; in other words, when there is serious constitutional involvement; under such circumstances we abstain from the use of the knife. We abstain from the use of the knife when there is serious lymphatic involvement; for example, in a case of scirrhus of the mammary gland with serious involvement of the axillary ganglions. We abstain from incision when there is ulceration to any extent; if we operate under such circumstances, it is simply to get rid of the offensive odor, which, in itself is frequently enough to poison the system. Such a case was before you recently, in which I removed the mammary gland after ulceration had occurred, because the discharge was offensive to the patient herself as well as to those around her, for there was a copious flow from the ulcer, establishing a serious drainage on the system, and for these reasons I was induced to perform the operation.

We operate then, generally, when the case is of a favorable character; that is to say, when there is no serious constitutional involvement; when the tumor has been growing slowly, when it has not a quired any very large size, or when it is comparatively small; when it has not contracted any extensive adhesions to the surrounding structures; when there is no tendency to ulceration; when there is no lymphatic involvement, when the constitution at large is perfectly sound, as not unfrequently happens in cases of this kind; under such circumstances we do not hesitate to operate, or excise the affected structures.

Cases sometimes occur in which the disease, especially when of the scirrhous variety, is of long standing. I have myself seen a number of instances of this kind. When this is the case, when the disease is, as it were, latent, manifesting no disposition to progress, or to involve the surrounding structures, or the constitution, the best plan, according to my judgment, is to allow the tumor to remain; not meddling with it in the slightest degree. It has been shown, under such circumstances, that the patient may live in comparative comfort for many years, fifteen, twenty, or even twenty-five years. I had such a case eight or nine years ago, in a lady over seventy years of age, formerly a patient of Sir Astley Cooper, in whom such a tumor remained for twenty years in the mammary gland, in a state of latency. At the time she presented herself to me, it was progressing, and I removed the gland. She subsequently died, in North Carolina, from some other intercurrent disease.

All these cancerous products have, usually speaking, a short life, in consequence of the peculiarity of their organization; and when we perform an operation, the tendency is to return, either at the cicatrix, in the neighboring lymphatic ganglions, or in some other part of the body, it may be more or less remote. This is the tendency of all of them; in a more marked degree, perhaps, in encephaloid than in scirrhus, and in scirrhus than in colloid or in epithelioma. It is also true in regard to melanotic tumors; the tendency here is perhaps as rapid as in encephaloid, much more so than in epithelioma or in colloid, even more rapidly, I think, than in scirrhus. They all have this repullulating tendency, and this leads me to say that, in the great majority of instances, they have a constitutional origin; they are not merely local affections, but so many local manifestations of a predisposition to the occurrence; if they were local in their character, ablation would be the proper remedy; but, being constitutional, when we remove the tangible local affection, there is a liability to recurrence either in the part itself or in other structures. When encephaloid arises after local injury, there is the same tendency to proliferation as when it arises with out any tangible cause, and the same tendency to recurrence after extirpation.

These affections are not incurable. Experiments have been performed in many instances, especially with the matter of melanosis and epithelioma, without any results to prove the fact that the disease can be propagated in this way. There would seem to be, therefore, no specific poison, such as that which characterizes chancre, gonorrhœa, small-pox, and other affections, where the poison is of that peculiar zymotic character; no poison, but a peculiar cell-development; but whether the cells of the se formations are peculiar, or whether they are superadded to the structure in which the morbid affection appears, or whether they are simply modifications of the original or previous natural cells—for the whole body is nothing but a series of congeries of cells—is a point not yet determined. This much is perfectly certain, that when a disease of this kind is once called into activity, there is rapid proliferation, formation and multiplication of cells; and these cells, as has been shown by Schroeder Van der Kolk, are not always limited to the morbid mass itself, but are scattered through the surrounding tissues, forming thus new foci for further development, so that, no matter how thoroughly extirpation may be effected, these cells, existing in the neighborhood of the mass that has been excised, will form the basis of new growths, or of secondary formations, as they are called.

You will find, gentlemen, that the experience of surgeons, in regard to the operations performed for the relief of these growths, varies very much in different countries, and in different communities. Some surgeons, well-informed, intelligent, and apparently honest, will tell you that nearly every operation of this kind is a success. I beg you always to receive such declarations with a grain of allowance, and a very big grain at that. It is the result of my observation, now extending through a period of active professional engagements of upwards of thirty-five years, that comparatively few of these operations are ever successful. I can point to only a few instances where my efforts have been crowned even with temporary success, much less anything like permanent triumph. I recollect a lady who used to live in Thirteenth street, in this city, from whom, after the age of sixty-five years, I removed, five years ago, the mammary gland of the left side on account of a scirrhus of that organ. She had previously been subjected to an operation involving only a portion of the gland. When I saw her, some six months afterward, I found that all the symptoms were well marked; there was every characteristic feature of scirrhus. I removed the whole mammary gland, and to this day she has remained entirely well, enjoying excellent health.

The cicatrices are perfectly smooth, perfectly normal; there is not the slightest involvement of the lymphatic ganglions; she is fat and plump; and this is the most successful case of the kind that has ever come under my observation. In another instance, of a lady residing in the northern part of this city, I performed an operation for excision, last June three years ago; she, too, remains perfectly well. In another instance, I operated in November three years ago, removing one of the mammary glands. In that case there was a return of the disease, so that, in September last, I was obliged to remove a tumor toward the axilla, not from the axilla, in that chain of lymphatic ganglions which exists in this situation. The lady called at my office the other day, and I found that there are enlarged lymphatic ganglions deep in the axilla; I advised another operation, but whether it will be submitted to I am not able to say. These examples are among the most favorable which have come under my observation with regard to scirrhus. I have seen a number of cases of cancer of the penis, and cancer of the lower lip, in which the patient has remained well for a number of years, but they are comparatively few; all the rest of the cases have been unfortunate, this occurrence having taken place within a comparatively short period after the extirpation. There is another remarkable case, that of a Miss T——s, of this city, who had an operation performed on the left mammary gland, in 1857, by Dr. Russel; only a portion of the gland was removed. The patient was afterward placed under my charge, and I performed an operation in which I removed the entire gland, as is my wont under such circumstances. Some four or five months afterward, there was a recurrence of the disease, and I performed another operation; after awhile another operation became necessary; I brought the patient, at last, to the clinic, and operated in this way perhaps three times, when the case was placed in the hands of my assistant, Dr. Morris J. Asch, since, and at present, surgeon in the United States Army, who, along with my son, D. S. W. Gross, performed upon her a number of operations. She subsequently fell into my hands again, for surgical interference, and the last operation was performed in September, 1861, some four years after the first. Altogether twenty-one operations have been performed, and fifty-two tumors have been removed. A fungus would sprout out, between four and five weeks after an operation, and would grow with great rapidity, acquiring the bulk of an almond, or of a pullet's egg, within a very few weeks; this would be removed, and the case was followed up in this way; but ever since the last operation, in 1861, the woman has remained perfectly well. We removed, in this case, nearly the whole of the pectoral muscle, and portions of the external and internal intercostals, so that the pulsations of the heart can be perceived distinctly in the corresponding intercostal space. This case is not extraordinary in all of its features; I know of no parallel case on record.

In regard to these operations—when you find that the case is a proper one, you do not hesitate to undertake it. But always and invariably explain to your patient the great liability to recurrence, as it is your solemn, bounden duty to do, as honest men.

How is the operation to be performed? When the tumor involves such a structure as the mammary gland, the testicle, the penis, the vulva, or the neck of the uterus, excise the whole of the breast, a large part of the penis, the whole of the testicle; these must always be sacrificed under such circumstances; the very atmosphere, so to speak, of the disease must be removed, not the tumor merely; you must make a careful, tedious, thorough, honest dissection, taking your time for it. If the tumor involve an extremity, then never amputate in the continuity of the limb; you have heard me say enough on this point. Such, then, are the principles which should guide you in performing operations of this kind.

In performing an operation whether for the removal of a benign or malignant tumor, the rule is always to save as much integument as possible, not a redundancy, but sufficient to cover in the resulting wound. This is a good plan under all circumstances, and is especially expedient in the case of a malignant tumor, so that the wound may unite as speedily as possible. Sometimes we are obliged to make an elliptical incision so as to include portions of integument, as in excision of the mammary gland in order to include the nipple, which is always to be sacrificed along with the breast. So in regard to other tumors in other portions of the body, we remove part of the integument, especially if there is the slightest appearance of involvement. The flaps are dissected carefully from the morbid mass, which is then lifted out of its bed, including, in the malignant form of disease, always more or less of the surrounding healthy structures; in the benign tumors, on the contrary, we cut as close as possible to the morbid mass.

In performing an operation for the removal of a tumor, whether benign or malignant, we prevent hæmorrhage, as much as possible; I rarely stop to tie an artery until the whole morbid mass is removed, unless it is very large; but I have good assistants, and as fast as a vessel is divided, the finger of an assistant is placed upon it; the eye and the finger of the assistant should follow the knife, and instantly, hæmorrhage may be effectually arrested, even when the tumor is very large and considerably vascular. The same vessel is frequently necessarily divided more than once in an operation of this kind, and if you were to stop and apply a ligature once or twice to the same vessel, it would render the operation very tedious. After the whole of the morbid mass has been excised, then all the bleeding vessels are to be tied one after another upon ordinary principles; then the blood is carefully washed away, the surface is cleansed, and the edges of the wound are approximated by sutures and adhesive strips, supported, if need be, by compress and bandage. The dressings should, under all circumstances, be as light as possible; the part should not be encumbered or heated, lest there should be a superabundance of inflammatory action. The object is to invite adhesive inflammation; not to promote suppuration, but to make the wound heal as far as possible by union by the first intention. If the wound is very large, you may be obliged to introduce a small tent at the more dependent portion, for the purpose of promoting drainage, more or less of which will always happen under such circumstances; but when the wound is comparatively small, such a procedure as this may well be omitted. Should, however, an abscess form, should matter accumulate and bag, it should be let out as promptly as possible by a counter-opening; the matter should not be allowed to accumulate for obvious reasons. Should the inflammation exceed the adhesive point, the ordinary antiphlogistic remedies must be employed for the purpose of relieving it. I need hardly tell you that the part should be placed at perfect rest, and in an easy position, elevated if practicable. The patient should be kept quiet; his diet should be properly regulated; the day after the operation, or a few days after, a slight aperient should be given to correct the secretions, and to clear out the contents of the bowels, not copiously, but in a slight degree, and for the purpose, if you please, of cooling the blood, for there is a good

deal in that. If the secretions require correction you administer a little blue pill, or a few grains of calomel; the diet should be light, non-stimulating, non-irritating. The wound should not be disturbed before the expiration of the third day, unless the weather is very warm, or there is a tendency to suppuration, when the dressings should be removed earlier, and renewed afterward once or twice in the twenty-four hours, according to circumstances.

Should recurrence take place, as in the case of malignant tumors, or of benign tumors improperly excised, a similar operation may be performed, the surgeon being governed by the same principles precisely as actuated him in resorting to interference in the first instance.

Progress of Medical Science.

The Treatment of Puerperal Fever.—Dr. Grailly Hewitt, in a paper read by him before the Obstetrical Society of London, on April 1st, on the subject of puerperal fever, laid down the following as his treatment of that disease:

The binder was directed to be closely and accurately applied, to prevent collection of lochia in uterus, and facilitate its contraction; hot turpentine stupes to the abdomen, also to relieve the pain, for which purpose the light binder also gave most universally good results. Every four hours, thirty minims each of tincture of lavender, chloric ether, aromatic spirit of ammonia, and compound tincture of camphor. Brandy with water or egg at once, in varying quantities—in a mild case, six to eight ounces per diem; but as much as two ounces every two hours was given when initial symptoms were very severe. Nourishment in good quantities very frequently, chiefly liquid—milk and eggs, and beef-tea most relied on. Every half-hour something was given in the worst cases. Aperient medicines religiously avoided, unless the rectum was obviously loaded. Experience had convinced the author of the bad effects of brisk purgatives in such cases. Later on, the same treatment was, if necessary, continued, with the addition of twenty to thirty minim doses of tincture of iron in some cases, and in some cases of turpentine enemas. Promptly and thus treated, the disease had almost invariably given way. Since the year 1862 the author had treated the disease boldly and thoroughly on the stimulant plan, having first observed its extraordinary effect in a woman who, being extremely ill, took every day for over a week at the rate of a bottle of brandy, besides nourishment in good quantities, and recovered. Some also of the cases now related were very bad ones. If the disease be allowed to go on unchecked for two or three days, this stimulant plan may fail, the important point being to treat the affection promptly. Intra-uterine antiseptic injections the author thought highly of, but they were not employed in these cases.

Passage of Blood-Cells through Capillaries.—The *Lancet* of April 25th says:

The observations of Cohnheim, to which we gave especial prominence last week, are exciting much attention amongst pathologists. Dr. Bastian brought the subject before the Pathological Society on Tuesday last; and demonstrated the passage of the blood-cells through the capillaries and into the tissues outside them in the web of the frog's foot. Dr. Bastian referred in detail to the subject of the production of petechial patches in the frog's web and in the internal organs of frogs and rabbits as a consequence of venous stasis, etc., by the escape of the blood-cells from the vessels; to the assumption that the capillaries possess apertures in their walls; to the phenomenon of the migration of the cells through the vessel-walls by the agency of amœboid processes; to the active changes of form observed to take place in the cells after they arrive at the tissues. Admitting that such changes of form might happen in corpuscles virtually dead, in the ordinary acceptation of the term, as in bloody urine, he gave it as his opinion that the escape of the red corpuscles was not in stasis due entirely to a mechanical cause—the obstruction—but in great measure to an active and inherent power similar to that observed in the case of the white corpuscles, there being no lacunæ in the vascular walls, the corpuscles protruding before the tissues, and finally escaping through an aperture made by the yielding of the walls before the outcoming cell. However, the actual passage of the cells through the capillaries was well seen by those who examined the specimens submitted by Dr. Bastian.

Anomalous Effects of Atropine.—In the current number of the "Royal London Ophthalmic Hospital Reports," Mr. George Lawson calls attention to some of the anomalous effects of atropine upon the eye. In several cases he has found the sulphate of atropia, so useful in general as a sedative, act as a direct irritant, and in two which he relates very troublesome symptoms resulted. In one there was acute conjunctivitis, lasting several days; in the other, erysipelas of the lids, spreading to the face and head, was excited on two occasions, a period of six months intervening. The irritative effects occasionally witnessed from the use of a solution of sulphate of atropia have been generally ascribed to the presence of some free acid in the solution, but Mr. Lawson doubts the truth of this explanation.

He believes that when atropine acts thus as an irritant, or produces peculiar and distressing symptoms, it is due to some idiosyncrasy on the part of the patient, which renders him intolerant of the alkaloid or of its salts, and, in some cases, of any preparation whatever of belladonna.

Fractures of the Elbow-Joint.—Dr. Henry J. Bigelow, of Boston, Mass., holds that in simple fractures of the elbow, except of the olecranon, *passive motion*, as laid down in works, is radically wrong and unnecessary; it occasions excessive pain during the operation, and begets active inflammation, besides injuring severely the part under repair, which nature in her own good time will restore better without than with it.—*Boston Med. and Surg. Journal.*

Treatment of Chronic Bronchitis.—Dr. F. J. Knight (*Boston Med. and Surg. Journal*) has administered the following combination in one hundred cases of chronic bronchitis at the Boston Dispensary, and the result has been most satisfactory.

℞ olei lini, syrupi simplicis ää ℥j; olei menthæ pip. gtt. ss ℥j ter die. The diminution of the dyspnœa is one of the most noticeable effects.

Belladonna and Opium Non-Antagonistic.—Dr. John Hurley delivered a lecture at the Royal College of Physicians, London (*Medical Times and Gazette*), and in conclusion, from the results of his own experiments on the horse, dog and man, he stated that he found that belladonna and opium, whether given both together, or one is administered some time before the other, not only intensify, but prolong each other's effects. The belladonna he thinks increases the hypnotic effects of the opium, while the opium increases the effects of the belladonna.—*Boston Med. and Surg. Journal.*

Venom of Toads.—The toad possesses a venom capable of killing certain animals and of injuring man. It was believed to be exhaled by the mouth, but it is found to be a sub-epidermic cutaneous secretion, which acts powerfully if the epidermis is abraded. In small animals in contact with the venom is followed by convulsions and death. The humor oozing from the parotid region of toads is a poison when introduced into the tissues, according to MM. Gratiolet, Cloez and Vulpian. In *South America*, the savages employ the acid liquid from the back of the toad in large quantities. It is dissolved in ether, leaving a residue; this residue possesses a toxic power sufficient to cause the death of a small bird.—*Journal de Chimie Méd.*

Mitral Direct Murmur.—Dr. F. J. Knight, of Boston, Mass., coincides with Prof. Austin Flint's theory, that the mitral direct murmur is heard without any lesion of the mitral valve occurring.

Diphtheria.—Dr. S. T. Pomeroy (*Boston Med. and Surg. Journal*) recommends the use of the following compound in diphtheria. R. Potassæ chloratis ʒ vij.; acidi hydrochlorici, ʒ iv.; aquæ ℥ij. A table-spoonful properly diluted and sweetened, should be given every hour or two. He also uses, as a local application, a solution of the permanganate of iron, applied with a swab to the throat. The diet should be milk and water.

Case of Embolism.—Dr. M. Calkins relates a case (to the *Springfield, Mass., Med. Society*) of embolism of the right common iliac artery in a female occurring in connection with chronic bronchitis and pleurisy, which is not only interesting to pathologists, but also in its medico-legal bearings. She was under his care more or less during the summer and autumn of 1865. Soon after leaving him, having somewhat improved under his treatment, she obtained two policies of $5,000 each on life insurance companies. Her disease occurred in May, 1866. On making the post-mortem examination, a pint of serous effusion in the pleural cavity was found. The right lung was indurated and contracted to a very small size. The left lung was somewhat enlarged, and healthy, with the exception of some passive congestion. There were no signs of tubercle except a slight deposit at the apex, of the miliary variety. The abdominal organs were healthy. An inspection of the right common iliac artery revealed the existence of a fibrinous plug, or embolus, extending through the artery to the external iliac, being from two to three inches in length, cutting off the circulation of the blood to the right limb. A few months after her decease, the holder of the policies applied for payment, which was refused, on the ground that the statements made by the applicant in her application were false.

A trial was held at *Hartford, Conn.* The decision of the jury was in favor of the defendant, and the case is appealed to the Court of Errors, for a final decision.

Poisoning by Opium cured by Electricity.—Attention is called in the *Annales d'Electricité* to the value of electricity in opium poisoning. Four cases are narrated where it was successfully employed, after all the usual means had been tried, and had failed. One pole was put at the nape of the neck, and the other to the perineum. The improvement in a quarter of an hour was such, that the patients were out of danger.

Carbolized Sponge Tent.—Robert Ellis, Surgeon to the Chelsea and Belgrave Dispensary (*London Lancet*), has introduced a new tent, called the carbolized sponge tent, by him. It is rendered incapable of putrefaction without diminishing its value as a dilator. It is made, by introducing into the core of the tent some threads of cotton-wick steeped in carbolic acid; after the sponge is rolled in its proper shape, it is then immersed in cocoa butter, to which a certain quantity of glacial carbolic acid is added. This tent is spindle-shaped, and adapts itself to the canal. The disinfectant properties of the carbolic acid protect the tent, and it is withdrawn in an inodorous state after a stay of twelve to eighteen hours.

A New Styptic.—Perchloride of iron combined with collodion is a good hæmostatic for wounds, the bite of insects, etc. One part of crystallized perchloride of iron is mixed with six parts of collodion. The composition is of a yellowish-red color, perfectly limpid, and produces on the skin a yellowish pellicle, which retains great elasticity.

Cerebral Congestion and Hallucination.—Dr. Lisle (*Gaz. Hebdom.*) read a paper before the Academy of Medicine upon the Treatment of Cerebral Congestion and Hallucination by Arsenious Acid. The following are the conclusions of his paper:—Symptoms of cerebral congestion often present themselves in the insane. Those laboring under hallucination always have cerebral congestion. Of 193 of the latter treated by arsenious acid, 131, or 67 per cent. were cured, and 27 experienced a marked improvement.

Hallucination is a complication of insanity, and nearly always grave. It is the most characteristic symptom of cerebral congestion. Arsenious acid is a remedy really specific in the disease. This acid, administered with prudence, is one of the most inoffensive agents of the Materia Medica. The dose varies from five to sixteen milligrammes (1-15 to ¼ grain), administered three times a day, at the beginning of each meal.

Artificial Stone for Buildings.—A Mr. Ransome, of England (*The Engineer*), has finally succeeded in manufacturing an artificial stone, which is equal to any natural stone for cheapness, durability, appearance, etc. He has tested it in divers ways during the past five years, and it has proved to be what its discoverer has claimed for it. It is composed of flints, sand, caustic soda, silicate of soda (the latter made from flints and caustic soda), and chloride of calcium; it is finally turned into moulds, and then placed for a longer or shorter time, under a shower bath of cold water. It has been used extensively in the stations of the Metropolitan Railway; several manufactures at Ipswich and elsewhere have the bed stones of their steam engines, oil mills, steam hammers, etc., formed of the new stone. Ionic capitals have been moulded by Mr. Ransome for the New Zealand Post Office, and embellished capitals for public buildings at Calcutta.

To Detect Woody Fibre in Paper. — Touch the paper with ordinary strong nitric acid; and if wood fibre is present the paper will be colored brown, especially on warming.

Bronze Colors.—Mr. L. Brandeis, of Brooklyn, N. Y., has discovered a new way of making bronze colors, after experimenting for the last fifteen years. The colors manufactured by him are much cheaper and finer than those imported from abroad. France and Germany now consume American bronze; Russia has begun to use it; and the delicate, beautiful, bright flowers on the most expensive ladies' bonnets have been done in Paris with American bronze.—*Am. Artisan.*

Gold.—Fulminating powder is formed from gold, and when it contains chlorine it explodes less violently than when containing no chlorine. The latter is made by

digesting oxyd of gold in ammonia or its salts. It explodes by electricity, percussion, or friction.—*Am. Artisan.*

Sodium.—By decomposing carbonate of soda with charcoal at a high temperature, sodium may be prepared. One pound of carbonate of soda, obtained by calcining the acetate, mixed with one-fourth pound of finely-powdered and one-half pound of coarsely-powdered charcoal, and heated in a malleable iron bottle, yields about five ounces of sodium.—*Am. Artisan.*

Action of Veratria.—Dr. L. Hirt, of Breslau, has arrived at the following conclusions, after experimenting with veratria: 1st. Poisoning by veratria diminishes the intensity of the respiration and of the circulation. 2d. The muscles lose their tension. 3d. The sensibility of the peripheral nerves is diminished. 4th. Small doses produce nausea, vomiting, and diarrhœa. 5th. The secretion of urine is slightly, that of saliva markedly, increased.

Mushrooms in the Ear.—Two new kinds of mushrooms of the *Aspergillus* order, growing on the membrane of the tympanum, are described by Dr. C. Robin, in a paper read to the French Academy of Sciences. This parasitical vegetation he has observed in ten patients, four of whom had it in both ears; and in all cases it existed independently of any other morbid affection.

This auricular mushroom presents the botanical characteristics of *aspergillus glaucus.* He has found that these *aspergilli* can exist elsewhere than on the human body; as they take to the lemon or orange very readily; but their color is lost by the transfer. The growth of these parasites in the human body is an obstinate affection, and Dr. Robin gives highly diluted solutions of hydrochloride of lime or of arsenite of potash, which at once destroy the cells of the *aspergillus.*

New Glue Preparation.—If glue or gelatine be mixed with about one quarter its weight of glycerine, it loses its brittleness and becomes useful for many purposes for which it is entirely unfit, such as dressing leather, giving elasticity to parchment, or enamelled paper, and for book binding.—*Druggists' Circ. and Chem. Gazette.*

A New Anodyne.—Dr. A. H. Gallatin, of this city, communicates the following: Having a case where the oxide of zinc and bromide of potassium had failed in producing sleep, and where the cerebral symptoms prevented the exhibition of any preparation of opium, I thought of trying a combination of codeia, ipecacuanha, and sulphate of potash, in imitation of pulv. Dover. The result satisfied my theoretical expectations. Morphia, codeia, and perhaps other alkaloid extractions of opium are now universally used, when the narcotic without the stimulating effects are to be produced. By combining these principles with ipecacuanha, I think I have provided a mixture which may be given in cases where it would not be judicious to use pulv. Doveri.

Several members of the faculty are at present trying this mixture in their practice, at my suggestion. I hope soon to give an account of the result.

Tar-Water in Catarrh of the Bladder.—The efficacy of tar is found to be indisputable in the treatment of catarrhs of the bladder. It modifies the mucous membranes of the genito-urinary organs. The urinary secretion is increased, also facilitates the exit of the urine, and causes the pains to subside, besides being prompt in its action. It is prescribed in the following doses:—For injections (three times daily), one part of tar-water to four parts of water. As a drink (five times daily), a teaspoonful of tar-water to a cup of water.—*L'Evénement Médicale.*

Novel Bullet Probe.—A probe for audibly announcing the presence of a bullet in a wound, was on exhibition at the Paris Exposition. When the points of this instrument came in contact with a metallic body, an electrical circuit was made and a small bell rung.

Rupture of the Uterus.—*Dr. G. J. Townsend*, Natick, Mass. (*Boston Medical and Surgical Journal*), mentions a case of rupture of the uterus, which occurred in a German woman, aged 35. When called, she was in labor with her sixth child. Her previous labors had all been severe, though favorable, owing to a projection forward of the promontory of the sacrum, diminishing the conjugate diameter of the brim of the pelvis more than one-fifth. The pains continued hard and frequent, with apparent slow progress, and no impaction, from 9 o'clock in the morning until 1½ P.M., after which time the head neither advanced nor retreated. At 2½ P.M., being tired, the patient begged to turn upon her hands and knees, for rest. In less than five minutes after the change, she complained of pain in the bowels, saying she had just such pains in her former labors. The labor pains ceased entirely. An attempt was made to apply forceps, but without success. He introduced his hand, encountering a coil of intestine very soon after it entered the cavity of the uterus, brought down the feet, turned and delivered. The head passed with some difficulty, and the child was still-born.

The rent in the uterus could be traced, and the intestines felt through it, after the removal of the placenta. It was anterior, six inches in length, extending diagonally across the body of the uterus, below the Fallopian tubes.

The patient lived three weeks after the accident, sat up several times in a chair, and even walked a few steps to her chair and back again to her bed. The points of interest in the case are:—1st. The situation of the rupture, which being anterior and low down toward the neck, allowed the free escape of the lochia, thus remedying the distension of the abdomen, which occurs in these cases. 2d. The mild character of the pain, and of the collapse. 3d. The great tenacity of life the patient evinced—having lived four hours into the twenty-second day. He states that he is aware of but one case where the patient lived so long, and that one died on the twenty-fourth day.

Sulphate of Zinc in Dyspepsia.—*Dr. William A. Gillespie*, Louisa Co., Va. (*Boston Med. and Surg. Journal*), has found that, in addition to a regulated diet, in dyspepsia or chronic gastritis, the sulphate of zinc, in doses of a half grain, gradually increased to two grains, three times daily, in pill or solution, combined with opium, or extract of hyoscyamus, affords great relief. His experience with this remedy has been extensive for several years, and he thinks it as safe and sure as quinine in intermittents. The explanation of its *modus operandi* is, that it acts on the inflamed and engorged mucous coat of the stomach in the same manner that it does in ophthalmia.

Compression of the Carotids for Convulsions.—M. Faviz (*Pacific Med. and Surg. Journal*) gives some curious results of compression of the carotids for convulsions. Three cases are related in which it was successful. The first case was that of a child six years of age, who had violent spasms of the left side of the body, with bitten tongue, clenched jaws, &c. On com-

pressing the right carotid, the fit was stopped immediately, sleep followed, and the child awoke a quarter of an hour afterwards, in full consciousness.

The second was a girl seven years old. She had convulsions of the right side of the body, produced by fright. On compressing the left carotid, an equally happy effect was produced.

The third was a child of two and a half years, with convulsions of both sides. The movements of the left side were arrested by compression of the right carotid. The left carotid was afterwards compressed, and the convulsions of the right ceased. Sleep followed, and the child awoke in an hour, quite well.

Cases of Pneumonia in Boston City Hospital.—J. N. Borland, M.D. (*Boston Med. and Surg. Journal*), read before the Boston Society for Medical Improvement, a "Report on the Cases of Pneumonia treated in the Boston City Hospital, from its opening, June 1, 1864, until February 8, 1868." From the examination of this report, 90 cases are reported. Of these, 57 were males, and 33 females. But 30 were born in North America; of the remainder, 52 were Irish. In persons employed as servants, or leading sedentary lives, there were 39 cases. The remaining 41 occurred in those classes whose mode of life caused them to be exposed in all kinds of weather.

The average age of the males was 31 years, 8 months; females, 30 years, 4 months. The duration of the disease was 394 days. The average duration of stay in hospital was 28 days. The results of the cases were as follows:—49 males and 27 females were discharged well; 12 in all, being 7½ per cent., died.

In regard to locality, 42 were double, 46 single. In the single cases, 28 were confined to the right side, and in 18 the left lung was diseased. Sixty cases were uncomplicated, 30 complicated.

Treatment.—The plan of Dr. Bennet was mostly adopted, by restoratives to further the natural progress of the disease, the vital strength being supported, and at the same time not cutting the disease short, or weakening the pulse or vital powers. The general outline was as follows:—Milk always by the bedside, for the patient to drink at will; beef tea and wine whey, alternately given, regulating the frequency by the severity of the case. As soon as convalescence commences, and the patient begins to ask for food, he is placed on a diet of mixed animal and vegetable food. The "jacket poultice" of flaxseed meal, always kept warm and fresh, as an external application, is very beneficial. After the active symptoms are over, cod-liver oil, iron, quinine, &c., are given, as judged necessary. Calomel and antimony were given only in six cases, all of which recovered. In no case was bleeding practised.

Epilepsy and Atresia of Vagina.—Dr. Appert, physician to the City of London Dispensary, reports (*Med. Press & Circ.*) a case of a woman, thirty-six years of age, who is subject to epileptic fits at each menstrual period, the fits being the consequence of an almost complete atresia vaginæ. She has been operated upon twice; the condition of the vagina got rather worse after each operation, and the patient objects to another attempt. Dilatation, either by bougies or by Holt's instrument, will probably be tried.

Malgaigne's Hooks for Fracture of Patella.—At the meeting of the Surgical Society of Ireland, of February 28 (*Med. Press & Circ.*), there was quite an animated discussion on the use of Malgaigne's hooks in fracture of the patella, arising from the report of a case treated with remarkable success by Mr. H. G. Croly. The majority of the surgeons present seemed to be in favor of their use, because they produce much better apposition of the fragments, and cause much less inconvenience to the patient, than the treatment by a figure-of-eight bandage with a straight splint.

Quadruple Births.—Dr. Geo. M. Mayberry, of Riversdale, Kenmare, reports the case of Margaret Gallivan, laborer's wife, æt. 33, multipara, of delicate and emaciated appearance, who gave birth, on February 7, 9 and 10, to four children—one son and three daughters—all alive. The entire delivery was accomplished with no interference, save that of rupturing the membranes. The mother's debility was exceedingly great, but she has now entirely recovered. The first child lived 8 hours; the second, 60; the third, 44; and the fourth, 16. The Queen sent a donation of £4 to the sufferer.—*Med. Press & Circ.*

The wife of M. V. de M——, of Antwerp, was also safely delivered of four female children. According to the local journals, this occurrence created quite a sensation in that town. When the christening took place, the church was crowded with spectators, and thousands of persons lined the streets along which the *cortège* of four nurses, with their charges, and as many godfathers and godmothers, were to pass. Cries of "Long live the parents and children!" were raised, and many ladies only found relief from their emotion in tears. After the return home of the children, they had to be brought out to the balcony of the house to receive an ovation from the crowd assembled in the streets. All the little ones, as well as the mother, are doing well.

Neuralgia with the Spine-Bag.—Dr. John Chapman, physician to the Farringdon Dispensary, gives notes of 14 cases of neuralgia, embracing pretty much all the varieties—facial, dental, brachial, intercostal, mammary, ovarian, uterine, and general—treated successfully by means of the spine-bag. The bag was filled in some instances with ice, in others with water at 130° F., and applied over different regions of the spine, depending upon the seat of the neuralgia, for a period ranging from a half-hour to an hour and a half, twice, daily.—*Med. Press & Circular.*

Sounding for Calculus.—Sir Henry Thompson, in a recent lecture in the University College Hospital, reported in the *Lancet* of April 25, made the following remarks on the use of the sound:

How do you sound? You should employ an instrument with a small, short, curved beak, because it can be turned in any direction. If you take an instrument with a large curve, like a catheter, you are unable to rotate it in the bladder, and hence it does not explore sufficiently.

When I entered this room I asked for the hospital sounds, for I knew I should find among them a good example of what a sound ought *not* to be. Here is one, for example, which no one could rotate, or ever find a small stone behind an enlarged prostate with, except by sheer accident. You will say, naturally enough, "Why are such sounds here, and who has used them?" They were used formerly, and found a good many stones, too, in the hands of our illustrious predecessors. But I will answer for it, they have missed a good many stones also; and this is precisely what I want you not to do. I have no hesitation whatever in saying that more stones are missed in sounding than are found, by the ordinary methods adopted in this country; and that must be the case if a sound of the form of the common catheter is relied on for the purpose. [Diagram.] But with an instrument which has this small beak at the end of it, you can search in every direction. If there is a large stone, of course

you can find it with anything; but our great object is to find the small stones. Anybody can find a big stone; the art consists in finding a small one. It is important to find a small stone, because it will grow large, and may be very formidable to deal with; whereas, when it is small, it is a far less formidable matter. You may promise the patient, in the case of a small stone, that it may be removed without risking his life; whereas, in the case of a large stone, there is always some risk, often considerable danger.

CONGENITAL ANORCHIDIA.—Dr. Wenzel Grüber has published in the *Med. Jahrb.*, December 1867, a valuable essay "On Congenital Anorchidia in Man," wherein will be found an abstract of all the cases observed for the last 300 years. From recorded post-mortem examinations, Dr. Gruber finds twenty-nine reliable cases of congenital anorchidia; out of these there were twenty-two cases of monorchidia, and seven or eight cases of anorchidia on both sides. He adds a description of two cases of his own: one of anorchidia on one side, the other of double anorchidia.

SUBCUTANEOUS INJECTIONS OF SUBLIMATE IN SYPHILIS.—These have been proposed and practised by an Italian surgeon, who has recorded his cases in the *Annali di Medicina*, 1867. Dr. G. Lewin has treated 500 cases in this manner, and inserted the results in the *Charité Annalen*, 1868. The author, in many cases, combined other means with the injections. He has been pretty successful, and states that the relapses have been fewer than in cases treated by the ordinary methods.

VACCINO-SYPHILIS.—Mr. Lee, in a paper read before the Medical Society of London, discussed the exact nature of the fluids which were the vehicles for the transmission of syphilitic poison, Mr. Lee contending that there were no facts to prove that any secretion (except the semen)—whether a physiological product, such as milk, or a morbid product, such as the vaccine fluid—could impart syphilis on inoculation, unless it contained blood, or some secretions derived from a syphilitic lesion.

A REMARKABLE POISONING CASE.—The *Lancet*, of April 25th, says: An inquest was held last week at Bristol on the body of a barmaid who poisoned herself with oxalic acid. The evidence went to show that the deceased took three-quarters of an ounce of the poison, dissolved in warm water highly charged with lime; and that she died ten minutes afterward. It is remarkable, as Mr. Herapath informs us (who gave evidence at the inquest), that she vomited almost all the poisonous material, as the coats of the stomach retained by absorption only two grains of the oxalic acid. There was nothing to be found in the contents of the stomach, which were merely effused blood. The stomach was intensely red and inflamed in that short period. The hot lime-water acted as an instantaneous emetic, and came up almost as it was swallowed—"a milky-looking fluid," capable of precipating a large quantity of lime. The woman died of course from collapse, which would be produced by oxalic acid.

THE MODES OF DEATH IN EPILEPSY.—Dr. G. Mackenzie Bacon, Superintendent of the Cambridge County Asylum, England, furnishes the subjoined classification of the modes of death in epilepsy, in the *Lancet* of May 24:

Asylum experience furnishes some facts of importance in elucidation of this question. Excluding cases in which the fits are known to be secondary to other disease, the causes of death may be classed under the following categories:

1. Those arising from the long-continued effects of the disease on the body;
2. Deaths after a rapid succession of fits;
3. Sudden deaths in a fit;
4. Accidents due to fits.

1. Under the first head I would include what is properly expressed by the term "the decay of epilepsy"—i. e., the condition patients reach who have had fits for years, and, after becoming demented, gradually lose the use of their limbs, and die out, wasted and exhausted, without the supervention of any structural disease. These cases are always to be found in the wards of a public asylum, and in these are often discovered, at the post-mortem, inequalities and defects of the brain—abnormalities only indirectly threatening life.

2. Some epileptics die after a series of fits lasting through two or three days, and their death may be ascribed to "epileptic coma," that being the final stage.

3. Deaths *in* a fit are more rare, and require the most consideration. The following are some of the causes:—(1) Asphyxia from the violence of the spasm, and consequent venous congestion. (2) Sudden loss of nervous power, due, probably, to the state of the heart or its nerves, and not occurring in young persons. (3) Suffocation: which may arise from (*a*) the face being buried in the pillow (or any soft material—mud, for instance) by the patient turning over in a fit; (*b*) from the impaction of food in the larynx or œsophagus; (*c*) from regurgitation of liquids from the stomach into the lungs, or the flooding of the lungs with blood from a vessel giving way during a fit, as happened to a phthisical man with a vomica.

4. Accidents may include a great variety of modes of death, but I only refer to those directly connected with the fit, such as when patient falls in a fit and fractures his skull, or receives other injuries from which he dies; or when such an incident occurs as the following, recorded at the Notts Asylum: "An epileptic patient was found early in the morning dead, with his head on the floor and his legs on the bed, twisted among the bedclothes, which retained him in this unfavorable position. On inquiry, it appeared that he had been seized with a fit, had rolled thus partially out of bed, and expired."

ABSINTHE.—Referring to the recent article in the Pall Mall *Gazette*, on the effects of absinthe drinking in Paris, the *Lancet* of May 9th has the following remarks:

For our own part, we have never been convinced that there is anything in the symptoms of acute or chronic *absinthism*, as they are described, essentially different from those of acute or chronic *alcoholism* which has been produced by the imbibition of innumerable drams of any spirit. We have repeatedly seen the whole train of symptoms, which are now so much talked of, produced by the constant drinking of brandy or rum. As for hallucinations, there is nothing more common. At any rate, it will take a good deal of very solid and precise evidence to convince us that the trifling amount of essence of worm-wood contained in the liquor called absinthe, adds any considerable poisonous power to the natural influence of some 20 or 30 ounces per diem of a highly concentrated alcohol, which is what many of these Parisian *buveurs* actually dispose of in the course of innumerable visits to the *cafés* and other houses of refreshment.

TORSION OF LARGE ARTERIES.—The practice of twist-

ing the divided ends of the arteries, instead of applying ligatures, has lately been tried by Professor Humphry, after all his operations, in Addenbrooke's Hospital, Cambridge, and with good result. There has been no subsequent bleeding in any case; and the wounds have, he thinks, on the whole, healed better than they would have done with the ligatures. The popliteal is among the arteries which have been thus secured, and the femoral, in two instances, after amputation in the thigh.

Petrifaction of the Human Body.—W. P. Bain, M.D., writes as follows to the *Lancet*, on the subject of Dr. Marini's preparations of the human body:

Having handled some of his preparations in Florence last autumn, I am able to say that he is the inventor of a mode of turning the human body or any part of it into stone, in any attitude that may be desired. I inclose the photograph of a senator of the Italian Parliament taken four months after his decease, in which he is represented seated in his chair, with his clothes on, just as when alive, his eyes retaining in an astonishing degree the vivacity of life. I also inclose the photograph of a table, the slab of which is formed of pieces of the human body—brain, muscles, &c.—all turned into stone, and which, when struck by me, sounded as a marble table. I also inspected a lady's foot, likewise petrified, and which had every appearance of marble, until upon close inspection the texture of the skin was apparent. Dr. Marini showed me, too, some specimens of the human body, which were in a most undperfect condition, preserved for years. He assured me also that the week before, he had dined off a duck which had been killed months previously. The foot of a mummy was in his apartment at the time of my visit, in which the color assumed that of life, and the toes were perfectly flexible.

I am perfectly certain that these inventions are genuine, and of high value; and when Dr. Marini arrives here, I hope to be able to introduce him to the heads of the profession. The Emperor of the French, with his usual tact, has expressed himself warmly to Dr. Marini in approbation of his inventions.

Paraffine.—It is ascertained that paraffine is capable of taking the place of wax to a much greater extent than has been supposed. It forms crystalline scales on cooling, when melted with oil; but by the addition of five to ten per cent. of wax this property is destroyed—this addition causing the mixture to cool in a homogeneous mass, without crystallization. This substance is abundant and low-priced, also being without marked physiological effect on the system.—*Proceedings of Ph. Ass.*, 1867.

Nitro-Glycerine.—According to *Prof. R. Ogden Doremus*, nitroglycerine corresponds to the formula $C_3H^5O_3$ and $(NO_2)_3$; the substance freezes at about 46°; when carried about exposed it cannot explode, even if a coal of fire is dropped into it; if the liquid is confined, or under pressure, then an explosion ensues; it is more difficult to explode than powder, resembling in many respects gun-cotton, which is made in a similar way. It is less dangerous in a frozen than in a liquid state, but concussion would explode frozen nitroglycerine.—*Druggists' Circ. and Chem. Gazette.*

Beeswax.—The following bodies have been isolated from beeswax: ceroline, amounting to about four per cent.; myricine, thirty per cent.; and cerine, sixty-five per cent.

Rhœadine. *Hesse* has discovered a new alkaloid, named rhœadine, in the red poppy and in opium. It is soluble in alcohol, ether, and water, crystallizing from the ether in white prisms. Bichloride of mercury gives a white amorphous precipitate, ammonia precipitates it in white crystalline flocculi, chloride of gold a yellow precipitate, and it is decomposed into gold by strong acids, giving a purple solution.

Koumiss.—*Dr. Stahlberg*, physician to the factories of *Sorgu* in the *Ural*, read a paper before the French Academy of Medicine, on the efficacy of Koumiss, or fermented mare's milk, in the treatment of pulmonary affections. The secretion of the mucous membranes is said to be lessened by its use, and better nourishment is afforded. The *Khirgeses* prepare the best kinds of this beverage, and give it with success to those who have a tendency to consumption.—*Druggists' Circ. and Chem. Gazette.*

Tyrian Purple.—Writers assert that a *Tyrian* was the inventor of the purple dye, about 1500 years B. C., and the king of Phœnicia was so captivated with the color, that he made purple one of his principal ornaments, and for centuries Tyrian purple became a badge of royalty. It is believed to have been derived from two kinds of shell fish, described by *Pliny* under the names *purpura* and *buccinum*, and was taken from a small sac in their throats to the amount of one drop from each animal. At first it is a colorless liquid, but on exposure to air and light it becomes successively a citron yellow, green, azure, red, and in the course of forty-eight hours, a brilliant purple hue. This color resists the action of the alkalies and most acids. The first ground of the purple was given by the unprepared liquor of the *purpura*, and then heightened by the liquor of the *buccinum*. The Tyrians prepared their double-dyed purple—*purpura dibaphi*—so called, either because it was dipped in two different liquors, or because it was first dyed in the wool and then in the yarn.—*Chemical News.*

The Long Island College Hospital treated, last year, 237 patients, as inmates, at an average cost of $22.96, and 5,453 as outdoor patients. The receipts from all sources for the year were $7,071.68, and the disbursements on all accounts $6,552.02, leaving an amount on hand, on January 1, 1868, of $518.66. The hospital has been in operation 10 years, and during that time has treated more than 65,000 patients. It was wholly sustained, for the first four years of its existence, by private benevolence, but since 1862, it has received aid from the State appropriations for hospitals, and since 1865 from the city of Brooklyn.

A New Work on Ophthalmology. J. Soelberg Wells, the author of "Impaired Vision," is writing a complete treatise on Diseases of the Eye, which is to come out in London early in the fall. It will contain about 800 pages, and is to be illustrated by 150 wood cuts, and several chromo-lithographs taken from Liebreich's Atlas.

Infant Protection Society of Paris.—A short time ago the annual meeting of this society was held; a great interest was manifested by the members. Meritorious wet-nurses received prizes; and the prize of £20 was given to Dr. Brochard, of Bordeaux, for his book on maternal nursing.

Frequent Venesections.—There died, some little time ago, in the Carmelite Convent of Mataro, Italy, a nun at the advanced age of eighty-seven, who had taken the veil seventy-two years before. She suffered excruciatingly with rheumatism, and had been bled 317 times for this complaint.—*(Tribune Médicale.)*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, July 1, 1868.

THE MEDICAL SUPERINTENDENTS OF AMERICAN INSTITUTIONS FOR THE INSANE.

THE above Association held their annual meeting in Boston, on the 22d ult., and continued in session five days. The most important subject brought up for discussion was, "the project of a general law for determining the legal relations of the insane." This subject was referred to a committee to report upon, almost twenty years ago. The committee only reported at the annual meeting in 1864, since which time the whole matter has been in abeyance.

The profession at large is greatly interested in this matter, and experience is constantly demonstrating more and more the absolute necessity of such laws, in States where they do not already exist, and cases are constantly occurring, which urge the subject on the attention of all persons interested in the care and treatment of the insane. In the meantime distrust has been spreading in the community in regard to the superintendents of lunatic asylums, and even the profession generally, there being a very general impression that lunatic hospitals are not only liable to be used by wicked men for the confinement of innocent and sane persons, whom they wish to keep out of sight, but that they are so used, and that not unfrequently. Now, every one at all acquainted with the matter, knows very well that such an imputation is not only untrue, but positively absurd; still, it must be admitted that the present mode of admission is too lax, and capable of abuse, if sufficient motive be presented. We have noticed, for instance, in some reports of our State Asylum at Utica, several admittances of persons pronounced *not insane*, and yet, doubtless, on the certificate, as the law requires, of two physicians.

In England, where private asylums exist to a much greater extent than in our own country, such abuses have prevailed to a considerable extent, as the temptations presented have been often very great; under the present system, however, of "Commissioners of Lunacy," who maintain a very close inspection of all such establishments, public as well as private, such abuses are very certain to be detected and punished. The difficulty has been with us to guard against extremes; that the rules of admission to lunatic hospitals be neither so easy and lax as to render it possible for sane persons to be deprived of their liberty, nor so stringent as to prevent the admission of proper subjects before the disease has obtained such foothold as to diminish greatly the chances of cure. Such a law is especially necessary for the pauper insane, for the authorities having them in charge are very apt to avoid the expense of committing them to asylums as long as possible; also for the vagrant insane, who have no regular residence, and whose confinement is an act of humanity to themselves, and a means of safety for the community.

The whole subject appears to have been very fully and ably discussed by the members of the Association, the chief difficulty centring in the question whether the law should provide in all cases for a judicial examination, supported by the sworn testimony of two regular physicians. It was very plausibly objected, that the interests of the insane themselves would be materially injured by the legal requirements of such judicial investigation, inasmuch as husbands and fathers would suffer great inconveniences, and would very likely imperil the condition of insane wives or daughters, rather than have a municipal or judicial inquest held in their house, and over their families. The general opinion held by the superintendents seems to have been, that the question of committment to insane asylums is a purely medical matter, and that the interests of all classes concerned would be best subserved by leaving the decision of alleged cases of insanity with the medical profession. A modified plan, however, was at length adopted, which, as it seems to us, is as nearly perfect as can be made; at any rate, it is one which will prove far more satisfactory to the public than the present one. It reads thus:

"Insane persons may be placed in a hospital for the insane by their legal guardians, or by their relatives and friends, in case they have no guardians, but never without the certificate of one or more responsible physicians, after a personal examination made within one week from the date thereof; and this certificate to be duly acknowledged before some magistrate or judicial officer, who shall certify to the genuineness of the signature, and to the respectability of the signer."

In many of our States, the laws relating to the admission of patients to lunatic hospitals are already, perhaps, sufficiently guarded and safe; but in some of them there is no legislation, we believe, on the subject. In all such it is sincerely to be hoped that the process of law recommended by the "Association of Superintendents" will be speedily adopted.

IT will be gratifying to our readers to know that the *Gazette Medicale de Paris*, in the number for April 18, devotes two columns to a catalogue of the original arti-

cles and memoirs which appeared in our volume for 1867, and to the first instalment of a synoptical notice of some of the more important ones. In the number referred to, the following articles are thus far presented in summary form:

Puerperal Hemorrhage, by Prof. Gaillard Thomas; New Operation for Umbilical Hernia, with remarks on Exploratory Abdominal Incision, by Prof. Horatio R. Storer; and Complete Luxation of Clavicle, by Dr. L. North.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, MARCH 12, 1868.

DR. H. B. BIBBINS, PRESIDENT, in the Chair.

ENDO-METRITIS, ETC.

DR. ROGERS exhibited a specimen of uterus on behalf of Dr. Wooster Beach, Jr. The history was that "a *very respectable practitioner*" was called to see a woman, who was said to be suffering simply from asthma. He found her laboring under urgent dyspnœa, and concluded that there must be asthma, and prescribed accordingly. The next day he received a summons that she was in labor, the latter being somewhat premature. The labor was a little tedious, and when the doctor called in several hours after, he found the woman suffering a good deal of pain. During his absence the membranes had ruptured, the waters had escaped, and the cord had advanced. The cord had become pulseless in a few minutes, and the child was supposed to be dead. The pains were inefficient from that time, and when the head had advanced to the lower strait, there being a good deal of pain, delay, and threatened exhaustion, the gentleman in attendance called counsel in order to decide the practicability of delivering the head with the forceps. This operation was afterward performed without special inconvenience. When the gentlemen were putting on their coats, preparatory to leaving the room, they noticed that their patient had grown extremely pale, and on going to the bedside found that she was flooding frightfully. Measures were taken to arrest the hæmorrhage, which were successful. No untoward symptoms showed themselves for two or three days, except tenderness over the hypogastric region. No account of the passage of any more blood than seemed to belong to the lochial discharge was given by the medical attendant. This condition continued for six days, coupled with symptoms of great debility, when rather suddenly and very unexpectedly to everybody, the woman died. The attending physician's certificate was to the effect that death had been occasioned by metritis. The friends of the patient believing, however, that the woman had died as the result of injuries inflicted by the forceps, the case naturally became one for examination by the coroner. Dr. Beach called in the assistance of Dr. Rogers at the post-mortem examination.

Post-mortem examination. The uterus was of usual size for that period of delivery. The cervix and os uteri were in a state of gangrene. No evidences of injury about the vagina could be found. On laying open the cavity of the uterus, which was not even reddened, there was found adherent to its fundus a large piece of placenta. The body was in an advanced stage of decomposition, and it was not remarkable to find the os and cervix in that condition, but it must be remarked that the adherent placenta was in a good state of preservation.

The kidneys were found far advanced in destructive and chronic nephritis. The heart was normal, excepting the valves between the left auricle and left ventricle, which were bound down in a great measure so as to narrow the passage somewhat, which lesion might account for the occurrence from time to time of the asthmatic symptoms. It occurred, however, to the doctors at the post-mortem examination, that the asthmatic symptoms depended upon the kidneys. The results of the post-mortem examination were such as to thoroughly exculpate the physicians from the charge of inflicting injury by the forceps. The only question was whether at the time when flooding occurred the case was sufficiently closely watched as to subsequent hæmorrhage, the probability being that a piece of placenta as large as was found caused a very considerable oozing of blood during all the remaining days of the patient's life.

DR. JACOBI was of the opinion that had the case been carefully watched after delivery, the existence of chills would have been discovered, offensive lochial discharge, and the other symptoms commonly attendant upon endo-metritis. He believed, in a word, that the case was one of endo-metritis, terminating in the lodgment of an embolus in the brain.

DR. ROGERS asked what the last speaker thought of the condition of the kidneys in the way of explaining the cause of death. These organs had their proper structure in a great measure destroyed, the cortical as well as the tubular portion being very indistinctly marked, and more or less subject to fatty degeneration.

DR. JACOBI was inclined to throw the significance of the results of the microscopic examination entirely out of the question, as the organs were too far advanced in a state of decomposition to show anything positive.

DR. DRAPER stated that there were three facts in the case which pointed to the condition of the kidneys as the cause of death. In the first place, the so-called attack of asthma might have been and in all probability was an attack of pulmonary œdema; then again, she was the subject of premature labor, the child being dead and premature; and thirdly, the woman died in coma. Of course, in the absence of any positive information in regard to the condition of the kidneys, the real cause of death was a conjecture.

DR. ROGERS asked if pectoral oppression was not a usual sign of kidney disease.

DR. DRAPER believed that it was.

DR. ROGERS cited a case in point, that of a gentleman of his acquaintance who was seized with urgent dyspnœa attendant upon severe congestion of the lungs due to the presence of uræmia, as proved by the existence of albuminuria and fibrinous casts.

DR. WHITEHEAD asked how it was possible for an embolus to pass from the vessels of the uterus to the brain without becoming arrested in the capillaries of the lungs.

DR. JACOBI stated in reply that it was a well known physiological fact, that during the inspiratory act, the capillaries of the lung were distended to three times their natural size, thus allowing comparatively large substances, substances actually much larger than the ordinary calibre of the vessels, to pass through without becoming arrested. He was positive that this would take place, and referred in proof to the fact of the occurrence of metastatic abscesses in some cases in all parts of the body except the lungs.

DR. ROGERS next exhibited a colored sketch of the specimen of epithelioma of the thumb presented at a previous meeting, remarking, that the periosteum was

found not to be involved in the disease. Subsequently to the operation cancerous enlargements commenced to show themselves in the axilla, and grew so rapidly, occasioning so much inconvenience, that he removed them. They were found to be epithelial in character, the disease having become developed in the lymphatics connected with the growth.

Dr. Briddon remarked that six or seven years ago he had removed a similar growth from the index-finger. It was followed in a few months after by encephaloid disease of the liver and cancerous tubercle of the skin. As far as his recollection served him the bone was exempt from disease.

POST-MORTEM DIGESTION.

Dr. Rogers exhibited a specimen as a so-called example of post-mortem digestion of the stomach, removed from a man who died of convulsive trouble, dependent upon tuberculous disease of the brain and spinal cord. There was a large opening in the stomach corresponding to the greater curvature.

Dr. Rogers stated that he believed it to be a case of pure post-mortem digestion, from the facts which were presented. The stomach was found to contain farinaceous food mixed with gastric juice, and in the most dependent portion; not only the mucous membrane but the peritoneal coat was dissolved: the former of course most extensively. When the stomach was lifted out, the fluid contents dropped into the peritoneal cavity through the digested membrane. The patient was seized in the morning with a convulsion, after having taken some light article of nourishment. The convulsion was followed by a comatose condition for a period of thirty hours, when he died. During the thirty hours, nutritious articles, mostly fluids of various kinds, were introduced into the stomach by the teaspoonful. The body was put on ice immediately after death, and at the post-mortem examination, about twenty-two hours after, many parts of the exterior were frozen.

Dr. Jacobi was not a believer in post-mortem digestion. He had yet to see a well authenticated case of the sort. All the instances of the post-mortem digestion, so called, which he had met with could be explained by simple putrefaction commencing in the contents of the stomach and spreading to the surrounding parts. This was very commonly the case with children who died during the summer. He could not see why more gastric juice was effused for purposes of post-mortem digestion than during life, it being well known that no considerable quantity is free during any one particular time.

Dr. Rogers stated that there was no odor of decomposition about the part.

Dr. Bibbins wished to remind the gentleman that digestion could only be carried on properly when the temperature was that of the body in health.

Dr. Rogers did not think that the temperature of the stomach was affected by the ice-packing sufficiently soon to interfere with the digestion.

DISEASE OF HEART, ETC.

Dr. Fennell exhibited several specimens. The first was on behalf of Dr. John Beach, and consisted of a heart taken from a man sixty-five years of age. About ten days before death he sent for a physician complaining of inability to pass his water. He was soon relieved, but for three or four days afterwards the catheter had to be used. At that time seeming to be doing well, the physician left without further treatment; three days after that, while walking about, he suddenly complained of pain in his heart, and dropped dead in the street. The post-mortem revealed no changes in the body to account for the suddenness of death except a thickened ridge corresponding to the attached margins of the semilunar valves.

A second specimen was presented on behalf of Dr. John Dwyer, and consisted of the bones of the shoulder-joints. They were removed from the body of a man thirty-six years of age. He was a German, and had been employed in a sugar refinery as an active laborer. Six weeks before his death, he first stated that he had pain in his shoulder. He continued to work for three weeks, and then was obliged to give up and apply for admission to the Ward's Island Emigrants' Hospital. He came under the care of Dr. Dwyer of that institution, who found the joint very much enlarged, very painful, and giving evidence of fluctuation. A free incision was made in the part, and a quart of healthy pus was discharged. The typhoid symptoms, which had existed to some extent previously, now passed away, but diarrhœa came on later, from which he sank and died. The specimen showed the existence of very extensive periostitis, synovitis, and osteomyelitis. The cartilage of incrustation was entirely destroyed, the head of the humerus, as well as the glenoid cavity, presenting a worm-eaten, carious appearance. The specimen was remarkable on account of the extent and rapidity of a disease of action in the joint, which was not more than six weeks in duration.

OSTEOMYELITIS OF THE LEFT TIBIA SUBSEQUENTLY INVOLVING THE CORRESPONDING KNEE-JOINT.

Dr. Louis Bauer presented the following history and specimen:

The patient from whom the specimen has been derived by amputation is a powerfully framed man, six feet and one inch in height, averaging 185 pounds in weight, and 46 years of age. He exhibits no marked feature of any morbid diathesis; his parents are octogenarians, and he himself is the father of five well-constituted children. His childhood passed without any aggravating disease.

When 16 years of age and in possession of undisturbed health, he met with an injury to the spine of the tibia, near the tuberosity. Pain, swelling, abscess and exfoliation of bone followed in succession, leaving eventually a fixed cicatrix of an irregular form, descending from the tubercle down the upper third of the bone. At long and irregular intervals, he has experienced severe and paroxysmal pains at the affected portion of the bone, usually terminating in small abscess.

Last fall, whilst engaged in the lumbering business in the West, and exposed to fatigue, cold, wet, and some privation, he became ill and had to return to Brooklyn. Soon after his arrival at home he sent for his physician, Dr. Burdick (who has kindly furnished me with these notes), who found him suffering from severe paroxysmal pains in the external aspect of the left leg. There was, however, no tenderness, swelling or redness. The attacks were distinctly intermittent, recurring every afternoon; tongue coated, and bowels costive. The disease seemed to yield readily, and when apparently convalescent, the Doctor dismissed the case on the 6th of Jan. On the 10th of the same month, he was again summoned; the patient complained again of pain, which, however, was limited to the original seat of the disease, though no other local changes presented themselves; there was, however, fever of a bilious remittent, gradually assuming a typhoid character, pulse from 120 to 135. This lasted 15 days. On the 25th the leg began to swell, and fluctuation rendered an incision near the tubercle necessary. The suppuration was but scanty; the probe detected roughness of bone, and two cloacæ running into the cancellated structure. On the

30th of Jan. profuse perspiration supervened, and during 15 hours the pulse came down to 80 per M. A small abscess appeared 3 in. below the first incision, and had to be opened; the pus seemed to be laudable. The œdema which had extended from the foot upwards diminished, but the head of the tibia remained tender. Soon fluctuation was detected near the inner head of the gastrocnemius muscle. An incision was succeeded by very free and purulent discharge, which continued up to the time of amputation.

From the 7th of Feb., the knee-joint became involved, and the fluctuation could be traced beyond its circumference. There being no chance to recuperate the shattered constitution, and to master the existing local disease, amputation had to be resorted to, and was performed on the 27th ult. Ever since, the patient has done well, and well-founded hopes are entertained of his ultimate recovery.

The specimen having been kindly placed at my disposal, I have subjected it to a careful examination, and now I exhibit the same to the Society.

The chief interest is centred upon the tibia, which bears the marks of a long existing structural disease. The arthropyosis has been of too short a duration, and too recent occurrence to change the condition of the articular surface of the femur. Its cartilage is somewhat swelled, and has lost its normal color, as if fatty degeneration had barely commenced. Only at two places on the outer aspect of the condyle it has been destroyed, and the bone is there denuded. Whereas the articular surface of the tibia is entirely bare, rough, osteoporotic, and covered with the peculiar, luxuriant granulations so characteristic of the ulceration of bone. The anterior half of the tibia, more especially its shaft, is enlarged, its outer surface rough and perforated. A ridge of osteophytes divides the external from the posterior surface. The latter is likewise elevated and roughened by new bony deposits, and perforated by a bore leading to the interior. At the cut surface of the tibia, a few inches above the ankle-joint, the tibia is of ordinary size, and exhibits the medullary cavity filled with a rather firm medullary substance. The fibula is intact, but matter has found its way into its articulation at the knee-joint, and crepitus can be readily produced in examining the capitulum.

Having longitudinally divided the upper half of the tibia, a singularly interesting pathological picture is presented to view. There are large cavities, contiguous to each other, filled with a yellow, apparently purulent semi-fluid substance, around which the osseous structure is very hyperæmic. In the immediate neighborhood of these cavernæ, the bone is osteoporotic, and towards the head of the femur, spongy; with magnified hollow spaces. Towards the lower end of the specimen, the bone is densified (osteosclerotic), the medullary cavity being entirely obliterated. At some places the yellow material approximates the surface of the bone, at other it occupies the centre. The largest cavern is seated but a little below the tubercle of the tibia, has the shape of a figure 8, being an inch in length and about half an inch in width, and rather deep. The periosteum seemed to be healthy, except at places where the cicatrix perforate, and where it has been subject to the action of the discharge. This yellow substance to which I have adverted has, of course, been subjected to a searching microscopical examination. Expecting to find pus corpuscles in abundance, I was rather surprised to meet, but very few of them; the whole substance is made up of very minute osseous detritus, fat, and opaque granules, without any other structural element worth speaking of.

Very few observers would hesitate in pronouncing this substance tubercular; and, indeed, it corresponds as much as possible with the description of tubercular matter; in fact, I have never as yet met with any specimen that came nearer to it; nevertheless, I would take issue with such an opinion, were it offered. For the microscopical findings are not inconsistent with the changes which pus undergoes when pent up for such a length of time. Next, it is evident that the disease originated in a traumatic injury, and eventuated in circumscribed osteomyelitis. Again, there is no link wanting in the pathogenesis of the case from its very inception to its eventual termination; and last, the patient is no subject of tuberculosis.

The case in question is prolific in practical importance. The entire history indicates that there was a circumscribed and limited bone disease. Every symptom pointed that way. The use of the trephine in proper time and place, could not have failed to give immediate and permanent relief; and, moreover, it demonstrates the dependence of the joint on the anatomical and physiological integrity of the component bones.

CARIES OF ACETABULUM, ETC.

He presented a second specimen consisting of the acetabulum and upper portion of a thigh-bone in an advanced state of caries, which had been removed from a young woman in Montreal, whom he had seen a year ago in consultation, and in whom none of the usual signs of disease of that part presented themselves, save a few openings in the neighborhood.

A third specimen, consisting of a uterus and appendages, was shown for the purpose of exhibiting a very pretty fibrous tumor, and some cysts of the Fallopian tube, which were evidently filled with menstrual blood. It had been removed from a woman who had died of pneumonia and hydrothorax.

Dr. Flint exhibited a heart, the chief interest in connection with which was the sudden death of the patient, who was admitted into the hospital with pleuro-pneumonia. On returning from the water-closet one day, he suddenly dropped dead in the ward. At the post-mortem, pleuro-pneumonia was found. The right ventricle of the heart was in an extreme state of dilatation, and was filled with blood. No other disease of the organ was found. It weighed in all 22 ounces. He thought that death was occasioned by paralysis of the right side of the heart, caused by the over-distension consequent upon difficult respiration. Some atheromatous patches were discovered in the aorta.

Dr. Lewis Smith presented a specimen of cancerous infiltration of the middle lobe of the right side of the brain, taken from a patient who died in the epileptic wards of the Charity Hospital. The convolutions of that part of the organ were entirely obliterated by the disease. The only declared symptom which the patient suffered from, not only during his stay in the hospital, but for the seven preceding years, was that of epilepsy.

STATED MEETING, MARCH 25, 1868.

DR. H. B. BIBBINS, President, in the Chair.

ENCYSTED CANCER.

Dr. Sayre exhibited a small encysted tumor, about the size of a strawberry, which he had removed from the upper lip of a gentleman 42 years of age, who was apparently in perfect health. The mass seemed to be developed in the orbicularis oris muscle, but was nearer the external than internal surface of the lip. It was accordingly removed by an external incision. After its extirpation, he was struck not only with its nodular

appearance, but also with its color, which resembled that of blackberry-juice. The tumor was examined by Dr. Flint, and found to be cancerous in character. There was no hereditary taint of cancer, neither were there any glandular enlargements in the neighborhood. He remarked that he had never seen an encysted cancer before. In this connection, he referred to the case of a physician's father, from whose temple a similar sized tumor had been removed under like circumstances, followed in the course of a few years by an enormous cancerous deposit in the liver, from which the patient died. The liver measured about 25 inches in its different diameters.

He next exhibited a portion of the coccyx, which he had removed from the person of a soldier who had been wounded four years before through the buttocks while lying face downwards on the ground. The ball entered on the right side and passed out on the left, just to the back of the ilium. A large abscess was the immediate result of the wound, which in time forced the patient to leave the army, since which time he has suffered with numerous fistulous sores, becoming much emaciated in consequence. One of these openings existed above Poupart's ligament, another on the inside of the thigh, near the internal condyle of the femur, and one or two opened near the crest of the ilium. The excessive suppuration had reduced him so much that he was unable to get about. There was a good deal of difficulty in striking dead bone through the openings, but this was finally accomplished through one of the cloacæ on the posterior part of the thigh, the bare bone being found in the situation naturally occupied by the coccyx. An incision was made upon the point, and a portion of the coccyx was removed. From that time all the sinuses had healed up, this portion of dead bone being the source of all the patient's trouble.

He remarked that this was the second time that he had performed a similar operation. The first patient was a clergyman, who had necrosis of the same bone, as the result of a large post-rectal abscess. In answer to a question from Dr. Rogers, Dr. Sayre remarked that he could not be mistaken either as to the locality from which the bone was removed, or the bone itself, and was therefore certain that it was a portion of the coccyx, and nothing else.

POST-MORTEM APPEARANCES OF HANGING.

Dr. Terry exhibited the upper portion of the windpipe and subjacent integuments removed from a woman who committed suicide by hanging. She sent a little girl, who was with her, into a yard to get some water, and when the little one returned the woman was found suspended from the top of the door-frame in a large tripled loop, one end of which had been slipped over a large spike, the other end supporting the front of her neck. The girl gave the alarm instantly, when some gentlemen came in and cut down the suicide; she gasping only a few times before she expired. He exhibited the specimens for the purpose of showing the mark produced by the rope. Death had been produced by asphyxia.

In answer to a question from Dr. Howard, he stated that there were several modes by which death by hanging was produced; if dislocation of the cervical vertebræ occurred, it was of course sudden, by pressure on the medulla oblongata, but if by mere pressure upon the trachea it must be a slow one by suffocation, consuming probably fifteen minutes in the operation. In this connection he also referred to the case presented at a previous meeting by Dr. Finnell, in which the deceased was found lying in a prone position alongside of a mantel-piece with his head suspended in a rope, in such a manner as barely to keep the nose from touching the floor. The details of this case were already familiar to the members. He also stated that some cases were recorded in which persons had been cut down and were alive after hanging for half an hour.

Dr. Howard remarked that he had asked the question because he had witnessed several well-ordered executions, and had never met with a single instance in which death had taken place other than by suffocation at the end of fifteen or twenty minutes.

Dr. Rogers stated that the horizontal method of hanging by slinging the throat in a noose was very common among the Chinese upon the Isthmus, he having seen numbers who had thus committed suicide by attaching one end of the rope to the axles of railroad cars.

Dr. Howard had seen a culprit fall for ten feet with such violence as to break the rope, and yet the cervical vertebræ were not dislocated.

Dr. Mason asked if in any of the cases referred to by Dr. Howard the hyoid bone had been broken.

Dr. Howard stated that he had not made a post-mortem examination in any of the cases.

RUPTURE OF THE PULMONARY ARTERY.

Dr. Terry also presented a heart removed from a patient of twenty-five years of age who had complained of dyspnœa, a dry harsh cough, and a good deal of palpitation. He was able to work but little. Five days previously he complained of a sharp stabbing pain about the heart. He went from one room to the other to get relief, but the pain continued, and extended to the left shoulder and down the left arm. After four or five days it suddenly increased and he experienced a faintness as if he were going to die, and lived but three hours after.

At the post-mortem examination the pericardium was distended considerably, containing about a quart of coagulated blood. At the root of the aorta there was an ecchymosis in the cellular tissue, and about half an inch above the root of the pulmonary artery there was a rent of half an inch in length in that vessel, through which the blood escaped. This was accounted for, in the opinion of Dr. Terry, by a patent ductus arteriosus, which allowed a cross current of blood to enter the pulmonary artery and impede the regular current in that vessel to the extent of distending it to rupture.

At this stage of the proceedings the President introduced Dr. Nettel, of Russia.

OVARIOTOMY.

Dr. Peaslee exhibited an ovarian tumor, and remarked upon it as follows:

I have brought this here for the sake of showing an interesting point in diagnosis, as I thought it would prove to the Society, and not because of any interest that may be possessed by the tumor itself. It is an ovarian tumor removed from a woman some hours after death, and hence has not interest in connection with an operation. This patient I first saw four weeks ago, she having been tapped eighteen times, and there having been removed from thirty to sixty pounds of fluid at the different tappings. She had always rallied after these without symptoms of inflammation, but she was not then in a condition for a removal of the tumor, and if she had been, I should have first preferred, as I always do (unless there is some particular reason to the contrary), to tap her once myself in order to perfect the diagnosis. This diagnosis, I may say, remained somewhat doubtful. She had been tapped by two different physicians, and so far as I could learn no decided

opinions as to the precise nature of the tumor had been expressed. I found the circumference of the abdomen about forty inches. The appearances presented were those of a monocystic ovarian tumor. Examining her per vaginam, I felt a very solid, unresisting mass projecting into the pelvis. Fluctuation through the abdominal wall was very distinct; the uterus was in the natural position, and the sound passed in to the natural extent, two and a half inches. (I may mention here that she had given birth to one child.) I regarded the tumor as ovarian, tapped her, and drew off 60 pounds of fluid from a single sac. The remaining portion of the mass that I felt in the pelvis per vaginam was then brought into view. I then examined the woman with a sound to ascertain whether, after all, this might not be a fibro-cystic tumor of the uterus. I could introduce the sound, and hold the uterus up above the symphysis pubis, and make it so prominent that I could take it in my hand and feel every portion of it distinctly. I could feel the fundus of the organ and the pedicle of the tumor separated from it and extending into the mass, giving a perfect demonstration that it could not be a fibro-cystic uterine tumor. The pedicle, as seen here, is about two inches in depth and very delicate. I proposed, after the tapping, to await the result of her refilling, which I concluded would be in about three weeks, when I should be prepared to remove the tumor. She went on for five or six days, when she was seized with a bilious attack, and vomited a great deal. This reduced her considerably; but she recovered, to be attacked a week afterwards by bronchitis, from which she sank.

This sac, on examination, presents some interesting points. It appears to be extremely thick, but the least traction will tear it. That thickness is apparently the result of successive inflammations; still she never complained of any of the usual symptoms of such a complication during life. The sac is lined throughout by a soft pulpy exudation, which makes up more than half of the thickness of the sac its-lf. You see here whence proceed those long strings of exudation which so frequently block up the aftercter during an operation, yet, strange to say, in this instance nothing but a highly albuminous viscid fluid escaped through the cannula.

He stated in conclusion, that the patient from whom he had removed the fibro-cystic tumor of the uterus, whose case was reported at a previous meeting, was now perfectly well.

Dr. Post presented a specimen of salivary calculus, taken from Wharton's duct, which had the peculiarity of being nearly tubular.

CHEESY PNEUMONIA.

Dr. Lewis Smith presented a lung taken from a man who died about the age of fifty. He had a cough for a considerable time, and was supposed to have tubercular disease. On making the *post-mortem* examination, almost the entire upper lobe of the left lung was in the state called grey hepatization, and that form of it which some writers designate as purulent infiltration. He remarked that he presented it simply on that account, the lesion being that stage of pneumonia. "Some writers, it is known," says he, "do not consider that there is more than one variety of grey hepatization." On making an incision into this lobe, a considerable portion of it was found in an almost diffluent state, and these portions removed presented very much the appearance of pus. Now, the question is one of some interest in pathology, whether we should consider this stage of purulent hepatization or grey hepatization, the substances deposited in the lungs having become softened. This is the opinion entertained by many, that when this very soft condition of the lung exists, it is not a purulent infiltration, but it is simply softened grey substance, which is also present in pneumonia which has reached its third stage. I have made an attempt to settle this point by a microscopical examination, but have not been able to determine by the appearances whether pus was present or not. These cells (a diagram of which was shown) may be pneumonic cells, or they may be the ordinary pus globules which have undergone such a granular change, so that the test by acetic acid was not very satisfactory.

Dr. Loomis was of the opinion that the case was one heretofore known as infiltrated tuberculosis, but better described as cheesy pneumonia, the result of a more chronic inflammatory action.

Dr. Smith also exhibited a fatty liver removed from an infant one year old, who died with pneumonia, having suffered for a considerable period from diarrhœa. The interest of the case centred upon the concurrence of diarrhœa with the hepatic lesion, a fact which has often been noticed by writers upon the subject. The intestinal canal showed no traces of anatomical lesion.

Dr. Rogers exhibited a cartilaginous growth which he had removed from the os brachi, just beneath the deltoid, of a lad fifteen years of age. It was so situated that when the arm was brought forward, raised and rotated, the sharpened point of the growth would insinuate itself under the muscle and arrest its further action. If, however, it was rotated backwards, the growth was brought into view under the anterior edge of the deltoid, and was thus easily removed. It was composed principally of cartilage with a small spiculum of bone through its substance. There did not seem to have been any cause for the trouble in the shape of an injury. The patient recovered entirely.

He lastly exhibited a small exostosis which he had removed from the last phalanx of the great toe of a young girl ten years of age.

After which the Society went into executive session.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, March 2, 1868.

Dr. E. R. Peaslee, President, in the Chair.

The President announced the admission to membership of Drs. John H. Dorn, Geo. A. Murdick, and Wm. R. Whitehead.

THE GENERAL PARALYSIS OF THE INSANE.

Dr. Oscar G. Smith read a paper upon this disease, otherwise known as *General Paresis*, and as the *Perioencephalite Chronique Diffuse* of M. Calmeil. He stated that, although abundant opportunity had been offered for the study of its pathology—for it was invariably fatal—yet no two observers were agreed upon it. M. Calmeil had perhaps thrown the most light upon this, as well as upon its symptoms; and his views had been confirmed by late microscopical investigations. He had first pronounced the affection to be an inflammation of the cortical substance of the cerebral hemispheres; an inflammation non-suppurative, producing a gradual degeneration of tissue, the healthy structures being destroyed and their débris being found mingled with lower forms of growth. Among the morbid appearances commonly to be found were the following, though it was not certain that any one of them was peculiar to this disease, or even to insanity: Diploe of cranium diminished or destroyed; its tables thickened or thinned, or obliterated. Dura mater adherent to the bone; arachnoid thickened and opaque in portions; and between these

two membranes, thin jelly-form layers, remains of old extravasations, often appearing half-organized. Pia more opaque and thickened, adherent to the brain. Cortical substance of brain thinned and atrophied; frequently soft, but more commonly hardened by destruction of its cells and shrinking of its connective tissue. To this last Rokitansky attached great importance, believing an overgrowth of the connective tissue to be the cause of the paralysis, by pressure upon and consequent destruction of the brain cells. Wedl ascribed the lesions to disease of the capillaries; other pathologists to meningitis. Dr. Franz Meschede (in *Virchow's Archives*, 1865) pronounced the affection a parenchymatous inflammation of the cortical structure of the hemispheres, commencing in the inner layer and spreading outwards. He found destruction of the brain-cells, condensation of the connective tissue, and wasting of the vessels. The cells were to be seen in various stages of fatty degeneration. This view Dr. Smith regarded as best accounting for the mental symptoms, which often closely resemble those of ordinary insanity. Wedl's theory could hardly be sound, for we should expect degeneration of the capillaries chiefly in the aged, whom this disease never attacks. Nor could the affection be due to meningitis, which constantly occurs without producing its symptoms.

The diagnosis between this form and other forms of insanity is based chiefly upon the character of the delusions, the paralytic symptoms, and considerations of age, sex, etc. The delusions are commonly of the exalted kind, the patient being the possessor of untold wealth or power or fame; but occasionally they assume the melancholic form. In the early stages there may be simply failure of memory, with lack of mental poise, the patient being easily swayed by trifles; later there is often great violence, and he will persist in tearing off all clothing and committing the greatest extravagances; and finally dementia supervenes. The paralysis is usually first noticeable in the enunciation, afterwards becoming general. This, like the other signs of the disease, is not uniformly progressive. The course of the affection is marked, at intervals, by epileptiform seizures, which for the time completely prostrate the patient mentally and physically; but after which he may, in a few weeks, regain almost his former intelligence and strength, so as even to resume his business. But such improvement is always delusive and transient. Irregularity of the pupil, with or without contraction, is frequently observed. Authorities differ about the thermometry of the disease; but the best affirm that there is no increase of temperature, even in the initial stage or at the periods of highest excitement, while there is a decided and progressive decrease, from the time when paralysis and mental imbecility become marked up to the patient's death. General paresis rarely attacks persons under twenty years of age or over sixty. Women are remarkably exempt from it. Of 133 cases admitted to the asylum at Utica, from 1849 to 1866, but 11 were women. As it seldom supervenes upon ordinary insanity, and has commonly a brief course, which always ends fatally, time becomes an important element in the diagnosis. Calmeil gives thirteen months as the average duration of the malady, and Esquirol says that it rarely exceeds three years.

The etiology is obscure. Hereditary taint is less frequently traceable here than in other forms of insanity. Innutrition, prolonged and exhausting mental exercise, especially from business anxiety, intemperance, and sexual excesses, are the causes commonly assigned. The treatment should be adapted to the indications of each case. Tonics and nutritious food are generally demanded, with sedatives. The bromides should have a fair trial.

Dr. J. C. Smith said that Dr. Luther V. Bell, of Boston, had first brought this affection to the notice of the profession in this country, by an article published in 1843. Dr. Bell had become familiar with it in Europe, but, until that year, had seen no case of it in the McLean Asylum, nor could he find record of any. During a service of five years at this asylum, Dr. Smith had not himself found these patients more violent and destructive, or more troublesome to manage, than others. Sexual excesses he had been wont to regard, not as a cause of the disease, but rather as a symptom of its early stages. In the first stage, of mental aberration so slight as hardly to be noticed, and in the first part of the second stage, of excitement and sleeplessness, these excesses were often wonderful. There was often also an excessive indulgence in alcohol, contrary to the patient's habit. In the five years he had seen but one well marked case in a woman. The disease evinced an unmistakable preference for localities. In the northern and eastern parts of the country it was much more prevalent than in the south and west. Boston, where it was quite common, appeared to suffer more than New York; or, rather, more cases were found in its asylums, which received wealthy patients, while such cases here might perhaps be sent away from the city for treatment. Though most often developing itself rather suddenly, yet occasionally the disease was so slow in its approach as to be deceptive. In the case of a well known gentleman of Boston, its first indication had been that he sent a very large number of bills over the city, each one for $0.99. Among the most characteristic symptoms in the early stage were a certain clumsiness in the use of the fingers, as in buttoning the coat or thrusting them into the vest pocket, which, once observed, could always be recognized; and a very slightly faltering or slip-shod gait. The tongue was protruded almost always with difficulty or hesitation, being finally thrown out with a jerk, and as suddenly drawn back with a grimace. According to almost all writers, it was very rarely drawn to one side, as in some other forms of paralysis. Treatment was so unsatisfactory that many gave none whatever. But the bromide of potassium might be expected to prove serviceable in the early stages. It would at least overcome the vigilance and secure rest.

Dr. Jacobi had been led to look into the literature of the subject by the case of a friend affected with syphilis and threatened with grave cerebral symptoms. There were a few positive cases on record, in which the so-called paralytic insanity had been caused, not simply by venereal or other excesses, but by the syphilitic poison itself. It was worth while to know this fact, and also to know that paralytic insanity, even when it has advanced to the third stage, of complete imbecility, may be cured, if due to syphilis. Dr. Fleming had reported one or two cases of this kind, that had reached the third stage and were cured by iodide of potassium. If, then, these syphilitic cases are amenable to treatment, every physician should so well understand the disease as to be able to detect them. There was reason for believing that alcohol, also, was a cause of this disease; and, perhaps, the comparative exemption of women might be owing to their being so much less affected than men both by this and by the last named cause. Many of the paralytic insane had been drunkards. Again, the lesions of this affection were very like those found in many of the viscera after the abuse of alcohol. We must not forget that it is an inflammatory condition, commencing in the cortical substance, and gradually invading the whole brain; that the microscope shows, in all cases, hyperplasia of the cerebral connective tissue, and, in many cases, this together with

fatty degeneration. Compare with this cirrhosis of the liver, which is found almost only in drunkards. Cirrhosis means interstitial inflammation of the liver, with hypertrophy of its connective tissue, compression, and atrophy. These lesions are the characteristic of many affections considered incurable. Cirrhosis will not yield to treatment; neither will paralytic insanity, except in the syphilitic cases. Tetanus shows in almost every case acute hyperplasia of the connective tissue of the spinal cord, and is incurable, except in rare instances. So with enlargement of the lymphatic, or of the mucipa rous, glands; where it depends upon hypertrophy of their connective tissue, with compression of the proper glandular tissue, the only remedy is the knife. No diseases are more obstinate than granular pharyngitis and granular conjunctivitis; and for the same reason, that we have as yet no means of influencing those inflammatory processes which invade the connective tissue, and result in its hypertrophy.

Dr. Chamberlain would refer to a single case, which he did not hesitate to call one of paralytic insanity, although it presented some points of difference from the description in the paper just read, was still in progress, and had at one time so improved under treatment as to lead the patient and his friends to believe the recovery complete. The subject was a very successful mechanic, about fifty years of age, who had first developed symptoms of the disease about eighteen months before. During its progress he had fallen under the observation of a large number of physicians, going from one to the other, and finally returning to the care of Dr. Chamberlain. He reached a degree of prostration such as the doctor thought, was rarely followed by even partial recovery. He lost his speech almost entirely, his reason completely; had well marked facial paralysis; was extremely emaciated, with bed-sores on the sacrum and either trochanter, and abscesses throughout the cellular tissue of the lower extremities and the scrotum; was so feeble that he could not be turned in bed except upon a sheet; and gave every indication of speedy dissolution. He was put upon quite large doses of phosphate of strychnia; and amendment was so soon perceptible, that the doctor inclined to think that this treatment had something to do with it. He regained his strength, and gradually his reason also, and presently began to resume his place in the family. The period of prostration lasted from December, 1866, to April, 1867. About the first of April he got up; and by the first of July he had gained nearly fifty pounds of flesh, and was, to all appearance, in perfect health. He removed to the country, bought a farm, and undertook its management, in spite of a warning to his friends that he was still an insane man and could not safely be trusted. For a long time there seemed nothing to justify this warning; but quite lately he began to make wild purchases, and now he was in bed again with the old symptoms. A careful ophthalmoscopic examination had given only negative results.

Dr. J. C. Smith asked if the tongue was protruded in the median line, and being answered that it was not, thought this alone would throw a doubt upon the diagnosis. He deemed the point very important. He believed also that emaciation was uncommon in general paresis. He had often seen patients gain weight freely. They would eat voraciously, and were not particular as to the quality of their food. However coarse, their dinners were the most bountiful in the world.

Dr. C. Pelser had seen Dr. Chamberlain's case, and was disposed to confirm the diagnosis, at least in some respects. He had himself two cases then under treatment. The first was doing well under bromide of potassium, in 5 grain doses three a day. The bromide of ammonium had been tried with less success. The second case seemed connected with syphilis, and though it had gone on favorably for a time, the patient was now sinking.

Dr. Chamberlain had supposed his case complicated by more or less effusion in some part of the brain, and Dr. Hammond had agreed with him.

Dr. Jacobi was positive that there was not on record a single case of local effusions or hæmorrhages in general paresis. When effusions and hæmorrhages were found, they were into the meninges, never into the brain-substance; and meningeal effusions would not produce symptoms of facial paralysis.

Dr. Peaslee said that this disease might perhaps be regarded by the specialists as incurable, because they do not see it in its first stages. It was of the utmost importance that every practitioner should be familiar with its earliest symptoms, that it might be aborted while, if at all, its abortion was possible. The use of the bromide of potassium for this purpose would commend itself to every one. For if the disease began as a congestion, going on to inflammation, with all the pathological effects that had been stated, then if any remedy could arrest it, and prevent the congestion from passing into inflammation, it must be one that would diminish the amount of blood sent to the brain. And that the bromide of potassium had this power, the experiments of Dr. Hammond had fully proved.

Dr. Leaming began the reading of a paper upon Cardiac Murmurs, its conclusion being postponed to the next meeting.

ANNUAL MEETING OF THE CONNECTICUT RIVER VALLEY MEDICAL ASSOCIATION.

The Annual Meeting of the Connecticut River Valley Medical Associat on was held at Bellows Falls, Vt., on Wednesday and Thursday, May 6 and 7, agreeably to a vote at the last annual meeting, to hold the session two days this year.

On Wednesday, at 10 o'clock A.M., the President, Prof. Dixi Crosby, being absent, Dr. Z. G. Harrington, of Chester, Vt., was called to the chair.

The Secretary's report was read and adopted.

The report of the Treasurer showed all expenses paid, and a surplus of $34.90.

Little business was transacted in the forenoon.

The following officers were elected:

Dr. H. D. Holton, of Brattleboro, Vt., President.

Dr. Geo. B. Twitchell, Keene, N. H., Vice-President.

Dr. F. Whitman, Bellows Falls, Vt., Recording Secretary.

Dr. A. B. Crosby, Hanover, N. H., Corresponding Secretary.

Dr. Samuel Nichols, Bellows Falls, Vt., Treasurer.

Prof. Dixi Crosby, the retiring President, gave his annual address. His subject was: Pelvic and Abdominal abscesses. The address was a well written and interesting one, and commanded the most respectful attention of all present.

At its conclusion a vote of thanks was tendered to the Professor.

During the session the following gentlemen presented voluntary papers:

Dr. Samuel Wheeler, on Neuralgia.

Dr. H. G. McIntire, on Uterine Inflammation in insane women.

Dr. W. B. Porter, on several interesting obstetric cases, and one on ovarian tumor.

Dr. Thomas Goodwillie, of Vernon, Vt., exhibited and explained a new and improved instrument for ad-

dministering anæsthetics, with statement of cases showing the results of its use.

On motion, voted that, at succeeding elections, no one shall be eligible to office in this Association not present at the election.

It was voted to hold the July meeting at Bellows Falls, Vt., and the October meeting at Brattleboro, Vt. And also that the next annual meeting be of two days' duration, and that all meetings held at Bellows Falls be called at two P.M., the better to accommodate those residing in different parts of the Valley.

Throughout the entire session there was pretty general and free discussion of various medical topics, and the meeting finally adjourned on Thursday at two P.M., after a two days' session of unusual interest and profit.

Correspondence.

MEDICAL MATTERS IN PARIS.

THE CATALOGUE OF THE U. S. ARMY MEDICAL MUSEUM, AND A FOREIGNER'S ESTIMATE OF THE MEDICAL RESOURCES OF AMERICA—TWO INTERESTING CASES OF OVARIOTOMY—THE USE OF DRAINAGE TUBES—GUERIN'S PNEUMATIC OCCLUSION.

TO THE EDITOR OF THE MEDICAL RECORD.

PARIS, February 9, 1-83.

SIR—The Archives of Medicine, in a very complimentary note, acknowledges the gift of the catalogue of the United States Army Medical Museum. "Every one interested in the advancement of medicine and the amelioration of the health of armies, ought to feel indebted to the American Government for the gigantic and costly enterprise which it has just undertaken. The magnificent volume which has been sent us by the liberality of the Surgeon-General, cannot fail to be of immense utility, even to us to whom the rich Museum is inaccessible. Thanks to the summary observations which it contains of each piece registered in the Museum, we are able, in a great measure, to study the collection as if it were under our eyes, and shall in the future have the means of controlling the quotations of American surgeons who shall take their illustrations from the Museum.

"Our administration is not accustomed to such generous initiative in the distribution of official reports to the journals. It has been necessary for the American Government to have the honor of giving the example, and of meeting, with the most laudable munificence, the silent wishes of the medical press."

A FOREIGNER'S ESTIMATE OF THE MEDICAL RESOURCES OF AMERICA.

I met, the other day, a young Norwegian surgeon, with hair as yellow and eyes as blue as became a countryman of the Vikings, who had been spending some months in the study of this Museum, and expressed for it the most unqualified admiration. "I cannot understand," he said, "why you Americans should take the trouble to come to Paris to study surgery; your facilities at home are worth fully as much, if not more, than all you can get here."

CASES OF OVARIOTOMY.

Certainly no one need come to Paris to study ovariotomy. M. Richet, than whom a more distinguished surgeon is hardly living, has just had the misfortune to add another to the list of failures in this formidable, but sometimes successful operation. He had undertaken the extirpation of the cyst, to comply with the urgency of a brother physician, who considered the case remarkably favorable. M. Richet, however, pronounced an unfavorable prognosis, on account of a circumstance, which he has been subsequently led to consider sufficiently characteristic to serve as a formal contra-indication to an operation. The abdomen of the patient was the seat of a fluctuating tumor, apparently a unilocular cyst; but it had not the form which should have been given by a cyst of so considerable size. Instead of being prominent towards the middle, and advancing as it were in a point, the belly was rather flattened, and much enlarged at the sides, but not at all prominent in the middle. In the meantime the surface was even, and no sign existed of a division of the cyst into cavities; the unequal juxtaposition of whose walls might explain the flattening of the abdomen.

M. Richet could not well account for this circumstance, but it inspired him with an indefinable apprehension of evil consequences, an apprehension only too well realized. For when, after incision through the integuments and subperitoneal tissue, both of which were thickened by adipose tissue and much infiltrated, the surgeon arrived in the cavity of the peritoneum, the most solid adhesions were discovered, uniting the cyst to the abdominal walls. The first could be turned with the hand, but they presently became so solid as to resist all efforts. Convinced that localized adhesive peritonitis and fibrinous adhesions were more readily formed in the pelvic cavity than towards the abdominal walls, M. Richet inferred that the obstacles met with in this latter locality would be re-encountered, and on even a more formidable scale, towards the base of the tumor. He therefore resolved to abandon the operation, and the incision was united with a few metallic sutures.

The patient, however, died of peritonitis the next evening, and the autopsy fully confirmed the prevision of M. Richet. The cyst could only be separated from the abdominal wall by tearing a part of this latter; and in the pelvic cavity the adhesions were so close, that a slow and careful dissection was required to remove them. The bladder and uterus were involved with the tumor. This had no pedicle, properly speaking; it was composed of a principal cavity, from whose wall were suspended, floating, several smaller cysts; it was nourished by means of its intimate and extensive adhesions, especially with the uterus. It is certain that the continuance of the operation would have been completely impossible, since the isolation of the cyst was so difficult, even on the cadaver.

The remarkable flattening of the abdomen was therefore accounted for by the very solid adhesions which maintained it solidly fixed, and drawn downwards. In such cases, concludes M. Richet, ovariotomy should never be attempted.

It is interesting to notice also, that in spite of the repeated attacks of peritonitis which must have occurred to produce the adhesions, the patient had never suffered any abdominal pain, a fact which had greatly conduced to excite the false hopes for the success of the operation.

From Strasbourg, however, comes a note of better cheer. M. Koeberlé has succeeded in saving a patient operated upon for an ovarian cyst, and that in spite of the most formidable complications.

The patient was 43 years old, the mother of three children, and endowed with a vigorous constitution. She was affected with a multilocular cyst of the right ovary, of which one of the subdivisions had ruptured eight months previous to the operation, and occasioned a grave peritonitis. From that time had set in ascites, emaciation, anæmia, and hectic fever. Towards

the end of September tapping was performed, and about six litres of brownish liquid, partly serous and partly stringy, were withdrawn. After this the general health of the patient was notably ameliorated. Ovariotomy was practised on the 26th of November, under the influence of chloroform. An incision was made, twenty-five centimetres in length, giving issue to three litres of reddish serum. Puncture successively of three divisions of the cyst, of which one furnished a yellowish, one a brown, and one a grayish liquid, altogether amounting to eight litres. There remained a multilocular mass, weighing two kilogrammes, which was easily removed after division of a few adhesions, which united it to the omentum and abdominal wall. The former adhesion, which contained large vessels, was destroyed with the actual cautery. The pedicle of the tumor, four centimetres long, was divided by a wire loop, by means of a slip knot. The abdominal cavity was well sponged out, and the incision united by means of four deep, and six superficial sutures. *A glass tube, ten centimetres long, plunging in the pelvic cavity along the posterior wall of the uterus, was placed in the lower angle of the wound, to admit of a free escape of the liquids.* The operation lasted three quarters of an hour. About 400 grammes of blood were lost.

A pelvi-peritonitis occurred, which remained localized and disappeared rapidly under the influence of the free escape afforded to the liquids, and the *half sitting position* given to the patient. But the fourth and fifth day the patient became restless, and the pulse counted 130. On the sixth day the sleep was interrupted at two in the morning, the restlessness augmented to agitation and anxiety; the pulse, still at 130, became variable small, and irregular; inspirations thirty-six; sweats, coated tongue, diminution of the urine, and tympanitis of the abdomen, all announced grave change for the worse.

By the 7th the condition of the patient was extremely menacing. At five o'clock in the afternoon, the surgeon discovered dulness in the right flank, between the iliac crest and the hypochondrium, extending over a space about as large as the palm of the hand. There was evidently a collection of serum, formed during the last fifteen hours, and dependent upon a local peritonitis (probably connected with inflammation of the ovarian vessels), and which would not delay to become general. Bold measures were necessary, and on the spot, M. Koeberlé made an incision in the centre of the dulness, about seven centimetres above the iliac crest. The patient was too feeble to be chloroformized, so recourse was had to a local apparatus for the vaporization of ether, which sensibly diminished both the pain and the hæmorrhage. After division of the tissues to the depth of six to seven centimetres, the peritoneum was discovered, and *being opened*, gave issue to about 150 grammes of reddish serum. This was completely withdrawn by means of a canula, the exterior wound united by a single suture, and a tress of lint, replaced subsequently by a glass tube, served to maintain *external communication with the cavity of the peritoneum.* The local dulness had disappeared. The patient was placed in a half-sitting position and in a lateral decubitus towards the right side, in order to facilitate the escape of the liquids.

The next day, the patient, who had been in a subcomatose condition, exhibited a marked improvement. The pulse was between 118 and 125, and the respiration twenty-two. On the fourth day after the incision, the borders of the wound were invaded by an erysipelas, which extended about twelve centimetres. Treated with tincture of iodine on the limits of the inflamed parts, the erysipelas was arrested on its third day.

The third crisis attended or consisted in the evacuation by the rectum of gray purulent stools. The patient afterwards became more comfortable, but the tumefaction in the right flank reappeared, and continued, and the surgeon was unable to reach it by sounds introduced into the wound. Finally, on the eighteenth day after the original operation, the purulent collection opened spontaneously by means of the large tube which had been left in the wound; and a great quantity of pus escaped, and the flow continued during two or three days. The tumefaction diminished in proportion, and disappeared entirely. The tube was gradually shortened, and at the end of a fortnight the cicatrization of the iliac wound was complete, as well as that on the median line, made for the extirpation of the cysts, and where a tube had constantly remained. In a month and a half after the operation, the health of the patient was perfect.

The striking peculiarities of this remarkable case unquestionably belong to the successful plan of leaving the drainage tubes in communication with the peritoneum; and to the boldness which risked an incision of that membrane, to give issue to the products of a local peritonitis. *General* peritonitis was thus warded off, three distinct times—first, in connection with the original operation, then at the moment of the subsequent tumefaction, and finally during the formation of the abscess. M. Koeberlé remarks, that when in the course of peritonitis a collection of liquids has been formed, opening of the peritoneal cavity is far from presenting the same gravity as when the membrane is healthy. The pseudo-membranes which agglutinate together the intestines, have rendered possible the formation of circumscribed cavities in which the exuded liquids have been able to accumulate, and these serous or purulent foci may be opened, without interesting the remainder of the peritoneal cavity. When these liquids, which have a great tendency to decompose and become fetid, have been evacuated, there is nothing to prevent washing out the cavity with injections of sulphate of soda or of phenic acid. By this means, the affection is reduced to a simple local peritonitis.

M. Koeberlé has performed NINE ovariotomies during the last six months, and only lost one patient, and she was fifty years old, and had submitted eight times to paracentesis.

THE BENEFITS OF THE DRAINAGE TUBES.

The immense advantage to be derived from the practice of leaving a tube inserted in a cyst, to provide for the complete evacuation of its contents, is shown in a remarkable case of hydatid of the liver, cited by the Archives from an observation of Dr. John Harley.

When the patient first consulted the physician, he was affected with an abdominal tumor of four years' duration, continuous with the liver in the hypochondrium, and extending to within two fingers' breadth of the pubes and Poupart's ligament. Dulness extended from this point to the level of the right nipple. On percussion, fluctuation was evident in all parts of the tumor.

Three times in the course of the first eighteen months of the development of the tumor, the patient had suffered attacks of sharp pain in the abdomen and epigastrium, of which the first attack had lasted twenty-four hours, and the last fifteen days. He had never been jaundiced.

From the seat of the tumor and its development, Dr. Harley diagnosticated an hydatid cyst of the liver. No treatment was instituted. Two years later the patient returned, with the tumor somewhat increased in size. The girth measured forty-two and five-eighths inches, and under the influence of a slight attack of local peri-

nitis, the cyst increased so rapidly, that in ten days he measure of the girth had increased to forty-four hd a half inches. In view of this rapid development, was decided to tap the cyst, which was done on the evel of a line going from the xiphoid cartilage to the mbilicus. A clear colorless liquid escaped, whose omplete evacuation occupied two hours. Eleven litres f this liquid were collected, and found to contain sevral broken cysts, the size of a filbert, and cysts unroken, as large as a pea. The operation was well supported, and relieved the patient. The abdomen retracted, and by palpation, below the umbilicus, could be perceived the lower border of the cyst. The canula was left in place.

The patient remained without fever till the eighth ay, when the canula escaped from the wound, and all ow of liquid ceased during twelve hours. The cyst ecame distended and perceptible in both hypochondria, he skin hot, pulse 120. The canula was replaced, and mmediately there escaped 250 grammes of a turbid quid, dark yellow in color, and with a fetid oder. The febrile symptoms disappeared, while the flow was nly interrupted by the fragments of hydatid cysts hat from time to time blocked up the canula. When he obstruction became definite, the cyst was distended second time, and grew painful, and the fever returned. In this occasion, an elastic sound, nine inches long, was introduced into the cavity by the canula, and 600 rammes of liquid were collected. About the same mount escaped during the course of the following ortnight, and occasionally, owing apparently to the upture of some secondary cyst, the flow would become more abundant.

The forty-third day the canula was entirely removed, ut the elastic sound left in place. Up to this date njections had been made of water mixed with iodine or creasote, forty drops to a litre. On the fifty-first lay, a considerable hæmorrhage was produced in the yst. The pulse immediately mounted from 96 to 140, nd in the evening was 160. The skin became hot, ry, and yellowish, the cyst hard and distending the pigastrium and hypochondria, and the patient vomited repeatedly. 500 grammes of thick fetid sanguinolent iquid, resembling the blood which flows after the section of the liver, were withdrawn from the cyst, which was then carefully washed out with water, containing some creasote. During the following week, the iodine injection was replaced by a solution of twenty-five to fifty centigrammes of nitrate of silver, in some ounces of water; afterwards an injection was made every morning and evening of a solution of four grammes of sulphate of zinc in 300 grammes of creasotized water.

After several days, during which the stools were quite colorless, there was suddenly evacuated by the rectum a quantity of pultaceous matter, of a color analogous to that of the liquid coming from the cyst. A few days later, a great quantity of pure bile flowed from the wound, fifteen grammes being collected in some minutes. Communication was therefore evidently established, on the one hand with the intestine, on the other with the gall bladder. This was the fifty-third day.

After various less important vicissitudes, it is noticed on the 123d day, that no more bile escaped from the wound, that the cyst was greatly diminished in size, so that the sound, which had penetrated 9 and 10 inches, now extended only 4. On the 148th day, the flow had ceased, and the sound was withdrawn. Shortly afterward, the health of the patient being entirely re-established, he resumed his ordinary occupations. The girth had diminished 13 inches. The dulness of the liver was *normal*, but the spleen remained hypertrophied. The heart had resumed its proper position. No trace remained of the tumor.

Dr. Harley follows the recital of this interesting case with some general remarks on the treatment of hydatid cysts, in which he particularly insists on the necessity for favoring the complete evacuation of the cavity. He thinks that nearly all failures are due to neglect of this precaution and of any attempt to obliterate the hydatic membranes. If any liquid be left, it is sure to putrefy sooner or later, and infect the blood. Then follows a synoptical table of about 100 cases gathered from different authors. In thirty-four, a single opening had been made, followed by complete or partial evacuations of the liquid and immediate closure of the wound. There were eleven cures, thirteen ameliorations, and ten deaths.

In the second table are thirteen cases treated by successive openings, with or without iodine injections; eight ameliorations, two cases without result, and three deaths.

In the third table, containing thirty cases treated by one or several openings followed by prolonged communication with the exterior, there are twenty-three cures, of which at least eighteen may be considered radical, and only seven deaths, five of which must be attributed to a new accumulation of liquids which had been unable to escape, and had putrefied. In ten cases in which the tumor was opened by caustic potassa, were observed three cures, three ameliorations, and four deaths. Dr. Harley thinks, moreover, that the caustic presents no real advantage, and has the disadvantage of being much more painful than the other treatment.

These results therefore tend to confirm the views expressed in connection with the operation for ovarian cysts, namely that the dangers do not depend upon the admission of air into, but the imprisonment of liquids within the cavities, natural or artificial. Escape, escape, escape for all these vile and noxious fluids—such is the watchword of a host of modern surgeons, in a host of cases, and the doctrine is perhaps best applied by M. Maisonneuve, in his apparatus that fulfils at once the double purpose of occlusion of the wound, and aspiration of the liquids at its surface or burrowing in its recesses. I believe I have already described to you this apparatus, or at all events it is well known to you, if only for the reason that every American physician who comes to Paris goes straight to the Hotel Dieu, to see it in operation.

M. Gosselin, at La Charité, carries out the principle of free drainage for other purposes than that of preventing purulent infection. In case of cold and burrowing abscesses, with or without fistulas, he generally inserts a small perforated drainage tube by the original opening, at the same time exercising steady pressure upon the dilated walls of the cavity. In this way he has recently treated with marked success a case of indolent abscess burrowing under the great pectoral muscle, and has now under treatment an abscess at the malleolus, and another resulting from axillary adenitis; a case of rather diffused phlegmon of the neck was similarly treated, but succumbed to the erysipelas which had been imminent from the first day of the disease, much more before the insertion of the drainage tube. This instrument does not in any case seem to provoke superficial irritation around the wound, and what deep-seated irritation may be excited by the pressure of even such a mild foreign body as gutta-percha, does not seem to pass beyond what is advantageous for stimulating the reparative powers of the secreting surfaces.

GUERIN'S SYSTEM OF PNEUMATIC OCCLUSION.

In a recent séance at the Academy of Sciences, M. Guerin gave a résumé of the applications hitherto made

of his system of pneumatic occlusion,—essentially the same as that of Maisonneuve to which I have just alluded. He ranks these applications under four categories.

1st. Wounds and simple surgical operations such as incisions, ablations of cicatrices or of subcutaneous tumors, extractions of foreign bodies from articulations.

2d. Grave operations, such as amputations of limbs, and accidental wounds of the same importance.

3d. Contused wounds, openings of the skin, and simple complicated fractures, that is with perforation of the skin, while the bones are simply broken.

4th. Wounds from fire-arms with dilacerations and destruction of the tissues, fractures with crushing of the bones, and wounds uniting the gravest complications of traumatic lesions.

In the most favorable condition, the pneumatic occlusion produces cicatrization without traumatic fever, and without suppurative inflammation; that is to say, it realizes union by first intention.

In less favorable cases, and when the wound has already been a long time exposed, or contains foreign bodies, or, finally, is complicated with anterior morbid conditions, pneumatic occlusion cannot prevent a certain degree of suppurative inflammation; but in virtue of the continuous aspiration which it exercises, it opposes all accident resulting from the putrefaction and absorption of altered fluids, and in all cases favors, and renders much more rapid, the cicatrization, and consecutive organization of wounds. P. C. M.

Medical Items and News.

Orthopœdic Infirmary.—The Trustees of the Brooklyn City Hospital have tendered the use of their Pathological Hall for the establishment of an Orthopœdic Infirmary, for the gratuitous treatment of deformities of all kinds, and diseases of the joints, under the direction of the surgeons of the hospital. The institution will be open every Monday, Wednesday and Friday hereafter, at 12 M.

Dr. Thos. C. Brinsmade, of Troy, N. Y., died suddenly on the 22d ult., from heart disease.

The State Medical Society of Pennsylvania.—The nineteenth annual meeting of this Society was held at Harrisburg, Penn., June 10, 11, and 12. The attendance was unusually large. The usual routine society business was transacted, and the customary receptions and hospitalities were tendered the delegates. Perhaps the most interesting feature of the meeting was the discussion upon the right to consult with female physicians. A very earnest effort to support a resolution appropriate to this end was made by Dr. Atlee, but after a warm debate it was defeated. Dr. John Curwen, the well known alienist, and the Superintendent of the State Lunatic Asylum of Pennsylvania, was elected President.

O'Reilly Prize. Dr. John O'Reilly, of New York, having offered, through the N. Y. Academy of Medicine, a prize of six hundred dollars for an Essay on the Physiology and Pathology of the Sympathetic or Ganglionic Nervous System, the Committee of Award, appointed by the Council of the Academy, have adopted, with the concurrence of the Council, the following regulations.—1. The competing Essays shall be sent in to the Chairman of the Committee, Prof. J. C. Dalton, M. D., No. 101 East Twenty-third street, New York, on or before the first day of March, 1869. 2. Each Essay shall be marked with some distinguishing device or motto, and accompanied by a sealed envelope bearing the same device or motto, and containing the name and address of the writer. 3. The Essay selected by the Committee shall be transmitted by them, together with its accompanying envelope, to the Council of the N. Y. Academy of Medicine, under whose direction the envelope shall be opened and the name of the writer announced at the first meeting of the Academy in May, 1869. 4. This prize is open for universal competition. 5. The Committee have a right to reject whatever does not come up to a proper standard of merit.

Alfred C. Post, M.D., President of the Academy, *on behalf of the Council.*

Committee of Awards: J. C. Dalton, M.D.; A. Flint, Jr., M.D.; Alfred L. Loomis, M. D.

Contagious Diseases in New York.—The reports of contagious and infectious diseases made to the office of the Sanitary Superintendent of the Metropolitan Board of Health by practising physicians in this city during the two weeks ending June 15, show 178 cases of scarlet fever, 153 of which were under the age of 10 years; 5 cases of typhus fever, the ages varying from 7 to 58; 11 cases of typhoid fever, between the ages of 9 and 47; 13 cases of diphtheria, 7 of which were under the age of 6 years; 7 cases of small-pox, between the ages of 2 and 25. The reports do not indicate the special prevalence of any of the above diseases in particular localities.

The Trustees of the New York State Institute for the Blind held a meeting at Batavia, on the 10th ult. The President, Treasurer, and Secretary were re-elected. The Board fixed upon the first Wednesday in September as the day for opening the new institution for the reception of pupils.

Prof. Pelleger, of Bonn has received a call to the chair recently vacated by the death of Prof. Von Bezold, in the University of Wurzburg.

Mortality of Physicians from Typhus Fever.—Up to May 9, twenty physicians had fallen victims to the typhus fever epidemic at present prevailing in East Prussia.—*Allgemeine Med. Central Zeitung.*

The Jewett and Russell Prizes having been awarded to one gentleman, Prof. Roberts Bartholow, of Ohio, we are requested to state that the unsuccessful authors can procure their Essays from the gentlemen of the committee to whom they have been sent.

Death of Professor Jarjavy.—The Paris Faculty of Medicine again has lost a prominent light, by the death of Professor Jarjavy, who formerly taught anatomy in that institution, and was promoted the present year to the chair of clinical surgery formerly filled by M. Nélaton.

An Ample Fee.—M. Nélaton has left for Stockholm, to operate upon Baron de Hoepner, the Grand Marshal of the Swedish Court, for a tumor. This eminent surgeon is to receive $20,000. His travelling expenses also are to be paid.

New Publications.

Books Received.

The Surgical Treatment of the Diseases of Infancy and Childhood. By T. Holmes, M.A. Cantab., Surgeon to the Hospital for Sick Children; Surgeon and Lecturer on Surgery to St. George's Hospital; Surgeon-in-Chief to the Metropolitan Police, etc., etc. London: Longmans, Green, Reader & Dyer. 1868. 8vo. pp. 648.

Original Communications.

ORIGINAL ADAPTATION OF RECEIVED PRINCIPLES OF TREATMENT IN FRACTURE OF THE THIGH;

WITH DESCRIPTION AND ENGRAVING OF APPARATUS, AND REPORT OF CASE.

By HENRY S. HEWIT, M.D.,

SURGEON TO CHARITY HOSPITAL, LATE MEDICAL DIRECTOR U. S. ARMY, AND DEPARTMENT OF THE OHIO, ETC., ETC.

In October of last year I was called to a distance in the country to a case of fracture of the left femur in the person of a boy 11 years of age. The injury was the result of indirect violence applied by jumping from a height of fifteen feet. The bone snapped with an audible report, and the thigh nearly doubled upon itself. Much difference of opinion arose among the gentlemen who were first called in, and I found him temporarily arranged with the limb lying on its outer aspect, and extended by the weight and pulley.

Displacement and shortening were present and obvious.

Upon careful consideration of the circumstances, the extreme natural irritability of the subject, the distance, and other minor but influential particulars, it was determined to adopt the starch bandage with constant extension.

The fracture was accordingly put up in the immovable apparatus on the third day. Measurement and inspection gave satisfactory evidence in regard to length and symmetry, extension was applied in the usual manner, and the case promised an excellent conclusion. As it progressed, however, it was demonstrated that no power within the capacity of the means at command could control the movements of the child, without injury from undue pressure and constriction. It was discovered that the padding was secretly removed as fast as replaced, and that he had acquired the art of relieving himself from the extending weight at pleasure. There was no surveillance equal to the emergency, and when the dressings were finally removed consolidation had taken place with shortening of 3 4ths of an inch, and slight external angular obliquity.

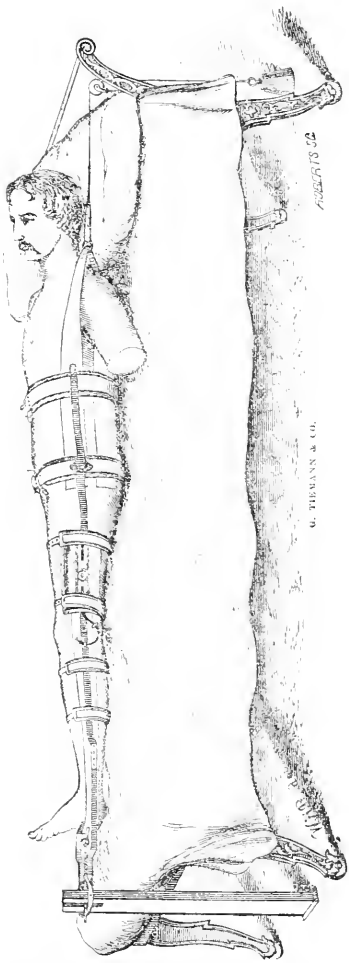
This defective result was by no means in excess of many which are counted good cures; it produced no lameness, and was indistinguishable when the child was dressed.

The attention which the case required, and the difficulties and discouragements by which it was attended, induced much reflection, and I resolved during its progress to adopt on any future occasion the method which I am about to describe.

A few weeks subsequently the little patient fell and refractured the same thigh at the same point. He was brought to the city and again placed under my care. I now caused the new apparatus to be made by Mr. Tiemann, and applied it seven days from the date of the second accident.

It consists of two light flat lateral bars of steel connected by a cross-bar below the sole of the foot. The exterior bar or splint extends from its angle with the cross-bar, six or eight inches below the foot, to the side of the chest opposite the nipple. Two flat bands of steel well padded secure it to the chest and body. The inner bar reaches nearly to the perineum, but does not impinge, and the floor of the splint is of flexible metal carefully padded by a continuation of the bands which secure it to the limb and buckle in front. The two lateral bars opposite the thigh are fenestrated, and nuts are inserted capable of sliding longitudinally, through which play the screws which can be used for the exact application of detached moulded metallic "splints of coaptation."

Extension and counter-extension are obtained by broad straps of adhesive plaster extending from the groin in front and nates behind, secured by additional



bands encircling the body, meeting in a ring at the top of the shoulder, and continued by an elastic cord running over a pulley at the head of the bed, and supporting a weight heavy enough to meet the requirements of the particular case.

Extension is effected and precisely regulated by plaster extending bands connected with a foot-piece to

which the screw playing through a hole in the cross-bar is hooked by an elastic loop. The screws are moved by a detached key, which places them beyond the interference of the patient or his friends. The cross-bar is secured to an upright of wood at the foot of the bed, also by elastic straps, to prevent the upper border of the under portion of the splint pressing against the nates when the extending force is exerted.

Everything having been placed in position, counter-extension by means of a weight of eight pounds was employed, and extension carefully but easily accomplished by the screw at the foot. The limb was made to assume its natural length, twenty-four inches and a half, and this degree of extension was preserved without difficulty to the close of the treatment. The result was recovery with perfect restoration of symmetry and length. These desirable conditions have remained unchanged, and the case has been pronounced perfect by disinterested and competent professional judges. Joints are introduced at the hip and knee, which permit passive motion as soon as consolidation has attained a sufficient degree of firmness, or its conversion into a double inclined plane.

APPRECIATION.

It is distinctly recognized that extension and counter-extension are the elements of correct treatment, and that the muscular substance of the thigh, when the fractured ends of a femur are placed in apposition in a right line, becomes an efficient retaining and coaptating apparatus.

The object of the plan just described is to effect extension and counter-extension easily, safely, and effectually. All other parts of the apparatus and details of method are subordinate to this end, or introduced to meet accidental complications.

The detached splints of coaptation can be used in cases of excessive displacement or of double fracture, and to retain the broken ends in apposition by temporary strong pressure, analogous to that of the hands of the surgeon, during adjustments, and renewal of the plaster bands.

In many cases their use can be dispensed with entirely, excepting for the reasons just mentioned. The perineal band may be also temporarily employed, and the weight transferred to the foot for occasional relief, or if circumstances demand it. All the advantages of the most approved modern methods are combined, with complete control, power of exact regulation, facility of inspection and measurement, and absence of any constriction or pressure capable of exciting pain or producing ulceration. The only distress experienced is the steady draft upon the muscles, and the constraint of position. The accompanying engraving is a correct representation of the instrument and its application.

Dr. S. H. Hunt, of Eatontown, had direct personal charge of the patient during a portion of the treatment, and Prof. Van Buren was associated throughout in consultation.

129 E. 29th Street, June 1st, 1868.

SUPPRESSION OF URINE.—In the *Lancet* of May 23, William Roberts, M.D., details two cases of suppression of urine, for the purpose of illustrating the marked difference between suppression due to disease of the secreting structures of the kidneys, or disturbance of the circulation or innervation of those organs, and suppression due to mechanical obstruction in the pelvis of the kidney, the ureter, or some lower part of the urinary passages. In the latter case, Mr. Roberts shows that the highly concentrated, oily, saffron-colored character of what urine is passed, is an important point in the differential diagnosis.

OBSERVATIONS UPON GANGRENOUS INFLAMMATION,

BASED UPON

MICROSCOPICAL EXAMINATIONS OF THE DISINTEGRATING MATTERS OF THE HOSPITAL GANGRENE.

By PROF. JOSEPH JONES, M.D.,

OF NASHVILLE, TENNESSEE.

DURING the recent war, the writer made numerous microscopical examinations of the putrid matter of Hospital Gangrene, and determined, that it consists of the various structures in a disorganized and disorganizing state, together with the various products resulting from the altered physical and chemical changes. Innumerable granules are observable, with detached masses of fibrous and muscular tissue, broken blood-vessels, disorganizing blood corpuscles, and in some cases, especially when strong mineral acids have not been applied to the gangrenous wound, crystals of the Triple Phosphate.

Animalcules of simple organization, and endowed with active rotary motion, abound in Hospital Gangrene. The number of these varies very much, both in the gangrenous matter and in the urine, in accordance with the changes of the temperature of the surrounding atmosphere. In cold weather they are less numerous than in hot weather. When the gangrenous decomposition of the living tissues has taken place under the sound skin without direct access to the atmosphere, I have also found that the animalcules are not present, or if present, they exist in such small numbers as to elude observation.

After a careful examination of various vegetable and animal matters exposed to the atmosphere under similar circumstances of temperature and moisture, I have come to the conclusion that in the present state of our knowledge we are unable to demonstrate that these animalcules are in any way connected with the origin and spread of Hospital Gangrene. The gangrenous matter appears to afford a *medium* in which these simple forms of animal and even of vegetable life are rapidly generated and multiplied. As far as my observations extend, they show that these animalcules will be generated with similar rapidity in urine containing albumen, or in any nitrogenized body undergoing putrefaction in a warm, moist situation, like that of the wards of a hospital. The warmth of the human body also, without doubt, affords a most favorable condition for the rapid development of these simple forms of animal life. I have been unable to discern any forms of animalcules peculiar to Hospital Gangrene.

With reference to the simple forms of vegetation, they are also present, but in less abundance than those of animal life; and, in like manner, these vegetable organizations are not peculiar to Hospital Gangrene, but are found in all organic matter undergoing decomposition under similar circumstances.

I have been unable to establish any relation between the rapidity of the spread of the disease, and the number and character of the living organisms; and have even found them absent in the most extensive moist gangrene which had been excluded by the sound skin from the atmosphere.

These microscopical investigations have, thus far, afforded only negative testimony upon the animalcular origin of Hospital Gangrene.

I have determined by careful microscopical examinations, *that the pus-globule is not formed in true gangrenous matter.* We do not wish to be understood as asserting that *pus* is *never* formed in a gangrenous wound.

It frequently happens that gangrene may exist in certain portions of a wound, whilst in other portions the reparative process is active. So also portions of the structures may resist for a time complete death, whilst passing into a state of gangrene, and may present some of the changes of inflammation, and yield some of the products of inflammation, one of which may be an altered and imperfectly developed pus. In the healthier portions of a gangrenous wound, we may therefore have the formation of pus whilst in the gangrenous mass the existence of the organizing force is absent, or only acceptably present.

After gangrene has set in and prevailed, the reappearance of pus should be regarded as a favorable sign, it being an attempt at a separation, and an improvement of the parts of the parts immediately surrounding the dead gangrenous matter.

In the local manifestations of the actions of many organic poisons, as those of small-pox, syphilis, gonorrhœa, of sibbosis or sivvens, of yaws, and of various skin diseases, the formation of pus is invariably observed.

In the extensive sloughing of tissue, so often observed accompanying necrosed bones, the formation of pus is universal.

Even in the phagedenic ulcers arising from the abuse of mercury in constitutions worn down by vicious habits, determined by the abuse of alcoholic stimulants and bad diet, and pus-mel by the syphilitic virus, the spread of the ulcerations, and the detachment of the tissues, is attended with the constant formation of pus.

Whatever we view this fluid as resulting from the degeneration of the affected fluids and tissues in these diseases, or as analogous to a secretion thrown out by the parts surrounding the immediate foci of the inflammation, destined to dissolve the diseased tissues; or as one of the natural stages of the change of coagulated lymph, and of granulation cells in the progress of inflammation, it is nevertheless true that the absence of pus in any wound or ulcer which is rapidly enlarging its bounds, indicates marked derangements in the changes of the solids and fluids, and in the action of the forces concerned in ordinary inflammation. Whilst inflammation is justly called a diseased action, and is necessarily attended with derangements in the constituents and forces of the affected part, and in the process of nutrition and secretion—at the same time inflammation is governed by definite laws, and often progresses in such a manner as to preserve the life of an animal, and the functions of the part inflamed; therefore uniform perturbations of the process, as ordinarily observed, indicate clearly the action of some definite cause. And hence also we may correctly speak of a derangement of even the curative characteristic of inflammation.

If we accept the definition that inflammation is "an alteration in the healthy structure and function of a part, accompanied by a perverted condition of the blood and capillary blood-vessels; ordinarily attended with redness, heat and swelling; and inducing more or less febrile disturbance in the general system;" *then in Hospital Gangrene, we observe all the essential conditions of inflammation.* In this disease, there is an alteration in the healthy structure and functions of the affected part, as indicated by the change of color and structure, the fetid odor, and the suspension of secretion and healthy nutrition; there is an altered condition of the blood, as manifested by the dark livid areola, by passive hemorrhages, and by the dusky hue of the complexion; there is derangement of the capillary circulation as manifested in the effusion in and around the gangrenous tissues, and the intense congestion of the blood-vessels in immediate contact with the diseased part; there is redness, pain, heat, and swelling; and there is more or less febrile disturbance of the general system, as manifested in the rapid, feeble pulse, the marked diurnal elevations and depressions of temperature, the depressed spirit and deranged muscular and nervous actions. When the injury of the living tissues is simple, as in wounds caused by a mechanical instrument, the natural result of inflammation appears to be the production of such a fibrous effusion as will surround and isolate the injured or diseased part.

In such uncomplicated cases of the inflammatory process, there will be observed in the injured structures that perversion of nutrition, the destruction of capillaries, the alteration of blood, the exudation of lymph, and the formation of pus; and around the foci of actual distinctive changes, the blood-vessels are distended with blood, and exude the plastic lymph from which the coagulable elements separate, containing the germ cells, destined not merely to form structures inclosing the diseased parts, but also by their development to form a tissue which will replace that which has been destroyed. The lining cells of the lymph may either form tissue or granulations, or they may be arrested and altered in their development, and form pus globules. With regard to the vital properties of coagulable lymph, its essential character is its power to develop itself and assume organic structure. The character and rapidity of the transformations and development of the lining cells of the lymph effused, in inflammation, will depend chiefly upon the cause exciting the disease, and upon the powers of the general system, and upon the constitution of the blood, and, consequently, of the lymph itself. Thus, in open wounds, when the constitutional forces are deficient the granulations may be arrested in their development, or they may become more granular and lose the well-marked characters of their nucleus, and acquire the structure of the pus cell. This degeneration of the lymph cells and granulations into pus should, however, by no means be taken as an evidence that the natural powers of the system are defective, or that the constitution of the blood and lymph is abnormal, for it is invariably present in all wounds which do not heal by immediate contact, or by the first intention, and appears to be intimately associated with, if not absolutely necessary to, the successful healing of the internal parts. It is rather the amount and character of the suppuration which indicate the extent to which the powers are involved. We should therefore regard pus, on the one hand, as a secretion destined to dissolve certain organic tissues, and to shield, by its bland properties, delicate granulating surfaces from the direct action of the atmosphere, and, on the other hand, as a rudimental, imperfectly developed, or degenerated substance, essentially similar to the materials of the lymph of inflammatory exudation, or of granulations, but which has either failed of being developed like them, or which has degenerated after a certain amount of development.

In hospital gangrene, the lymph effused around the foci of disease possesses the power of coagulation, as in other varieties of inflammation, as I have determined by actual experiment; and there appear to be all the conditions necessary for the arrest of the disease by the development of coagulable lymph, through nucleated cells, into the fibrous and fibro-cellular or connective tissue; but the characters of the irritant poison are such, that the products of inflammation, together with the blood-vessels and the blood itself, are rapidly disintegrated. The life of the blood is destroyed by the gangrenous poison, and the fluids and living organizable matter and cells, upon which the progress of inflammation depends, are poisoned. It results from this, that the liquor-sanguinis effused within the diseased structures does not

pass into the state of *pus*, as in healthy wounds, and in the common furuncle and carbuncle, or even in erysipelas and the pustules of small-pox; and the exudation corpuscles are so poisoned and disorganized, that they are not further changed in either a progressive or descending series; and whenever the limiting fibrous wall is thrown out with its cellular elements, it is in like manner destroyed whenever it is reached by the poison. All the changes of the blood characteristic of ordinary inflammation, may be present around the gangrenous parts; as the increase of liquor-sanguinis, with increase of its albumen and fibrin, both actually and relatively, to the blood corpuscles, aggregation of the red corpuscles, and increase of the colorless or lymph corpuscles; but no arrest of the disease will take place as long as the poison is capable of exciting rapid change and decomposition after the manner of a nitrogenized ferment in the products of inflammation.

If in a wound infected with Hospital Gangrene, the morbid process did not advance, as in any other wound, from the centre to the circumference, with the central focus of infection and active disorganization surrounded and guarded as it were by a circle of active congestion, with blood-vessels loaded with colored corpuscles, with interrupted circulation, and exudation of plastic liquor sanguinis, and with venous and lymphatic absorption greatly impeded, if not altogether arrested, the gangrenous poison would enter directly and rapidly into the circulation, and prove rapidly fatal. And even after the excitation of inflammation, in virtue of the irritant properties of the poison, in every case of Hospital Gangrene of any standing, more or less of the poison is absorbed and affects the general system. The extent of this absorption of the deleterious agent or agents, will depend upon many circumstances, but chiefly upon the character and extent of the inflammatory process around the immediate centre of infection.

We may in these facts find some explanation of the relief sometimes afforded by hæmorrhage in Hospital Gangrene. The poison is diluted and washed out by the blood at the same time that the inflammatory congestion is relieved.

Finally, the results of these microscopical observations clearly sustain the view that Hospital Gangrene is due to the action of an *irritant organic poison*, which, after the manner of a ferment, is capable of inducing such decomposition in the tissues and in the blood, that all development of the cellular elements of the liquor sanguinis into cells, fibres, or into pus, is arrested.

REMOVAL OF
A LARGE HORSE-SHOE PESSARY
(HODGE'S OPEN LEVER)
FROM WITHIN THE CAVITY OF THE BLADDER WITHOUT INCISION.

By HORATIO R. STORER, M.D.,

OF BOSTON,

SURGEON TO THE FRANCISCAN HOSPITAL FOR WOMEN.

(Communicated to the Suffolk District Medical Society, May 30, 1868.)

On the afternoon of May 11, 1868, Miss ——, a young school-mistress, residing some miles from the city, came to my office, and requested me to remove a horse-shoe pessary, which she said had been inserted by her physician five days before, and had ever since caused her a great deal of pain. The lady had some time previously consulted me. I had found her suffering from anteflexion, and at my suggestion she had from time to time worn the instrument referred to, with a good deal of benefit, it being occasionally removed for a while, until annoyance from the displacement returned.

Surprised to learn that it was now distressing her, I proceeded to seek for the cause, and found, to my greater astonishment, the vagina empty. Stating to the lady that she must have been mistaken with reference to the instrument having been introduced, she replied that this was impossible; she was sure it was there. I now requested a physician who was present, Dr. Richardson, of Hartford, Conn., to examine the case, stating to him that I could not convince the lady of her error, and desiring him to express to her his own opinion. She still declared that the pessary must be there, while it was very evident from the tonicity and normal condition of her nulliparous vagina, and from what I knew to be the size of the supporter she had worn—for it had first been inserted by my assistant, Dr. Stone—that it could neither have spontaneously escaped, nor have been removed by any efforts of the patient herself.

Being impressed by her pertinacity, I thought that possibly the instrument might have been slipped into the anal instead of the vaginal orifice, and accordingly made a careful exploration of the rectum and sigmoid flexure, without avail—the lady still insisting that the instrument was within her somewhere. It could not be within the uterus, for that organ was too small to have contained even a segment of the rod of which the pessary was composed, and the os was, besides, undilated. I now made a bimanual examination of the bladder, and thought that in the suprapubic region, far away from, and equi-distant from the pubic arch, I could indistinctly feel two blunt points. The vaginal touch showed the anterior portion of the vaginal cul-de-sac upon the stretch, while, close to the uterus, at the junction of the cervix with its central third, there was a broad and lengthened region of induration. Upon passing a sound into the bladder, the urethra was found free, but, far backwards and downwards, there was the click of a foreign body. The sound, looked beneath this, raised and brought forward the bar of induration felt through the vaginal wall, and depressed the points felt through that of the abdomen, thus confirming the diagnosis. The pessary was completely within the cavity of the bladder, which it had distended to the utmost, and was lying with the centre of its closed portion directly opposite the outlet, but with its convexity, instead of its concavity, forwards.

Not particularly satisfied with this condition of things, I told the lady that her return home under such circumstances was contra-indicated, and the more completely to prevent her being excited or interfered with by her friends, admitted her to the Franciscan Hospital.

The next afternoon at 1 o'clock, I proceeded to operate, having present Dr. Richardson, who had seen the patient with me the day before; Dr. King, of Franklin; Dr. Pinkham, of Lynn; and my assistant, Dr. Stone. Without the aid that these gentlemen rendered me, I could hardly have succeeded in obtaining the result that was achieved. The patient having been etherized, the pessary was found in precisely the same position that it had occupied the day before. It was sufficiently evident that any of the usual sections for lithetomy would prove unavailing, or very dangerous. The suprapubic section would have required an extensive incision, for it would have opened down upon the pessary between, and at a distance from, its lateral bars; and the vagina was so distended by their wide expanse, that very little assistance could have been rendered by digital coaxing through the wall of that canal. There would, moreover, have been, as there always is

in women, on account of the excess of adipose tissue clothing the mons veneris, a serious predisposition to subsequent extravasation of urine. Had the lateral variety of suprapubic section been performed, so as to cut directly down upon one of the bars, the danger of extravasation would have been increased, with the added risk that, owing to the lateral curves of the bladder, the incision must have dipped lower down, and almost necessarily have opened the peritoneal cavity. Equally grave objections obtained with regard to vaginal section, either at the base or fundus of the bladder. The incision, of course, could easily enough have been made, and though cutting upon the central and closed portion of the pessary, this could, undoubtedly, after a sufficient amount of manipulation, have been extracted. But suture of the necessarily large opening through the vesical wall, the vagina being a very tense and narrow one, would have been much less easy than in ordinary cases of vesico-vaginal fistula, even where attended by narrowing from cicatrices and bands of adhesion.

Vestibular section, at either of the usual points of selection, would have been as plainly attended by the serious difficulties resulting from the pessary. There remained, therefore, only urethral division or its dilatation, rapid or gradual; each of them affording but a forlorn hope of permitting sufficient rotation of the instrument to allow it to be withdrawn in the only way possible, viz., by one of its extremities. It would have been very difficult to remove a rod of its dimension, more than twice that of the ordinary silver female catheter, by direct traction, even if the point could be engaged in the urethra, and a tolerably firm grasp have been exerted; for this under such favorable circumstances could hardly have equalled the vis a tergo which caused its introduction. And how under any ordinary methods of procedure could it be hoped to move one of those far away points into the position desired? It was, moreover, impossible to grasp the pessary by any form of forceps, of which I had several with me; for, putting aside the certainty of their slipping, the diameter of the pessary rod was such as to necessitate a corresponding separation of the handles of any ordinary forceps within the urethra and there was, besides, the additional thickness of the blades themselves to be withdrawn through that canal—while the only other alternative that could be imagined, the cutting in twain of the pessary itself, was precluded by the mechanical difficulties to which I have just alluded, and by the unyielding material, hard rubber, of which the pessary was composed; by its rounded, slippery surface; by the impossibility of steadying it by pressure behind it, and by the great risk in case the cutting pliers, even had it been possible to apply them, should slip, and, under the force that only could have been of the slightest avail, perforate the tissue and organs behind the bladder, and at once produce a fatal result.

Under the circumstances, I was perhaps excusable in stating to my associates that I considered the case by far the most difficult that had ever presented itself to me in practice. I had removed pins and hair-pins from the female bladder; but what were the worst difficulties attending the presence of such foreign bodies, in comparison with those now before us!

My only choice, as I have said, was necessarily between urethral division and its dilatation, rapid or gradual. As to division, in view of the manipulation that must be effected before the pessary could possibly be withdrawn, there was but little to be hoped for in this quarter. Incision superiorly, or to either side, could have given but little advantage; while inferiorly, no more could be accomplished unless the urethra were slit through for its entire length, and after this were effected, there would still remain to be performed that so difficult evolution of the pessary, or rotation upon its longitudinal axis, and the subsequent closure of the opening into that narrow vaginal outlet.

I was thus forced to dilatation as the only means left me, though fully aware of the objections that have been made to it for the removal of calculi, by Emmet and others. Should the dilatation be gradual? This, whether by tents or by branched dilators, would take time, and already, five days of pain and irritation had elapsed. To produce a sufficient amount of dilatation, a comparatively long-continued pressure upon the urethral walls would be necessary, and the risk of a slough, or of permanent incontinence of urine, would of course be proportionately increased. There was, then, nothing left but to dilate as rapidly and as extensively as should be possible.

I now, by graduated uterine bougies, dilated the canal sufficiently to receive the tip of the little finger of my right hand, the patient being upon her left side. By steady, continuous pressure, or rather coaxing, I succeeded in inserting this finger entirely, and could then only touch the centre of the pessary at the posterior portion of the bladder; the points, even when extreme pressure was made above the pubes, could not be brought within reach. Efforts were made to rotate the pessary by the aid of the forefinger of the left hand within the vagina, but without avail; and very shortly I was compelled to desist on account of the severe pain I was suffering myself, the position of the centre of the pessary being such that I could only reach it with my right little finger by stretching this away from those adjoining it, the hand being supine, while upon turning it with the palm downwards, the remaining fingers of the hand, by closing the vulval outlet, effectually prevented any assistance by introducing the forefinger of the other hand.

I now tried the little finger of the left hand with no better result, although I am ambidexter. So far I had accomplished nothing. Forceps was introduced, and the insurmountable character of the obstacles already indicated was practically shown, while hæmorrhage, which now began to show itself despite all the care that had been taken, warned me against further essaying what was, at least by this means, an impossibility. Determined, however, to succeed if success was possible, I now rapidly and forcibly passed my right forefinger, and, to my great delight, found that I could grasp the bar with the pulp of the first phalanx, much as an elephant seizes an object with the tip of his proboscis, and I now felt that the case was practically my own. For some twenty minutes, or half an hour, with the active assistance of my friends, who controlled, as they best could, the points of the instrument through the thick abdominal wall, I essayed the required evolution—one forefinger being in the bladder, the other in the vagina. It was necessary that the position of the pessary should be completely reversed and that the right bar of the instrument—this looking forward, the concavity being upward, and the patient still lying upon her left side—should enter the outlet. Otherwise, of course, extraction would be impossible, as every one familiar with the vaginal use of the horse-shoe will at once perceive. So that I not only had with the tip of my forefinger, which was aching badly from the compression to which it was subjected, to bring one of the distant extremities of the pessary to, and into, the opening which my finger already occupied, but it was necessary also to make a selection between them, and not merely this but to see to it that the pessary was right side up, its concavity looking forward, else my efforts must be in vain. I

have often thought, when turning the fœtus in utero, how completely the mind and the touch must coincide in order to effect success, and have been even more impressed with this when essaying version where the membranes have remained unbroken; but how simple and easy were these procedures in comparison with the present!

Several times I all but succeeded, and each time the upper limb, in its rotation, impinged upon the arch of the pubes or one of the rami, and the instrument slipped back in an instant; but, at last, by a fortunate coincidence of position, continued manipulation and forcible pressure, a point of the instrument was engaged in the urethral aperture, was protruded by pressure behind from within the vagina, was seized, the three-quarters rotation was effected, and, to the joy of us all, there came the safe deliverance.

Large flax-seed poultices were applied to the abdomen and within the vulva, and after twenty-four hours the patient was sitting up to a hearty meal, with but little disturbance of micturition. A day or two afterwards there was some threatening of peritonitis; but this readily yielded to appropriate treatment. Convalescence was uninterrupted, and the patient at once regained complete control of the vesical sphincter.

The instrument that was removed measures as follows:

Outside length	8½ inches
Central longitudinal diameter	2⅝ "
Breadth between points	2 "
Diameter of rod	½ "

Height of curve, the posterior portion being depressed just enough for it to touch the surface on which it lies, 1 inch and 1 line.

The above case is interesting in more than its difficulties and its singularity. So far as I have been able to learn, it is unique, alike as to the size, resistant material, and character of the body removed. It may be thought that its very occurrence argues ignorance or great carelessness on the part of the gentleman in whose practice it occurred. Such, however, is not the case; for I have had previous abundant evidence of his knowledge of the principles laid down by Dr. Hodge concerning his levers, his practical familiarity with this especial form of them, and his general caution in their employment. Here was a young woman with a very small vaginal aperture, sensitive both physically and mentally, whose feelings the Dr. wished to spare as much as possible. Guiding one point of the instrument with his finger, it became engaged in the meatus urinarius—an accident which, under the circumstances, might easily occur. To use his own words, the rod slipped in as easily as a catheter; he gave it the usual vaginal turn, and in a moment it was gone. A little surprised at his own dexterity, he made a partial vaginal exploration; but, taking it for granted that the instrument was high up in the vaginal cul-de-sac, and the patient asserting strongly that she felt the *uterine* support, as might well have been the fact temporarily, he desisted from further examination. Fortunately for him that the case fell into friendly hands. There are those who might have called this accident an unpardonable error, instead of seeing in it only an instance to warn themselves of the possibility of its occurrence. Those only who have never, in passing the female catheter, found its point sliding down into the vaginal rather than into the urethral orifice, can have the right to miscall the gentleman's misfortune. None such, however, exist.

Dr. Livingstone.—Sir R. Murchi on has expressed the opinion that the return of Dr. Livingstone may be looked for in August.

Original Lectures.

SOME OF THE LATEST DISCOVERIES IN PATHOLOGY:

BEING REMARKS MADE BEFORE THE NEW YORK MEDICAL JOURNAL ASSOCIATION, JUNE 19, 1868.

By W. NEFTEL, M.D.,

NEW YORK.

Mr. President and Gentlemen: The remarkable facts and observations accumulated during the last few years are so numerous that it would require more than one evening to give even an imperfect sketch of them all. I therefore decided to plunge at once into the most difficult and interesting subject, namely, the phenomena of inflammation and suppuration.

But, before entering into the subject, I will ask you, gentlemen, to examine under the microscope these living specimens, in order to be able to judge of the changes that will take place in the course of the evening.

It is almost impossible to give an account of modern progress in pathology without touching upon the great reform started by Virchow. As you are aware, he established a group of so-called connective tissues, to which belong the fibrous, the mucous, the adipose, the elastic tissues, the cartilages and bones. They all consist of cells and intercellular substance, and this is their common feature. The cells vary in shape; they are either spherical, spindle-shaped, stellate, isolated, or with anastomosing projections. The intercellular substance is hyaline and amorphous, or opaque, granular, fibrillous; and yields either gelatin, mucin, chondrin, or earthy salts. The different tissues of this group replace one another. So, for instance, the connective tissue can be transformed into bony tissue by the deposit of earthy salts in the intercellular substance, as in periosteum, in the intima of arteries, in the arachnoid, etc. In the same way can also cartilage be transformed into bony substance, fibrous tissue into elastic, adipose into mucous, and so forth.

This established, Virchow again makes a startling discovery, and we learn that all new formations—pus, tubercle, sarcoma, cancroid, cancer, etc.—are produced by the proliferation of the cells of connective tissue or its equivalents. The difference is given by the mode and degree of development of the new-formed cells, by the average duration of their life, by the increased or diminished formation of intercellular substance, and by their progressive or retrograde metamorphosis. In all these pathological processes we first observe the connective tissue corpuscles increasing in size, absorbing more nutritive fluid, and thence becoming more opaque (Virchow's cloudy swelling). The nuclei next commence to divide, then the cell-membranes do the same, producing new cells. In the case of tubercle, for instance, the multiplication of cells is very rapid; they do not arrive at a high degree of development; but, on the contrary, from their great number and mutual pressure, they obliterate the blood-vessels, and very soon perish, shrivel, and undergo cheesy metamorphosis. In other new formations, the cells are also produced by the proliferation of connective tissue corpuscles, but with less rapidity. The cells grow larger, and are separated by a great deal of intercellular substance, as is the case in fibrous tumors. But when the intercellular substance gets scarcer, and at the same time the cellular elements become more numerous, we have the sarcoma. If, again, in the diseased tissue we find the cells more of an epidermoid character, and contained in cavities or alveoli, it is the cancroid, often

improperly called epithelioma.* The same alveoli, filled with cells of a similar type, but in a new-formed stroma, characterize cancer.

Pus, according to Virchow, is also originated by the very rapid proliferation of the connective tissue corpuscles. Pus-corpuscles, like the cells of tubercle, are incapable of organization, and liable to cheesy metamorphosis; although they very often undergo fatty degeneration, or molecular disintegration, producing a kind of emulsion, in which condition the detritus of pus can readily be absorbed. On the mucous and serous surfaces Virchow admits of the pus being formed by the proliferation of epithelial cells. The pus-corpuscles cannot be distinguished from the colorless blood-corpuscles and the lymphatic cells, either by their micro-scopical appearance or by chemical reaction, and there exists no criterion to justify any distinction.

Inflammation has always been considered as a pathological process, accompanied by the well-known four cardinal symptoms—heat, redness, swelling, pain. But the Vienna school, based upon anatomo-pathological investigations, took as the only criterion of inflammation its products or exudation, that transudes from the blood-vessels and can either organize itself or be metamorphosed into pus. At the same time the blood was considered as containing a larger amount of fibrin (hyperinotic crasis).

Virchow was the first to upset this theory. He showed that in a great many inflammations free exudation cannot be found at any period of the process; as, for instance, in hepatitis, where, under the microscope, we observe nothing but enlarged hepatic cells. Again, tissues destitute of blood-vessels, like the cornea, articular cartilages, are also liable to inflammation, though it is the blood-vessels alone that were considered as the source of exudation. Virchow therefore concludes that neither blood-vessels nor exudation are essential to inflammation; but the cellular elements of any organ, under the influence of some irritation, will attract, absorb and transform a greater amount of nutritive fluid than in their normal condition. With regard to the increased quantity of fibrin in the blood, he considers it not as the cause but as the consequence of inflammation. Wherever the fibrin occurs in the body, he does not admit of its being an excretion from the blood, but considers it as a local production of the lymphatics from the metamorphosed tissue.† We therefore find fibrinous dyscrasia in inflammations of organs abundantly provided with lymphatic vessels, and connected with numerous lymphatic glands, like the lungs, pleura, etc.; whilst, on the other hand, in such organs as the brain, where no lymphatics exist, inflammation is never accompanied either by increased fibrin in the blood or by fibrinous exudation in the organ itself.

These views of Virchow, with which we are all sufficiently acquainted, have been adopted by almost all pathologists.

The latest modifications of his theory start from the recent investigations concerning the structure of the connective tissue, and the new observations of the vital properties of cells. Recklinghausen,‡ by means of a new method of treating the connective tissue with a weak solution of nitrate of silver, discovered a network of anastomosing canals intersecting it in certain directions, and named these canals juice-conveying canals (Saftkanäle). He considers them to be the source of the lymphatics.

Until lately it was thought that cells consist of a membrane, cell-contents, and nucleus; but now we have every reason to believe with Max Schultze,* Brücke,† Haeckel,‡ and others, that the cell-membrane is not indispensable to the life of the cell, and that there are cells altogether destitute of a membrane. Very excellent specimens for the study of these facts are the amœbæ, the whole organization of these creatures being nothing more than one single cell, containing but a lump of protoplasma with a nucleus, and positively no trace of a membrane.

Extremely important is the discovery of the active contractions of the protoplasma, a vital phenomenon, by means of which the cell not only changes its shape, but produces locomotion. Recklinghausen§ showed that the pus-corpuscles are also endowed with vital properties of active contraction and locomotion. Having cauterized the cornea of animals, and examined with the microscope the turbid aqueous humor, he found the opacity of the humor dependent upon the presence of a great number of pus-corpuscles, which all exhibited very strange properties. They never retained the usual globular form, but continually altered it by sending forth one or several projections, to the extremity of which the bulk of the cell was attracted, and by this means produced locomotion. Though continually modifying their shape, and sometimes assuming the most curious forms, their volume always remained the same. These are undoubtedly vital phenomena; so much the more, as when the cells were brought under conditions incompatible with life, they assumed their usual globular shape and became immovable. To arrest their vitality it sufficed to dilute the aqueous humor; to concentrate it by adding some salt or sugar; to increase or lower its temperature; to allow the least evaporation; or to produce the slightest pressure, as by the use of a covering glass. Recklinghausen then produced suppuration in animals, and with the following precautions he examined the pus. To dilute it he used either aqueous humor or Max Schultze's iodized serum;‖ to keep up a uniform temperature and prevent exosmosis from evaporation, he constructed a so-called moist chamber (feuchte Kammer), that has since been improved by Kühne, and carried on the observations on M. Schultze's heated objective. The fresh pus from a living man or animal gave the same results—the pus-corpuscles performing the most active movements and incessantly changing their shape, exactly as was observed in the aqueous humor of an inflamed eye.

Haeckel found that the white blood-corpuscles and lymphatic cells exhibit the same amœboid movements as the pus-corpuscles, and considers them likewise lumps of contractile protoplasma destitute of cell-membrane.

In the cornea and other connective tissues of living animals Recklinghausen observed, besides the usual connective tissue corpuscles, a few others, smaller in size, having a complete similitude to the pus-corpuscles and colorless blood-corpuscles, and exhibiting the same change of shape and locomotion. He calls them contractile and movable cells of the connective tissue, or wandering cells (wandernde Zellen), and thinks their locomotion is performed through the canals he discovered in the connective tissue. Now I beg to make a digres-

* Virchow: *Gesammelte Abhandlungen*, Frankfurt, 1856, S. 1015.
† Ibid., S. 604.
‡ F. v. Recklinghausen: *Die Lymphgefässe und ihre Beziehung zum Bindegewebe*. Berlin, 1862.

* M. Schultze: *Das Protoplasma der Rhizopoden und der Pflanzenzellen; ein Beitrag zur Theorie der Zelle*. Leipzig, 1863.
† E. Brücke: *Ueber die sogen. Molecularbewegung in thierischen Zellen*.—Sitz. der Wien. Acad. der Wiss., Bd. xlv.
‡ E. Haeckel: *Die Radiolarien; eine Monographie*. Berlin, 1862.
§ F. v. Recklinghausen: *Ueber Eiter und Bindegewebskörperchen*.—Virchow's Archiv, Bd. xxviii., S. 157.
‖ Virchow's Archiv, Bd. xxx., S. 263. Iodized serum is composed of albumen of egg, water, chloride of sodium in a certain proportion, and a little iodine.

sion, and say how Recklinghausen* succeeded in demonstrating, what previously could only be presumed, that the red blood-corpuscles originate from the white ones. He found that blood taken from a living frog, kept at a certain temperature, and with sufficient access of moist air daily renewed, will be perfectly well preserved for a long time (thirty-five days); the coagulation disappears and the blood displays no signs of decomposition. He could observe how the colorless blood-corpuscles began to emit homogeneous, highly refracting projections, that by and by separated from the cells and assumed the color and other properties of the red corpuscles. Lately, again, Friedreich,† in examining the red blood-corpuscles from the urine of patients affected with leuchæmia, ascertained that they too exhibit changes in their appearance; they get constricted and divide, then each separated part assumes the properties of a red blood-corpuscle.

I have dwelt a little longer than I purposed on these wonderful properties of the contractile cells and the connective tissue, because they are called to exercise a vast influence over our knowledge of pathological processes, as will be seen from the following account of Cohnheim's admirable researches.‡

To study the phenomena of inflammation and suppuration, Cohnheim chose the cornea, which for its transparency and absence of blood-vessels has often been the classical territory for microscopical investigations. Already, in 1852, His§ had produced traumatic keratitis, and ascribed the subsequent opacity of the cornea to the presence of an innumerable quantity of pus-corpuscles, originating, as he thought, from the proliferation of the corneal corpuscles. This last presumption proved erroneous, when Cohnheim, treating the cornea with a weak solution of chloride of gold, was enabled to observe distinctly the condition of each—the pus-corpuscles, the corneal corpuscles and the intercellular substance. He saw that the corneal corpuscles undergo no change; they do not proliferate, but remain in the same condition from the beginning of the inflammation and after its resolution. The pus-corpuscles, on the contrary, exhibit continual changes of shape, producing active locomotion.

To call forth traumatic keratitis, Cohnheim cauterized with lunar caustic a small central spot in the cornea of a frog; and immediately after appeared the well known whitish gray eschar from the action of nitrate of silver on normal elements. For some three days the cornea around the cauterized centre remained unchanged, whilst the conjunctiva became hyperæmic; and twenty-four hours after the cauterization a narrow, opaque, whitish gray line appeared at the upper margin of the cornea, extending in a radiate direction to the central eschar, which it reached about the third day. Then the opacity increased at the upper part of the eschar, whilst at the same time it began clearing away from the upper margin of the cornea. The same process, but in a less degree, was observed at the lower margin of the cornea until the fifth or sixth day, when the opacity had concentrated around the cauterized spot, leaving the rest of the cornea perfectly free and exhibiting its normal appearance. These so to say clinical observations, submitted to microscopical analysis, give the following result. The pus-corpuscles move from the upper and lower margins of the cornea towards the cauterized centre, where they accumulate and produce the intense opacity. They exhibit the appearance of the wandering cells of Recklinghausen, and perform their transit exactly in the direction of the juice-conveying canals. As soon as their migration is over, the marginal corneal corpuscles, that until then were hidden by the pus-corpuscles, become perfectly distinct. From the fact that the pus-corpuscles did not at first appear in the place of irritation, but near the insertion of the superior and inferior recti muscles, where the largest blood-vessels of the conjunctiva approach the cornea, Cohnheim concluded that the origin of the pus-corpuscles must be in some close relation with the blood-vessels, and tried the following experiments. He injected into one of the lymphatic sacs, or into a vein, of a frog finely divided carmine or aniline-blue,* which are known, since Haeckel, to be readily absorbed by colorless blood-corpuscles and lymphatic cells; and he found red or blue molecules contained in some of the white blood-corpuscles of the circulating blood, but all the organs remained free from similarly colored cells. When, on the other hand, inflammation was produced after the injection, the result proved different. It was also in the pus-corpuscles of the inflamed cornea that he now found the coloring particles that had been injected into the lymphatic sac or blood-vessel, whilst the corneal corpuscles and the intercellular substance remained free from them. This was sufficient evidence for the origin of the pus-corpuscles being from the blood; otherwise stated: *the pus-corpuscles were at first white blood-corpuscles.* It remained only to watch their transition, and decide whence they come, and in what way and under what conditions they make their way towards the inflamed tissue.

Cohnheim at once transferred the field of observation to the mesentery of the frog; the cornea, being destitute of blood-vessels, could not answer the purpose.

The mesentery is very convenient for microscopical observations, being transparent and at certain intervals containing blood-vessels. Traumatic inflammation can easily be produced in it, either by cauterizing with lunar caustic, or applying tincture of cantharides, or still better by drawing out of the abdominal cavity the mesentery together with the intestines, and exposing it to the influence of the air. Hyperæmic condition develops itself very soon; the vessels get fuller and appear on the intestines as a uniform redness. In a few hours the whole surface is covered with a kind of dimness, and at the end of twenty-four hours the mesentery and intestines wear a layer of soft, grayish, tenacious matter, that can be lifted like a so-called false membrane. The microscope shows it to consist of pus-corpuscles and a few red blood-corpuscles, all imbedded in an amorphous fibrinous matter; exactly the same course and the same characteristic products (the well-known fibrinous purulent exudation) that we find in the traumatic peritonitis in a woman after ovariotomy. If we return the inflamed mesentery and intestines into the abdominal cavity, and close the wound with sutures, the frogs generally recover; and after a while no trace of peritonitis, no adhesions can be found, so completely will the exudation be absorbed. When, on the contrary, the mesentery is left exposed to the air, the animal always dies.

The remarkable influence of the nervous apparatus of the mesentery on the action of the heart has been demonstrated by Goltz, who by striking on the abdomen of the frog produced paralysis of the heart. I have often observed during the operation of ovariotomy how instantly the action of the heart gets weak and irregular as soon as the mesentery is exposed to the irritating influence of the air.

* F. v. Recklinghausen: *Ueber die Eiterzellen rother Blutkorperchen.* Arch. f. r. Microsc. Anatomie, I. S. 137.

† Virchow's Archiv, Bd. xii, S. 395

‡ Virchow's Archiv, Bd. xl, S. 1 79.

§ His: *Beitrage zur normalen und pathologischen Histologie der Cornea.* Basel, 1856.

* The best way to obtain carmine in a finely divided condition is to dissolve it in ammonia and precipitate with acetic acid. Aniline can be precipitated from its alcoholic solution by an excess of water.

For convenience of observing the phenomena of peritonitis, male frogs are chosen, to avoid the voluminous ovary; and a very small dose of woorara is injected into one of the lymphatic sacs to call forth a complete paralysis; but so small must be the dose as not to allow the paralysis to get developed sooner than two hours after the injection, in which case the circulation continues in the usual way, and the peritonitis takes its regular course; forty-eighty hours after the injection the frog recovers its mobility. When the paralysis is complete, an incision is made through the skin and muscles on the left side of the abdomen, not to have the liver in the way; the mesentery, with the intestines, is drawn out and fixed on the objective, as in the preparations before you. To prevent evaporation and drying up of the specimen, a drop of M. Schultze's iodized serum is occasionally used, as it somewhat corresponds to the natural fluid of the living body, and is therefore indispensable for observation of the vital phenomena of tissues.

Immediately after the mesentery is drawn from the abdomen it appears pale and transparent, and allows us to recognize all the characters of the connective tissue with its corpuscles and elastic fibres, with the nerves subdividing, and the nuclei of the pavement epithelium on its surface. The varied appearance of the blood-vessels is extremely attractive. The arteries are narrower than the veins, and are easily distinguished from them by the opposite direction and greater celerity of the stream, by the pulsation synchronous with the systole of the heart, and by the character of the stream containing in the centre the blood-corpuscles and at the circumference the so-called colorless plasmatic layer. In the veins the blood circulates much more slowly, and in a contrary direction, from the intestines to the basis of the mesentery; there is no pulsation; and in the plasmatic layer from time to time appear colorless blood-corpuscles. The color of the venous blood is at first darker than that of the arterial, but after a while, probably from the influence of the air, it becomes lighter and scarcely differs from that of arterial blood. In the capillaries, where the stream flows very slowly, every blood-corpuscle can be seen separately, especially in the smallest capillaries, where each red or white corpuscle, on its way through, touches the wall of its vessel and consequently can be perfectly observed. The direction of the stream in the capillaries is from the arteries to the veins.

But the condition of the blood-vessels changes very soon after the mesentery is drawn out. The arteries begin dilating, and in a few hours attain double their former size, when the stream is manifestly retarded, and the blood-corpuscles fill the whole vessel to its walls. The plasmatic layer exists no more, and its room is occupied mostly by the colorless blood-corpuscles. The arteries remain in the same condition throughout the whole process of inflammation, whilst the veins and capillaries present the following remarkable phenomena. The veins, like the arteries, begin dilating to the double of their original size; next follows a considerable retardation of the stream and the disappearance of the plasmatic layer; the white blood-corpuscles, accumulating around the wall of the vein, become immovable; their number largely increases, mostly by the constant arrival of similar ones from the capillaries and from the axis of the vessel, where an uninterrupted stream of red blood-corpuscles continues to flow, whilst the white ones stick to the walls and completely line the interior surface of the vein. After a little while small colorless globular elevations or excrescences appear on its outer surface; they gradually get pear-shaped, and keep to the wall only by a thin pedicle that at last separates itself entirely; and we have, on the outside of the vein, contractile colorless cells with one or several projections. The same process continues on the entire surface of the venous wall; and in a few hours we find several rows of colorless cells outside, the inner series yet protruding through the wall and being replaced by the new comers; whilst the red stream still continues in the axis. If coloring matter be injected, it is easier to observe the emigration of the white blood-corpuscles, containing red or blue particles, from the interior of the vein through its intact wall.

After the dilatation has begun in the arteries and veins, the capillaries, too, dilate a little; and whilst in some of them the current continues regularly during the whole process of inflammation, in others it slackens, and in others again a complete cessation of the stream takes place. This stasis in some capillaries disappears after several hours' duration, and in others remains permanently. Where the circulating stream keeps regular, nothing abnormal is noticed in the vessel; where, on the contrary, it gets slower or ceases altogether, the same process as in the veins begins in the capillaries. But whilst through the dilated veins white blood-corpuscles alone emigrate, in the capillaries after the passage of the white cells we perceive the escape of the red ones. Owing to the thinness of the wall of capillaries, we can see distinctly how the blood-corpuscles protrude to the outside of them; and it often happens that, whilst making its way through the wall, the part of a red corpuscle yet in the inside of a vessel is torn off and carried away by the passing stream, so that amongst the emigrated cells we find outside the capillaries débris of red corpuscles.

The process of emigration of white blood-corpuscles continues to such an extent that at the end of twenty-four hours the whole field of observation gets covered, and the once transparent mesentery now becomes filled or, as we say, infiltrated with pus-corpuscles, which at last emerge in large numbers to the free surface, exhibiting their usual active contractions and locomotion.

As in the frogs, so Cohnheim produced peritonitis in rabbits and cats, under the influence of an anæsthetic. He examined microscopically and found the same results, with this difference only, that the animals generally died before the end of the process.

Some explanations of these phenomena must yet be given to sum up the whole pathological process.

The dilatation of the vessels depends probably upon the paralysis of their muscular coat. The accumulation and stagnation of white blood-corpuscles is explained by their adhesiveness; for even under normal conditions they exhibit a tendency to approach the wall of the vessel, but being pushed forward by the current and pressed from all sides by the circulating red corpuscles, they retain their globular form. As soon as, in consequence of dilatation, the current gets weaker, they stick to each other and to the wall, and finally become immovable. Then they begin their amœboid movements, and send forth projections into the wall of the vessel. The coats of the blood-vessels are permeable, because between the epithelial cells lining their inner surface there are apertures (stomata) discovered by Oedmansson; these of course get more open during dilatation and a mit of the free escape of the cells. The intima and adventitia, as well as the connective tissue between the muscular fibres of the media, possess Recklinghausen's canals; and the blood-corpuscles, passing through them, continue their wanderings by the canals of the connective tissue of the mesentery until they arrive at its free surface, where they constitute pus. They get imbedded in the transuded plasma, which coagulates under the influence of the air. The capil-

laries, too, as has been shown by Aeby* and Auerbach,† possess epithelium and stomata.

Here I will mention that M. Charles Robin, who certainly is the most prominent of French histologists, in one of his latest works ("*Sur l'inflammation et les raissaux capillaires*"), still asserts that the walls of capillaries and of blood-vessels in general are perfectly impermeable, and that particles suspended in the blood, and cells, cannot pass through them unless a rupture have previously taken place. This is now obsolete, as you can convince yourselves by examining the preparations before you. Lately Prussak,‡ after injecting a ten per cent solution of chloride of sodium into the lymphatic sacs of frogs, or keeping them for some time in it, saw in the web the escape of red blood-corpuscles through the intact walls of capillaries, and found similar extravasations in different organs. He ascribes the extravasations in scurvy to a similar process.

This digression made, it remains only to state whence comes the enormous production of pus in some suppurations, the normal blood containing but a comparatively small number of white corpuscles. But if we remember that in all, especially acute, inflammations we find hyperæmic swelling of the lymphatic glands and spleen, both which are known to be the producers of white blood-corpuscles, it becomes obvious that these organs, in a condition of increased activity, produce a larger number of cells.

The experiments of Cohnheim, which I have repeated a great many times and modified in every way, undoubtedly show that suppuration is nothing else than an emigration of white blood-corpuscles through the intact walls of blood-vessels of the irritated or inflamed part, and that pus-corpuscles are nothing else than the emigrated white blood-corpuscles. It is obvious why suppuration is limited to the connective tissues in which the juice-conveying canals exist, and why it never occurs, for instance, in cartilage destitute of such canals. It is also obvious, according to these facts, that inflammation must be preceded by hyperæmia, and can be relieved by local depletion. By these facts, again, can be explained why, for instance, cold, producing contraction of the blood-vessels, checks inflammation and suppuration, and why heat, on the contrary, favors them; and a great many other observations so familiar to the practical physician.

The researches of quite a number of excellent observers confirm the correctness of Cohnheim's investigations. Koster‖ produced inflammation and suppuration in the liver of animals, and obtained results leaving no doubt of the pus-corpuscles being the white corpuscles emigrated from the blood-vessels. R. Volkmann¶ ascertained that, in suppuration on the surfaces of mucous membranes, the pus-corpuscles are not originated, as it appears, by endogenetic proliferation of the epithelial cells; but they also are white blood-corpuscles, which, after wandering from the vessels through the connective tissue, arrive at the surface and stick to the epithelial cells. E. Hering** could pursue, in the web and mesentery of frogs, some of the white corpuscles coming out of the veins and getting into the lymphatics.

To study the phenomena of passive hyperæmia, Cohnheim†† put a ligature on the femoral vein of frogs, and observed the web, with the following result. The vessels do not dilate; the plasmatic layer disappears; and the blood circulates only with the systole. The transuded plasma produces œdematous swelling of the web, and the red blood-corpuscles escape through the intact walls of the capillaries. If the ligature be taken off, the normal circulation gets gradually restored.

Not only are the results of Cohnheim's researches of the highest importance for pathology, but his method itself is most valuable, and opens a great field for further observations. Binz,‡‡ when investigating the antiseptics, found that they act as poison on the lower organisms (amœbæ, paramœciæ), arresting almost suddenly their amœboid movements. Quinia possesses this property in the highest degree; it acts as a most powerful poison not only to the lower organisms, but also to the white blood-corpuscles, at first arresting their protoplasmatic movements, and then destroying them altogether. In warm-blooded animals, after hypodermic injections of quinia, he found a great diminution and almost a disappearance of the white blood-corpuscles. When Binz§§ produced peritonitis in frogs and cats, by Cohnheim's method, and observed the mesentery he was able, by injecting hypodermically a solution of quinia, to prevent the accumulation, stagnation, and emigration of the white blood-corpuscles, and the formation of pus. At the same time the temperature of the animal became lower, and the spleen did not increase in size, the contrary being always the case when quinia is not administered. By these and other experiments, Binz explains the antizymotic and antiphlogistic action of quinia, as well as its known property of diminishing and arresting suppurations. He recommends using the muriate of quinia, which is more soluble than its other salts. This precaution must especially be taken into consideration, since we know, through the investigations of Maljuin,¶¶ that quinia taken internally can be absorbed only in the stomach; as soon as it enters the intestine it produces an insoluble combination with the bile, and is eliminated.

Finally, I may mention the experiments which I myself made last year, in Prof. Virchow's Pathological Institute and Dr. Kühne's Chemical Laboratory, and which I still continue. My object was to study the influence and mode of action of cryptogams in the animal body. For this purpose I produced a fistula of the small intestines in dogs, and through it introduced the fungi. I also injected cryptogams into the respiratory organs of dogs and rabbits by means of tracheotomy; again I injected them hypodermically; into the veins; into the abdominal cavity; and at last I introduced them into the lymphatic sacs of frogs, and observed by Cohnheim's method. I will give a detailed account of my very numerous experiments on a future occasion, as I am not yet ready with my investigations, and here will only mention some of them.

Injected hypodermically in rabbits and dogs, the cryptogams produce a moderate amount of fever, which soon disappears, and the animals look quite well. A week, or several weeks, after the injection, I found the fungi still existing, and increased twenty or thirty times in their number; they were under the skin not only at the place where they were injected, but also between the neighboring muscles, and occasionally I found some in the blood. Injected into the abdominal

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* C. Aeby: *Der feinere Bau der Blutcapillaren.*—Centralbl. für die med. Wiss., 1865, S. 209.

† L. Auerbach: *Untersuchungen über Lymph- und Blutgefäss.*—Virchow's Archiv, Bd. xxxiii., S. 340.

‡ Prussak: *Ueber künstlich erzeugte Blutungen per diapedesin.*—Wien. Acad., Sitz. Mathem. Nat. Cl., Abth. lvi., 13—3.

§ *Ueber einen neuen Entzündungs- und Eiterungsherd der Leber.*—Centralbl. f. d. medic. Wissensch., 1865, N. 2.

‖ *Ueber entzündliche Leberabscesse.*—Bonn, 1865. N. 17.

¶ *Ueber das Verhalten der Blutzellen aus den Blutgefässen in die Lymphgefässe.*—Wien. Acad., Sitz. mat. naturw. Cl., ii. Abth. lvi. S. 691-700.

* *Ueber Venöse Stauungen.*—Virchow's Archiv, xii., S. 20.

† C. Binz: *Experimentelle Untersuchungen über das Wesen der Chininwirkung.*—Berl. klin. Wochenschr. 1868, N. 10, S. 114.

‡ Centralbl. f. d. medic. Wissensch, N. 11, S. 172.

§ *Ueber den Einfluss der Galle auf Chininsalze.*—Centralbl. N. 24, S. 370.

cavity of rabbits, the fungi, even in small quantity, produced a violent fever and purulent peritonitis, which always killed the animals in the first few days; sometimes I found their lungs in a state of splenization. In conclusion I will relate the two following experiments:

June 13th, 1867. I performed tracheotomy on a healthy middle-sized dog, and injected through the opening of the trachea 7 cubic centimetres of cryptogams mixed with water (fungi developed in pancreatic fluid, and kindly given me by my friend Dr. Kuhne). On the 14th the dog was a little feverish, but the next day looked quite well, and the wound healed rapidly. A subcutaneous emphysema remained, with the intensest crepitation on the back. On July 12th a condensed mixture of 3 cc. of the same cryptogams was injected into the crural vein of the same dog, and on the 20th July I killed the dog by haemorrhage. At the post-mortem examination I found a great amount of general obesity, or polysarcia, (panniculus adiposus and internal organs.) The lungs remained very much pigmented and numerous resistant nodules or tubercles of the size of a millet to a lentil, consisting of small lymphoid cells and cryptogams. The spleen was enormously enlarged and hard; its follicles numerous and enlarged. The epithelial cells of the kidneys were fattily degenerated; the pericardium and the capsules of the kidneys and the liver contained a great deal of fat. In the blood some cryptogams.

July 20th, 1867, I injected into the dorsal lymphatic sac of a frog fungi mixed with water. On the following day I vivisected the frog, and observed in the circulating blood of the mesenteric vessels some cryptogamic cells (torulæ), which had evidently disappeared from the lymphatic sac. My experiments so far led me to the conclusion that the lower vegetable organisms can continue to live and multiply in the tissues of living animals, and that they can enter into the general circulation either through the intestinal canal or respiratory organs, or by means of hypodermic injections. What is their ultimate fate in the animal organism, and what their importance in producing disease, further investigations will have to show.

Progress of Medical Science.

A NEW THEORY OF CRETINISM.—Dr. M. A. Netter, principal physician to the military hospital of Brançon, communicates to the *Gazette Medicale de Strasbourg* (1868, No. 7, p. 77), an article calling attention to a novel theory of cretinism announced by M. le Docteur Chabran, a physician of Briançon. The primary cause of goitre and of endemic cretinism, is not referred to the nature of the waters, the humidity of the valleys, or the excessive fatigue undergone by the inhabitants of mountainous countries; but is said to be essentially dependent upon the enormous differences of temperature which, in summer, occur in the high Alps and similar regions, from morning to noon, and from noon to evening. The people carrying goitres, and the cretins, says M. Chabran, are found particularly where in summer, a very elevated temperature (+ 45 in the sun, for example) alternates each day with a very low temperature morning and evening. The less these differences of temperature occur in one locality or another, the less we find of goitre and cretinism. If, as is said, regions altogether elevated are spared the endemic, it is because that, there, the differences of temperature oscillate within more confined limits. The answer to the question, "how such oppositions in the exterior temperature can produce goitre, the first degree of cretinism?" is given as follows:

Among the functions of our organism, is that of caloricity, a complex function, which secures our constant temperature of + 37 , a function, however, the mechanism of which is not yet well understood. Now the thyroid body, an appendix to the pulmonary apparatus, performs a considerable rôle in the duties of this function. Starting from this point, brusque oppositions in the exterior temperature, troubles in organic caloricity, that is to say, troubles of respiration and circulation, and thence, alteration of the thyroid body.

The author of this paper, since his residence at Briançon, has been struck with a fact which accords with the observations of M. Chabran, but which is not mentioned by him; and that is the great difference of temperature which exists there, not only between noon and morning, and morning or evening, but still more, at the same moment of the day, *according as one is in the sun or in the shade*. This difference will often amount to more than 20 .

Another singularity peculiar to these countries, is in relation to a great difference in the meteorological observations, between one valley and another, one village and a neighboring one, sometimes between adjacent residences. This occurs because the pele-mele of mountains is such as to give origin to a great number of *local winds*, veritable currents of air, sufficient to exert a meteorological difference along a slope of the mountain, in a village or house situated in its course.

To those of our readers interested in this subject we recommend the perusal of the entire article.

RESEARCHES ON THE ASSIMILATION OF PHOSPHATE OF LIME, AND ITS THERAPEUTICAL EMPLOYMENT.—We notice in *Le Mouvement Medical* (No. 17) a summary of a recently published Memoire by MM. Dusart et Blache, who have made a number of experiments upon animals and men, to ascertain the action of the gastric juice upon phosphate of lime. They find that much of the phosphate of lime of commerce is nothing more than carbonate of lime, and to this cause they attribute the varying experiences of different observers.

They have found that the hydrated phosphate of lime, and recently precipitated, is the most suitable for assimilation; and in their experiments they employed the lacto-phosphate of lime, the ultimate result of the action of gastric juice upon pho-phate of lime. They made some experiments on Guinea pigs, in whom they produced fractures, and they found that the increase in the weight of the bones of such of the animals as were submitted to the action of the phosphate of lime, exceeded that of others placed under ordinary regimen more than 33 per cent., though all the animals were given exactly the same quantity of aliment.

They administer two grains of the lacto-phosphate of lime to the ounce of syrup, daily, in soup.

Dr. Pérate has found this lacto-pho-phate of lime extremely beneficial in dyspepsia from insufficient secretion of the acid of the gastric juice.

ÆTHER AS A STYPTIC.—A case is reported in the *Lancet* in which the spray of æther arrested hæmorrhage following the extraction of a molar, after several other means, including persulphate of iron and nitrate of silver, had failed.

TREATMENT OF MEMBRANOUS ANGINA BY ICE.—*La France Medicale* extracts from the Rev. Méd. de Limoges, portions of an article of Dr. Bleynie, Sr., who, following M. de Grand-Boulogne and M. Baudon, has employed this treatment both with adults and with children. He declares that he has never been unsuccessful. The patient places a small piece of ice in the mouth, and it is allowed to melt, when it is immediately replaced by another, and so on to the disappearance of

the false membranes, which takes place from the second to the seventh day. The relief is immediate. He allows, at the same time, wine and food. This method should be employed before the extension of the diphtheria to the larynx, but good effects may still be hoped for in croup; as has been affirmed by M. de Grand-Boulogne of results obtained during a simultaneous epidemic of membranous angina and croup; and which has been confirmed by M. Bleynie in one case in his practice.

Calcification of the Pericardium.—Dr. C. F. Fenn, of Chicago, read an interesting history of a case of this kind where the subject was about 65. He was admitted to the Hospital Dec. 19, 1867, with the following symptoms: Complexion sallow, feet and legs œdematous; the circulation irregular, excitable and feeble, the radial pulse being felt with difficulty. The apex of the heart was felt about an inch to the left of its normal position; and there was a want of rhythm and a sense of distance in the sound, but no friction sound or murmur was detected. Respiration was irregular, sighing and imperfect. The mental faculties seemed imperfect, his words being incoherent and articulated in a mumbling way. The urine was normal in appearance and quantity, but contained albumen. He died Feb. 2, 1868. An autopsy, 48 hours after death, revealed old adhesion of the right pleura, the lungs full of dark blood, and the middle of the right lung hepatized. The coverings of the heart *in situ* seemed normal, but in an attempt to cut through the pericardium, an extensive deposit of calcareous matter was found, which covered the whole anterior face of the heart and about half the posterior. The deposit was deficient over the upper part of the left margin of the heart and extended to the right, a little beyond the ventricular septum. A firm adhesion existed between the apex and the base of the sac. The inner surface of the pericardium was roughened only in spots, the heart was enlarged, softened, and covered with plastic lymph. The aortic valves were calcified. The arch of the aorta, about the opening of the left subclavian, presented a rough and calcified surface, a square inch in area, and plastic deposits existed along the inner surface. The liver was enlarged and indurated, and the kidneys were both atrophied to about one-third their natural size.—*Chicago Med. Examiner.*

Nævus Successfully Treated by Collodion.—Dr. S. S. Joynes reports that he was called upon to prescribe for a healthy infant, four months old, on whose cheek there had appeared, two or three weeks before, a small red spot, which gradually enlarged and deepened in color. The spot was about three-fourths of an inch in diameter, slightly elevated above the surface of the cheek, of a purple hue, at a distance somewhat resembling a contusion, but a closer inspection showed the appearance of vascularity and vitality. The tumor involved the dermoid and subcutaneous areolar tissue.

Dec. 16th, collodion was freely applied over the discolored surface. Contraction taking place, the prominence of the discolored portion of the cheek disappeared; the integument all around was strongly puckered, and through the coating of dried collodion the discoloration was seen to be much diminished. The application did not cause the slightest inconvenience to the child. By the first of January there was no longer any tumor perceptible, either to the eye or touch, and by January 9th there was no trace of the nævus at all, and the cheek became entirely natural in appearance.—*Atlanta Med. and Surg. Journal.*

Glycerine in Diabetis.—Dr. Pavy, of London, has been experimenting with the administration of glycerine in diabetes, in quantities of from 6 to 8 ounces daily. He says: Without entering here into the why or the wherefore, it is quite evident that glycerine leads to an increased elimination of sugar in diabetes. Still, under the large quantity given, there was nothing like the increase that is produced by the administration of even a moderate quantity of sugar.

Occlusion of the Os Uteri.—Dr. Taylor, in the *Lancet*, reports that, being called to a case of labor, he at first could neither find the os nor detect the presentation. After some time he found an indentation about the size of a pea. He concluded that this had formerly been the os, and that he now had to deal with a case of occlusion. The pubes also projected inwards, making the antero-posterior diameter very narrow. He concluded to adopt the alternative of making an artificial os, and overcome the pubic projection by forceps or craniotomy.

To make an os he passed one of the blades of a pair of long scissors through the indentation in the uterus, and made several notches round it, which enabled him to introduce the point of the forefinger into the uterus. The uterus not dilating much, the middle finger was introduced, and the opening enlarged by stretching the edges. After three hours two fingers could be introduced and the head was felt presenting. After ten hours the os was sufficiently enlarged to admit of the rupture of the membranes. This was done, and the head came down to the pubic projection, but could make no further progress. The forceps were applied, but the head could not be delivered. Craniotomy was then performed, and after considerable difficulty the woman was relieved. The patient recovered without a bad symptom.

Schneiderian Membrane as an Absorbent.—Dr. Rombert, of Chateauden, recommends the use of the lining membrane of the nasal cavities as a medium of absorption for remedies in cases of very painful diseases of the head, and in certain cases of diseases of the eye. He has obtained very good results from the administration of pulverized morphine, gr. j. to sugar gr. xvij., by this new method in cases of neuralgia of the face and head.—*Gaz. des Hôpitaux.*

Fatal Division of an Intercostal Artery.—M. Demarquay, of Paris, had lately under his care a patient suffering from necrosis of the ninth rib in consequence of injury. An abscess had formed, which the surgeon opened, and, to obviate severe symptoms of dyspnœa, the part was largely laid open. This incision fell upon the intercostal artery exposed by the displacement of the rib, and after several attacks of hæmorrhage the patient sank.—*Lancet.*

Spontaneous Subsidence of an Ovarian Tumor.—S. Mitchell, M.D., was called to see a patient about 40 years of age, with a large tumor which occupied nearly the whole abdominal cavity. It was multilocular, more than usually hard, and of nearly two years' growth. It was first discovered when about the size of an egg, and was situated in the right ovary. It was attended with but little pain, and the general health was but little impaired when seen by Dr. M. After a careful examination of the case it was decided not to operate upon the tumor. The tumor became very burdensome, and the patient was obliged to wear a strong bandage with shoulder-straps to support it. About two years after having first seen the patient, she was again seen, when it was ascertained that about two years before she had ceased to menstruate, since when the tumor had steadily decreased in size and was now about the size of a small child's head, quite hard and firmly fixed. She has no pain, and says she is quite well.—*N. Y. Med. Journal.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, July 15, 1868.

THE COUNTRY PRACTITIONER.

THE practitioner who is now the type of the rural physician is an altogether different personage from his brother of old. The march of civilization, and the necessities which have grown up with it, have wrought in this, as well as in other things, a change for the better. The rapid increase of population with its attendant wealth, the establishment of new routes of travel, the extension of trade, and the development of many new branches of industry, have all had the effect of coaxing our young graduates away from the large cities to try their fortunes among strange people. It is a source of congratulation with those who formerly looked upon the country practitioner as a mere necessity, a short remove from a nurse, that such a change, which promises so much for the elevation of the profession among the people, has been commenced. There are, it is true, a few of the old-timers left, who still calomelize every patient, and who swear by the virtues of tartar emetic, but these are so far outnumbered that they can hardly be taken into account.

The young medical men who are settling themselves throughout the country are some of the most enterprising that we have ever had in our schools and hospitals, and are destined to become leaders in the districts in which they reside. They have succeeded in infusing among their *confrères* a healthy working element, which is already beginning to tell for good, and which will accomplish even more, as their numbers increase and their influence extends. The microscope, the stethoscope, ophthalmoscope, laryngoscope and spray-producer, have been taken into almost every hamlet, and the veriest backwoodsman is being blessed with all the recent improvements which the advancement of science has beneficently showered upon the healing art.

The time was when the metropolitan doctor could speak of his rustic brother in well-merited terms of patronage, and commiserate him for his ignorance; but this is so far passed away that there is not only no shame on the part of the scoffers to acknowledge the existence of a common brotherhood, but they are prepared to study with profit the distinguishing traits of the country physician's character.

When a physician in the city stumbles upon a puzzling case, he has always at hand some ministering angel in the shape of a consultant, who is ever ready to help him out of his difficulties by wise suggestions and by a division of weighty responsibilities. If a formidable operation is to be performed in an emergency, he can call upon some distinguished surgeon to guide his knife, while the cadaver is ready to afford an opportunity for rehearsal. An obscure and difficult obstetric case is soon simplified by the aid of an expert; in fact, in every department the specialist is ready to render his valuable assistance; the stethoscope is handled for him by one skilled in its use, the ophthalmoscope reveals to him the hitherto hidden chambers of the eye, and the laryngoscope and microscope do their duties under like circumstances with equal exactness. Most, if not all, of these advantages are denied our rustic practitioner; the circumstances which surround him are so different and so varied, that he is forced to rely almost entirely upon his own individual efforts to unravel every case that comes along. With the full appreciation of what is required of him, he is compelled to be prepared for every emergency, and is not at liberty to decline attendance upon this or that case, because he desires to be simply a physician or wholly a surgeon. He is just as likely to be summoned miles from his home, in the darkness of the darkest night, over roads almost impassable, to operate upon a case of strangulated hernia, in some farm-house where there is no other light save that from a tallow dip, and without the appropriate instruments, as he is the following day to attend upon a case of fever in the family of his wealthier neighbor. His obstetric cases are to be watched by himself, and if any complication exists to endanger the life of his patient, upon him alone, in most cases, devolves the responsibility of acting on the spot.

In view of these circumstances, which are so peculiar to the practice of medicine in out-of-the-way districts, is it not unfair to our hard-working, self-sacrificing, and dutiful "brethren in the field" to infer that in general knowledge of the requirements of the healing art, they are not as well informed as the mass of our city practitioners? The very necessities of their position, if they would discharge them conscientiously, force them to be. To be a reliable country practitioner, one equal to every ordinary emergency, calls for fully as much if not more preparation than is required of the mass of our physicians in the cities. The rural medical man of to day fully appreciates this fact, and is ever ready to appropriate every new discovery, every important advance in knowledge, every new idea of treatment to his own needs. Even the "old fogy" of the district is determined not to be behindhand, and shows a creditable disposition to follow in the footsteps of his more enterprising junior. This explains in a measure the increased pa-

tronage which our metropolitan schools enjoy from the physicians out of town. There is hardly a medical class in our colleges which cannot number among its devoted students many a gray-haired veteran who has retired awhile from the more active duties of his calling to be refreshed with the streams from the fountain head. The same may be said of the special courses of instruction which are nominally connected with these institutions. These gentlemen are always ready to join classes in practical surgery, in auscultation, and in microscopy, and those teachers who have been honored by their attendance, can testify to their ardor in the pursuit of useful information. We do not mean to draw any uncharitable comparison between the metropolitan and the countryman as regards the respective attendance upon these valuable means for improvement, nor to infer that the city practitioner neglects them because they are always so ready at hand, but we simply mention a fact in passing.

In the matter of therapeutics, our country friend is at home. In the first place, being his own apothecary, he becomes practically familiar with all the useful articles of the materia medica, he makes his own pills and boluses, compounds his own mixtures, and divides his own powders. Secondly, he is so situated that he can very soon test the power of any article, and ascertain exactly its real merits as a curative agent, for he cannot, as a general rule, leave his patient in agony, with a few directions as to how the medicine is to be taken, in fear that he may have to repeat a long journey a little too soon to find that the desired result has not occurred. On the contrary, it is prudent for him to wait for the effect a reasonable time, and leave the sick person, if possible, in a better condition than when he arrived. He thus becomes an accomplished prescriber, and is soon able to predict, with tolerable certainty, the respective actions of the various powders, extracts, and tinctures in his saddle-bags.

There are other points in the character of the country physician of to-day, which will bear being looked at in far from a disparaging light. We are convinced from our personal knowledge, that he does not obtain that credit for study which he really deserves. He is, in fact, as far as his means as to time and money are concerned, an industrious student. When we consider the many long hours he is forced to be on the road, his tiresome drives in all weathers and all seasons—these would seem a sufficient excuse for being anything else than a patron of medical literature. But in the majority of instances this excuse is not taken to himself. He believes in progress, and is, all other things being equal, as ready to investigate the merits of any new theory or practice as is the more favored inhabitant of the city. The transactions of the various county societies prove our assertion; their publications are always creditable, and evince a laudable enterprise in their members. The same may be said of their contributions to medical literature; our periodicals teem with wise suggestions and original observations from their pens, and many a physician who writes from the wilds of our territories, whose yearly income would hardly pay the driving expenses of some of our metropolitans, and whose patients are only backwoodsmen, is rapidly gaining an enviable and enduring reputation. There are many to whom we could point who are now considered our leading authorities in medicine, on this side of the Atlantic, who first commenced their labors in some far-off and obscure country village.

We think we have said enough to prove that every conscientious medical man who is now practising in a country district, is at least "respectable," and that any one who is pleased to call him a fellow-worker, will not do it at a sacrifice of good judgment or self-esteem. We can now happily find enough true men of science in every community to redeem the medical men in our country districts from the sweeping condemnation, which is so apt to be hurled at them by such as can never acknowledge the rewards of true merit, or appreciate sterling worth.

We cheerfully call attention to the following amendment to the "Plan of Organization" adopted at the last meeting of the American Medical Association:

"The sum of $5 shall be assessed annually upon each delegate to the sessions of the Association, as well as upon each of its permanent members, whether attending or not, for the purpose of raising a fund to defray the necessary expenses of the Association, and for printing the Transactions. The payment of this sum shall be required of the delegates and members in attendance upon the sessions of the Association previously to their taking seats and participating in the business of the session. Permanent members not attending shall forward their yearly dues to the Treasurer, and thereby shall be entitled to receive a copy of the printed Transactions, the same as delegates."

The amount named may be forwarded to Dr. C. Wister, 1306 Arch street, Philadelphia.

Reviews.

CONTRIBUTIONS RELATING TO THE CAUSATION AND PREVENTION OF DISEASE, AND TO CAMP DISEASES, TOGETHER WITH A REPORT OF THE DISEASES, ETC., AMONG PRISONERS AT ANDERSONVILLE, GA. Edited by Austin Flint, M.D. New York. Published for the U. S. Sanitary Commission, by Hurd & Houghton, 459 Broome street. 1867. 8vo., pp. 655.

THE first of a series of volumes relating to the medical and surgical history of the late rebellion, prepared under the direction of a medical committee of the U. S. Sanitary Commission, has at length made its appearance. The volume before us treats upon medical topics entirely, and consists of a number of elaborate papers drawn up by several gentlemen of eminence in the volunteer forces; principally relating to the causation and prevention of diseases in armies. As might be expected, the discussion of these topics covers a great deal of ground, and many points associated with actual experiences upon the field and in military hospitals, and of great importance in a sanitary point of view, are considered.

The work is divided into two grand sections—the first devoted to the causation and prevention of diseases, and the latter to the very instructive subject of camp diseases.

The first chapter, on the various influences affecting the physical endurance, etc., of the men composing the volunteer armies of the United States is by the well-known and talented writer, Dr. Roberts Bartholow, of Ohio. He presents us with a fair estimate of the fighting qualities of the different races which composed the grand volunteer army, and accords to the native American particularly the highest rank in the scale, not only as regards mental, but physical qualifications. In reference to the former the spirit of enterprise and intelligent hardihood which render them superior to fatigue is one of their prominent characteristics, while as to the latter, the toughness of the muscular fibre, and the freedom of the tissue from inter-stitial fat, enable them to combine endurance with activity. The two great physical drawbacks to our countrymen, phthisis and digestive derangements, almost entirely counterbalance their otherwise unexceptional qualities. The various occupations most favorable for the production of good soldiers are such as are of an outdoor character; hence farmers, lumbermen, and railroadmen were found to be better prepared to withstand the hardships incident to camp life than clerks, tailors, shoemakers, and others of the sedentary class. The age most suitable is believed to be that of 30, when the physical development is to be looked upon as to all intents and purposes complete. "The medium height, the weight of 160 pounds, thirty-three inches in the girth of the chest, and an expansive mobility of three inches, *cæteris paribus*, present the conditions as to physical health most favorable to military service. Symmetry is by no means so important as swollen muscles, well marked bony prominences, and well developed joints, for these are the evidences of power and endurance. Great height is frequently objectionable, because gained at the expense of the development of the thorax. The rule is, that the girth of the chest at the level of the nipple should equal half the height, but in tall men this rule may be violated. Excessive weight, or obesity, is still more decidedly disqualifying than excessive height."

Joined to these qualifications he very properly assumes that a cheerful disposition is of paramount importance as the surest safeguard against nostalgia and malingering.

Speaking of the peculiar pernicious influences that surround the new recruit, he draws a very faithful picture of his entry into the depot, and his subsequent transfer to the camp and field; the crowding together of large numbers into single inclosures; the deprivation of even the ordinary necessaries of their former lives, both as regards clothing at night, cleanliness, and proper cooking accommodations.

The American propensity to cook the food by the indigestible frying process comes in for its share of reference as one of the most prolific of all causes of digestive diseases found to be so prevalent throughout the war. The ordinary diseases occurring in camp are then cursorily touched up, their causes and prevention dwelt upon; the whole forming one of the most interesting and readable chapters of the book.

Remarks on the various circumstances relating to the causation of diseases by Dr. A. J. Phelps, go into more detail in reference to this particular subject than does the previous author. The observations are based upon the personal experiences upon the field, and are mainly confined in detail to the medical history of an Ohio regiment. He alludes to the want, at the commencement of the conflict, of a proper medical organization, and faithfully pictures the difficulties which a volunteer medical officer had to contend with in becoming accustomed to his responsibilities and pressing duties—difficulties which were in no small degree heightened by the lack of a desire to co-operate on the part of commanding officers. He was led from experience to prefer men of medium height and large trunks, and in this respect, along with Prof. Bartholow, he agrees with the highest authorities on military organizations.

The chapter on army alimentation by Sanford B. Hunt, M.D., is of exceeding interest as a history of the diets of various armies, their relative value in nutrition and calorificient properties. The physiological part of the subject does not, however, contain anything striking or new. Dr. Bartholow, on the effects of malarious influences upon medical and surgical diseases, is to the point and full of valuable facts, drawn mostly from personal experience. Some striking examples of the interference to repair which the malarious condition induced, are given, in regard more particularly to surgical wounds; and not a few original ideas are advanced relating to a supposed connection between cause and effect. We regret, however, to learn that aside from the testimony of a few surgeons no evidences of the prophylactic properties of quinine have been presented.

The important subject of vaccination in the army is written up by Dr Elisha Harris, who in a most exhaustive, not to say somewhat tedious report, arrives at some valuable conclusions, to wit: 1. Vaccination in the recruit must be proved by a revaccination. 2. Virus from scorbutic persons and those suffering from any dyscrasia of the blood and tissues, is not trustworthy. 3. Syphilitic contamination of virus is infrequent. 4. The evidence obtained in both armies relating to syphilitic inoculation by vaccinating, strongly corroborates the conclusions by M. Viennois upon this subject; and so far as has been ascertained there was no exception to the law of such transmission from the constitutionally infected, as announced by Mr. Rollet, viz.: "that syphilis always commences with a chancre." 5. The greater proportion of the ulcers following vaccination and attributed to syphilis were simply scorbutic in character; the true syphilitic sores, being chancres, were rarely seen. 6. Vaccination and revaccination should be performed in every person in health; and 7. Genuine vaccination is an absolute safeguard against small-pox.

The comparative mortality in armies from wounds and diseases by Edward S. Dunster, M.D., is a carefully prepared statistical paper, tending to prove that deaths from disease are invariably greater than those from battle; the aggregate mortality being variable, according to the nature of the service, the susceptibility of the men to endemic influences, etc., etc.; that a larger proportion of officers than men perish in battle, and that the infantry is the most dangerous arm of the service, both as regards the liability to death from disease and the casualties of battle.

Under the caption of Camp Fevers, Prof. Bartholow discusses the remittent, typhoid, typho-malarial, common continued, and mountain fever, and points out the clinical differences. The paper on Yellow Fever by Dr. E. Harris, gives a more or less complete history of the epidemic on the Atlantic coast and at the South during the war, and presents many facts bearing on the malarial agency of infection.

In the perusal of the volume thus far we find ourselves not beyond its middle, with as much of interest and profit ahead as that which we have passed by. Gladly would we continue our review as it has been begun, but already we have occupied space which rightly

belongs to other articles, and with a general recommendation of the work to our readers, with an assurance that the time spent in its perusal and study will be well appropriated, we are forced merely to mention the remaining articles by title only:

Acute rheumatism of the troops of New Mexico; Roberts Bartholow, M.D. Scurvy in its medical aspect, and camp diarrhœa and dysentery; Sanford B. Hunt, M.D. On the prevalence and fatality of pneumonia and of typhoid fever in the Confederate Army; by Prof. Joseph Jones, M.D. On cerebro-spinal meningitis; by Sanford B. Hunt, M.D. Diseases of the nerves, resulting from injuries; by S. Weir Mitchell, M.D.; and lastly Prof. Joseph Jones, Surg., P. A. C. S., contributes an elaborate, masterly, interesting, and instructive report on the diseases, mortality, etc., at the military prison at Andersonville, Ga.

A very copious index much enhances the value of this work for ready reference.

THERAPEUTICS AND MATERIA MEDICA; A SYSTEMATIC TREATISE ON THE ACTION AND USES OF MEDICAL AGENTS, INCLUDING THEIR DESCRIPTION AND HISTORY. By ALFRED STILLÉ, M.D., Prof. of the Theory and Practice of Medicine, and of Clinical Medicine in the University of Pennsylvania, etc., etc. Third Edition, Revised and Enlarged. In two volumes, vol. I and II. Phila.: H. C. Lea, 1868. 8vo. pp. 824 and 834.

MATERIA MEDICA FOR THE USE OF STUDENTS. By JOHN B. BIDDLE, Prof. Materia Medica and Therapeutics in the Jefferson Medical College, etc. Third Edition, Enlarged, with Illustrations. Phila.: Lindsay and Blakiston. 1868. 8vo. pp. 359.

THE work of Prof. Stillé, comprised in two large-sized octavo volumes, each over 800 pages, may be regarded as of value more in a clinical point of view than in any other, and as such may be considered a real and substantial addition to our knowledge of therapeutics. It is true that the chemical and physical properties of medicines receive a certain amount of attention, but the energies of the author have been almost entirely spent upon investigations that bear upon their physiological actions. A surprising number of facts, collated from experiments of present and past writers, is presented, giving evidence of a vast amount of laborious and patient research. Not content with loose general statements, he has gone to the trouble of quoting, in more or less detail, the experience of those who, by their careful investigations, have long since gained their reputations as authorities. Such a labor by a gentleman so favorably known as a searcher after truth and a sound scholar, cannot fail to meet with its just deserts in an appreciative reception by the student of rational therapeutics.

The work of Prof. Biddle holds a somewhat middle ground, being too lengthy for an abstract and too incomplete for a treatise. On the whole, the book cannot meet any pressing want of the general practitioner, unless it may serve by the outline presentation of facts to stimulate him to seek after more elaborate treatises. It seems designed for students just beginning their studies in materia medica, and more especially as a text book for the author's course in the Jefferson Medical College. It has scattered throughout some very fine wood cuts, which will doubtless tend to fix in the mind of the learner the physical properties of many of the important plants.

LESSONS IN ELEMENTARY CHEMISTRY INORGANIC AND ORGANIC. By HENRY E. ROSCOE, B.A., F.R.S., Prof. Chemistry in Owens College, Manchester. New York: W. Wood & Co. 12mo. pp. 372.

THIS is the most concise and useful work on Elementary Chemistry for schools and colleges that we have thus far seen, and must needs meet with universal favor. All the modern advances in the science are carefully noted, and everything of real importance presented which is necessary to make it a model "first book."

PATHOLOGICAL ANATOMY OF THE FEMALE SEXUAL ORGANS. By JULIUS M. KLOB, M.D., Professor of the University of Vienna. Translated from the German by Joseph Kammerer, M.D., etc., and Benjamin F. Dawson, M.D., etc.: Moorhead, Simpson & Bond, N. Y.: pp. 299.

THE volume before us represents the most advanced views of one of the leading German pathologists. Its translation is a positive boon to the advance of gynecology in this country. Free from speculation, dealing laboriously with facts, based on statistics and the careful observations of recorded autopsies, it is just the book that the sincere student needs. Its influences will be recognized in more ways than one, in the literature, lectures, and clinical practice of the country. The profession should encourage in every way the labors of gentlemen like Drs. Kammerer and Dawson, who bring within the reach of all works that in their *original* tongue are sealed to so many. The work is thus divided: Anomalies of the uterus. Anomalies of Formation. 1. Anomalies of fœtal development; under which head are considered excess and arrests of development, congenital anomalies of form and of situation, anomalies of uterine development during childhood, anomalies of formation and the latter part of extra-uterine life, comprising all displacements and alterations of form of the uterus, with adventitious growths; with an appendix concerning the entozoa and the entophyta. In Anomalies of nutrition the following topics are considered: Hyperæmia, hæmorrhage, hypertrophy, atrophy, parenchymatous metritis, endometritis, acute and chronic catarrh, croupy inflammation, ulcerations, wounds, and ruptures, with fatty and amyloid degeneration. Finally, puerperal affections of the uterus are discussed under the heads of endometritis, metritis, thrombosis of lymphatics, and lymphangitis, venous thrombosis, and metrophlebitis, peritonitis, paralysis of the uterus, introduction of air into the uterine veins, hæmorrhages of lying-in women.

In addition, the author has furnished an elaborate bibliographical record for each topic.

The excellent work before us is written in a very condensed style, and the translators state that they found their task extremely arduous. Even without a knowledge of the German language, the truth of this statement is apparent; but they have succeeded admirably, and we are confident that in the next edition some typographical errors will have disappeared, and that certain sentences will have been reconstructed. The work is hard to read, and hard to study; one wishes sometimes that it had been paraphrased by the translators, and made the basis of a work which should have represented more fully and more attractively the present conflicting views on the subjects of which it treats. But before one has finished the study of the volume, its sterling merit, its excellent tone, and the hard logic of its facts, dissipate such thoughts, and leave us anxious for the appearance of the next volume, on which the translators are now engaged.

The future advance of gynecology is to be securely made from just such studies of the dead body as furnished the materials for the present work. The speculum has been used and abused *ad nauseam*. It is time that the accumulation of vast pathological data—confirmed by the scalpel and the microscope—should decide vexed questions, and give that elevation and breadth of purpose to the practitioner which is frittered away and

obscured among the infinite details and limited observation of general practice. Our own hospitals should move in the matter. Statistical observations of the female sexual organs in the dead-house could readily be furnished, and prove of inestimable value.

On Diseases of the Skin: A System of Cutaneous Medicine. By Erasmus Wilson, F.R.S. Seventh American Edition, from the Sixth and revised English Edition. With 20 plates and illustrations on wood. Philadelphia: Henry C. Lea. 1868. 8vo.

The fact of any work reaching a seventh edition renders all review unnecessary. It is only sufficient to say that the present treatise is equal in completeness to any that have preceded it, and gives ample evidence of being fully up to the present time. The views of the author have been very essentially modified in many points, in accordance with the progressive state of his specialty, which gives evidence of a laudable intention on his part of making each successive edition better than the preceding. The plates, which by the way are only fair representations of what may be done in that line, are increased in number by the publisher, who has judiciously added those prepared by the author to illustrate his work on Constitutional Syphilis and Syphilitic Eruptions.

The Neuroses of the Skin, their Pathology and Treatment. By Howard F. Damon, A.M., M.D., Fellow of the Massachusetts Medical Society, &c. 8vo., pp. 111. Philadelphia: J. B. Lippincott & Co. 1868.

Any one who rightly interprets the signs of the times, must see that the study of *nervous diseases* is rapidly assuming an interest, a dignity, and an importance second to no other department of medical science. Monographs on the various phases of nervous affections are continually appearing, both in this country and in Europe, and if the coming ten years shall witness as great progress in their pathology, diagnosis, and treatment, as has been observed during the last ten years, humanity will be a great gainer. It is not too much to say that in the future, and that not far distant, *neurology* is, in a certain sense, to assume the commanding position now held by *gynecology*. The causes that will lead to this revolution in medical thought and fashion, are twofold:

First, nervous diseases are increasing in frequency and in severity, and multiplying their phases with the rapid advance of civilization.

Secondly, our method of diagnosis, and the accumulated experience of scientific observers, are demonstrating more and more that a very large class of diseases that have hitherto been ignored as *obscure*, are to be classed among the *neuroses*.

This graceful monograph of Dr. Damon is designed to call our attention to the fact that many of the ordinary affections of the skin are in their character essentially nervous, and should be treated accordingly. The leading ideas advanced are accredited to the influence of the labors and teachings of Prof. Brown-Séquard, to whom the author very appropriately dedicates the volume.

The author proposes the following classification of skin diseases:

I. Neuroses of the skin.
II. Functional diseases of the cutaneous glands.
III. Inflammations of the skin.
IV. Structural lesions of the skin.

"This monograph is intended to supply all that is now positively known of the first of these classes of cutaneous affections."

Under *hyperæsthesia* are included *dermalgia, prurigo, urticaria, zoster*. *Anæsthesia* also receives considerable attention.

The leading pathological views of the author are thus succinctly presented in his Introduction:

"Neuroses of the skin are, generally speaking, of two kinds. These are caused by peculiar conditions either of the sensitive or of the vaso-motor nerves. . . . . Cutaneous neuralgia is produc ive of zoster on the peripheral branches of the nerves affected. This is the reason why this eruption always has its origin and termination at the median line of the anterior and posterior portions of the body . . . Prurigo is consequent upon an intense pruritus, and also upon the mechanical irritation produced by scratching. . . . Temporary spasm of the blood-vessels of the cutis, from excessive irritation of the vaso-motor nerves, causes the wheals in urticaria to become bloodless; while paralysis of these nerves produces the opposite effect."

We rejoice that Dr. Damon has not followed the dominant and sinful fashion of our time, and ignored the therapeutics of disease. The best methods of treatment are given in elaborate detail; and the author has evidently not contented himself with making a diagnosis, and then allowing his patients to suffer and to die. We regret, however, that the treatment for these distressing neuroses of the skin is not more satisfactory. The large variety of prescriptions recommended shows that our most advanced dermatologists are still feeling in the dark.

Speaking of the treatment of anæsthesia, the author strongly recommends electricity, believing that it "is destined to become a powerful remedial agent in the restoration of sensibility." He should have added that the results of the treatment of anæsthesia by electricity depend very materially on the manner in which it is employed. Constitutional diseases demand constitutional treatment, and in those cases of anæsthesia that depend on or are associated with any vice or feebleness of the general system, electricity, if used at all, should be applied all over the person of the patient, from the head to the feet. Electricity thus used, in the form of general electrization, will oftentimes produce more rapid and permanent results in anæsthesia than any other system of treatment. On the other hand, localized electrization, with the wire brush that is sometimes recommended and employed in such cases, is at best a very painful process, and usually achieves but partial and unsatisfactory results.

There is a wide and, as yet, untrodden field for investigation in the treatment of the neuroses of the skin by electrization, and we earnestly urge upon Dr. Damon to devote his practical attention to this suggestive and interesting study, in the full confidence that with his scientific enthusiasm, his large and various experience, and his abundant clinical material, his experiments might ultimately be crowned with a success that would be at once pleasing to himself and useful to science.

In conclusion, we unqualifiedly commend this monograph, not only to dermatologists, but to neurologists, to all general practitioners who seek to do their whole duty towards those patients who are afflicted with these distressing neuroses of the skin. We venture, however, to express the hope, that in the rapid advance of science, this treatise will shortly be superseded by others, in which the therapeutics will be more logical, more established, and more satisfactory.

Brevet Lt.-Col. B. A. Clements, Surgeon, U. S. A., in addition to his other duties, has been appointed Inspector of Quarantine in the Department of Louisiana.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, APRIL 8, 1868.

DR. W. B. BIBBINS, PRESIDENT, in the Chair.

AORTIC AND CORONARY ANEURISM.—CARDIAC HYPERTROPHY.—FREE CYSTS IN THE BRAIN.

DR. FINNELL presented four specimens, with brief histories. The first was the heart of a man about forty years of age, found dead in the street. The aorta showed an aneurismal dilatation the size of a small orange, commencing immediately above the semi-lunar valves, and extending upwards and backwards. Both here and in the undilated portion the artery was atheromatous, and at one point there was calcareous deposit. The coronary arteries were much dilated, either of them readily admitting the index finger. The lungs and the kidneys were healthy. As the aneurism had not ruptured, it was supposed to have caused death by some interference with the heart's action.

Next was shown an hypertrophied heart, from a man aged about forty-five, dead of apoplexy. It weighed eighteen ounces; the walls of the left ventricle were one inch thick, those of the right from two to three lines. No valvular lesion was discoverable; and, in the absence of other cause, Dr. Finnell was inclined to attribute the hypertrophy to the deficient length of the musculus papillaris, or its chordæ tendineæ, connected with one curtain of the mitral valve, preventing its complete closure. Jones and Sieveking had mentioned that this condition often accompanies hypertrophy. The apoplectic extravasation was extensive into the middle and the posterior lobe of the left hemisphere, and into the fourth ventricle.

DR. LOOMIS thought this condition should be regarded as a consequence of the hypertrophy, not as its cause.

As the third specimen Dr. Finnell exhibited two cysts from the brain of a man subject to epilepsy and found dead after a fit of intemperance. The larger of the cysts resembled in form and size a Malaga grape. Both were found floating, unattached, in the fluid of the right or left lateral ventricle; and near the larger were two little masses looking like organized fibrine. In the choroid plexus cysts were not uncommon, but the Doctor had seen none of this size. He presented these for microscopic examination, thinking they might be due to cysticercus.

AORTIC ANEURISM BURSTING EXTERNALLY.

DR. FINNELL'S last specimen consisted of a part of the thoracic viscera and the interior thoracic wall, from the body of a man about forty-five years of age. The history of the case was imperfect. About four years ago had first been noticed a pulsating tumor in the sternal region, which had then been diagnosed as aneurism of the aortic arch. It had continued to enlarge until the patient's death, though prevented by the pectoralis major from projecting far forwards. The day before his death, the patient had gone down town to his business; the next morning he arose as usual, but failed to appear at breakfast, and was found sitting up in bed, holding a wash-basin, into which blood was slowly flowing from a point of ulceration in the tumor. He gradually sank and died from loss of blood. At the autopsy the true aneurismal dilatation was seen to begin just above the aortic valves, gradually enlarging higher up until it attained a diameter of about four inches; then it suddenly enlarged, the pleura forming a part of the false aneurismal sac. At least two pounds of coagulum were removed from the cavity of the tumor. Under its pressure nearly one-half the sternum and a part of two ribs had disappeared.

DR. LOOMIS had seen but one case of aortic aneurism bursting externally. That was for two years under the observation of Dr. Camman, who had fitted a sheet of lead as a shield to the tumor. The aneurism pointed about the junction of the second rib with the sternum, a little to the right side. Death was sudden.

DR. ROGERS presented, for a candidate, a specimen with written history.

PYÆMIA.

DR. JANEWAY presented the heart, the abdominal viscera, the radial artery and its venæ comites, of a boy dead of pyæmia. The patient, a newsboy sixteen years old, was admitted to Bellevue Hospital, on the morning of April 4th, giving an imperfect history, to the effect that, three days before, he had, on waking in the morning, observed an "injury" to his right forearm, near the wrist; and had that day seen a physician, who applied splints. Upon admission to hospital these were removed, and evaporating lotions applied. At that time the patient manifested no cerebral symptoms; but in the evening he was slightly delirious, though he still walked about the ward. The next morning he was in much the same condition; towards night he became comatose, and so remained until his death, at 10 P. M., April 6th. While in this state the pulse was from 120 to 130 per minute, the respiration about 40.

Examination sixteen hours post-mortem showed the forearm and hand œdematous. A fluctuating swelling at the wrist gave vent, on opening, to a quantity of sanious pus. This had burrowed among the tendons to the bone, of which the periosteum was thickened and vascular, but had no pus beneath it. The outer one of the radial venæ comites contained, in the middle of its course, a firm clot about two inches in length; the inner one, a whitish clot of soft consistency from commencing disorganization. The basilic and axillary veins, with the brachial venæ comites, were distended, throughout their course, by soft clots, buff-colored in parts, moist, and apparently of post mortem formation. Upon the brain, chiefly upon its convexity, were seen numerous little opacities in the arachnoid and the pia mater, due to thickening, each surrounded by a red border, due sometimes to congestion, sometimes to extravasation. The substance of the brain showed several small points of extravasation. Three of its larger veins contained detached fibrinous clots, evidently formed some time before death. Upon the pleura at the base of the left lung was a small amount of lymph. The lung itself exhibited several points of pulmonary apoplexy, the largest the size of a hazel-nut. In both lungs were several points of commencing catarrhal pneumonia. The heart showed, all over its surface, beneath the pericardium, numerous little white points, more or less softened, similar to those found on the arachnoid. At its apex were two small cavities filled with broken-down, puriform matter. Within, scattered over the muscular structure of both ventricles, were white points similar to those on the outside, and, like them, surrounded in most cases by a red areola. None were to be found in the auricles. In the left ventricle, upon each papillary muscle was an ulcerated excavation, perhaps one-eighth of an inch in diameter, and as deep, apparently the result of a puriform collection which had been discharged into the ventricular cavity. Entwined among the tendinous chords, and attached to the free border of the anterior curtain of the mitral valve, was a soft, thin lamina of fibrine, about an inch and a half long by an inch broad, attached by one of its

edges, the other floating more or less free. Upon this lamina were seated numerous little bead-like vegetations; and there were similar vegetations upon either papillary muscle. The liver presented upon its convex surface many of the white points noticed elsewhere, semi-softened, few of them larger than a pin's head, and very few surrounded by a red areola. Both kidneys were studded with them, all having the red border. Those in the medullary portion had a longitudinal arrangement: those in the cortical portion were much softened, as was especially noticeable beneath the capsule; upon peeling this off, some of them were ruptured. In the small intestine were to be seen numerous elevated points, from the size of a pin's head to that of half a split pea, surrounded by the red areola; some of them strung along like rows of beads, others evidently due to enlargement of the solitary glands. Some of the larger ones were denuded of epithelium, and showed commencing ulceration. The stomach presented one of these points; throughout the large intestine was to be found but one, which was in the cæcum. The prostate, bladder, etc., showed nothing abnormal.

AORTIC ANEURISM—RUPTURE INTO ŒSOPHAGUS.

Dr. Loomis presented a specimen of aortic aneurism from a case in which death had occurred from its rupture into the œsophagus. The patient, an Irishman, forty years old, had been admitted to Bellevue Hospital, on the 20th of Dec. last, for facial erysipelas of a severe type, from which he recovered in about three weeks. He was a man of temperate habits; had no hereditary predisposition to phthisis; had seven years before contracted syphilis, which had been treated with mercury to ptyalism, but from which he had never fully recovered, the manifestations of the disease frequently recurring. During his convalescence from the erysipelas the patient first noticed and called attention to a swelling of the abdomen, found, on examination, to be due to ascites. The liver was very small and nodulated on its under surface. The spleen was enlarged, with tenderness on pressure over it. Examination of the chest discovered a loud, rough, systolic murmur heard all over its anterior portion, the point of maximum intensity being at the junction of the third rib with the sternum, on the right side. There was no impulse at this point, no swelling, no unnatural area of dulness, no pain, no tenderness on pressure, no difficulty of deglutition. The only rational symptom referable to the chest was a cough, coming on in paroxysms which were very frequent during the early part of the patient's stay in hospital, but later became less so. During this time he had repeated attacks of epistaxis, some of them so severe as to demand the plugging of the nares. About four weeks before his death, there was physical evidence of fluid in both pleural cavities, attended with more or less dyspnœa, but not aggravated. A week or two later he became deeply jaundiced, and after this he would at times pass into a state of coma, in which he would remain for an hour or two and then come out bright again. He was generally aroused by a paroxysm of coughing. On the 12th of March, during one of these spells of coughing, he was seized with profuse hæmorrhage from the mouth and nose, of which he died in a few minutes.

On opening the thorax, both pleural cavities were found half-full of serum. The heart was pale and flabby, but of natural size. The aorta, from its origin to its passage through the diaphragm, was converted into a number of aneurismal pouches. One of these had ruptured into the œsophagus, about two inches above its passage through the diaphragm, making an opening about three-fourths of an inch in diameter. This opening had apparently been caused by the gradual thinning of the walls under pressure; there was no evidence of ulceration. Along the course of the aorta were several of these pouches, with very thin walls, all of small size, varying from half an inch to an inch in diameter. One, upon the descending portion of the arch, had by pressure upon the lung caused inflammation sufficient to produce close adhesions between the lung and the walls of the sac. It was so thin that it must very soon have burst. One of them pressed upon the recurrent laryngeal nerve; and this was probably the cause of the paroxysmal cough. The abdominal cavity was found half-full of serum. The liver was a typical specimen of cirrhosis. The spleen was enlarged, weighing thirty-two ounces, and abnormally firm. The kidneys were apparently healthy.

Dr. Loomis remarked that the point of maximum intensity of the murmur in this case was worthy of notice; as this was the third specimen he had presented to the Society of aneurismal tumor given off at the origin of the aorta, into which the maximum intensity of murmur had been upon the right side. The seat of rupture was also interesting; he had seen no other case of rupture into the œsophagus. Another noticeable point was that there should have been no difficulty of deglutition.

Dr. Finnell said that Dr. Beach had presented a specimen of aortic aneurism ruptured into the œsophagus.

Dr. Beach said he had seen two cases of the kind.

Dr. Sands had seen, some years ago, a case in which the aneurism had burst simultaneously into the œsophagus and the trachea. Forty-four ounces of blood were found in the stomach.

Dr. Rogers thought that if the cough, in the case presented, had been caused by pressure upon the recurrent laryngeal, the voice should have been deranged.

Dr. Loomis replied that the pressure evidently was not constant, or the cough would have been constant; and that during the paroxysms of coughing the voice became very husky, though there was not complete aphonia.

Dr. Sands presented, in the name of the Pathological Society of Albany, a collection of excellent stereoscopic photographs of pathological specimens, taken under its superintendence. He stated that the Commissioners of Public Charities and Correction, of this city, had provided for the use of the hospitals the means of taking a similar record of interesting specimens and cases; and that physicians were at liberty to avail themselves of its advantages in their private practice, at a very cheap rate.

UNUNITED FRACTURE: FAILURE OF BRAINARD'S OPERATION: FIRM UNION, BUT WITH PARTIAL PARALYSIS, AFTER RESECTION AND WIRE LIGATURE.

Dr. Sands presented a beautiful preparation of united fracture of the humerus, the dissection of which, showing the musculo-spiral nerve, had been made for him by Dr. Curtis. The history of the case was, in brief, that the patient, a chief engineer in the navy, thirty-three years old, large, robust, quite fat, and quite intemperate, had broken his left arm, about the junction of its middle with its lower third, April 18, 1866. He had entered the New York Hospital, where Dr. Sands had accidentally seen him, and noticed that the splints were applied to the arm alone, leaving the forearm free. In the latter part of June he applied to Dr. S. to be treated for non-union of the fracture. This was complete, there having been no attempt at repair. On the 22nd of July, Brainard's operation was performed

the bone being perforated in three or four places, through a single cutaneous opening; and the limb was put up in a starch apparatus. No benefit resulted, and the operation was repeated August 16, and again September 22. On the 11th of October a note was made that there was some firmness at the seat of fracture. On the 20th of that month Brainard's operation was tried for the fourth time. On each occasion the drilling had seemed to be very thoroughly done; though owing to the thickness of the muscular and adipose tissues, it was impossible to tell the exact position of the fragments, or just how the drill was penetrating them. It was now proposed to cut off the ends of the fragments and wire them together. To this the man did not immediately accede. He travelled, and consulted various practitioners, regular and irregular, finally returning for the operation, which was performed February 9, 1867. Cutting down upon the bone, the fracture was found to be oblique, the acute ends of the fragments overriding each other in such a way as to present the least possible surface for repair. It was probably to this peculiar position, that the failure of the previous operations was attributable. The ends were sawn off, and the fragments tied together by a single stout silver wire (No. 27). This was effected with no little difficulty, from the thickness of the soft parts and their infiltration. Great care was taken to avoid injury to the musculo-spiral nerve, which should run just at the point of fracture. A note was made that it was looked for, but not found and not injured. On the 27th of April the limb was finally removed from splints, firm union found, and the wire withdrawn. It was observed that the patient had lost power over the extensors; and the doctor gave an unfavorable prognosis, fearing that the nerve just referred to had become included in the cicatrix.

After this date the Doctor did not see the patient; but the man had lately fallen dead in the street, and he had obtained the specimen. This showed the fracture oblique; the position of the resected ends almost perfect; no trace of the wire ligature. The musculo-spiral nerve ran directly over the seat of fracture, and was either partially or wholly divided; it was difficult to say which, though traction upon one part would move the other. As to the way in which this injury occurred, Dr. Sands was inclined to think that, in spite of the precautions taken, it had been done with the knife; it might have been due to pressure of the nerve between the bones; or the nerve might have been included in the cicatrix; it could not have been included in the wire ligature, for that was passed upon the opposite side. This accident was not a rare one, as several cases of it were already on record. The Doctor did not see how it could always be avoided where the patient was fat and muscular, for it is necessary to resect the ends of the bone without removal of the soft parts to any great extent.

This specimen was preserved in gasoline, which has been proposed as a cheap substitute for alcohol. Some discussion ensued concerning the merits of this fluid, the general opinion being that its antiseptic properties were insufficient for the preservation of fresh specimens, though such as had been already hardened by alcohol might be safely kept in it.

OVARIOTOMY—INTERESTING DIAGNOSIS.

Dr. Peaslee presented an ovarian tumor, together with the other ovary, the uterus showing the ligatures as applied to both pedicles, and a portion of the abdominal wall showing union of the incision, from a patient upon whom he had performed double ovariotomy. He remarked as follows: The patient was a lady twenty-four years old, married two years. Shortly after marriage she first noticed a tumor in or near the right iliac fossa. About last August she observed fluid in the abdominal cavity. In October she was visited by a physician, and the case was pronounced one of ovarian tumor complicated with ascites. On the 1st of February she was tapped, and about fifty pounds of fluid were drawn off. About four weeks later I saw her. The largest circumference of the abdomen was then 42 inches; before the tapping it had measured 48½. No definite information could be gained as to the nature of the fluid removed; and the diagnosis of the case offered some points of interest, to which I would call the attention of the Society. With the patient on her back I found fluctuation, and dulness on percussion, over every part of the abdominal walls. Turning her to either side, there was dulness everywhere except low down over the region of the colon. No fluctuation was communicated, from the mass of liquid in the abdomen, to the finger passed per vaginam or per rectum. The patient standing, a tumor, apparently globular and solid, could be felt just above the ramus of the pubes on the right side; and this could be raised easily, as if floating in fluid; and upon removing the pressure, it would fall back again, as does the head of the fetus in the process of *ballottement*. The umbilicus was somewhat prominent, showing that some fluid, at least, had accumulated in the peritoneal cavity. I concluded that the diagnosis lay between that of an ovarian tumor complicated with ascites, and that of a very large ovarian sac, with a smaller one floating in a smaller quantity of ascitic fluid. I decided in favor of the former supposition, though some of the facts just mentioned militated against it. The patient was immensely anasarcous all over the lower half of the body; but there was no pitting on pressure upon the upper limbs or the face.

Proceeding to the operation, I made an incision three inches long, midway between the umbilicus and the symphysis pubis, through the skin and down to the abdominal aponeurosis; and through this a very minute incision, to ascertain the nature of the fluid in the abdomen. It was evidently ascitic. A steel bougie was passed around the tumor, and its pedicle easily made out as very long. The peritoneal fluid was then evacuated; and before enlarging the incision—not to be again deceived as in another case presented to the Society, where the tumor turned out to be an outgrowth from the uterus—I passed a sound into the uterus, and then found I could completely grasp this organ through the now flaccid abdominal walls, and distinctly feel the pedicle passing off to the right side. The tumor, on being brought into view, was found to be polycystic, but the sacs were all so very small that it could not be diminished by tapping. The incision was accordingly prolonged to an inch and a half above the umbilicus, and the tumor drawn out and removed. Its pedicle was the longest I have ever seen, measuring 3½ inches; and in ligation more than half of it was removed as undesirable. The other ovary was sought, and found to have commencing disease of the same kind, so I took that out also. Both pedicles were ligated with the double silk ligature, cut off short and returned into the cavity, as I have always done. Not a drop of blood had escaped into the abdominal cavity. Before closing up the incision, passing my hand down towards the Douglas cul-de-sac, I found that I could not reach it, but met there a globular mass, about three inches in diameter, resembling calves' foot jelly inclosed within a very thin membrane; and another smaller one, about the size of a hen's egg. I took them out and laid them on

a plate for examination; but for this I had no opportunity; for in about twenty minutes, during which I was attending to the patient, the contents had dissolved away the investing membrane, leaving a semi-fluid mass out of which I could make nothing. I have no doubt that they had originally belonged to the ovarian tumor, and, becoming separated, had fallen down into the Douglas cul-de-sac, completely filling it. The fact that the cul-de-sac was filled in this way explains the non-transmission of the fluctuation from the abdominal cavity to the finger in the vagina or the rectum. The dulness on percussion over the abdominal walls, the patient lying supine, was no doubt due to the fact that the fluid rose higher than the length of the mesentery would allow the intestines to rise, so that there was a layer of fluid still above them. Before the operation the fluid had for some time been accumulating at the rate of a pound and a half a day. In view of this, and of the fact that the peritoneum was found more highly congested than I had ever before seen, I expected that the effusion of ascitic fluid would still continue for a time after the operation. I therefore introduced a tent at the lower end of the incision, intending after four or five days to pass a silver catheter to ascertain the amount and character of the fluid in the abdominal cavity.

After the operation the patient appeared to be doing well, and presenting no unusual symptom except that she passed almost constantly an immense amount of urine, which seemed to be so irritant that she could not hold it. The anasarca disappeared completely, so that in forty-eight hours she was reduced to a mere skeleton. This gave me anxiety, as it showed much greater emaciation than I had supposed. Still the case went on favorably, with the single exception of irritation of the bladder. There was nothing to denote peritonitis, the pulse rarely rising above 100, though once to 112. On the morning of the third day, the patient, who had passed a good night, was spitting up a little mucus, to which she attached no importance, as she had often done it before. Two hours later, at 11 A.M., I was informed that she had vomited a little bile. Soon after 12 o'clock, the vomited matter much resembled the black vomit of yellow fever; and at 1 o'clock she was dead. Death was so sudden that there was hardly time to send down stairs to tell her husband that it was imminent. This was about 72 hours after the operation. You will see by the specimen that there is no evidence of any loss of vitality in the pedicles beyond the ligatures. A very slight degree of peritoneal inflammation was found. About two quarts of fluid were contained in the peritoneal cavity, all, or nearly all, ascitic, with less than a drachm of fibrinous material floating in it.

The Society then went into Executive Session.

Correspondence.

TRANSMISSIBILITY OF SYPHILIS BY VACCINE VIRUS.

To the Editor of The Medical Record.

My Dear Sir—At a meeting of the Journal Association, held June 5, a discussion arose relative to the transmissibility of syphilis by vaccine matter, in respect to which a diversity of opinion was elicited. I believe experience more and more establishes the fact, that syphilis is not transmitted by vaccine lymph, except it be mixed with blood, or the secretion from a specific sore, or when taken at the pustular stage. As this is a subject of vital interest, and one which is deservedly attracting much attention at present in the profession, and as the reason of its non-transmissibility has never to my knowledge been explained, I submit these few lines, that you may—if you deem it proper—give publicity to them, not that I claim infallibility in my explanation, but as everything that awakens discussion elucidates truth, I may hope that by this view becoming the bone of contention, the absolute truth may be revealed. That the non-transmissibility of syphilis is founded upon sound doctrine, is, I think, clearly demonstrated by Beale's germinal-matter theory. He inoculates that germinal matter from whatever tissue taken, and placed in the substance of another, will always produce that from which it was obtained, and not that in which it is placed, e.g., Periosteum will never produce anything but bone, no matter where it is placed. This holds good in pathological processes; transplant syphilitic virus to a healthy soil, and it will form a chancre; inoculate a person with vaccine lymph and vaccine will be produced. Again, germinal matter possesses the inherent property of CONVERTING the nutritive material *derived from the blood* into matter like itself.

From these data it seems plausible to infer that vaccine lymph possesses the same *property as other* germinal matter of REPRODUCING ITSELF, and TRANSFORMING the fluids (syphilitic?) which it receives from the blood INTO ITSELF, and therefore it is that when taken in a perfect state, it can never transmit any disease except its own.

Yours truly,

ALEX. W. STEIN.

25 West 13th Street, N. Y.

LOOSE CARTILAGES IN THE KNEE-JOINT.

(INFORMATION DESIRED IN REGARD TO UNPUBLISHED CASES.)

To the Editor of the Medical Record.

Sir—In February, 1861, Doctor T. H. Squire, of this city, and myself were obliged to defend a suit for alleged malpractice, growing out of an operation performed by us for the removal of a loose cartilage from the knee-joint—the result of the operation being anchylosis—the result of the suit being in our favor. In preparing ourselves for defence, assisted by physicians at home and abroad, we collected information in regard to 206 operations for this troublesome difficulty, while information, in tabular form, was published by Baron Larrey in the *Gazette des Hopitaux* for June 8, 1861.

After an interval of seven years, a letter has been received by Dr. Squire from Alfred Poland, Surgeon to Guy's Hospital, London, in which he states that he is about to publish a small work upon loose cartilages in the knee-joint. He has tabulated all published cases, up to the present date. He is now pushing his investigations still further, and desires of his medical brethren information in regard to cases that have never been published.

Any reader of the MEDICAL RECORD who may possess such information, will confer a favor upon Mr. Poland, and render a service to the cause of science, by communicating the same to me as soon as possible.

The chief items of information are the name, residence, age, and occupation of the patient; the particular knee affected; the size, mobility, supposed cause, and symptoms of the foreign body; the duration of the difficulty; the treatment, whether by operation or otherwise; and if operated upon, by what method, and finally, the result of the case, together with any reflections or remarks that may be added.

Proper acknowledgment of thanks, and due credit,

will be awarded to all persons who may render assistance, in accordance with this regard.

WILLIAM C. WEY, M.D.

ELMIRA, New York, June 24, 1868.

Obituary.

THOMAS C. BRINSMADE, M.D.

OF TROY, NEW YORK.

DR. THOMAS C. BRINSMADE, one of the most prominent medical gentleman of this State, died suddenly of angina pectoris, while officiating, on the evening of the 22nd of June, at a public meeting, held in behalf of the Rensselaer Polytechnic Institute of that city. He was born in Hartford, Conn., graduated at Yale College, and came to Lansingburgh in 1822, where he remained until 1832, when Dr. Elisha Sheldon, then a leading physician of Troy, having died, he and Dr. F. B. Leonard removed to Troy, and succeeded to the practice of Dr. Sheldon. Dr. B. was induced to come there by some fifteen or twenty of the leading citizens —the Warrens, Hearts, and others—who guaranteed him a certain sum of money each per year, whether the amount of the income reached that sum or not. Dr. Leonard remained but a short time, when Dr. Brinsmade, for some years, with Dr. John Wright, as partner, continued the practice. In 1848-9 he was elected President of the Rensselaer County Medical Society. In 1857 he was elected Vice-President of the State Medical Society. In 1858 he was elected President of that Society. In 1866 he was chosen Vice-President of the American Medical Association; and in 1867 he was appointed delegate to the International Medical Congress at Paris, and, attending the same, took a prominent and conspicuous part. Dr. Brinsmade was at one time City Physician; repeatedly President of the Board of Health; one of the original Governors of the Marshall Infirmary, and one of the Medical Board; a trustee of the Binghamton Inebriate Asylum; and for twenty-five years was an active member of the Board of Trustees of the Rensselaer Institute. Upon the resignation of President Winslow he was elected President of the Institute. During all the years of his connection with that institution he took a deep interest in its affairs, and it is stated that in his will he has left it a most munificent bequest.

Dr. Brinsmade was well known throughout the country as an active worker in the cause of medical science; and his brethren, in his death, sustain an irreparable loss. He was truly a noble example of the upright, conscientious, Christian physician, one who was untiring in his efforts to advance the best interests of his calling as well at the bedside as in the numerous Society gatherings, at which he was a devoted, zealous, and punctual attendant.

New Instruments.

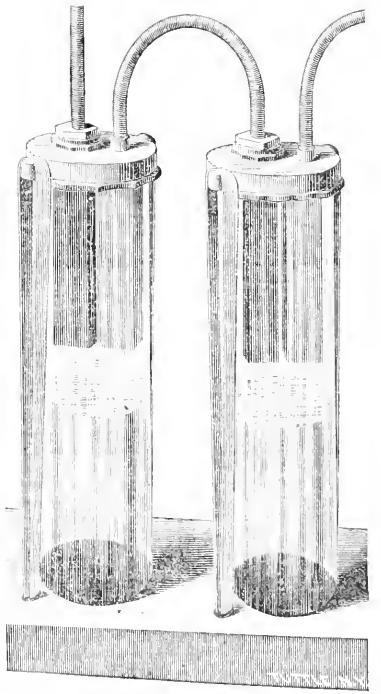
DESCRIPTION OF AN AIR-TIGHT GALVANIC APPARATUS.

BY G. M. BEARD, M.D., & A. D. ROCKWELL M.D.

THE electricians of this country and Europe have long felt the want of some convenient, powerful, and constant Galvanic apparatus, that should be tolerably portable and not inordinately expensive.

The most trying annoyances that we have experienced during all our investigations in the department of electro-therapeutics have been our repeated failures to obtain a convenient and satisfactory *Galvanic* apparatus. For the purposes of *general electrization*, we almost invariably use the *Faradaic* current from the electro-magnetic machine of Jerome Kidder, and have found it to combine every element that can be desired in an electro-magnetic apparatus. But, as is well recognised by all electricians, there are certain conditions that can be better met by the *Galvanic* than the Faradaic current. The Galvanic current will sometimes produce muscular contractions, when the Faradaic will not. It will dissipate or cure neuralgic pains, that the Faradaic serves only to aggravate. It possesses greater intensity than the Faradaic, and will also produce more marked chemical effects. It is therefore indicated when we desire to cause the resolution of tumors, or to hasten absorption.

On account of these manifest advantages of the Galvanic over the Faradaic current in various types of diseases, such as organic paralysis, certain forms of neuralgia, rheumatic effusions, and some affections of the eye, we have spared no efforts to obtain a convenient and reliable Galvanic apparatus. Our first attempts were quite discouraging. A horizontal pile of 150 pairs, arranged somewhat after the style of Cruikshank's trough,



gave a powerful current for a time, but soon became utterly valueless. A modification of the Voltaic pile, manufactured for us by Messrs. Chester & Co., answered our purpose tolerably well for a few weeks; but the odor that arose from it was unpleasant, it was not conveniently portable, and, more than all, like Voltaic piles in general, soon became very much coated, and the cur-

rent it produced was too feeble and inconstant to be of any service.

Still another modification of the Voltaic pile arranged by Mr. Chester was found to be as uncertain as its predecessors.

At our very urgent and repeated request, Mr. Chester consented to try one more experiment, the result of which is presented in the accompanying cut. It was not completed until after considerable labor and investigation, and many annoying details, that can only be appreciated by those who have attempted similar experiments. The apparatus may be composed of any number of elements that may be desired. Probably 75 or 100, or at most 150 cells, will be sufficient for nearly all the ordinary purposes of electro-therapeutics. The wood-cut accompanying represents two of these cells. They are three inches long, and are inserted in a wooden block. Each glass is provided with a zinc cover from which a projection runs down into the glass, thus forming the zinc element. The other element is *carbon* carefully connected with platinum, and well insulated from the zinc cover. Between this cover and the glass top, a piece of soft rubber is interposed, and the packing is made completely *air-tight* and water-tight by the pressure of two rubber sponges, that pull the cover firmly down. Connection between the cells is readily made by means of spiral springs. The battery is charged by filling the glasses *half full* of water, adding some bi-sulphate of mercury. A small bit of cloth is interposed between the plates so as to retain moisture. To use the battery, we invert it, thus allowing the fluid to flow over the plates, and moisten the cloth. It should be kept inverted but for a short time, and then it should be restored to its natural position.

While the apparatus is inverted, and for some time afterwards, the current of electricity may be felt by taking hold of the electrodes. The strength of the current, and the length of time it can be felt after the immersion, will depend on the number of cells of which the apparatus is composed. In an apparatus composed of 100 cells, a powerful current has been felt for many hours after inversion. In any apparatus all the cells may be used, or only a part of them, according as a strong or weak current is desired.

The current may be interrupted with any desirable rapidity by means of a brake-piece. With a large apparatus of 100 cells or even of a less number that are in perfect order, one immersion will oftentimes answer for two or three successive applications. This apparatus has the following advantages over any other Galvanic apparatus that has been hitherto devised either in this country or in Europe.

1st. It is portable. Stöhrer's Galvanic apparatus, that has been so popular in Germany, is exceedingly cumbersome.

The same is true of all the combinations of Daniels, Bunsens, Groves, and Smees elements that have been hitherto employed.

They occupy a large space, are very heavy, and can therefore be transported only with great difficulty.

2nd. It gives a current of great intensity and of sufficient quantity for most of the purposes of electrization. All the modifications of the Voltaic pile, that have been used from the period of its invention until now, have failed to afford a strong current for any considerable length of time. They lose their strength very rapidly.

The electro-motive force of this apparatus is superior to that of any form of Voltaic pile. According to the experiments of Mr. C. N. Chester, the lowest electro-motive force of this battery, at its lowest power, is fifteen times greater than that of the perforated Voltaic pile, and at its highest force, 256 times greater. The quantity force is not so great as that of some other batteries, but yet is sufficient for all the ordinary purposes of electrization. Moreover, it has been found by direct experiment, that the quantity force of many of the ordinary batteries is in excess of the ability of the body to conduct it. On the other hand the intensity of this battery is very great, one cell and a half being equal to one of Grove.

3rd. It retains its strength for a considerable time, and can when necessary be very easily cleaned. It can be pulled to pieces and charged at the rate of 100 cells in two hours. At first some difficulty was experienced in making the cells water-tight, but by perseverance this obstacle has been overcome. Some slight improvement in regard to the mechanical details of the apparatus may yet be suggested and adopted, but the general principle of its construction must, we think, hold good for a long time. We have found a battery of eighty cells to work for six weeks.

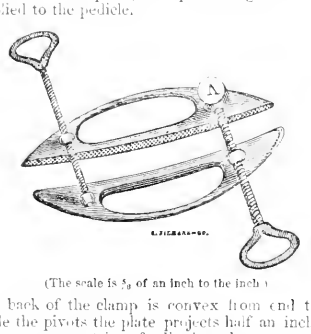
4th. It is always ready and convenient for use.

When we desire to make an application it is only necessary to invert the apparatus for a moment, and the current begins to flow.

It gives forth no unpleasant odor, as do most of the Galvanic batteries in common use; occupies but little space in the office, can be readily transported by hand, and, unlike the familiar batteries of Grove and Daniels, &c., is ornamental as well as useful. This apparatus can be seen and examined at the office of Messrs. Chester & Co., 104 Centre St., N. Y.

WILDE'S OVARIOTOMY CLAMP.

This instrument was devised to overcome the objections entertained against Mr. Spencer Welles's small clamp, of being unnecessarily heavy and expensive. The accompanying cut accurately represents the clamp, which consists of two parallel fenestrated plates controlled by the screws B, C. The four pivots that receive the screws are loose in the plates. The screw B is larger than C, a circular notch being made near its extremity to receive the small screw A, which works in the pivot at right angles to B. By unscrewing A, B is freed from the pivot, thus permitting the clamp to be applied to the pedicle.



(The scale is $\frac{1}{10}$ of an inch to the inch.)

The back of the clamp is convex from end to end. Outside the pivots the plate projects half an inch, that they may rest on strips of adhesive plaster.

Mr. Welles's clamp weighs three and a half ounces and costs from ten to twelve dollars.

This instrument weighs less than an ounce, and costs about three dollars. It is manufactured by Messrs. Tiemann & Co., No. 67 Chatham st., N. Y., to whom I am indebted for their kindness and practical workmanship in perfecting the clamp. THOS. WILDE, M.D.

7 Fifth av., Brooklyn.

Medical Items and News.

Assistant Sanitary Inspectors.—The following named gentlemen were appointed Sanitary In-pectors for the coming three months, commencing July 1:—Albert Strang, J. D. Wadsworth, W. H. B. Post, L. A. Raborg, Lucien Damanville, Benjamin Howard, W. V. White, Francis A. Thomas, J. Win-low, and Charles T. Roberts.

The Late Michael Faraday.—Prof. John Tyndall, the successor of Michael Faraday in the Royal Institution, has written a memoir of his friend, in which his scientific investigations are fully discussed.

Acting Assistant Surgeon F. M. Holly, U. S. Army, having reported at Headquarters Fifth Military District, pursuant to instructions from the chief medical officer, New York city, has been ordered to proceed to Austin, Texas, and report to the Commanding General and to the Chief Medical Officer, District of Texas, for assignment to duty.

Medical Publications.—According to recent statistics of the Leipsic book publishers, the demand for treatises upon medicine, and the natural and collateral sciences, is constantly increasing, while novels and light literature are neglected.

Labor Bureau.—The Commissioners of Public Charities and Corrections have established a labor bureau, under the direction of the Superintendent of Out-door Poor. The object of the movement is to facilitate the emigration of unemployed labor to the interior, and thereby lighten the burden upon the public charities.

Long Island College Hospital.—Professors Austin Flint, Senior and Junior, and Foster Swift, have resigned their respective chairs in this institution.

Yellow Fever and Cholera are raging fearfully in Lima, Peru. In the middle of last month from 200 to 300 persons were dying daily, and 2,500 patients were in the hospitals. The epidemic at Vera Cruz, which was of a dangerous type, is now showing signs of abatement.

Sporadical cases of cholera occur daily at Matanzas, Cuba, but they are not of an alarming character.

Out-Door Relief for the Poor.—The Superintendents of the Poor, Kings county, New York, have disbursed for the relief of the poor, from August 1, 1867, to July 1, 1868, the sum of $122,984.22.

Analysis of the Massena or St. Regis Spring Water.—According to Prof. Mayer, the Massena or St. Regis spring water, in repute for the treatment of cutaneous diseases, contains in one gallon, chloride of sodium, 79.792 grains; chloride of potassium, 0.508 grains; chloride of magnesium, 29.927 grains; bromide of magnesium, 0.673 grains; bicarbonate of lime, 4.872 grains; bicarbonate of iron, 0.488 grains; sulphate of lime, 60.931 grains; sulphate of soda, 3.501 grains; phosphate of soda, 1.320 grains; hyposulphate of soda, 4.205 grains; sulphuret of sodium, 1.105 grains; silicate of soda, and organic compounds, 11.176 grains; total, 198.678 grains. Sulphuretted hydrogen (free and half combined) is also present.

The Report of the Tragic Death of Pirogoff, which was first published in the "*Wiener Allgemeinen Med. Zeitung*," is happily not confirmed. The distinguished Russian is at his villa near Kiew, enjoying excellent health.—*Allgemeine Med. Central Zeitung.*

The Eminent Dr. Szymanowsky, Professor of Surgery, died at Kiew on the 25th of April.

Died, in April, 1868, at St. Petersburg, Peter Alexandrowitsch Dnbowitzky, Medical Inspector General of the Russian Army, in the fifty-third year of his age.

Infant Mortality in Paris.—The *Courrier Medicale*, of Paris, in a very able article on the mortality of infants, attributes it in a great many instances to the insufficiency of the development of bone, and adds that the milk of a healthy nurse ought to contain two and one-half grammes of phosphate of lime, which is the basis of all osseous matter. From observations made, it appears that scarcely one in ten women has milk coming up to this standard, and, therefore, the infants, it is said, necessarily perish or grow up sickly and probably deformed.

Present System of Medical Education in Great Britain.—Mr. W. F. Teevan, F.R.C.S., delivered the oration at the ninety-fifth aniversary of the Medical Society of London (*Med. Press and Cir.*), and took as the theme of his remarks the present system of medical education, reviewing, first, the examining boards, which he styles the "Government Inspectors;" second, the medical schools—the great manufactories of medical men; and, third, the raw article—the medical student. The speaker very ably maintains his opinions that the medical student is no longer "a mere school-boy, but a reasoning, thinking, intelligent young man," and should be allowed to obtain his education when and where he sees fit, provided only that he *thoroughly* fits himself to practise his profession before receiving his diploma; that the classes at the medical schools are, as a rule, so large that very few of the students can see the demonstrations of the professor of anatomy, and that very many of them are excluded from the advantages which accrue from personal intercourse between teacher and scholar; and that the examinations for graduation are a *farce*. Mr. Teevan even goes so far as to criticize the ability of men who studied anatomy and surgery fifty years ago to examine at all; and attributes the fact that so many unqualified men pass their examinations, either to this inability or—to something worse.

He calls special attention to the fact that men who have obtained the diploma of the College of Surgeons, and are *therefore qualified* to practise on the British public, are still *not* qualified to practise on those costly articles—British sailors and soldiers—as shown by the fact that they are continually "*plucked*" by the examiners of the Naval and Military Boards.

Death from Tight Lacing.—We record for the benefit of the ladies of England the melancholy death of a young lady in New York from tight lacing. Miss Jones, the lady in question, died suddenly, and, it is alleged, from apoplexy of the lungs in consequence of unusual tight corset lacing. There was an actual post-mortem examination and inquest ending in a verdict in accordance with the above statements. Ladies will, of course, be in the fashion. We only show them that this occasionally involves going out of the world.—*Lancet, May 23.*

New Publications.

Lectures on the Diagnosis and Treatment of Functional Nervous Affections. By C. E. Brown-Sequard, M.D., F.R.S., etc. Part 1. Phila.: J. B. Lippincott & Co. 1868.

Footprints of Life, or Faith and Nature Reconciled. By Philip Harvey, M.D. New York, S. R. Wells, 389 Broadway. 1868.

Original Communications.

FIVE CASES OF STRANGULATED HERNIA OPERATED UPON WITHOUT OPENING THE SAC,

TOGETHER WITH SOME REMARKS UPON THE OPERATION.

By ERSKINE MASON, M.D.,

DEMONSTRATOR OF ANATOMY, COLLEGE PHYSICIANS AND SURGEONS; SURGEON TO CHARITY HOSPITAL, ETC.

CASE I. FEMORAL HERNIA.—January 22, 1865—I was sent for by Dr. Loomis to see Mr. C., aged 55, by occupation a carman, who was suffering from strangulated femoral hernia. When I saw the patient his pulse was exceedingly rapid and small, countenance anxious and expressive of great suffering, bowels tympanitic, and so painful upon pressure that his limbs were drawn up to keep off the weight of the bed-clothes. The surface of the abdomen was very red, as also the hernial tumor, from the effects of a mustard poultice which had been applied for the purpose of alleviating his pain. In his right groin, directly below Poupart's ligament, and running parallel with it, was a tumor about the size of a pullet's egg: tender to the touch, elastic and somewhat movable upwards and downwards. The patient stated that he always had enjoyed good health, and been perfectly temperate as to his habits. Nine years ago, while suffering from a constipated condition of his bowels, he noticed a small swelling in his right groin, which he was not able to reduce, and giving him no trouble, he thought but little about it. Two days before I saw him, his horse fell and he was thrown forward from his dray. At that time his hernia increased in size, and he felt a little sick, though he kept on with his work. The following morning he had a movement from his bowels, and walked out a short distance to have his horse shod, but feeling sick at his stomach, returned home and went to bed, when he began to suffer with pains in the chest and bowels, together with frequent attacks of vomiting. Later in the day hiccough made its appearance, which, together with great restlessness, continued throughout the night. All attempts at reduction by taxis having failed, the patient being under ether, I proceeded to operate at 12 M., in the presence and with the assistance of Drs. S. S. Crane, Loomis, Morrel and White, all of whom had first attempted reduction by taxis. I made the incision over the centre of the tumor at a right angle with Poupart's ligament, and proceeded cautiously until the sac was reached, intending to liberate the gut by dividing the stricture without the sac if possible. *The sac was found to be bent upon itself, and lying under the falciform process of the saphenous opening.* The flaps were dissected off the tumor, so that all could obtain a perfect view of the hernia as it rested in this novel situation. I proceeded to nick Gimbernat's ligament with the hernia knife, a few adhesions which bound down the fundus of the sac being broken away, and the tumor brought down so as to occupy the usual position of femoral hernia. It was found necessary to divide a few fibres of Poupart's ligament before reduction could readily be made; which was accomplished without wounding the sac. After which the sac was also returned. The wound was dressed in the usual manner, and the patient placed in bed. Upon coming from under the effects of the ether he vomited great quantities of stercoraceous material, and troublesome hiccough continued for some time, though the pain in the abdomen rapidly diminished under two grs. of opium, which was administered immediately after the operation. Small doses of opium were given at intervals for the first two days, every thing progressed favorably, and on the sixth day after the operation his bowels moved naturally. Many months afterwards I saw this patient and found the canal completely closed. He is still I believe following his occupation, and rejoicing in a *radical cure*. Looking over the literature of this subject, I have been unable to meet with an example of femoral hernia passing down *inside of the vein*, and assuming the position which this case did.

CASE II. OBLIQUE INGUINAL HERNIA.—June 28, 1865—This evening I was requested by Dr. Withers to see Mr. R., aged 57, who was suffering from a strangulated oblique inguinal hernia of the right side. This patient had always led an active life; except during the last two or three years, in which he had been engaged in keeping store. He has had this rupture for the past ten years, but has always been able to effect its reduction while sitting in a rocking-chair. His habit has been to wear a truss, but lately had left it off, owing to its not fitting properly. On the evening of the 27th, while taking a walk, an immense quantity of intestine came down, which he was unable to return. He did not suffer, except from slight uneasiness, until the following afternoon—attending to business as usual up to that time. I found the patient with his scrotum the size of an infant's head, not very painful, nor complaining of much abdominal tenderness, except at the umbilicus. The countenance wore a somewhat anxious expression, and he was troubled with hiccough and had vomited a great deal of "greenish matter." Bowels had moved during the morning. Ether being administered and a trial made at reduction by taxis without success, I proceeded with the operation, assisted by Drs. Withers and S. P. P. White. A single incision was made along the tumor, beginning just about an inch above the external ring and extending downwards the extent of two inches. The various coverings were divided till the sac was reached; and the stricture being discovered just above the external ring, a director was passed through the ring and the stricture divided, without opening the sac—the sac containing both intestine and omentum. No impediment was made after the division of this stricture, to speedy reduction. The wound was dressed as usual in these cases, and the patient, who had been placed upon a table for the operation, was removed to bed. This first night after the operation was rather a restless one, and he had several movements from the bowels. Everything went along rapidly towards recovering, and he was up on the twelfth day after the operation.

CASE III. FEMORAL HERNIA.—November 19, 1867—I was called this morning at 8 o'clock, to see N. G., aged 45, and a printer by occupation, whom I found to be suffering with a strangulated femoral hernia of the left side. Upon entering his room, he informed me he had been suffering from colic all night, had his bowels move once, but vomited frequently. During the night his wife had administered a dose of oil, which was immediately rejected. His surface was cold, his expression that of a person in great pain. Finding the bowels exceedingly tympanitic, I asked him if he had a rupture, to which he replied, No! Upon turning down the bed-clothes to examine for myself, I found a small tumor about the size of a small egg, just below Poupart's ligament. This was somewhat tender and firm to the touch, and according to his statement had never been there before, which fact was corroborated by his wife. Upon questioning him more closely, he stated that last evening he was wrestling with a friend, but did not know of making unusual exertion. He re-

turned home about 8 o'clock in the evening, and was then taken with pain in his bowels and vomiting. The nature of this tumor being explained to him, and a fruitless attempt having been made under ether with taxis, I proceeded to operate at 9 A.M., with the assistance of Dr. Carmalt. Both Gimbernat's and Poupart's ligament had to be slightly nicked before reduction could be accomplished, which was done without opening the sac. The intestine was filled with fæces, which had to be pressed out before the gut returned; after this the sac was pushed up into the canal. Everything did well, and the patient made a rapid recovery. The bowels moved naturally, and without pain, on the afternoon of the third day. Some time after this patient was about, I examined him and found the canal had become completely closed by lymph, an indurated mass being all there could be discovered. I believe he will have a radical cure.

CASE IV. FEMORAL HERNIA.—June 16, 1868.—While making my visit this afternoon at Charity Hospital, I was asked by Dr. Gouley, one of the House Physicians, to see a patient who had been brought into his ward, whom he believed to be suffering from strangulated hernia. The following account I received from the Doctor in charge. "S. T., born in Germany, cigar-maker, aged 38. On admission the patient presented a very anxious and pinched expression of countenance; his skin was cool and moist, and devoid of elasticity, so that a portion of it pinched up would remain in that condition several minutes. During the day he had vomited in essantly stercoraceous material. His bowels had not been moved for eight days. Pulse was 120 and weak, and complained of cramps in the calves of his legs and jaws, also in the abdomen." When I saw the patient he was suffering no pain, mind clear, surface moist, extremities quite cool, and his fingers were pitted as if they had been in warm water for some time. Upon examining the abdomen, I found it hard and flat, no tympanites, and considerable pressure gave rise to but little pain. A small tumor was found just below Poupart's ligament, which he had had for about a year and a half, and was at times smaller than at present. He gave me the history of having suffered from strangulated hernia for a period of four days. So prostrated was his condition, that I feared he would not survive the operation, but this being his only chance, I deemed it but right to proceed. I omitted to state that but the slightest impulse could be discovered in the tumor when he coughed; the tumor being hard and but slightly tender when firmly grasped. Before giving ether, which was administered with great care, by Dr. Black, one of the house staff, I gave the patient a little whiskey and water, which was instantly rejected, together with large quantities of stercoraceous material. Upon coming down to the sac, I determined to divide the stricture without injuring the same if possible. Some of the fibres of Poupart's and Gimbernat's ligaments being divided, I seized the sac preparatory to examining the contents more closely, which presented a dark purplish hue, when suddenly the sac, together with its contents, passed up into the cavity of the abdomen. The hernia had, I believed, been reduced *en masse*, which indeed was found to be the case. Passing my left forefinger up the canal, I could distinctly feel the sac, and was fortunate in being able to retain it in position, while with a pair of forceps in the right hand, I was enabled to seize the sac and draw it out again. A few fibres surrounding the neck of the sac were then divided, and warm sponges being applied, the intestine began to assume its natural color, when without any further difficulty the hernia was reduced. The patient came from under the influence of ether slowly. He passed a restless night, complaining of some abdominal pain, which was relieved with morphia, and an opium suppository, together with turpentine stupes over the bowels; he took some whiskey, beef-tea and carb. ammon. during the night, and had no vomiting after the operation. When the house physician made his visit in the morning, he seemed to have rallied, and hopes were entertained of his recovery. At 11 A.M., however, he suddenly sank and died. Autopsy 24 hours after death. Abdomen slightly tympanitic. On opening the abdomen but little peritonitis was discovered, and that principally upon the peritoneum covering the left iliac fossa and the abdominal wall. The intestines were but little injected; no fluid in the cavity. The portion of ileum, which had been strangulated, was not gangrenous, and presented upon its surface only one small patch of ecchymosis. The sac was found to be uninjured. Fearing lest the intestine might have been wounded by the forceps in drawing it out of the cavity after its reduction in mass, I had it filled with water, but no laceration was found either in the gut or sac. This specimen was presented at the Path. Society, June 24. Death assumed to be due to the great prostration, produced perhaps from the excessive vomiting, which had taken place for two days previous to the operation. The kidneys were apparently healthy, and no albumen was found in the urine removed from the bladder after death.

CASE V. OBLIQUE INGUINAL HERNIA (Congenital).—Feb. 27, 1865.—I was called this afternoon to see a colored boy, aged 18 years, servant of Rev. Mr. M. I found him suffering from a strangulated hernia on the left side. This hernia he has had all his life, he informed me, could always be reduced by himself, except last summer while at Saratoga it "became caught," and was reduced by Dr. Allen of that place. The day previous he had carried a young lady up stairs, and thinks he then strained himself. This afternoon symptoms of strangulation appeared, the most constant of which he describes as like a cord drawn around the body, in the region of the abdomen. While employing taxis, a portion of intestine went back with a gurgle, when he exclaimed, "Doctor, it has all gone up and I feel all right now." I applied a compress and bandage, but did not feel satisfied that the reduction was complete, owing to an appearance of fulness about the scrotum. I directed that I should be sent for, did any other symptoms show themselves. At 8 that evening I was sent for. When I reached the patient, I found him suffering greatly from pain in the abdomen and the inguinal canal, together with the scrotum greatly enlarged. With the assistance of Drs. J. J. Crane, White and Gillette, after all attempts at reduction by taxis had failed, I proceeded with the operation at 9 P.M. A stricture was found in the canal, which was laid open, and divided without injury to the sac. Still that portion of intestine and omentum which were in the scrotum, could not be reduced. The scrotum was consequently laid open, when the hernia was found to be within the cavity of the tunica vaginalis. Just at the point where the tunica vaginalis is usually occluded, there was a ring of indurated tissue within the sac, thus producing a stricture. I presume this was formed by the truss which he frequently used. Not wishing to injure the peritoneum, I made a small opening at the bottom of the tunica vaginalis, through which I passed my finger, and with the finger as a guide, I introduced the hernia-knife, and nicked this indurated ring. After which reduction was easily effected. All passed along very well, till one evening, by moving about in bed, the edges of the wound became very much separated. I did not bring them together again, believing that if the wound was

left to granulate, he would obtain a radical cure. A few days after this, he had an attack of epididymitis, together with an abscess of the scrotum; all of which he rapidly recovered from. This patient was under my observation for a long time, and had a perfect cure following the operation, the inguinal canal having been completely closed from this union by granulation.

Perhaps this case may not be regarded as one in which the sac was unopened, yet I would call particular attention to this fact, that the *peritoneal sac* was not wounded; the only serous membrane that was cut being the tunica vaginalis, which is not prone to give rise to serious inflammation, when wounded, as is the peritoneum.

These five cases I have transcribed from my notebook, for the purpose of showing the readiness, even in small, as well as in large hernia, with which the operation of not opening the sac can be performed, as well as its giving promise of far better success, than when the sac has been opened, the gut exposed to the air, and subjected to handling. So seldom do we find the stricture to be contained inside the sac, and so rarely does real necessity occur for the opening of its peritoneal covering, that I think we can rarely be justified in choosing any other operation than the one advocated in this paper. It has been contended by some, that this operation might lead to the reduction of the gut, when in a gangrenous condition. This objection, it appears to me, might be used with equal justice against the employment of any means to effect reduction short of a cutting operation. Should the contents of the sac be such as to forbid their reduction, this could be determined both by the eye and by the sense of smell, in the majority of cases, without wounding the sac. If not, then it would be time enough to resort to the old method of operation.

In one case we were tempted to resort to this practice from the dark appearance of the intestine, and portions of the sac, but warm applications by means of sponges wrung out in hot water proved sufficient, after the stricture was divided, to restore the parts to their normal appearance. The majority of deaths occurring after the operation for strangulated hernia, are due to peritonitis, and this certainly seems far more likely to follow after the sac, which is so often inflamed, is wounded, and the intestines and omentum subjected to digital manipulation, than where these are carefully protected from such exciting causes. Again, should any vessels, as the epigastric or obturator, become wounded, the risk of hæmorrhage taking place into the peritoneal cavity is avoided; and the patient's chances for recovery thus increased. Looking at these facts, and as we shall show from statistics the very favorable results of this operation, it seems surprising that surgeons should ever think of practising any other, when the case would at all admit of it. This operation is the one I believe now advocated by English surgeons, but as yet not so much practised in this country. Prof. Gross, in his System of Surgery, when speaking of this operation, remarks that "in this country it has probably not attracted as much notice as it deserves." As far as I have been able to learn, but little has appeared in our literature upon this subject, and we are almost wholly indebted to English surgeons for what has been written upon it. Some few years ago, Dr. Henry B. Sands published the histories of some cases in the *New York Medical Times*, wherein he had performed this operation, together with remarks on the same; with this exception I do not remember ever having seen this operation treated of in our medical journals, though case after case of various kinds of hernia has been published, operated upon after the old method. The operation of dividing the stricture without the sac is generally supposed to be due to S. L. Petit; but according to South in his notes to Chelius' System of Surgery (*American Reprint*, page 303), both Franco and Paré "had cut into the abdominal ring, and did not open the hernial sac, except when reduction could not be effected." To Jean Louis Petit, however, is due the honor of first generally recommending this operation. According to Lawrence, this operation was performed by Petit in 1718, who not only advised it in old and large hernias which were adherent to the sac, but also recommended its more general employment. In 1750 this procedure was brought forth as entirely new by Ravaton in a Treatise on Gunshot Wounds, and he speaks of having operated with success in three cases. Monro the second was also an advocate of the operation, his first operation being in 1770. Sir Astley Cooper recommends this method in his work upon hernia, in all old ruptures, and believes surgeons will employ it more generally when they have learned its advantages from experience. The revival of this operation must be ascribed to Mr. Aston Key, who in 1833 published a memoir on the "advantages and practicability of dividing the stricture in strangulated hernia on the outside of the sac." Prior to this date, however, he called the attention of the profession to this method in a clinical lecture, published in 1829. (*London Med. Gazette*, vol. 4, p. 193.) Mr. Luke, also, strongly urges the practice of Petit, and gives the results of this operation in his own hands (*London Med. Gazette*, vol. 1, 1839-40, and *Medico-Chirurg. Trans.*, vol. 31, 1848.) Mr. Luke says: "I have attempted the performance of Petit's operation in eighty-four cases. Of this number the operation was completely successful without opening the sac, in fifty-nine. In twenty-five it was necessary to open the sac to effect a reduction of the hernial contents, the operation generally varying in extent from one-half to one-quarter of an inch. With respect to the mortality amongst these patients, of the fifty-nine in whom the sac remained unopened, seven died; of the twenty-five in whom the sac was opened, eight died. These cases included those of femoral, umbilical and inguinal. In three of these cases he states that Petit's operation was successfully completed; but the sac was opened after the reduction of the strangulated parts into the abdomen, to remove some doubts as to their perfect liberation. The proceeding in each case, however, was ascertained to be wholly unnecessary. Mr. Erichsen, in his System of Surgery, p. 728, states that of seventy-seven operations for hernia, reported by Sir A. Cooper, 36 proved fatal; and of 545 cases recorded in the journals, and collected by Dr. Turner, 260 are reported to have died. The result, therefore of Mr. Luke's operation is most favorable, when contrasted with such as these." According to the experience of those who have written upon this subject, the operation appears to be more successful in femoral hernia, owing to the stricture being found frequently in the neck of the sac in the inguinal variety. In all cases it would appear to me that this operation should first be attempted, and *then*, if found unsuccessful, only that portion of the sac opened which involves the stricture. Certainly no operation has ever held out greater inducements than the one so strongly advocated by Petit, Key and Luke.

113 West 44th st.

FEES FOR TESTIMONY.—A physician in Chicago, Ill., refused to give his testimony as an expert in a railroad case without a fee. The judge ordered the company to deposit $20 with the clerk of the court, to abide the decision of the point raised. The physician then testified.

SOME REMARKS ON PARONYCHIA.

BEING A PAPER READ BEFORE KINGS COUNTY MEDICAL SOCIETY, AND PUBLISHED BY REQUEST OF THAT BODY.

By J. S. WIGHT, M.D.,

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PARONYCHIA is an inflammatory condition of the finger or thumb. It not unfrequently affects more than one finger at the same time, even appearing on a finger of each hand. And it may invade the palm of the hand, going up the front of the wrist to the forearm.

Paronychia generally makes its appearance on the palmar aspect of the hand, in one or more of the anatomical elements from the skin to the bone. It may be confined to the skin and subcutaneous cellular tissues; it may be limited to the tendons and their sheaths; it may begin in the periosteum; it may attack the bone; it may implicate all the structures of the finger or thumb. More than once have we seen it make a joint the chief point of attack. It is destructive, and often perils the integrity of the hand, unless arrested by appropriate treatment.

Whatever may be the origin of this affection, there are various opinions in regard to its nature. A consideration of some of these opinions will, doubtless, aid us in an attempt to arrive at a better understanding of the subject.

Mr. Druitt says that paronychia "signifies an *abscess of the fingers.*" If this be true, paronychia cannot signify an ordinary abscess, for it has no wall of "limiting-fibrine"—at any rate, we have never seen one that did.

Prof. Miller, after describing "a mild form [of paronychia] limited to the surface," says "a somewhat more serious action is found to pervade the subcutaneous cellular tissue, as well as the skin, bearing the same analogy to the former affection [superficial Paronychia] as phlegmonous erysipelas does to erythema."

Prof. Gross describes paronychia as "an affection of the thumb or finger, commencing in inflammation, which soon terminates in suppuration, and sometimes even in gangrene."

"How this disease is produced, or what its real character is, is still a mooted question. The most plausible conjecture is that it is a bad form of inflammation, not unlike carbuncle, occurring in a constitution more or less depraved, in consequence of a disordered state of some of the secretions, particularly those of the digestive apparatus."

"That whitlow," writes Erichsen, "is truly an erysipelatous affection of the fingers appears to be the case for the following reasons:—1stly. Because the causes, whether of season, infection, or local irritation, appear to be the same in both affections. 2ndly. The constitutional disturbance is always very severe for so slight a disease, and assumes the same character of speedy depression that we observe in erysipelas. 3dly. The inflammation of the affected finger is invariably diffuse, never being bounded by adhesions, but always tending to terminate in suppuration and sloughing. And lastly, so soon as the disease spreads beyond the affected finger it assumes a distinctly erysipelatous appearance and character."

One author says, that paronychia "signifies an *abscess* of the fingers;" another thinks it is analogous to erysipelas; another "conjectures that it is not unlike carbuncle;" and another affirms that it "is truly erysipelas of the fingers." When there is a difference among the *doctorum reges*, who shall be able to decide? and whose opinion shall prevail?

In our opinion *paronychia is a diffuse inflammation, sui generis, affecting the finger or thumb, sometimes extending to the hand and forearm.* And we should never forget that it occurs in those constitutions which are below the standard of perfect health.

Prof. Erichsen says that "whitlow is a frequent affection in *old* and *young* people;" while Professor Gross says that "it is most common between the ages of twenty and thirty-five." This difference of opinion must be accounted for on the supposition that different facts were recorded by different observers.

Fifty-seven cases were admitted as out-patients of the Long Island College Hospital from January, 1866, to October, 1867. Thirty-four of these were females, and twenty-three males.

These cases were admitted for treatment at all stages of the disease; but the majority of them applied at about the end of the first week of attack. The earlier the treatment was begun, the more speedy was the recovery. If the treatment was begun late, the recovery was delayed. If there is anything well established in medicine or surgery it is this: *that paronychia can be cut short by treatment.*

The youngest case was nine; the oldest was sixty years of age; and both were females. There were thirty-four females and twenty-three males. If one less of each had been admitted, there would have been *three* females to every *two* males. According to this record females are more liable to Paronychia than males; and it also appears that Paronychia is most common from twenty to twenty-five; next, from fifteen to twenty; next, from twenty-five to forty; next, from ten to fifteen, and from forty to fifty; next, from fifty to fifty-five; and least frequent under ten and over fifty-five.

Causes.—Paronychia is very frequently traumatic. One of the worst cases we ever saw followed the scratch of a rusty pin. A very severe case originated in an abrasion made by an old piece of sheet lead. "Inoculation of the part with poisonous or putrescent matters" not unfrequently gives rise to this inflammation. "Washerwomen, and other persons who have their hands habitually immersed in water, are particularly obnoxious to it."—*Gross.* It is apt to affect the fingers of laborers who handle barrels by the chines. Sewing girls suffer from it quite frequently. This affection not unfrequently follows slight bruises or contusions. "It is common in the spring of the year, when, indeed, at times it appears to be epidemic."—*Erichsen.* Prof. Gross informs us, that Paronychia, a few years ago, was epidemic in various sections of the Union.

Symptoms.—The affected finger becomes painful, and the pain, marked at the outset, rapidly increases; the patient cannot sleep, and walks about his room suffering the greatest torture. The pain is constant, tensive, throbbing—even increasing in severity, and is referred to the palmar aspect of the finger. At first there is very slight redness and swelling of the palmar surface; as the disease progresses, these two symptoms become more marked. Subsequently, the dorsal surface, not unfrequently, becomes the most distinctly red and swollen. The finger will tend towards flexion, so as to relax the skin, tissues and tendons, as much as possible, thereby, to some extent, mitigating the patient's suffering.

We have now arrived at the third and fourth day of the attack; and, if the disease is not arrested by appropriate treatment, it may invade the palm of the hand, or even go up the front of the wrist to the forearm; in which case the constitutional disturbance will be of a more marked character.

When suppuration takes place, the pus is not confined by a wall of "limiting-fibrine," but diffuses itself

through the tissues and burrows beneath the tendons and periosteum. Sometimes the tendon dies and protrudes through the opening made by nature or the surgeon. A portion of the flexor tendon may thus slough, when the extensor tendon keeps the finger in a straight position. In addition to this, the bone may perish; and sometimes the entire finger may be lost.

In the severer forms of paronychia the fever often runs high, especially at night, when the patient is sleepless. Delirium sometimes occurs—generally during the night, when there is more fever and more pain.

Prognosis.—This affection has been known to terminate fatally; but such an event must be extremely rare. It may peril the integrity of a part or the whole of the hand. Too often the utility and symmetry of the hand are permanently impaired. Destruction, anchylosis, and other deformity are, indeed, too often the effects of this truly dreadful malady.

Treatment.—It does not enter into our purpose to investigate the different plans that have been adopted in the treatment of paronychia. Allow us to present for your consideration the method which has seemed to be surest, speediest, and most efficient,—in a word, let me tell you what appears to be the best plan of treatment.

The remedies we would recommend are the *scalpel*, a *flaxseed poultice*, the *sulphate of zinc*, and the *muriated tincture of iron*. Other remedies may be employed—but these are the principal ones. The sulphate of magnesia will sometimes be useful; now and then quinine will be required. Any complication, must, of course demand our attention.

In the first place, the *scalpel* is the *sine qua non*. If it is improperly used it does harm,—but if properly used, it is indispensable. Always use a *scalpel;* a thumb-lancet, *never*. A *thumb-lancet* is made for *puncturing;* a *scalpel* is made for *cutting*. A puncture will not benefit a paronychia. Never place the finger upon a table—on the *dorsum*—and then cut at random into the palmar surface—the patient drawing away the hand; nothing can be more unscientific and unskilful. If the tendon be not already destroyed, you may put it in a way never to recover.

Instead of this, take a towel in the left hand, and then with this seize gently, but firmly, the affected finger; tell the patient that the operation is necessarily painful, and that you will be obliged to hurt him; therefore, you do not deceive him; select a point upon the lateral surface about midway betwixt the tendon and the artery; put the point of the scalpel on this point: now cut down—*without haste*—to the bone in a line parallel with the tendon, making the incision about two-thirds the length of the phalanx implicated by the disease. Try to spare both the artery and tendon; if you must sacrifice one of them, by all means sacrifice the artery—the tendon, never. The hæmorrhage can be controlled; the symmetry and utility of the finger are not impaired by the loss of an artery; but destroy the tendon, and they are gone for ever. Use the knife, therefore; use it *early*, use it properly, and you will have the satisfaction of benefiting your patient.

To stop here is to leave one's work half done. And we have abundant experience to prove that a paronychia, after having been opened, has not continued to improve, until the remedies we shall presently describe have followed the employment of the scalpel. Over and over again have we seen this happen.

In the second place, after opening a paronychia, apply a warm flaxseed poultice for a few hours—not exceeding twenty-four. If the poultice be too long applied it will do harm. Sometimes it may not even be necessary to use a poultice. The more recent the attack, the more beneficial will be the poultice. But a poultice without the scalpel is of but little use.

In the third place, on leaving off the poultice, apply a wash:— R. Zinci Sulphatis gr. iv.—xvi.; Sp. Lavandulæ Comp. ʒ i.—iv.; Aquæ par. vel. Aquæ Rosæ ʒ viii. M. S. *Red wash.*

Saturate a piece of old muslin or linen with this wash, and keep it constantly applied to the diseased part. Continue the use of this remedy till recovery is complete.

In the fourth place, give the patient from ten to thirty minims of muriated tincture of iron three times a day in a little sweetened water. This remedy should be taken just before meals—and the mouth always washed with cold water immediately after taking it, to prevent the action of the iron on the teeth. Begin to give this preparation of iron, as soon as possible after seeing the patient, and continue it till recovery takes place. In addition to this, it may be necessary in some cases to give the sulphate of quinia.

Commentary.—The knife evacuates the pus; depletes locally; relieves tension; and abolishes pain. The poultice promotes molecular change, and soothes the inflamed tissues. The zinc acts as a disinfectant, as local astringent and nerve tonic; iron improves the appetite, invigorates the blood, and seems to prevent the extension of diffuse inflammation.

Prognosis of the above-mentioned fifty-seven cases: *One* only lost a finger, and she had been treated elsewhere until it was impossible to avoid amputation—which was performed on the day she applied for treatment. One other case—that of a young man—applied with a paronychia of the index finger, that had been opened on the palmar surface, in one of the New York City Dispensaries. I removed the ungual phalanx from the extremity of the finger through a small incision; a new phalanx grew, and the patient had a useful finger. In the other fifty-five cases the recovery was complete. *The prognosis is more favorable, when the knife is used early.*

The following instance will show the practicability and usefulness of early opening in this affection: A young man with paronychia applied within thirty-six hours after the commencement of the attack. He had to support his mother and himself by daily labor, and could not afford to lose much time. I told him that he would sooner recover if his finger were opened. He consented; the knife was used; the blood flowed freely; a poultice was applied, and the next day there was suppuration. The sulphate of zinc and the muriated tincture of iron completed the cure toward the end of a week; and the patient returned to his work. This case is not included in the above account.

All of these fifty-seven cases were treated upon the plan herein recommended, and with the most satisfactory results.

Since writing the above, I have received a communication from Professor Frank H. Hamilton, in which he has pointed out some valuable statistical information, and kindly suggested an approved nomenclature of this interesting subject.

In the first place, you will find, page 257, vol. xi., of the *Buffalo Medical Journal*, "*An Analysis of Eighty-one Cases of Paronychia Benigna*," made by Austin Flint, Jr., and taken from the private records of Dr. F. H. Hamilton. According to this record, "The most frequent causes, however, are exposure of the hands to hot water, as in washing dishes, or a slight hurt or bruise."

Again, Professor Hamilton reports, page 710, vol. v., of the *Buffalo Medical Journal*, the *Reconstruction of an Entire Phalanx* of the thumb. He says, "We have

many times seen the bone reconstructed, where a *portion* only of the whole was removed; . . . but it is the complete reconstruction of a bone when it has been removed in its totality by extraction, that excites our surprise, and which we have marked as a novelty, for I am not informed that after Dr. Dudley [Professor Dudley, of Lexington], any one except myself has demonstrated its practicability."

I have lately seen a case of reconstructed phalanx of the index-finger, in a patient of Dr. J. M. Turner, of this city. The doctor removed the ungual phalanx and part of the next phalanx; the reconstructed bone is continuous to the end of the finger having no joint.

In the second place, Professor Hamilton writes me: "I will suggest that the best division of this subject is as follows:—

Onychia benigna;
Onychia maligna (*onyxitis*);
Onychia syphilitica.

Onychia benigna (which term corresponds to "whitlow," "felon," "paronychia," &c.,) is then divided as follows:—

1st, *Paronychia* (from παρα, round about; and ονξ, nail, "run-around," or "tourniole," of the French), or what is better still, *Onychia cutanea.*

2d, *Onychia cellulosa* (the first of the characteristic forms of "whitlow," or white-flame).

3d, *Onychia tendinosa* (when the inflammation runs along the sheaths of the tendons).

4th, *Onychia periosteosa* (the second of the characteristic forms of "felon").

5th, *Onychia osteosa* (the third of the characteristic forms of felon).

"This nomenclature was, I believe, first adopted by Velpeau; at any rate, it *is* adopted by him."

The doctor has told me where to find more recorded material on this subject; but we have not had opportunity to refer to it as yet.

ABSTRACT OF A PAPER ON

THE YELLOW FEVER EPIDEMIC, AT KEY WEST, FLORIDA, IN 1864.

READ BEFORE THE NEW YORK MEDICAL ASSOCIATION, FRIDAY EVENING, APRIL 17, 1868.

By BRADFORD S. THOMPSON, M.D.,
OF NEW YORK.

During the spring, summer, and fall of 1864, the writer was stationed at Key West, Florida, and saw something of this fatal disease as it made its havoc among a large number of officers and enlisted men of the United States army, also among the unacclimated persons residing there. The population at this post was about 5,000, including those in the military and naval service stationed there. The command numbered about 1,200 officers and enlisted men, with about 150 Floridian refugees and contrabands in the quartermaster's department; 200 prisoners of war, mostly from Florida, were also confined in Fort Taylor.

The first case of yellow fever occurred on the afternoon of April 23, 1864, in the person of the Rev. James H. Schneider, chaplain of the 2d U.S. colored troops. When received into the hospital he was suffering, as was supposed by the surgeon of his regiment, from a severe type of a remittent fever. But in an hour he commenced to vomit, with violent symptoms of yellow fever in every respect. He died April 26th, having had in the course of the disease, jactitation, delirium, subsultus tendinum, hæmorrhages, suppression of urine, convulsions, coma, and black vomit. His case was considered the most violent of all the fatal cases which occurred that year.

This disease is one which makes its havoc along our Southern American coast during the summer months, and abounds more particularly in bays, and on low miasmatical lands; and is the most malignant type of the periodical fevers. It never appears in high latitudes, except in hot seasons, and in crowded, ill-ventilated and filthy places; and even in Southern and tropical regions its ravages are checked by the coming on of the colder seasons of the year. It is more violent in its attacks, more rapid in its progress, and more fatal in its tendency, than any other form of periodical fever.

Clinical History.—The attack of yellow fever is, in most particulars, like that of other fevers. It is usually ushered in by sensations of lassitude and weakness, a stiffness or soreness of the muscles, pain of the head, back, and limbs, generally accompanied by some degree of chilliness; these precursors are soon succeeded by increased pain of the head, particularly at the supra-orbital region, giddiness or dizziness, flushings of the face, a sense of fulness in the eye-balls, with an expression of distress in the countenance; the eyes red and suffused with tears; a general sense of debility with thirst; either great restlessness with signs of delirium, or a tendency to lethargy; urine high-colored, scanty and turbid; pulse irregular, either too hurried or too slow, full, often giving the delusive feeling of increased force; the tongue is moist and covered with a white fur, with tip and edges pinkish; great irritability of stomach, with nausea and vomiting of bilious matter; bowels usually constipated, with tenderness over the epigastric region on pressure. In the course of twenty-four or thirty-six hours, the eyes usually become of a deep yellow, which readily spreads over the whole body. In this epidemic the eyes generally were yellow, but only one-third of all the patients had this characteristic appearance over the body. There is a peculiar, indescribable odor emanating from yellow fever patients, which to one accustomed to the presence of this disease is readily distinguishable.

Remis-ions in this variety of fever are an exception, differing from the ordinary remittent fever. But relapses are likely to occur, and although it is stated that persons generally recover from them, in this epidemic the reverse was true, as almost all died after a relapse. As the disease advances, symptoms more and more indicative of a fatal termination manifest themselves; the strength of the patient continues to decline, the skin becomes of a deeper and darker hue, sometimes patches of livid spots begin to be observable on different parts of the body, delirium increases, the tongue becomes dark and dry, the teeth are incrusted with a dark matter, the breath is fetid, hiccoughs ensue, hæmorrhages are apt to break forth from the mouth, nostrils or elsewhere, dark fetid and involuntary discharges take place from the bowels, the pulse sinks, and death quietly closes the scene. Such are the ordinary displays in those cases which terminate speedily in death.

The duration of disease, whether terminating favorably or otherwise, will be in proportion to the violence of the causes and the constitutions of the subjects of the disease. Being a malignant disease, it usually runs its course in from two to nine days. The average duration is about six days. Recoveries from cases protracted beyond this period are, for the most part, tardy and imperfect—the patients suffering more or less from indigestion, the necessary result of in-

janes sustained by the stomach during the continuance of the disease.

Anatomical Characters.—The morbid appearances after death are variable, exhibiting no fixed laws. In one case, examined at Key West, the vessels of the inner coat of the stomach were much more conspicuous than normally, and filled with dark grumous blood; but without any traces of acute inflammation whatever, and none of congestion, save such as might be readily accounted for by venous gravitation. In the brain or its membranes but few traces of undue vascular action, save in its basilar portion. In another autopsy the following facts were discovered:—

1st. That the *brain*, in all parts, was found in a natural condition.

2d. That the *viscera of the thorax* were perfectly sound; the blood, however, in the heart and veins was fluid; similar in its consistency to the blood of persons who have been hanged.

3d. The *liver* was of a yellowish hue, having undergone fatty degeneration, as mentioned by Louis, and other writers.

In two persons who died of the disease on the fifth day, the mucous membrane of the stomach, especially at the pyloric portion, was found highly inflamed, and this inflammation extended through the pylorus into the duodenum quite a distance. The inflammation here was exactly similar to that induced in the stomach by acrid poisons, as by arsenic. The *bile* in the gall-bladder was quite of its natural color, though very viscid.

In another person, who died on the eighth day of the disease, several spots of extravasation were discovered between the membranes, particularly about the pyloric portion of the stomach, the inflammation of which had considerably abated. *Pus* was seen in the beginning of the duodenum, and the mucous membrane at this part was thickened.

In two other persons who died at an advanced period of the disease, the *stomach* appeared spotted in many places with extravasation, with absence of inflammation. It contained, as also did the intestine, a *black liquor*, which appeared clearly to be an altered secretion from the liver; for a fluid in all respects of the same quality was found in the gall-bladder. The *liver* was of its natural appearance, excepting in one of the last persons, on the surface of which a very few distended veins were seen; all the other abdominal viscera were of a healthy appearance. The stomachs of those who died early in the disease were always contracted; but in those who died at a more advanced period of it, when extravasation appeared, they were distended with air.

Causation.—The exciting causes of this are variously stated. Some have attributed its origin to intense solar heat, acting either *per se*, or on wet and marshy coasts. Others have stated that this disease is caused by the gaseous products of trees, shrubs, or of any sort of wood, in a state of decomposition.

The island, or Key, on which Key West is situated, is of coral formation, and about five miles in length, and one mile in width in its widest portion, and covered with fresh and salt water ponds at the upper part of it. The fresh water ponds are covered with green slime at all seasons of the year. Decayed vegetable matter abounds more or less on the Key, and probably the action of the sun on this matter has a good deal to do in bringing on the epidemic.

As to the cause of this particular epidemic, I will merely mention that some supposed it proceeded from clothing and other articles sent there by the celebrated Dr. Blackburn. The above-mentioned chaplain bought at auction a saddle from this lot of goods, and immediately he was stricken down with the fever. The disease was not thought to have originated from this saddle at the time; after the death of the chaplain, it was sold to two other officers of the same regiment, who also were attacked with the same disease and died.

The predisposing causes are numerous. Anything that disturbs the healthy and regular action of the system, predisposes to the disease, particularly exposure to the heat of the sun at mid-day, and the dews at night. Excess in eating and drinking, particularly the latter; a debauch in drinking is almost certain to lay open the system to the approach of the disease, since it carries in its train many other imprudences equally dangerous with itself, such as great exposure to the sun, and cool, damp, night air; breathing impure air, thus an atmosphere laden with particles of putrid animal or other vitiating matter, is highly predisposing to the fever, from their deleterious effect upon the general health of the system. Consequently, those who sleep on the ground floor are more liable to contract it than those who sleep in the upper stories.

Constipation of the bowels is a very great predisposing cause, and therefore much attention should be paid to keep them in regular and healthy action; *fear* or great disturbance of the nervous system from any cause; and it is probable that the disease may lie dormant in the system for many days.

The fever does not occur at Key West every year as an epidemic, although it is believed that a few cases occur there annually. In 1859, 1862, and 1864, it prevailed there as an epidemic. The inhabitants look for it every two years. It is believed that the general opinion among the army and naval surgeons stationed there was, that the disease was not contagious but portable. This view can be substantiated on the following grounds:—1st. Very few of the yellow fever nurses and attendants had the fever, although they necessarily were over the patients day and night. 2d. Although some of the officers and enlisted men from Tortugas (some 60 miles distant), were constantly going back and forth between these two posts, not a solitary case occurred at the former place; which is remarkable, as Fort Jefferson contained about 900 military prisoners of war, mostly from Northern States, besides the regular command of 1,000 men. Among the acclimated inhabitants but a few cases occurred in 1864; but more of the acclimated died that year than usual in those epidemics. Acclimation, however, is a strong safeguard against the disease.

The epidemic prevails longer at this place probably than at any other point of the United States, as a frost is never known there, it being the most southern point in the Union.

The trees and shrubs are continually covered with verdure, being in fact almost one perpetual summer the whole year.

The thermometer averages from the middle of April until the 1st of October, about 86 degrees. From the 1st of October till the middle of April, the average is 64 degrees.

Treatment.—The general plan of treatment was to give the patient a very hot mustard bath, being rubbed by one or two attendants powerfully while in it. Then the patient was taken out and put to bed under cover of two or three blankets, which is regarded as a sort of sweating process. The patient is cautioned against restlessness as much as possible, as a strict regard to quietness enhances the recovery. If there are any unoccupied beds in the room, patients have a disposition to go from bed to bed if not watched. Good nurses should by all means be employed; and it is proper to state that the inhabitants of Key West seemed to vie with each other in nursing the sick officers and soldiers of the

Union army, although most of them were sympathizers of the Lost Cause; they proved themselves better than half the medical men, as they had by a long experience obtained practical knowledge of the idiosyncrasies of the disease.

The patients were given calomel quite freely, in doses of 5, 10, or 15 grains, during the continuation of the fever, during the latter portion of the epidemic, as that plan of treatment was found to succeed the best in severe cases. Ptyalism was guarded against, however. If the disease took a favorable course, the fever was broken by the end of the third or fourth day; and then the patient was put upon a tonic, like quinine, chamomile flowers, or some other article of that nature.

Early in the epidemic, the quinine treatment advocated by Dr. Dundas was adopted from the start, by one of the army and naval surgeons. But it was found that the majority of the patients succumbed to the disease from this treatment. Among this number was General D. P. Woodbury, U.S.A., in command of the district at the time of his death; he died in August of that year, after 10 days' illness. Of course, the treatment was varied according to circumstances. Mild cases were treated with saline cathartics. Measures were taken to bring on a secretion of the urine, when symptoms of suppression of the urine presented themselves. Nitrate of potash, acetate of potash, spiritus ætheris nitrosi in combination with mucilage of gum arabic, were the main articles used, they being the most abundant in the hospital.

The loins were painted with tincture of iodine, which acted well on the kidneys many times; wet and dry cups were made use of over the lumbar region. Sponging the body two or three times daily, with whiskey, quinine and water, seemed to give patients great relief in the fever stage.

Quite a good many unacclimated persons were treated and nursed by the citizens of the place, and very successfully. Their mode of treatment was the use of calomel, to break the fever (using their language); an infusion of orange leaves, or mint tea, as a diaphoretic; an infusion of powdered watermelon seeds combined with spiritus ætheris nitrosi, being the favorite remedy for suppression of urine.

In proportion to the tendency to collapse or death, stimulating measures were made use of, sherry wine and brandy being the favorite stimulants. In private practice, champagne was used, and seemed to act the best of all stimulants. Beef-tea was always used, and if it could not be taken by the mouth, given in the form of an enema combined with brandy.

Gastric irritability was relieved by sinapisms over the epigastrium, and the salts of morphia. Water was not allowed, but pounded ice was given, both as a quieter of the stomach, and to allay thirst, which is excessive.

The writer can testify to most of the symptoms of this fatal malady, as he was stricken down with it about the date of General Woodbury's death. The most prominent feeling to the patient is best expressed, when he says that during the fever stage he felt as though he was lying on a cable, extending from the head to the sacrum over the spinal column.

The most unfavorable prognostics are subsultus tendinum, suppression of urine, delirium, walking from bed to bed, sprotus, and black vomit.

The following are the results of the Epidemic:—The disease was not so fatal, as at Newbern, North Carolina, in the same year; there, nearly all who were attacked died.

Out of 25 officers stationed at Key West, only 15 were left at the end of the epidemic; of these 6 had the black vomit.

Only one company of white troops, from the 110th N. Y. S. Volunteers, was stationed here; the balance of the command was colored soldiers, with the exception of the above mentioned officers. The white soldiers lost 35 out of 73, leaving 38 on duty at the end of the season—59 had the fever altogether. *Black vomit* occurred in 19 of the fatal cases.

The colored soldiers were not so liable to attack as the whites; and when they suffered from it, the mortality was not as great, and the convalescence was more rapid. Out of 1200, 400 had it, and only 75 died—21 of them had black vomit. In all probability the mortality would not have been so great among the colored, if the regiment had been recruited from the Gulf States; but they were nearly all conscripts from the District of Columbia, and Maryland. Twenty of the prisoners confined in Fort Taylor had the fever, and only 4 died.

Early in the epidemic, a Lazaretto Hospital was established at the upper part of the island, and all enlisted men in the military service who were taken down with the fever, were transported over a rough road under the burning sun, to this place. By this action the mortality was undoubtedly doubled.

None recovered during the whole course of the epidemic, who had *black vomit*, although recoveries have been laid down by Dr. Dickson and other writers.

105 East 29th street, N.Y.

Original Lectures.

LECTURES UPON THE PHYSICAL EXPLORATION OF THE ABDOMEN.

DELIVERED IN THE PRELIMINARY COURSE AT THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NEW YORK.

BY ALFRED L. LOOMIS, M.D.,

PROFESSOR OF INSTITUTES AND PRACTICE OF MEDICINE.

LECTURE IV.

PHYSICAL SIGNS OF ABDOMINAL ANEURISMS, OMENTAL AND MESENTERIC TUMORS.

GENTLEMEN:—I will continue the physical exploration of the abdomen, and in the first place will call your attention to the physical signs by which we determine the existence of abdominal aneurisms. There is no class of abdominal tumors attended with such difficulty of diagnosis; in fact in very many cases our diagnosis is only approximative.

Aneurisms of the abdominal aorta usually occur at or near that portion of the vessel from which the coeliac axis is given off, and the rupture is usually in the posterior wall of the artery. Aneurism of the coeliac axis of the renal, hepatic, superior mesenteric, or splenic arteries, is of very rare occurrence, and there are no means by which, if it does occur, it can be distinguished from aneurism of the abdominal aorta.

Inspection.—On inspecting the abdomen in a case of abdominal aneurism, a tumor in the epigastrium with an expansive impulse, usually may be discovered; in some cases, however, the closest inspection reveals nothing abnormal. When a tumor is present, the surface of the abdomen over it will be rounded and smooth. When the aneurism is of large size, abdominal respiration may be diminished and thoracic increased. Enlargement of the superficial veins of the abdomen, and œdema of the lower extremities, are very rare phenomena.

Palpation.—By palpation we can determine approxi-

mately the size of the tumor, its position, and its impulse. Aneurisms of the abdominal aorta are usually felt on the median line, or to the left of it, on the right side, or on both sides. They are *immovable*. The impulse, if one exist, is systolic and expansive, although when it is situated high up, there also may be a slight diastolic movement. A thrill is rarely perceptible. By comparing the pulsation in the arteries of the lower extremities with that of the upper, a feebleness of pulsation may be detected. The surface of the tumor, when unruptured, is rounded and smooth. Effusions of blood into the surrounding tissue may produce lobulations.

Percussion.—Dulness or flatness will exist over the tumor, although intestinal tympanitis, tenderness, etc., may interfere with the value of this means of diagnosis.

Auscultation.—A systolic murmur, resembling that produced in aneurisms of the thoracic aorta, is usually heard directly over the tumor in front, or opposite to it, along the lumbar spine; rarely, if ever, is a diastolic murmur heard, though a prolonged second sound often exists. In some cases the murmur is audible when the patient is in the recumbent posture, but disappears when he assumes an erect position. In other cases all the physical signs of aneurism are absent, and still we are led to suspect its existence from the rational symptoms, the most prominent of which is a continuous, deep-seated, and at times paroxysmal pain in the lumbar region, which shoots down the thighs and around the abdomen.

Abdominal aneurism may be mistaken: First, for enlargement of various organs which by its size it has displaced, as the liver, kidney (especially the left), and the spleen. The presence, however, of the physical signs of aneurism in such cases will enable us to refer the apparent enlargement to its right source. Second, for neuralgia, rheumatism, colic, renal calculus, etc. The steady, persistent, long-continued paroxysmal pain in the lumbar region, especially in male subjects, is strong presumptive evidence of aneurism, and if we have connected with this an immovable, although perhaps not pulsatile tumor along the course of the artery, the diagnosis of aneurism becomes almost positive. Third, for disease of the spine. Here the pain, and possibly a curvature produced by an aneurism may mislead, but the physical signs of aneurism in most cases will correct the mistake. Fourth, for psoas or lumbar abscess. In this the shape of the tumor is elongated, and there is neither impulse nor murmur perceptible, which latter usually occurs even in those secondary tumors due to rupture of an aneurism when it appears in the lumbar region, or even at Poupart's ligament. Fifth, for aortic pulsation. In aortic pulsation there is, however, absence of a murmur, of a thrill, of percussion, dulness, and the impulse is quick and jerking, and not expansive, as in aneurism. Sixth, for abdominal tumors. The tumors which are apt to be mistaken for aneurism are, enlarged left lobe of liver, cancer of the pylorus, enlarged mesenteric glands, fæcal accumulations, and hydro- or pyronephritic kidney. In tumors the feel is usually harder, the impulse lifting, rarely expansive, and they may be accompanied by ascites, œdema, or enlarged abdominal veins, the infrequency of which in aneurism has already been alluded to. If a murmur occur with a non-aneurismal tumor, it may be made to disappear, in most instances, by causing the patient to assume a posture on his hands and knees, and the impulse may be diminished, or cease at the same time. Tumors are also usually movable; aneurisms immovable. In many cases of abdominal aneurism, the diagnosis is uncertain.

Omental Tumors.—The omentum may be the seat of a hydatid cyst, of cancer, or of tubercular deposits. These deposits or growths give rise to tumors which are readily detected through the abdominal walls, both by percussion and palpation; they are first recognized *high up in the abdominal cavity*, above the umbilicus, and gradually extend downwards. If there are no adhesions, you can push these tumors upwards, and from right to left; they are superficial, and their uneven surface is readily detected by passing the hand lightly over the surface of the abdomen. They are always more or less tender on firm pressure. The percussion sound elicited over these tumors is never flat, but has a tympanitic quality, caused by the subjacent intestines.

Mesenteric Enlargements occupy a position corresponding to that of the small intestines. They are beyond the reach of physical diagnosis, except as they occur in children, in the last stage of tabes mesenterica; then their diagnosis is of little practical use, their cure being hopeless.

That you may better appreciate the difficulties attending the diagnosis of intestinal and mesenteric tumors, I will briefly relate a case of intestinal and mesenteric cancer which recently occurred in my wards at the hospital (some of you are familiar with the case). The patient was twenty-nine years of age, and free from any hereditary predisposition to disease. At the time of his admission into the hospital, he stated that three weeks before (previous to which time he had always been perfectly well) a tumor about the size of an egg made its appearance on the right side, midway between the umbilicus and the anterior superior spinous process of the ilium; at the same time he began to have griping pains in his bowels, which were most severe immediately after eating. He had no evacuation from his bowels, after the appearance of the tumor, up to the time of his admission. The tumor, from the time it was first noticed, had steadily increased in size, vertically rather than laterally. Two weeks previous to admission, he had an attack of vomiting, which lasted two days; the substance vomited was of a greenish hue.

When admitted his general appearance was that of perfect health—face florid, eye bright, skin white and soft, pulse normal, expression of countenance cheerful, and he only complained of the tumor in his right side, which alarmed rather than pained him.

On inspecting the abdomen, a slight bulging was readily noticed in the right inguinal region. Palpation on the right side revealed a hard mass, the outline of which could be distinctly traced through the abdominal walls; it extended from the umbilicus to the level of the anterior superior spinous process of the ilium. This mass was somewhat movable, it did not fluctuate, was smooth, and had the feel of an intestine filled with fæcal matter; it was slightly tender on firm pressure. Over its whole extent the percussion sound was dull.

The diagnosis made at the time was, impacted fæces in the cæcum and ascending colon. The reasons for this diagnosis were as follows: First, obstinate constipation which had existed before and since the patient first noticed the tumor (according to his statement, only a few rounded masses of hardened fæcal matter had passed him for one month). Second, the situation of the tumor corresponded exactly to that of the cæcum and lower portion of the ascending colon. Third, it was dull on percussion, and had the peculiar feel already described as characteristic of impacted fæces.

Acting upon this diagnosis, for three days the patient was vigorously plied with cathartics and enemata, and at intervals the mass was carefully manipulated, with a view of dislodging accumulated fæces. During the first day after the commencement of this treatment, a few hardened scybalæ were passed; afterwards the discharges were blood and mucus. On the fourth day, the tumor,

instead of diminishing, had increased in size, spreading itself out in all directions; the patient had grown much weaker; his countenance had assumed a pale, anxious expression; his stomach rejected food, and the dischargos from his bowels were still slimy and mixed with blood, and the tumor had become somewhat tender to the touch.

From these symptoms, a doubt was entertained as to the correctness of the original diagnosis; and the question of cancer presented itself.

Ten days after (on the fourteenth day after admission), the mass had doubled in size, enlarging in all directions, upwards rather than downwards. On firm pressure, nodules could be distinctly felt upon its upper border. The patient was rapidly emaciating, had wholly lost his appetite, his countenance had assumed the cachexia so often noticed in the last stages of cancer; constipation still obstinate; vomiting constant; but patient suffered little or no pain in the tumor except when it was handled.

The diagnosis made at this date was, cancer of the intestines, or mesentery, or omentum, and the reasons for the change in diagnosis were the following: First, the utter failure of cathartics and enemata to dislodge or diminish the size of the mass. Second, the fact that the tumor had become nodulated, and was not confined to the line of the intestine. Third, the rapid emaciation, and the marked cancerous cachexia which had developed in the patient.

On the fourth week after his admission the following note was made: Patient greatly emaciated, cancerous cachexia very marked, pulse feeble, patient growing daily weaker, is unable to get out of bed, and dislikes to be moved. The upper row of inguinal glands is indurated and enlarged. The mass measures eight inches transversely, and eight inches vertically, and is distinctly nodulated over its whole surface. Vomiting and constipation continue, and the patient is only free from pain in the region of the tumor when under the influence of opium.

Six weeks after admission patient had wasted to a perfect skeleton; suddenly his abdomen became tympanitic and tender on firm pressure. The tumor had not increased much since last note; the pulse was small, frequent, and tense—vomiting of a spinage-green material; patient lies on back, with feet drawn up; breathing entirely thoracic. Diagnosis, secondary peritonitis.

He died during the night of the forty-third day after admission. The autopsy was made twelve hours after death. The organs contained in the thoracic and cranial cavities were found healthy. On opening the abdomen a large tumor was found, situated for the most part on the right side, extending from the lower border of the liver to the brim of the pelvis, and a little to the left of the median line. This tumor was composed of enlarged mesenteric and lumbar glands, together with the lower part of the descending colon, caput coli, and termination of the ilum. Evidences of peritonitis existed over the whole peritoneum, most marked, however, on the right side and in the pelvis, there being a thick fibrous exudation in the ascending colon and under-surface of the liver, also considerable flocculent fluid in the cavity of the pelvis. The omentum was normal.

On removing intestines and mesentery in a mass, the tissues surrounding the aorta and spinal column were found to be converted into a firm white mass. The liver was normal, weighed 2 lbs. 6 oz., was of a deep red color; spleen weighed 4 oz.; and normal kidneys. The right was situated beneath the tumor, and was removed with it, its capsule greatly thickened, its substance appeared normal; left weighed 5 oz., and a few of the Malpighian bodies reacted with iodine. The bladder, prostate gland, and testicles were normal. The right ureter, though passing through the tumor, was pervious; stomach normal. The duodenum from commencement of descending portion passed through tumor, and the ductus communis could be traced to its opening, pervious. The duodenum was pervious, and as far as could be told by the feel of the finger, though surrounded by the tumor, was not involved. The small intestines, with the exception of the last foot, were normal. From that point to within four inches of the ileo-cæcal valve, there was considerable congestion of the mucous membrane. The walls of the whole of the small intestines felt somewhat thicker than normal, and were contracted. The large intestines, with the exception of the five inches nearest the ileo-cæcal valve, were normal, and the descending colon contained fæces of moderate consistence, and of a yellow color. The tumor, as already mentioned, was made up of the last four inches of the ilium, and first five inches of the ascending colon, including the caput-coli. The intestine in these parts was much thickened. In the ilium, the walls at the valve were half an inch in thickness; all the coats were thickened—but principally the sub-mucous connective tissue. As we pass from the valve, the thickness of the walls rapidly diminishes, and, instead of its being of uniform thickness, little nodules developed from the sub-mucous tissue. These are about one half-inch across their base. The mucous membrane, considerably thickened, was arranged in transverse rugæ and had on it several small ulcerations, somewhat irregular in shape, and occupied by a yellowish slough. This was most marked on the inner face of the valve. The large intestine was also much thickened for five inches; the thickest portion of its walls was one inch, and throughout the diseased portion it was from one half to one inch in thickness. The principal thickening was also in the submucous connective tissue, though here the thickening extended around the intestine more uniformly, and did not so much tend to produce distinct masses. In both intestines the muscular tissue had the appearance of a translucent line about one half-inch in thickness; on both it was interrupted by transverse, white strie, arranged into bundles (being the circular fibres). The interior of the intestine was occupied in the cæcum and along its posterior aspect for two inches from the valve, and at the outer portion about an inch above the valve, by a mass of sloughing tissue, mostly consisting of mucous membrane. At the last mentioned spot, there was a slough one inch in diameter, which extended through the whole thickness of the intestine. On removing the intestine this portion was found sealed at its margins to the abdominal wall. Besides this there were numerous small sloughs of the mucous membrane; more than half of the mass, however, was made up of enlarged mesenteric glands—these enlarged glands being firm, lobulated, of a whitish color, and covered with thickened peritoneum.

The aorta seemed somewhat compressed by the tumor.

A microscopical examination of different portions of the mass, showed it to be unmistakably cancerous. There can be little doubt, it seems to me, but that this cancerous deposit occurred primarily in the intestinal walls, and that at the time of the patient's admission into the hospital the mesenteric glands were not involved.

The mistake made in the earlier diagnosis in this case I think was unavoidable, and shows very strikingly the difficulties attending the diagnosis of this class of tumors.

Dr. Lizars, of Toronto, becomes Professor of Anatomy in the University of Pennsylvania.

Progress of Medical Science.

Creasote Enemata in Chronic Diarrhœa.—Creasote is recommended as an effective remedy in chronic diarrhœa. It was employed in a case which had resisted other treatment and with the most gratifying results. The quantity injected should be three or four drops with a little mucilage or starch. A grain or two of opium may well be added.—*Pacific Med. and Surg. Journal.*

A Curious Nervous Disease.—A brief account is given in the *Lancet* of May 23, of an anomalous nervous disorder occurring in a child seven and a half years of age, in St. George's Hospital. The following are the main points as recorded: Ever since her birth she has been fretful, and for a very long time now has been subject to transient fits and great nervous irritability. The child never talked at all until seven years of age. She often complained of her head, and put her hand to the top of her head as if in pain there. Father and mother reported healthy; four other children all well. This child used frequently to go into uncontrollable fits of laughter, and would laugh till she fell. It was said that she was worse in cold weather. On admission the child appeared to be in perfect health, and was well made; the head not large, the skull natural, rather of a simple countenance, but could not be said to have any vacant look. When touched on the shoulder or elsewhere sharply, the child dropped immediately, helpless and quite unconscious, with a slight cry, coming to herself in about three seconds.

She was treated with gradually-increasing doses of bromide of potassium (up to thirty grains) three times a day, and at first improved; but after two months, confinement in the hospital seemed to affect her health, and the fits became more frequent. She was sent out in April.

Case of Trichiniasis.—E. C. Segnin M.D. (*N. Y. Med. Journal*) reports a case of Trichiniasis which was admitted to the N. Y. Hospital. He was suffering from anasarca, and had been ill three weeks, having during the first ten days suffered from vomiting and diarrhœa, followed by debility and dropsy. On admission to the hospital he was extremely anæmic, the tongue was clean, smooth, devoid of epithelium, the stomach still irritable, and during the last few days constipation had succeeded the former diarrhœa. The pulse was small, weak, and beating at 112. The urine was pale, of normal specific gravity, and free from albumen. The patient was ordered a generous diet and iron with tincture of cinchona. He stated that he had been in the habit of eating half-cooked ham sandwiches and of cutting off small pieces of raw ham and eating them. Suspicions of trichinæ were entertained, and to prove them a small piece of the deltoid muscle was removed. On looking at a specimen under the microscope 10 or 12 living trichinæ were seen. "The trichinæ which were still inclosed in cysts presented a constant vermicular motion, while those which were free in the liquid of the preparation were so active as to leave the field (a narrow one) at one jump. The patient slowly recovered and was discharged cured."

Influence of Drunkenness on Conception.—Dr. Demeaux adduces further facts in support of the proposition that conception during drunkenness is one of the causes of epilepsy, and of other affections of the nerve-centres. He attributes to the same cause a great number of monstrosities and malformations, congenital lesions of the nervous centres, etc., which prevent complete evolution of the offspring, or if it arrive at term, cause early death.

Chorea.—In the *Brit. and Foreign Med.-Chir. Review*, Dr. H. M. Tuckwell presents the following as his conclusions on the subject of this disease:—

1st. That in death from chorea the presence of warty vegetations on the mitral or aortic valves is the rule. 2d. That these vegetations may be set free, and carried as emboli to the different organs of the body. 3d. That the brain is often found softened; and that this softening may certainly, in some instances, be attributed to plugging of the cerebral arteries. 4th. That the spinal cord is not uncommonly found softened, and that this softening may, in all probability, be in like manner attributed to plugging of the spinal arteries. 5th. That a cardiac murmur may not be heard, even though the valves be seriously diseased; and that consequently certain cases of chorea attributed to pregnancy, fright, worms, etc., can be really due to the presence of vegetations on the cardiac valves. 6th. That the recent investigations into the morbid anatomy of chorea warrant the suspicion that this disease may, at least in its severe forms, depend directly on irritation or softening of the great nerve centres, induced by the presence of emboli in the blood-vessels of those centres.—*N. Y. Med. Journal.*

Treatment of a Severe Case of Hooping-Cough by Vaccination.—A very severe case of hooping-cough occurred in a child sixteen months old. The paroxysms varied from twelve to fourteen a day. With the idea of cutting short the malady, or of modifying its severity, the child was vaccinated. Upon the first appearance of the areola, and before the full development of the vesicle, *all* convulsive coughing had ceased. A. Aronstein, M.D.—*Pacific Med. and Surg. Journal.*

Cupping Glasses in the Treatment of Anthrax.—M. Foucher adopted the following method of treating a case of anthrax. It was as large as an egg and situated in the left dorsal region, on a level with the spine of the scapula. He procured a cupping glass about an inch and a half in diameter, and adapting to it the pump, he placed it over the carbuncle and exhausted the air. The cup filled quickly with sanious pus and shreds of tissue; he left it on for some moments, when upon taking it away the pain disappeared and the tumor was emptied of its contents. He applied the cup three successive days; each time all organic detritus was removed from the tumor, and the third time the integument over the part came away, leaving a healthy exposed surface, perfectly clean, and commencing to be covered with healthy granulations. The borders of the wound were irregular, sharp, and elevated, and suppuration was normal. The dressing consisted of poultices, and the wound proceeded to a speedy cure.—*Bouchardat's Annual Abstract.—Pacific Med. and Surg. Journal.*

A Case of Epilepsy due to Cerebral Anæmia.—A patient, aged 23, came under treatment for epilepsy, under which she had been suffering. She was thin, pale, and exsanguinated, and evidently enfeebled in mind. The cause of the affection was owing to severe and protracted mental disturbance due to the death of a friend. Since this event, she had scarcely passed a day without having a fit, and her health steadily failed. The æsthesiometer revealed a loss of sensibility on the right side. The paroxysms always recurred at night, and she scarcely slept without having a fit. During the day she frequently slept, but always without a fit. Desiring to see one of the paroxysms, I was introduced to

her bed-room, after she had fallen asleep. Before ten minutes, the paroxysms began, but differed in no respect from an ordinary epileptic fit, and lasted about three minutes. The bromide of potassium was prescribed in twenty grain doses. An hour after taking the medicine, she had a severe fit, the first she had ever had when awake. After the second dose, she had a fit, and a third after the third dose. The medicine was then discontinued. Believing that the epilepsy was due to a condition of cerebral anæmia, she was directed to sleep only during the day, and dispense with the use of pillows, and also to take of the citrate of iron and quinia, two grains three times a day, and a pint of porter daily. She gradually improved, and has slept at night for a week without a return of the paroxysms.—W. A. Hammond, M.D., *in the Quarterly Journal of Psychological Medicine and Medical Jurisprudence.*

Pyrethrum Roseum.—A tincture prepared by macerating one part of pyrethrum roseum with four parts of dilute alcohol, is used in the Philippine Islands against scabies. It is immediately removed by the tincture, and the itching ceases at once.—*Jaeger's Travels.*

Picric Acid in Intermittent Fever.—Persons afflicted with such forms of fever, upon whom quinine has lost its power, have derived benefit from the use of picric acid and the picrates. It is not dangerous like arsenic, nor does it derange the stomach like quinine.—*British Med. Journal.*

Bisulphide of Carbon.—Dr. P. H. v. Weyde reports, that the inhalation of this substance produces serious derangement of the nervous system, dulness, loss of memory and injury to the intellect, more or less complete paralysis, and absolute genital impotence, the testicles becoming smaller, and the post-mortem of females shows an almost entire obliteration of the ovaries.

Treatment of the Habit of Opium-Eating.—A writer in the *British Med. Journal* says: "The sudden suspension of the habit is infinitely more efficient and easier to the patient, than the gradual diminution of the dose. The administration on of large doses of phosphoric acid, and lupulin, materially helps the system in overcoming the effects of the immediate suspension of the drug, and in checking the craving for a further supply. Zinc, iron, and quinine, in large doses, also assist powerfully, at a later period, to restore the impaired health and strength of the patient. I feel certain that the sudden and complete suspension of the drug is less trying to the physical and moral powers, than a gradual diminution of the quantity; because, after every dose, however small, the same reaction takes place, the physical and mental craving remains the same, the temptations to an occasional increase are so many, and the trial is so protracted and exhausting, that very few have the courage to persevere."

A Case of Puerperal Convulsions.—A stout negress was taken in labor, and in an hour, without any apparent cause, was attacked with violent spasms. The membranes were unruptured, the vertex presenting, and the pelvis was roomy. The diagnosis was made that the convulsions depended on an "erratic distribution of nervous energy." The membranes were ruptured, but the uterus was not competent to expel the fœtus. The convulsions were somewhat abated by the use of chloroform. After waiting some time, it was decided to use hypodermic injections of morphia, and accordingly, half a grain of the sulphate was injected under the skin, on the arm. In less than five minutes, the effect of the narcotic was plainly perceptible in its controlling influence on the convulsive respiration, and the uterus began to work more vigorously, and in ten minutes the child was delivered. The convulsions after delivery recurred only at long intervals, and the mother and child did well.—J. C. Osborne, M.D., *in New Orleans Journal of Medicine.*

An Interesting Case of Labor.—N. Guhman, M. D. (St. Louis *Med. Reporter*), communicates the following interesting case of labor. He was called on April 6 to a primipara, aged twenty-one. After a protracted labor she was delivered of a male child, after passing eight hours in gestation. He called the next morning after delivery, and was told that she had convulsions about four o'clock in the morning, and had had a paroxysm every half hour. After waiting at the bed-side about five minutes, the patient went into a convulsion, of which she had a warning. The spasmodic movements always commenced about the legs and arms first; the convulsion, which was of an epileptic form, lasted about five minutes, and then the patient fell asleep, which lasted about ten minutes; then she roused up and remained in a semi-conscious condition until another paroxysm returned. Pain in the frontal region was her chief complaint.

Blood-letting was decidedly indicated, and he proceeded to take from the arm 16 to 20 ounces of blood. The following prescription was also ordered:

R. Hydrarg. Chloridi Mitsi, gr. xvj.
Pulvis Jalap. Optim., gr. xxv.
M. Ft. Chart. No. 5.

Of which she took one every half hour. A few hours afterwards he took another medical man with him, and the patient was found comatose, with stertorous breathing; the bowels had not moved. The pulse was found strong and forcible. By the advice of Dr. Cooper, who thought that the only hope for life was in bleeding, ten or twelve ounces more blood was taken, which made a decided impression on her pulse. With careful nursing, her recovery was rapid and complete.

He reports this case to draw the attention of the profession to these cases of disease, which require prompt and efficient treatment. He did not use opiates, antispasmodics, or anæsthetics, as are usually recommended, because he believes that the disease is nothing more nor less than a congested state of the brain, and probably the spinal column.

He states in conclusion, that this case did not present very well marked indications for the use of the lancet, but it was well borne. She had diarrhœa up to forty-eight hours previous, and still he gave her alterative doses of mercurials, with strong purgatives; no anodyne medicine was taken.

Cholera Fungus.—Dr. Sanderson and Mr. Hulke made a report a short time since, before the Pathological Society of London, on Thome's specimen of cholera fungus, taken from vomited and alvine matter. After cultivation of the growth on a lemon for seven days, it consisted of spheroidal corpuscles $\frac{1}{1000}$ of an inch in diameter, cylindrical bodies $\frac{1}{2500}$ inch long and $\frac{1}{5000}$ inch wide, and mycelial filaments, an early stage of some higher form. They conclude that the spheroidal bodies, identical with the micrococci of Hallier, are produced in the cavities of the cyst-like bodies described by Dr. Budd in 1849. Thome's fungus is believed by Hallier to be analogous to the oïdium lactis of Fresenius, of which penicillium and achyla are varieties.

Champagne from Petroleum.—The Pennsylvania oil territory, in producing petroleum, has added another substance, from which a sparkling, foaming champagne can be made, which will delight the eye and tickle the palate.—*British Med. Journal.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, August 1, 1868.

THE NEGLECT OF THE STUDY OF THERAPEUTICS.

THE first thing that concerns the physician when he is called upon to treat a patient, is to make the diagnosis; and so far as his capability to do this is concerned, we may congratulate him that there is, in the ordinary run of cases, but comparatively slight difficulty. When, however, he is to settle upon the right course for treatment, the aspect of the case is seriously changed. The unpardonable ignorance of therapeutics, which is so rife, and withal so fashionable, with the professional man, coaxes him to be, outside of the use of a few hackneyed remedies, the merest empiric. It is so easy for him to entertain skeptical views in regard to the majority of the articles of the materia medica, that he naturally allows his opinions, as to the curative powers of drugs, to drift in the strong, almost irresistible, and popular belief in the self-limitation of disease, and overstrain his estimate of the *vis medicatrix naturæ*.

The strong tendencies among enthusiasts to overrate the powers of a particular article have had a great deal to do in bringing about this state of medical opinion, by exaggeration of effects, and a courting of one-ideaism, which is never balanced by unprejudiced and honest scientific investigation. But this should be no good excuse for admitting the assertions of these investigators *cum grano salis*. It is reasonable to suppose that an article which has its virtues trumpeted to the point of being a specific for the most intractable maladies, should be of *some* use in these affections when employed with a tempered judgment.

If it be generally conceded that any disease is, so to speak, incurable, there is certainly no harm in giving every new method of treatment, any new therapeutic agent, any new combination, a reasonable trial; on the contrary, the physician has no right to assume *à priori* that it will not be productive of good, if not in establishing in the end a perfect cure, at least in mitigating suffering and prolonging life. If we are not willing to allow this to be the case, we must be prepared to fold our hands and make the ignominious acknowledgment that, notwithstanding other sciences are progressive, ours, as regards its chief end, is really at a stand-still. For, after all, what does the community care if we can make ever such a brilliant diagnosis, and are not ready profitably to turn it to good account in the proper and scientific treatment of the disease?

There never was a better time for a reaction in the matter of therapeutics than the present. The rapid perfection of our means for making diagnoses, the wonderful progress which physiology and pathology have made, gives every chance to test, in the proper manner, the true value of articles, new and old. The stubborn obstructions that have heretofore existed, have been, in a great measure, removed by the investigators in other branches, and to overtake them involves but the necessity of travelling over a well-made and sure road.

We are forced to acknowledge that the abstract study of the power of remedies is far less attractive than that of any other branch, but when properly joined with the kindred departments it should become, at least, interesting.

Our knowledge of the actual remedies is extensive enough for present purposes: the only difficulties in the way consist in the lack of a disposition to apply theories to practice, and thus enrich an experience in the actual treatment of disease, which the profession of medicine so much needs. We are not to be deterred in this work, either from a superabundance of theories on the one hand, or a lack of them on the other. Experience in their application will eventually place each of these classes on the proper conservative level, will sift the theories on the one hand, and possibly create theories on the other. And even if this latter enviable state of things cannot take place, we might better have one good drug, without a theory, than twenty inert ones covered with them. After all, it is well known that the majority of our most valuable agents, as far as any reasonable explanations of their modes of action are concerned, were used empirically, and many of them at the present day are still so employed. It is comfortable to an investigating mind to be able to explain certain efforts; but if this cannot be done, we must be satisfied to rest for the present, at least, in a one-sided knowledge.

We are convinced that this inability to connect cause with effect is one of the great barriers to the progress of zealous investigation; but as acknowledged benefactors, we must be ready to work against the odds until such time as we can obtain more light. It is, after all, the cure of our patient that should be our ultimate aim. The old farmer who brings his wheat to market is not necessarily asked what road he came, the only concern is whether the grain is good or not.

In regard to the prevalent doctrine of self-limitation of disease, tempting as it may be to entertain, it is only of use in preventing a meddlesome interference, a check against the other extreme of over-medication. We may be prepared to say that many of our diseases are

self-limited, but our present knowledge does not allow us to make the sweeping assertion that all maladies have such a tendency. If we were able to do this, we should have to admit that medicine was specially invented to please those who may practise it, without any reasonable equivalent to those who feel the need of our services.

It is certainly orthodox, so long as we have no proof to the contrary that a disease is self-limited, not to interfere with Nature's intentions, but it is inconsistent with the spirit of progress to suppose that we will not eventually be able to cure the now incurable maladies, and arrest others believed to run an invariable course. It is our duty still to strive to perfect our knowledge of the treatment of diseases to ultimately attain such an end. We have no more reason to suppose that our labors will not yet be rewarded in the search after such knowledge than that of any other that may now seem hidden from us. By such a course we may probably be able, instead of increasing the already too large number of self-limited diseases, to so lessen their number as to give the physician a satisfaction beyond the making of a diagnosis in a successful case, and a post-mortem examination in an unsuccessful one.

There is hardly now any danger of over-medication in giving the advice for a more extensive and conscientious trial of remedies, and a greater attention to this department of our science than has been given to it for some years past. We are aware that the revolution cannot be effected without a great deal of trouble, and much crucifixion of opinion; that it will be as hard for the majority to look beyond whiskey, iron, and quinine nowadays, as it was for our brethren of old to bid adieu to the accursed use of calomel as a universal specific; but that time must come if we would keep our escutcheon clear of the stains of apathy, ignorance, and abominable conceit.

The physician who, nowadays, treats many chronic cases, feels more especially the need for a more extended application of remedies. But, after all, he has no one but himself to blame for the scanty knowledge of the many excellent, nay reliable, remedies that are treated of in our works on therapeutics. He is virtually in the same position as were the thirsty souls on board the ship in the mouth of the broad Amazon, who knew not that they were sailing in fresh water and had but to drop their buckets at the ship's side to relieve their suffering.

It becomes us now, instead of quietly dismissing a case as incurable, first to be sure that it is not, and not content ourselves with the ignorant and shameful belief that medicines are of little or no use. The chemist and pharmaceutist are laboring in their respective departments to create for us new remedies, and out of common courtesy we should, at least, subject their compounds to fair trials. We are convinced that if we did so, we should not only elevate the practice of medicine to the dignity of a more exact science, but would be really astonished at the wealth of resources that is at our very doors. If one remedy does not suffice, we should be prepared to use another, and not be daunted in our search after the proper and most reliable agent, until we have gone through the whole list. It is nothing short of this desire to attain this desirable end, that will wake the profession from its lethargy and give it a reasonable faith in the power of medicines.

There are too many of us who, not taking into account the conditions of a case, are determined to put remedies to a test for which they were never intended, and, failing in the accomplishment of the object, to disbelieve in everything that savors of therapeutics. Very much upon the same principle that an old lady, to test the power of faith, prayed for the removal of a mountain that obstructed her view, and when she waked in the morning, held up her hands in pretended astonishment to see the mountain still there, and significantly exclaimed, "Just as I expected."

The New York Medico-Legal Society is holding Moot Courts for the mutual improvement of its members in the science of medical jurisprudence. Both its lawyers and physicians are required to be well-up in the business of the court-room. The former confine themselves to the sifting of testimony, while the latter, for the credit of their calling, are expected to be exact in their statements.

We know of no better substitute for actual experience than devices such as these for the concentration of the attention upon certain practical points; they are, to say the least, admirably calculated to abate that carefully cultivated dread of the witness-stand on the part of the non-expert, and to dissipate the prevalent impression that the chief delight of the lawyer is to hold up his professional brother to ridicule by stripping his evidence of its mystical lore. We but repeat a truism in the assertion that the tendency of humanity to expose pretentious ignorance is exceedingly strong, much too strong indeed to be overcome by the throes of the victim upon the altar of his immolation. By universal consent it has come to be regarded as a capital crime in the intellectual calendar, and as such is entitled to neither justification nor clemency. The schools of medicine, we maintain, are responsible for much of the conceded animosity on the part of the physician to the court-room and its surroundings; there has been too much of the inculcation by insinuation that barristers are unscrupulous, and that cross-examinations are but invitations to perjury, to be rejoiced over in future with the glee of a Mephistopheles. These impressions the Medico-Legal Society has made its mission to correct by the cultivation of friendly relations between the representatives of each profession, and is accordingly entitled to a word of good cheer from both.

Removal.—The Medical Department of Bowdoin College is to be removed from Brunswick to Portland, Me.

Reviews and Notices of Books.

REPORT ON EPIDEMIC CHOLERA AND YELLOW FEVER IN THE ARMY OF THE UNITED STATES DURING THE YEAR 1867. By Brevet-Lieutenant-Colonel J. J. WOODWARD, Assistant Surgeon, United States Army. Circular No. 1. War Department, Surgeon-General's Office.

THESE are very valuable documents, as they abound in well substantiated, carefully observed facts, made out according to instructions issued from the Surgeon-General's office, in April, 1867.

We learn that cholera prevailed quite extensively in the United States Army in 1866, causing over 1,200 deaths among officers and men. It seems to have spread that year among the troops as far westward as Forts Leavenworth, Riley, and Gibson; and southwest as far as Texas. In its progress the disease, as usual, followed the lines of travel and the movements of bodies of recruits. Out of this fact grew the argument in favor of quarantine, as stated in Circular No. 5. The instructions sent out by the Surgeon-General, in accordance with this view (Circular No. 3), in connection with the hygienic precautions directed in the same circular, undoubtedly saved many lives in the army; for the total number of deaths from cholera in the army in 1867 was but 230, and the disease is known to have been more virulent and fatal than in 1866; the total mortality in 1866 being 1 to 2.22; and in 1867 it was 1 to 2.19 cases.

The experience of the army in 1867 fully confirms the views in favor of quarantine formed during 1866, and especially confirms the opinions formed with regard to the danger of distributing recruits, or other bodies of troops, from an infected point to other garrisons. It also shows the danger or liability of cholera re-appearing the following year at places visited by it during an epidemic, if the most stringent hygienic precautions are not adopted.

It seems the cholera re-appeared in the Valley of the Mississippi as the summer opened, and was carried by the movement of infected troops and trains during July across the plains to every post on the Arkansas River and the Smoky Hill Fork. Three other notable instances of the transmission of the disease occurred; one on the route between Forts Gibson and Arbuckle, one in the case of the posts in New York Harbor, the third in that of certain recruits distributed from New York, by way of New Orleans, through Texas.

Our limits will not allow a detail of the individual facts which substantiate these important conclusions. Suffice to say, they establish the infectious and transmissible character of cholera beyond any shadow of doubt. The total number of cases among the white troops during the year 1867 was 317, of whom 137 died; among the colored troops, 187, and 91 deaths; being 1 to 2.28 cases for white; and 1 to every 2.05 for colored troops.

YELLOW FEVER.—The observed facts in regard to this disease in the Army of the United States, in 1867, appear to strongly favor the theory of the exotic origin of epidemic yellow fever in the United States. It cannot be denied that the experience of the Medical Staff of the army last year furnishes many facts favorable to the doctrine of the portability and transmissibility of the disease, and favorable, therefore, to the establishment of an efficient quarantine in the case of vessels or persons coming from infected places, and in this the experience of 1867 agrees with the general tenor of the experience of the Medical Staff of the army during the late war. This experience showed, also, the great importance of promptly removing any command when exposed to this pestilence, to a new and more healthy locality. It seems, moreover, that the ordinary hygienic precautions were not found so effectual against yellow fever as experience had shown them to be against cholera, and therapeutic efforts were comparatively fruitless.

The reports go to show that the disease was brought into the United States from the ports of Vera Cruz and Havana. From Mexico it was brought to Indianola, and thence to other points in Texas. At all the other stations it seems to have been brought, directly or indirectly, from Havana. The ratio of deaths was 400 per 1,000 cases for those of Mexican origin, and 284 per 1,000 for those of Cuban origin.

It is unnecessary to trace the progress of the disease; it will suffice to say, that from Indianola it was carried to Galveston (where it caused 1,180 deaths among the citizens), thence along the chief routes of travel to various towns, villages, and barracks; it was introduced into New Orleans from Havana, and from thence it was carried to various places in Louisiana, Mississippi, Alabama, Tennessee, etc. We omit the various details. Total number of cases among the white troops 1,349 and 428 deaths; 171 cases and 25 deaths of colored troops; mortality being 319 deaths per 1,000 cases; or, 1 death to every 3.15 cases for the white; 146 deaths per 1,000 cases, or 1 death to 6.84 cases for the colored troops; mortality for the whole number, including white and colored, 298 per 1,000, or 1 death to every 3.36 cases. It appears that ten assistant surgeons of the United States army died of yellow fever and two of cholera, while twenty-one assistant or acting assistant surgeons were attacked with yellow fever; how many with cholera is not stated. The experience of the army during the war, and subsequently, has abundantly established, first, the wisdom of quarantine as a means of preventing the introduction of yellow fever; and secondly, the expediency of the prompt removal of the command to some rural site, on the appearance of the fever among the citizens of the town at which it is stationed, or even after the disease has appeared among the troops.

A few years ago, at a Quarantine Convention held in the city of New York, it was voted, almost unanimously, by the 200 or more medical men present, that quarantine was useless against the yellow fever; our late fellow-townsman, Dr. J. W. Francis, being one of the six who voted in defence of quarantine. But a short time has elapsed, and now it is demonstrated, by observations made in armies, where the mode of introducing diseases can be easily recognized, that quarantine, strictly observed, is an effectual preventive against the invasion of this disease; hence Drs. Aiken and Parker, of England, are strong defenders of the doctrine of importation, though the incubative period is found to be longer than was formerly supposed, viz.: from fourteen to sixteen days, and, according to Surgeon Woodward and the Surgeon-General, even twenty-one days. Sufficient praise can scarcely be awarded to Dr. Barnes, Surgeon-General U. S. A., for the wisdom and foresight he has displayed in guarding the United States army against the invasion of these two fatal diseases, and especially for his recommendation to the commanding general of the army (April 15, 1868), that an efficient quarantine should be established along the entire Southern seaboard, as early as May of the present year, and that troops should be promptly removed from points threatened with infection.

THE death is announced of Dr. Pagan, of Glasgow, at the age of sixty-seven.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, APRIL 24, 1868.

DR. WM. B. BIBBINS, PRESIDENT, in the Chair.

DR. HAMILTON exhibited a specimen of epithelioma of the hand, accompanied with histories of other cases. (*Vid.* p. 169.)

GRANULAR KIDNEY—ŒDEMA OF LUNG—OVER-LOADED STOMACH.

DR. FINNELL presented several specimens, the first of which was a pair of granular kidneys removed from the body of a woman aged 40. Two years ago she suffered from albuminuria, accompanied with general œdema. She seemed to have entirely recovered from that trouble, and remained apparently well until the day of her death. On the date referred to she became suddenly very weak while out walking, and complained very much of an oppression about the chest. The weakness continued until she was brought home, when she was placed upon a sofa, and almost immediately expired. She was said to have had several attacks of what appeared to be œdema of the lungs, and would expectorate at those times great quantities of frothy mucus.

The post-mortem examination showed small contracted and granular kidneys. The right lung was found firmly bound by old adhesions to the walls of the chest and the diaphragm. The stomach was very much distended with food which she had taken at a restaurant previous to the attack which brought on her death. Death was attributed to œdema of the lung, aggravated by an overloaded stomach.

SUICIDE BY ARSENIDE OF COPPER.

The second specimen presented by Dr. Finnell, was the stomach of a girl 20 years of age, who, supposing herself pregnant, and being disappointed in love, committed suicide by taking a teaspoonful of Paris green (arsenide of copper). After procuring the poison at a paint shop, she obtained lodgings in a hotel, where by the help of two oranges she managed to swallow the salt. She immediately afterwards rang the bell, informed the proprietor what she had done, and sent for her uncle. A physician was immediately summoned, who freely administered the white of eggs, but to no purpose. She commenced to vomit and purge very freely, the ejected matters being composed mostly of the green pigment. When the physician arrived, about two hours after the poison had been taken, the patient was almost pulseless, and soon after sank. She lingered but nine hours.

The coats of the stomach were found very much thickened, and contained the same kind of matter that had been vomited. The evidences of congestion of the stomach were very marked, but faded away as the large intestine was approached. Dr. Finnell stated that a day or two previous to the death of the girl he had seen a newspaper report of a suicide with the same poison, and he imagined that she had been led, on reading the account, to adopt the same means.

There were no evidences of blood poisoning to be noticed; in fact, the body seemed to be very well preserved.

DR. CLARK remarked that the suicide referred to by Dr. Finnell, as having occurred previous to the one reported, had been admitted to the Bellevue Hospital. At the post-mortem there were evidences of extensive blood poisoning; there were abundant ecchymoses throughout the various tissues.

DR. FINNELL stated that in his case the only discolor-ation was on the inside of the thighs.

DR. BRIDDON remarked that the uterus was slightly enlarged, and gave evidence of commencing menstruation.

MEDULLARY SARCOMA OF TESTICLE.

DR. CUTTER exhibited a specimen of medullary sarcoma of the testicle which he had removed the Monday previous from a child 2 years old. An enlargement of the testicle was first seen in July of last year, and could not be referred to any injury. It continued to increase gradually until a physician in Vermont was called in, who diagnosticated it hydrocele, and advised a puncture. It was afterwards tapped by another physician, and about a tablespoonful of very thick glairy fluid escaped. Dr. Cutter saw the case about a week after the operation, and found the scrotum very much enlarged, very elastic, and simulating hydrocele. He did not at first arrive at any opinion as to the true nature of the tumor, and a week after he first saw it he cut down upon the growth, but could obtain nothing but the fluid similar to that already described. Dr. Hamilton afterwards saw the case in consultation, and his opinion was, at first, that the swelling was due to a pulpy exudation, and advised an explorative operation, to remove all of the sac and leave it possible the testicle behind. It was found necessary, however, to remove the testicle, the cord being tied *en masse*. The child improved very much since the operation.

TYING THE CORD WITH A SINGLE LIGATURE.

DR. HAMILTON stated that the reason why he had made the diagnosis as he did, was that he had supposed he had discovered the testicle separate from the tumor. This supposed testicle was only an outgrowth from the main tumor. Believing it, however, to be testicle, and never having heard of a case of cancer of the tunica vaginalis, the conclusion arrived at was a natural one. At his suggestion Dr. Cutter tied the cord *en masse*, and he believed that the practice was eminently orthodox. He had twice used that means to prevent hæmorrhage, and had been successful in each instance. Mr. Erichsen, too, had done it repeatedly without any ill effects.

DR. GARRISH stated that he had used the ligature in the manner referred to twice, with satisfactory results.

DR. HAMILTON believed that it was true that pain sometimes resulted; but the question was, whether it was not more hazardous, taking everything into account, to ligate separately each vessel and run the risk of subsequent hæmorrhage, than to make one stout, strong and tight cord answer for all.

DR. BRIDDON stated that he had once tied the cord *en masse*, and no more pain resulted than if the vessels had been ligated in detail.

DR. FINNELL had adopted the method in two instances, one case being for scrofulous testicle, and the other for fibro-plastic tumor of scrotum. The results were satisfactory, and no unusual amount of pain was complained of.

DR. POST preferred in all cases the use of the provisional ligature of Astley Cooper.

DR. NEFFEL stated that he had met with a case in Saint Petersburgh where tetanus resulted from the employment of the single ligature.

WAXY LIVER, ETC.

DR. WARD exhibited a large waxy liver measuring 13 inches in its transverse diameter and 11½ in its vertical diameter, and weighing 11¾ pounds lacking half

an ounce. There was very little in the history of the patient's that showed any reason for the pathological condition, there being no hereditary tendency to tuberculosis; he never had syphilis, had never been a hard drinker. He came under observation in September last, and complained only of enlargement of the side on account of its being a mechanical impediment to him, especially when he attempted to stoop over. The bowels were regular, and the digestive apparatus was never interfered with. There was some accumulation of fluid in the peritoneal cavity; but before there offered a favorable opportunity for tapping, the patient was seized with erysipelas of the face, of which he died in the course of a week. During the time he was under observation a circumscribed fluctuating tumor was discovered to the right of the ensiform cartilage, and as he had been some time in the British army, and had fed on uncooked meat, it was presumed that an hydatid cyst existed. This, however, was not proved at the post-mortem examination.

The patient was 30 years old at the time of his death. None of the lymphatic glands were enlarged, there were no chronic ulcerations of the legs nor chronic disease of the bones, but at one time during his life he had suffered from rheumatism.

Dr. Newman referred to a case of amyloid degeneration of the liver, which he had met with a few weeks before, and which was an exact counterpart of the one exhibited by Dr. Ward. The patient was a negro boy aged 18, whose abdomen was much enlarged, and who had been ailing some time with some ill-defined symptoms, and who had finally died suddenly. It did not appear that he had any disease that could be looked upon as the cause of the liver disease except, perhaps, a slight attack of rheumatism.

In answer to a question as to the possibility of the liver disease being fatty, he stated that he took 150 grains of the substance of the organ, and although he boiled it in ether, he could obtain only 4 grains of fat. He thought that the erysipelas had nothing whatever to do with the disease of the liver.

OVARIAN CYST—REMOVAL, ETC.

Dr. Weir presented an ovarian cyst which had contained 43 pounds of purulent fluid, and which he had removed the Friday before, from a patient of the St. Luke's Hospital. The case terminated in peritonitis forty-five hours after the operation. She was 33 years of age, had been married twelve years, had never been pregnant, and her menstruation had always been regular. A year ago, last February, she first noticed a swelling of one side of the abdomen, which gradually increased. In October, 1877, she was tapped, and eight quarts of a dark viscid fluid were drawn off.

After this she refilled, and entered St. Luke's; when she was again tapped, and 14 quarts of the same kind of fluid were withdrawn. This second tapping was followed by a pretty sharp peritonitis, which, however, was controlled at the end of three weeks by opium.

She rallied well after this, and then began to enlarge again, so that by the first of April she measured forty-two inches at the umbilicus. She, however, begged that she should not be tapped again. Her appetite was fair, her pulse ranged from 80 to 100, and her spirits were excellent.

In regard to her uterine organs, repeated attempts were made to examine them with not very satisfactory results, and the os being displaced so far upwards, backwards, and to the left, all attempts to introduce the sound into the fundus were futile. Dr. Thomas, who saw the case in consultation, thought that the uterus was movable.

On consultation with the surgeons, it was decided that an exploratory operation should be undertaken. Accordingly, an incision 2½ inches in length was made between the umbilicus and symphysis pubis. The finger was swept readily around the surface of the tumor, and some thread-like adhesions were broken up. A sound was then introduced, and also swept around, destroying other adhesions; these latter being most marked on the right side. The sac being tapped, forty-three ounces of fluid were drawn off. The tumor was then drawn out of the incision, which had to be enlarged to five inches. There were then found adhesions to the omentum, large and small intestines; but these were easily broken down. On turning out the tumor more completely, extensive adhesions were found to the uterus and rectum, obliterating the cul-de-sac, and extending from the left side of the uterus across to the left brim of the pelvis. Several of these adhesions between the uterus and rectum were drawn through, and a portion of them to the left was ruptured. This gave a pedicle two inches in length, which was secured by Spencer Wells' clamp.

From the ruptured adhesions on large intestine there was some little hæmorrhage, which was arrested by some silk ligatures, which were cut short. There was, however, such free oozing from the torn surfaces of the small intestine, as to require the liberal application of the persulphate of iron. At three points on the abdominal parietes there was also bleeding, which was arrested by the actual cautery, lightly applied. The wound was closed by the silver wire suture, and the pedicle secured in the wound. The operation consumed an hour and five minutes. The patient was considerably shocked by it, but rallied quite readily, and at eight or nine in the evening had fairly reacted. At the next visit, the following morning, the symptoms were very encouraging, and the patient was buoyant with hope as to ultimate recovery. In the evening, however, she was seized with vomiting, acceleration of the pulse, pain in the abdomen, and the other signs of peritonitis. About eleven o'clock that evening, thinking that some relief might be obtained by releasing the pedicle, it was cut off beyond the clamp, and allowed to sink; it did not, however, detach itself from the abdominal wall. After this, the head of the bed being previously raised, the two sutures below the pedicle were removed, and the adhesions were cautiously broken through to give exit to six or eight ounces of bloody serum. There was some transient relief following this procedure, but she soon after began to sink, and died at one o'clock on Sunday.

At the post-mortem examination, there were evidences of general peritonitis. The points of interest were these:—First, as to the effect of the persulphate of iron. A portion of the coil of intestine to which it had been applied was found firmly adherent to another portion of intestine in juxtaposition. He did not, however, consider that as the starting point of the peritonitis. Secondly, there were no traces left of the actual cautery. The tumor and contents weighed 46 pounds.

Dr. Koehler exhibited an aneurism of the ascending aorta, with considerable atrophy of the left heart and disease of the lungs. The patient was 50 years of age, and met his death by effusion upon the brain, the result of a fall.

Dr. Post presented the heart of a lady aged 47, the seat of centric hypertrophy, for the purpose, more particularly, of referring to her sudden death by a subarachnoid effusion at the base of the brain, and over the surface of the medulla oblongata.

STATED MEETING, MAY 13, 1868.

DR. WM. B. BIDDINS, PRESIDENT, in the Chair.

MAMMARY GLANDULAR TUMOR.

DR. DELAFIELD presented a specimen on behalf of DR. JAMES R. WOOD. It was a tumor of the female mamma which had been removed two weeks ago. The history of the patient from whom the growth was taken was as follows:

She was 40 years of age; was married 14 years; was never pregnant. During this time her health was comparatively good, and her menstruation was regular. She had no hereditary history of disease, nor was she aware of having received any injury. About fourteen years ago she first noticed a tumor commencing in the left mamma, a short distance above the nipple. It increased gradually until two years ago, when it had reached the size, as she described, of a small hand-ball. Up to this time the growth of the tumor had been attended with no pain. After this it had increased more rapidly in size, especially during the last six months, being subject to occasional attacks of inflammatory swelling. For the past two years also there were lancinating pains of considerable severity.

The tumor at the time of its removal weighed six pounds. It was not adherent to the skin, neither were there any enlarged glands found in the axilla. The entire tumor was somewhat infiltrated, and its structure was quite composite. It was divided into several lobes, inclosed in fibrous capsules; some of these were quite solid in structure; some presented the appearance of cysts with secondary growths in their interior. The solid portion of the tumor consisted almost entirely of glandular tissue, which had an exceedingly regular arrangement, the follicles of which were lined with cylindrical epithelium. Between the follicles the tissue was composed of connective tissue cells, with a very small number of fibres. The lobules containing the so-called cysts were filled with fibrous masses, which being examined under the microscope were found to be made up of a considerable number of little papillæ, having a polypoid shape. In most of these were bloodvessels of considerable size. The structure of these papillæ was mostly of connective tissue cells, some of which were in an advanced stage of fatty degeneration. Then, besides these two kinds of tissue found in the breast, there was still a considerable portion of apparently solid tissue, which was also proved to be made up of a great many papillary tumors, identical in appearance with those in the cystoid portion of the breast.

Although the tumor undoubtedly belonged to that class generally described as mammary glandular, it differed markedly from the majority so called, in that the follicles were lined with cylindrical epithelium. The ordinary gland took very little part in the new formation of these tumors.

MORBUS COXARIUS—INCIPIENT INVOLUCRUM.

DR. LEWIS SMITH presented a specimen, and remarked upon it as follows:

The specimen is the femur taken from an infant who died at the age of 13 months. The child appeared to have pretty good health, until about one month before his death, when it began to grow very fretful. On examination for the cause of this disposition the right thigh was found swollen, almost to its entire extent; this increased, and within a few days the skin covering the middle part of the thigh, upon its external aspect, was observed to be red, to the extent of three or four inches. An examination was made to detect fluctuation, and when any considerable pressure of the part was made, it was found to be attended with pain. Although there was considerable swelling over the knee, there was no evidence that the joint itself was involved. About one week before the death of the child pneumonia commenced, and extended over a considerable part of the right lung. The child died of the pneumonia, which disease seemed to be entirely independent of the trouble in the thigh.

On making the post-mortem examination (at which I was not present) an incision was carried down upon the thigh, but no pus escaped. The knee-joint was found in its normal state. The periosteum covering the femur, up to within two inches of its head, was injected and thickened; and directly underneath the membrane, and separating it from the bone, was this mass which you see here, which presents very much the appearance of a clot. This has been examined with the microscope, and seems to be made up almost entirely of granular cells, deeply stained with blood. It was a question whether this effusion of blood might not have been due to the pressure of the fingers in making the search for fluctuation before death. It seemed to me (the surgeons would, however, be better qualified to express an opinion) as if this substance which we see, and which was produced within three weeks from the commencement of the inflammation, might have become involucrum. The microscopical appearances here presented, being for the most part those belonging to caudate and elongated cells, would seem to bear out such a conclusion.

A CASE OF CROUP. AN INTERESTING QUESTION IN DIAGNOSIS. THE EFFECTS OF INHALATION OF OXYGEN, ETC.

DR. JACOBI presented a specimen consisting of larynx and trachea, upon which he made the following remarks:

This specimen, Mr. President, has been removed from the body of a child 3½ years old. The boy from whom it was taken had been in good health almost all his lifetime. He had, however, suffered from an attack of local pharyngeal difficulty, and also from general diphtheria several times, along with a number of other children of the same family. I resected parts of eight tonsils in four children, and all the wounds became diphtheritic within twenty or twenty-four hours. All of them, the boy included, got well in four or five days. A quarter of a year ago he was taken with scarlatina, and got well without nephritis.

On the 25th of last April he was noticed to be hoarse, and suffering from a little dyspnœa. The mother not wishing to trouble me, put him on chlorate of soda, and applied cold water on his throat until morning, when his symptoms increasing she sent for me. I saw him a little after twelve o'clock on the 26th of April. At that time the inspiration was very difficult, the expiration not being impeded. The respirations were about 26 per minute, and the pulse 84. The voice was not at all gone, and was pretty clear and loud, notwithstanding the obstruction referred to. I noticed a small piece of membrane, the diameter of a third of an inch, of a greyish-white color, on the left tonsil. There was then a considerable exertion of the respiratory muscles, and a drawing-in of the diaphragm and supra- and sub-clavicular regions. The patient took chlorate of soda, muriated tincture of iron; ice was applied to his throat, and the attendants were directed, in case the dyspnœa increased rapidly, to administer an emetic. The emetic, consisting of the sulphate of copper, was given at one o'clock, and again at five—each time with temporary relief. At the same time I ordered an injection to be given to empty the lower bowel, and to give the diaphragm and lungs as good play as possible.

I again saw the child at six in the evening, six hours after my first visit. At that time the dyspnœa was still more considerable than before; expiration still a good deal better than inspiration. The diphtheritic deposit was not larger than before. The epiglottis felt rather stiff, succulent and swollen, but not very hard nor solid. All that time inspiration was very loud, and the pulse had increased to 110 or 120. Now and then perspiration would break out over the surface in consequence of the child's exertions in breathing. There was no cyanosis.

The diagnosis appeared to be clear enough: It was a case of croup, associated it is true with diphtheritic deposit on the tonsil, but not dependent upon membranous obstruction of the larynx, but rather upon œdematous infiltration of the vocal cords, and especially of the crico-arytenoidean folds and consecutive paralysis. I made that diagnosis for the reason that the voice had not entirely gone and that expiration was much easier than inspiration.

In order to remove if possible the diphtheritic membrane from the pharynx, and whatever slight deposit there might be lower down, which however I did not diagnosticate, I applied carbolic acid diluted with water, half and half, to the tonsils and beyond, but without any relief.

In a short time the dyspnœa increased, and the pulse went up to 132, but was still regular. Thus, as the pulse was still regular, I thought that I might just as well wait a while before resorting to tracheotomy. An hour and a half after, 7½ o'clock, the pulse ran up to 140, and was very small and irregular, at the same time the temperature of the body was not increased, and there was the same difference between inspiration and expiration as before noted, and no cyanosis.

The fact that there was no cyanotic hue, together with other features of the case, confirmed me in the opinion that I had to deal with that form of croup which consists of œdematous infiltration and consecutive paralysis. As the child, however, began to be soporose, I concluded that I would not wait any longer.

I performed tracheotomy at eight o'clock. I had to operate below the thyroid gland, which was very large. Again I noticed that the diagnosis of a non-membranous infiltration was correct, from the fact that the veins were hardly swollen at all, and that when I opened the trachea no membrane was thrown out. There was complete and immediate relief following the operation.

While the child was still under chloroform and afterward, the pulse was 84 and the respirations were slow, from 15 to 18 per minute. The respiratory murmur was vesicular, with the exception of a few rhonchi which persisted until a few drops of blood that had entered the trachea at its ramifications during the operation were thrown out. That was at 8 o'clock or a little after.

At ten o'clock that same evening, an hour and a half after I left, I found the patient asleep, with 56 respirations, 132 pulsations, and a highly increased temperature. Although I had not in my opinion waited too long before performing the operation, I still thought that it was the beginning of a broncho-pneumonia. The child took during that night a few doses of Norwood's tincture of veratrum viride to control the action of the heart, the respiration and the temperature. He slept almost all night, and did not eat or drink.

Early in the morning, and after the pulse got down below 100, he commenced to vomit, and in accordance with my directions the Norwood's tincture was stopped. When I saw him at 10 o'clock the temperature had risen to 103, the respiration was 60 per minute, rough and harsh, and the pulse was again at 132. I ordered Norwood's tincture to be resumed. At eleven o'clock I found the pulse down to 100, after five or six drops of the veratrum viride and five grains of the chloride of quinia had been administered. Before eleven o'clock he had again vomited once, and when the pulse was down to 88, and since that time in the course of half an hour it had risen to 100.

At two o'clock, three hours after, the condition of the patient appeared to be still worse; the respirations were increased in frequency, and so I continued the veratrum viride according to circumstances to keep the pulse below a hundred. At the same time, as dyspnœa increased, I thought I would try the inhalation of oxygen mixed with the air that the child was to breathe.

I have to state that I corrected my diagnosis in this manner.

Those cases of membranous croup that will extend downwards into the smaller ramifications of the bronchial tubes, have a pathognomonic symptom by which we can say positively that the formation of membrane has taken place. When the normal trachea is touched by any foreign body, as a drop of water or a feather of a chicken or pigeon, a severe spell of coughing is brought on by the irritation. It is but natural to suppose that when this sensitive membrane is covered by a deposit no such irritation will occur. Thus we can determine the exact point at which the new deposit has taken place. I had then ascertained that the diphtheritic deposit had taken place and was migrating downwards into the smaller ramifications of the bronchial tubes. Thus, as the process was evidently a very rapid one, I had no hopes of saving the child, but I thought that it was worth while to try oxygen. I knew very well that the effect of pure oxygen upon the mucous membrane of the air passages was very unfavorable, that it was entirely unphysiological to expect that breathing this pure gas would have any good effect. In fact, physiological experiments have proved that nothing will be more certain to bring on dyspnœa than such a course. But I mixed it in this way: I bought a copper cylinder, supplied with a stopcock and india-rubber tube, at an address given me by Dr. Chamberlain (who had used the method in a young patient of his a short time before) and had it brought to the house. I allowed a tolerably free current to escape directly into the tracheotomy tube. Thus the child was supplied with a given amount of oxygen mixed with air. The result of this experiment was very satisfactory indeed, for not only would the child be more quiet, but he was so much satisfied himself with the effect that finally he would not allow the elastic tube to be removed from the tracheotomy tube.

The next morning, April 28, about five o'clock, he showed a slight cyanotic hue about the lips, nose and cheek; at the same time he was taken with slight convulsions. These convulsions would last for five or ten minutes, when the child would again become conscious. Whenever the oxygen was introduced the convulsions would stop very soon afterwards, and the child would return to consciousness almost immediately afterwards. Every time the oxygen was not introduced it would take a longer time before the spasms would cease. These experiments were continued until death, proving by their good results that the convulsions were the direct results of carbonic acid poisoning the blood. We were enabled by these means to maintain consciousness until death.

This, Mr. President, is the specimen. There is no membrane on this left tonsil, and although the specimen is more than a fortnight old, there is still evident the place where the diphtheritic deposit has been imbedded. The epiglottis still looks a little more succulent, thicker,

and stiffer than normal. The larynx is entirely filled up with a thick membrane. The trachea is lined with a very thick membrane, which extends into the tracheotomy wound up to the external skin. This membrane gets gradually thinner as it extends downwards below the bifurcation into the smaller tubes.

It is pretty thick in the trachea, and can be lifted up; it was not so thick in the smallest ramifications, but still of sufficient thickness to finally obstruct the smaller ramifications.

In accordance with the fact that the air did not fully enter the lungs, a large portion of the pulmonary tissue which was not at all inflamed was in an atelectatic condition. I shall open the left bronchus, which, as far as can be seen now, still shows very thick membrane.

The opening was made below the thyroid gland, and the canula itself is lined with diphtheritic deposit.

There is something very remarkable in this case. Unfortunately, in a large number of cases of a similar kind when I operated, my diagnosis was absence of membranes from the larynx. It is true there were membranes in the pharynx, but at no time did I feel justified in diagnosticating membranes inside the larynx; and if there were any at the time of the operation they must have been just in the beginning of the development, and very thin indeed. When I operated no membranes were thrown out, and there were positively none to be seen in the trachea at the time. At ten o'clock the symptoms of a new exudation showed themselves already to a considerable extent, and the following morning I could trace the presence of membranes below the bifurcation, showing with what rapidity the process took place.

It is a common thing to find that cases beginning with rapidity, without premonitory symptoms, will terminate in this manner. It is common to find when children begin with a simple pharyngeal catarrh, which afterwards ends in croup, that they have plenty of time to get over the worst part of the disease before tracheotomy is resorted to. But when the symptoms show themselves so rapidly and increase so fast afterwards, we must always be fearful of a bad result. In this instance it took, from the first beginning of the new exudation process, not more than thirty-two or thirty-three hours, within which time the whole respiratory tract from the larynx to the smallest ramifications of the bronchial tubes was lined with deposits.

Dr. Delafield asked if Dr. Jacobi had ever noticed in his examination of diphtheritic deposits the transformation of epithelium into a fibrous network, as spoken of by Wagner.

Dr. Jacobi stated that he had noticed this to take place under some circumstances, but that it was not invariably the case—the epithelial scales sometimes undergoing fatty degeneration. He believed that pathologists were justified in acknowledging three or four different kinds of transformations.

Dr. Neftel remarked that, according to modern pathological anatomy, the so-called diphtheritic deposits or diphtheritic membranes are principally the affected tissues themselves (mucous membrane) in a condition of necrosis, and may undergo decomposition. What is generally considered a diphtheritic deposit of the respiratory organs is a croupous exudation, consisting of amorphous fibrinous matter containing some cells of the epithelium, whereas the real diphtheritic masses are composed of the normal histological elements of the affected parts.

Dr. Jacobi.—What would you call this exudation?

Dr. Neftel.—Croupous.

Dr. Jacobi.—I believe that this common and so-called croupous membrane that can be elevated from the subjacent tissue is nothing more than necrosis of the tissue, but when we find a continuous membrane we shall very frequently find that one part can be lifted while another part cannot be detached. Again in the trachea it is a common thing to lift them up, as in this case, where there is a deposit on the top of the mucous membrane, removing absolutely nothing but a part of the epithelial covering. The differential diagnosis that has been made from time to time between croupous and diphtheritic membranes is therefore absolutely worthless, because the same contiguous membrane may tear up as croupous on one square inch, and on the next square inch it will be found imbedded in the subjacent tissue; and it is not at all uncommon to find that while there is still a so-called croupous membrane on the trachea, there is a necrotic diphtheritic deposit in the mouth. It is a common thing to find the angles of the mouth and tonsils covered with a diphtheritic deposit attended with loss of substance, while in other parts the so-called croupous exudation is going on. I think that it is wrong to suppose that the two forms of exudation can go hand in hand in such a manner unless they are identical. I firmly maintain under these circumstances the anatomical equality of the two.

He remarked that the investigation into the different forms of deposit was still in its infancy; that since Virchow had promulgated his views, other investigators had been at work, and had proved that, aside from there being but one form of the so-called diphtheritic deposit, there were three or four, and that it was natural to expect that in time we should have more before the question was definitely settled.

PERFORATING ULCER OF THE DUODENUM.

Dr. Terry exhibited a portion of the duodenum, the seat of a perforating ulcer which was removed from a painter. The patient was at work one afternoon upon a platform, and losing his balance he made a successful effort to recover himself, when he felt for the first time a sharp pain in the epigastrium. This afterwards annoyed him so much that he was forced to leave his work and go home. He walked 15 blocks, and when he arrived at his destination, stayed around the house. The following night was a more or less restless one, and the next morning there was increased pain and tenderness over the abdomen, accompanied with fever and thirst. He died of peritonitis 40 hours after the accident.

At the autopsy, a quart of turbid serum was found in the abdominal cavity; the anterior and superior surfaces of the stomach and the convolutions of the superior portion of the intestines were covered with a layer of greenish material resembling sage tea. The duodenum about half an inch below the pylorus, on its anterior aspect, was the seat of a perforating ulcer, which was open throughout its entire extent as if it had given way at once and entire.

TRAUMATIC APOPLEXY OF CORD.

He also exhibited the upper portion of the spinal cord of a boy 7 years old, who had died as the result of an injury upon the side of the head and neck by a flange wheel. He was standing in the doorway at the time, and was knocked down by the wheel, which struck him upon the angle of the jaw and the side of the neck. He was seen within an hour afterwards, and there was paraplegia, with partial paresis of the upper extremity and dyspnœa; but the boy was quite rational, and spoke to every one who addressed him. There was no special pain complained of at that time. There was considerable effusion of blood on the right side of the neck.

At the autopsy, the effusion of blood was found subfacial and inter-muscular, extending down to the verte-

ter. There was, however, no lesion of continuity of the vertebral ligaments, nor did there appear to be any injury of the bones themselves. The upper portion of the canal was opened into, when a long and slender clot was discovered, which extended downwards. It impinged upon the respiratory tract, and accounted for the dyspnœa. The right side of the heart and the jugular veins at the side of the injury were very much distended.

Dr. Newman thought that, inasmuch as the right heart was much distended, as well as the veins of that side of the neck, the apoplexy of the cord might have been induced by the hindrance to the circulation offered by the effusion in the neck. He did not think it possible that effusion of blood could take place in the spinal canal as the simple result of a shock, *i.e.* without giving any evidence of injury to the bones.

Dr. Post did not see why this latter condition might not take place as well in injuries of the spinal column as in those of the head. The force he would suppose would be of course expected to be greater in the latter.

A GROUP OF CANCEROUS SPECIMENS.

Dr. Terry lastly exhibited a group of specimens taken from the body of a woman 43 years of age, who had died of cancerous disease. At the birth of her youngest child, now 2 years and 9 months old, she first noticed a nodule in her left breast, which continued to enlarge, at the same time establishing a chain of nodules from the lower border of the pectoralis major to the axilla. The disease also appeared in other parts of the body during that period. Dr. T. saw her about 5 weeks ago, at which time the left breast was closely attached to the ribs, and there was an ulceration half as broad as the hand on its external portion, with the long diameter towards the axilla. There was also a chain of nodules to the axilla, at which latter place was a large bunch of cancerous disease. In the neck the deep cervical glands only were involved. All the glands of the left side were larger than those of the right. There was also a small nodule in the right breast.

She died a week before the meeting. At the post-mortem examination the left breast was found the seat of a cancerous mass, closely attached to the ribs, the costal insertion being implicated in the deposit. The cancerous nodules in the axilla were found to follow the vessels into the thorax, forming a dense plexus around them; thence into the neck and into the mediastinal space to the root of the lung, involving the bronchial glands. The lung tissue itself showed cancerous deposits around the bronchial tubes. In some places where the bronchial tubes were large, the cancerous deposits were pretty clearly seen as forming an irregularity in the contour of the tube. In the posterior mediastinum only a few nodules were discovered. The pleuræ on both sides were adherent to the walls of the chest by broad, soft adhesions; the membrane being studded with cancerous nodules. The pericardium contained a considerable quantity of bloody serum, but nothing more. The liver was nearly twice its normal size, showing on its exterior the nummular deposit. The liver substance was quite pale, and was filled with large masses of the deposit; as was also the case with the left wing of the thyroid gland.

The woman died five months after the last menstruation, and the pregnant uterus was opened in presence of the members, affording a very interesting exposition of the position of the fœtus, conditions of the membranes, etc., of that period of gestation.

COINCIDENCE OF DEPOSIT IN LONG BONES WITH ATROPHIC CANCER.

Dr. Whitehead remarked, that if the cancerous deposits were of such a character in the breasts as to shrivel them, retracting the nipple, etc., making the true atrophic cancer, deposits of cancerous material would have been found in the spongy tissues of the vertebræ and the long bones. This generalization of the cancerous deposit under the circumstances was first pointed out by De Cazilis of Paris, who ten years ago based this view upon 300 post-mortem examinations. Dr. Whitehead had performed three of these himself, and was prepared to substantiate the assertion.

Dr. Jacobi did not know of any difference between a scirrhus of the breast with or without retraction of the nipple.

Dr. Whitehead remarked, that the difference was, as far as he could say, merely a clinical one.

Dr. Terry remarked, that only the upper vertebræ bones were superficially examined.

In answer to a question from one of the members, as to the most frequent position of the placenta, Dr. Jacobi stated that he had most generally found it laterally and posteriorly.

Dr. Terry was under the impression that it was almost always situated posteriorly, as he had frequently felt a roughened surface in that locality after delivery had taken place, when an opportunity had offered to introduce the hand into the cavity of the uterus.

Dr. Biddiss lastly referred, in connection with the last specimen, to the case of a woman who had two breasts removed for cancer, and afterwards married while she was being treated for cancer of the neck of the uterus, became pregnant in due time, and brought forth a living child at full term.

Some discussion of a desultory character then followed in regard to the frequency with which women with cancerous disease of the uterus become pregnant.

After which the Society went into Executive Session.

Correspondence.

EYE AND EAR HOSPITALS.

LETTER FROM PROF. KNAPP, OF HEIDELBERG.

To the Editor of the Medical Record.

Sir—I read with great interest in your issue of the 15th April an article on Foreign and American Eye and Ear Hospitals, the chief tendency of which article was to prove the necessity of establishing more eye and ear infirmaries in America, and especially of founding another in the west part of New York. In a vacation trip to your great country, last autumn, I had the opportunity of visiting the medical institutions of New York and Boston. Another ophthalmic hospital in the former city appeared to me such an unquestionable want, both with regard to medical teaching and to charity, that I fully agree with the views of the author of the quoted article. But since my own ophthalmic institution is mentioned as an example in favor of the multiplicity of eye hospitals, I beg leave to send you some explanatory and correcting notes. The article in question says: "While the institutions of New York and Massachusetts had $2,000 unexpended, Dr. Knapp has a deficit of 430 florins for his 3,500 patients. How far a little money will go in Germany!" This quotation is a simple mistake of translation. To correct it, and to give you an idea of the working of a German provincial eye infirmary, I may be allowed to send you an extract of my last year's report.

During the year 1867, in the Heidelberg institution, which is under my care, 3,314 eye patients have been treated; 706 were in-patients with a hospital sojourn

of 14,268 days; 607 patients, with 10,488 days of keep ("verpflegtagen"), belonged to the poorer classes. The average duration of one patient's stay in the hospital was 20 days. The highest number of in-patients at the same time was 65; the average number 39. The institution has 65 beds. During the course of the year 413 important operations on the eye and its appendages were performed; 120 for common cataract, 15 for secondary cataract (some after the method of Dr. Agnew, N. Y.), 111 iridectomies, 81 operations for squint, and 66 of different kinds, such as extirpation of the globe, plastic operations of the lids, etc. The total income was 13,328 florins, the *total expenditure* 13,858 florins.

There are very few ophthalmic establishments in Germany which have a greater number of patients. The reason of it is that Heidelberg, although a small town of only 18,000 inhabitants, has a celebrated university, with professors of world-wide reputation, such as Chelius, Helmholtz, Arnold, Bunsen, Kirchhoff, and is, besides, the medical centre of about one and a half millions of people. The government gives considerable aid to the ophthalmological clinic; and the neighboring districts, of about 600,000 inhabitants, have, at my suggestion, made arrangements with the institution, so that every indigent eye-patient *has a right* for free treatment, and, if necessary, free admission into the hospital, the expenses of which are paid by the administrations of the said districts. This highly commendable arrangement only exists in the liberal grand-duchy of Baden.

Since Prof. Gräfe, in Berlin, has had such a splendid success in starting a private ophthalmic institution, a great many smaller ones have been established in different towns of Germany; all have had a certain success at the beginning, but many of them now labor under great financial difficulties, and are gradually disappearing. My own opinion is, that special hospitals for eye-diseases in our country are only of need and likely to last in large cities and universities, where the State pays the unavoidable deficit.

As for New York my impression is, that two other eye and ear hospitals would be highly advantageous, for I am greatly mistaken if this splendid metropolis will not soon prove such a centre of medical instruction, and a refuge of all severe diseases, as London, Paris, Vienna, and Berlin are at present and have been long ago. That the metropolis of the New World will improve on the institutions of the Old is to be expected from the inventive genius, the ample means, and liberal mind of its citizens.

Yours very respectfully,

PROF. KNAPP, M.D.

HEIDELBERG, 9th June, 1868.

DR. JACOB BIGELOW, Boston, Mass., in a speech before the annual meeting of the Massachusetts Medical Society, said:—I am very proud and happy to be able to say, that for the last half century I have not personally been obliged to occupy my house, to stay at home for a single day on account of any indisposition or malady whatever; and I know not to what I shall attribute this singular exemption for so long a period unless it be to the joint agencies of temperance, hard work, and abstinence from medicine.

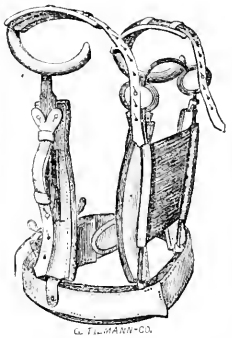
ANTISEPTIC PROPERTIES OF ETHER.—According to M. Martin (*The Student*), ergot of rye, cantharides, portions of meat, and substances liable to attack from insects, worms, or putrefaction, may be preserved by being moistened with sulphuric ether, and kept in sealed stopped bottles.

New Instruments.

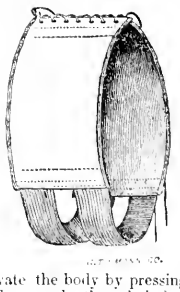
NEW BRACE FOR POTT'S CURVATURE OF THE SPINE.

MESSRS. TIEMANN & CO. have recently constructed a new brace for the spine.

It is intended to afford an entirely elastic continuous and gentle pressure to the parts to which it is applied, giving to the patient, along with adequate support, an easy and comfortable feeling. It is made of light tempered springs and softly padded, wherever it comes in contact with the body.



The belt below passes round the pelvis, and the principal weight is thrown upon the gluteal region. The front portion is broad, so as to compress the protruding abdomen. Two upright parallel bars pass on each side of the posterior elevation, having a portion of silk elastic rubber between them, which gives a constant pressure upon the protuberance. If the latter is inflamed, a portion cut out of the elastic material prevents direct pressure upon the extremity of the bone. Upon these side bars are attached two elliptic and padded springs, yielding to every pressure, and adapting themselves to the sides of the spinal column and keeping the body in an erect position. These are removed or applied by a very simple process:—The two padded crutches are



elastic and elevate the body by pressing mostly under the margin of the scapula, thus obviating any tendency to pressure upon the axillary veins. They are constructed in such a manner that the equilibrium of the body can be restored in case one shoulder is depressed.

The elastic belt shown in the cut is for the purpose of giving additional pressure if needed, but mainly to

compress the sternum, which generally protrudes. It is also designed to be worn at night, when the apparatus itself is not applied.

Medical Items and News.

Monument to Türk.—A committee is being formed in Vienna for the purpose of erecting a monument to the memory of the lamented master of laryngoscopy, Prof. Türk, in the hospital to which he was attached.

In Memoriam.—A massive and chaste white marble monument has just been erected, in the Beech-Woods' Cemetery, to the memory of the late Dr. Joseph M. Smith, of New York, who was born in New Rochelle, March 12, 1789, and died in New York, April 22, 1866.

A New Asylum.—The trustees of Turner's Retreat, at Norwich, Conn., a State asylum for the cure of inebriates and opium-eaters, organized yesterday at Wilton, where the institution is located, and elected for president Dr. J. Edward Turner, the founder of the first inebriate asylum in the world.

Blackwell's Island.—The area of Blackwell's Island is now being extended northward by the erection of sea-walls.

The N. Y. Society for the Relief of the Ruptured and Crippled needs $100,000 to extend its charity and complete its building on the N.W. corner of Lexington avenue and Forty-second street.

The N. Y. Dispensary is rebuilding upon its old site with increased accommodations gained by the addition of an adjoining lot.

Berkshire Med. College.—There will be no lecture-term of the Berkshire Medical College at Pittsfield, Mass., this year, and probably the institution will be abandoned or greatly modified in its character. It was incorporated in 1822, and for many years had a flourishing existence.

Surgeons of the Abyssinian Army.—There will be no special promotions in the Army Medical Department arising out of the Abyssinian campaign. Ten surgeons and fourteen assistant-surgeons will revert to the general roster, and their absorption may be taken as to some extent accounting for the present slackness of promotion, but the general seniority of the list will not be interfered with.—*United Service Gazette.*

Curious Experiment.—In this month's *Revue Populaire*, of Paris, Dr. Badet gives the following curious experiment, made by Dr. Claude Bernard:—If oxygenized blood be injected into the arteries of the neck immediately after decapitation, warmth and sensibility return; the eye gets animated and displays such strong perception that a hammer shaken before it will cause it to wink and look sideways.

Drs. J. J. Chisholm and F. T. Miles have resigned their positions as Professors in the Medical College of South Carolina.

Lightning Concussion.—In the London Hospital, in the month of June, there was treated a well marked case of concussion of the brain due to lightning. The man was struck down suddenly during a thunder-storm, and as soon as taken up he manifested the symptoms of concussion.

Substitute for Cod-Liver Oil.—M. Gubler, in his very useful book, "Commentaries on the new French Pharmacopœia," states that he considers the oils of squalet fully equal to that obtained from the liver of the cod. He even assimilates the latter to the livers of birds and mammalia, and maintains that the livers of the Strasbourg pies may be used with advantage, advising patients who dislike cod-liver oil to eat the livers of fattened birds.

Chloride of Potassium.—A vast deposit of pure chloride of potassium has been discovered in a salt mine in Hungary. It contains about 50 per cent. of potassium, and must prove of great value to Austria.

A Singular Case of Strangulation.—An Orkney paper reports a singular case of strangulation in the island of Stronsay. An old man, named Neil Macpherson, who was carrying on his back a bag containing 2½ stone of sugar, turned into a stable to rest himself. To lighten his burden he allowed the bag to rest on the edge of a manger, but whilst he was momentarily off his guard it fell to the ground, and the rope by which it was slung over his shoulder tightened round his neck and killed him.

Operations on the Vocal Cords.—At a meeting of the Royal Medical and Chirurgical Society in London, on May 26, seven cases were reported in which morbid growths were removed from the vocal cords by means of the laryngoscope.

Curious Case of Apoplexy.—In Gray's Hospital, London, during the month of June, a fatal case of apoplexy occurred in a man twenty-one years of age. A post-mortem examination showed disease of the cerebral arteries and hypertrophy of the left side of the heart.

Special Hospitals.—The *Lancet* rejoices in the difficulties that appear to beset special hospitals in London, particularly that for diseases of the skin, and is of opinion that the general hospitals afford facilities for the treatment of all classes of disease.

Cyanide of Potassium.—A curious, and at the same time interesting fact has recently been made known by the scientific journals. Cyanide of potassium, much used by photographers, is an exceedingly dangerous poison; and they will be glad to hear that the painful ulcers and other bad symptoms which it produces may be effectually prevented by rubbing the hands when soiled with it with a mixture of proto-sulphate of iron, reduced to a very fine powder, and linseed oil.

Application of Spectrum Analysis to Chemistry.—Prof. Roscoe, F.R.S., has attracted general admiration in London, by showing results of the application of spectrum analysis to chemistry:—He exhibited in his lectures the decomposition of white light by prism, the recomposition of colored rays, the monochromatic nature of colors of spectrum, the white light by revolving disc, as seen by magnesium wire and electric spark, and Tyndall's experiments with dark rays, viz.: blackened paper, platinum red hot, gunpowder on gunmetal paper, carbon burnt in oxygen, and blackened magnesium wire.—*Lancet.*

New Operations on the Eye.—Three new surgical operations on the eye have been communicated by M. de Graefe. (*Gazette Hebdom.*) The *first* has for its object the *section of the optic nerve*, in cases of remaining subjective luminous sensation, in particular affections, to the loss of the eye. The *second* consists in the *partial tenotomy of the elevator of the upper eyelid*, in *Bandow's* disease. The *third* concerns the recent modification practised by the distinguished professor in his *method of linear extraction of cataract*. This modification consists

in the suppression of every tractor for evacuating the crystalline. The number of cases of prolidentia of the vitreous body has been diminished since the introduction of this modification, in the proportion of from 14 in 100 to 3 in 100.

Death of Two Distinguished Russian Surgeons.—The *Berliner Klinische Wochenschrift* announces the death of two notable Russian Surgeons, viz.: the Inspector General and member of the Privy Council, Peter Alexandrowitsch Dubowitzsky, whose influence on medical education in Russia was well known, and the celebrated Prof. Szegmanowsky, one of the most renowned surgeons of Russia, who died on April 13th, at Kiew.

The Progress of Hippophagy.—The first shop for the sale of horse flesh was opened in Paris on July 9th, 1866, and now there are upwards of seventeen such shops in different parts of the city. During the past twelve months 2312 horses were slaughtered, yielding some 11,320,000 pounds. Seventy-eight asses and some mules were also killed in the same time.

Mortality of Cities.—The following table shows the mortality of several cities during the year 1867, and the proportions to the population as *estimated* for the middle of that year:—

	Population 1867.	Deaths 1867.	Deaths to Population one in
New York	850,000	23,170	36.7
Philadelphia	650,000	15,539	46.6
Brooklyn	330,000	8,325	39.6
Newark	90,000	2,124	42.4
Rochester	53,000	1,021	51.9
Providence	57,000	966	59.4
Hartford	34,000	514	66.1
Lynn	21,500	410	52.4
Norwich	15,000	280	53.6
New London	10,500	151	69.5
New Bedford	21,000	420	50.0

We have seen no statement of the mortality of Boston in 1867. It is probable that the estimate of the population given above would satisfy very few of the people of the several cities named. There is a constant and irresistible tendency among the people to over-estimate the population of cities. In the cities named above in Massachusetts, New York and Rhode Island, there was a census only two years ago, and the estimates given cannot be far from the truth. The population in 1865 of the three cities named in the State of New York was as follows:—New York, 726,386; Brooklyn, 296,378; Rochester, 50,940. The estimate given allows a liberal increase in the two years from July, 1865, to July, 1867. And yet local authorities claim a million or more in New York city, nearly half a million in Brooklyn, and 60,000 to 65,000 in Rochester. The latter city increased only 2,700 in the five years, 1860 to 1865; we give it more than 2,000 increase in the two years, 1865 to 1867. Besides this in Rochester and some other cities named they have no complete system of registration. These facts are important in considering the proportion of deaths to population, or the relative healthiness of different cities.

The Perils of the Medical Profession.—Dr. Juge died lately, in Paris, at the early age of forty years. He had practised in the provinces, and had been settled in the French capital only five years. The deceased was highly respected and beloved in his birthplace, as well as in the localities where he had been residing; and the most touching marks of reverence were paid to his remains when, according to his wish, they were conveyed to his native village. The peculiarity of the case lies in the rapidity with which Dr. Juge was carried off. About ten days before his death, a pin, which had not been used for any pathological purpose, pricked his little finger. Of course no attention was paid to this. Two days afterwards, however, he was seized with rigors; the finger became red and painful, and swelled considerably; erysipelas set in and ran up the arm; delirium came on; and death ultimately ensued. Now it should be noted that Dr. Juge was an indefatigable investigator in medical science; that his brain was habitually overworked; and that, consequently, his nervous system was in a state of constant irritation. That the pin had not come in contact with some noxious principle no one could of course maintain; but it may be suspected that the state of the system—a state which, to our knowledge, obtains with many of our professional brethren—had much influence on the fatal issue. Let this be a warning.—*Lancet.*

An Amendment to the Code of Ethics.—At the last meeting of the Iowa State Medical Society, and during the supper, the following humorous toast was proposed:

Article 1st. The two Presidents, Drs. Watson and Whitman, shall be expected to wear the hair parted on the top of the head as a mark of contradistinction, and in this consultation they shall be considered the prominent symptoms. (Cheers.)

Art. 2d. It shall not be deemed unprofessional for any bachelor member of this Society to pay *especial attention* to women and children in any case of actual disease, or in-*fat*-uation. (Cheers.)

Art. 3d. It shall be the privilege of any member of this Society to be sick on any very dark or stormy night; provided, however, that he shall recover by the following morning. (Cheers.)

Art. 4th. No member of this Society shall hereafter report more than four fearful accidents per day to the daily papers, nor have a sign more than ten feet in length—nor an advertisement of more than one column in any newspaper—unless he shall advertise that he will give *special attention* to something, or that he has been a surgeon in the United States Army. (Cheers.)

A New Salt Mine.—An immense bed of solid salt, said to be 500 feet thick, and extending no one knows how far, has been discovered in the immediate neighborhood of Berlin, Prussia.

Mr. G. Jamieson, a surgeon at Bradford, England, committed suicide recently by throwing himself under a train on the Midland Railway as it was being started.

New Publications.

Books Received.

The Medical Register of the City of New York and Vicinity; to which are also added Contributions to the Medical History of the City of New York. For the year commencing June, 1868. Vol. VI. Published under the supervision of the N. Y. Medico-Historical Society. John Shrady, M.D., Editor. New York: Baker & Godwin, 1868. pp. 448.

Contributions to Dermatology. By Silas Durkee, M.D. Boston: D. Clapp & Son. 1868.

A Manual of Extracting Teeth. By Abraham Robertson, D.D.S., M.D. Second Edition. Philadelphia: Lindsay & Blakiston. 1868.

Theoretical and Practical Treatise on Midwifery, including the Diseases of Pregnancy and Parturition. By P. Cazeaux, Member of Imperial Academy of Medicine, etc. Fifth American, from the Seventh French Edition, by Wm. R. Bullock, M.D. Philadelphia: Lindsay & Blakiston. 1868.

Original Communications.

CAN WE DIAGNOSE BETWEEN THE ALBUMINURIA OF PREGNANCY AND THAT OF BRIGHT'S DISEASE?

By F. D. LENTE, M.D.,

OF COLD SPRING, NEW YORK.

I AM induced to ask this question, and to present a case for publication bearing upon it, by the perusal, in the April number of the *American Journal of Medical Science*, of a review of a recent work on the Diseases of Women*, in which the reviewer takes the affirmative side of the question, and also takes the author pretty severely to task for not grouping his cases (of convulsions with albuminuria) with "reference to any such view of their pathological difference." He goes on to ask: "Can these cases be distinguished during their progress? Is there any means of telling whether the albuminuria of a pregnant patient is simply the result of pregnancy, or whether it is a symptom of organic disease of the kidney?" Dr. Elliot takes the negative side. The reviewer quotes the following passage, giving his views very decidedly.

"It is, however, very gratifying to remember that the urine of pregnancy may present all those varieties and numbers of casts which are recognized in every stage of Bright's disease, but that, after a fortunate labor, these conditions may disappear entirely, and the patient remain as well as those who have presented similar appearances after scarlatina and other acute diseases." (p. 12.)

The reviewer states that authorities are "against the author," and quotes Frerichs, Hurley, Basham, and Roberts. Dr. Elliot, with large opportunities for the observation of these cases in his private practice and in the great public charities, with which he has long been associated, has industriously studied this subject, and his views should therefore carry considerable weight, even though placed on the opposite side of the balance to those of the distinguished names quoted. It is an important question, and one which must come up with painful interest, not unfrequently, to all of us who are much engaged in obstetrical practice. We do not intend to discuss it at present, but simply to furnish the following interesting case as a contribution to the negative side, to which our individual experience has inclined us to adhere.

As I kept no notes of the case myself, I applied to the physician (DR. WHITE, of Fishkill, President of the Dutchess County Medical Society), who called me in consultation, and received the following communication.

"As to the history of the case of Mrs. M., I will endeavor to give you it as nearly as possible.

"I was called to visit her at 5½ P.M. on Friday, 22d February, 1867. I found her in a comatose and insensible condition, having had two convulsions before I arrived. She had been complaining, during the day, of what they call sick headache up to the time the convulsions came on. The pulse was full, skin hot, bowels constipated; very considerable œdema (of lower extremities). The time of her expected confinement had arrived but no evidence of labor. I bled her sixteen ounces from the arm, applied ice to head and mustard to the neck, and gave 15 drops of Magendie's solution of morphine. Within half an hour she had another convulsion, when I sent for you; and about the time you arrived she had another, when you injected the arm (with morphine ½ grain), and had her bowels moved by an enema, and the bladder evacuated by the catheter; by which operation we obtained but a small quantity of urine, there evidently being but little secretion. After this she had no more convulsions. Whenever she became uneasy, and gave evidence of their return, she had an injection, *per anum*, of one grain of morphine; this was repeated every six or eight hours, three times when all unpleasant symptoms disappeared.

"The kidneys became active soon after she was fully under the influence of the morphine. During the day and night of Saturday, she voided seven and a half pints of urine of a natural color. After this I made no note of the quantity, but remained with her until 3 o'clock Sunday afternoon. The following morning at 8 o'clock, I was called to her, and found her in labor; and at 11 o'clock A.M., she was delivered of a full-sized child with no unpleasant symptoms during or after the labor. She recovered rapidly, and has enjoyed uninterrupted good health since. I saw her this week, and found her in perfect health, and in the sixth month of pregnancy.

"I made a verbal report of this and five other cases of *puerperal convulsions* (that I have had within the last two years, all treated with morphine, and all terminated favorably), to our County Medical Society, at the semi-annual meeting in January last, and two cases were reported by Dr. G. L. SUTTON, in which I was in attendance with him, which were treated with morphine, and resulted favorably. It provoked a very spirited discussion by the members of the society, a majority of whom had treated their cases with chloroform, bleeding, and veratrum. But they were free to acknowledge that the mortality was fearfully great."

I have only to add in addition to the notes of Dr. White, that the urine was quite turbid *when drawn off*. It was highly albuminous, and presented a most interesting appearance under the microscope. The turbidity seemed to be due to multitudes of a very rare form of uric acid crystals. I have never seen such a variety and abundance of casts in any one specimen as this presented. It was examined also by Dr. Barker, my partner, Dr. Head of the army, and by Dr. Wm. H. Draper, of New York, who stated in a letter to me, that he had scarcely ever seen such a beautiful specimen of casts. I endeavored to procure a sample of the patient's urine soon after convalescence; but, as she lives at some distance from me, I have never been able to do so until the middle of June, the 7th month of pregnancy. I found it normal, with no trace of albumen; I, moreover, learned that the patient had always, previous to marriage and since, enjoyed good health, except being subject from childhood to headache. It may be pretty safely affirmed that she has no Bright's disease.

The statements of Dr. White, regarding the efficacy of opiates, are worthy of particular note, and are strictly in accordance with my own experience.

ANOTHER DEATH FROM CHLOROFORM.—An inquest was made a short time since at Liverpool, England, on the body of Charles Rollason, 46 years of age. The chloroform was administered at the Northern Hospital, by Mr. Frederick Lowndes, in the presence of Drs. Bradley and Henry Lowndes. The amount of chloroform given was less than usual, as Dr. Bradley suspected that his heart was fatty. A *post-mortem* examination showed that the deceased died of syncope. Verdict, "Died under the influence of chloroform rightly and skilfully administered."—*British Medical Journal*.

* Obstetric Clinic, by Geo. T. Elliot, Jr.

RETINITIS IN BRIGHT'S DISEASE.

By ORESTES M. PRAY, M.D.

BEING A PAPER READ BEFORE THE KINGS CO. MEDICAL SOCIETY, NEW YORK, JUNE 16, 1868.

The peculiar form of retinitis, often found accompanying Bright's disease, and never found under any other conditions, is as interesting to the general practitioner as to the oculist.

The changes which take place in the retina, during the course of this disease, are easily seen by the aid of the ophthalmoscope, and, when once recognised, a positive diagnosis of the kidney disease may be made, even though no other prominent symptoms are discoverable at the time.

I wish to report a case of Bright's retinitis that may be of interest to the Society, and then to state as briefly as possible, the known facts concerning this disease, avoiding tiresome detail and all mere theory.

CASE.

December 13th, 1867.—On Friday, December 13th, 1867, a patient, a man aged 52, a lawyer by profession, came to me, complaining of sudden impairment of sight.

Eight days before, he first noticed indistinctness of vision in the left eye, and a day or two after the same in the right eye. Three days from the time that the disturbance of vision was first noticed, he found that he could not read his hymn-book in church, which usually gave him no trouble.

For several years past, he had suffered quite often from severe headache, sometimes accompanied by nausea and vomiting. For about five months, he had been troubled with an increased quantity of urine, which often compelled him to get up two or three times during the night. By the direction of his family physician, he had been taking tinct. of the chloride of iron. At the time of examination, I found vision of both eyes greatly impaired. He could read no type smaller than No. 18 of Jäger.

Upon examination with the ophthalmoscope, I found the retinal vessels congested, the nerves red, and their margins almost obliterated; the retina in both eyes hazy, and containing white patches and small extravasations of blood.

In the left eye, there was a large whitish patch at the macula lutea, which he complained of as a blue cloud. The whole picture was that of a well-marked case of Bright's retinitis.

The urine contained a very small quantity of albumen, so small that it might easily have been overlooked. I found no casts and no sugar.

He was directed to continue the Tr. Ferri Chlor. gtt. x. three times a day.

December 14th.—Wet cups were applied to each temple and about ʒiss of blood was taken from each side.

December 17th.—Dr. Henry D. Noyes, of New York, saw the case with me and confirmed the diagnosis. Upon auscultation, we both heard a distinct murmur with the first sound of the heart—a mitral regurgitant murmur.

Dr. Noyes advised alcohol vapor baths, three times a week, about an hour each time; wet cupping on the temples, from ʒ iss to ʒ ii. from each side twice a week, and Tr. Ferri Chlor. gtt. xv. and Hydrarg. Bi-Chlor. gr. $\frac{1}{8}$, twice a day. Patient not confined to the house; diet nourishing.

Six or eight days after this I stopped the bi-chloride of mercury, and, by the advice of his family physician, he took a blue pill every other night.

December 28th.—Sight seemed to have improved a little, so that he could read No. 17 of Jäger. Baths, cupping and the Tr. Ferri Chlor. continued as before.

January 7th, 1868.—I made a careful examination with the ophthalmoscope. The vessels appeared less congested, and the white patches, especially the one at the macula lutea, in the left eye, seemed not so dense. He said that he could see better, and that his general health had improved. Treatment the same as before. Complains of not sleeping well after the vapor bath; perspires quite freely.

After this the headache, accompanied by nausea and vomiting, became very troublesome, almost constant. He lost appetite, and was rapidly running down. Vision grew a little more indistinct. Treatment the same. The cupping and baths omitted once or twice.

January 22d.—He came to my office in the morning; sight had slightly improved, so that he could again read No. 18 easily. Ophthalmoscopic examination showed no marked changes. General condition very bad.

About 5 or 6 o'clock, P.M., he was seized with violent pain in the head, behind the ears. I went to see him, and found that his family physician had already been there and had prescribed counter-irritation to the back of the neck (Chlor. Liniment), and had given internally hyoscyamus. It was 10 o'clock P.M. when I saw him. He was suffering greatly from pain behind the ears; had been vomiting, and had perspired quite freely afterwards. His speech was very thick, and he seemed to be in a sort of stupor. He was restless until 2 o'clock A.M. the next day (January 23d), when he became motionless, and probably unconscious. I saw him at 8 A.M.; pulse 140, hard and full; respiration 20; skin of the forehead moist and warm; pupils contracted and eye insensible to touch. (Pupils dilated the night before.) He had not spoken or moved since 2 A.M. At 10.15 A.M. he died.

I examined a specimen of urine, passed the day before, and found a small quantity of albumen, as at other examinations; no sugar; found no casts.

No post-mortem examination was made.

It has long been known that disturbance of vision frequently occurs as a complication in Bright's disease; such disturbance being called by the older writers Amaurosis Uræmica. Bright himself describes this complication, and states that it occurs in four cases out of every thirty seven (1 to 9¼); according to Frerichs, six to forty-one (one to six and five-sixths); according to Lebert, one to five. These statistics, however, are of little value, because they were made almost entirely before the ophthalmoscope came into use.

There are two forms of disturbance of vision: one dependent upon actual disease of the retina—true retinitis, and the other upon mere functional disturbance of the retina, probably dependent upon uræmia, showing no visible change in the retina.

This second form is characterized by its sudden appearance and as sudden disappearance; while the first form has a more progressive course, and often lasts for a certain time unchanged, and then either grows worse or gradually disappears.

As the functional disturbance of the retina presents no changes, either by ophthalmoscopic examination or by post-mortem microscopic examination, it need not detain us further; and we will confine our attention to the retinitis. This disease is so characteristic that when once recognized a positive diagnosis of Bright's disease can be made without the aid of any other symptoms.

The retinal complication occurs only in the later

stages of Bright's disease; still it is sometimes the first symptom complained of; and so the oculist is frequently the first to make a diagnosis of the kidney trouble.

The general symptoms of Bright's disease are so familiar that I shall not attempt to describe them or speak fully of the general treatment, but shall limit myself to the retinal complication.

In the case first reported, the loss of vision was rather rapid, within eight days or less. Frequently the impairment of sight comes on much more gradually. The first symptom of the retinal trouble observed with the ophthalmoscope is congestion of the retinal vessels; the veins appear swollen and tortuous, and often the arteries relatively thin; then the gradual appearance of a grey or bluish opacity of the retina, most marked near the nerve; next little points and stripes of ecchymosed blood appear. The opacity of the retina grows more and more dense, the nerve appears swollen, cloudy, and its margin becomes ill-defined; then, first near the nerve, small milk-white spots appear, which gradually increase in number and, running together, form large white patches. These white points often have a peculiar arrangement around the macula lutea, which was first described by Liebreich; they are arranged in rows radiating from the macula, which may appear dark by contrast.

On the margins of the large white patches are often seen the small white points which have not yet run together; frequently stripes of dense white are seen running along the sides of the vessels.

The vessels are sometimes clearly seen lying upon the opacities, and sometimes more or less covered by them.

The most characteristic symptom is the dense, white opacity of the retina; this opacity, together with the minute retinal hæmorrhages, is sufficient for a positive diagnosis.

Disease of the heart is a frequent complication, for in nearly every case in which a post-mortem examination has been made, dilatation of the cavities of the heart and hypertrophy of the left ventricle have been found.

The kidney disease and the retinal trouble seem to be, to a certain extent, independent of each other, that is, improvement in sight does not imply a corresponding improvement in the state of the kidney: in fact, the retina may recover, so that vision becomes normal or nearly so, while the degeneration of the kidney steadily advances. As a rule, the impairment of vision remains stationary for some time, often showing temporary improvement and sometimes going into recovery, but, too often, growing worse, and finally leading to atrophy of the retina and nerve, unless the patient is carried off before these last changes occur.

Detachment of the retina, more or less complete, may take place as an accidental complication.

As regards the pathological anatomy of the retina in this disease, the important changes are: congestion, serous infiltration, degeneration of the retinal vessels, extravasation of blood, fatty degeneration of the retina itself, hypertrophy of the retinal connective tissue, and gradual atrophy of the retina and nerve.

The prognosis is unfavorable, for, although partial or complete recovery of vision may take place, it will not, as a rule, be permanent, and sooner or later, in the great majority of cases, sight will be destroyed, if the patient lives long enough.

TREATMENT.—Of course the principal treatment is directed to the general disease.

Alcohol vapor baths, or Turkish or Russian baths, and Tr. Ferri Chlor. in as large doses as the patient can take comfortably, seem to be the most important means of treatment. Locally the application of leeches, or, better still, artificial leech, to the temple is strongly recommended by Professor Graefe, though, according to some writers, this should be limited to the first stage, that is the stage of congestion, before the appearance of the white patches.

Death may take place within a period of from one or two months to a year, or more, after the appearance of the retinal disease. In the case reported only about seven weeks elapsed.

This disease proves that the ophthalmoscope is useful, not only to the oculist, but also to the general practitioner.

ATROPINE

AS AN ANTIDOTE TO OPIUM POISONING.

By M. S. BUTTLES, M.D.,

ADJUNCT TO CHAIR OF OBSTETRICS, AND LECTURER ON GYNECOLOGY AT THE UNIVERSITY MEDICAL COLLEGE, NEW YORK.

THE following is the history of a case occurring in my practice, which shows the value of belladonna in cases of poisoning by opium:

Mrs. W., aged 38, has been troubled with retroversion, perimetritis, and severe endometritis, and has had several severe attacks of pericarditis, which have left extensive adhesions.

Had severe neuralgic pains all along the left side, for which I had been in the habit of giving her subcutaneous injections of gr. ss. morphiæ sulphatis.

On January 20th last, I gave her one of these hypodermic injections, which gave but slight relief; the next morning I repeated it, injecting exactly ℥ xv. Magendie's solution (equal to gr. ss. morphiæ), and remained in the room fifteen or twenty minutes, when she seemed a little easier, and I retired to my office down-stairs; but was very soon summoned by the nurse, who stated that Mrs. W. was dying.

I found her lips purple, the respiration seven per minute, no pulse at the wrist, but one sound at the heart; pupils contracted to a fine point, frothing at the mouth, and the extremities cold.

I commenced artificial respiration (for while I was cogitating on my handiwork, she entirely stopped breathing), which by myself and assistants was kept up for about half an hour, when I attempted to give her some strong coffee, but she could not be made to swallow. I had sent for several neighboring physicians, who were all out; but just at this moment my friend Prof. Chas A. Budd providentially called on me, and was immediately shown to the room. He declared that she was dead, and "laughed in his sleeve" at the idea of keeping up artificial respiration.

By this time I began to think of sending for an undertaker (for she had come to me from a neighboring city for treatment), but as a "drowning man clings to a straw," so I was eager to give her every possible chance, and asked Dr. Budd to suggest something, at the same time mentioning belladonna, when he said that atropine might be given hypodermically, if I wanted to do something, but as she was dead it would not bring her around. We resolved, however, to try it. By this time artificial respiration had been kept up for an hour and a half. One-sixtieth of a grain of the sulphate of atropia was injected, and in fifteen minutes she showed signs of life, the pupils began very slightly to dilate, and in ten minutes more she began to breathe, and the respiration rose to twelve per minute; in half an hour we repeated the dose, making in all one-thirtieth of a grain of atropine; and in about fifty minutes from the time of giving her the first injection, she returned to

consciousness, and is living now, with a blank in her life of two and a half hours.

To Prof. Budd is due the credit of suggesting the remedy.

Original Lectures.

CLINICAL LECTURES

ON DISEASES OF THE GENITO-URINARY ORGANS.

By Prof. W. H. VAN BUREN, M.D.,

CHARITY HOSPITAL, APRIL 22, 1868.

There are three cases of syphilitic nodes, the subjects of our lecture last week, which the House Surgeon has in waiting, to illustrate the effects of the iodide of potassium upon this form of disease. In one of them, who was suffering excruciating nocturnal pains, and whose haggard aspect showed his loss of sleep, one of the nodes upon his tibia was red, hot, and exquisitely sensitive to the touch; and I told you that suppuration was imminent, and that after it had broken, or been opened, a probe introduced into the opening would come into contact with dead bone, and that a "carious ulcer," as it is called in the text books, would exist. This man now looks cheerful and happy, and tells you that his "pains are all gone,' and that he "sleeps well." When I make pressure upon the node which was so tender last week, it gives him no pain; in fact it has diminished by one half in size, and the gratitude of the patient is pleasant to witness. He had just commenced the use of the remedy when you saw him last, taking 10 grains three times a day. The dose was increased to 15 grains, and in "two or three days" the pains ceased; *ex uno disce omnes.*

This remarkable influence of iodine upon syphilitic periostitis is hardly paralled in certainty and promptness of effect, in the whole range of therapeutics. The remedy is spoken of by some authors as an "anodyne." I have been watching its effects, on a large scale, for a good many years; and I cannot call to mind an instance of this sort in which it has failed to give relief. The somewhat enthusiastic expressions of the patient before you, as to his "feeling so much better," are in no degree exaggerated. He does feel *a great deal better*, not only through the relief of his aching pains, and his ability to sleep, but in consequence of a decided and peculiar influence upon the spirits and feelings which this drug is capable of exercising, and which is hardly sufficiently noticed in the books, and which resembles the "happifying" effect of opium—only that it is more permanent. Brown-Séquard uses the remedy in view of this effect, in conjunction with the bromides, in cases of nervous depression, in the combination which has been called his "brain-tickler," and with undoubted good results. In syphilis, this peculiar influence of iodine is probably due to improvement in quality and increase in number of the red corpuscles of the blood, which are sensibly deteriorated by the syphilitic poison, as proved by the famous experiments of the apothecary of the Hotel Dieu. You see this most strikingly in the chloro-anæmia of syphilitic women, of which I have exhibited to you so many examples in this room. Thus, you perceive that the doctrines of the "cellular pathology" rule the hour. Syphilis injures the organism, as I have endeavored to teach you, by unfavorably modifying and impeding cell growth. Iodine seems to possess the power of neutralizing certain phases of this poisonous effect, by stimulating cell development—very much, I suppose, as an appropriate fertilizer stimulates the growth of plants by ministering to their peculiar vital requirements.

The next case, as you learn from the notes of it just read, is one of classical syphilis, presenting those features which characterize a *grave* case of the disease. Chancre in October last small, insignificant, soon getting well; no bubo; in November, a roseolar eruption, complicated with sore throat and iritis—gradually passing away in six weeks or two months with little or no treatment; in February, a second crop of eruption, pustular in its character, and accompanied by a return of the iritis, more severe and profound. At the present time, two months later, no treatment, as far as we can learn, having modified the succession of symptoms, you have an opportunity of studying the case. The eruption, which, as you see, covers pretty much the whole body, consists, in the main, of small elevated papules of a dusky red tint. A large proportion of these elevated papulæ have slowly taken on the process of suppuration, presenting themselves as small pustules, conical in shape, with hardened bases. Some of them have discharged their contents, and present small crusts upon their summits, resembling, as they dry up and fade, spots of scaly eruption, which they are not. Some few have passed away, leaving minute, depressed cicatrices, dusky in color. Still later these little cicatrices will lose their dusky tint and become whiter than the surrounding skin; but they are indelible. The left eye, the sight of which is almost extinguished, presents the uniform redness of superficial conjunctivitis, but on pressure, the deeper straight vessels radiating from the cornea are brought into view, showing that the iris is involved. This latter shows the wasted, dingy appearance and the irregularly shaped, immovable outline of the pupil, which characterize the disease; and the patient describes the severe aching pain over the brow, worse at night—peculiar to it. With these objective symptoms, exist also the peri-articular pains, and general deterioration of health, which are so rarely absent.

I call this case *classical*, because it affords an example of the successive eruptions of syphilis, which I have elsewhere described to you as belonging to the disease when the development of its successive phases has not been interrupted by the modifying influence of mercury or iodine: the first superficial, ephemeral, tending to spontaneous and early disappearance; the second more profound, more permanent, showing less disposition to spontaneous cure, and leaving permanent traces of its presence. If treatment were still to be withheld, you would probably see, in time, a third crop of eruption, tubercular perhaps in character, tending to ulcerate more deeply, and complicated with gummy tumors, or periostitis and death of tissue.

I call this case *grave*, because it is marked by a tendency to suppuration and destruction of tissue. The existence of iritis and pustular eruption always indicate a more serious prognosis as regards rapid and early cure than when these symptoms are absent.

This man would be properly treated by mercury. Iodine is hardly indicated, except as an adjuvant, to keep the mercury in a soluble and active state whilst circulating in his blood, and perhaps to prevent its chemical union with the earthy constituents of the bones. You know, probably, that mercury can be obtained by destructive distillation from the *heavy* bones, altered by syphilis and mercury, specimens of which are to be found in all of our surgical museums. In giving mercury in a grave case like this, if the nutrition were already impaired, I should prefer to administer it by means of the moist mercurial vapor, or by the old established plan of rubbing in the mercurial ointment, thus leaving the stomach free from any possi-

ble irritation from drugs, to the unimpeded performance of the functions for which nature designed it; and I should not neglect to supply it with wholesome and easily digestible food.

The next case, as you hear from the House-Surgeon's case-book, is a woman of middle age, supposed to have contracted disease from her husband. She shows you badly ulcerated legs—the ulcers being circular in outline, aggregated in clusters, and yielding a copious and fetid discharge. She has also depressed cicatrices on the forehead, one of these covered by a scab, and she says some fragments of bone have been discharged from it. She looks feeble and cachectic, but has no other evidence of disease.

This is undoubtedly syphilis, and you may regard this patient as showing the third stage of the disease, of which the last patient exhibited to you the second, with a history of the first.

Women contract disease from their husbands generally in one of two modes: either by inoculation through the genitals—and this I trust, for the credit of humanity, is the least common mode; or by impregnation, through the medium of the embryo in utero. A man with no obvious symptom of syphilis, and with apparent reasons for considering himself in perfect health, but having suffered at some former period from the disease, may communicate it through the medium of impregnation to his wife, and at the same time continue, himself, to enjoy uninterrupted health. This is more likely to occur where the constitution of the wife possesses a degree of susceptibility to the venereal poison greater than that of the husband. And this degree of susceptivity, *quoad* syphilis, is exceedingly variable; and, unfortunately, we have no means in our power of determining its existence before exposure to danger.

I have had a family under observation for twelve years, where the wife has passed through various phases of severe syphilis, having given birth to several syphilitic children, and the husband has throughout this time enjoyed uninterrupted health. He had disease of undoubted character several years before marriage. She is now in excellent health, as a result of well-directed treatment, and has had a healthy child.

A very common result of this mode of communication of the constitutional disease from husband to wife is a succession of abortions or miscarriages. The woman before you aborted two and a half months after her marriage, and her symptoms of syphilis dated from this event. She has never since conceived.

To what extent the syphilitic poison is thus destructive to fœtal life we have no means of certainly determining; but I feel that I am safe in advising you to keep it always in view as a not unfruitful source of sterility in the female, as well as of abortion and miscarriage. There are well authenticated cases in which a well-directed anti syphilitic treatment has rendered a barren union fruitful. But such a course is not to be adopted hastily; only after careful study and judicious consideration. Cell growth culminating in the production of healthy spermatozoa is liable to be arrested by the syphilitic poison, as well as the development of a germ already impregnated in the uterus of the female.

A Rain of Sulphur.—According to the *Messager de Toulouse*, an interesting phenomenon occurred at Toulouse, in June last, called by the people a rain of sulphur. The earth was covered with a yellow powder resembling pulverized sulphur. The powder was composed of the pollen of flowers borne by a strong wind from the pine forests.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting—May 27, 1868.

Dr. William B. Bibbins, President, in the Chair.

CURIOUS COMPOUND TUMOR OF EPIDIDYMIS.

Dr. Sands exhibited a rather interesting disease of the testis. The patient from whom it was removed came under his notice the early part of the present month at the New York Hospital, where he begged to have a tumor removed which occupied his left scrotum. The account which he gave of the origin of the disease was wholly unsatisfactory, and no conclusion could be arrived at as to the nature of the tumor, from the history. He said it had come on about eighteen months ago. He had been driving a stage at the time, although he was a shoemaker, and had become very wet. Soon after that exposure, he was seized with pains in the left side of the scrotum, followed by a swelling. He stated that he had never had gonorrhœa, and that he was in perfect health up to the time of the commencement of his trouble. He asserted with considerable positiveness that the tumor had attained a considerable size at the end of the first ten days. After that he kept no particular account of it, further than to notice that it gradually grew. Previous to his admission he had been under the care of some gentleman in town not connected with a hospital, and many others, among whom was an eminent surgeon, who had tapped the swelling, without, however, obtaining any fluid. It was very evident on examination that the tumor was not a hernia, because the cord could be felt above the level of its superior surface (although the latter extended fully up to the abdominal ring); and the tumor received no impulse from coughing. Regarding the precise nature of the tumor there was a great deal of doubt. One or two of the surgeons examined the patient with the dioptric test, and were convinced that no light was transmitted; the house surgeon, who also examined the case with great care, was equally well convinced that light was transmitted. Dr. Sands was inclined to agree with the latter opinion. The tumor fluctuated very evidently to palpation, but this of itself did not indicate the presence of fluid. In order to settle the point, he had recourse to a fine exploring needle which he is in the habit of using in such cases. This he inserted nearly the whole depth of the tumor, and on withdrawing the needle no fluid came away, but when the canula was being taken out a couple of teaspoonfuls of fluid escaped. No more could be obtained, not even as the result of manipulation; and not being able to move the inserted edge of the instrument, he rather got the impression that the mass was solid. The fluid was examined by the microscope, and was found to consist of serum, granular matter, and some pus globules, together with some corpuscles undergoing fatty degeneration.

On consultation it was decided to remove the mass.

At the consultation one of his colleagues thought that the tumor was a hydrocele with very thick walls. Acting upon this suggestion, and willing to give the patient the benefit of a doubt, he commenced the operation with a free explorative incision until he discovered that the swelling was not sacculated, but solid and very ugly-looking, when the whole tumor was removed.

After removal it was examined in order to ascertain the relative position of the parts. The patient remarked that the tumor grew from above downward, which led at first to the suspicion of hernia; but no hernia

being found, not much reliance was placed upon his other statements. It was found that the largest portion of the tumor consisted of a morbid growth developed in the substance of the epididymis. The testicle was clearly recognizable as occupying the lower part of the tumor, somewhat less than its usual size. The mass weighed a pound and three quarters; its length was 6.25 of an inch, and its breadth four inches and five-tenths.

He exhibited a drawing of the growth made by one of his pupils representing it one-tenth its natural size. It was indicated that certain parts were normal and others subject to a morbid appearance much resembling tubercle, which, however, it proved not to be.

Dr. Sands had not had an opportunity to examine the tumor with much care, but so far as he had gone he was able to get the idea that it was not cancerous, but fibro-plastic in character.

Dr. Delafield, who had conducted the examination with more minuteness, being asked for the results, stated, that he had found part of the structure sarcomatous, that is to say, it was made up of connective tissue, connective tissue cells and fibres. In addition to this there was found striped muscle in different stages of development. In the first place there were long fusiform nucleated cells identical with muscular fibres in an embryonic state, then larger cells, somewhat of the same shape, in which striæ were evident, and then large and fully formed fibres with sarcolemma. In other parts could be discovered the results of fatty degeneration. The tumor was then partly cystic, partly sarcomatous, and partly striped muscular fibre.

Dr. Sands stated that Virchow spoke of sarcomatous disease of the epididymis as extremely rare. The patient had no glandular enlargements in any part of his body, and had none of the signs of any other disease, with the exception of renal trouble, which was indicated by the presence of albumen in the urine. The patient being apparently in good health, eating and sleeping well, and being withal so eager for the removal of the tumor, the operation was performed on the 15th of May. The vessels of the cord were secured in turn after being divided over the left forefinger. Eight days after, however, secondary hæmorrhage occurred, when the house surgeon secured the whole stump by a single ligature, since which time there had been no trouble.

CALCIFICATION OF MITRAL VALVE, ETC.

Dr. Finnell exhibited the heart of a colored man who had died suddenly in a convulsion after a severe pulmonary hæmorrhage. He presented it on behalf of Dr. J. C. Morton. The patient had had several attacks of pulmonary hæmorrhage during the last three years of his life. On post-mortem examination the heart was found enlarged with a little calcified deposit on the attached margins of the mitral valve; the three semilunar valves being thickened at the extremities more or less throughout their extreme extent. The left ventricle was the seat of hypertrophy and dilatation. The organ weighed thirty-five ounces.

MORBUS COXARIUS:—OPERATION.

Dr. Newman presented the remains of the upper part of the femur, taken from a patient with morbus coxarius on the Monday previous. The disease first made its appearance two years and seven months ago, since which time he had been treated in several public institutions of this city without benefit. The case gradually progressed, and when Dr. Newman saw it, it was in the last stage, there being seven openings surrounding the joint. The operation of exsection had to be delayed longer than was desirable, in order to wait for the manufacture of some wire breeches, and the patient in the mean time became more and more emaciated; the abdomen became puffy, and he suffered such agony that he had to be carried in his mother's arms almost without cessation.

He operated in the presence of Drs. Finnell, Sayre, and others. The operation advised by the latter gentleman was performed under his special superintendence. Dr. Newman stated that so far as this particular case was concerned it was demonstrated to him that it was possible to enucleate the bone from its attachments to the tendons of the psoas muscles without dividing them.

The patient being in the habit of lying in a position with the thigh strongly flexed upon the pelvis, it was extremely difficult to adapt the wire breeches. The wound was dressed with oakum. Although the patient was reduced it was thought that his chances for recovery were reasonably good. In this case, as in several others, Dr. Newman administered internally a few drops of chloroform in order to prevent the vomiting during anæsthesia, but his experience in this case, in uniformity with the others, was that the emesis, had a tendency to be increased rather than diminished.

He also presented some cystic tumors of the scalp for the purpose of alluding to the good effects following the closing of the wound with silver wire sutures.

Dr. Sayre presented the upper extremity of the femur and portion of the ilium, with the following history:

Miss S—— J——, aged nineteen, of perfectly healthy parents, and always enjoying good health until nine years of age. At that time she jumped from a high fence and struck upon her right hip. That night the hip felt stiff and painful. The next day she was unable to use it. In four or five days she got about, and was apparently as well as ever. About six months after her father observed that her right leg always stood in front of the other, or as he says, "like a horse pointing," and that it could not be brought back without bending the knee. Drs. Hall and Moore of Rochester then saw her and diagnosticated the case as *Morbus Coxarius;* they applied a seton, and put her on iron and cod-liver oil, and kept her out of doors. The issue ran two and a half years, and was then allowed to dry up, she then being apparently well.

She remained so for a few months, when after a long walk the hip again began to trouble her, the pain increased, and she was confined to her bed for six months; a seton issue was again established, and continued for one year.

She was brought to me for examination June 13, 1865, when she presented the third stage of hip disease, with the limb flexed upon the body, adducted and shortened. There was slight motion at the hip-joint attended with pain.

My prognosis at the time being that she might recover without being subjected to an operation, I applied extension, and a splint, after the pattern of Dr. Andrews of Chicago. This was worn about a year, there being no pain in the hip. Two abscesses formed and discharged three or four weeks. The limb then became contracted and anchylosed, remaining so a year. In March, 1867, Dr. Moore divided the contracted tendons and broke up the adhesions. The limb was lengthened about an inch. A month later Dr. Moore moved the limb freely in all directions (under ether). From that time she had no trouble with the joint, and walked about with canes until January, 1868. At this date she fell over the banisters and struck the hip (above and behind the trochanter upon the scar of the upper issue) upon the newel post of the stairs. The hip gradually

swelled, and in February a small abscess formed on the inner side of the thigh, and in April a larger one at the place of injury broke and discharged a thin watery fluid until May 20th, when a large slough of white tissue about the size of a hen's egg escaped. She was brought to me, and on the 24th of May I anæsthetized the patient, and examined the abscess with the finger; it burrowed in different directions with numerous bands. The trochanter was covered with perio-teum and smooth. Enlarged the incision and found what appeared at first to be an abscess in the trochanter, but which proved on further examination to be an opening into a false joint. The joint had been formed by the erosion of the upper surface of the acetabulum, and the formation of a new socket above with a very sharp edge. The head and neck of the femur had been absorbed as far as the inter-trochanteric line, where it was covered with a smooth membrane, and articulated into the new joint on dorsum ilii, about one inch above natural acetabulum. The conical portion of the trochanter was removed with a metacarpal saw, and the sharp eroded edge of the new acetabulum by means of forceps, a large incision for drainage was made toward the back of the nates, the wound stuffed, and extension applied for security. May 27th. Patient was placed in wire breeches, and June 3d, went to Rochester, having progressed finely up to that date.

It appears probable, from the history of this case and the specimen removed, that cure had been effected with a false joint, and that the disease had been redeveloped by the fall of January last, which caused caries of the rim of the new acetabulum. At the time of the operation the articulating face of the trochanter was probably quite healthy, the tissues covering the false caput femoris appeared cartilaginous, but unfortunately they had too far decomposed when submitted to microscopical examination for any decided opinion to be formed.

FOREIGN BODIES IN ŒSOPHAGUS AND THEIR MODE OF EXTRACTION.

Dr. S. also exhibited a clasp plate 2½ inches in circumference, ½ in width, ½ inch in height, and with the middle incisor attached, ⅝ inch in length, which he had removed from the œsophagus of a gentleman who had swallowed it during sleep. The specimen was of interest more particularly in connection with the instrument used in its removal, which consisted of an ordinary gum elastic catheter through which a whalebone rod passed, the free extremity of which was armed with a sponge. Between the extremity of the catheter and the staff a layer of hog's bristles longitudinally arranged around the circumference of the tube was attached, so that when an attempt was made to withdraw the staff by grasping upon its handle, the ends of the bristles would be so approximated as to spread out in the form of an umbrella. The patient from whom the specimen was removed had applied to several surgeons, who had failed by the passage of instruments to ascertain the existence of any foreign body in the œsophagus. This was due to the position of the plate, the circumference of which corresponded to that of the gullet so perfectly that all the probangs would pass through the centre of its concave surface. Dr. Sayre on examining the case was at first struck with the ease with which the bougie could be passed, the œsophagus being held open at one point by the arch of the foreign body. Being guided by the sensations of the patient, which were referred to a particular spot, and learning from him that the tooth pressed in front, and the clasps on either side, he introduced the bristled probang, passed it beyond the point indicated, expanded its extremity in the manner already described, and withdrew the plate with the greatest ease.

He contended that the instrument was superior to all others, in that it completely filled up the gullet below the obstruction, and did not give any liability to laceration so commonly endangered when the ordinary œsophageal hooks were used.

He also in connection with the foregoing case referred to that of a young lady, from whose throat he extracted a portion of the scapula of a codfish with the same kind of instrument.

Dr. Sands mentioned an important modification in the instrument in question, which consisted in furnishing two shoulders to the tube, and a ring for the handle of the staff. By these means it could be used with one hand.

INOCULATION OF TUBERCLE.

Dr. Delafield presented the viscera of a dog which was inoculated with the material of a person who died at Bellevue Hospital on the 6th of April, from pulmonary phthisis. The patient was a woman twenty-nine years of age. The upper lobes of both lungs contained cavities, and throughout all the lobes were masses of the yellow opaque material, variously known as infiltrated tubercle, cheesy pneumonia, etc. There were no miliary or grey tubercles in the lungs, nor was there grey tubercle in any of the viscera. The left thorax contained fibrine. It could not be ascertained how long the left lung had been affected, although it was known that previous to the middle of March the right lung was sound.

A portion of the cheesy material that was firm, and a portion of that which was softened, were mingled together and introduced under the skin of the neck of a dog. The animal, which was a small black and tan terrier, was inoculated on the 8th of April. The first week after the inoculation the animal showed no symptoms of uneasiness; ate well, and exhibited his usual spirits. At the end of this time he began to emaciate, and this emaciation was after a while accompanied with great depression; the animal ceased to run about the room and leap on the laps of visitors, and finally got into the habit of lying quietly in a corner all day.

The dog was killed on the 27th of May, by breaking up the medulla, and an autopsy was made the same afternoon. On examining the neck at the point of the inoculation, the wound was found entirely closed by indurated cicatricial tissue, which showed no signs of degeneration. Immediately below this wound were two enlarged cervical glands. The surface of the lungs was studded with miliary tubercles, situated beneath the pleura, some quite small, others larger and extending into the lung substance. There were also found small tubercles on the surface of the liver, and in its substance, as was also the case with the spleen. Besides these localities the miliary tubercles were found in the mesentery.

He stated that the only two points of interest in this experiment (which of itself was but one of other experiments, successfully performed by others, and one of a number which he expected to perform in connection with Dr. Janeway) were, in the first place, that the matter inoculated was from a typical case representing tubercular pneumonia, and in the second place it was an example of successful inoculation of a dog, these animals having been found less liable to such inoculation than other animals.

Dr. Loomis believed in the case of tuberculous inoculation of animals, that care enough was not taken to place the animals under proper hygienic influences, it

being well known that those animals of active habits, who were kept in confinement, would develop the disease independently in the course of six weeks.

Dr. Krackowizer remarked that animals who were experimented upon with septic poisons, were found after the necessary long confinement to be free from tuberculous disease, and to develop the results of the septic influences only.

Dr. Flint stated that the original experiments in the inoculation of tuberculous matter were performed upon different animals under precisely the same hygienic influences, and those only which were inoculated gave evidence of tuberculosis after death.

RUPTURE OF RIGHT AURICLE.

Dr. Loomis next exhibited a specimen of rupture of the right auricle, which had suddenly caused the death of a man aged forty-five. As the case came through the coroner, no previous history was obtainable.

At the post-mortem examination the rupture was found extending downwards from the descending vena cava, and was about an inch and a half in length, with ragged edges. The auricle was thickened throughout its whole extent. The pericardium was found filled with blood.

He wished to present the specimen on account of its extreme rarity. Dr. Walshe had reported only two such of fifty-seven cases of rupture of the heart, and Fuller of sixty cases of rupture of that organ, referred to only one in which the auricle alone was involved.

MELANOID TUMOR OF CHEEK.

Dr. Post exhibited a melanoid tumor which he had removed from the integument of the face of a young man twenty-five years old, who first noticed a small black growth about six years ago, midway between the lobes of the ear and the outer angle of the eye. It remained, as is usual with such cases, stationary, until a few months since, when it began to grow until it attained the diameter of three-quarters of an inch.

Dr. W. B. Lewis made the following report of its microscopical character:

"A section through base of original tumor, cutting outwards, showed a fine and loose reticulum, its comparatively large spaces filled with cells of various shades of brown. Cells large and small, irregularly round and oval, imperfectly polygonal, columnar, or imperfectly fibroid, nearly all having more than one nucleus, some of them three; these in turn showing in most instances two or three nucleoli.

"A portion from the smaller, and, as I think, the deeper fragment, presented the same, together with free nuclei and blood corpuscles.

"I should consider this a medullary melanoid."

AMERICAN OPHTHALMOLOGICAL SOCIETY.

FIFTH ANNUAL MEETING.

NEWPORT, R. I., JULY 21 AND 22, 1868.

FIRST DAY.

The Society was called to order at 11 A.M., by H. W. Williams, M.D., of Boston, the Vice-President, in a brief but happy address.

The following members were present during the sessions:—Boston, Dr. H. W. Williams, Dr. B. Joy Jeffries, Dr. G. A. Hall, Dr. O. W. Wadsworth. New York, Dr. C. R. Agnew, Dr. H. D. Noyes, Dr. O. D. Pomeroy, Dr. D. B. St. John Roosa, Dr. Wm. F. Holcomb, Dr. E. G. Loring, Dr. H. B. Sands, Dr. F. J. Bumstead. Albany, Dr. C. A. Robertson. Rochester, Dr. C. E. Rider. Philadelphia, Dr. E. Dyer. Cincinnati, Dr. E. Williams. St. Louis, Dr. John Green. Baltimore, Dr. Russel Murdoch.

The Committee on the progress of Ophthalmology, Dr. Hay, read a report which was accepted and referred to the Publication Committee. This report consisted of an abstract of the various papers of importance which had appeared during the year. The different subjects alluded to were discussed by Drs. Noyes, Williams, Jeffries, Green, and others.

Committees on the election of officers, new members, publication, &c., were then elected. The names of Dr. C. E. Hackley, of New York, and Dr. Russel Murdoch, of Baltimore, were then presented to the Society by the Committee on Membership. They were elected by ballot, and declared members of the Society. Dr. Murdoch, being in Newport, was informed of his election and took his seat. Dr. Roosa moved an amendment to the constitution, inserting the words "and aural" in the 2d article, so that the objects of the Society would be "the cultivation of ophthalmic *and aural* science and art." The proposed amendment was seconded by Dr. Loring, and was then laid over under the rules.

The Secretary, Dr. Noyes, read a paper by Dr. Hildreth of Chicago, entitled "Report of a case showing anæsthesia of the cornea and radiating fibres of the iris, without intra-ocular tension."

Dr. Roosa then read a paper entitled "A case of Monocular Mydriasis dependent upon disease of the brain."

Dr. Rider spoke of a case of Mydriasis dependent upon masturbation.

Dr. Loring read a paper on relative accommodation.

These papers, after a full discussion of the last named, were referred to the Committee on Publication, and the Society at 2½ o'clock took a recess till 8 P.M.

P. M.

On reassembling the minutes were read.

Dr. Green read a paper on Astigmatism.

Dr. Jeffries on Binocular vision from the Thaumatrope. The Thaumatrope is the familiar toy consisting of a bit of paste-board, with letters on either side, which seem to coalesce, on rapidly rotating the card.

The Society adjourned till Tuesday at 9 A.M.

SECOND DAY.

Society came to order and minutes were read. The following-named gentlemen, whose names were reported by the Committee on Nominations, were elected members of the Society:—Dr. Prout of Brooklyn, Dr. H. G. Newton of Brooklyn, Dr. A. Mathewson of Brooklyn, Dr. Curtis of Oswego, Dr. Pray of Brooklyn.

The proposed amendment to the constitution was called up, and after debate by Drs. Roosa, Agnew, Williams (Cin.), Pomeroy, Noyes, and others, a vote was taken, a proposition to lay it on the table for one year having been rejected, when the proposed amendment was lost. The principal argument advanced against it was want of time for the consideration of two such subjects as Ophthalmology and Aural Surgery in the limited time of one meeting.

Dr. Noyes read a paper on Retinitis in Glycosuria.

Dr. Murdoch showed an instrument for illustrating the accommodation and refraction of the eye.

Dr. Jeffries read a paper on the form of projection of after images.

Dr. Noyes made some remarks on the form of knife to be used in extraction of cataract, and suggested the use of a modification of Graefe's knife, which he now employed.

Dr. Green read a case of laying aside of spectacles in old age.

The Committee on Election of Officers presented their report, when a ballot was held and the following were chosen for the ensuing year:—President, Dr. H. W. Williams; Vice-President, C. R. Agnew; Secretary, H. D. Noyes; Corresponding Secretary, H. Althof. Newport, R. I., was chosen as the place of the next meeting, and the day changed from Tuesday to the 3d Wednesday in July, 1869.

Dr. Agnew offered a resolution, in substance as follows: "No member of this Society shall attach to his name the title of Oculist." It was seconded, but laid over till after the recess.

After the recess, Dr. Jeffries exhibited some microscopic specimens.

Dr. Hay showed a new cystotome for modified linear extraction.

Dr. Green made some remarks on a modification of Williams' method of treating lachrymal obstructions.

Dr. Hay read a paper on the inclination of the vertical meridian of the eye-ball for the direction of vision upwards and outwards.

Dr. E. Williams read a paper entitled "Cases and practical observations on Ophthalmology." This paper contained statistics on cataract operations by the author and Dr. A. D. Williams, with some other interesting cases.

Dr. Agnew's resolution was called up. Dr. Rider offered the following substitute, which was accepted by Dr. Agnew: "No member of the American Ophthalmological Society shall attach to his name in any public announcement the title of Oculist, or any similar title, or shall publicly announce in print that he gives special and exclusive attendance to special practice."

After an animated debate the resolution was carried without a dissenting voice.

Dr. Agnew made some remarks "On the after-treatment of capital operations," and submitted the paper by title.

Dr. Jeffries read a case of Herpes Zoster Frontalis.

The Society then adjourned without having reached the subject of discussion appointed for this year, "Sympathetic Ophthalmia" was chosen as the subject for the next year.

A dinner at the Ocean House closed the sessions of this Society, which had spent 12 hours in work in a session of two days.

(We regret that the crowded state of our columns prevents our giving anything more than the above abstract of the proceedings of this Society.)

AMERICAN OTOLOGICAL SOCIETY.

A meeting of some of the members of the American Ophthalmological Society was held at the Ocean House, Newport, R. I., on Wednesday, July 23d, 1868, for the purpose of forming a society for the advancement of the Science of Aural Medicine and Surgery. Dr. E. Williams, of Cincinnati, was called to the chair, and Dr. C. E. Rider, of Rochester, was made Secretary.

The Constitution and By-Laws of the American Ophthalmological Society, with the requisite verbal alterations, were adopted for the government of this Society. It was resolved that the name be the "American Otological Society." The names of a number of gentlemen, who have shown an interest in aural science and art, were proposed and elected as members, and the Secretary directed to inform them of their election.

Dr. Roosa, of New York, was appointed a committee on the progress of aural medicine and surgery, with instructions to report at the next meeting.

The Society then adjourned to meet on Tuesday, preceding the 3d Wednesday of July, 1869, at Newport, R. I.

Progress of Medical Science.

South African Colony of Natal for Consumptives.—The fitness of the South African colony of Natal as a residence for consumptives, is urged in a little pamphlet published under the authority of the Natal Government, by Dr. Mann, the Emigration Commissioner in England for that colony.

Two Interesting Parasitic Diseases.—J. H. Salisbury, M.D., Cleveland, Ohio (*Boston Med. and Surg. Journal*), mentions two interesting parasitic diseases with their treatment.

1st. *Chloasma produced by the Microsporon furfur* (Robin).—A cigar-maker, aged 30, came to him in January last, covered over the whole trunk, anteriorly and posteriorly, with brownish-yellow maculæ or spots of irregular outline, from the size of a pin-head to four and six lines in diameter.

The spots were not elevated above what appeared to be the surrounding skin. The epidermis was soft and pultaceous, and appeared spongy when scraped with a scalpel. The colored cuticle peeled off like the epidermis from a boiled apple. The sheets and night-dresses were covered with furfuraceous scales. On microscopical examination, the epidermis was found filled with a fungus (*Microsporon furfur*) both in the spore and filamentous stages of development. The spores were developed in multitudes in the dark spots.

Treatment.—The patient was pale and emaciated, and was disturbed at night with alternate sweating and chilliness. A diet of rare beef and bread was ordered, and he was put on the following treatment:—

℞ Acid. sulphuric. aromat. ʒ iij.—S. Put two teaspoonfuls in half a pint of warm water, and wash the body and limbs all over every other night, and wipe dry afterwards.

℞ Nichols' sol. bisulphite of soda, ʒ iij.—S.

Put 1½ tablespoonfuls in half a pint of warm water, and wash the body and limbs all over every other night, and wipe dry. ℞ Tr. ferri chlorid. ʒ iij.—S. Take twenty drops in a full glass of water two hours after each meal. ℞ Tr. cinchonæ comp. ʒ vj.; potass. bromid. ʒ iv.—S. Take a teaspoonful before each meal.

On the fourth day of treatment, the spots had entirely disappeared. Sickly spores and filaments remained in the epidermis, but further development seemed to be checked. Treatment was continued. At the end of two weeks, the vegetation disappeared, the skin was smooth and healthy, and the patient had gained several pounds in weight and was feeling perfectly well.

2d. *Parasitic Disease of the Conjunctival Membrane and Epidermis of Cheek.*—A carpenter, aged 26, came to him with a diffuse inflammation, roughness, and œdema of eyelids and the surrounding soft parts. The inflammation and scaly condition extended over nearly the whole cheek, to the wing of the nose, and from this point, up the ridge of this organ, to the forehead, involving the entire eyebrow. At first it was considered a case of erysipelas, but on examination, the epidermis was filled with a fungoid growth, in the spore and filamentous stages of development. This vegetation extended to the conjunctival membrane lining the eyelids. The following was prescribed: ℞ Ddute citrine ointment, ʒ ij.; glycerine, ʒ iij.—M.—S. Apply morning, noon, and night to the inside of eye and over the entire affected parts. ℞ Nichols' sol. bisulphite of soda, ʒ ss.; aquæ, ʒ viij.—M. With an atomizer, the spray of this mixture was thrown into the eye and over the cheek, for five minutes, morning and evening, after

washing, and before applying the ointment. ℞ Tr. ferri chlorid. ʒ iij.—S. Take twenty drops in a full tumbler of water two hours after breakfast and dinner. The use of sweets and all organic acids was forbidden, and a plain substantial diet ordered. The patient rapidly recovered, and in three weeks there was not a trace of the parasitic growth.

Acupressure in Hæmorrhage.—Dr. D. W. Cheever, of Boston, Mass., believes that acupressure may be employed in some cases of hæmorrhage. If properly applied it appears to be as effectual as the ligature, though the latter is more favorably considered by most surgeons. —*Boston Med. and Surg. Journal.*

Poisoning by Bromide of Potassium.—Dr. J. O. Tailor (*Boston Medical and Surgical Journal*) relates a case of poisoning from the use of bromide of potassium. A colored soldier, laboring under a severe attack of asthma, was admitted into the hospital, and on the morning after administration potass. bromide, gr. xx., was prescribed, to be given at 9 A. M., and at intervals of six hours through the day in the same dose. The doctor having occasion to visit the hospital at 10 A. M., found the patient suffering much agony in the region of the stomach, with repeated retchings and emesis. On inspecting the mouth, the mucous membrane of the fauces was found to be highly injected, while the tongue presented every appearance of the effects of a corrosive poison. Diarrhœa also was present, and on using cloths they were found to be stained *violet color.* Two fluid drachms of aromatic spts. of ammonia, in half a tumbler of water, were at once given, to the great relief of the sufferer.

This was twice repeated at half hour intervals, and mucilaginous drinks were prescribed for the rest of the day. The patient was finally relieved. No food had been taken for twenty hours previously, which accounts for the rapid disintegration of the salt in the stomach and liberation of bromine.

The Use of Peroxide of Hydrogen in the Healing of Ulcers.—Dr. Stohr (*Med. Chir. Review*) makes the following deductions, in regard to the use of peroxide of hydrogen in the treatment of ulcers. The peroxide of hydrogen accelerates the healing process in virulent ulcers, especially in the soft multiple chancre. The secretion is changed in such a manner that the inoculability is destroyed, and the sore loses its specific character. For the destruction of the inoculability, quite a quantity of the peroxide is required. The remedial operation of the peroxide is most remarkable in diphtheritic sores. It is not a corrosive agent, since the tissues are not destroyed by its use, and probably only influences the fluids, such as pus, etc. But the secretion of sores, and the exudations of croup and diphtheria are directly altered by the peroxide in the histological as well as the chemical constitution.

Neurine found Synthetically.—M. Courtz (*Med. Times and Gazette*) has demonstrated to the French Academy that the synthetical neurine is identical with that prepared from ordinary brain substance. The identity is based on the fact that the chemical reaction and crystalline form of the two substances are exactly the same.

Continued Electric Currents as a Remedy for the Accidents caused by Chloroform.—MM. Onimus and Legros recently presented a paper on this subject to the Académie des Sciences. Remak's pile (14 to 30 elements) has been used by the authors, and dogs, rabbits, rats, frogs, sea-hogs and tritons have been experimented on. The use of continued currents on animals, apparently dead, has resuscitated them. Fourteen o Remak's piles are used for rats and sea-hogs. Thirty elements are scarcely sufficient for rabbits and dogs.

For men, it would be necessary to employ electric apparatus, which would give a considerable tension.

Poisoning by Croton Oil.—Dr. J. L. Bunting, St. John, N. B. (*Boston Med. and Surg. Journal*), records a case of poisoning by croton oil, in the person of an Englishwoman, who took an ounce of the poison. She was found lying upon a couch: eyes quite bright, peculiar at times; no complaints of trouble whatever; skin cool, clammy; pulse 108, very feeble; respiration slow and powerless; burning sensation in mouth and pharynx; no pain or tenderness on pressure; bowels had been moved during the morning. Mustard in warm water was given her to drink, and the fauces were irritated with a feather, to bring on vomiting. The oil could be distinctly seen floating over the surface of the matter vomited. In about an hour and a half, her bowels were open d freely, and at intervals for the ensuing 30 hours —in a l some thirteen movements. Milk and thin corn starch were given as freely as she would take it, with a teaspoonful of pure glycerine every two hours. There were no symptoms of inflammation, and bromide of potassium was given to quiet the nervous system. Recovery was rapid, as in two days she said she felt better, and rested easier during the night than she had for months.

Iodided Opodeldoc.—With a view of bringing this preparation more to the notice of the profession, the following formula is given:

Take of iodide of potassium, eight troy ounces; alcohol, 30 Baumé, two pints. Mix the above and form a perfect solution. Animal soap, finely shaved, fourteen troy ounces, alcohol, 30 Baumé, two pints. Dissolve the soap in the alcohol in a flask over a sand bath; when dissolved, mix the two solutions and add oil of garden lavender, two drachms.

This is usually dispensed in one or two-ounce wide-mouth vials, which should be filled while the opodeldoc is warm and in a fluid condition; when cold it forms a translucent mass, and as an external application, possesses advantages over the ointment of iodide of potassium.—*St. Louis Med. Reporter.*

Novel Sand.—J. B. Dancer, F.R.A.S., president of the microscopical and natural history section of the Manchester Literary and Philosophical Society, exhibited some sand from the sea-shore at Santos, South America. It was remarkably silvery in appearance, a large portion of which consisted of minute plates of mica, and very transparent fragments of quartz, which made it an interesting object for the polariscope. It was rich also in foraminifera, spines of spatangus, and fragments of coralline.—*Chemical News.*

Solubility of Silicic Acid in Ammonia.—This behavior has been investigated by Richard Pribram, who found that SiO^2 is taken up by ammonia in the following proportions: natural anhydrous requires 6,000; artificial anhydrous, 200; hydrated, dried, 330; gelatinous, 140 parts; liquor ammoniæ of 10 per cent. evaporates when exposed to the air $NH.^3$, and a clear solution of $N.H.4\ O.4\ SiO_2$ remains. About ⅓ of the remaining ammonia is expelled on boiling, and the clear solution contains about 80 of SiO_2 to 1 $N.H._3$. Dried at ordinary temperature the residue has about the same composition, but water takes up mere traces of it.—(*Wittst. Vierteljs.*, 1867, 30-41.)

Amputation of Thigh.—Dr. F. W. Draper, house surgeon, Boston City Hospital (*Boston Med. and Surg. Journal*), gives a record of a case of amputation of the thigh as follows: A shoemaker, aged 35, whilst walk-

ing on the sidewalk on the 14th of February last, slipped and fell on the right leg, bending it under him, and breaking both bones. The tibia was broken obliquely downwards and outwards from the axis of the leg at lower part of middle third; the fibula was broken about three inches higher up in the upper third. The lower end of upper fragment of tibia had nearly pushed through the skin, and there was a scratch through the skin at the place, but no connection with the bone from the outside; considerable bruising from ankle to knee. The leg was immediately put up in a fracture box, and hot fomentations applied. The swelling gradually declined until February 28th, when leg commenced to be more swollen, with tenderness in the groin. On the 29th, the discharge being pent up, an incision was made over the outer aspect of the leg; two or three ounces of dirty pus was discharged. The ends of the fragments were found necrosed, and no attempt at union. March 21st: Troublesome diarrhœa commenced, and the following prescription was ordered: R. Amyli mucil. ℥ ij; tinct. opii ℥ j. Ft. enema bis die. From this time until the 22d of April, the diarrhœa increased, with a greater frequency of the pulse.

Dr. F. C. Ropes, the attending surgeon, in consultation with others, decided to operate on the 24th of April, by the circular method, just above the knee. After the operation the femoral vein was tied, and stump dressed with ward solution of carbolic acid. Injections of beef tea and brandy were made use of to support the strength of the patient. The patient continued to be very weak, with frequent offensive discharges, until May 3d, when he expired.

Employment of Sulphocyanides in Toning and Fixing.—M. Civiale stated at a meeting of the Société de Photographie, that in the summer of 1867 he fixed about 700 positive proofs by means of potassium and ammonium sulphocyanides. A print, one half of which had been protected from the light, the other unprotected and which had been exposed for three months, showed only a uniform tint.—*Chemical News.*

Preservation of Dried Plants.—Mr. Bailey, of Manchester, uses with success, in the preservation of dried plants, glue with carbolic acid for securing them to the paper, in order to protect them against mites, also placing a few crystals of the dry acid in his cabinet. —*Chemical News.*

A New Process of Obtaining Carbonic Acid.—M. Bondet read a report before the Paris Academy of Medicine upon a new process, invented by M. Ozouf, for obtaining pure carbonic acid for use in the manufacture of mineral waters. The action of sulphuric acid upon marble is the source of the carbonic acid now used in the preparation of these waters; but the sulphuric acid is not completely separated in the washing. In order to avoid this defect, M. Ozouf has had recourse to the combustion of coke; he thus prepares pure carbonic acid.—*Chemical News.*

Syrup of Lime in Rheumatism.—Carl H. Smith, M.D., Kenton, Ohio (*Boston Med. and Surg. Journal*), advocates the use of the syrup of lime in the treatment of rheumatism, as mentioned by Dr. Buckingham. He has treated fifteen cases of acute rheumatism with the syrup of lime, using no other remedy, and the result was a cure in from ten to sixteen days.

To Arrest Hæmorrhage.—George W. Rossman, Antram Lead Mines, N. Y. (*Boston Med. and Surg. Journal*), when arteries cannot be tied in the wound to advantage, presses fine sponges—previously saturated with per-sulphate of iron—into them, one after the other, until filled, then a compress and bandage over all. His experience has been, that after several days, on carefully removing the sponges, little or no hæmorrhage followed. The wounds kindly healed.

Paracyanogen.—This substance is most easily prepared from cyanide of mercury; 5 grammes are placed in strong glass tubes of about 10 centimetres capacity; the tubes are sealed, then heated to 440 (boiling sulphur). The tube, opened at both ends, is heated again to 440 in a current of cyanogen gas, so as to separate the paracyanogen from mercury. This mode is preferable to the heating to dull redness with sulphuric acid. —*Chemical News.*

Extraction of the Coloring Matter from Madder.—A process for the extraction of the coloring matter of madder has been patented by M. Guignot. It only differs from the process patented by M. Leitenberger, in garancine being operated upon instead of madder. The garancine is submitted to treatment with boiling water in an exhausting apparatus. It is replaced by more, as soon as the water has passed through the filter, until the garancine is exhausted. A large proportion of coloring matter is charged with the hot water which has passed through; by mixing all the colored filtered liquors, and allowing the solution to cool, the coloring matter gradually becomes less and less soluble, and falls to the bottom of the vessel. The colorless liquor is then decanted, and the deposit thrown on to calico filters to drain, and afterwards dried sufficiently to enable the coloring matter to be transported in commerce, in the shape of powder. By submitting ground madder to treatment with concentrated sulphuric acid at a temperature of 100°, after exhausting all the soluble principles by water, garancine is obtained.—*Chemical News.*

A Case of Cæsarean Operation, Successful to Mother and Child.—John Taylor, M.D., M.R.C.P., London (*Lancet*), gives the following history of the operation, which was performed by Mr. Baker Brown, assisted by himself and other medical men:

Mrs H———, wife of a porter to a confectioner, aged 23, at the full period of her first pregnancy. On examination per vaginam, the promontory of the sacrum was found arching forward to within one inch and a quarter of the pubes. The os uteri was found hanging over the contracted pelvis-brim like a nipple. The abdomen, viewed externally, showed that the uterus occupied an oblique position, and the child's head could be felt hanging over the left groin, in the intervals of pain. She was removed to the "London Surgical Home," and with the patient's concurrence, the Cæsarean operation was performed. A healthy female child, weighing seven and a half pounds, was quickly removed. The uterus and abdomen were closed by silver sutures.

The whole operation was done in five minutes. A low form of general peritonitis followed, and until the fourth day vomiting occurred incessantly, when a severe attack of sickness caused one of the abdominal sutures to give away, which allowed a knuckle of intestine to protrude. The inflammatory symptoms ceased forthwith, and the patient is now convalescent.

The child is fed on milk and water, and seems none the worse for the novel manner of birth.

Nitrous Oxide Gas as an Anæsthetic.—In a recent discussion on the so-called Anæsthetic Nitrous Oxide Gas, at the Medical Society of London, Dr. Richardson, the President, gave his views on this popular agent. It was painful, he remarked, to see the childish excitement with which nitrous oxide had been dwelt on. The gas had been thought to be a wonderful and harm-

less agent, whereas it was one of the best known, least wonderful, and most dangerous of all the agents for general anæsthesia. Death had been caused in the human subject; and on animals, it was a delicate task to narcotize them without destroying life. He explained that it was not, in the true sense, the agent that caused the insensibility, but it acted indirectly. Carbonic acid was really the immediate stupefier. Nitrous oxide he considered an asphyxiating agent. Two explanations are given for this. The nitrous oxide may quicken the oxidation of the blood, and carbonic acid is accumulated in the blood; or it may be—and this theory is most probable—that it acts by checking the outward diffusion of carbonic acid. Nitrous oxide and carbonic acid are of the same vapor density, namely, 22; the diffusion of gases into the blood, and out of it, being governed by the same laws as in ordinary diffusion, to make an animal breathe nitrous oxide is equivalent to making it breathe carbonic acid itself.

The arterial blood became venous by nitrous oxide; the animal temperature fell, and the skin became livid. These symptoms might be carried on often without destroying life, but certain disaster would follow if sustained for any length of time.—*Lancet.*

Two Interesting Cases of Head Injuries.—Dr. John M. Harlow, of Woburn, read an interesting paper before the Massachusetts Medical Society, containing the history of the famous case of a man named Gage, a former resident of Lebanon, N. H., who, while blasting rocks at Cavendish, Vt., in 1847, had a tamping iron, three feet seven inches long, and one and a quarter inches thick, forced through his head.

Dr. Harlow attended the man, and gave the daily symptoms of his patient. The bar entered the left side of the face, and came out on the top of the head, at about the centre.

In 59 days after the injury, he was able to ride and walk, and soon was nearly as well as before; but his intellect was somewhat impaired. Gage died May 21, 1861, twelve years, six months and eight days after the injury. His head has been procured by Dr. Harlow, and the skull has been given to the Warren Museum of the Harvard Medical College. The skull and iron were examined by the members of the Massachusetts Medical Society, and much interest was evinced.

Dr. H. J. Bigelow gave an account of the case as it occurred, and said he had seen Gage twenty years ago, and was satisfied of the truthfulness of Dr. Harlow's statement. He also called the attention of the medical men present to a similar accident, by which a tube of iron, five-eighths of an inch in diameter, and five feet in length, passed through a miner's head, while blasting coal in Ohio, and which was pulled out by a brother miner. The injured man was brought before the audience, and the case was recounted in detail by Dr. Jewett, the attending physician. The young man's mind has not yet been fully restored.—*Boston Med. & Surg. Journal.*

Hereditary Nature of Hare-Lip.—M. Demarquay presented to the Surgical Society of Paris, a short time since, a case of double hare-lip, in a child, 5 years of age. He stated that the interest of the case rested in the fact that, in the family, eleven children have been born with hare-lip, from the grand-parents downwards, or with a peculiar arrangement of the lower lip, viz., two openings on either side of the mesial line, with a novel form of the lip itself. As early as 1845, in the *Gazette Medicale*, M. Demarquay had called attention to this latter defect.

The Value of Glycerine.—Glycerine is not only very valuable in certain skin diseases and ear affections, but it is found to be an admirable means of preserving all perishable matters, meat and fish being kept in it for months perfectly fresh.—*London Quarterly Review.*

The Art of Making Modern Perfumery.—To chemistry, modern perfumery is more indebted than any other art that conduces to the luxury of life. Essences are generally supposed to be produced by distillation; this is far from being the case. In the flower season at Cannes, plates of glass are thinly covered with clarified inodorous fat; flowers are placed upon or under this fat, and the power this substance has to absorb perfumes is wonderful. Delicate odors are thus fixed on these sheets of glass. In this way the jasmine, the violet, the tuberose, and orange perfumes travel across France, and arrive as pure as the day they were given forth from the flowers themselves. The fat, cut into small cubes, is placed in spirits of wine, and the essence deserts the coarse fat for the more spiritual solvent. The oil of pine-apples is obtained from a product of the action of putrid cheese on sugar. The wintergreen oil is artificially made from willows, raised in New Jersey, England.

Crew's Spread Mustard Plaster.—Benjamin J. Crew has succeeded in working out the problem of an *efficient* and *portable* mustard plaster. A uniform layer of mustard in substance is formed on paper, adheres firmly, and is ready for application in half a minute when dipped in water; it is easily retained in position with a bandage. It will be found exceedingly valuable, for travellers and country physicians, as well as in families, as its power is retained unaffected by age so long as it is kept dry.—*American Journal of Pharmacy.*

Picrate (Carbazotate) of Potassa.—This is soluble at 0° C. in 440 parts, at 20° C. in 273 parts, at 100° C. in 14 parts of water; at 0° C. in 1,138 parts of alcohol (90 p. c. Tralles), at 20° C. in 735 parts.—*K. Trisch, Journal Peak's Chem.*, vol. 100.

Natural Aniline.—Mons. Ziegler, of Muhlhouse, has carefully examined the red coloring matter, which is secreted by a mollusc (*aplysia depilans*), known as the sea-hare, which animal is abundant on the coast of Portugal after heavy storms. The odor of the coloring matter is very peculiar, and is a defence to the animal against its enemies, by making the water turbid, and disagreeably odoriferous. The coloring matter is found to be aniline, with a slight admixture of organic substances.

Mons. Ziegler plausibly suggests, that the sea-hare and not the murex, as now generally believed, is the animal from which the Phœnicians obtained their famous purple; and thus he thinks, that the priceless purple of Tyre is identical with the cheap coal-tar aniline of modern manufacture.—*Scientific American.*

Brown Windsor Soap.—This soap is made from shavings of perfumed soap, which are first melted, and salt added till the soap separates from the lye, and a good grain appears. After the application of the dye, the soap is poured into the form, and stirred until cold, when it is perfumed.

For the perfume, two-thirds oil of cinnamon and one-third oil of cloves are used, to which a little tincture of musk is added.—*Kurten.*

Indelible Ink (*without preparation*).—Rub together one-half ounce each of nitrate of silver and cream of tartar with two fluid ounces of aq. ammoniæ, and macerate for an hour with shaking. Then add to this a mixture of sugar one drachm, gum arabic one and one-half drachms, lampblack 40 grs., water 2 ounces.—*The Drug. Cir. & Chem. Gazette.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

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Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEEMANN.
PARIS—BAILLIÈRE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, August 15, 1868.

RECENTLY DISCOVERED MINERAL WATERS.

OUR attention has recently been called to the subject of mineral waters, as agents in the cure of disease; and more particularly to the "Gettysburgh" (Pa.), and "Missisquoi springs" (Vt.), the waters of which have been greatly lauded of late in sundry pamphlets and advertisements—in consequence of which, they seem to have come into very extensive use in quite a variety of diseases. Now, it may truly be said that the medical evidence of the value of mineral waters in the cure of diseases is abundant, even to profuseness, in quantity, but its quality is indifferent. Indeed, here, as in medical evidence generally, the quantity is in inverse ratio to the quality; for where little is known very much is usually said and written about it; and those diseases which are most obscure are most voluminously descanted upon. It cannot be denied that there is a widespread scepticism on the part of medical men, in regard to the alleged virtues of mineral waters, and it has chiefly grown out of the fact that most works that have been published on the subject have been written by interested parties—mostly, indeed, by physicians resident at the Springs themselves—knowing how easily the judgment may be influenced by self-interest. All such works are read with suspicion, and the statements made are received with considerable allowance. And in addition to this, these productions, for the most part, are among the most unsatisfactory, puzzling, and confusing of all medical, or pseudo-medical, works. The diseases claimed to be cured are not only extremely numerous, but opposite in their very nature; so that, according to all known principles of pathology, if one class is benefited, the other ought to be made worse. We have often been amused, in reading these productions, to see how ingeniously the writers explain the cause of numerous failures, and the aggravation of the disease, under the name of "water crisis." How often have we seen, while sojourning temporarily at some of our medicinal springs—where patients have been ordered by their medical advisers to take so many tumblers of water and so many baths per day—a cutaneous eruption make its appearance, accompanied with febrile symptoms, and a disordered condition of the digestive organs, such as coated tongue, failure of appetite, a vague feeling of sadness and inquietude, perhaps diarrhœa and vomiting; all of which have been most satisfactorily explained to the poor sufferer, on the theory that one must be made worse in order to be made better—that there was a fearful contest going on between the disease and its deadly enemy, the *watery antidote*; that the latter had got the upper hand, and in a few days, with proper patience, every remnant of disease would be effectually eradicated from the system!

Now, we are inclined to believe that this "*bad sturm*," as the Germans call it, whether we call it "*crisis*," "*point of saturation*," or by any other term, is very satisfactory proof that the water is not suited to that particular case, and the sooner the use of the water is discontinued, the better for the patient.

The scepticism to which we have referred, has been vastly increased during the last quarter of a century, not only in our country but in Europe, by the exaggerated accounts of the efficacy of these agents in so many diseases, and the difficulty of arriving at the exact truth from so many partial and interested witnesses. Besides, the profession found no difficulty in accounting for the improvement by the change of air and scene, freedom from cares of business or the dissipations of pleasure, early hours, simple diet, and attention to the more obvious rules of health. It was the consideration to which we have referred, that led the "Royal Academy of Medicine, of Paris," to prepare a report on the "*Mineral Waters of Vichy*," to which we are really indebted for most of our knowledge in regard to their nature and value in different diseases. Our Academy of Medicine could not perform a more useful work than by preparing such a report on our principal mineral springs, not only as a guide for physicians, but also the public. Notwithstanding, however, the existence of this incredulity and scepticism, no candid practitioner, who carefully reflects upon the chemical composition and known action of many of our native mineral waters, but must admit that they are powerful agents, capable of producing a decided impression on the secretions, excretions, vital and morbid actions of the body. We know, for example, that some of our mineral springs hold in solution such decided doses of medicines as we are daily in the habit of prescribing, and their action on the secretions is so palpable, that even the most sceptical must learn. Some contain active, aperient, neutral salts in such quantities as to act on the bowels or kidneys; or alkalies sufficient to keep the fluids of the body in a constant state of alkalization; or such a combination of salts in small quantities, and gas, as to act immediately on the skin or kidneys; or they are so highly impregnated with gases, such as carbonic acid or sulphureted hydrogen, whose action is sensibly experienced by any one who will submit his body to the test; or they hold *iron* in solution, and in that condi-

tion, the state of carbonate, which all admit to be its most active medicinal form, and one retained in artificial preparations with great difficulty. Besides, many of our springs are hot, and the action of heat is no fanciful, theoretical notion, but one of the most obvious stimulants we possess; stimulating the minute cutaneous vessels, and filling them with red blood, thus tending to equalize the circulation and relieve internal congestions. It is well known, for example, that a single bath of the hot waters of Vichy, which contain a considerable quantity of carbonate of soda and carbonic acid, renders the fluids of the body alkaline, even of gouty persons, whose fluids were previously acid. We know that the active medicinal agents referred to are mixed in these waters in such proportions that they act as aperients, diuretics, alteratives, and tonics, without any pain, uneasiness, or other discomfort, if taken in proper quantities, with due attention to exercise, diet, and a general observance of the laws of health.

But what shall we say as to another class of mineral waters, which are now commanding such general attention, and which contain so minute quantities of saline ingredients as hardly to account for the powerful effects attributed to them? We refer to the water of the Gettysburgh and Missisquoi springs. In regard to the latter, however, we should state that we have seen no accurate analysis of it. It has no sensible properties, though it is said to contain the *chlorides and carbonates of soda, magnesia, and lime, carb. manganese, carb. iron, chlorine, &c.* We have prescribed it in cases of *cancer*, and known it taken for a variety of affections, but without any decided benefit in any. We know it is very fallacious to attempt to estimate the action of medicines on the body by reasoning prior to experience, however logical and clear the chain of reasoning may be. Occasionally analogy favors us, but the safest plan is to begin by experience, and then to reflect and reason on the facts which experience has furnished. The safest way, we think, in regard to new mineral waters, is to seek information in regard to their virtues from local tradition on the spot; for in this way, and among the poorer classes, have the virtues of most springs been discovered. It will be found that the people in the neighborhood of springs have been well aware of the kind of diseases which are likely to be relieved; and we hold it to be unreasonable to disbelieve this kind of experience, particularly when confirmed by the more educated and scientific who have subsequently examined it, merely because chemical analysis does not discover any active ingredient, according to our notions, to account for the effect satisfactorily. Can chemistry detect the principles which produce contagious or epidemic diseases, or even of the *milk-sickness* of the breast? Can it tell us the cause of plague, yellow fever, and cholera? The best chemists of France admit that chemical analysis has not enabled them to discover in many of their mineral waters, whose effects on the body are well marked, the active principle; but instead of doubting the truth of these effects, they have concluded that the failure only proves that there are many bodies of great efficiency which escape their means of examination. Chaptal has truly remarked that "the dead body of the water is alone acted upon."—[*Annales de Chimie*, 28, 105.] The Commission, too, appointed under the direction of the French Government, by the Académie Royale de Médecine, to report on the mineral waters of France, in 1836, declare their conviction that chemical analysis has not yet added in any considerable degree to that knowledge of the therapeutical effects of mineral waters which the experience of their effects had proved before chemistry was brought to their elucidation; and they insist on the importance of taking into consideration the information which the inhabitants of the spot can furnish.*

Following this wise, common-sense rule, we find the "Missisquoi Spring," of Vermont, had the reputation in the neighborhood for many years of "curing *scrofula, itch, salt-rheum*, and other cutaneous diseases." It is now claimed, in the pamphlet sent us, to cure "cancer, consumption, syphilis, mercurial sores, tumors, affections of the kidneys, cataract, dyspepsia of an aggravated character, general debility, and other diseases, cutaneous and otherwise."—[p. 3.] Judging the "Gettysburgh Katalysine Water," so-called, by the same rule, it has cured *disorders of the digestive organs* (dyspepsia), *rheumatism, gout* (*nodosities* of the joints), *torpidity of the liver*, some *pulmonary disorders*, as *chronic catarrh, bronchitis*, and *humid asthma*. Analysis of this spring, by Prof. Mayer, of Washington, reveals the existence of *bi-carbonate of lithia*, with *bi-carbonate soda, potash, magnesia, iron, lime, &c.*, but in quantities so minute as to give the water no sensible taste. Our experience in the use of this valuable water, confirms the conclusions stated by Dr. John Bell, of Philadelphia, in the *Medical and Surgical Reporter*, May 9th, 1868, that it is a very useful remedy in chronic disorders of the digestive organs, and the secondary derangements, as gout, rheumatism, hepatic and renal affections, skin diseases, &c., consequent thereon. We have good reason also to believe, from what we have seen and experienced, that it will, by long use, remove nodosities of the joints of a gouty nature. We have also seen cases of *albuminuria* much relieved by it, as well as the irritable bladder of old age, and calculous disorders of the lithic acid diathesis. Whether the solvent properties of these waters depend on the presence of *lithia* or not, we cannot say; but as this agent has the property of rendering the uric acid soluble, we think it highly probable. We are pleased to learn that the use of this water has been introduced into the New York Hospital, and that Drs. Parker, Stone and Crane, of the Metropolitan Board, are giving it a trial in cases of gout and rheumatism. We shall again recur to this subject in a future number of the journal.

*Rapport sur les Eaux Minérales de France, etc., 1834, 5, 6, p. 58.

—The very able letter from Prof. Ordronaux on the question of repetition of prescriptions by apothecaries without authority, to be found in another column, is one which should interest every practitioner of medicine and every pharmaceutist; and while commending it to their attentive perusal, we take occasion to heartily endorse the suggestions therein contained.

The recent action of the American Ophthalmological Society in reference to the improper use of the title of oculist not only reflects honor upon that body, but also upon the cause of specialism. In a future number we shall discuss the general propriety of such a movement.

Reviews and Notices of Books.

The Surgical Treatment of the Diseases of Infancy and Childhood. By T. Holmes, M.A. Cantab., Surgeon to the Hospital for Sick Children, Surgeon and Lecturer on Surgery to St. George's Hospital, Surgeon-in-Chief to the Metropolitan Police, etc., etc. London: Longmans, Green, Reader, and Dyer. 1868. 8vo. pp. 642.

There is so much valuable material scattered throughout the literature of the profession relating to the surgery of children, not readily accessible, that any attempt to collect and embody it in a systematic and comprehensive form should be duly appreciated. Such a task Mr. Holmes, an author already well known on this side of the Atlantic, has performed, and he has given us in addition the results of his own extensive experience. Although the volume does not much exceed six hundred pages, we have presented to us a rich mine of facts which will particularly interest the practical surgeon. It is written in an attractive style, and filled with lucid descriptions.

The work as a whole is divided into three parts: 1st, Malformations; 2d, Injuries; and 3d, Diseases; the two latter being obviously of most interest to the surgeon.

The first chapter of Part I. treats of Joined Twins, and presents us with a very carefully written summary of the nature of such monstrosities and some practical suggestions as to treatment. The subject of congenital innocent tumors next claims attention, their different kinds, pathological anatomy, etc.; and in chapter third we have the interesting subject of nævus written up. The different varieties are concisely described, the various methods of diagnosis pointed out, and the several modes of treatment detailed. Properly viewing nævus as an affection that is not dangerous to life, he advises treatment with the mildest means that hold out any chance for success. The respective advantages of the perchloride of iron, caustics, ligature, vaccination, etc., are fully and fairly detailed, and nothing is said that will tend to stimulate the younger surgeon to yearn for the performance of the graver operations. A very interesting case is referred to of a nævus of the back being partly cured by the friction of the clothes, showing how little sometimes is required to cause some varieties at least of this disfiguring affection to fade and perhaps eventually disappear.

Continuing the subject of Malformations, our author, in chapter IV., commences with those that belong to particular parts of the body, and speaks first of those of the head, giving us a very lucid description of meningocele and encephalocele, and pointing out the importance of a proper diagnosis before any operative procedure is thought of. As a general rule, nothing beyond support to the tumor is advised, more especially if any obvious symptoms of hydrocephalus are present. If the tumor increases rapidly without other symptoms, repeated puncture, without the admission of air, may be cautiously tried; failing in this, injections of iodine may be employed. The number of cases in which a removal of the tumor might be contemplated, are so exceedingly rare, that practically the method is of no account. In the treatment of the allied affection, spina bifida, the author gives but very little encouragement, and seems to appreciate fully all the difficulties which stand in the way of success.

Hare-lip, simple and complicated, next claims attention, following which the whole subject of staphyloraphy is exhibited, and all the accepted methods of operating fully and clearly detailed. Extroversion of the bladder is an affection to which he devotes a very considerable amount of space, and describes an important modification to the operation devised by himself.

The operations for artificial anus and absence of the rectum are also described, together with the procedures advised for other less important malformations, where a more interesting portion of the work, because containing an account of the more common affections, is entered upon.

Part II. opens with some general considerations upon wounds, anæsthetics, etc. The author declares himself for the use of chloroform, and for the suture versus acupressure; for both of which preferences very good reasons are given.

Fractures and dislocations are the subjects of the next chapter, and their peculiarities in childhood sufficiently pointed out. The preference is given to the gelatine splint for the very good reason that it can be removed and altered as occasion may require, especially in those cases where much swelling or pain ensues after their application. In this respect this splint has an advantage over the ordinary starch or Plaster Paris bandages, so much used in this country. Aside from the convenience of application, etc., one splint is as good as another, as in the vast majority of cases coaptation is all that is requisite, the softened bones having a preference to bend rather than break.

The question of amputation in cases of compound complicated fracture is candidly discussed, and due deference is paid to the wonderful recuperative power of nature in these young subjects. He does not consider that the *most extensive laceration* combined with fracture justifies amputation at an early age, unless the main vessels are also injured. "In any doubtful case the limb ought to be preserved until the onset of gangrene renders persistence in the attempt to save it no longer justifiable." In regard to the diagnosis of the "willow or green stick fracture," where of course no displacement, and sometimes deformity occurs, our author, it seems to us, does not dilate sufficiently upon the symptoms of the accident. His remarks upon the separation of epiphyses, particularly those of the elbow, are very systematically put, and some rather unusual forms of the accident referred to.

In the treatment of burns and scalds, nothing peculiar is noted except perhaps the recommendation to use the carbolic acid putty of Lister, which may combine the advantage of an antiseptic to the other applications commonly employed. The after management of these lesions may be summed up under the heads of simple extension, incision, excision, and transplantation.

Two chapters are devoted to the removal of foreign bodies from the trachea and œsophagus. A very valuable table of 28 cases of tumors of the larynx is given as compiled from the Transactions of the London Pathological Society; remarks are made upon the operations of

œsophagotomy and tracheotomy, and the cases described which render the respective operations necessary. In reference to tracheotomy, our author is completely up to all the requirements of the learner. Every indication for its performance, every accepted method, every necessary step in the proceeding, all the dangers that are to be encountered, all the anomalies that are to be looked for, etc., etc., are graphically presented; making this portion of the book a monograph in itself. The same may be said in regard to the subject of joint diseases, the merits of exsections compared with amputations, etc. In connection with this latter subject, the diatheses are practically discussed; and while the author is non-committal on many of the mooted points, very many suggestive ideas are thrown out, which may serve as useful landmarks to such as are called to do something more than theorize upon the cases that may be placed under their charge.

Diseases of the mouth also claim a certain share of notice, as well as those other regions of the body which occasionally require surgical treatment.

Throughout the work there are not a few very fine woodcuts and several well-executed chromo-lithographs. The typography, as might be expected, is excellent, giving that clear, clean, open page that is so refreshing to the eye and so easy to read. A good portion of the work is in smaller type, for the reason, we presume, that the author wished to curtail the size of the volume, at the same time presenting the reader with a great number of additional and valuable facts. We would say, in passing, that the reader who slights these foot-notes will lose much of the cream of the work.

In the preface the author states that some of the special subjects were omitted for the reasons that he wished to confine the volume to decent limits, and that the different subjects were already well "treated in works which are in every one's hands." Although there may be good reasons why diseases of the eye, ear, and skin were not touched upon, they do not, in our opinion, hold good in reference to orthopædics. This latter matter is now so much in the hands of enthusiastic hobbyists, that it would be particularly refreshing to have the merits and demerits of the different kinds of apparatus treated by an impartial and clear-headed writer. The reader is made to regret this omission on the part of Mr. Holmes, particularly after the perusal of his chapters on the treatment of joint diseases. We trust that in a future edition, which, by the way, cannot be long forthcoming, our talented author will incorporate some views of his own in regard to many of the vexed questions that cumber the investigations in this particular branch of surgery.

In conclusion, we would say that the work is the only one of its kind in any language that so fully supplies an admitted want in the literature of surgery; and it is evident that no one could be better fitted for the task than has been our author. It cannot fail to be appreciated by every surgeon who is fortunate enough to read the English language.

Lessons in Physical Diagnosis. By Alfred L. Loomis, M.D., Professor of the Institutes and Practice of Medicine in the Medical Department of the University of New York; Physician to the Bellevue and Charity Hospitals, etc. New York: Robert M. Dewitt; pp. 155.

In the short preface to this work the author gives his reason for its publication in the following words: "In compliance with the request frequently made by members of my classes in Physical Diagnosis, to furnish them a guide in the practice of this art, I have prepared the following lessons."

The book is divided into fifteen different chapters, or, as the author terms them, lessons. The first lesson is devoted to the topography of the thorax; whilst in the succeeding seven he considers the different modes of physical exploration of the chest in investigating the state of the lungs and pleura. He states under the head of each method, the rules for its employment, then what is observed in health, and, finally, the changes which take place in diseased conditions. The seventh and eighth lessons contain a synopsis of the physical signs of each of the diseases of the lungs and pleuræ; in the succeeding four lessons, the methods of physical exploration of the state of the heart and aorta are treated of; whilst the last three lessons consider this mode of ascertaining the condition of the abdominal viscera—the same arrangement being preserved as in the preceding lessons.

In reading this book, we have been glad to notice the clear and concise style of the author. There are no useless words, and from its terseness, it may to some, in a few places, lack a little of euphony; but this is a recommendation to those who have experienced the weariness of hunting through a page of words for an idea. To make the subject clearer to students, woodcuts have been added, illustrating the topography of the different regions, and the place and mode of production of the different physical signs. They enhance considerably the value of the book. There are no theories broached, merely matters of fact stated. The division of sound into its acoustic properties, of pitch, quality, intensity, and duration, has been made the basis of arrangement of the various sounds heard on auscultating, or produced by percussing a patient. This division has always appeared to us the preferable one.

We would also draw attention to the author's mode of considering the physical diagnosis of cardiac diseases, both as regards matter and illustration. They should, it seems to us, make the subject readily intelligible. Considering the difficulties which invest a diagnosis of the morbid states of the abdominal organs by the employment of physical means only, the author has succeeded very well in this part of his work.

As regards the book itself, its external and internal appearance are fair, and the type good. On a careful perusal of it we have noticed a few errata, but of minor importance.

Klinik der Ohrenkrankheiten. Ein Handbuch für Studirende und Aerzte von Dr. S. Moos, Praktischer Arzt und Docent an der Universität in Heidelberg, Wien, 1866. Wilhelm Braumüller, pp. 348.

Aural Clinik. A hand-book of Aural Surgery for students and practitioners. By Dr. S. Moos, Lecturer in the University of Heidelberg.

Dr. Moos has a flourishing clinic for the treatment of aural disease, in the Institution at which he has become a Professor since this volume was issued, if we mistake not. His book is a valuable contribution to the science of aural medicine and surgery, containing as it does chiefly the author's own experience as to the results of treatment. The wood-engravings are excellent, and those illustrating the changes that occur to the membrana tympani, in the case of chronic and purulent catarrh of the cavity of the tympanum, are valuable. The cases are well narrated, and well repay perusal.

The Physicians' Diary. Monthly, Semi-annual, and Annual Journal and Cash-book (combined). By James O'Connor. Second Edition, Revised. Phila.; J. L. Ridl, M.D., & James O'Connor, 2002 Frankford Avenue.

This exceedingly useful work supplies a much needed want—its arrangement is simple, and at once addresses itself to the attention of the profession who are almost universally careless financiers. Part first comprises all

the essential elements of Day Book, Monthly Journal, and Journal of Statistics. The second Part, is the Cash Book and Ledger in index form posted from the first. Being intended as a book of original entry, it fulfils the requirements of the law as affecting disputed accounts in cases before the courts. By the use of this book, time, labor, and money may be saved, and the luxury of an instantaneous knowledge of one's financial standing is gained after very little effort. The physician may learn also the exact number of his unintended charities and unsubstantial villas, paid for in short instalments of mental solicitude. We heartily commend the Diary to the profession for its comprehensiveness and convenience.

Correspondence.

PHYSICIANS AND APOTHECARIES, IN RELATION TO THE REPETITION OF PRESCRIPTIONS WITHOUT AUTHORITY.

To the Editor of the Medical Record.

SIR—At the last meeting of the New York State Medical Society, Dr. John P. Gray, as President, called attention, in his introductory discourse, to the necessity of some legislation upon the subject of the indiscriminate sale of medicines by incompetent apothecaries; as also of drugs calculated to produce abortion, though advertised with an ironical caution against their use, intended to mask in a legal way their predetermined purpose. Of the wisdom and justice of Dr. Gray's suggestions none can entertain any doubt, nor does the subject deserve less consideration because of its frequent mention heretofore in various medical assemblages, both local as well as national. It is one which appeals to the best interests of society in the future, as well as in the present, and should be recognized by legislators as forming part of that great department of the common weal known as STATE MEDICINE. Whatever legal reforms may flow from such well-timed and apposite counsel as that given by the distinguished President of our State Medical Society, whether they be immediate or remote, all will agree that in the frequent ventilation of a great source of wrong-doing, other topics germane in character, if not of direct consanguinity, are invariably dragged into the light of observation, and placed beneath the eye of criticism, so as to secure ultimately some minor good in various directions, even though the parent evil should continue to resist the vigorous assaults of a scientific siege. It is through this law of association that the attention of the profession has of late been called to a great and growing evil committed by apothecaries, probably without intention of wrong-doing, and yet militating seriously against the rights of medical practitioners, *in renewing prescriptions without permission of their authors first had and obtained*. The subject has been largely discussed in England; and in our own Academy of Medicine has given occasion to the passage of some very significant resolutions. But, as something more than resolutions is needed to give a definite solution to the question, I venture to offer the following suggestions as the readiest road to a permanent remedy.

The wrong alluded to, though practically committed by the apothecary, has its foundation in a different cause than the mere pharmaceutical incompetency of, or the negligent disregard of, another's rights by the dispenser of drugs. However true it may be, it is still painful to be compelled to admit that the blame should often be divided between the apothecary and the physician himself. And, as we pursue the inquiry, we shall see that the remedy has always lain within easy reach of the medical practitioner, who, having too often been negligent of duty to himself, expects another person, and in a different calling, to repair that negligence. Is this reasonable? We think not. As a presumption in law founded upon the habitual conduct of rational beings, every man is supposed to be watchful of his own rights, whether those rights are associated with life, health, reputation, or property. But if he slumbers upon them, so as to invite, if not permit, another to encroach upon their limits, he cannot avoid dividing the responsibility for his own injury with him who may have been the instrument for inflicting it. That this is the view which should be taken, in most instances, of the subject-matter now under discussion, will appear by a more critical investigation of the principles underlying the tri-partite relations of physician, patient, and apothecary. If it can be shown, as is easily demonstrable, that the physician, in giving a prescription, has a duty to discharge to himself, as well as to the patient who employs him, and that the apothecary, on his part, can no more re-issue a prescription without a renewed authority from the physician originating it, than he can give professional advice in his name, or use that name in any transaction of life, then the whole question will be resolved into a simple one touching the proprietary right of physicians in their own prescriptions. And, first of all,

WHAT IS A PRESCRIPTION?

Counsel or advice, as given by a physician or lawyer, is, in the language of political economists, an immaterial product, which is consumed in its very production. Whether reduced to writing or not, it is the property of its author, and its *usufruct* may be sold to any one, though the right of property in the thing itself is not thereby dissevered from its original author. Now a prescription is professional advice in the nature of an order for the compounding of certain drugs intended to be used under specific conditions, and those only, viz.—*First, as to time; second, as to individuals*. And in order to guarantee the good faith of the prescriber *it should bear his name*. The specific conditions above recited form an implied contract between the physician and patient, consisting of two elements: first, that the prescription exhibits ordinary skill in its composition; and, second, that it is, according to the best judgment of the physician, suited to the necessities of a particular patient at a particular time. The unities of skill, present or contingent pathological necessity, coupled to individual wants, must all reveal themselves in the prescription. For, unless without a date, or without a patient's name, no prescription implies universality of use, or illimitability of time. Again, as the physician's reputation is involved as much in his prescriptions as in his treatment, of which they, in fact, form a part; and, in case of a suit for malpractice, his ordinary skill will be tested no less by the one than the other, it is important that he should sign his prescriptions, since it is only in this way that their paternity can be verified. A patient has a right to refuse receiving a prescription from a physician who will not sign it; nor should an apothecary be allowed to compound an anonymous one. The refusal to sign, of itself, casts suspicion upon its merits, and practitioners should bear in mind that a man's reputation for judgment and self-reliance, as well as skill, may turn on precisely such trivialities as these. In reality, however, these are not trivialities, for they constitute safe-guards precisely as no one would accept a check unsigned, nor would the teller of a bank pay one, even though the drawer pre-

scuted it himself. It is here that physicians too often neglect the first duty which they owe to themselves when prescribing, viz. that of investing the prescription with a character of scientific accuracy commensurate with their own, and a legal precision indicative of the responsibility they assume in issuing it. In the majority of instances, as all will testify, no signature is appended to a prescription, for let it be remembered that initials do not constitute a legal signature. Here is the first and fatal omission. Next, a date is rarely appended to a prescription, although no one would pretend that any prescription, however good to-day, is applicable to all time or circumstances, irrespective of a renewal by the physician after investigation of the patient's condition. And, lastly, the patient's name is not usually stated in it, thus omitting the most important evidence of its having been issued in favor of a particular person. Let any one who doubts this universal omission of self-protection on the part of physicians, step into any one of our large druggists and examine their prescription book, and he will acknowledge that we have not overstated the facts. Under these circumstances, therefore, and since prescriptions are so often signed by initials alone, which are equivalent to no signature; without date, which limits them to no time; and without name of person, which restricts them to no individual in particular, why blame a druggist for renewing a prescription, or even originally compounding it, since he may never have seen the prescription before, and cannot be presumed to know that it had previously been compounded? Why blame him exclusively?

The perfunctory way in which too many physicians write their prescriptions, is the fertile source of the evil so greatly complained of; and whenever, with a better and more realizing sense of the responsibility attached to the art of prescribing, practitioners shall ennoble their orders upon druggists, by giving them at least as much legal accuracy as belongs to an order upon a grocer, the opportunity and the disposition to renew prescriptions without authority by druggists, will both disappear.

In order to promote such a reform, let our stationers publish for the use of physicians blank-books like check-books, printed in some such form as this:

Prescription No. —	Prescription No. — N. Y.....186 .
For Mr. ———	For Mr. ———
Dated .....186. .	R.....
	.....
	.....
	.....
Renewed...	..... R. Galen, M D.
do.	Renewable....186 .
do.	do. .....186 .
	do. .....186 .

RELATIONS OF APOTHECARIES TO PHYSICIANS.

An apothecary is simply a vender of drugs, whether he compounds them personally or not; and at law he stands upon the same footing as any retailer of goods, except where, on account of the peculiar character of his commodities, and their relations to human life or the public health, special statutes restrict him in the manner of their sale. As to a prescription, it is plain at the outset, that the apothecary cannot retain it without the patient's permission, though he may copy it, if he please, as a voucher of the articles dispensed by him in obedience to its terms; otherwise, and in cases of error in compounding prescriptions, it would be difficult to trace the delinquent. The apothecary being responsible for want of skill in his art, as well as the physician, should exercise equal caution in compounding, as the latter is required to in prescribing drugs. Hence it is not only proper, but his duty also, to keep a copy of every prescription, with date and names of physician and patient. Or, if he will not do this, then some law should be passed requiring apothecaries to keep a cancelling stamp to be struck upon every prescription compounded by them, under a penalty for each omission. This stamp, like those used in post-offices, might be of any form (or writing might be used alone), and contain name of apothecary and date of compounding; and without mutilating or defacing a prescription, would thus simply record upon it two important facts in its history. The same law should contain a second clause, forbidding any apothecary to renew a prescription once cancelled, without a fresh signature from the physician originally issuing it. Now, if the physician thinks the patient may need the same prescription a second time, let him fill out the blank space headed "renewable"—with either the words "at pleasure of Mr. ———, and upon his order," thus throwing the future responsibility for its use upon the patient, or limit the renewal to some particular date, as in the first issue. But where, as is now so commonly the case, the physician neither signs his name, nor affixes any date or the name of any patient to his prescription, there seems to be no valid reason why the apothecary should not renew it just as often as it is called for. Like a bank bill thrown into the street, it is good in any one's hands who picks it up. If the physician's name be not attached to it, it is not his property, for he can claim no exclusive property in drugs, as drugs, but only in the formula which he has designed for a particular occasion. And if he does not patent it, as no respectable physician will, and as no respectable government should permit, then, he cannot legally prevent any one from using it, who simply uses the prescription *without his name*. Dr. Squibb, for example, can undoubtedly enjoin any one from manufacturing and selling his Diarrhœa Mixture under his name *without permission*, for his name is his *trade-mark*; but he cannot prevent any pharmaceutical pirate from manufacturing and selling it, under the name of Smith's Intestinal Anodyne, or Great Sympathetic Restorer. And if Dr. Dover, or Dr. James, or Dr. Lugol, had chosen to manufacture the celebrated compounds which bear their names, no one could have sold them under their names without permission, though any one could use their formulæ, wherever unpatented, under any other name—since there can be no exclusive property in that which has once become the common possession of mankind; and this principle may be predicated in relation to nearly the whole pharmacopœia. With such a statute in existence as has been foreshadowed, no apothecary could renew, without authority, any physician's prescription; for, if he did, he would incur the penalty specially affixed to such misconduct. On the other hand, I am aware that many physicians would look upon the prescription book as an unnecessary piece of formalism, and like the ceremonial law, calculated to increase rather than diminish professional cares; but if they would consider it in its proper light of a legal guarantee of their professional competency, able to be of immense advantage to them as evidence, in some moment of supreme necessity, they would no longer hesitate as to its acceptance, nor have occasion to complain that some remedy was not within their reach.

In conclusion, and to add some legal artillery to this army of suggestions, I would recommend that our

State Medical Society request of the next Legislature the passage of some such act as the following, viz:

Be it enacted, &c., &c.:—

1. No apothecary, druggist, or retailer of medicines, shall compound any written prescription, unless it be signed with the full name and address of the person writing the same, under a penalty of —— dollars, for each and every violation of this prohibition.

2. Every apothecary, druggist, or retailer of medicines, who shall compound any written prescription, shall, immediately thereafter, and on the same day, write or stamp on said prescription, in legible characters, the date of such compounding, together with his own name and place of business, under a penalty of —— dollars for each and every omission so to do.

3. Any apothecary, druggist, or retailer of medicines, who shall compound a written prescription, bearing upon its face the certificate of an apothecary showing the same to have been already compounded, and without a renewal of said prescription by the person originally writing the same, duly expressed by a fresh signature and date, shall be chargeable with a misdemeanor, and on conviction thereof, shall be subject to a fine of fifty dollars, for each and every offence so committed.

4. All fines and penalties incurred under this act, may be recovered in a Justice's Court, one-half to go to the informer, and one-half to the Overseers of the Poor of the county in which such conviction shall be had.

I am, very respectfully, yours,

JOHN ORDRONAUX.

ROSLYN, N. Y., July 23, 1868.

PERINEAL SECTION—AMPUTATION.

HEALING OF WOUNDS BY FIRST INTENTION AFTER THE INHALATION OF CHLOROFORM.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—I am induced to report the following cases as being, in my private practice and hospital experience, rather remarkable results of surgical procedures; and especially to prove that adhesion of cut surfaces by "primary union," or by "first intention," does take place after the use of an anæsthetic, which fact has been denied by some eminent medical teachers in your city.

The first case is one of "perineal section" for impermeable stricture. On the afternoon of Wednesday, April 8, 1868, I was called to see Thomas Clark, aged 55, suffering from retention of urine, and who gave the following history of his disease: Twenty-six years ago he contracted a gonorrhœa, the results of which gave him but little trouble till five years after; at which time he was first attacked with a retention. A physician being called, endeavored to pass a catheter; but failing in his efforts, the patient, in his desperation, seized the instrument, and forced it through into the bladder. From the efforts of this he recovered in a short time, the water flowing without much trouble, and in a fair stream. Nine years ago he was again attacked with a similar difficulty. The physician endeavored to pass an instrument, but after two hours' labor, failed. Since this last illness he has suffered more than ever, the obstruction to the free flow of urine increasing decidedly during the past winter. For the last nine years he has been obliged to urinate, on the average, once in two hours, day and night; and in order to accomplish it, has been compelled to sit upon the pot de chambre, as the straining and forcing were almost sure to produce more or less of an evacuation from the bowels. The water generally came in drops, and occasionally in a stream as "large as a knitting-needle," and in amount varying from a teaspoonful to an ounce. During this latter period he has had several attacks of retention, lasting from four to eight hours, which yielded to opium and hot baths. Tuesday, April 7th, feeling rather unwell, he drank a small glass of whiskey, passed rather a restless night, and in the morning was greatly troubled by frequent calls to pass water. At 12 M., a stoppage occurred, and at 4 P. M., when I was first called to see him, his bladder was distended, and he suffering great pain. From the history a diagnosis was easily made. Full doses of opium and hot baths were ordered, which were frequently repeated till 12 P. M., when, as nothing had escaped, I passed, after a great deal of trouble, a filiform bougie. No instrument, up to this time, had been introduced into the urethra. Allowing the bougie to remain for a few minutes, as it was withdrawn a small stream followed. By this means he was relieved of about 8 ounces of water. The next morning he could pass nothing, and no instrument could be introduced; though after some manipulation and pressing against the face of the stricture, he forced through a couple of ounces.

In this way he was relieved from time to time until Saturday, April 11th, when I saw something more radical was to be done, as he was yielding to the effects of the long retention. I decided, therefore, upon "perineal section without a guide." Making the usual operation, after half an hour's search I succeeded in dividing the stricture (which was situated in the membranous portion of the urethra just behind the bulb, and about one-quarter of an inch in length), and passing a full-sized catheter to the bladder. This was retained 48 hours, and on its withdrawal the wound was found to have directly united all about the instrument, leaving it but a few lines in depth from the outside edges, which latter had been prevented from uniting by the interposition of a strip of lint. From the moment the operation was completed he rallied, and in four weeks was about his usual business. For the first week the water was drawn every four hours; after this a No. 12 sound was introduced every other day for two weeks, and then once a week, which he continues to the present time, and is advised to continue. Beyond a slight cystitis nothing untoward occurred. Two weeks after the operation he could hold his water eight hours, and pass it in a full, free stream. No water escaped through the wound at any time. Clark is a tall, lean man, of temperate habits, a tailor by occupation, having a strong will and great powers of endurance, though much broken down by his long existing trouble. Since the operation he has rapidly gained flesh and strength, and now considers himself as well as he was 26 years ago.

I regarded "perineal section" in this case as more advisable than "puncture of the bladder by the rectum" for several reasons. First, the great length of time the stricture had existed, the possible existence of many false passages, and the great length of time it would have taken to have dilated sufficiently for internal urethrotomy, or rupture. Second, the urine on microscopical and the ordinary examination, was found perfectly healthy, and gave no evidence of a diseased condition of the bladder or kidneys, which state of affairs, under similar circumstances, in my experience, is very rare. I would also mention in this connection a novel mode of securing a catheter in the bladder. It may be old to many of your readers; and for the suggestion I am indebted to Dr. John C. Du Bois, to whose skilful assistance, as well as to that of my friend Dr. W. H. Pitcher, the success of this operation is in a great part

due. Take an ordinary ivory napkin-ring and wind it (through the ring) into a strip of old muslin till it is well padded; four tapes about 18 inches long are to be sewed on the outside of the ring by their middle, at equal distances apart. The ring is then placed over the penis, close to the pubes. The two upper tapes are fastened in the eye of the catheter above, and the two lower ones below; those at the base of the penis are then fastened to a bandage around the body. By this means the patient is enabled to flex and extend the thighs, and the end of the catheter to be raised or lowered as may be wished, which cannot be done by the old method without moving the instrument in the bladder, thereby causing great irritation.

Case 2.—Alvah Simmons, by occupation a paper maker, aged 40, while grinding an axe caught the sleeve of his coat in the belting by which the stone was turned, producing a lacerated wound of the right hand, with a compound dislocation of the wrist-joint. The integuments on the anterior aspect of the forearm were torn completely off, the muscles separated one from another, and the skin on the dorsal surface loosened, and infiltrated with blood. The radial artery was intact. He had bled profusely before I saw him, and was much weakened. As there seemed no chance of saving the member, I amputated by skin flaps, and a circular cut through the muscles about three inches below the elbow; seven stitches and five ligatures were used. The stump was placed on a pillow, and covered with a cloth wrung out of cold water. On the fourth day the plasters were removed, and the whole line of incision was found firmly united. The stitches were nearly all removed at this time, and the remainder a few days after. *Four* weeks after, as the ligatures had not come away (though I had many times before used considerable traction upon them), I broke them off in the wound, and on his next visit home, a week after, the point at which they emerged had completely healed. From the beginning to the end there was not altogether more than one *drachm* of pus discharged, and this came from the point where the ligatures left the wound. No sign of inflammation was at any time present, nor could any difference in the temperature of the two limbs be discovered by the hand. The operation was done February 15th, 1868, and to-day, June 30th, the arm remains as sound as ever.

H. Lyle Smith, M.D.,
Late House Surgeon, Bellevue Hospital.
Hudson, N. Y., June 30th, 1868.

Not so Very Bad.—The authorized inspector of milk in Cincinnati, appointed by the Board of Health, made an inspection some days ago of the contents of that cans of the milkmen who supply the inhabitants of the city, and published the result for the information of the people. He gives the names of fifty-two milkmen who had pure milk, of ninety-eight who had milk and water, of nine who had pure and skimmed milk, and of four who had watered, skimmed, and pure milk.

The Rinderpest.—The English government has received official information of the outbreak of cattle plague in Egypt. It is reported to have broken out in Volhynia and other parts of Russia.

The Memorial Hospital in New South Wales.—The fund for the hospital to be erected as a grateful memorial for the recovery of Prince Alfred of England has reached £15,000.

European Scientific Periodicals.—The mere catalogue of scientific periodicals published in Europe during the present century, fills sixty-three closely printed pages.

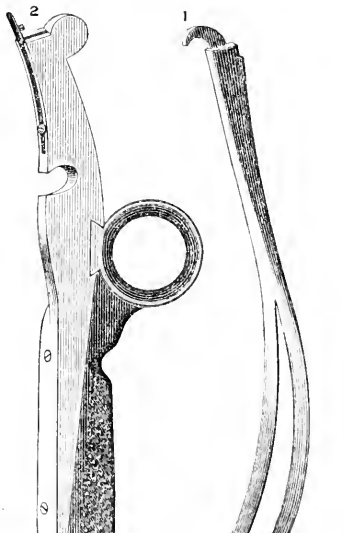
New Instruments.

IMPROVEMENT IN THE HANDLES OF OBSTETRIC FORCEPS.

By WILLIAM READ, M.D.,
Boston, Mass.

I desire to call to the notice of the profession an improvement in the handles of obstetric forceps, by which, without in the least impairing their strength or efficiency, they are made much more portable. By reference to the accompanying drawing, it will be seen, that the handles are disconnected from the blades by a parrot-bill joint, which admits of instantaneous adjustment, and when adjusted, gives as much power and facility of use as if each blade were in one solid piece. The improvement can be applied to any forceps at a very moderate cost, and is not limited in its application to them alone, but may be used whenever it is desirable to shorten the handles or reduce the length of any instrument for greater economy of space in packing or transportation.

Reference to the figures in the plate :—



1. A parrot-bill projection at the end of the blade which hooks into

2. A socket formed in the shank of the handle. When the joint is closed, a spring on the back of the shank catches into a notch in the blade and prevents the two parts from being disconnected while introducing them and fitting them to the head of the child.

3. A clamp by which the forceps, after being locked, can be retained in their hold upon the head, and which

admits of being released without delay by simply lifting the catch from the pin which confines it.

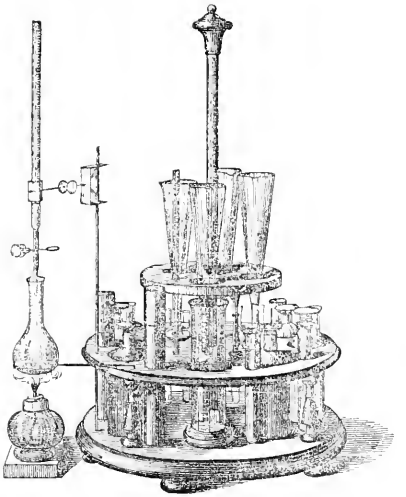
ROBERTS' APPARATUS FOR URINE TESTING.

IMPROVED BY DR. WILLIAM B. LEWIS,

LECTURER ON RENAL PATHOLOGY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

EVERY one who has had much to do with the clinical examination of the urine, can testify to the inconvenience of having the various portions of his apparatus disconnected and apart. The lamp is on the mantelpiece, the test-tubes on the table, the urinometer in the drawer, the wine-glasses put out of sight or scattered, and the burette and test-fluids, even in the "best-regulated office," not in position at all times for immediate use. Any contrivance, then, by which these ills may be entirely and conveniently obviated, cannot fail of a welcome from the busy practitioner. In this particular, Dr. William Roberts, of Manchester, England, is deserving of gratitude, as the stand figured in his excellent Practical Treatise on Urinary and Renal Diseases, combines in a graceful form and small space, all the appliances ordinarily required. The desire to possess a counterpart of this apparatus, led the writer to furnish the necessary "drawings and specifications," from which Luhme & Co., of Lafayette Place, have constructed the caster-like stand figured in the cut. It is thought that a few improvements have been introduced by substituting, in some cases, instruments of greater accuracy and convenience than those represented in the original cut.

For the purposes of comparison and reference, the



following list is copied from Dr. Roberts:—1. Three or four wine glasses; 2. litmus paper; 3. urinometer; 4. half-a-dozen test-tubes; 5. spirit-lamp; 6. nitric acid; 7. acetic acid; 8. liq. potassæ; 9. liq. ammon. fort.; 10. drop-tubes and stirring-rods. For sugar-testing; 11. prepared copper solution; 12. graduated burette; 13. two hundred grain measure; 14. six-ounce graduate; 15. small flask. These he arranges on "a circular stand of two tiers." The prepared copper solution is that of Fehling, made from the following formula: Sulphate of copper, 90½ grains; neutral tartrate of potash, 364 grains; solution of caustic soda, sp. gr. 1.12, four fl.oz. Add water to make up exactly six fl.oz. Of this 200 grains are decomposed by one grain of diabetic sugar.

The changes are these:—1. Instead of the single urinometer with its short scale, and small degrees, there are two spindles of German manufacture. On one the scale runs from 1,000 to 1,020, on the other from 1,020 to 1,040, this being as high as is generally found necessary. By reason of the lengthened scale, the degrees are wide and distinct, so that, if the urine be moderately clear, the sp. gr. may be read to half degrees. 2. The 6-oz. graduate is replaced by a 4-oz. measure, on which the drachms are indicated. Space and weight are thus saved, and the smaller is more convenient. In diluting saccharine urine for quantitative examination, Dr. Roberts directs to add 4½ fl.oz. water, to ½ fl.oz. urine. But it is as well to dilute 2 or 3 to 20 or 30 drachms, since all the fluid cannot be used in either case. 3. The chief improvement, however, is found in the change from the old to the new form of burette, which has a movable support. When arranged for use this portion of the apparatus presents the appearance represented in the cut. A brass rod is passed through the first shelf and sunk into the base.

Upon this slides at right angles a spring clamp, holding with considerable strength to the rod at one end, and supporting the burette by the other. This is of such a length as to permit the burette to swing over the brass ring and arm supporting the flask.

Upon the completion of an analysis, the burette, its stand, the lamp, and the flask, may be conveniently packed, each in its appropriate place. The flask support swings inward, resting on the shelf. In the quantitative estimation of sugar, 200 grains of the copper solution are diluted with once or twice their bulk of water and boiled. The urine, after dilution, is then carefully added from the burette, until, after repeated cooling and boiling, all vestige of blue color has disappeared. The computation is then easily made. One-tenth of the fluid added from the burette, is pure urine, and this contains one grain of sugar. Divide the total excretion of urine in 24 hours, *in grains* (4557 grains in 1 fl.oz.) by this tenth, and the result will be the total excretion of sugar in grains.

Medical Items and News.

Dr. Frederic A. Castle has been appointed Visiting Physician to the Randall's Island Hospital, and the Idiot Asylum. He has for several months been acting in that capacity, during Dr. Whittlesey's absence abroad; and the present permanent appointment is a well merited acknowledgment of his marked ability and energy. Dr. Whittlesey has been appointed Consulting Physician.

A Good Suggestion.—It was proposed at the last meeting of the Journal Association of New York, by Dr. H. G. Davis, that that body employ some person to enter in books, prepared for the especial purpose, the titles, and where found, of all the articles or papers in the journals taken by the Association. The subjects to be classified and arranged in the index, by a committee. This will render it comparatively easy to investigate any particular subject, without the necessity of going over all the journals.

Large Brain.—The brain of the late Brevet Major-General Charles G. Halpine (County Register) weighed fifty-six ounces.

Death of Prof. Stein.—The famous surgeon, Prof. Stein, died in Copenhagen, May 14, 1868.

Dr. Von Armfeldt, Emeritus Professor of the Moscow Medical Faculty, died recently in Moscow, in the 63d year of his age.

Dr. Heine, who, during the illness of the late Prof. Weber, proved himself to be a very excellent teacher of Surgery, has been appointed Professor of Medicine at the University of Heidelberg.—*Allgemeine Medical Central Zeitung.*

The Appetite for Medicine.—It was stated at the Paddington Board of Guardians that 138 gallons of medicine had been dispensed in two months, including 30 gallons of quinine mixture. It was remarked that the inmates were never satisfied unless they were taking medicine.—*Lancet.*

Phthisis in London.—In his report for May of the health of Marylebone, Dr. Whitmore again calls attention to the large number of deaths from phthisis during the month. In 1 of every 7 persons who died, the cause of death was stated to be phthisis.—*Lancet.*

Materialism in the French Schools.—The Paris correspondent of the London *Lancet* writes as follows: With regard to the materialism of the rising generation in Paris, I believe I may venture safely to assert that it is not so deep-rooted and extensive as has been supposed. This is not the first occasion on which the cry of "Vive le matérialisme" has been heard in the lecture-room of the Faculty. Only, before the unqualified attacks of a certain party, it was uttered by some half-dozen or so of students, who openly profess the most radical opinions. The large body of the students never joined in the cry. If materialism has become, not a watchword, but a more general exclamation with the students, it must be taken as a sort of reaction against the aggression of their adversaries. Here, again, the playful humor asserts itself, and—the clericals must be annoyed by any means. This ill-timed and unjust aggression has put materialism *à la mode* among the students. The students had been made to pass as materialists, had been denounced and reprimanded as such; so they will be materialists just for the fun of the thing. 'Tis the old story. But this show of materialism is at the surface, and no deeper.

Obituary Record.—Robert Gray Mayne, M.D., LL.D., author of the learned work, entitled "Expository Lexicon," died, at Leeds, England, March 15th, 1868, aged 60 years.

Accidents.—The *Accident Assurance Company* report, that 2,000,000 of persons, or one in every ten of the population, receive every year injury from accidents. Ten thousand are killed, or die from the direct effects of the accident. Since 1849, this company have paid £250,000 in claims.

Medical Education in Sweden.—The *Lancet* of June 6th, gives the following as the curriculum of the University of Stockholm—probably the most exacting of any in Europe: After two years' general education in the University, the candidate for medical studies must submit to a preliminary examination in Latin, Mathematics, Chemistry, Physiology, Botany, and Geology. He then performs dissections for two years, and works at Practical Chemistry for six or twelve months, at the same time attending hospital practice at Stockholm for six months, with voluntary attendance at the military hospital, followed by four months' practice at the hospital of Upsala. At the end of the four years thus occupied comes the first medical examination in Anatomy, Chemistry (including analysis of urine, bile, and other secretions), Pathological Anatomy, the diagnosis of disease, Surgery, and Midwifery.

Then follows hospital practice at Upsala or Lena, and at Stockholm at the Seraphim Hospital of 300 beds, the student being occupied from 8 A.M. to 3 P.M. in case-taking, making post-mortem examinations, and writing a description of post-mortem appearances. Twice a week also, for two hours at a time, the student works in the laboratory at the chemistry of morbid secretions. Subsequently attendance is given at the Hospital for Sick Children for four months, four times a week; and at the same time the student attends Midwifery for four months in a hospital of forty beds. Then follows the study of Syphilitic Diseases for two months, Insanity two months, Legal Medicine and legal protocols two months, and Practical Pharmacy.

All the preceding courses are necessary for the license to practice; but to become M.D. or professor (there being no different qualifications for physician and surgeon) a candidate must be house-surgeon a year, and study abroad one year. All the medical lectures and instruction are free in Sweden, the Government paying the professors. The professional course may be prolonged to ten years.

LEPERS IN THE EAST.—The present social position of the poor mendicant leper generally throughout the East is a most deplorable one, and it is not surprising that he is often subject to the most inhuman treatment. In the recent report on leprosy prepared by the College of Physicians, great prominence was given to the cruel neglect of the leprous outcast, and the necessity and humanity of decently lodging and housing him, instead of allowing him to live on more like a wild beast than a human being. It is to be hoped the Government will not lose sight of the point. The Indian papers tell us that the practice of burning lepers alive is still carried on in Rajpootana. It is an easy and short method of getting rid of the afflicted. The Rao of Sirohi has issued a proclamation forbidding the practice under a penalty of ten years' incarceration; but the prevention of the act is difficult. One means to this end would be the provision of a suitable lazar tito at or near Sirohi. The expense would be comparatively trifling.—*Lancet, June* 13.

OVERCROWDING AND TYPHUS.—At a recent inquest held in St. Lukes, London, medical evidence showed that eight persons lived in a room ten feet square, and which was also the father's workshop.

DR. DAVID W. CHEEVER, Boston, Mass., has been appointed by the President and Fellows of Harvard College, Adjunct Professor of Clinical Surgery in the Medical School of the University.

A SENSIBLE LEGISLATURE.—The Legislature of Wisconsin has passed a law legalizing dissections, and also to prevent quacks from giving testimony in court on medical matters, and from collecting fees.

DR. JOHN HOMANS, a well-known practitioner of Boston, Mass., died a short time ago, having lived beyond the age of seventy. He was actively employed in his profession to the day of his death.

COAL.—The coal raised from the coal mines of the United Kingdom in the year 1866, amounted to 101,630,544 tons. Its bulk is 30 times as great as that of the greatest single work of human hands—the Pyramid of Cheops. It would take more than seven times as many vessels as those which now enter all the British ports in a year to carry the quantity of coal used in Great Britain.

It is ascertained that good coal contains latent force sufficient to raise its own weight 11,422,000 feet, or about 2,100 miles against the force of gravity. The coal raised in 1866 contained force equal to that which would be exerted by 5,30,000,000 horses, or 2,650,000,000 men working eight hours a day for 300 working days in the year.—*Chemical News.*

MINERAL OILS.—Galicia is attracting attention as a valuable source for mineral oils. In West Galicia, these oils abound; the principal petroleum reservoirs in this tract are found in the mountains inclosed by Limanowa, Neusandec, Grybow, Gorlice, and Sanyszce, covering an area of 20,000 hectares. It always suffices to bore 10 or 15 feet below the surface to encounter the substance. The petroleum of Eastern Galicia resembles that of Canada, while that from the western part of the province is identical with Pennsylvania oil.

PRESENTATION OF THE ETHER MONUMENT TO THE CITY OF BOSTON.—The late Mr. Thomas Lee, of Boston, Mass., gave to that city a monument (to be placed in the Public Garden), "To commemorate the discovery that the inhaling of ether causes insensibility to pain; first proved to the world at the Mass. General Hospital, in Boston, October, A.D. 1846." This monument has been completed, and on Saturday, June 27th, 1868, was formally delivered to the city government by Dr. Henry J. Bigelow. The form of the monument is suggested by mediæval types, modified by the nature of the white Concord granite used in its construction; it is about 30 feet in height.

THE SENECA COUNTY MEDICAL SOCIETY ELECTION.—At the annual meeting of the Seneca County Medical Society, held at Waterloo, July 8th, the following officers were elected for the ensuing year:

President—Dr. Jas. Flood, Lodi.
Vice-President—Dr. E. J. Schoonmaker, Tyre.
Secretary—Dr. S. R. Welles, Waterloo.
Treasurer—Dr. J. Flickinger, Fayette.
Censors—Dr. W. W. Wheeler, Farmer Village; Dr. A. Emens, Fayette; Dr. J. Dunn, Lodi.

THE COMMENCEMENT OF OLD AGE.—What are the signs of natural decay? When does old age commence? The natural history of individual death, without disease, is one of the subjects which it remains for modern physicians to study. When does the vital machine begin to wear out in the typically healthy man, and what are the ways by which normal decay, inevitable death, invades the aged man? With our modern means of precise observation and minute pathological research, we should be able now to lay the foundation for the answer to this most important question. The subject is suggested to us by a most thoughtful, able, and well-written thesis on death, considered from the ethological point of view, by Dr. Acosta, of Paris, which will repay the perusal of reflective men. Discussing the difficulty of determining the commencement of old age, Dr. Acosta reminds us that while the Greeks regarded the age of 49 (7 times 7, their climacteric number) as the culminating point of human strength, and at the same time as the commencement of decadence, M. Flourens holds that decadence does not commence until the seventieth year; an age which the Chinese, according to Sir John Bowring, regard as a metaphorical one, calling those who have attained it *rare birds*, and men of ninety years old *Liderers*. The two climacteric ages of the Arabs were 63 and 81, being the multiplication of 9 (their magic number) by 7 and 9. The age of 63 was considered so critical that it was called the *grand climacteric*, and the ancients were accustomed to mutually congratulate each other when they had passed it. Quételet, to a certain extent, admits the danger of this critical period; for he says, "From 60 to 65 years of age, vitality loses much of its energy; that is to say, the probability of continuing to live diminishes greatly." M. Reveillé-Parise, while in common with some other physiologists allowing the existence of two sources of strength in the constitution, which he names *force in reserve* and *force in use*, believes that the physiological fact which reveals old age is the progressive diminution of reserved force so superabundant in youth. There certainly exist some organizations which are proof against the ravages of time and the attacks of sickness and death. Some men at the age of 80, 90, even 100 years, have preserved their sensorial and intellectual faculties, and great mental energy, even to the last days of their life. A complete list of them would be too long. We will, therefore, only mention a few names. Plato died at the age of 81, pen in hand. Gorgias continued his literary labors to the age of 107. Socrates wrote his famous *Panegyric of Athens* in his 94th year; Theophrastus his *Characters* at 99; Cato learnt Greek after his 60th year; Cicero composed his charming work, *De Senectute*, one year before his violent death; Voltaire wrote a great number of tragedies, *Tancrède*, and *l'Orphelin de la Chine*, amongst others worthy of his best

time, at the age of 65, and he came to Paris in his 81th year, to give himself an intellectual treat, the representation of his tragedy of *Iréne*. There are also still living members of our profession, as well as the literary, scientific, and political world, who would illustrate the list of Nestors, remarkable both for their longevity and for the intellectual labors to which they continue to devote themselves. Disraeli has said, "Old age has been a thing unknown to many men of genius."—*British Medical Journal.*

How to travel for Health.—The architect in England may consider that cedar might be the best wood for a certain purpose; but if he had to send to Lebanon for it, he might think the cost of carriage would counterbalance the particular suitableness of the wood, and he would seek another tree which would answer nearly as well. In like manner, Madeira may be the place for one recovering from inflamed lungs; but the transit thither may so injure the health that sea sickness will effect what the previous disease had spared. Again, the breadwinner of a family may require change of air; and if a local tryis ordered that is too expensive for his means, the mental distress arising from doubts about the future position of himself and of his dear ones, may counterbalance the benefits which the climate ought to bring. We conceive, when change of air is required for the recruitment of health, that the doctor, instead of shaking his head ponderously and issuing, in a decided tone, the name of one locality, should go through a catechism something like the following: Have you fondness for one spot more than for another? No.—Well, what do you enjoy the most when you are well—do you like fishing, sketching, boating, yachting, mountaineering scenery, photography, or society? Still further, how much can you afford to spend over yourself? According to the replies to these questions the physician would recommend a quiet valley with a good trout stream, or a spot like the Bowness Cove, in Wales, where materials abound for the most ardent fisher, or Beaumaris, where there are both boating and yachting; or Bowness, where there are boats in plenty, fish in abundance, society galore, and scenery the most lovely. The main requirements for an invalid who is recruiting health are animal or mental enjoyment, warmth, air without much exercise, and a good *cuisine*. The influence of change under these circumstances is very marked. I well remember my recovery from an attack of fever—too languid to care much whither I should go, my father decided upon sending me to Llangollen, and I went there with my mother and brother. As the carriage bowled along the level plains I was only conscious of fatigue; but as we entered amongst the mountains the sight of them was like a mental draught of champagne, and I became as excited as if I had drained a bottle of that wine. My brother had a kindred spirit, and we did not sleep until we had climbed to the summit of the nearest hill. Thence we saw another in the distance which was higher, and that we scaled the day after; and my recovery was as absolute as it was sudden. Now as I feel mentally certain that such a result would not have occurred had I been condemned to visit a place which to me would be as stupid as Bath, Harrogate, Cheltenham, or Brighton, so I would not recommend any one to visit a spot where there are not some means of gratifying his peculiar pleasures.—Dr. Thomas Isman, *London Medical Mirror.*

Work and Rest.—The *Pall Mall Gazette* has lately discoursed at once wisely and pleasantly on a most important subject,—Work and Rest. The great points falls on the nervous system, and that the great evil of it is rather under-rest than over-work. Into any limited space it would have been difficult to put more sense and truth. There is a quality of laboriousness in all we do,—in our pleasures as well as in our work. We do everything fast and fashionably. We move in ruts, and crowds, and set modes. There is no play, no leisure, no quietness in our lives. One great evil is the multiplication of engagements. There is something worrying in the very number of our undertakings. The men work longest and work best who do a few different things thoroughly,—things so different, and withal so interesting, that the doing of one is a complete distraction from the cares incident to the doing of the others. But the most urgent want is that of sleep. The injurious results of scanty rest are very obvious. They take two apparently opposite, but really related, forms —excitability and exhaustion. We are fearful and fatigued; hypersensitive and subject to ennui. We are exquisitely sensitive to pain and discomfort on the one hand, and uncommonly hard to please on the other.

Influence of War on Population.—From the Registration Report of Massachusetts, for 1866, some interesting deductions may be drawn. During the war from 1861–5 inclusive, the male population was lessened and the births were affected in a still greater degree. The births in 1866 were increased by 3,836; the marriages by 1,376; the deaths were diminished by 2,525.

The indirect effects of the war upon population are marked; the census shows a diminution of adult males between the ages of twenty and sixty. Thus, instead of 266,019 in 1860, we find 249,806 in 1865. Their numbers had diminished by 16,243, in spite of a gain to the general population of 35,965.

Ivory Producers.—Mr. Simmonds tells us, that from 18,000 to 20,000 elephants are killed annually to furnish the *ivory* used by the Sheffield manufactures.

The French Medical Association.—This excellent Society, instituted among the medical men of the whole empire for mutual benevolent purposes, lately held its annual meeting at Paris. The funds are in a flourishing condition, and the money intended for granting annuities to deserving medical men is increasing rapidly.

Convivialities of Medical Corporations.—M. Chereau gives, in *L'Union Medicale* of June 4th, a humorous account of the numerous banquets and feasts which used to be held at the old Faculty of Medicine of Paris. These were mostly defrayed by newly received doctors, and sometimes by the professors. The recipients of the degree were, besides, bound to send presents of confectionery and wine to each professor. These *good* old customs, being a heavy burden for the young doctors, were gradually abolished.

New Publications.

Anatomy and Histology of the Human Eye. By A. Metz, M.D., Prof. Ophthalmology in Charity Hospital Medical College, Cleveland, Ohio. Phila: Office Med. and Surg. Reporter. 1868.

Microscopic Examinations of Blood and Vegetations found in Variola, Vaccinia and Typhoid Fever. By J. H. Salisbury, M.D. New York: Moorhead, Bond & Co. 1868.

The Diathesis, or Eczema and its allied Affections. By A. Hardy, M.D. Translated by Henry G. Piffard, M.D., late House-Surgeon Bellevue Hospital,—

Original Communications.

EXPERIMENTS WITH THE POISON OF THE AMERICAN COPPERHEAD,

(TRIGONOCEPHALUS CONTORTRIX—HOLBROOK.)

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This reptile was first described by Linnæus, in the twelfth edition of his Systema Naturæ, under the name of Boa Contortrix. The genus Boa, of Linnæus, included all those serpents, venomous or not, that had plates under the tail, as well as on the abdomen.

Synonymes.—Boa Contortrix, Lin., Syst. Nat., vol. 1, p. 373. Angkistrodon Mokeson, Beauv., Tran. Amer. Phil. Soc., vol. IV., p. 381. Cenchris Mokeson, Daud., Hist. Nat. des Rept., vol. V. p. 358, pl. IX., fig. 3. Scytalus Cupreus, Rafin., Am. Jour. Art & Sci., vol. I., p. 85. Scytalus Cupreus, Harl., Med. & Phys. Res., p. 130. Cuchris Mokeson, Harl., Med. & Phys. Res., p. 128. Trigonocephalus Contortrix, Holbrook, North Am. Herp., 1838, vol. II., p. 69, pl. XIV. Trigonocephalus Contortrix, DeKay, Zoology of New York, Part III., p. 53, pl. IX., fig. 18. Copperhead, Vuego, Red Adder, Dumb Rattlesnake, Red Viper, Chunckhead, Copper-belly, Deaf Adder, Bastard Rattlesnake.

The geographical distribution of the Trigonocephalus is extended. Naturalists having observed it upon the eastern Atlantic slope, from the western parts of New England to the middle of Florida. Its geographical range extends from about 45 north latitude to the Gulf of Mexico, whilst upon the West it appears to be limited by the Alleghany Mountains. In the Valley of the Mississippi, its place is supposed, by Dr. Holbrook, to be supplied by the Toxicophis Atro-fuscus, of Troost, which it resembles in habits. The motions of the Copperhead are sluggish; and when approached it prepares for defence, raising its head, throwing out the tongue, hissing and contorting, and flattening the head and body. The following is an accurate description of this reptile, as given by Dr. Holbrook in his great work on North American Herpetology:

Characters.—Head very large, triangular, covered with plates in front and in the vertex, with scales behind, and a pit between the eye and nostril; upper jaw with poisonous fangs; body, thick, light hazel, with brown, with transverse bars of dark brown, narrowest on the mesial line, broader and bifurcating on the flanks; tip of the tail coriaceous.—*H.* 150, *Caud.*, *fol.* 42, *sc.* 4.

Description.—The head is very large, triangular, and broadest posteriorly; the mouth large, with the upper jaw strong, and furnished with poisonous fangs; the vertical plate is regularly pentagonal, with an acute angle directed backwards; the superior orbital plates are irregularly triangular, with their apices turned inwards, and their bases outwards, projecting over the eye; the occipital are rhomboidal, the frontal plates are large and quadrilateral; the anterior frontal are of the same form, but smaller; the orbital is large, triangular, with its basis downwards and its apex upwards, and truncated. There are two nasal plates, the anterior quadrilateral, with its posterior margin hollowed; the posterior trapezoid, with its anterior border lunated to complete the nostril. There are three posterior orbital plates nearly of the same size, the upper one triangular; the inferior orbital plate is single, long, narrow, and semi-circular. There are two anterior orbitals, the upper quadrilateral; the lower makes the superior wall of the pit between the eye and the nostril, which is completed below by the second labial plate, and by a small plate that rests on the third labial. The margin of the upper jaw is covered by semi-quadrilateral plates. The nostrils are large, lateral, and placed near the snout; the eyes are large, but do not at first appear so, from the projection of the superior orbital plates; the pupil is elliptical, vertical, and dark; the iris bright golden, with a tinge of red. The neck is greatly contracted; the body is elongated, but thick to near the tail, and is covered above with rhomboidal scales, carinated, except those of the lower rows, which are smooth and larger. The abdomen is covered with plates, the last one of which is very large; the tail is short, thick, conical, and ends in a horny tip.

Color.—The head is a delicate light hazel-nut brown above, with the labial plates whitish; the ground of the *color* of the whole animal, body and tail, is of the same delicate hue, lighter on the sides, where the scales are beautifully freckled with small dark spots. Behind the occiput begins a series of transverse bars of dark brown, continued to near the extremity of the tail. These bars are contracted along the vertebral line, but are broader and bifurcated on the flanks. These bars are lightest on the back, darker at the sides, with their anterior and posterior margins bordered with brown. The under surface of the whole animal is flesh-colored, freckled with minute points of dark brown; and a series of dark-colored spots on the abdominal plates, near their extremities, which then ascend, to include a scale or two on the flanks, and are so disposed that one spot corresponds to the point of bifurcation of the transverse dorsal bars, and another to the space between them. All these spots terminate at the tail, which is flesh-colored below.

Dimensions.—Length of head, 1 inch 2 lines; breadth of head, 11 lines; length of body, 21 inches; length of tail, 3½ inches; greatest circumference of body, 3½ inches; circumference of neck, 1 inch 10 lines. In the individual described there were 150 abdominal plates, 42 sub-caudal, and four pairs of bifid plates, or scales, near the apex.—[*North American Herpetology, Phila.*, 1838, *Vol. II., pp.* 69–71.]

As a general rule, the Trigonocephalus Contortrix inhabits dark, damp, shady places, though it is frequently found in the meadows bordering upon the low lands. The specimens which were used in the following experiments, were captured under the steps of a small negro-house, situated upon a slight elevation in the neighborhood of an extensive marsh. The related species, the Water Moccasin (Trigonocephalus Piscivorus), which is very abundant in the low swampy regions of Georgia and Carolina, frequents the rice dams and swamps, and is never seen far from water; and in summer numbers of these reptiles may be seen resting on the low branches of such trees as overhang the water. The water moccasin is exceedingly dangerous to the unwary; and is the especial terror of the negroes about the rice plantations, as it is very sluggish in its movements, taking no pains to avoid the descending foot of the passer, but attacks every thing that comes within its reach. From its habit of erecting its head and opening the mouth for some seconds before striking, and from the white appearance of the mouth, it has been called, on the rice plantations, the cotton-mouthed moccasin. I once saw a stout negro man who had been bitten by a large water moccasin. The symptoms of poisoning were very marked. For hours the man appeared to be in extremis, notwithstanding the free scarification of the wound and the administration of large quantities of alcoholic stimulants. Beneficial re-

sults appeared to be derived by applying chickens and frogs cut open alive to the wound. The entire leg and thigh swelled enormously, and the recovery was tedious. The limb continued somewhat larger than the sound leg for several years, and the man complained of pain in the region of the site of the poisoned wound during certain changes of the weather, and especially during damp spells. Both species of the Trigonocephalus feed upon frogs, mice, birds, and insects. As far as my information extends, they do not, as the king-snake, feed upon other reptiles of the same genus and species. The copperhead is regarded by the negroes with as much dread as the rattlesnake. It is, however, not so abundant in the lower portions of Carolina and Georgia as the water moccasin and rattlesnake; and instances of persons bitten by it are comparatively rare. DeKay, in his Zoology of New York, says that the poison of the copperhead "is considered as deadly as that of the rattlesnake; and an instance is recorded, where a horse, struck by one of these reptiles, died in a few hours."—[Part III., p. 54.]

EXPERIMENTS UPON BITE OF COPPERHEAD, (TRIGONOCEPHALUS CONTORTRIX.)

Experiment No. 1.—Augusta, Georgia, May 12th, 1862. Subject of experiment, a fine, large black cur dog, half hound and pointer (male). Temperature of rectum of dog, 103°.1 F.; temperature of room in which the experiment was conducted, 100°.4 F.; respiration of dog, panting, irregular, from the heat of the weather; impulse of heart, irregular, about 90 per minute. 1½ o'clock P. M. Immediately after determining the temperature, the dog was brought near the copperhead, which struck him twice on the foot of the right hind leg. The moment that the fang entered, the dog emitted most piercing cries, and appeared to be greatly agitated, and the foot began to swell almost immediately.

The thermometer introduced into the rectum, stood at 104°.2 F., and remained thus for ten or fifteen minutes, and then slowly descended 0°.2, and remained stationary at 104° F. This would indicate that the first rise was due partly to the agitation and struggles of the animal, excited by the pain of the bite of the snake. Twenty-five minutes after the stroke of the snake, temperature of rectum 104° F.; heart as yet not specially affected, although the foot is greatly swollen; thirty minutes after stroke of snake, (5 minutes after last observation,) action of heart 98 per minute, and somewhat irregular as before the experiment, being affected by the inspiration and expiration; fifty minutes after stroke of snake, (10 minutes after last observation,) action of heart 110 per minute. One hour after the bite of the snake, temperature of rectum still 104° F., the action of the heart appears to be diminished in force and increased in frequency, being 124 per minute. The swelling is gradually proceeding up the thigh, the limbs being greatly distended up to the knee-joint, and the lower portion of the thigh is commencing to swell. *A bloody serous fluid now issues from the wound in considerable quantities, and the epidermis can be readily removed from all the region around the point where the fang entered, presenting a red, raw appearance. The swollen parts feel hot, and are several degrees warmer than the sound leg.* The dog is perfectly quiet, and, in fact, appeared to become so as soon as the swelling commenced.

Two hours after the stroke of the snake, action of heart 156 per minute; respiration not increased. Swelling of leg greatly increased, and extending up and involving the thigh; the swelling increases in a decided manner, with defined borders. Blood and bloody serous fluid continue to issue from the points at which the fangs entered: *under the microscope the blood-corpuscles of this fluid present a swollen, altered appearance.* The dog does not whine or cry, but appears restless and sometimes groans, and pressure upon the swollen leg appears to excite some pain, as manifested by his whines. The temperature of the rectum still remains at 104° F. When the dog is loosed, he runs about, with considerable life, upon three legs, and during this exertion there is a slight rise of temperature in the rectum, of *one-tenth* of a degree F. Action of heart 150 per minute.

During the night the dog remained quiet, and next morning appeared much better. Swelling in leg declining. Temperature of rectum next day, at 11 o'clock A.M., still 104° F. The animal appears to have regained his spirits. Right hind leg still greatly swollen, and several degrees warmer than its fellow. Action of heart 120, in standing posture. On the following morning May 14th, 11 A.M., dog seems lively, but the leg is still much swollen, and several degrees warmer than the sound leg; temperature of rectum 104° F. The leg is much swollen, and pits when pressed; and pressure appears to cause pain; the swelling extends to the integuments of the belly and the sheath of the penis. Tongue of dog looks redder and drier than usual. The action of the heart in the sitting posture is 120 per minute, and the force of the heart has greatly increased. The wounds and excoriated places on the foot present a much lighter color, and appear to be healing over. *May* 16th, 11 A.M.—The dog still continues to improve—swelling of leg and penis greatly reduced; temperature of rectum 103°.2 F. Dog appears to be much better: action of heart 100 in sitting posture. Muscles of limbs, as upon yesterday, tremble occasionally. This dog recovered entirely from the effects of the poison.

Experiment No. 2.—Subject of experiment a fine active young cock—temperature of anus 110°.3. Augusta, Ga., May 12th, 1862, 4 o'clock P.M. The copperhead used in the preceding experiment was allowed to strike the cock upon the comb and head; the reptile appeared to be somewhat exhausted by striking the black dog in the morning. The strokes of the snake appeared to excite violent pain in the cock; he struggled violently, and opened his wings. The rapidity and force of the action of the heart were increased during the strokes of the snake, and during the struggles of the bird. During these violent struggles, and great agitation, the temperature of the rectum of the cock rose ½° C., and then fell again to the point whence it had started, being 110°.3 F.

Fifteen minutes after the strokes, the cock breathes very rapidly; the heart beats rapidly, and with considerable force. Temperature of rectum still remains at 110°.3 F. The cock was again thrown to the copperhead, and several severe blows were inflicted about the head and comb and leg, and the effects of the first strokes were thus increased.

At this time, the action of the poison resembled in some respects those of a narcotic; the cock appeared quiet and stupid, as if drunk; but when aroused, opened his eyes and looked about, and attempted to fly and run with some activity.

Thirty-five minutes after the first stroke of the snake, the temperature of the rectum still remained at 110°.3 F. whilst the head, comb, and adjoining parts, as well as the regions around the wounds in the breast, swelled greatly, and presented a dark purplish color, similar to that presented by wounds inflicted by the rattlesnake.

The effects of the poison resembled those of a narcotic—the bird remained perfectly still until aroused; it did not appear, however, to have entirely lost its reason, but was only stupid and lethargic. The cock died

during the night, about nine hours after the first stroke of the snake. After death, the tissues around the wounds inflicted by the fangs of the snake were found to be infiltrated with bloody serum and tenacious blood, which did not appear to possess the power of coagulating. The muscular fibres, in the region of the wounds, which had been subjected to the direct action of the poison, were evidently in a state of softening and disorganization. The bloody fluid issuing from the various cut surfaces presented a tenacious appearance, and was of a dark purplish-brown color, and changed very slowly and imperfectly to a lighter color when exposed to the action of the atmosphere.

The coloring matter of the blood-corpuscles had evidently been altered, and had escaped in many cases from the blood cells.

The infiltration of all parts around where the poison had been injected, and the flow of the blood out of the vessels which had not been ruptured by the fangs of the snake, as well as the bloody color of the effused serum—all point to profound changes both in the blood and in the capillaries and muscular tissues. A simple prick with a sharp instrument, like that of the fangs, certainly could not produce the pouring out of disorganized blood and bloody serum, through all the pectoral muscles. The blood and bloody tissues subjected to the immediate action of the poison, remained black, and did not change, even after several hours' exposure to the action of the atmosphere.

The brain was not more congested with blood than usual, and the physical and microscopical examination failed to detect any alterations characteristic of the action of the poison on the nervous structures. The spinal cord, in like manner, presented no special alterations. Heart somewhat relaxed—empty, and apparently softer than is usual with the heart of birds. The intestines, liver, stomach and spleen presented no special alterations, except that the liver appeared to be somewhat more congested with dark blood than usual. The blood-corpuscles, under the microscope, appeared in many cases to be swollen and altered in shape.

Experiment No. 3.—A portion of the dark, black and purplish-black flesh and blood, from the breast of the cock, killed by the stroke of the copperhead, as related in the preceding experiment, was introduced beneath the skin, on the side of a young kitten, three weeks old, and secured by a bandage. Twenty-four hours afterwards, the wound looked healthy, and the kitten did not appear to be at all affected. During the night, the mother pulled off the bandage and licked out the meat and blood. No injurious effects were observed from the action of the flesh of the cock.

Experiment No. 4.—Augusta, Ga., May 12th, 1862.—The copperhead appeared to be much exhausted by its strokes of the dog and cock, and its poison appeared to lose its activity, for a fine large pointer dog, which was bitten on the foot and lip by the snake, at the conclusion of the experiments, was but slightly affected. The temperature of the rectum, which stood before the stroke of the snake at 103°.1 F., remained at the same point, and whilst there was some swelling of the foot and lip, it was comparatively slight. The action of the poison was manifested chiefly in a tendency in the dog to sleep, and also in a slight increase in the frequency of the beats of the heart. The effects were only temporary, and the dog recovered entirely in a few days.

Experiment No. 5.—Augusta Ga., June 5th, 1862.—The copperhead used in the preceding experiments was allowed to rest for near one month, in order that it might accumulate a stock of poison. The fine large black cur dog, which had been employed in the first experiments, and which at this time was very fat and strong, was selected for the trial. Temperature of rectum 103°.7 F. Action of heart, 100 per minute in standing posture (this number represents the impulses of the heart against the walls of the thorax).

The copperhead inflicted several severe bites upon the fore-legs and nose of the dog. In five minutes the effects were manifest. During the infliction of the wounds by the snake, the dog cried out loudly and shivered with pain. In eight minutes the nervous system had given way entirely; this loss of nervous power was ushered in by convulsive movements, the voiding of feces, dilatation of the pupil, laborious breathing and inability to stand, complete prostration of the muscular system, frequent convulsive efforts to void feces, and apparent loss of consciousness. The temperature of the rectum, during this period of twenty-five minutes, remained at 103°.7 F., and then rose to 104° F. During the period that the thermometer remained stationary, the breathing of the dog was stertorous; as the heat rose the dog appeared better, passed a great quantity of urine, and then the breathing became better. Up to this period, after the strokes of the reptile, the action of the heart could scarcely be felt. One hour after stroke of snake, temperature of rectum 104 F. Action of heart so rapid and feeble as scarcely to be felt, and it cannot be counted with accuracy. The dog appears a little better, and notices when called. Two hours after bites of snake the action of the heart can be felt with sufficient distinctness to be counted, and is now 160 per minute in the recumbent posture; the dog has again voided a large quantity of urine, and appears sensible; the respiration, which was before 48 per minute, is now 40, and is no longer stertorous; the animal raises his head and notices when called, and the pupils are less dilated; and when raised up upon the fore-legs, maintains his position and appears quite sensible.

June 6.—Next morning, dog looks badly—*dysenteric flux from the bowels*—bloody discharges of altered blood-corpuscles, having a dingy, dark, purplish look. Temperature of rectum 101°.3 F. Extremities feel cold. Leg much swollen—the swollen leg feels warmer than the other extremities. Animal very weak and feeble. Action of heart 145; respiration 24. With the diminution in the frequency of the action of the heart, and the diminution in the frequency of the respiration, the intellect appears clearer.

The evacuations of the bowels resembled in appearance tar, presenting a black color, and consisting almost entirely of altered and partially coagulated and concreted blood.

When broken up and spread upon a glass slide, these tar-like excrements presented the appearance of a semi-transparent bloody jelly.

Under the microscope but very few blood-corpuscles could be seen, and these were altered in shape; it appeared as if the walls of the corpuscles had been dissolved, and the coloring matters had discolored the thick mucus and the thick serous, and exuded glutinous and fibrous matters.

Whether the destruction of the cell-walls of the blood-corpuscles occurred in the intestines after the passage of the blood out of the blood-vessels, from ruptured vessels, or whether there were but few ruptures of the capillaries of the intestinal mucous membrane, but rather a transudation of the altered blood with its coloring matter through the walls of the capillaries, was considered important to be determined. The large quantity, and the black color of the intestinal discharges, led me to view them as of the nature of a hæmorrhage.

Six o'clock P.M.—Action of heart 145; respiration 22. Dog very lethargic and feeble in motions, but perfectly sensible. Has discharged more of the tar-like bloody

matter. Temperature of rectum 101°.4 F. The dog drank a large quantity of cool water, and in a few moments the temperature fell to 100°.4 F., and remained at this point for three-quarters of an hour.

June 7, 2 o'clock P.M.—Action of the heart about the same in frequency as on yesterday, but more feeble; the dog rose up to pass excrements, and the pulsations or beats of the heart increased to 184 per minute. Respiration slow and regular as before. Temperature of rectum 103°.1 F.—there has been an increase of heat. The dog still passes from the bowels, black, bloody, gelatinous, tar-like matter. The surface of the wound on the leg is of a dark color, and emits a dark-colored serous fluid. The dog appears to be sensible, but is very sluggish and indisposed to motion; drinks water freely, but refuses food—has refused to eat ever since the stroke of the reptile. Lips also much swollen.

During the night this *dog died.*

Autopsy 30 hours after death.—The fore-leg which had been struck by the copperhead was infiltrated with bloody serum; all the fibrous tissues of the leg and thigh beneath the skin, up to the abdomen and beyond, were greatly infiltrated with dark purplish-black serum. Under the microscope this presented numerous oil-globules and altered blood-corpuscles, with ragged star-like edges; long acicular crystals were also seen floating amongst the altered blood-corpuscles. The blood, from the swollen infiltrated cellular structures of the head and nose, where the snake inflicted the severest bite, presented a peculiar appearance; thousands of small acicular crystals were mingled with the altered blood-corpuscles, and as the bloody serum and effused blood dried, the blood-corpuscles seemed to be transformed into crystalline masses, shooting out into crystals of *hæmatin* in all directions. The blood-vessels of the brain were filled with gelatinous coagulable blood, which presented altered blood-corpuscles and acicular crystals.

The muscular system everywhere presented a dark purplish color. The heart was filled with coagulated black blood. When spread upon a glass slide, the blood-corpuscles almost immediately commenced to assume a crystalline form. Blood-vessels of brain filled with dark blood; membranes and structures of brain presented a normal appearance; there were no lesions of the brain recognizable to the eye. The exterior fibrous sheath of the spinal cord presented a red appearance, as if the coloring matters of the blood had been effused; structure of spinal cord natural; vertebral arteries filled with coagulated blood.

Stomach.—Mucous membrane of this viscus greatly congested—the stomach contained a considerable quantity of bloody water.

Small Intestines.—Congested with blood, and presenting a dark purplish appearance. Some portions were more congested with blood than others. The congestion was especially great in the ilium, colon, and rectum. The lower portions of the intestinal canal—the ilium, colon, and rectum resembled raw flesh, and contained the dark, tar-like, altered blood.

The *peritoneum* presented a purplish reddish color, as if saturated with the disorganized blood. The internal coat of all the arteries was in like manner stained by the coloring matters of the blood.

The liver was congested with blood, and rapidly underwent decomposition.

Spleen somewhat enlarged.

The fibrous tissue of the lungs was infiltrated with bloody serum.

All the organs and tissues appeared to have suffered.

From the preceding experiments, designed to illustrate the mode of action of a poison about which little or nothing was known, we conclude:—

1*st. The primary and chief action of the poison of the American copperhead (Trigonocephalus Contortrix) is upon the blood.*

2*d. The poison of the copperhead is directly destructive to the colored blood-corpuscle, altering its physical and chemical properties and relations, and rendering it unfit for the performance of its important offices in circulation, respiration, and nutrition.*

3*d. The poison of the copperhead appears to have an affinity more especially for the coloring matter of the colored blood-corpuscles.*

4*th. Under the action of the poison of the copperhead the animal temperature is but slightly increased, notwithstanding the profound changes inaugurated in the blood; and after the establishment and propagation of these pathological changes the temperature descends.*

5*th. The action of the heart is increased in frequency, and diminished in force, under the influence of the poison of the Trigonocephalus Contortrix.* This increase in the rapidity of the pulsations of the heart is not, as in the case of febrile diseases, attended by a marked rise of animal temperature. This difference may be due to the peculiar and direct action of the poison upon the colored blood-corpuscles.

6*th. In its action upon the cerebro-spinal nervous system, the poison of the Trigonocephalus Contortrix resembles a mild narcotic*—whilst rendering the animal sluggish and stupid, it may produce death without the establishment of profound coma.

7*th. The profound alterations induced in the constitution of the blood by the poison of the American copperhead give rise to passive hæmorrhages into the cellular structures, and from the intestinal mucous membrane.* This phenomenon recalls strongly the passive hæmorrhages in certain febrile diseases, and especially of yellow fever. Some have supposed that the black vomit of yellow fever was the resultant of the effects of the preceding intense fever. Do not the present experiments indicate that it is rather the resultant of the action of a poison upon the blood and gastro-mucous membrane? We have here also an illustration of the mode in which dysentery might be produced by a poison introduced into the blood.

A CASE OF HYDROPHOBIA.

By J. W. PINKHAM, M.D.,

OF MONTCLAIR, N. Y.

I was called to-day to see Mr. T. L., a robust and healthy man, æt. 61—from whom I learned that on the previous day he had commenced feeling unwell, that he was nervous, had rheumatism, as he called it, in his left arm and shoulder, and that he had difficulty in drinking water. This difficulty in drinking he had first noticed about twelve o'clock on the preceding night; when feeling thirsty, he had attempted to take some water, and found himself frightened at its approach, and unable to drink it without considerable effort. About two hours before I saw him he had been advised by a friend to apply "wet cloths" to his painful shoulder, and on their application, he received, as he expressed it, "a tremendous chill." I requested him to drink some water—he took the glass, but on its approach, looked at it in an anxious, startled manner, sighed deeply, and as he brought it towards his lips, his breathing seemed to be one long jerking expiration, and when he drank the water, it was with a convulsive effort. I gave him some tincture of valerian from a teaspoon, which he took with comparative ease. His pulse at this time was 80, his temperature 98, his surface cold and damp. Fearing hydrophobia, but not

wishing to alarm the family, I made no inquiries suggestive of this disease. In the course of an hour, however, I ascertained from his son, that Mr. L. had been bitten by a dog, on the 10th of May last, that he had sought professional aid at the time, had the usual remedies applied, and that the wound had healed readily and perfectly. I recommended that a consultation be had, and it was agreed to send for Dr. O'Gorman of Newark, who arrived about midnight. In the meantime the patient had been visited by my friend Dr. J. J. H. Love, who had prescribed "Bibron's Antidote," a remedy which he had found effectual in curing rattlesnake bites, during his connection with the army. This remedy was given for seven or eight hours with no apparent effect. Dr. O'Gorman confirmed the diagnosis of hydrophobia, and suggested the administration of morphia in the form of Magendie's Solution by hypodermic injection. This treatment was persevered in, with the result shown in the sequel.

During the first night the solution was twice injected, the first dose being about five, and the second about ten minims. The effect was marked. In the morning he was much calmer, and was able to drink with greater ease. I should have mentioned that in the early part of the night, he had become rapidly worse. He would sit for ten or fifteen minutes, in a state of composure, during which time he would converse rationally, and manifest no other signs of indisposition than a certain wild and restless expression of the eyes. Then of a sudden he would start to his feet, walk excitedly about the room, complain of thirst, and be seized with a fit of spasmodic retching and vomiting. On one occasion I noticed that his pulse, which in the intervals of calmness was regular, suddenly ceased and lost one or two beats, just before one of his spasmodic attacks.

During the following day, till three o'clock, the morphia was given once in about two hours in doses varying from five to fifteen minims of the solution, according to the symptoms. To such an extent did the patient improve under this treatment, that, to a person unacquainted with his previous history, he would have seemed to be but slightly indisposed. Between three and seven o'clock P. M. no morphia was given. When I saw him at the latter hour, he was very much worse, all his symptoms having returned with increased severity. His pulse was now 120, and his temperature 98. The morphia was again resorted to, and its former tranquillizing effect realized. It was now noticed, however, that it was necessary to use the remedy in larger quantities in order to produce the same result as before.

At about eight o'clock P. M. of the second day, I made a microscopic examination of a specimen of the patient's blood, with negative results, except that there seemed to be considerable irregularity in the contour of the blood corpuscles. During the night he became somewhat delirious, but was easily managed. He took several glasses of milk and some ale, with comparative ease. In the morning another intermission of four hours occurred in the administration of the morphia, and its withdrawal at this time was attended, as in the former instance, with a decided change for the worse. When I saw the patient at seven o'clock in the morning, he was wandering about the fields, very delirious, and having, every ten or fifteen minutes, violent paroxysms of coughing and retching. I gave him, in the course of an hour, two large doses of morphia, but its effect in diminishing the severity of his attacks was not appreciable.

During his spasms he coughed up large quantities of frothy saliva and tenacious mucus. At about ten o'clock he commenced to fall when his spasms came on, and to struggle upon the ground—this he did more and more frequently till about noon, when he was no longer able to regain his feet. As his struggles were now fearful, and his attendants were becoming afraid of him, it was decided to administer chloroform, which was done, and the patient kept moderately under its influence until half past one o'clock P. M., when he died.

In this case, the period of incubation was slightly over ten weeks, and that of active disease about three days. There was at no time any appearance of reconvalescence in the wound. The amount of morphia given in the course of 36 hours was about 10 grains, yet there was no sign of narcotism,—the pupils were but slightly contracted, and the patient obtained no sleep during the whole course of his disease.

July 22, 1868.

REMARKS ON PULMONARY PHTHISIS AND ITS CURABILITY.

By C. BOTH, M.D.,

of Boston, Mass.

(No. 1.)

Professor Niemeyer, in his lately published treatise upon phthisis pulmonalis, lays great stress upon the fact that many pathological processes have been confounded with tuberculosis. His dissent from the general belief in the hereditary transmission of tubercles is a very important point. But he does not explain his views as to the nature and origin of tubercles. Speaking of a croupose, scrophulous, gelatinose pneumonia, he distinguishes between an acute catarrhal pneumonia with accumulation of young, indifferent and round cells in the alveoles (page 12) and a chronic catarrhal pneumonia which may originate in perfectly healthy lungs, and which may either be the inception or the consequence of pathological changes leading to tuberculosis, (page 17). The word pneumonia is here used in its broadest sense. The question arises, what is to be understood by pneumonia under the circumstances? It is not said where and how the young, indifferent, round cells are to be formed? It is very difficult to comprehend how pneumonia can begin as a chronic condition in healthy lungs. The statement that a bronchial catarrh can directly infect the alveoles and lung-tissue requires discussion. In a therapeutical view he declares himself powerless in the treatment of tuberculosis.

How can a primary tubercle originate in a healthy lung, the other organs not exhibiting evidence of former pathological processes, thus excluding emboli?

The information which we receive from autopsies can help us but little towards answering this question, because we observe consequences and not the origin. We can only speculate upon what may occur under given circumstances.

The contraction of the right ventricle forces the blood into the lungs until it reaches the capillaries, and prevents regurgitation. Respiration is the propelling power which moves the blood through the capillaries; and it is carried from the lungs into the left heart partly by inspiration, but mainly by the sucking power of the left auricle and ventricle. I consider it unnecessary to argue the correctness of this statement. From it we conclude *that if respiration ceases, the motion of the blood through the capillaries slackens until it entirely stops.*

In physiological textbooks it is stated that the exchange of air in the lungs is effected by the law of diffusion of gases. I deny the correctness of this statement. From experiments which I have made

with carbonic acid in water, and with different kinds of blood under pressure in lime-water, I have reason to believe that blood does not contain any absolutely free carbonic acid, as is stated in books. The experiments made by several physiologists for evolving carbonic acid from blood do not show the presence of free carbonic acid at all, only the fact that blood contains carbonic acid, or that carbon is held in such a way as to be easily converted into carbonic acid. Herrmann in his Physiology states: "The pressure of the carbonic acid in the alveoles is so high that the law of diffusion of gases hardly serves for the explanation of the disengagement of carbonic acid. There must be other than simply physical processes to account for the disengagement of the carbonic acid." Traube supposes the existence of substances which aid in the transformation (Uebertragungs-stoffe). The absorption of oxygen by the blood does not follow Dalton's law; the introduction of oxygen immediately disengages carbonic acid. The view that the capillaries lying in contact with the alveoles dismiss their carbonic acid, and absorb oxygen directly, loses its ground as soon as we consider that the blood-vessels touch the alveoles in one point only, that both gases would meet in this same point, passing through two membranes, offering considerable resistance, and being of different structure; and the quantity of gas and enormous rapidity with which the exchange actually takes place. It seems to me absolutely necessary *that the blood-serum which holds the carbonic acid must meet the oxygen in a third place, independent of the capillaries and alveoles.* This place can only be the meshes of the elastic tissue. I cannot see how it can be difficult to understand the ultimate process of respiration when we consider that the capillaries throughout the body are penetrable by the blood-serum (especially in the lungs, as seen by injecting them); that the walls of the alveoles are penetrable by air only under normal conditions; that the meshes of the elastic tissue are constantly extending and contracting through respiration; that oxygen has the power to disengage carbonic acid immediately from the serum; that the blood has a decided and strong affinity for oxygen; that the oxygen cannot reach the globules except through the serum, and that the serum holds the carbonic acid to be disengaged and not the globules. As the alveoles collapse, and the elastic tissue extends, the serum fills its meshes; between expiration and inspiration the whole surface of the alveoles is thus open for the oxygen to act on the serum; during inspiration by the distension of the alveoles the blood-serum is pressed back in the capillaries, and the whole blood is thus propelled forward.

The ignorance in which physiology has, so far, left us upon this point is, in my opinion, the reason that the origin and nature of tuberculosis and the definite process of pneumonia have not found their ultimate explanation.

Returning to the formation of tubercles, I repeat that the motion of the blood lessens to complete stagnation as soon as respiration entirely ceases in any part of the lungs, the blood-globules accumulating and forming a thrombus. [The sigh which we are obliged to take from time to time, especially when inactive in a stooping position, is the precaution of nature to prevent this accumulation, and is in no way necessitated by want of oxygen.] The consequence is an enlargement of the capillary vessel before this thrombus, which, owing to the pressure of the right heart and the increasing thinness of its walls, is liable to burst under certain circumstances. Thus blood-globules escape into the meshes of the tissue, where they act as foreign bodies, undergoing such changes as circumstances will permit. It is hardly necessary to state that the degenerating blood-globules would instigate degeneration also in the cells of the tissue. This process will account for the nuclei found in tubercles, as well as for the fatty cells, pus-cells, and the new cells which are nothing but blood-globules, both white and red, in different stages of degeneration. It also accounts for the peculiar fact that tubercles never exceed a certain magnitude, a phenomenon which has never been explained as yet. The observation that primary tubercles always begin in the apex and never in the bases of the lungs cannot be accounted for except by the above theory, which, answering the microscopical examination of tubercles in all complications, as well as bearing account with all pre-existing theories, has the advantage of being comprehensible and not requiring extraordinary agents necessary for explanation.

The theory of a *specific new formation* which ends with its beginning is incomprehensible.

The existence of a "materia morbi," or the inherited nucleolus, which can be hidden for twenty years, and then make its appearance as an unavoidable tubercle, may be found unnecessary.

The theory that a tubercle is the result of a certain plasma which, having been originated by a certain blood-diathesis, exudes into the alveoles, is contradicted by microscopical examination of tubercles. The theory that tubercles are the *result* of an inflammatory process does not account for the isolated miliary tubercle.

The tubercle resulting from an embolus presupposes a pre-existing primary affection.

The view of Virchow that tubercles are a new formation, originating from the connective tissue cells, analogous to other new formations, is inconsistent with the fact that they never exceed the small size in which they appear.

PROGRESSIVE LOCOMOTOR ATAXY.

By JAMES CUMMISKY, M.D.,

PHYSICIAN TO ST. MARY'S HOSPITAL, PHILADELPHIA.

J. F——D, æt. 41, widower, born in England, by trade a carpenter, late a private in the Pennsylvania volunteers; states that, about October, 1862, he was attacked with dysentery, which was followed immediately by typhoid fever. This lasted some four or five weeks, and was of rather a mild character. When recovering, however, he found that he was unable to walk properly; that his gait was unsteady, and the movements of his lower limbs particularly uncertain. After a time, though not improving, he was returned to his regiment, and put on light duty at headquarters. His condition at this time was attributable to weakness resulting from the fever, and as he was afraid of being considered a "shirker," he made extraordinary efforts to perform the light duties assigned him; consequently he tottered and stumbled around, and so painful did his movements become at last to his superiors, that in November, 1863, he was allowed to rest from duty altogether. In April, 1864, he was sent to Turner's Lane Hospital, Philadelphia, where he remained under treatment until September, 1864, without experiencing any improvement. Since then he has been under the care of several physicians, but without perceptible benefit. For the past year he has taken no medicine, and he does not perceive that he has suffered any aggravation of his symptoms as a consequence of this abstinence. Nux vomica, iron, iodide of potassium, and faradisation, are the principal remedies that have been employed in his treatment, the last being the only one which, he says, did him any good. He has never been addicted

to the excessive use of tobacco or spirituous drinks; nor has he, at any time, been accustomed to masturbation (which last vice the ancients considered as the cause of this disease).

The principal points exhibited by this case are the following:—

The gait is tottering, and the movements of the upper as well as the lower limbs uncertain and trembling; in walking he feels as if he were treading on some soft yielding substance like wool or hair, and is obliged to carry the head forward and the eyes looking downward, otherwise he would be certain to fall. If he attempts to move forward while looking upward, he immediately loses his balance and runs great danger of falling backwards. In the dark, or with his eyes closed, he finds himself unable to move about at all without the aid of the touch. Pain in the lumbar spine is complained of, but pressure there does not appear to excite particular uneasiness or pain — a prickling sensation in the skin and a general flushing at times are complained of. His upper extremities are not so much affected as the lower ones, and are less so than in the beginning; formerly he states that he had some difficulty in carrying food to the mouth, or in executing any of the movements of the hand and arm, now, however, though the limb trembles, and the motions are made slowly, still he can execute these tolerably well. His grasp upon large objects is strong though not steady; small objects he is unable to hold; he finds great difficulty in buttoning his clothes, and where the buttons are small he fails completely in accomplishing it. All virile power is entirely lost, and has been for the last two years, no erection being experienced during that time. He is very emotional, and at times very despondent, and during these fits of despondency he is strongly impelled to commit suicide. His vision is not impaired, but his memory is somewhat weakened. In the beginning he suffered much from incontinence of urine, but now is able to retain it pretty well. His bowels are regular and appetite is pretty good. His mother died of paralysis; his father is still living.

I would add, that though he states that he has lost flesh since he was attacked, his limbs and body do not appear emaciated or thinner than might be expected.

This case came first under my notice about two years ago, and since then I have had occasion to examine him several times for the Pension Office (he being on the Invalid Pension Roll of this city). It being the first case of the kind that I had ever seen, my attention was directed to it very particularly, and I have watched its progress with a great deal of interest. During the time that it has been under my notice I do not think that any change has been observable.

Romberg,* in his beautiful work on the Nervous System, gives under the name of "Tabes Dorsalis" a very clear and accurate description of this disease, the pathological condition of which he states to be an atrophy of the posterior columns and roots of the spinal cord and nerves. In his description of the post-mortem examination of one case (vol. ii., page 399) he states, "The spinal cord, compared with the fresh cord of a man of the same age, only amounted to two-thirds of its normal size; I was not a little surprised to find that the atrophy was confined to the lower part of the posterior columns and nerves. The medullary tissue of the former had almost entirely disappeared, so that they were translucent and of a greyish-yellow color. The posterior roots of the nerves were deprived of their matter, and presented a watery appearance. From the middle of the dorsal nerves upwards, the atrophy passed into a healthy condition. The anterior columns and roots of the nerves presented no abnormity."

Rokitansky* (vol. iii., page 335) passes over this disease with very slight notice, merely stating that "atrophy of the lumbar portion especially, under the name of 'Tabes Dorsalis,' has long obtained the attention of physicians, as a consequence of the decay of the generative powers and of spermatorrhœa. From thence the wasting gradually extends, as has been said, and becomes a total atrophy."

Duchenne, Trousseau, Wunderlich, Friedreich, Brown-Séquard, and others, have more recently and learnedly written upon this disease, and to those who would wish to make themselves *au fait* in the various views advanced by these eminent gentlemen, I would refer them to the originals. I merely offer the history of this case as one that might be interesting to your readers, and as a contribution to the history of a class of cases comparatively rare in this country. In conclusion I would direct attention to the apparent cause of the disease in this case, viz., typhoid fever, which I have not seen thus far mentioned as one of its causes. I have seen paralysis, insanity, spasms, long-continued functional disease of the heart, &c., the results of typhoid fever, and in this case we see another of the terrible sequelæ of this dreaded disease.

* A Manual of the Nervous Diseases of Man. By M. H. Romberg, M.D. Two vols. Sydenham Society. 1853.

* A Manual of Path. Anat. By C. Rokitansky, M.D. Four vols. Philadelphia.

Garibaldi has written a letter severely commenting upon the treatment of his wounded followers in Rome. The correspondent of the *Standard*, however, states that out of 175 prisoners taken at Mentana and Monte Tarioli about 50 have died in the hospitals of Sant' Onofrio and Sant' Agata, and that this proportion is almost identical with that in the case of the Zouaves engaged in the same combats as the Garibaldians; moreover, that every care has been bestowed upon the wounded in the hospitals at Rome. Amputations have in most cases not been followed by good results, but this is accounted for by the climate and unhealthy season.—*Lancet.*

Surgeons of Sick Assurance Societies.—It is announced that 165 medical practitioners in Birmingham—all, save 12—have signed a declaration affirming the principle that five shillings per member shall be the minimum payment received by surgeons of sick assurance societies. The fee has hitherto been only two shillings and sixpence.

Ovarian Tumors Cured without an Operation.—Dr. D. L. Miller, of Chicago, Ill. (*Am. Journal Med. Sciences*), in a report on Obstetrics, before the Illinois State Medical Society, mentions three cases of ovarian tumor with recovery without an operation. Under a treatment of laxatives and tonics, with, alternately, the iodide and bromide of potassium, chlorate of potassa, bitter tinctures, nutritious diet, and counter-irritants over seat of tumor, the tumor disappeared.

In the first case the tumor disappeared at the end of ten months. In the third case, the female was 36 years old, the mother of two children. Tumor first detected after an attack of peritonitis; at the end of three years and four months had reached the size of the fœtal head. After a long treatment by laxatives, tonics, and nutritious diet, with counter-irritation over tumor, and as alteratives, iodide and bromide of potassium, the growth of the tumor ceased. In May, 1867, the patient was delivered of twins. June 2, 1867, a careful examination failed to detect any enlargement of either ovary. Prof. M. queries whether the diminution in the size of the tumor was due to the continuous pressure exercised for so many months by the enlarging uterus.

Progress of Medical Science.

Excessive Lactation and Treatment. — Professor Grailly Hewitt, of London, speaks very truly, when he states that the process of lactation constitutes a great drain on the system of the mother. This long-continued supply of nourishment to the infant is productive of very injurious effects on the body and mind, when the mother is without a good constitution and health.

The presence of an aching pain of the back is one of the most constant symptoms; pain is also felt across the shoulders and on the top of the head and forehead. Sleep is a marked symptom; the patient will often be awakened by frightful dreams.

The Treatment.—The first indication is to wean the infant. The mother can pretty safely, for the child, wean it at the age of six weeks or two months.

To procure sleep is the next important indication. One or two grains of opium may be given at bed-time. Opium is relied upon when *puerperal mania* actually comes.

The diet should be of the most nourishing and easily-digested variety; eggs, milk and beef tea, and meat two or three times a day, if it can be borne. Large quantities of stimulants are often required.

He concludes that in all cases, whether there be mental alienation or not, tonics—iron, quinine, or bark—are indicated.

The Diagnosis of a Malignant Tumor by Microscopical Examination. — Professor Waldeyer, of Breslau (*Lancet*, May 2, 1868), remarks, that the diagnosis of the malignity or innocency of a tumor from a microscopical examination must be abandoned; as the malignity of a tumor does not depend alone on its anatomical structure, but upon other conditions—like locality, and the general condition of the patient. A particular form of tumor will remain perfectly innocent in one case; in another, evidence of intense malignity will be seen in a tumor of the same anatomical elements.

Avoidance of Amputation in Certain Cases of Severe Injury.—Jonathan Hutchinson, F.R.C.S., Surgeon to the London Hospital (*Medical Press and Circular*), speaks as follows on amputations:—Of late years exceedingly few amputations for injuries have been performed by me. The difference in risk to life between a primary amputation and a severe compound fracture seems to be very little. Nor have secondary amputations been favorable when resorted to in patients who were doing badly. You may infer that the patient will ordinarily succumb if the shock of an amputation be added, provided he is bearing the compound fracture badly. In asking medical men to avoid as a general thing the performance of secondary amputation, cases of traumatic gangrene are not included. In summarizing the principal points obtained from experience, he concludes:—1st. As a means of saving the patient from irritation and exhaustion, he thinks less highly of amputation. A compound fracture is very dangerous, but not more than a primary amputation. 2d. In secondary amputations, estimate the local conditions and almost disregard the constitutional ones. 3d. As to the time for secondary amputations—wait until the inflammatory fever has subsided, also until suppuration is established. You may amputate with safety when the wound is granulating, and the patient eats well.

Fermentation and Source of Muscular Power.—Professor Von Liebig recently delivered an address to the mathematico-physical class of the Munich Royal Academy of Sciences, on fermentation and on the source of muscular power; and in this connection showed that Pasteur's most famous discovery, which seemed to most strikingly disprove Liebig's former theory of fermentation, that is, the multiplication and propagation of the yeast-plant which Pasteur claimed to have produced in a mixture of tartrate of ammonia, sugar, and the ashes of yeast, was based upon a gross error. Liebig explained that, according to his analysis, the chief ingredient of yeast was a substance which, like the casein of milk, contained nearly one per cent. of sulphur, and which, in a state of putrefaction, made itself known also to those who are no chemists by its fetid odor. But as the materials used by Pasteur for the purpose of making the yeast-plant grow, contained no sulphur, his statement as to the multiplication of this plant under the conditions mentioned by him, was simply an impossibility. The proofs adduced by Pasteur with reference to the disappearance of the ammonia and its consumption for the support of the fungus are called frivolous observations by Liebig. Pasteur has overlooked the fact, that with the yeast-ashes he added soluble and insoluble phosphates to his mixture, which with the calcined magnesia added for the purpose of driving off the ammonia necessarily caused the formation of the well-known phosphate of ammonia and magnesia; and that in this view the means which he employed to determine the quantity of ammonia made this substance indeterminable. The missing ammonia was not, therefore, consumed by the growth of the fungus, but had simply entered into a chemical combination, the formation of which Pasteur has overlooked. In reference to the labors of Fick, Wislicenus, and Frankland, which are by many considered as proofs against Liebig's theory of muscle-labor, Liebig observed that this depended upon an imperfect conception of the nature of the organic processes under consideration. The working capacity of a muscle in the living body can as little be calculated by the combustion of a piece of dried muscle, as the above-named investigators wish to do, as the soaring for hours of a bee, or the labor which it performed in propelling its weight of body for miles, can be determined by the combustion of a dried bee. The muscle in the living body behaves like the apparatus in a watch, which gradually gives out the force accumulated in it: a freshly prepared frog's leg presents such an apparatus, with a check, that of a frog's heart, one without the check; the latter continues to labor for hours, just as in the living body; the former moves as soon as an irritation removes the check, and by hanging small weights to the leg, labor could be performed with it, *i.e.*, the weight could alternately be lifted to a certain height, without blood or the supply of any nutriment.—*Allgemeine Med. Central Zeitung.*

The Pathology of Shock.—Mr. LeGros Clark, in his lectures on surgical diagnosis as reported in the *Lancet*, said:

The great characteristic of shock was the vital depression produced by some exciting cause, acting primarily on the nervous centres and heart, and secondarily on the organs of respiration, secretion, &c. It might be produced by physical causes, when it was often most intensely marked, by mental emotion and by blood-poisoning. The predisposing causes by which the effects of shock are increased were mental peculiarities, the nervous temperament, and structural disease of some viscus interfering with the elimination of the products of organic combustion, and the consequent blood-poisoning which takes place. At different ages the effects of shock were differently manifested. In early life the impressibility was greatest, and reaction

least; old age offered the reverse conditions; while middle life presented the time when the effects of shock and phenomena of reaction are best marked. The shock produced by railway accidents was often severe, especially in its remote effects.

The lecturer then detailed at considerable length some observations he had made on the temperature in shock. His results agreed in the main with those of Mr. Jordan, of Birmingham. The temperature generally fell one or two degrees, and subsequently rose during reaction to between 100 and 103, and then in favorable cases gradually declined. The lowest in which recovery took place was 91·2, in a case of cut-throat; the highest 105, after compound fracture. The lowest temperature in fatal cases was 89·6; the highest was 106.

Reaction was the rebound of the organism after the depression of shock. It might be so great as to be fatal, but this was rare; in ordinary cases excess was more promising than deficiency. The question of operating during shock was very important; the lecturer believed that operations might be undertaken safely during shock if they did not involve loss of blood. During reaction they were borne badly, except in those cases in which the apparent shock was out of proportion to the cause, and then it was better to wait till the shock had passed off.

The cause of death from shock was then discussed. Mr. Clark believed that it depended—in such a case, for instance, as a blow on the epigastrium—upon the impulse on the branches of the pneumogastric producing paralysis of the brain, and consequently of the sympathetic, resulting in arrest of the heart's action.

A Case of Compound Fracture of the Cranium, followed by Aphasia.—Carl H. Smith, M.D., of Kenton, Ohio (*Boston Med. & Surg. Journal*), mentions a case of *compound fracture of the cranium, followed by aphasia*, which came under his own immediate care. A male, aged 34, was admitted to Dennison (U. S. A.) General Hospital, in August, 1864, on account of an injury from a railroad accident. When brought in, he was unconscious, and was at once operated on. During the operation of removing fractured bones, one and one-fourth ounces of brain were lost.

For six weeks, he remained in a semi-conscious condition, being fed by the mouth and rectum. At the end of two months he began to look about himself, but the use of his speech was lost. His intellect was in perfect order, but memory was disordered in its relation to language. For three months he remained in this condition, when he began to learn word after word with assistance, just as if he had never seen a letter. He was able to converse a little in about eight months, but would halt in quest of words. He was not attacked with paralysis during convalescence.

Cutting of the Leech, has lately been introduced in Germany, so that the blood will flow out of his body as fast as he sucks it from the patient. In this way, an ounce, or even two ounces, may be drawn by a single leech. The spring lancet is preferred, though a thumb lancet will answer. The left side is preferred for the incision, and at the time when the leech has nearly filled himself, and just before he is ready to stop sucking. The application of a warm sponge keeps away the coagulated blood from the wound. The same leech may be repeatedly applied, and incised at intervals of days or weeks, if carefully kept in clean water.—*Pacific Med. and Surg. Journal.*

Rosin Weed (Silphium Laciniatum) a Reported Specific in Asthma.—Dr. Garrison has received the information from several reliable persons, that the rosin-weed cures obstinate cases of asthma. The rosin-weed, *silphium laciniatum*, known also as the "polar plant," or "compass plant," is a member of the large order *Compositæ*, and is found on the high rolling western prairies. The stem is from three to ten feet high, and rough, with white hairs. The leaves are one-half to two feet in length. Four to eight large heads, with yellow rays, are borne on the stalk, and it flowers in July and September. The plant has a bitterish taste, but pleasant aroma. The best form for administration is the fluid alcoholic extract, twenty to forty drops being the dose.

Hemorrhoids.—The following local application is valued highly by Dr. A. E. Hull, of New York, in this affection.

℞ Manna, ʒ iij. Dissolve in boiling water, q. s., so that it will be about the consistence of thick cream upon cooling; add sulphur, ʒ iss, to this, previously triturated in a mortar with mercury, q. s., to give the sulphur the color of gunpowder. The manna should be mixed with the sulphur; add rhei pulvis, q. s., to make mass, and divide into balls about the size of rifle bullets. Set away to harden, after being rolled in rhei pulvis. One of the balls, dipped in olive oil, may be introduced up the rectum every night, or every other night, as the case may be.—*The Drug. Cir. & Chem. Gazette.*

Instantaneous Hair-Dye.—

℞ Argenti nitr	parts	5
Plumbi acet	"	1
Aquæ distil	"	100
Aq. Colonensis	"	1

—*The Drug. Cir. & Chem. Gazette.*

On Snake Poisons.—Mr. Frank Buckland (*Lancet*), after repeated investigations of the poison emitted from all kinds of snakes, is prepared to say, that the poison—particularly the cobra poison—acts upon the system of the person bitten, by *curdling* the blood, which is arrested in the heart. He therefore counsels the free use of stimulants; but is not prepared to say what the antidote may be. He thinks that it may be reasoned out pretty correctly.

Ingrowing Toe-Nail.—S. B. Kelly, Franklin, N. H. (*Boston Med. & Surg. Journal*), practises the following method for this affection. The growth at the side of the nail is burned down with caustic potash; then the caustic is applied to the portion of the nail you wish to remove, being careful not to injure the matrix. The section of the nail can be wiped off in a few days, it having been dissolved by the caustic, leaving the surface smooth and healthy for the nail to grow over. The operation is attended with very little pain.

Severity of the Later Cases of Typhoid Fever.—Dr. Hudson, in his lecture on Fever, now being published in the *Med. News & Library*, states that while the epidemic typhus generally becomes less fatal, the contrary is rather the tendency of the endemic typhoid of summer and autumn, which gradually augments in severity, the poison becoming more intense, as decomposition advances, until a change in its character follows upon a change of season.

Rupture of Spinal Cord from Concussion.—At the meeting of the Medical Society of London, of March 30, Mr. Henry Lee exhibited a specimen of rupture of the spinal cord from concussion, the seat of lesion having been accurately diagnosed before death. Death occurred from apnœa; and the interesting point was that on opening the vertebral column at the point which was supposed to have been injured, no lesion

could be seen: but on making a longitudinal section of the cord the rupture was perfectly apparent.

In many cases similar to this it has been reported that no lesion of the spinal cord existed; and Mr. Lee attributes this to the fact that the interior of the cord was not examined.—*Med. Press and Cir.*

Syphilis Communicated to a Wet-nurse.—Dr. Henry Lee, of London, in the *Lancet* of June 13, records a case in which there is no doubt that secondary syphilis was communicated to a wet-nurse by a babe. The report says:

Some spots appeared on the child's mouth when a fortnight old; and it subsequently had eruptions in other parts of the body.

I saw the wet-nurse five months after she had commenced nursing the child. There was a circumscribed, oval, elevated, discolored patch, covered with thick epithelial scales, an inch below and to the outer side of the left nipple. This was of much firmer consistence than the surrounding parts, but wanted the characteristic induration of primary syphilitic sores on other portions of the skin. A gland in the axilla was considerably enlarged, very hard, and accurately circumscribed. The remains of a well-marked, copper-colored eruption were distinctly visible on different parts of the skin, especially upon the arms. The spot on her breast had commenced, she said, soon after taking the child to nurse. Her own child, which was quite healthy, she had not nursed. She had never suffered from any enlargement of the glands in the groin, nor from any local symptom. Her husband, whom I saw, appeared a perfectly healthy man.

Iodized Syrup of Horseradish.—We have already spoken, in a former issue, of the *iodized syrup of horseradish* (to be obtained in its purity only at the manufactory of Messrs. Grimault & Cie., Paris); and from recent and reliable medical reports on this subject we glean the following facts: In France, Holland, and Belgium, the iodized syrup of horseradish has thoroughly established itself as an agent in the treatment of diseases of children, and has almost entirely superseded the use of cod-liver oil. While there are cases indicating the value of the fatty constituents of cod-liver oil, there are many more in which its other components are desirable while the fatty material is contra-indicated; while at all times the offensive odor persisting more or less in every preparation of the article renders its use amongst children difficult. The iodized syrup of horseradish of Grimault contains all the constituents of the ol. morrhuæ excepting the rancid oil, which is admirably replaced by the vegetable oils found therein. The reports now before us are for the most part of swellings of the lymphatic glands in children, the true scrofula, in which horseradish syrup seems to exert a special healing power. Legard reports the following interesting case: The patient, a boy eleven years old, had suffered in his earliest infancy from scrofulous inflammations of the eyes and swelling of the Meibomian glands. He was suspected of specific infection, through his nurse, and at one time treated with mercurials. Until his fifth year he suffered repeatedly from affections of the glands in the neck and groins, was poorly nourished, and backward in his growth. From the age of five to ten the child did well. At this time he was attacked with variola, recovering from which his former condition recurred. Newly degenerated glands pushed forth with great exuberance from the cicatrices of the former tumors. Scarcely had one disappeared by suppuration, than another of the size of a hen's egg would replace it. The child rapidly emaciated, while iodine, iod. of potassium, cod-liver oil, quinine, and iron were tried in vain, and even removal to the country effected no change. Legard now administered the iodized horseradish syrup, commencing with six teaspoonfuls daily, and increasing this to eight tablespoonfuls. After four weeks of this treatment, no other medication being employed, the child's appetite improved, the normal secretions were increased, marked diuresis occurred, the strength and general appearance of the patient were so improved as to excite the wonder of all observers. Under a continuation of this treatment the swelling of the glands entirely disappeared, and the skin of the old cicatrices became soft and pliable. Legard now resolved to remove these unsightly scars with the knife, and under the continued use of the syrup the wounds healed by first intention, showing, six months afterward, a scarcely perceptible line of union.

To-day, sixteen months after the first administration of the iod. horseradish syrup, the boy is in blooming health, having had no recurrence of his trouble. Another equally interesting case is that of a child three years old, the daughter of a banker, suffering in the same manner. All the usual anti-scrofulous and anti-scorbutic treatment having failed, the iodized syrup of horseradish was employed as above, in proportionately smaller doses, and a cure was effected at the end of three months. We rejoice to see this valuable preparation also making its way, to a considerable extent, in Austria, and prophesy for it an equal, though, of course, not universal success.—[*All. Wiener Med. Zeitung.*]

Translucency of the Human Body.—At a recent meeting of the Medical Society of London, the President explained the mode in which he had succeeded in rendering certain parts of the body translucent by means of the magnesium light; and exhibited a lamp which he had constructed for the purpose. He stated, and his remarks were confirmed by others, that the bones of the hand could be distinctly seen when the light of the lamp was powerfully reflected upon the hand, and the latter was viewed from the side opposite the lamp. The President believed that in course of time the lamp might be so altered as to become a valuable aid to diagnosis in tumors of various kinds.

Treatment of Placenta Prævia.—Dr. J. C. Richardson, of London, has the following communication in the *Lancet* of June 13:—I beg to communicate a case in which Simpson's method was successful. Mrs. H., in the seventh month of her second pregnancy, had repeated attacks of uterine hæmorrhage since the 18th inst., for which rest, cold applications, etc., had been prescribed. On the evening of the 23d ult. I found the os uteri very slightly dilated, and the discharge profuse. I plugged the vagina, applied a T bandage, and gave a drachm of tincture of opium. On the 24th, at 9 A.M., the flooding was renewed as soon as the plug was removed; os uteri dilated to the size of a florin. I introduced my hand into the vagina, and, with the index-finger passed through the os uteri, I freely detached the placenta all round from the uterine surface. The bleeding ceased, the os uteri gradually dilated, and at 11 A.M., finding the shoulder presenting, I brought one foot into the vagina, and gave a drachm of ergot infused. The delivery of a still-born infant was completed in half an hour.

Action of Theine.—Dr. Leven (*Archives de Physiologie Normale et Pathologique*, May–June, 1868), starting with the acknowledged idea that tea contains the same crystallizable, nitrogenized principle as coffee and cocoa, has experimented with theine on frogs and Guinea pigs. The following are the results of his experiments:—1st. Theine and caffeine, being considered by chemists as the same alkaloid, on submitting

animals to their action, produce toxic acid of a different character. 2d. Caffeine is a more powerful toxic than theine, and if the toxic effects of the former are required, the latter must be given in double doses. 3d. Convulsive movements of the limbs are produced by the administration of theine, which has not been noticed from the action of caffeine. 4th. The physiological effects of theine and caffeine in other respects are the same. The heart and respiratory movements are excited by both alkaloids, and the arterial tension is increased. The central nervous system, brain, and spinal marrow are stimulated by exciting the circulation; but the functions of the spinal cord and nerves are not arrested by them. The stimulation of the spinal cord by the action of these alkaloids, causes tetanic convulsions. The functions of muscle are not abolished by them; immediately after death the heart does not cease to beat.

Substitute for Coffee.—The seeds of grapes are often used in Germany in the place of the coffee berry. A quantity of oil is yielded, by pressure, and afterward, when boiled, they furnish an economical and a very delicious substitute for the real Mocha.

Nasturtium Officinale.—Surgeon John Wyatt (*British Med. Journal*) says that this vegetable alterative, in the treatment of cachectic diseases, has not been sufficiently noticed by medical men. A very efficient preparation has been made by Messrs. Savory and Barker, of London, called, "liquor nasturtii." No officinal preparation of the plant is found in the *British Pharmacopœia;* but a preparation called the "succus antiscorbuticus" was found in the *Pharmacopœia* of 1788; the "succus" and the "syrupus antiscorbuticus" —two good preparations—are in the Parisian *Codex*. Water-cress, scurvy-grass, and buck-bean are the chief ingredients of these articles. The "liquor nasturtii" is a valuable prophylactic for that numerous class of cases of cachectic blood-diseases, which are so often seen among the poor and dirty classes in crowded cities, and the deficiency of vegetable elements in their food has the effect of producing a morbid deterioration of the blood.

Preserving Polished Steel from Rust.—Pure paraffine is the best of anything for preserving the polished surface of iron and steel from oxidation.

The paraffine should be warmed, rubbed on, and then wiped off with a woollen rag. The color is not changed by its use, whether bright or blue, and the surface is better protected by it than by any varnish.—*The Druggist's Circular and Chemical Gazette.*

Catarrhal Icterus.—M. Wyss, knowing that Virchow states that catarrhal icterus, and icterus accompanying poisoning by phosphorus, are produced by a catarrh of the intestinal portion of the bile-duct, determined by experiments whether the sudden dilatation and intense coloring of this duct furnish sufficient proof of this theory of the celebrated Berlin Professor, and the following are the results of his investigations:—

He finds that the coloring of the bile-duct and hepatic duct was wanting many times. The presence of these lesions has not been found by him after a careful study of many cases of poisoning by phosphorus; and the mucous plug mentioned by Virchow, as obstructing the terminal portion of the common bile-duct, has not been seen.

In order to find out whether the walls were colored with bile, and the intestine was deficient in bilious fluid, M. Wyss ascertained if animals with biliary fistuke became icteric after poisoning by phosphorus. Dogs having biliary fistuke were poisoned by injecting into the rectum some phosphorized oil, and in this way the vomiting—following phosphorized injections into the stomach—was avoided. Every dog treated in this manner had icterus; biliary acids were found in the urine. The bile did not flow continuously as before the poison was given, during the icterus: some mucous matter was mixed with it; the flow ceased entirely sometimes. The following conclusions are drawn from his experiments:—1st. True catarrhal icterus is identical with the icterus seen in phosphorus poisoning. 2d. The accumulation of a thick mucus in the small canals causes the catarrhal icterus, so that biliary stasis arises, and is not due to the catarrh of the intestinal portion of the common bile-duct. 3d. When the channels leading to the hepatic duct and common bile-duct have become impermeable to bile, the latter is not found in these ducts. The bile flows more or less when all of these channels are not choked.

Finally, he states that the obstruction of the intestinal portion of the common bile-duct should not be held as the cause of catarrhal icterus, although the possibility of the obstruction of the intestinal portion of the bile-duct is admitted.

A New Anæsthetic.—Dr. Prothero Smith has made several experiments with the *tetrachloride of carbon* ($C Cl_4$) as an anæsthetic, and he finds that anæsthesia is quickly produced by its use (in some cases in the space of half a minute), and the effects pass off very quickly. In inducing quick and refreshing sleep, Dr. Smith has found it valuable.

Milk in the Breast of a Male Infant.—In a late number of the *Lancet*, Mr. Owens mentions a case of a male child, nine days old, from each of the breasts of whom he obtained half a drachm of milk.

Specific Character of Varicella.—Dr. L. Thomas gives the following reasons in support of the specific character of chicken-pox:—1st. The form of the eruption. 2d. The way development of the pock occurs. The maturation and disappearance take place more quickly than in variola. 3d. An epidemic of varicella happens more frequently than variola. 4th. The age of childhood appears to be the most suitable for its production. 5th. Vaccination does not prevent the occurrence of chicken-pox. 6th. Prodromata is generally absent; the temperature during the eruption stage is slightly increased. Fever of an intermittent type lasts two or three days, and declines rapidly, the termination being within twelve hours. From three to four days is the duration of the febrile stage. At the end of the first day, or at the commencement of the second, the eruption begins to appear. The contents of the vesicles become turbid on the second day after their appearance, and afterwards form a yellowish or brownish crust. 7th. Inoculation with the contents of the vesicles does not propagate chicken-pox. 8th. In variola, the period of incubation is uniform in duration, while in this exanthem it is variable.

Cactus Grandiflora—Night-Blooming Cereus.—This plant is used by Dr. Rubini in functional palpitation of the heart with success. He prefers the tincture. Take of the fresh stem and flowers of the cactus, four ounces; ninety-five per cent. alcohol, one pint; macerate for one month, and filter. Dose, one to five drops three times a day.—*Drruggists' Circ. and Chem. Gazette.*

Dry Catarrh of Children.—Dr. Stiner (*Jahrbuch. f. Kinderheilkunde*) describes an affection of the air passages in children during a catarrhal epidemic, as follows: Swelling of the respiratory mucous membrane with hyperæmia, is a prominent symptom. The lymphatic glands of the trachea are enlarged, and are of a

dark red appearance. Dyspnœa attends the disease, with recurring paroxysms of coughing. The cough is dry and whistling, with an absence of rales. Sputa is not discharged. A loud and tympanitic sound is discovered on percussion. A rough vesicular respiration, with a whistling sound, is detected on auscultation. These cases are unattended with fever. When symptoms of congestive hyperæmia come on, the disease proceeds rapidly to a fatal termination.

In the treatment of this affection Dr. S. recommends the vapor of hot water, and alkaline mineral waters are useful to excite the normal secretion of the respiratory mucous membrane. Emetics seldom do good. He employs stimulants, as benzoin, liq. ammon. anisat., tinct. ferri acetat., and external rubefacients, to subdue severe asthanatic paroxysms and difficulty of respiration.

Non-penetrating Wound of Heart; Wound of Both Lungs; Sojourn for Three Months in the Thoracic Cavity of a Metallic Spike Sixteen Centimetres Long, and two Centimetres Thick.—M. Sillaux communicated (*Gazette Hebdomadaire*) the following observation to the *Société Impériale de Chirurgie* at its meeting of 8th of April last. A man aged 55 years, afflicted with general paralysis, attempted suicide by plunging into his breast a long piece of iron. An examination of the thorax showed a wound situated five centimetres below the left nipple. At two centimetres beyond, and a lit le below this wound, there existed an energetic elevation of the skin, synchronous with the arterial pulsations; the finger applied to this point perceived the stroke of a foreign body. The left half of the thorax was emphysematous, and a large ecchymosis extended around the wound. The uneasiness of the patient precluded the practice of percussion. The sounds of the heart were regular and normal, the elevation of the skin by the piece of iron coincided with the systole of the ventricles. There was no evidence of liquid in the pericardium; nothing amiss with the abdominal organs; no sign of internal hæmorrhage. The pulse, slightly increased, was regular; and the temperature of the skin was not elevated. It seemed necessary, therefore, to conclude either the contact of the distant extremity of the foreign body with a large artery, or its penetration through the walls of the heart.

Under the impression that immediate extraction would be attended with more hazard than would result from delay, Mr. Tillaux awaited the morrow. But the instrument had worked through the tissues; an incision was made at its centre, the patient fainted, and it was deemed prudent to suspend the operation. Some days afterwards the patient announced an acute pain in the region of the eighth dorsal vertebra; the oppression was very great; there was expectoration of bloody sputum of a very red color; no signs of pneumonia. Ten days later, the painful point had settled itself at the posterior and inferior portion of the right side; no available sign could be determined by auscultation. The discomfort diminished little by little, the appetite returned, and the general condition improved.

In March 1868 (3 months after the attempt at suicide) the patient had frequent expectoration of bloody and purulent sputa. A blowing murmur could be distinguished at the base of the heart, with the first sound. Syncopes soon supervened, and the patient died on the 24th of March.

The result of the autopsy was as follows: The anterior border of the left lung was adherent to the thoracic wall and to the pericardium; the pericardium was adherent to the surface of the heart in its entire extent. The posterior wall of the left ventricle, and the inferior lobe of the right lung, were traversed from before backward, and from left to right, by an iron spike, which had not penetrated into the cavity of the ventricle, nor involved the auricles. The instrument, leaving the aorta to the left, had passed between the vertebral column and the œsophagus.

Animal Quinoidine.—Dr. Chalvet has repeated before the "Société de Biologie," of Paris, some experiments on efflorescence which appear to modify the conclusions of Dr. Bence Jones, concerning this animal quinoidine. It is known that Dr. Bence Jones, when making, in 1866, some researches as to the time required by certain substances to disappear from the tissues, was much embarrassed in determining the question with regard to the sulphate of quinia. To prove the presence of this salt in the tissues, Drs. Bence Jones and Dupré conceived the ingenious idea of examining acidulated solutions of the various tissues by means of the fluorescence produced by the electric light. To the surprise of these experimenters, they discovered the same fluorescence in animal tissues that had not been injected with salts of quinine, as in those substances which had been so treated; and they finally concluded that there exists in the animal economy, a substance capable of producing the same fluorescence as sulphate of quinia. Dr. Bence Jones supposed this new alkaloid to be an albuminoid derivative, which he placed between caseine and indigotine, and he expressed the opinion that this quinoidine plays an important part in the phenomena of nutrition, acting as a conservative agent and retarding organic combustion.

Dr. Chalvet has confirmed the facts announced by Dr. Bence Jones, and demonstrated by his experiments that there exists in the tissues a substance capable of producing a fluorescence precisely similar to the phenomena of refrangibility produced by sulphate of quinia. He has also found that this fluorescence often disappears in acute febrile affections; but he does not accept the interpretation of Dr. Bence Jones, as to the origin of this supposed quinoidine. He has demonstrated, in fact, that this fluorescent substance exists in the majority of aliments, especially in wine and in vegetables. From these researches he concludes that the supposed quinoidine is not an albuminoid derivative; but that it is introduced into the organism with the *ingesta*, and that it mingles with our fluids and our tissues just the same as iron does, but is not formed in our organs any more than iron is.

This substance having the property of being rapidly eliminated by the secretions, we can understand how low diet somewhat prolonged may cause the fluorescence of the urine to disappear, and thus explain the supposed destruction of the quinoidine by the fever.

Dr. Chalvet is inclined to class this substance with quinine itself, which being thus produced in infinitesimal quantities in almost all vegetables, would afford an easy explanation of its presence in the tissues and fluids of all animals. This does not prove but that this substance, though existing in an extremely minute quantity, may not play an important part in the phenomena of life; for we know very well, that the mere presence of some atoms of a substance may develop, by catalysis, forces relatively of great power."—*Gazette Hebdomadaire.*

Treatment of Pyæmia.—William S. Savory, F.R.S. (St. Bartholomew's Hosp. Reports), advocates the use of quinia, with free stimulation and careful nourishment, in cases of Pyæmia. He also states that "Pyæmia not only often occurs, as is well known, without the previous existence of any wound, but sometimes, so far as the most careful and complete examination can show, without any previous suppuration or any of the local mischief whatever." The rigors, or shivering, attendant on pyæmia, he believes are the sign of the operation of a poison in the blood.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, September 1, 1868.

THE "GETTYSBURG KATALYSINE WATER."

IN our last number, we made some general remarks in regard to mineral waters, and alluded to the *Missisquoi* and *Gettysburg* Springs, which have recently attracted considerable attention. We made it sufficiently clear, we trust, that we must distinguish between our own notions as to the action on the body of the known chemical ingredients, and the actual and visible effects which these waters produce. We stated that, in many of them, chemical analysis cannot detect the active principle; yet, that they do produce a visible effect on the body. The Gettysburg water, for example, contains small quantities of the bicarbonates of *soda*, *lithia*, *potash*, *magnesia*, *iron*, and *lime*, with traces of the *sulphates*, *chlorides*, and *phosphates* of the same; and yet, in such minute quantities are they all, as to impart no sensible qualities, and yet there seems sufficient and reliable evidence to show that they do produce the most important curative effects. From observations we have made in several cases where they have been taken we have no hesitation in saying that they act as a powerful alterative, restoring healthy actions, and removing disordered ones, without any other effect very obvious to the senses; the improved health being the only visible change. It is true we know but little in regard to the action of alteratives; in large doses, we see them produce sensible excretions and secretions, as when we give minerals, antimonials, iodide of potash, etc., etc.; and we infer that in smaller quantities they produce the same kind of effects, only in a less degree; but, nevertheless, curing disease on the same principle. However this may be, we are too ignorant of the *modus operandi* of the commonest medicines we daily prescribe, to have any good grounds for disbelieving, from analogical reasoning, the peculiar curative influence of these waters. Indeed, analogy is altogether in favor of the principle we have laid down; for if, as we know, when absorbed in large quantities they sensibly act on all the secretory and excretory organs, when taken up in smaller they must more gently influence the same organs—in other words, excite physiological actions, similar, if not identical with those of health. We might, indeed, class all mineral waters as *evacuants*, *alteratives*, and *tonics*. The Saratoga Congress water may well serve as an example of the first, the Gettysburg of the second, and any of our Chalybeate Springs of the third. It is worthy of notice that nature has in many instances so combined evacuants and tonics, or alteratives and tonics, in her laboratory, that whilst they increase the secretory and excretory actions, there is no diminution, but an actual increase of power. Thus the small quantity of *iron* contained in the Gettysburg water, so far from interfering with its catalytic action on morbid tissues and deposits, would seem to increase it. We have been incredulous in regard to this water having any such power, as represented by Drs. John Bell, S. E. Hall, and other medical writers, of dissolving the *urates*, or *chalk formations* in the body, or on limbs and joints; a power unknown to any other mineral water in the United States, so far as we are informed. But when we consider that these waters contain a notable quantity of *carbonate of lithia*, which has a strong affinity for uric acid, together with its small combining proportion, and the great solubility of *urates of lithia*, we are compelled to admit that such a result is not only possible, but highly probable. We know that the carbonate of lithia, as Ganod has proved by his experiments, renders the urine more alkaline than the corresponding salts of soda and potash, as first theoretically suggested by Mr. Ure in 1843, and proved by him in his experiments with it in dissolving urinary calculi. This chemist actually found that one grain of lithia, dissolved in one ounce of distilled water, took up at 98° F., two and three-fourth grains of uric acid; and that a solution of four grains in one fluid ounce of water, at the same temperature, lessened the weight of a calculus, composed of uric acid with alternate layers of *oxalate of lime*, five grains in five hours. Mr. Ure remarks that if, by means of injections, we can reduce a stone at the rate of a grain an hour, as the above experiment would lead us to anticipate, we shall not merely diminish its positive bulk, but, further, loosen its cohesion, disintegrate it, so to speak, causing it to crumble down and be washed away in the stream of the urine. The solvent powers of lithia are also highly extolled by Binswanger and other high German authorities. Indeed the value of the salts of Lithia in cases of *uric acid diathesis* connected with *gravel*, and in cases of *chronic gout*, are now admitted by all practitioners who have used them to any extent, as held by the best recent writers on this class of diseases. The Lithia Springs of *Baden Baden* have recently come into great repute in the cure of this class of diseases, and their curative powers are explained by Dr. Althaus (*Med. Times and Gazette*, Nov. 23, 1861) on the principles above mentioned. Prof. Roscoe has recently discovered lithia in the Bath thermal waters of England, which have long been celebrated for the cure of gout.

We see, then, there is nothing unreasonable in the assertion that the waters of the Gettysburg alkaline springs have the power of dissolving and removing nodosities of the joints, whether produced by chalky depositions, or thickening of the fibrous tissues; as is borne out by the statements of numerous patients, as well as eminent medical authorities.

In regard to the other affections in which these waters are claimed to act very beneficially, as those of the digestive and pulmonary mucous surfaces, we see no good reason to doubt the positive statements that have been made, as they are not only supported by careful observation, but also by theoretical considerations. From experiments made on our own person as well as others, we can state that the Gettysburg water is a regulator of all the secretions and excretions; under its influence, the kidneys and liver, the glands of the intestinal canal and the skin, all perform their normal functions; the bowels, if constipated, become regular; the skin, if dry, becomes moist; the torpid liver is excited to healthy action, and the kidneys perform their functions with perfect regularity. There is a total absence of any disagreeable sensations whatever; the *vis medicatrix* seems roused to increased activity, and all morbid causes of bodily or even mental disorder seem rapidly to pass away. The result is, increased appetite and digestion, a freer circulation, a stronger pulse, a calmer mind, a more tranquil sleep, a clearer complexion, and an increasing nervous and muscular power. It is an aphorism of Hippocrates, that medicines, when given with judgment, produce relief instead of discomfort. It is literally so with mineral waters, when given with proper discrimination, and in suitable doses, in proper cases. These remarks will apply not only to the mineral waters of Vichy, Kissengen, Carlsbad, Baden, Marienbad, etc., but also to those of Saratoga and Gettysburg. We have sufficiently indicated the manner in which such effects are brought about.

There is one very remarkable effect produced by the Gettysburg waters, which we have experienced ourselves, as well as noticed in others, and that is, a feeling of dizziness or intoxication, but without any exaltation or apparently stimulating influence. At first we were inclined to attribute the feeling to some other cause; but as we had drunk nothing stronger than water for a month, and found the same feeling whenever we took half a pint four times a day of the Gettysburg, we came to the conclusion it must be the mineral water. Since then we have noticed the same effects in other individuals. Such effects are often experienced for a week or longer, when they gradually disappear. They prove, not only that the water has power, but that its properties are somewhat peculiar. To produce the effect above mentioned, we have found it necessary to take about three gills per day, between meals, and gradually increased. Where gouty or rheumatic persons are taking the water to this extent, we find an extraordinary quantity of uric acid secreted or deposited from the urine; the sweat no longer contains this principle in excess, as it generally does in gouty subjects; and, with proper attention to regimen and diet, the health rapidly improves; distorted limbs become straightened, and enlarged joints gradually reduced to their natural size. The cases of *albuminuria and irritable bladder* which are reported by Dr. Bell as having been essentially benefited by these waters, render a trial of them in these affections advisable, especially where other remedies have failed; and the same remark will apply to cases of asthma, chronic bronchitis, and chronic hepatic affections. It is, moreover, worthy of remark that these waters possess the rare advantage of being transportable to any distance, at all seasons, without undergoing any change in their chemical composition or curative powers, provided that ordinary care be taken to keep the vessels containing them properly corked; and, as Dr. Bell remarks, in favor of the home use of this mineral water, is the ability to pursue a suitable regimen, and get more tranquil sleep, and keep more regular hours, than are attainable at the Springs and other places of summer resort.

We have noticed a sensible communication in the *Boston Medical and Surgical Journal*, of August 6th, by W. H. Campbell, M.D., styled "The Abuse of Charity Medicine," which shows up some of the defects in our free hospital and dispensary system.

It is stated by him that many persons are treated free of charge in the dispensaries, eye infirmaries, and hospitals in and around Boston, who are abundantly able to pay. Two cases came under his own observation, where men worth $50,000 in real estate, received valuable medical aid as out-patients—and one of them, for a time, an inmate of the Boston City Hospital. Dr. C. suggests that some system be adopted by the officers of such institutions so that the *real poor* may be aided cheerfully, and at the same time persons who are able to pay *something* and *especially* the *rich*, may be prevented from obtaining medical treatment and medicine gratis, which should go into the pockets of the druggist and physician.

This is a crying evil in our own city, and one which should be remedied at no distant day. Such cases have come under our observation repeatedly, and it is time that the middling classes and the rich of the country and city, who are able to remunerate medical services should be cut off from these privileges. Already, in London, the prominent medical journals have mentioned it. The general impression both in this country and in Europe is, that medical men are giving their valuable services to too many who are able to pay.

Acupressure and Torsion.—A committee has been appointed by the Council of the Clinical Society of London, to investigate the value of acupressure and torsion as a means of arresting hæmorrhage.

Reviews and Notices of Books.

RESEARCHES IN OBSTETRICS. By J. MATTHEWS DUNCAN, A.M., M.D., L.R.C.S.E.; Lecturer on Midwifery in Surgeons' Hall Medical School; Physician for, and Clinical Lecturer on, Diseases of Women in the Royal Infirmary; Fellow and Member of the Royal College of Physicians, etc., etc. New York: William Wood & Co., 61 Walker street. 1868. 8vo., pp. 451.

THE volume before us is composed mostly of short original essays, contributed at different times by the author to various scientific and medical periodicals throughout Great Britain. The articles which form the basis of the work are principally founded upon experimental investigations in the dynamics of obstetrical science, and are made curiously interesting by the peculiarly novel manner in which they are carried on. With the exception of one or two reviews of other writers' ideas in regard to the operation of certain physical forces, the book is filled with thoughts that are thoroughly original, and supported in the main by clear and straightforward reasoning. The style is severely practical, and the manner of dealing with his subject is so strictly philosophical, that the work, as a whole, demands the careful study of the advanced expert, rather than the casual reading of the mere tyro, to appreciate its sterling worth. To the former class, although some of the arguments may not be conclusive enough to uproot preconceived doctrines, they have, at least, the singular merit of being clearly put, and conscientiously and impartially defended. In order to give our readers some conception of the ground covered by this volume, we will present the following list of topics more or less fully discussed by the author, in the five several parts into which it is divided:—First, the general states of pregnancy claim attention, and under this caption the following particular divisions of the subject are made:—The position of the uterus; the natural position of the uterus in advanced pregnancy; untenability of the theories of the position of the fœtus in utero requiring muscular movements; position of the pregnant female; and on the mode of presentation of dead children in labor.

In Part II. the pelvis is studied with a view to obstetrics; and in chapter first the sacrum is considered in reference to its office as part of the vault of the pelvis, and on its function in the development of the lateral expansion of that cavity; then follows a notice of the views of Meyer, of Zurich, on the formation of the rickety and malacosteon pelvis; next, the development of the female pelvis is entered into, containing some original, and not to say philosophical views, advanced by our author, which must commend themselves to the thoughtful consideration of all investigating minds; then follow some thoughts upon the proximate cause of the oblique ovate pelvis, and some remarks upon the importance of the pelvic articulations in parturition.

Part III. introduces, under the general heading of the physiology and pathology of the pregnant and puerperal state, the topics: menstruation in pregnancy; superfetation; site of the insertion of the ovum; internal surface of the uterus after delivery; the lochia; notes on John Hunter's theory of the development of mucous membrane of fundus uteri; the length of the cervix uteri in advanced pregnancy; the presence or absence of fetid discharge in cases of imperfect deliverance; and on the imperfect development and hypertrophy of the decidua.

Some of the topics in natural and morbid parturition are taken up in Part IV., and, as a whole, make one of the most practical portions of the work. We have in this section some thoughts concerning the power exerted in ordinary labors and difficult labors; the power of uterus to resist a bursting pressure; the influence of the obliquity or lateral flexion of the head, as well as the obliquity of the natural outlet; on the mechanism of parturition: following which are remarks upon the caput succedaneum; and the production of inverted uterus, and injuries to the bones and joints in parturition.

Part V. comprises miscellaneous articles on the retentive power of the abdomen; on some points in uterine metrology; and on some cases of vagina duplex, uterus simplex, and of saccated uterus.

The work is finely printed in large leaded type, on excellent paper, and elegantly illustrated with well executed outlined woodcuts.

So varied are the topics discussed, and so concise the diction of the writer, and so interesting are the chapters to the thoughtful student, that it would be impossible to do justice to the work in a detailed review of its contents without taking each section in turn and discussing at too a great length the several views of the author. Our readers can, however, from what has been said, form some sort of appreciation of its merits. Professedly an advanced book, written by a master in the art, it will be found particularly serviceable to such as are teachers in this branch, and others who have the disposition to investigate some of the more abstruse points connected with the subject under consideration. We have no doubt that its general introduction into the libraries of such candid and earnest investigators will tend to elevate the science of obstetrics to the dignity of a more exact one, and to stimulate the capable obstetricians to pursue those investigations which our talented and studious worker has commenced.

PROCEEDINGS OF THE STATE MEDICAL SOCIETY OF KENTUCKY, held at Louisville, April 2d and 3d, 1867, and the 13th Annual Meeting, held at Danville, April 7th and 8th, 1868. Cincinnati, 1868. 8vo., pp. 113.

THIS is by far the handsomest pamphlet of a medical kind that has ever come within our notice. It is really refreshing to turn from the coarse, cheap paper, and typographical blundering of our own "State Transactions," to the fine tinted paper and unexceptionable print of this beautiful volume; and the contents are worthy of the splendid dress in which they appear.

The most important papers contained in the volume are, 1st. President Porter's address, which is well written and well adapted to the occasion. 2d. Report of the committee appointed to memorialize the legislature for the enactment of a law to provide for the registration of all births, marriages, and deaths in the State. The law failed for want of eleven votes in the legislature, the expense being the only argument used against its passage. It will be remembered that the State of Kentucky published registration reports from 1852 to 1859, inclusive. Dr. Sutton, of Georgetown, performed the work admirably for seven years; Dr. Bemis, of Louisville, for one year. The law was repealed in the year 1861. 3d. The third paper of the Transactions is by John D. Jackson, M.D., on "The Inoculability and Transmissibility of Tuberculosis." The committee present no new facts or experiments on the subject, but give a very full and satisfactory *resumé* of what has been done by M. Villemin, Colin, Horard, and Cornil; John Simon, Andrew Clark, Lebert and Wyss, Dr. W. Budd, and other experimenters, and conclude by presenting the facts connected with the "Brompton Hospital for Consumption" in London, furnished by Dr. Cotton, the senior physician, which are in direct opposition to the theory

of the contagious character of the disease. The committee, however, seem disposed to concede that the disease may be communicated through the seminal fluid, or the milk; a theory which derives considerable support from the observations of MM. Lallemand, Vapul, Cazenave, and Mr. Porter.

4th. The Report of the Committee on Epidemics, by L. P. Yandell, M.D., is very ably written, and advocates the admitted doctrines that epidemic diseases depend on *specific poisons*, the nature of which is imperfectly comprehended, but which owe their spread and malignancy to the co-operation of local causes, as stagnant water, impure air, and organic substances in a state of decomposition.

5th. The Report on "Milk Sickness" is drawn up also by Dr. Yandell, sen. It presents nothing new on the subject. In regard to the cause of the disease, he states that "nothing positive is known" After stating the known facts on the subject, he considers in detail the various hypotheses which have been brought forward by different writers to explain the origin of this remarkable affection, and shows that none of them are tenable; that neither mineral nor vegetable poison has any agency in its production. No opinion concerning *milk sickness* is more firmly held by the public or the profession, than that this disease results from the use of articles of food derived from the cow, in the shape of milk, butter, or beef. And yet Dr. Y. maintains that this opinion is far from resting upon an impregnable basis; that many cases of milk sickness are on record, in which it is impossible to have any connection between the disease and the diet of the patient. "The cause of the disease," says Dr. Y., "is as profound a mystery as it was when the earliest physicians first began to speculate about it."

The concluding paper is an interesting letter from Dr. L. P. Yandell, jr., delegate to the International Medical Congress, which our limits will not allow us to quote in detail.

Reports of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

STATED MEETING, APRIL 6, 1868.

DR. E. R. PEASLEE, President, in the Chair.

CARDIAC MURMURS.

DR. JAMES R. LEAMING concluded the paper upon this subject begun at the last meeting. The views presented were novel; the reader, however, disclaimed originality, saying that he had only followed out and confirmed by his own observations those of the late Dr. Cammann. The paper, while seeming to us to contain one or two misapplications of physical principles, was full of valuable suggestion. Its positions challenge investigation; which, if it fail to establish all of them, may yet lead to a revision of the current doctrines. In the brief space at our command we can merely indicate the salient points.

Mechanism of the First Sound.—To appreciate the significance of cardiac murmurs, we must clearly understand the mechanism of the two normal sounds. Concerning the second sound, together with the intervals of silence before and after it, there is no controversy; but the mechanism of the first sound is still *sub judice*. Among the theories advanced to explain it, three have been prominent; first, that the sound is due to the friction of the blood against the ventricular walls and the aortic orifice; second, that it is due to the sonorous vibrations of contracting muscle; and third, that it is due to the closure and vibrations of the mitral valve. Dr. Cammann, like some others, regarded it as the result of all three of these causes combined. But does any one of them satisfy the requirements of acoustic laws? A friction-sound, if it existed, would be like that of rushing fluid in a tube of irregular calibre, and quite unlike the musical first sound of the heart. The muscular susurrus of Wollaston has but a single note of very low pitch, and could not give the higher and progressively rising pitch heard in the first sound. The mitral valve, already floated up to its position, is instantly closed at the very commencement of the ventricular systole, and its closure can produce no part of the first sound; nor, when closed and tense, can it originate sonorous vibrations of the character heard; but in this condition it becomes an admirable sounding-board to receive and reproduce such vibrations. Some other origin must be sought for the sound in question. Examining the interior of the ventricle, we find, running across its cavity, tendinous strings, attached, on the one hand, to the curtains of the mitral valve, on the other to the papillary muscles and fleshy columns. These strings, when rendered tense by the closure of the valve and the contraction of their muscular attachments, become, in connection with the tense valve itself, the very type of a musical instrument. The rushing blood throws them into vibration; and their vibrations are so reproduced and intensified by the resonant valve as to become clearly audible. The accelerated velocity of the blood-current, and the increasing tension of the string during the ventricular contraction, produce the progressive rise in pitch.

The Chest as an Acoustic Instrument.—Another prerequisite to the full understanding of cardiac murmurs, is a consideration of the acoustic properties of the chest, upon which their quality and intensity, as well as those of the normal heart-sounds and of the voice, in great measure depend. As a sounding-chamber, the chest surpasses any product of human ingenuity. Its resonant walls may be approximated or separated at will; its musculo-tendinous floor may be relaxed or made tense, may be fixed at a higher or a lower level. By these means the volume and the timbre of all sounds produced within the chest may be endlessly modified. Moreover, as the acoustic qualities of a violin are injured or destroyed by pouring water or sand into it, so those of the chest are impaired by various abnormal conditions, such as pulmonary emphysema or consolidation, pleuritic effusion, cardiac enlargement, aneurism. The knowledge of the variations thus produced becomes an important aid to diagnosis. A loud murmur suddenly weakened or lost, may be the first thing to direct attention to a rapidly-developed pneumonic solidification, or to a pleuritic or dropsical effusion.

Functional Murmurs.—These are anæmic, plethoric, or sympathetic. They are all more or less intermittent, and they cease with the cause producing them. "They all have their origin within the ventricle, and are owing, mainly, to irregular contraction of the columnæ carneæ and musculi-papillares with the ventricular wall, bringing the chordæ tendineæ into irregular tension, and causing discord in the natural first sound."

The anæmic murmur is loud and diffused over the chest, where resonance is heightened by the want of distension of the blood-vessels. It is increased by slight exertion, and has no points of special intensity, being thus distinguished from structural murmurs.

The plethoric murmur occurs in full habit with excitable nervous condition, as often in pregnancy. It is low and muffled, and is heard only in the præcordial region.

"A sympathetic functional murmur has its cause in disease of some other organ, as the brain, stomach, or uterus, and is not necessarily accompanied with either anæmia or plethora, and is caused wholly by an excited state of the nervous system." The systolic murmur of inflammatory rheumatism is often functional, owing, probably, "to spasmodic contraction of the muscles of the heart from nervous irritability of the endocardium, excited by the quality of the blood."

Its character may quickly change to that of a structural murmur; and this, together with the development of the diagnostic points of maximum intensity, will denote fibrinous deposit, and enable us to locate it upon either the aortic or the mitral valve. This diagnosis between the functional and the organic murmur, may give valuable indications for treatment. The peculiar murmur connected with chorea is commonly functional and transient, not mitral regurgitant as often supposed. Pericardial adhesions give rise to a murmur, which continues while they affect the symmetrical contraction of the ventricle, and disappears when they have become sufficiently lengthened.

Organic Murmurs.—The aortic obstructive (systolic) murmur is rarely heard uncomplicated with others, but may be distinguished from them by its character, and its points of greatest intensity. Caused by some impediment at the aortic orifice,—such as deposits of lymph, warts, calcification,—this murmur must be "a fluid friction sound, and have a slushing or rushing character." A slight obstruction will produce a brief murmur of rather low pitch; a greater obstruction will prolong it, raise its pitch, and make it more easily recognizable. It is most distinctly heard "where the aorta emerges from under the sternum on the right side, near or above the cartilage of the fourth rib; under the clavicle; and posteriorly, on either side on the spine from the third to the fifth vertebra, and on the right side running down the scapula to its lower angle." As soon as hypertrophy has taken place, this murmur becomes complicated with the mitral non-regurgitant (below described), from which it should be discriminated, for it is the aortic rather than the noisy mitral (intraventricular) murmur which measures the extent of lesion.

The aortic regurgitant (diastolic) murmur is due to insufficiency of the valve, and is heard with or immediately after its closure. It "is uncomplicated, for the intraventricular murmurs are not heard during the diastole. It has only one quality, that of blood-friction, and will be prolonged or short, of raised pitch or comparatively low, according to the size or shape of the orifice allowing the regurgitation." Its characteristics may be accurately imitated by forcing fluid through a syringe, and altering the aperture of the nozzle. It is heard most commonly half an inch to an inch from the aortic valve, in the direction of the apex-beat; sometimes only through the sternum; sometimes as far as the apex-beat; sometimes, like the mitral non-regurgitant, behind, near the lower angle of the left scapula. These variations depend upon the direction of the regurgitated stream, and the proximity of the heart to the chest-wall. If due to plastic deposit upon the valve, this murmur generally appears later than the obstructive, the insufficiency not usually occurring until the lymph begins to contract.

The mitral murmurs are two, the regurgitant and the non-regurgitant, both systolic. The former has its diganostic seat behind, the latter in front.

The mitral regurgitant murmur is caused simply by insufficiency of the valve, the result either of disease or of violence. The valve must commonly be much damaged by disease before regurgitation takes place; its rupture by violence is very rare. The murmur will be one of blood-friction, complicated with sonorous vibrations of the mitral valve, and its character will be determined partly by the size and form of the opening, partly by the condition of the valve. A harsh and rasping, as well as rushing sound, would denote insufficiency with loss of sonorousness in the valve, from calcareous or hardened fibrinous deposits. The murmur heard at the apex-beat gives notice of these deposits, and of their character. Most writers call this the mitral regurgitant; but it is a sign not of regurgitation, but of damage by deposits, which may presently lead to this, or may already have done so. The true mitral regurgitant murmur may be heard from the lower border of the fifth dorsal vertebra to the upper border of the eighth, but with maximum intensity and characteristic quality only between the seventh and eighth vertebræ, close to their spines. The sound is transmitted in the direction of the regurgitated stream, which is sent directly towards the seventh intervertebral cartilage. It must be discriminated from the mitral non-regurgitant and the aortic regurgitant, both occasionally heard at the lower scapular angle. That the apex-beat murmur is not a diagnostic sign of regurgitation is indirectly but strongly corroborated by the testimony of those who, accepting it as so diagnostic, have yet repeatedly failed, in post-mortem examinations, to find any valvular lesion where regurgitation was believed to have been clearly made out by this sign. Dr. Bristowe, in a report of six cases of this kind (*Brit. & For. Med.-Chir. Rev.*, July, 1861), accepts the sign as infallible, and concludes that regurgitation not rarely takes place where "all the valvular structures are perfectly sound and competent." Following Mr. King's explanation of the assumed safety-valve function of the tricuspid, he attributes the mitral regurgitation, as well, to over-distension of the ventricular walls. But the existence of such a safety-valve function, even in the thin-walled right ventricle, is probably far from being established.

Under the mitral non-regurgitant murmur are comprehended all other murmurs having their origin in the mitral valve or its chordæ tendineæ, whether due, as in the functional murmurs before described, to irregular contraction of the muscular structures of the ventricle, or "to organic change in the form of the heart or its muscular attachments, or to damage done by deposits on the mitral valve or the chordæ tendineæ." This murmur appears in great variety, and may indicate either transient disturbance or serious lesion. It "has its seat over the base of the heart, and at the apex-beat, and may run round under the axilla and appear at the lower angle of the scapula behind, or the left side, or it may pass from the apex-beat toward the sternum, just as the sound may be sent into the rib by the motion of the heart as it strikes the chest-wall." Being easily heard, it arrests the attention, and often misleads as to the gravity of disease. Some of its varieties have been termed the "præsystolic," or "auricular systolic," or "mitral direct" murmur, which has been attributed to the forcing of the blood through a narrowed auriculo-ventricular orifice by the contracting auricle. But the auricle cannot contract with sufficient power to produce so loud a murmur; the duration of the murmur is quite long, that of the auricular systole very short; its character differs greatly from that of the sound of fluid forced through an aperture; and finally, in intermission of the ventricular systole, common in mitral disease, the murmur always intermits coincidently, although the auricular systole is not intermittent. The murmur is really not præsystolic, but formed at the commencement of the ventricular systole, within the time

of the first sound. The irregularly hypertrophied ventricular walls and fleshy columns in contracting bring the tendinous strings into irregular tension. Some of these may be quite loose and produce a blubbering murmur; others tightly strained, and give forth a harsh, rasping murmur of high pitch. "Some, from the altered form of the heart, may be brought suddenly into tension with a snap, as described by Dr. Ormerod." Moreover, the irregularly thickened curtains of the valve will, in reproducing these sounds, add still farther elements of discord.

Thus far the left heart only has been spoken of, as being much the more liable to disease. The pulmonary valve is perhaps never diseased; but the tricuspid is subject to the same damage by deposits as the mitral, though much more rarely, and the right ventricle may become hypertrophied from obstruction of the pulmonic circulation.

A tricuspid intraventricular murmur is not very infrequent. "It is heard, ordinarily, at the lower part of the sternum, or by the left side of it, over the costal cartilages; or it may be heard at the upper part of the sternum, running out under the left clavicle. It has the same character as the mitral non-regurgitant; and, though more distant from the ear and less sonorous, is evidently formed in the same way."

"I know of no certain sign of tricuspid regurgitation. The right auricle has its natural bed in a hollowing out, as it were, of the right lung in its middle part; and should there be a stream of blood regurgitating through the right auriculo-ventricular opening, it would impinge upon the side of the auricle, and the murmur would be lost in its diffusion in the lung, and not be brought to the chest-wall unless by consolidated lung. I have never heard it, and do not know that it has ever been verified."

Owing to the misinterpretation of physical signs, the relative frequency of regurgitation through the several valves has commonly been given erroneously. Probably insufficiency of the aortic valve is the most frequent; next, that of the mitral; third, that of the tricuspid; and last, that of the pulmonary valve, if it occur at all.

Dr. Jacobi began the reading of an extended and most valuable paper upon Croup, its pathology and treatment, based chiefly upon his own observations and investigations. No abstract could do it justice.

Correspondence.

MEDICAL MATTERS IN PARIS.

(FROM OUR SPECIAL CORRESPONDENT.

The Treatment of Abscess of the Liver by External Incision—Swallowing of a Fork—Perforation of the Stomach and Colon; Escape of Instrument through an Abscess in the Abdominal Walls—Treatment of Morbus Coxarius from a French point of view.

Difficulties in Childbirth with an Abnormal Pelvis; Interesting Suggestion relative thereto—Cases of Complicated Rheumatism—Nux Vomica in the Dyspepsia of Hypochondriacs—Sulphide of Carbon as a Local Anæsthetic—Dextrine in Varicose Eczema.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—The medical experience of any particular country on the diseases peculiar to the locality, serves somewhat as Professor Tyndal's lecture apparatus, which projects upon a screen the magnified representation of operations too delicate to be otherwise perceived by the audience; for the characteristics of maladies, that may be inadequately appreciated when observed only at rare intervals, become salient and striking when a number of similar cases are massed together. Hence it is in the study of such masses of facts, that the practitioner becomes able to cope in his own climate with the exceptional cases of disease, for which, however infrequently, he is bound to be prepared.

ABSCESS OF THE LIVER, ETC.

Abscess of the liver, as every one knows, is as common in warm countries as it is rare in our temperate zone. The Medico-Surgical Society of Alexandria (Egypt), has just published the conclusions of a most interesting discussion on the treatment of this formidable degree of hepatic inflammation—conclusions that it cannot be uninteresting to relate to you.

The turning point in the debate, was the question of the utility of puncturing the abscess, and a great number of cases were reported by different members of the Society, in which the effects of the operation could be compared with the march of the disease when treated less energetically. I give you the sum-total of the results, without entering into the details.

The cases may be divided into two groups, the first comprising the abscesses not operated upon, the second, those upon whom the operation was performed. Each group is again subdivided into abscesses the size of a man's fist, called large, and all below this dimension, classed as small.

The first group, abscesses not operated, contains 81 cases, among which there were 58 deaths, 14 cures, and 9 doubtful cases. The mortality was, therefore, 80.55 per cent., the recovery 19.45.

In the second group are 42 cases, of which were 21 deaths and 21 recoveries—mortality 50 per cent., recovery the same. The first subdivision of the first class, in which the abscesses were as large as a fist, or larger, contained 24 cases, with 21 deaths, and 3 recoveries—mortality 87.50 per cent., recovery 12.50.

The second subdivision of this group (abscesses smaller than a fist) comprised 13 cases, of which 9 died, and 4 recovered—mortality 69.23 per cent., recovery 30.76.

In the first subdivision of the second group (large operated abscesses), are 22 cases, 15 deaths, and 7 cures—mortality 68.18 per cent., cures 31.81.

In the second sub-class (small abscesses), are 10 cases, of which 3 died, and 7 recovered—mortality 30 per cent., cure 70 per cent.

It is noticeable that each group contains a number of cases in which the size of the abscess had not been determined with sufficient precision to rank it in either of the sub-classes. In view of these statistics, it was resolved by the Society that, 1st, in *all* cases of hepatic abscess, large or small, the chances for recovery are considerably greater if an operation be performed; 2d, that in cases of small abscesses the operation is *so* favorable that more than two-thirds of the patients are cured.

Among the 14 cases unoperated upon, in which the patients recovered, in 11 the abscess opened spontaneously into the lungs. In two cases, the communication was effected with the intestine, and in one, with the stomach. But generally, whenever the abscess opened anywhere than into the lungs, the rupture proved fatal. This was the case 14 times, where the rupture occurred three times into the peritoneum, four times into the intestine, four times the pleura, once the stomach, once the pericardium, and once the locality is not specified.

Death in all cases, whether following an operation, or occurring by the natural progress of the disease, was

determined either by general hectic fever, or by uncontrollable diarrhœa. The latter was the most frequent cause of death after an unsuccessful operation, and generally occurred when the puncture had been delayed to an advanced period of the disease. It was indeed decided by the Society that the operation should be performed as soon as possible after recognition of the abscess, and an exploration made, even when the liver was scarcely painful and no fluctuation could be distinctly perceived. In default of the most salient symptoms, an experienced observer would almost always pronounce upon the existence of an abscess by the earthy tint of the complexion, accompanied by augmentation of the size of the liver; an extremely obstinate diarrhœa, yielding to no treatment; nocturnal sweats; often periodical fever, chills, and loss of appetite. It is affirmed that the introduction of the exploring trocar, even if the liver be healthy, is not followed by any serious accident.

It was generally agreed that the use of caustic was to be proscribed, as being slow, extremely painful, and possessing no advantages over the bistoury. For the adhesive inflammation desired by the employment of the caustic is invariably set up around the drainage tube, within 24 hours after puncture by the bistoury.

It was asserted, moreover, that the action of the caustic is not well circumscribed, but is apt to occasion badly suppurating wounds.

The persistence of the drainage tube is a most important element of the treatment. This tube is liable from time to time to become blocked up, in which case it may be withdrawn, cleaned out, and replaced.

SWALLOWING OF A FORK, PERFORATION OF STOMACH AND ESCAPE THROUGH ABDOMINAL WALLS.

A most remarkable case of traumatic abscess is reported in the *Medical Gazette* of Strasburg, as occurring in an insane asylum at Zutphen. The patient was a woman 64 years old, affected with lypemania, who had swallowed a silver fork for the purpose of committing suicide. She was received into the asylum two days after accomplishing this feat, and the physician had no difficulty in detecting the foreign body in the stomach. The teeth of the fork were in the cardiac portion, directed upwards and forwards, the handle lying backwards, in the pyloric extremity. The patient complained of no pain, only a sensation of weight and oppression at the stomach. During the first days, she was submitted to entire repose, severe diet, and expectation. A slight febrile reaction gradually established itself, and the patient at last complained of pain in the left epigastric region. These symptoms continued without aggravation during three months, and then gradually subsided. At this time the teeth of the fork disappeared from the place where for so long they had been plainly perceptible, and instead was discovered a singular tumor in the abdomen, to the left of the umbilicus, which occasionally had the air of a gravid uterus at four months. It was impossible to decide upon the nature of the contents of this tumor, in which no sign of the fork could be perceived. The pain was trifling, the pulse at 72; stools easily obtained by enemata. A slight febrile reaction occurred later, but the digestion always remained undisturbed.

Five months later, the tumor, which till then had been quite round, began to point. The abdominal walls were not adherent. In the course of the following month an abscess formed; the integuments gradually reddened and thinned, and the tumor opened spontaneously, and gave issue, first, to a small quantity of pus, then to liquid fæcal matters. About a week later, at the morning visit, the physician was surprised at perceiving the four teeth of a fork behind the abdominal wall, close by the fistulous opening. By prudent manipulation, it became evident that the foreign body was only retained in place by the integuments, and in effect, after a couple of lateral incisions, the fork was easily extracted in the perpendicular direction that it occupied to the abdominal wall. The handle was entirely surrounded by extremely fetid fæcal matters; a great number of crystals of phosphate of lime covered the teeth of the fork, which had turned black from a coating of sulphate of silver.

The patient, who during the last days had suffered a good deal of pain, was immediately relieved after extraction of the fork. The fistula was simply dressed, and healed without difficulty, a firm cicatrix being established by the end of a month. For some time longer, the neighboring parts remained infiltrated, but even this infiltration gradually disappeared, and the patient was completely restored to health.

As the tumor had always remained on the left side of the abdomen, it seemed evident that the fork had not traversed the length of the intestinal tube, but passed directly from the stomach into the transverse colon, after an adhesive inflammation had established solid connection between the two organs. It was inferred that the crystals of lime salt had been deposited on the teeth which had arrived in the colon, while the handle still remained in the stomach.

It is extremely remarkable that the general health was so slightly deranged by the ten months' sojourn and peregrinations of a foreign body in the stomach and intestines. Perhaps the mental alienation of the patient may be presumed to have blunted the general physical sensibilities, a circumstance frequently observed in the pathology of the insane.

TREATMENT OF COXALGIA FROM A FRENCH POINT OF VIEW.

M. Philipeaux, who has for some time made a sort of specialty of coxalgia and its treatment, has recently published a memoir upon resection of the head of the femur, in cases of this disease that have resisted general treatment, and are conducting their victims to the grave. 96 instances of this operation have been published, since it was first practised by Antony White, of London, in 1821; and half the operations have resulted in radical cures. Surgeons have objected to this operation on the ground that it was unnecessary, since all curable coxalgias could be cured by general treatment; that it was fruitless, since the cotyloid cavity was always affected, as well as the head of the femur; and that any attempt to operate upon this cavity was too dangerous, on account of its proximity to the pelvis. M. Philipeaux admits the seriousness of all these objections, but, in reply to the first, observes that the operation is only proposed as a last resource, in cases where all others have failed; in answer to the second he declares that the lesion of the cotyloid cavity has many more chances to heal, if relieved of the irritation caused by the presence of the diseased femur; and finally, although the danger of applications to a point so near the pelvic cavity is not to be dissimulated, yet the surgeon may in many cases be justified in cauterising, with circumspection, the acetabulum with the actual cautery, and in all cases may remove the fungosities therein developed. The resection is contra-indicated when pulmonary phthisis, scrofula in the third degree, heart disease, or vertebral caries, complicates the coxalgia. Too great an extent of the local caries, is also a contra-indication. The operation is favorable in proportion to the youth of the patient; and

the following table of 67 cases shows clearly how success varies with age:

Cases	Age	Cures	Death
19	5 to 9 years	12	7
30	10 to 19 "	20	10
10	20 to 29 "	7	3
5	30 to 39 "	2	3
2	40 to 49 "	2	0
1	50 "	0	1

Spontaneous luxation of the head of the femur is one of the most favorable conditions for resection, but is not, as was at first supposed, indispensable. In 32 cases operated, where this luxation did not exist, are counted 16 cures, 9 deaths, and 7 doubtful cases.

The operation comprehends three periods:

A. First Period. The patient is placed upon the sound side, with the trunk slightly raised, and the lower limbs extended. Anæsthesia, of course, is induced.

The surgeon, standing at the right of the patient, feels for the upper border of the great trochanter, and by his incision describes a semi-lunar flap, whose convexity is inferior. All parts burrowed by fistulas should be included in the incision, and all parts removed which seem incapable of assisting in the cicatrisation. The insertion of the trochanter muscles is divided, and the border of the cotyloid cavity attained. When all the articulation is carious, the capsule is swollen and often perforated. If it be yet intact, the limb is placed in flexion and adduction before dividing the capsule by a pointed bistoury. The membrane is then loosened above and below by means of a bistoury guarded by a button. In the majority of cases, the round ligament no longer exists; when it does, it is to be cut with this same instrument.

B. Second Period. Luxation.—Forced luxation should always precede section of the femur, except where the parts are united by osseous stalactites. When the femur is intact it is easy to use it as a lever, and execute with it movements of adduction and inward rotation, which rapidly drive the head out of the cotyloid cavity and the lips of the wound.

C. Third Period. Resection.—A small board is then placed behind the dislocated head, the neck denuded of its periosteum (of which as much as possible should be preserved), and then severed by means of a straight or chain saw. If, on examination of the surface of section, any diseased bone is found to have been left, it is removed by a second stroke of the saw, which sometimes goes below the small trochanter. The great trochanter should be removed in any case, says M. Philipeaux, following Malgaigne, for if left, it will fit itself into the cotyloid cavity, and so oppose the free issue of pus. Finally, all articular fungosities should be removed, and if necessary, the acetabulum rasped, gouged, or cauterized.

D. Consecutive Treatment.—After the operation is terminated, the patient is placed in dorsal decubitus, and the sound side of the body somewhat elevated by means of oat cushions, so as to favor the flow of liquids from the wound.

Mattressed gutters for the reception of the operated limb are rejected as useless, fatiguing, and greatly interfering with the dressing of the hip. M. Philipeaux prefers to simply support the patient by the cushions. In two classes of cases, however, it is necessary to maintain continued extension of the leg: 1st, When the surgeon has been unable to place the femur in complete extension during the anæsthetic sleep. 2d, When, after a spontaneous luxation, the head of the femur had mounted high enough to occasion notable shortening, which persisted after the operation.

The wound only requires simple treatment. The edges are drawn together at the two angles by bands of diachylon, while the middle is left open for the introduction of a few balls of lint. The whole is then covered with anointed linen, and with compresses. This treatment may continue until the wound is filled up with fleshy granulations. If the suppuration is abundant, the wound should be washed two or three times a day with warm aromatic injections; if there be danger that it close too quickly, a caoutchouc drainage tube is introduced.

Before cicatrisation is complete, it is well to accustom the limb to some slight movements, but only allowed gradually and with much caution. These movements are renewed and extended in different directions, so as to restore, if possible, mobility to the joint. Excessive exercise, however, is hurtful, as tending to produce too much laxity in the articulation.

In the two most recent cases of resection, the patients preserved the mobility of the femur, and recovered with a pseudo-arthrosis instead of an anchylosis. In Mr. Le Fort's memoir on the subject, twenty-seven patients are reported to have escaped with a perfectly useful articulation, and capable of walking very tolerably, although more or less lame.

Permanent shortening of the limb is to be palliated, of course, by a raised metallic sole to the foot.

DIFFICULTIES TO CHILDBIRTH IN ABNORMAL NARROWNESS OF PELVIS.

A curious calculation is made by Dr. Vignard in relation to the difficulties opposed to childbirth by abnormal narrowness of the pelvis. The reflection is suggested by a case occurring in his practice, in which the sacro-pubic diameter of the basin was eighty-nine millimetres. All attempts to deliver the child by forceps proved unavailing, and the accoucheur was obliged to have recourse to craniotomy.

The woman had already had three children, and according to the husband's account, the first two, though delivered with forceps, came into the world alive and well, and were still living. The third, he admitted to have been born dead, but was still delivered with forceps. All three were girls. After the patient had recovered from the effects of the labor (lasting forty-eight hours), and of the operation, the physician requestioned the husband, and ascertained that, in truth, craniotomy had been performed upon this last child. It was not surprising, therefore, that the fourth, which was a boy, should have required the intervention of the fatal operation.

Hence the obstacle to delivery had continually increased with each successive birth. There was no reason to attribute this increase to any greater narrowness of the basin, but rather to what Dr. Vignard asserts to be a well recognized law, namely: that a woman's first children are always the smallest, and the size increases with each new birth. Thus, in this case, the first forceps delivery had been easy, the second difficult, the third accouchement required craniotomy, and finally, in the fourth, the masculine sex of the child introduced another cause of increased size. As a practical rule, therefore, Dr. Vignard recommends, whenever an abnormal retraction of the pelvic cavity has been discovered, sufficient to require the forceps to draw the fœtal head into the superior strait (of course, the application of forceps for any other reason would not count), and especially when craniotomy had once been practised—in these cases he recommends, when a new pregnancy occurs, that premature delivery be provoked at the eighth month. For it may be regarded as certain, that whatever difficulty has already existed, will be presented again,

and in a more formidable degree, and that a woman who has once lost a child by craniotomy, can never hope for living offspring, if she waits till term to be delivered.

CASES OF COMPLICATED RHEUMATISM.

M. Bouveand, of Lyons, reports several cases of grave rheumatism, severally complicated with pneumonia, albuminuria, hæmorrhage, or encephalic accidents.

In the first case, the patient was a man about 40 years old, and when first observed, after an illness of eight days, was in a demi-typhoid condition, manifested by general prostration, slowness of speech, dry lips, cracked tongue, great thirst, and slight epistaxis; but without any eruption. The pulse was vibrant, and at 130—slight cough, mediocre oppression, tubular breathing, and bronchophony at the summit of both lungs. The patient gave no sign of sensibility, except when his right thigh was touched or extended, when he screamed out. A rude bellows sound was heard at the base of the heart.

The patient was thus affected at once with double pneumonia, endocarditis, arthritis of the right hip-joint, burning fever, and stupor. According to M. Bouveand, all the other conditions were under the dependence of the abnormal rheumatism. The patient succumbed on the second day, but no autopsy could be obtained.

The second patient was a woman of 34 years, admitted to the hospital with acute rheumatism, complicated by endocarditis. After admission, she was attacked with pleurisy, accompanied by very moderate effusion. The urine contained albumen at this time. The arthritis persisted at the knee and wrist, in spite of the pleurisy. Suddenly, the patient, who suffered from insomnia, but whose cerebral functions remained intact, complained of excessive oppression, and sibilant and subcrepitant râles appeared in all parts of the chest. The patient died 36 hours after this invasion of pulmonary œdema.

The third observation relates to a man 25 years old, attacked with acute rheumatism for the third time. He labored under arthritis of several joints, intense fever and sweating, and repeated and abundant epistaxis. The skin was covered with sudamina; a soft, blowing sound was heard at the base of the heart; bilious vomiting occurred several times.

This patient recovered in 25 days, without preserving any sign of cardiac disease.

At the same time was received at the hospital a woman four months advanced in pregnancy, attacked with polyarthritis and endocarditis. She was affected also with epistaxis and also spitting of blood. The skin was red, and covered with sudamina. This patient was seized with eclamptic convulsions several hours before dying. No autopsy could be made.

In the fifth case, a lymphatic girl, aged twenty-two, was treated in September for acute rheumatism, and left the hospital, cured of the acute disease, but in cachectic condition, and subject to diarrhœa. She returned in a month, complaining of intense cephalalgia. Vomiting, nocturnal delirium, contraction of the maxillæ and the muscles of the neck came on, and the patient died ten days after admission.

Finally, another woman, 46 years old, was admitted on account of general feebleness and leucorrhœa, unaccompanied by organic uterine lesion. She suffered from no heart symptoms; but a well characterized organic disease was discovered, and the patient acknowledged having had several attacks of rheumatism. The patient was put upon digitalis and a tonic course of treatment; when, a week after her entrance, new symptoms suddenly declared themselves, beginning with moderate fever, complete stupidity, and anæsthesia and hemiplegia of the left arm. The left side of the face was paralyzed, the tongue deviated; no reply could be obtained to questions; complete prostration of strength, and loss of appetite. The urine contained albumen. Four days afterwards arthritis of the right wrist declared itself, and immediately the intelligence returned, and the left arm recovered its motor power. A fortnight later, the albumen had disappeared from the urine, the intelligence remained intact, there was no more sign of paralysis, and the patient ultimately left the hospital in a very satisfactory condition.

In connection with these two cases of meningitis (for so M. Bouveand feels entitled to call them), produced under the influence of rheumatism, the writer reports several cases of adult meningitis occasioned by other diseases. In one case it was a pneumonia, occurring in a person addicted to intemperance. The meningitis declared itself during convalescence from the original disease, and at the autopsy the pneumonia was found to be in full course of resolution; but a soft exudation had developed between the arachnoid and pia-mater. In another case the cerebral disease came on during an anomalous variola, where the eruption was late and scanty, consisting at first of herpetiform vesicles. At the autopsy a layer of greenish pus, infiltered under the arachnoid, was discovered on the upper surface of the cerebellum and the inferior extremity of the spinal cord. In a third case, an erysipelas of the scalp was the primitive affection, but when delirium declared itself, the opinion of Trousseau, who declares this symptom to be insignificant in the course of this disease, invested the prognosis with an optimism which the autopsy of the patient thoroughly routed, for the signs of meningitis were evident. Finally, is a case of meningitis occurring during typhoid fever. The patient was nineteen years old, and died the 20th day of the disease. She had coma and stupor, dorsal decubitus, fall of the eyelids, deafness, cephalalgia, dilatation of the right pupil without strabismus. The pulse was 100, the skin dry, and the temperature thirty-eight in the armpit. The jaws were so forcibly contracted as to render examination of the tongue impossible. Sensibility of the skin remained sufficiently keen; there was iliac gurgling, and retention of urine with distension of the bladder. A certain amount of contraction existed in the muscles of the neck and back; the thorax was sonorous on percussion, but there were sibilant and crepitant râles, constipation persistent, and vomiting of liquid ingesta. Three days before death hallucinations occurred, with contraction of the wrists and carphology, and the patient ceased to recognize her mother. Several attacks of epistaxis and tracheal râles preceded the death, which occurred in the midst of a continually increasing dyspnœa. The urine evacuated by the sound was red and extremely fœtid.

This case is extremely interesting from the curious mixture of the symptoms severally characteristic of the two diseases which found themselves in presence, and from the manner in which the meningitis gradually obtained the ascendency over the fever, so that at last it seemed to rule alone. But at the autopsy, the reality of sloth in enteritis was well demonstrated by two grayish ulcerations in the ileum and at the ileo-cecal valve. The meningitis was evidenced by a sero-albuminous effusion in the anterior subarachnoidal space; by the thickening and vascularisation of the pia-mater, everywhere adherent to the brain; by adhesion of the two cerebral lobes at the fissure of Sylvius; by half a glass of thick whitish liquid, like whey, in the third ventricle. Neither pus nor tubercle nor gray granulation along the arteries could be found.

M. Boucand remarks, that primitive meningitis is so rare with adults that, in presence of acute meningical disease, search should always be made for some other malady which has served as its cradle.

NUX VOMICA IN THE DYSPEPSIA OF HYPOCHONDRIACS.

En Fait de Therapeutique.—There are, as always, one or two items or suggestions worthy of being placed in the budget. Professor Trastour, of Nantes, has occasion to highly praise the employment of nux vomica in all forms of atonic dyspepsia, and especially as a relief for the painful digestions so common among the hypochondriacs. His theory is based upon the two facts, that nux vomica stimulates and regulates the activity of the spinal cord, especially in regard to its reflex action, and that the integrity of the functions of the grand sympathetic is subordinated to the regular accomplishment of the functions of this part of the nervous system.

The following is a useful formula:

℞.—Pulv-nux vom. 1—4 grammes.
Pulv. cassiæ lignea 2 "
Carb. calc. or carb. mag. 2 grammes.
M.—ft. pulv. 20.

One powder at the beginning of each meal, in unfermented bread.

M. Trastour, like many of his confrères, prefers nux vomica to the salts of strychnine, both on account of its innocuousness and its efficacy in dyspepsias.

SULPHIDE OF CARBON AS A LOCAL ANÆSTHETIC.

Recent experiments have been made upon the properties of sulphide of carbon as a local anæsthetic, and have been very satisfactory. The cold induced is more disagreeable than by the volatilization of chloroform and ether, but the analgesia is more profound. A splinter of wood, encysted since two months, was easily removed under the influence of the sulphide of carbon, after the operation had been abandoned on account of the pain which persisted in spite of the local application of ether.

DEXTRINE IN VARICOSE ECZEMA.

Finally, a suggestion in reference to the treatment of that obstinate disease, varicose eczema, cannot be inappropriate. It is recommended that the limb be swathed in linen bands, previously dipped in a solution of dextrine, made with 125 grammes of dextrine to a litre of boiling water. Compresses, dipped in the same liquid, should be laid upon the limb previous to the application of the bandage. This is then allowed to dry, and only renewed when it tends of itself to unroll—that is, by the fourth or fifth day. The eczema should have become tolerably dry before this application can be indicated.

M. Devergie, whose name is of such authority in skin diseases, finds that his patients are infinitely better off with the dextrined bandage than with the laced stocking. The bandage is useful even without the dextrine, but the addition of this latter prevents the linen from becoming soaked with liquids, in which case it can hardly be removed without tearing a considerable portion of the epiderm. P. C. M.

THE WEIGHT OF A FLUID OUNCE.

To the Editor of The Medical Record.

Sir—The volume of St. Bartholomew's Hospital Reports for 1867 contains an interesting article upon Dr. Roberts's "Differential Density" method of estimating the amount of glucose in saccharine urine. The author finally concludes that this simple method gives a result which is "slightly too great, but whose excess above the true number is less than its sixty-fourth part;" that is, the error is less than one and one-half per cent. This fact is of itself well worthy of extended quotation, since we have reason to welcome every reliable simplification of important chemical processes. The immediate occasion, however, of mentioning the article is found in a serious though natural mistake which appears in one portion of the author's computations. He wrongly premises that a fluid ounce measure of distilled water weighs 480 grains, and obtains results involving an error of five per centum in favor of the method in question. This, however, does not prejudice the conclusion above mentioned, since that is deduced from correct data. It is unexpected to find one accustomed to analytic processes taking such a false step, and the inquiry at once suggests itself to the mind, what explanation can be offered?

The truth is, it is no simple or easy matter to ascertain the precise relations of our various standards of weight and measurement to one another, or to bear them in mind when discovered. For the following reasons, then, the writer ventures briefly to state the weight of a fluid ounce, and its relations: First, examinations such as that referred to in St. Bartholomew's Reports are of great importance in confirming or disproving the results of other investigators or of estimating the limits of accuracy in such results; but, secondly, such examinations are worse than useless if undetected errors serve to mislead the original and subsequent investigators. Again, errors consequent upon using wrong figures are apt to be indefinitely increased in many simple calculations, as in reducing the "total excretion of urine" from ounces to grains, or in calculating from portions of an ounce, or in changing from the metric quantities to those more commonly employed. And lastly, because our usual books of reference do not present the information desired in such a manner that it may easily be obtained. The 1865 edition of the Dispensatory, it is true, furnishes data on page 1634 from which this information may be obtained by a little work, and an honorable exception must also be made in favor of Parrish's Practical Pharmacy. These books, however, are not in every physician's library.

Here, then, are some of the difficulties which loom up before the anxious inquirer as to the weight of a fluid ounce. Omitting altogether the metric scale, he finds five standards of weight or fluid measurement, the details of which he must needs to some extent bear in mind. They are the Troy, Apothecaries', Avoirdupois, Wine, and Imperial measures. Fortunately but three of these concern him much, and he finds one quantity, the grain, which amid all the confusion of names remains fixed and ultimate. Again he finds in each scale terms which are identical with certain terms in other scales with which they may or may not agree in value. But still more confusing, he discovers quantities, as the minim, bearing the same numerical relation to the ounce, in fluid scales, that the grain does to the Troy or Apothecaries' ounce. Hence the conclusion is almost irresistible that the minim and the grain are different names for the same weight. But, once more, if that temptation were resisted he would be likely to conclude that the minim and ounce were the same in both the Wine and Imperial measures, while in truth there is a considerable difference between them. May it not then be readily granted that it is no wonder that mistakes such as that which has occasioned this article should frequently occur, and that persons, to whom

these discrepancies have not been pointed out, should be led to use, in occasional quantitative calculations, such specious terms as have all the appearance of correctness, while they really lead to error?

Bringing each of the five ounces to the grain for comparison, we obtain the following result:

The Troy ounce weighs 480 grains.
The Apothecaries' ounce weighs 480 grains.
The Avoirdupois ounce weighs 437.5 grains.
The Imperial fluid ounce *weighs* 437.5 grains.
The Wine Measure ounce *weighs* 455.7 grains.

Thus the minim, Imperial measure, weighs .91 grains, and the Wine measure minim weighs .95 grains.

It need scarcely be remarked that the Wine measure ounce, U.S.P., is that commonly employed by druggists and physicians. It is seen to have a weight intermediate between the Avoirdupois and Troy ounces, and nearer the former. The British Pharmacopœia determined to diminish this confusion and created the Imperial measure, whose ounce has the weight of the Avoirdupois ounce, thus reducing also the weight of the minim. The Apothecaries' is identical with the Troy ounce. The Imperial fluid ounce and the Avoirdupois have the same weight. Thus there are but three different weights to be borne in mind. When reading English works we must remember that the fluid ounce of the Ph. Br. is the Imperial ounce, although it is not to be forgotten that, at times, the Wine measure ounce is used, and may be referred to as the "ordinary fluid ounce measure." When no reference is made to either standard, it may occasionally be necessary to examine some computation analytically in order to discover what figures are used by the author.

Now let us inquire what may be the error consequent upon using the figures of a wrong denomination.

If we use the Troy ounce for the Wine measure it will be about 5 per centum, or 50 parts in every 1000, or 2.5 ounces in every 50 ounces. In a case of diabetes, with a daily excretion of 10 pints, it would amount to no less than 3840 grains.

If we use the Troy ounce for the Avoirdupois, it will be about 9 per centum, or 90 parts in every 1000, or 4.5 ounces in every 50; and in the case of diabetes we should be no less than 6912 grains out of the way.

If we used the Avoirdupois for the Wine measure ounce the error would be nearly 4 per centum, 2 ounces in every 50, or 2916.5 grains in every 10 pints.

Thus when our author, above referred to, remarks, "It must be supposed that the temperature at which the observations are made is the standard temperature at which a fluid ounce measure of distilled water weighs 480 grains," he proves himself to have supposed that this was the weight of the Wine measure ounce, since, in another part, he refers to the Ph. Br. and uses the proper figures for that denomination. This is further shown by the facts that the standard temperature at which such observations are made in Great Britain, as with us, is 60° F., and that distilled water increases in volume but about .039 of one minim in a fluid ounce between 39.2° F., its point of greatest density, and 60° F. Hence no change of temperature could cause a fluid ounce to weigh 480 grains.

In conclusion, the purpose of this article will have been accomplished if it serves to show that the relations of our various standards of weight and fluid measurement to one another are at once obscure, complicated, and unsatisfactory, and to put any one on his guard against supposing that a minim and a grain have the same weight.

It is most sincerely to be regretted that our methods should be so difficult and unscientific, and we may well look with earnestness for the time when the metric system, with its accurate and mutually interchangeable denominations, shall be universally adopted.

Respectfully yours,
W. B. Lewis.

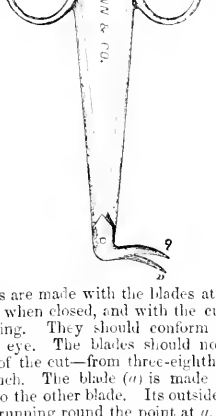
112 East Thirtieth street.

New Instruments.

A NEW INSTRUMENT FOR THE OPERATION OF PTERYGIUM.

By GEO. H. CHADWICK, M.D.,
PORTLAND, ME.

In this operation, having found considerable trouble in taking up all the fibres which form the pterygium, in consequence of the hæmorrhage which follows a partial division of the bands, it occurred to me that an instrument might be devised that would obviate this trouble, and I conceived the one herein to be described. The following cut shows the general form of the scissors, but the blade-shaped edge is not clearly defined.



The scissors are made with the blades at right-angles to the handle when closed, and with the curve, as seen in the engraving. They should conform to the convexity of the eye. The blades should not exceed in length those of the cut—from three-eighths (⅜) to one-half (½) an inch. The blade (*a*) is made flat, and at right-angles to the other blade. Its outside has a sharp, cutting edge running round the point at *a*. The blade (*b*) is similar to that of an ordinary pair of scissors. The method of using the instrument is as follows: Pass the knife-blade under the band, carrying it entirely under the whole portion, either above or below, as the case may be, for unless ambidexter you will operate from either of those positions, as either eye is to be operated upon; then run the blade laterally towards the pupil, thereby freeing the bands their whole extent; afterwards, divide at the point from which you started. This course makes a clean, free dissection, and expedites the operation greatly. It can be used in the operation of transplanting, so far as freeing the bands from the cornea and sclerotic. *En passant*, I do not see any great advantage to be derived from this latter operation over the old method, as described above. The only point I claim, in giving this little instrument to the profession, is that it simplifies the operation very much—and whoever produces that which will take from the labor and time in surgical operations, be it in ever so small an

amount, accomplishes much; and I hereby submit it to the physician's notice, only adding, that in my own hands it pleases me.

Medical Items and News.

Tobacco a Cause of Bald Heads and Gray Hair.—It is stated by Dr. D. B. Hoffman (*Pacific Medical and Surgical Journal*), that a great proportion of the young men of California have gray hair, and are bald-headed, which is not the case with females. He attributes this to the excessive use of tobacco. To support this view he mentions the case of one of his own patients, under forty years of age, who had used tobacco to excess, and had been bald-headed and gray-haired for five or six years. The use of tobacco was abandoned; his whole head became covered with a luxuriant growth of fine black hair.

Another Death from Chloroform.—Dr. Billroth, of Vienna, while tying the blood-vessels of the palm of the hand in a man aged twenty-six, found that by extending the fingers too much pain was caused, and immediately ordered chloroform to be given. In about five minutes from the commencement of anæsthesia, convulsive twitchings were noticed. Soon the patient was found to be pale, with weak respiration; the pulse was almost imperceptible. After artificial respiration had been kept up about thirty minutes, the case was abandoned. The death is attributed to very violent spastic contraction of the heart, in a patient weakened by loss of blood.—*Wiener Medizin Woch.*, June 6th.

Coating for Stoves.—A writer in an English magazine proposes, instead of blackleading stoves and grates, that they should be painted with water glass (silicate of potash), colored with pigment, to harmonize with the coloring of the apartment. Before this is applied, the iron must be thoroughly cleansed from grease, and all rust spots must be rubbed off with a scratch brush. Two or three coats of the paint may then be put on, and allowed to dry, after which the fire may be lighted without fear of injury to the color, which may, indeed, be exposed to a red heat with impunity. Grease or milk spilt over the paint has no effect upon it, and it may be kept clean by washing with soap and water. Dutch ovens and other similar utensils may also be coated with the same material, and the labor spent in polishing them may thus be saved. A good coating of this paint will last a year or two.

Children Born with Teeth.—M. Guéniot (*Med. Times & Gazette*) related to the Société de Chirurgie, a case of an infant, nine days old, exhibiting the two middle upper incisor teeth, which looked like two solid shells covered with enamel. He also speaks of several celebrated persons who were born with teeth, such as Mirabeau, Mazarin, and Louis XIV.

Births in Vienna during 1867.—During 1867 there were born in Vienna, 11,850 legitimate infants (6,155 males, and 5,695 females), and 12,152 illegitimate infants (6,300 males, and 5,852 females). The Foundling Hospital contributed 9,000 of this number. There were 552 twin-births. Triplets occurred three times.]

Obituary.—Died, on the 8th of July, at his residence in St. Louis, Mo., Dr. John D. McDowell, aged 64 years.

Died, in Philadelphia, on the 11th of June, Nathan Shoemaker, M.D., aged 80 years.

The Medical Department of Vienna University has 46 Professors.

Street Watering.—An improved system of watering the streets of London has been patented by J. W. Cooper, which promises to be successful. He introduces into carts filled with water, a mixture, in suitable proportions, of fused chloride of calcium and chloride of sodium. It is well known that these salts are highly deliquescent. When this solution is applied to streets, the retention of moisture by the chlorides serves to keep them in a moist state for a much longer time than when ordinary water is used. One application answers for two or three days.

Creation of Female Physicians by the University of Zurich.—For the first time since its foundation the University of Zurich recently conferred the degree of doctor of medicine upon a lady. Prof. Rose delivered an address on this occasion, on the desirableness of gradual emancipation of women in the domain of science. He mentioned also the fact that just fifty years ago the recently deceased Charlotte von Siebold received her degree from the University of Giessen.

Prof. Turk's heirs have presented his library, numbering more than a thousand volumes, and containing many very valuable works, to the Royal Society of Physicians of Vienna. His laryngoscopic instruments have been given to Prof. Dumrischen's surgical clinique, and the duplicates to the division of the hospital of which he was in charge.—*Allgemeine Wiener Med. Zeitung.*

Results of Surgical Operations in Portugal.—By examining the work of Dr. Antonio Maria Barbosa, published in the *Gazeta Medica de Lisbon*, it will be found that the general results of special operations performed by Portuguese surgeons, and by French surgeons (*i.e.*, in Paris and Lisbon), do not compare favorably with the work of London surgeons. In operations for hernia and lithotomy, by Dr. Barbosa, we learn that the advantage is manifestly with London operators. In hernial operations the mortality was as follows: in Parisian hospitals, 60.45 per cent.; in Lisbon, 58.82; and in London, 50.75.

In lithotomies, the mortality was 37.3 in Parisian hospitals; 35.7 in Lisbon; and 21.5 in London.—*Gazeta Medica da Bahia*, February 15th, 1868.

London Hospital Work.—According to hospital statistics recently published in the *Lancet*, it appears that fourteen metropolitan hospitals, to say nothing of the numerous smaller and special institutions in existence, give annual relief to over 33,000 in-patients, and to more than 550,000 out-patients. Or, taking the gross total, it will be seen that nearly a fifth of the three million inhabitants of London received relief from public charity, supposing the same patient to be relieved but once in the year. With regard to the out-patients, it appears that their number at each hospital (allowing a proportionate deduction for casualties at those hospitals where the numbers are not stated separately) ranges from 10,000 to 20,000 per annum, depending both upon the locality of the institution and the strictness with which governors' orders are required.

New Publications.

Books Received.

On Diseases Peculiar to Women, including Displacements of the Uterus. By Hugh L. Hodge, M.D., Emeritus Professor of Obstetrics and Diseases of Women and Children in the University of Pennsylvania. Second Edition, revised and enlarged. Philadelphia: H. C. Lea. 1868.

Original Communications.

GENERAL ELECTRIZATION AND ITS USE IN CERTAIN UTERINE AFFECTIONS.

By A. D. ROCKWELL, M.D.,

OF NEW YORK.

(Read before the New York County Med. Society.)

The term general electrization is so entirely novel, even to those who are quite versed in the subject of electro-therapeutics, that it will be necessary for me at the outset to explain what meaning I desire to have it convey.

It is not in any sense, either in its nature or its effects, like the applications of electricity that are ordinarily recommended and given both by the profession and the laity. It is not localized electrization, such as was first introduced by Duchenne, and is now so extensively cultivated by some of the ablest minds of Europe for the treatment of paralysis and kindred affections.

General electrization is a term first formally introduced to the profession in a little work on the "Medical Use of Electricity," by Dr. Geo. Beard and myself, to express that method of application of the Faradaic current, in which the feet of the patient are placed on a sheet of copper, to which the negative pole is attached, while the operator applies the positive—either the wet sponge or the moistened hand—(when the current passes through his own person)—over the neck, shoulders and arms, down the spine, over the chest and abdomen, down the lower extremities—in short, over *the entire surface of the body from the head to the feet.*

The remarks which I have the honor to present for your consideration this evening, are intended by no means to treat of electricity in all its varied powers as a remedial agent, nor shall I speak at any length of its use in the form of Galvanization.

The main idea which it is my wish to keep in view, and if possible to impress upon the minds of those before me, is that general electrization with the Faradaic current is a *constitutional tonic*, and as such is indicated wherever a tonic impression is desired.

Localized electrization is a *local* tonic, and as such has been recommended in paralysis and muscular atrophy; and that it will often restore life and vigor to paralyzed muscles, and retard fatty degeneration of tissues, is too well known to need mention here. Used in this way, however, it is manifest that it could be of but little service in constitutional disorders; and yet if it is able to tone up and strengthen a single gland or organ, why should not the whole system receive and retain its general influence?

The passage of a moderate current through the healthy body for a few minutes, will, as we have often demonstrated upon our own person, and upon others, raise the temperature several degrees, and somewhat increase or diminish the rapidity of the pulse.* An objection in the minds of some—in according to it, powers as a general tonic—is, that they conceive it impossible for electricity to directly affect internal organs and the deeper tissues of the body. This agent, they say, diffuses itself over the surface of any solid metallic substance, but does not penetrate to the interior.

But experiments with a solid metallic ball and the living body, do not afford parallel cases.

The human body is a conductor only by the warm saline solution it contains.

The epidermis in its dry state offers a very great resistance to the passage of the current, and it is only when it is well moistened that this resistance is overcome. The electricity, then, in its course from the positive to the negative, naturally seeks the best conductors; nerves, muscles and organs, and so passes through the body and not around it.

This question has been settled by direct experiments made by Dr. Epp, of Germany, on the cadaver.

He found that both the Faradaic and the Galvanic current directly affected the brain and spinal cord, when applied over the head and down the spine. The results of these experiments are confirmed by our daily experience. Patients suffering from inflammation and irritability of the cord, sometimes find it difficult to endure even the slightest current down the spine—especially over the diseased section. In diseases of the brain the sensitiveness of the head to the electric current is sometimes very much increased and sometimes very much diminished. In certain irritable conditions of the stomach, liver, and bowels, great pain is experienced when even a slight current is gently applied over these organs. In this way the electric currents are very useful aids in diagnosis.

When the applications are made over the abdomen, the bowels are often speedily loosened, and occasionally there may be a slight diarrhœa.

The uterus may be affected by applying the pole against the lower portion of the spine, or over the abdomen.

When applied over the whole person, and particularly if the gluteal region is brought under the influence of a strong current, it acts as a powerful diuretic, and in certain conditions the amount of urine voided after an operation is enormous.

The power of electricity to develop and strengthen the muscles on which it operates, has been most remarkably demonstrated on my own person.

When I first began to pass the induction current through myself from hand to hand, my arms were comparatively weak and slender.

For several hours in each day I have allowed a current of more or less power to pass through me. Soon I observed a marked change, and at the present time both the muscular development and strength of my arms are considerably out of proportion to the rest of my body. I have not indulged in gymnastics, nor engaged in any other labor that required unusual exercise, so that the change can be attributed to nothing but the tonic power of the electricity.

The reaction that sometimes follows a too powerful or too long continued application is very marked, and oftentimes absolutely alarming to those unacquainted with this mode of operating. Indeed there is no remedy to the effects of which there is so wide a range of susceptibility with different patients, as general electrization.

At the request of a medical gentleman of this city, I visited a patient of his for the purpose of administering an application of electricity.

This patient was past the prime of life.

Several years before, while in the South, he was attacked by yellow fever, and from that time had suffered from excessive nervous prostration and weakness, which persisted in spite of the faithful use of the usual tonic remedies. He was able to bear a current of moderate strength, and for the time was invigorated. It was but an hour or so, however, before reaction took place, which completely prostrated him.

Persistent vomiting followed, so that his physician

* We have tested the effects of general electrization on the pulse on a variety of patients. We find that in some cases the pulse is slightly increased, in others slightly increased, and in others not perceptibly modified. In nervous, impressible constitutions, the pulse is usually much more decidedly affected by general electrization than in the strong and phlegmatic.

became exceedingly alarmed, and resorted to quinine and whiskey. These evil effects passed off in twenty-four hours, and from that time the patient gradually improved, until in a few weeks he gained a good degree of health. That the prostration was due to general electrization there can be no doubt, and that the application was made injudiciously is evident. It should be remarked, however, that we have obtained some of our most successful results in cases that at first seemed to be injured rather than benefited.

Guided then by the above general principle, which we consider established, *i. e.*, that general electrization with the Faradaic current is a constitutional tonic, we have treated by this method quite a number of uterine affections, and the result has been far more satisfactory than we anticipated. A few of the cases so treated I desire to present to you this evening, with the hope that they may be accepted as a conscientious contribution of our experience in certain of this class of difficulties.

Dysmenorrhœa and Menorrhagia.

Case I.—The first case that I have to notice is that of a married lady, aged 33, sent to us in the early part of last winter, by Dr. H. H. Gregory, of Harlem. Some ten years previous her husband had been the proprietor of a large boarding school, and the care and labor which devolved upon her as matron proved too much for her strength. Her health finally became so much impaired that the business was given up, and from that time she had been vainly seeking for permanent relief. There was prolapsus of the uterus of the first degree, and during the menstrual period she suffered from general neuralgic pains of a severe character. What she chiefly complained of and regarded as the principal source of ill health, was the excessive dysmenorrhœa and menorrhagia, which occurred regularly every month.

The catamenial flow continued seven days, during which time, and immediately afterward, she presented a remarkably weak and anæmic appearance.

In the intervening time and under favorable circumstances, she regained a portion of strength and robor, only to be again prostrated at the menstrual period. Her previous medical advisers had given her tonics and other remedies most suited to her case, but what seemed to have given her greater temporary relief than anything else was a course of localized electrization, to which she had submitted in Boston. The menorrhagia and dysmenorrhœa seemed to be but a consequence of general debility; and indeed the symptoms of which she complained were so many and varied, that it was impossible to point out any one to which treatment should be especially directed. We immediately commenced general applications of an exceedingly mild and fine, or rapidly interrupted current. She was so susceptible to the influence of the electricity, that only the most gentle current could be borne; and contrary to our general experience in such cases, she was at the completion of her course of treatment as little able to endure the sensation as at the beginning.

The applications were given from two to three times a week, and were continued about two months.

In her case as in many others, the first *séance* was followed by considerable nervousness, and some soreness, but as she was instructed to expect such a result, it caused no uneasiness.

After two weeks of treatment, her courses came on, and were as long continued and the loss of blood almost as great as ever. Her other symptoms, however, were considerably ameliorated, and the pain from the neuralgia was hardly noticeable. During the succeeding three weeks she appeared a different person.

Her appetite was exceedingly keen, her sleep refreshing, and she had the desire and strength to exercise daily in walking, to an extent which before would have exhausted her. We looked for a pleasant result as the time for her courses drew near, nor were we disappointed. The flow continued but four days, and the dysmenorrhœa and menorrhagia were so trivial as hardly to deserve notice, and the general neuralgic pains were wanting. Another result of the treatment was to restore the slightly prolapsed uterus to its normal position. This condition was evidently associated with relaxation of the vaginal walls, and the beneficial result that followed was due to the direct tonic effect of the current upon those walls, as well as to the general influence which was exerted over the whole system. It is now a year since treatment was discontinued, and she has had no relapse.

The points of particular interest attending the foregoing case were as follows:

1st. It was absolutely impossible in making the applications to use effectively the sponge or any artificial electrode. From even the very finest and mildest current she would shrink, when it was passed through the sponge, *while a stream of much greater intensity was borne without much discomfort when it passed through the person of the operator, and was applied directly by means of the moistened hand.*

As is generally the case, we expected that she would become inured to the passage of the electricity, so that the amount could be increased, but at each succeeding sitting she seemed to feel its influence as much as at the first. But even this patient could bear, and needed more of the electric influence along the spine and over the vital organs, than could be given through the person of one not accustomed to the direct passage of the current.

In this connection it may be an interesting fact to state, that the very powerful current that I am now able to bear, is owing only to many months of constant practice. Before ever using this agent in disease or applying it to the person of another, I was accustomed during a period of several months, and from two to three hours in each day, to hold an electrode of an induction apparatus in either hand, and allow a current as intense as I could well bear to pass through my own person. At first the immediate and after effect was not at all pleasant, for a degree of muscular soreness and exhaustion was caused, the same that follows any violent and prolonged labor.

This effect, however, became in the course of time less and less marked, until now I am safe in saying, from my every-day experience, that I can pass through my own person for hours, a current of great intensity and feel no ill effects. This result has been fully corroborated also in the experience of Dr. George M. Beard.

2d. The second point of interest consists in the fact, that she had previously been treated by *localized* electrization, and with some benefit, although not sufficient to encourage her to hope for a complete or even an approximate cure. We made use of *general* electrization only, and although the applications were directed to particular parts, longer and harder than to others, yet the main idea was, to bring the system generally under the influence of the electric current.

Case II.—Miss M——, a young lady of 22, was sent to us in August last by Dr. Moreau Morris, to be treated for a dysmenorrhœa of an unusually distressing character. She was of a frail nervous organization, and was decidedly anæmic. In the opinion of Dr. Morris, the dysmenorrhœa was caused by congestion of the womb.

brought on by repeated colds and chills during the menstrual period, years before. But from her girlhood she had been an invalid. Her appetite was exceedingly delicate, and there was great impressibility to disease in all her mucous membranes. It would indeed be difficult to conceive of a more disheartening case of dysmenorrhœa, for any kind of treatment.

Very doubtful encouragement was given.

It was not long, however, before she began to improve in her general condition, and up to the present time she has continued to experience a greater relief from her severe neuralgia and dysmenorrhœa, than she had ever secured from internal medication. At one of her monthly courses she was almost entirely free from pain; and at most of the others that have occurred since she began treatment, she has suffered less than formerly. She is now far from being strong, but retains in a good measure the benefits she received.

Case III.—A married lady was sent to us by Dr. John T. Metcalfe, in order that she might receive the tonic effects of general electrization for a uterine difficulty of six years' standing. There was retroversion, and there had been at times considerable prolapsus, and also laceration of the cervix. Her appetite was poor, her bowels very constipated, and her whole system was greatly weakened by severe and oft-recurring attacks of menorrhagia, not only at her periods, but on any exciting cause.

There was a very relaxed, flaccid condition of the vaginal walls, and of the whole genital apparatus. The patient is still under treatment, but the improvement in her general condition has been very rapid, and will, we think, be permanent. Her appetite has increased; her bowels have been regular from the beginning of the treatment; her severe neuralgic pains, that formerly were most distressing, have been greatly mitigated, and what is of most importance, the menorrhagic attacks have been very greatly diminished in frequency and violence. She is now submitting to local treatment for ulceration of the cervix. It is proposed to resort to general electrization occasionally, as the condition of the system may demand.

But sometimes we unaccountably fail, in cases when by theory and analogy we should meet with success.

Case IV.—In the case of a married lady aged about 35, sent to us by Dr. Joseph Kammerer, we have thus far failed to afford any permanent relief for a persistent facial neuralgia and hysteria, associated with or resulting from uterine weakness or former displacement. The bowels were temporarily made more regular, and her spirits were enlivened by the application. Beyond this we have thus far accomplished nothing, although she is able to bear a very powerful current.

Amenorrhœa. In amenorrhœa our success has been as varied as the causes are different.

In the case of a Mrs. S——, aged 28, the menses returned after an absence of over a year.

The complaint was as persistent as her health was perfect, for she apparently suffered from no ailment with the exception of a slight leucorrhœa, which readily yielded. After six weeks of treatment, we told her that there seemed to be but little if any probability of a favorable result. She had more faith than we, and continued. On two different occasions we made use of the *galvanic stream from a voltaic pile of 90 pairs*, placing one pole over the sacrum, and the other over the region of either ovary alternately. The induced current was again made use of twice, at intervals of two days, when the catamenia came on and continued several days. She passed the next period without being unwell, and so we directed her to come again, about a week before the day when she expected her courses. She received a general application of the faradaic current every other day, and at the expected time her courses appeared.

Several months have now elapsed since she discontinued treatment, but she is still regular.

The leading facts and ideas that I desire to have remembered in this presentation may be thus summed up: First. General electrization, used in the manner described, is a *tonic* of vast and varied powers, and as such is specially indicated in a large number of nervous diseases that are associated with general debility. It meets with its best success in dyspepsia, rheumatism, neuralgia, paralysis, anæmia, hypochondriasis, chorea, amenorrhœa, and dysmenorrhœa.

Second. The effects of the electrical current, passing through the body of the operator, as it must do when the hand is used as an electrode, are beneficial rather than injurious. Theoretically, it would seem that an agent which is so powerful over disease, must be harmful when used to such great excess, through the body of the operator.

But it must be remembered that the current only traverses the arms and shoulders, and does not directly reach the vital organs, or much of the nervous system.

Third. General electrization is not an easy thing. To master all the details, requires study and practice. It is very important that the current should be fine and smooth, especially when applications are made to the very weakly or nervous. This vital fact is not considered by those who employ electricity in general. Again, the applications must be graduated carefully to the strength of each individual. An injudicious application, or one too severe for the constitution of the patient, may cause most unpleasant prostration and soreness for several days—perhaps great nervousness and insomnia, which are of course very alarming to the patient.

There are strong men who will bear only the weakest current, and there are delicate women upon whom we can use the whole power of an ordinary apparatus. Therefore the constitution of each patient must be *studied by itself.* But when we feel we have, as it were, mastered our patient, then the applications should be made as powerful as can be well borne. The length of the applications varies from five minutes to half an hour or longer, and we repeat them two or three times a week, rarely two days in succession. Careless or indifferent procedures will produce only indifferent results.

Fourth. The benefits and cures wrought by general electrization are not usually rapid or brilliant in their course, but are achieved by persistence as well as by thoroughness and delicacy of manipulation.

General electrization works no miracles, but acts by the ordinary laws of cause and effect. It does relieve pain very often, as instantaneously as hypodermic injections; but in chronic affections relapses are sure to occur, until the *tonic effects* have been sufficiently felt to make a permanent impression on the *whole* system.

Finally. General electrization is a feasible thing for those, and only those, who will devote to it the same time, energy, patience, and perseverance that they would to the mastering of ophthalmology, gynecology, microscopy, or any other special department of science.

The experimenter with electrization has this advantage, that he can experiment on himself, and he should do so for a long time before he begins to use the agent to any extent on others. The thousand and one details of this method of practice are only to be learned by various and constant experience.

General electrization does not supersede other medication. It may be used in conjunction with all other

systems and methods of treatment, external and internal. It can in no way interfere with any of our favorite and successful remedies, and therefore all the more it invites, and must receive, the attention of scientific men everywhere, and must in time become a part and parcel of the organic system of instruction in all our institutions of medical learning.

914 BROADWAY.

REMARKS ON PULMONARY PHTHISIS AND ITS CURABILITY.

BY C. BOTH, M.D.,

OF BOSTON, MASS.

(No. 2.)

THE existence of a contagion in tuberculosis has, I think, never been proved. The pretended successful inoculations of animals, closely confined after the operation, show nothing but what we may see daily in menageries, the inhabitants of which perish, almost as a rule, of tuberculosis. We may observe the same in men who have been closely confined in prison cells. Diseases can be transmitted to children either through a contagion or by emboli from the mother's blood.* In both cases the development of such children would be visibly interfered with, if not totally prevented. The transmission of emboli from the mother suffering with tuberculosis, would obstruct one or several glands; a process which, especially in children, could not exist without direct and most likely serious consequences. Under such circumstances only we might speak of tuberculosis as inherited; and it hardly serves for the explanation of the scrofulous habit, so called; or, as Niemeyer says, the vulnerability of the constitution from which arises the predisposition to tuberculosis at a later period.

There must be other causes to account for the majority of cases which have, heretofore, been considered hereditary. I would draw attention to three most ordinary causes, any one of which suffices for the explanation of such conditions as have been comprehended under the name of scrofula, and all three of which may often occur at the same time.

The first is the unexceptional overfeeding of babies, at the same time giving them an insufficient exposure to air and light; not giving sufficient attention to the quality of their food. As a consequence, there is an undue proportion of albumen, especially casein, supplied to the liquids and salts of the blood, which may at any time occasion an obstruction of lymphatic or other glands.

The second cause can be found in the inoculation of malignant virus and pus by vaccination, an occurrence more frequent than is generally supposed.

The third cause I find in atelectasis of the lungs; a process of the utmost importance toward the later development of phthisis, and one which has been overlooked by all writers on the subject. I can find reasons for the fact that atelectasis has never been mentioned as one of the principal causes of innate tuberculosis, only in the comparative newness of its discovery, and in the general belief of transmission, which makes all further inquiry useless.

Whoever has watched a newly-born infant must have observed that the child does not, in most cases, fill the whole of its lungs at once with air. Such manipulations as washing, rubbing, dressing, induce the little one to inspire more forcibly; but it is especially the *crying* of children which extends the lungs fully.

When the Romans invaded Germany they noted as one of the greatest of barbarisms that the German women used to dip their newly-born infants into the river. Among the Germans, at that time, tuberculosis or any predisposition to it was unknown, while in Rome the disease was quite rife. Now children are washed with warm, if not with hot water; afterwards filled with milk and then rocked to stupefaction. Should this not suffice to keep the child quiet, paregoric, a patent soothing syrup, opium, or alcohol, is resorted to.

This is sufficient to make a strong child liable to atelectasis. What will become of children that are born of weak parents and require artificial stimulation to breathe at all?

In a normal thorax the clavicle should be hardly visible. By watching girls as they come out of school, we may observe that in many the bone stands far above the ribs, sometimes more than an inch. It is sufficient for the later development of tuberculosis if only a few bunches of alveoli are in the state of atelectasis. As long as children play about and apply full pressure in their lungs, no chance is given for the degeneration of such places; but as soon as business or fashion compel a more sedentary life, the inner pressure of the air on the lungs diminishing, the parts which are entirely closed for circulation must begin to degenerate, and gradually to infect the surrounding tissue. The truth of this statement seems to me self-evident.

The various theories of transmission, of climate, of damp soil, of contagion, etc., cannot stand the test applied to all scientific theories, *i.e.*, that no exception whatsoever can be admitted. The transmission of phthisis is not, and never has been, a law. It is only a supposition which has been upheld because it is convenient for both patient and physician; perhaps also because it is coincident with the utter helplessness of therapeutical agents so far. As soon as we substitute the word "innate" for "inherited" we change the scope of our views as well as our practice. The prevention of the disease, which has been neglected on account of the belief in transmission, becomes not only possible but imperative. To eradicate this belief at once is as impossible in my opinion as the eradication of any other hereditary belief, unless we can substitute something more positive in its place. In consideration thereof, I advance the following hypothesis, which I think will bear close inspection, and which, in my opinion, excludes exceptions: *that it is absolutely necessary for the development of tubercles in the lungs that respiration should have been arrested previously in the parts in question; that the development of tubercles in all parts of the lungs which can be used for respiration, is an absolute impossibility.*

Upon reflection it may be found that diseases which obstruct respiration more or less, favor tuberculosis, *e.g.*, pneumonia, bronchitis (through obstruction of the air-passages), pleurisy, atelectasis; while emphysema, asthma, and various heart affections, prevent it directly on account of the forced respirations required under such conditions. The almost invariable development of the disease in the apex, the almost certain appearance of it in closely confined animals and men that formerly enjoyed the free use of their lungs, as well as in occupations which tend to prevent free respiration, together with observation and comparison, support the above hypothesis very strongly.

The consequences which result from its acceptance are various. We obtain a guiding rule for the etiology, nature and complications of this disease. The distinctions which have been made upon the appearances as found in autopsies, and which have led to differences in

* By emboles we understand any amorphous particle which can be carried away with the blood stream from a nidus of decay, and which may tend to obstruct the capillary net.

opinion, will be found unnecessary in regard to the nature of tubercle. As soon as the above rule is accepted we have reason to hope that the form of tuberculosis, which has been considered hereditary, may be eradicated through the proper management of infants; and an entirely new field be opened for the treatment of the already developed disease, which not only enables us to cure actually the tendency toward it and the, so called, first stages, but gives opportunity to arrest it in a degree as yet considered an absolute impossibility.

Original Lectures.

ON THE RADICAL CURE OF HERNIA.

REMARKS MADE BEFORE THE NEW YORK MEDICAL JOURNAL ASSOCIATION, MAY 22, 1868.

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(Reported for the MEDICAL RECORD.)

When we reflect, Mr. President, that according to the average estimate about twelve per cent. of the various populations are affected with some form of hernia—that in about four per cent. of this number the hernial condition becomes directly or indirectly an ultimate cause of death—we are not surprised to find that the literature of the radical cure of hernia, dating back, too, as it does to the earliest of mediæval times, is not only amusingly curious, but overwhelmingly voluminous. As therefore it would be manifestly unwise, on this occasion, to attempt a complete resumé on any one of the questions connected with the subject announced, *I propose in an informal way to present only such facts as shall best enable us to determine the relative merits of the various methods more commonly employed to effect a radical cure of hernia, having special reference to oblique inguinal hernia.*

And here I would say that by the radical cure of hernia I mean the institution of such a physiological condition as shall prevent are-descent after replacement, without the subsequent use of extraneous mechanical aid.

Etymologically, the term hernia, from ἔρος, a diverticulum or offset, is equally applicable to the sac alone, or the sac and its contents, however large or small. Those operations therefore which contemplate the return or obliteration of a part of the sac only, really possess no claim for classification with operations for radical cure. So long as an open pouch of peritoneum protrudes through the deep inguinal ring from the interior of the abdominal cavity, whether it advances more or less down the inguinal canal, whether it makes its exit or not, through the superficial ring, it is neither more nor less etymologically than a hernia.

Beginning with the earliest time, the methods of treatment have included abscission, incision with sutures, tight ligature, loose ligatnre, incision with ligature.

Abscission.—This was practised by Celsus, and consisted in removal by the knife of the sac and all its coverings, including the integument, and in young boys the testicle also, at the superficial ring.

Incision with Suture.—This was called the royal stitch, and consisted in opening the sac freely and uniting the edges closely with continued suture, with the hope of obliterating the cavity of the sac.

Tight Ligature.—This plan is described by Galen and Paulus Egineta, and consisted in applying a ligature so tightly at and below the superficial ring, as to cause the integument, sac, and testicle completely to slough off. For centuries after its first description, this operation continued to be practised with various slight modifications.

Loose Ligature.—This method, which is described by Ambrose Paré, consisted in passing a golden or other metallic wire so as to include in its loop the sac, spermatic cord, and intervening portion of integument close to the superficial ring; the loop was then tightened sufficiently to close the sac at the ring without strangling the spermatic cord.

Incision with Ligature.—This operation, introduced at a much later date by Schmucker and Langenbeck, of Berlin, was a great advance upon the previous methods. They exposed the sac by incision at the superficial ring, separated it from the cord, and included it alone in a tight ligature. The fundus of the sac below the ligature was, by Schmucker, then cut away. Langenbeck, however, preferred to let it alone, and leave it to such chances of sloughing or adhesive inflammation as might happen to occur.

One thing it may be well to note at this point, viz.: Each of these operations was limited to the parts outside of and below the superficial inguinal ring; so that however well the operation might have effected the object sought, the result would have been the modification of the tumor into a bubonocele only—the substitution of one form of hernia for another form of hernia—nothing more.

All these operations now belong exclusively to the past; and as by their mere recapitulation we have perhaps seen enough of the steps by which the plane we now occupy has been reached, we will forthwith proceed to consider the operations of our own period.

The operations now in vogue for the radical cure of hernia may be divided into two classes; 1st. Those which deal with the interior of the sac only. 2d. Those which attempt cure by invagination of the integument and scrotal tissue.

FIRST. OPERATIONS FOR THE OBLITERATION OF THE SAC BY EXCITING ADHESIVE INFLAMMATION WITHIN ITS INTERIOR ONLY.

For this purpose the *seton* has been used, consisting of thread, sponge, candle-wick and similar materials. This method was practised by Schuh of Vienna and by Riggs of New York. Belmas introduced into the sac a crumpled bag of goldbeater's skin, and afterwards distended it with jelly.

Injection of Irritating Fluids.—Velpeau of Paris and Prof. Pancoast of New York injected into the sac tincture of cantharides or iodine to provoke adhesion of the walls of the sac to each other. The dangers of these several modes of treatment are sufficiently manifest; they are, in the use of the *seton*, from the burrowing of matter, and from pyæmia. In the injection of irritating fluids, not only the sac, but sometimes the peritoneal cavity is unfortunately in danger of sharing the treatment.

The injection of irritating fluids into the sac may succeed as well, and for the same reasons, as it does in hydrocele, so far as obliteration of the present sac is concerned; indeed it may yield a permanent success provided only the exterior of the sac has acquired firm adhesions to the interior of the canal throughout its course, so that obliteration of the sac shall signify complete consolidation and closure of the late canal.

I might here perhaps mention the operation of Bonnet of Lyons, which by *pressure* seeks obliteration. The sac at its anterior part is pinched up below the superficial ring by needles. For a time it seemed in many cases to succeed, but the result was in the end

invariably unsatisfactory. There is one solid ground of objection to all methods the object of which is the obliteration of the sac or to establish a barrier to the descent of the intestine at or below the superficial ring, and nothing more; it is, that both etymologically and in fact, though the operation perfectly succeeds, the hernia remains. It may have been successfully imprisoned and its name be changed to "bubonocele," but it is a hernia notwithstanding, and is liable at any moment to re-descent or fatal strangulation. Such operations have no claim to be classed amongst operations for radical cure, the necessary conditions of such cure being therein apparently not even contemplated.

To this class would seem to belong an operation by Prof. Chisholm, of South Carolina. It is called "a simple method of radically curing reducible hernia," and is stated to consist "in sewing the columns of the inguinal ring together, subcutaneously, by silver wire and leaving the wire permanently in the tissues, so as to act the part of permanent clamp."*

Quite recently, Mr. Arthur Durham, of London, has attempted to revive the discarded operation of Langenbeck, with this heroic difference:—The incision is made down to the deep ring instead of the superficial, and the ligature is applied at the origin of the fascia propria instead of around the sac, at its emergence from the superficial ring. It is related that the single patient, upon whom this operation was performed, did not die.

SECONDLY. OPERATIONS BY INVAGINATION OF THE INTEGUMENT AND SCROTAL FASCIA.

Of the two classes this has, for a long time past, met with the greater favor, and may be considered the standard class of operations at the present time.

The first operation based upon this principle is that by Signorini and Gerdy. In *Gerdy's method*, the left index finger is made to invaginate the *integument*, scrotal fascia, and such part of the fundus of the sac as may happen to be in the track of the finger as its point passes into the superficial inguinal ring. The apex of the vaginal cone is then stitched to the anterior aponeuroses by a curved needle passed along the finger and transfixing them on each side of the point of the finger; the ligature, which is of strong thread, is then tied, fastening and holding the invaginated parts by *suspension*. [Demonstration upon manikin.] The most obvious cause of failure of this operation was at that time supposed to be, *Firstly*. The point of adhesion was too limited, and, in consequence, the parts united were very soon dragged asunder.

The Method of Wurtzer, of Bonn, was devised to obviate this difficulty; and this is the method which perhaps more than any other is now practised both in this and other countries. This instrument, which I now exhibit, is a wooden cone, which is made to substitute the index finger in invagination. [Demonstration upon manikin constructed for the purpose.] We now pass this needle through this conical plug, and as it emerges from its apex plunge it through and transfix the anterior parts; this corresponding half cone is now applied exteriorly in this manner, so that the intervening front wall of the inguinal canal and scrotal fascia is clamped tightly enough to induce adhesion of these parts to each other, after which the plug is removed. For this operation there may be claimed the following advantages over and above the last mentioned.

The wooden plug maintains apposition of the parts intended to be united with much greater security.

The area of adhesion is likely to be greater.

To this operation in its most approved form I must beg to submit, however, several objections. In the *first* place, by this sketch upon the blackboard, it will be seen that, however complete the area of the adhesion obtained, it is at best but very small; that it occurs anteriorly only; that the posterior wall of the inguinal canal remains free as before; that if the intestine strongly inclines to do so, there is nothing to prevent that part of the open sac still remaining above the point of adhesion from being bulged backwards and downwards behind the adhesion and emerging with the intestine through the superficial ring—the desired adhesions which are relied upon for a cure meanwhile remaining for the present undisturbed.

Secondly. Part only of the inguinal canal is attempted to be plugged, or in any way closed.

Thirdly. Though the operation be at first successful by the invagination of the integument of the scrotum, the weight of the testicles exerts continual traction upon the point of adhesion, tending to drag the united parts asunder.

Fourthly. The wooden plug dilates the parts we desire to close, renders the superficial ring more patulous, and, in case of re-descent, prepares the way for a larger hernia than before.

The operation which seems to present the greatest claims to our attention, both in its rationale and in its results, is that of Mr. John Wood, of King's College, London. Through the kindness of its author, I had the frequent opportunity in 1865 of witnessing and aiding in its performance, as well as of watching the patients in the several stages of cure.

Before proceeding to demonstrate the various steps of this operation upon the canvass manikin, please allow me to call your attention to an anatomical fact, plainly exhibited here, and which is very important to the clear understanding of this operation.

We have here the internal oblique and the transversalis muscles, their two tendons—joining to form the conjoined tendon. But whereas these muscles arch across and in front of the spermatic cord and inguinal canal, the conjoined tendon passes behind both, forming part of the posterior wall of the canal.

DEMONSTRATION UPON CANVAS MANIKIN.

The instruments needed are knife, this large curved needle with handle, and piece of stout copper wire, silvered, about two feet long.

The operation is performed in the following manner: An incision is made over the fundus of the tumor, beginning about an inch below the spine of the pubes, and proceeding about an inch and a half downwards and outwards; the integument is then detached from the subcutaneous cellular tissue, over an area of about two inches, by the handle of the scalpel. The knees of the patient being well bent upon the trunk, the left index finger is made to invaginate the *detached fascia* into the inguinal canal, as far up as the deep ring. Following the lower border of the internal oblique muscle, the finger finds and hooks forward the conjoined tendon. The needle, unarmed, but well oiled, is then passed along the thumb-side of the finger, and pushed through it, so as to take up a considerable portion; the point of the needle is made then to take up the more superficial parts, passing obliquely upwards and inwards, the skin being drawn in the same direction, and the needle pushed through it. One end of the wire is then hooked to the perforated point of the needle and the instrument withdrawn. The needle being disengaged, it is again passed along the outer side of the finger, which is on no account removed, as far up as the deep ring, opposite which it is made to pierce the anterior aponeurosis close to Poupart's ligament; it is then turned so as to make its point emerge through the

* Lancet, Sept 1st, 1866. Page 231.

same puncture first made, and in which the other end of the wire is already found; the upper end of the wire is then hooked on and drawn down after the needle through the scrotal incision. A loop of wire is now seen protruding through the puncture in the groin, and its two free ends are dependent from the scrotal wound, having traversed the conjoined tendon and internal pillar on the inner side, and Poupart's ligament on the outer side respectively. In some cases one of the free ends of the wire is now made to take up that part of the sac and scrotal fascia in front of the cord; the free dependent ends of the wire are now twisted upon themselves, and the loop pulled upward from above, by which the twisted sac and scrotal fascia are invaginated firmly into the inguinal canal, up to the deep ring. A few twists are now given to the loop, fixing it down firmly into the groin puncture, and the operation is complete.

For convenience of disposition the free ends of the wire may be made to hook on to the loop. Cold water dressing may be applied. The patient is put to bed, where he remains with the scrotum supported. Careful constitutional treatment is maintained; the wires are usually untwisted about the tenth day, and about the fourteenth day are finally removed.

After the operation the relation of the parts is as follows:—The inguinal canal, up to the deep ring, is plugged with freshly dissected subcutaneous cellular tissue. The anterior and posterior walls of the canal, except as occupied by the plug, are in apposition up as far as to the deep ring, without undue pressure upon the cord. The superficial ring is closed. The whole space occupied formerly by the canal is intercrossed by the wire sutures holding the plug, and apposed surfaces together in one solid mass from the superficial, to the deep ring.

The condition of the parts after recovery is, briefly:—Complete obliteration of the inguinal canal throughout, from the superficial up to the deep ring. The difference between the results of this and the other operations will be found, I think, to correspond pretty closely to the difference in the methods pursued. Recurring to the four objections which I have stated to Wurtzer's operation, we find, instead of holding good in this operation, that, in the *first place*, instead of there being a limited point of adhesion, this process occurs over an area equal to the superficies of the entire walls of the canal up to the deep ring.

Secondly. The canal, instead of being plugged only to a small extent, is completely occluded throughout its whole extent.

Thirdly. No integument being invaginated, the testicles are not so much lifted by the operation, nor suspended from any point of adhesion after healing; thus avoiding the traction which tends to drag the adhesions asunder.

Fourthly. No integument, nor anything whose pressure is simply mechanical, enters the canal; there is, therefore, no dilatation; but the superficial ring and other parts are so completely approximated to each other by the sutures, that though the operation does not entirely succeed, its only possible result must be improvement.

The occlusion is effected by a *physiological plug*, and by adhesions which establish throughout the former course of the canal a solid physiological continuity.

I know it is objected that the operation requires considerable anatomical and surgical skill, and that it is attended with some danger. All of this is most true—I admit it; but is it not also true of almost every operation in the domain of our chosen art? Whereas, nothing in connection with any of the other operations for radical cure seems so difficult to obtain as statistics, I am happy to be able to submit the proximate results of treatment of one hundred and fifty cases, by Mr. Wood. Of the whole number, one death occurred after the operation, in King's College Hospital, from pyæmia. The cures have been in the proportion of from 65 to 70 per cent. One of the patients has labored as a porter for five years since the operation in Covent Garden Market, but exhibits no signs of protrusion.

All those operated upon who have not been cured have been improved.

This operation has been performed by Paget, Haynes Walton, Redfern Davies, repeatedly with success, as also by others in Liverpool, Dublin, Berlin, India, Australia and the United States. Dr. Choever, of Boston, reports that out of what he would call eleven fair cases eight failed and three succeeded, but the Dr. modestly adds that the difference between his results and Mr. Wood's may be due to his want of experience.

I performed the operation in 1866, that being the first time it had been performed in this city. All the circumstances were highly unfavorable, and owing to the obstinacy of the patient I was obliged to remove the wires on the third instead of on the fourteenth day. Six weeks afterwards he called at my office, told me he was at work, coal-heaving, and was perfectly well. On examination no impulse or protrusion could be discovered.

When Mr. Wood operates upon children for radical cure, he frequently substitutes "rectangular pins" for the wire, used in rather a different manner from the wire and with equal success.

The *use of a truss* for procuring radical cure may in children yield a good degree of success. But there is one point in the shape of trusses upon which, before closing, I would make a few remarks. I have been unable to find in this city a hard wood truss of any other shape than this which I now exhibit. Its shape is exceedingly conical; and, as incidentally illustrated by the fact just mentioned, this is the shape which is uniformly used in all cases miscellaneously, when cure as well as retention of a hernia is desired. What we desire is contraction and closure of the superficial ring.

The instrument we have here would, especially in an old hernia, act rather as a conical dilator; the pressure tending to destroy the tonicity, and the shape mutually helping to *dilate* the pillars of the superficial ring.

By the use of a Wood truss—the outer margin of the pad being most prominent, its centre concave, with a slot in the margin of the pad for protection of the cord—the pressure is confined to the outer circumference of the ring, and instead of dilating, at once crowds the pillars of the ring towards each other, at the same time that it keeps up such pressure as would prevent redescent of the hernia, and tend to induce adhesion of the lower part of the walls of the canal to each other.

A Bloodthirsty Somnambulist.—The "Revue de Saint-Pons" (Hérault) states that a few nights back a pupil in the training school for young priests in that town rose from his bed while all his comrades in the dormitory were asleep, and in a state of somnambulism made an attack on the guardian of the apartment. The latter was awakened by feeling a hand on his shoulder, and the noise of blows on the bed. The assailant had made three stabs with a knife, but happily only penetrated the mattress and sheets. He was seized and locked up in a room by himself, and the next morning was utterly unconscious of what had occurred. This was the first time he had ever shown symptoms of somnambulism.

Progress of Medical Science.

THE NON-EFFICACY OF THE BROMIDE OF POTASSIUM IN CHORDEE.—W. F. Monroe, M.D., has contributed to the New York *Medical Journal* a recapitulation of thirty-six cases of chordee with the following results: In four cases its effects were exceedingly doubtful; in three cases only were the results at all satisfactory; in one case the relief was probably due more to the effect of the drug upon the over-trung nerves of the patient, than to its anaphrodisiac properties. In all the cases, hot water bottons at night were ordered, unless contra-indicated. None of the usual recommendations as to sleeping on the side, etc., were neglected.

ABORTION AS A CAUSE OF INSANITY.—The Superintendent of the Michigan Insane Asylum, in his report just published, says: "Mental derangement has generally occurred as a result of local injury, and the serious impairment of general health, directly traceable to the criminal act. In a few cases it has operated as a moral cause; as, for instance, when the unfortunate sufferer has borne a child which has been permitted to remain with her only long enough to show the unhappy mother the priceless value of the gift she had previously refused to accept. In these cases the immediate cause of the insanity is remorse. Unless this most disastrous practice be speedily arrested by the efforts now being used to suppress it, and by more stringent laws, severely punishing all parties implicated, it will materially increase the number of female patients annually presented for treatment."—*N. Y. Medical Journal.*

ANTISEPTIC PROPERTIES OF THE SULPHITES.—Recent experiments have shown that the sulphites of lime, hyposulphite of magnesia, and the sulphites of magnesia and soda, possess all the antiseptic properties of sulphurous acid, with the advantage that their action is more uniform and certain. In experimenting on animals and on himself, Dr. Polli (*Med. Times and Gazette*) found that large doses could be taken without risk. On killing animals treated with sulphites, and others not so treated, he found that the former were more slow to decompose, and indeed remained quite fresh when the others had become putrescent and offensive. Another series of experiments showed that the administration of the sulphites was sufficient to effect a more or less rapid cure where blood-poisoning was present, as in fevers. —*Humboldt Medical Archives.*

PROLAPSUS ANI.—Dr. Schartz, in *Hufeland's Journal*, recommends for this affliction a solution of the ext. of nux vomica of the strength of one or two grains to the ounce of distilled water. Of this solution he gives six to ten drops every four hours. This is the dose for very small children; to larger children fifteen drops at the same intervals. Children at the breast, two or three drops.—*Nashville Journal of Medicine and Surgery.*

EXTRAORDINARY RECOVERY FROM KNIFE WOUNDS.—An Indian of Los Angeles, Cal., while under the influence of delirium tremens, attempted suicide by stabbing himself with a bowie-knife. He was dragged about a mile by a rope fastened to his feet, being supposed to be dead. Dr. V. Gelich, on examination, found five stabs. The first perforated the trachea, partially dividing it; the second penetrated the left breast, between the fifth and sixth ribs, and was probed to the depth of three and one-half inches. There was considerable hæmorrhage from the wound of the throat. The other three wounds were in the abdomen, through which the bowels protruded. One cut, which had partially severed one of the lower intestines, was sewed up, the bowels washed and returned, and the edges of the gaping wounds securely drawn together by sutures. After having the wounds dressed, he was taken on a dray a mile to the hospital. Being delirious, he was taken to the jail and chained by the legs to a post. The wounds were carefully attended to, and with good nursing the patient's strength returned rapidly, and he was discharged in ten days from the date of the injuries, and is now quite well.—*Pacific Med. and Surg. Journal.*

AN AGED PRIMIPARA.—In response to the inquiry made through the London *Lancet*, with respect to childbearing in advanced life, Dr. Cachot, of St. Mary's Hospital, informs us that he delivered in that institution a female of her first child, at the age of 53 years, and again in sixteen months. The labor in both confinements was tedious, from inertia of the uterus, and required the forceps. The mammary glands enlarged, but produced no milk. The children lived in both cases.—*Pacific Med. and Surg. Journal.*

VERATRUM VIRIDE IN CONSTIPATION.—In an obstinate case of habitual constipation, Dr. T. C. Miller (*Journal of Mater. Med.*) gave three drops, five times a day, of the tr. of veratrum viride, and in the course of two weeks effected an entire recovery.

MINUTE INVESTIGATION OF THE KIDNEY.—M. Rendonsky (*Virchow's Archiv*, bd. 41, 1867) gives the following results of his investigations of the minute structure of the kidney:—1st. The uriniferous tubules are continued into the capsules of the malpighian bodies, or terminate in blind extremities. 2d. The malpighian capsules are placed on convoluted tubules, lined by nucleated epithelium; other and smaller canals, supplied with transparent epithelium, communicate finally with these tubuli. 3d. Straight tubuli are connected with some capsules, which, at a short distance from these capsules, show the characters of the convoluted tubuli. 4th. The convoluted and the straight tubes are connected by tubuli, which are lined by transparent (non-nucleated) epithelium; the convoluted tubes are in communication with the capsules, and the straight tubes open into the pelvis of the kidney. 5th. Henle has described canals with transparent epithelium, as continuations of the tubuli uriniferi, which are really blood-vessels.

INFLUENCE OF DIET UPON THE MOTHER'S MILK.—Dr. Subotin, of Petersburg (*Vierteljahrschrift f. d. Prakt. Heilk.*, No. xxv, 1868), has instituted a series of experiments in regard to the influence of diet upon the quantity and quality of mother's milk, and his conclusions are as follows: 1st. That the daily yield of milk is increased by animal food, and is diminished by a diet of vegetables. A marked diminution of the milk, and, when persisted in, an entire suppression, is shown when food of a fatty nature has been given only. 2d. The relative proportions of the elements which compose the milk are influenced by the character of the food. The amount of solid matter is increased by an animal diet, and the fatty material is shown by this increase. The increase of casein is less marked. The increase of these substances in the milk is absolute, not relative; animal food increases the daily amount of the milk secretion. There is scarcely an appreciable change of the proportion of the albuminous and saline ingredients. Bensch supposed that the saccharine matter of the milk was reduced by the use of an animal diet, but it is found not to be so. The experiments of Drs. Bensch, Playfair, and others, that the fatty constituents of the milk are increased by vegetable food, and by an animal diet diminished, are not confirmed by him. The solid

properties of the milk, especially the butyraceous, are but relatively increased, and at the same time a decrease in the sugar is shown. 3d. From these observations it would seem that the fatty matter of the milk is created, for the most part, from albumen.

CONGENITAL MONORCHIA IN MAN.—Dr. Gruber, of St. Petersburg (*Medizinische Jahrbucher, hf.* 1, 1868), has discovered but twenty-two real cases of congenital deficiency of one testicle (monorchia), after carefully overhauling the literature of the last three hundred years. He asserts that the subjects of this malformation and defective structure are generally well developed, and arrive at an advanced life. The testicle is generally absent on the right side, and the scrotum is well developed. The genital organs and seminal apparatus on the opposite side do not often show any associated anomalies. The size and form of the vesicula seminalis corresponding to the affected side is generally normal, and it acts as a secreting gland. After an examination of the fluid taken from the vesicula seminalis on the side of the monorchia, no spermatozoa have been found, although these bodies are found in the opposite gland. If the opposite testicle is perfect, a person with congenital monorchia is capable of procreating.

ACTION AND USES OF CONIUM.—Dr. Geo. Harley (*Med. Times & Gazette*) speaks in his lectures of conium as follows: "Muscular movements are depressed by hemlock, but the state of the muscles, whether in action or at rest, influences the effect. In man and in all animals the action of this drug is uniform. There is a lazy movement of the eyes, and occasionally strabismus, with depression of the motor function of the third nerve, after the use of it. Alcohol acts on the motor system only secondarily, and the action of conium is not affected by it. Sleep is the result of the full action of hemlock; to the corpora striata the whole of the motor tract, and the smaller nervous centres, it is what opium is to the brain—it renovates and calms the whole nervous system. Muscular activity influences the action of conium more than muscular power. It affects the delicate, but active, less than the sedentary, with great strength. The dose must be graduated to the amount of motor activity of the person; the bodily activity of the individual may be measured by conium. The cerebral effects of hemlock are absent; it diminishes the irritability of the spinal cord; distinct interference with the sensory functions is not evident. He regards it as a children's remedy. To a child, one and three-quarter year old, suffering from laryngismus stridulus and convulsive cough, he began with twenty minims, then thirty minims, forty minims, and increased it to two fluid drachms and a half. Not until forty or fifty minims were given was there any discernible effect. In the first five weeks (previously one in two weeks) there was one attack, and the recovery of the child was complete."

USE OF BELLADONNA.—Dr. Geo. Harley (*Med. Times & Gazette*) says in regard to the use of belladonna, that no other medicine is equal to it as a powerful *cardiac stimulant*. He recommends it in cases of syncope and cardiac asthenia; one hundredth of a grain of the sulphate is sufficient. It excites the torpid kidney and feeble circulation, on account of its *diuretic* qualities. In acute nephritis, the nervous agitation is calmed by it. The excretion of albumen is noticed in chronic albuminuria by its use. In all conditions of the kidney it is a safe article to give, as it has a tendency to keep the organ in a healthy state. *Oxidation* in the system is *promoted*. In uric acid and lactic acid diathesis it is very beneficial. By injecting one-fortieth to one-fiftieth of a grain of the sulphate in the region of the joints affected with rheumatism the pain vanishes.

TREATMENT OF FRACTURES OF THE LOWER EXTREMITIES.—Mr. Paget (*St. Bartholomew's Hosp. Reports*), treats fractures of the thigh in young children by position only, no apparatus being used. Fractured patellæ in patients of every age by extending the limb merely, and supporting the limb with a sand bag on each side. Fractures below the knee are treated with the immovable bandage of plaster of Paris, or, in complicated cases, with a suspension apparatus. When the fragments do not come into position and remain there, the tendo-Achillis is divided. If the fracture is compound, the tendo-Achillis is always divided.

CARBOLATE OF QUINIA.—Prof. Wenzel states (*Jahrbücher der Gesammten Med.*, August 28, 1867) that carbolic acid is borne by the higher animals and man, if introduced in a diluted state. When the rinderpest prevailed in England, it was given to animals in their food. By combining two equivalents of the acid with one of quinia, the carbolic acid loses most of the irritating properties. G. Braun gives it in puerperal diseases, and it has been given by eminent medical men in typhus cases and pyæmia. One grain of quinia with one-sixth of a grain of carbolic acid made into a pill, can be given without inconvenience three or four times a day.

LACTATE OF ZINC IN EPILEPSY.—Dr. Hart (*The Humboldt Medical Archives*) has tried this remedy in combination with belladonna, on 240 epileptic patients in the Western Lunatic Asylum of Kentucky, and with happy results. In no case did he use it without effectually controlling the paroxysm in from 24 to 48 hours. His formula was: R. Zinci lactatis, gr. xxx; Ext. belladonnæ, gr. viij; M. ft. pil. x. Sig.—One before each meal.

LOCAL TREATMENT OF SOFT CHANCRE.—The application of carbolic acid causes the rapid destruction of the ulcerating surface, with decomposition of the poison, and without any considerable degree of pain. The surface of the sore is turned white by the acid; this becomes a thin dry yellow scab, which separates in about two or three days. The application should be repeated to the third or fourth time, when it may be found that the sore has healed under the scab. The healing of the sore is generally completed in an average of ten to fourteen days.—*British Med. Journal.*

ELIXIR OF VITRIOL AND TANNIN AS A HÆMOSTATIC.—Elixir of vitriol and tannic acid in combination, have proved to be a very valuable hæmostatic for dental use. It is very effective in internal as well as external hæmorrhages, and is more agreeable, when applied to the mouth, than many of the agents possessing like properties. This preparation is highly recommended for hæmorrhages following the extraction of teeth.—*Am. Journal of Dental Science.*

REMOVING TAN.—Tan may be removed from the face by mixing magnesia in soft water to the consistency of paste, which should then be spread on the face and allowed to remain a minute or two. Then wash off with Castile soap-suds, and rinse with soft water.—*Chemical News.*

OIL STAINS IN MARBLE.—These can be removed by applying common clay saturated with benzole. If the grease has remained long enough, it will have become acidulated, and may injure the polish, but the stains will be removed.—*Chem. and Drug.*

LIQUID HAIR DYE, WITH PREPARATION.—Nitrate of

silver, in crystals, one drachm; rose water, or distilled water, two ounces. Dissolve, and add aqua ammoniæ, till the solution becomes cloudy from the precipitated oxide of silver; then add more ammonia, till the oxide is redissolved; to this, add one-half drachm of powdered gum arabic, to give it consistency. This constitutes the dye. The preparation consists of a solution of ten or twelve grains of gallic acid in an ounce of diluted alcohol (equal parts of alcohol and water), and is to be applied to the hair as soon as the other solution is dry. For a black color, the dye should be thoroughly applied, and if necessary more than once, but for a brown, one light application is sufficient. In some cases, this dye actually invigorates the hair, by imparting a stimulating and astringent effect to the scalp.—*Jour. App. Chem.*

Depilatory Powder of the London Hospitals.—

R Quicklime	ʒj.
Yellow Sulphite of Arsenic	ʒij.
Starch	ʒj.

M. Add a little water, and apply to the spot from which the hair is to be removed.

Seat of Taste.—It seems from the experiments of MM. Klautsch & Stitch, that the only portion of the tongue sensible to taste is a narrow space all round, the breadth of which varies from two to four lines.

Carbolic Acid as a Remedial Agent.—W. Kempster, M.D., Utica, N. Y., contributes an interesting article to the *Am. Journal Med. Sciences*, on "Carbolic Acid as a Remedial Agent," from which the following extracts are made. This agent is valuable in cases of catarrh, when the discharge is profuse and offensive. It is administered to the patient by inhalation, using one grain of the crystallized acid to the ounce of water. The fetor is not only relieved, but in the course of one or two inhalations the character of the discharge is changed.

In a case of scarlatina, when the breath was very offensive, a gargle of two grains of the acid to an ounce of water relieved the fetor at once.

In cases of simple tonsillitis it acts admirably, and has the advantage over the ordinary potassa gargles in relieving the "bad taste" and foul breath. An unguent made of five grains of the acid to an ounce of simple cerate is decidedly beneficial in correcting the odor attendant on cancerous discharges, and is recommended for overcoming fetid perspiration from the axillæ or feet. The odor of the acid can be overcome by the addition of a few drops of oil of lemon.

Secondary Hæmorrhage, following Incisions of Cervix Uteri.—J. C. Nott, M.D. (*Am. Journal Med. Sciences*), believing that exceptional cases of secondary hæmorrhage following incisions of the cervix uteri are liable to occur, which will resist the styptic and tampon made use of by Drs. Sims and Emmet, records a case of hæmorrhage occurring in a patient under his care in Baltimore. After the cervix was divided backwards, together with internal os, he waited thirty minutes, and there being no appearance of undue bleeding, a piece of patent lint, soaked in glycerine, was forced into the divided os internum, the divided lip was plugged with a wad of cotton wet with liquor subsulph. ferri (one part to three of water), and a tampon of dry cotton was placed over the whole. Secondary hæmorrhage followed in a little over an hour, and when he arrived the patient was found pulseless, blanched, and retching incessantly. The following expedient was resorted to: An ounce of Squibb's liquor subsulph. ferri, with three of water, was injected down to the bottom of the vagina, between its wall and the mass of cotton, while pressure was made upon the vulva to prevent its escape. The pressure was kept up for about five minutes, to allow the blood to coagulate, after which not a drop of blood escaped. One-third of a grain of sulph. morphia was given hypodermically, and in ten minutes reaction took place. The case afterwards did well.

Vegetable Organisms in the Human Blood.—Joseph G. Richardson, M.D., Union Springs, Cayuga county, N. Y. (*Am. Journal Med. Science*), has examined nearly one thousand specimens of human blood during the past year, and in most of the cases has found the molecular substance called by Prof. Salisbury "*zymotosis translucens*." The specimens of blood, taken from persons affected with rheumatism and neuralgia, have shown long strings of these transparent granules, and sometimes homogeneous filaments; in the blood of healthy persons these particles were single, or adherent in rows. In addition to them, he found, in a few instances, that the blood contained rounded particles, which did not fade away like the others; having an active or erratic motion. Cases where the pulse was intermittent, and the blood anæmic, exhibited these rounded particles. Under the administration of the tincture of chloride of iron they diminished. To obtain presumptive evidence of independent organisms within the blood, and to confirm the novel theories of Prof. Salisbury concerning the vegetable origin of diseases, Dr. R. made the following investigations:—

Expt. 1. A drop of blood was taken from his own arm and placed upon a slide, and a small quantity of water which had been standing four days upon some fragments of beef, was mixed with it. Upon examination under the microscope, moving vibriones were seen, some moving rapidly, some slowly, and others were carried among the blood-corpuscles, unaffected by the change of world. On watching one particular filament, which was active and constant, he found that it grew in length from $\frac{1}{1000}$th of an inch to $\frac{1}{125}$th of an inch in (8) eight hours, and at the end of twenty-three hours it had reached a length of $\frac{1}{25}$th of an inch. Its movement diminished in rapidity, as the organism increased in length; its breadth continued the same throughout, and was about $\frac{1}{3000}$th of an inch.

Expt. 2. Two hours after supper, at 8½ P.M., he drank a fluid-ounce of water, which contained on an average 14 vibriones and bacteria to each square $\frac{1}{100}$th of an inch, so that the f ʒj included about 7,000,000,000 of living organisms. A drop of blood was drawn from his arm in half an hour after the imbibition of the mixture, and but a single moving molecule was seen. At 9 P.M., a glass and cover, heated beyond the limit compatible with organic life, were used for the examination of another drop of blood, in which four molecules in an active state were seen. At 10 P.M. a drop of blood showed six specimens of moving bodies; while in a drop drawn at 10½ P.M., only two could be found.

Expt. 3. At 7 P.M., January 7, 1868—4 hours after dinner—he swallowed four fluid-ounces of water which had been standing 70 hours upon fragments of beef, and contained about 27,000,000,000 of living organisms. At 8 P.M. a slide and cover were prepared in the following manner; after washing them and drying them, a drop of strong hydrochloric acid was applied to the middle of the slide, and the glass cover laid upon it; the cover was raised in about a minute and held in the flame of an alcohol lamp until the acid was volatilized, then placed under a small bell-glass. The slide was treated in like manner, and when both became cool, a drop of blood (from an incision made through integument painted with tr. ferri chlor.) was placed on the slide, and after-

ward to the microscopic stage. The blood was very full of moving particles resembling vibrio bucillus; they being abundant, and at one time three were visible in the same field. Another drop of blood drawn from a new incision was examined at a quarter before nine, and the revolving particles were fewer in number. At half-past nine a drop from the second incision was examined with the application of acid, and after a careful scrutiny of half an hour, three moving molecules only were revealed.

He concludes, that candid inquirers will admit the fact that an increased number of moving particles were visible after an increased dose of vibriones, which goes far to prove that millions of infusoria, after entering the stomach, find their way into the blood in a short time, and penetrate to every portion of the system.

The presumption must be strong then, that there are other plants more poisonous in their nature, which constitute the real *contagium* of a zymotic disease, like scarlet fever and diphtheria, small-pox and measles, as declared by Prof. Salisbury, of Cleveland, and lately by Prof. Hallier, of Jena.

Curability of Delirium Tremens by the Application of the Spinal Ice-bag.—In a paper read before the Medical Society of the College of Physicians of Ireland, Mr. D. B. Hewitt gave an interesting account of a case of delirium tremens treated successfully by the spinal ice-bag, applied from the fourth cervical down to the upper lumbar. Soon the patient fell asleep, and slept soundly two hours. The patient immediately commenced to recover, the appetite returned, and a liberal diet was given without stimulants. The ice-bag was applied thrice daily for three days, during which he slept the greater part of the time.

The following phenomena were observed by Mr. H.: 1st. Sleep was the immediate consequence. 2d. The disappearance of the tremors. 3d. The vascular action was regulated by its use. 4th. Sweating ceased. 5th. The temperature of the body was increased, with a return of the natural color to the face.—*Medical Press and Circular.*

Tobacco Paper.—A Hamburg firm have manufactured this article as a substitute for the expensive "leaf" of fine cigars, and it has acquired considerable reputation. The composition is given us:

Woody fibre and moisture,	91.69	p. c.
Aqueous extraction, incl. albumen, gum, veget. acids,	7.63	"
Resin, sol. in alcohol,	0.05	"
Chlorophyle and nicotianin,	0.32	"
Nicotina,	0.31	"

—*Druggists' Circ. and Chem. Gazette.*

Sterility Cured by an Operation for Phimosis.—M. A. Amussat, Jr. (*Journ. de Méd. et Chir. Prat.*, 1856), mentions a case of sterility in a male cured by removing a phimosis. The subject of it was a man who had been married five years without his wife becoming pregnant, which caused unhappiness on the part of husband and wife. It was ascertained that he had a long prepuce with a very contracted phimosis, so that the gland was constantly covered. The prepuce was removed by cauterization, May 11. In July the wound had completely cicatrized, and the urination became free. One year afterward the wife of the patient gave birth to a son.

Colorless Tincture of Iodine.—Hubert Primm, Ph. D. (St. Louis *Medical Reporter*), states that a colorless tincture of iodine, which would represent iodine *per se*, without the formation of a new chemical compound, is, as yet, a chemical impossibility; but he does claim that the following formula is the freest from causticity and odor: R. Tincture of iodine, f ʒ vj. Distillers' water, f ʒ ij. Hypo-sulphite of soda, 100 grs. Triturate the soda with the water and add the tr. of iodine gradually, with constant stirring. When the process is completed, filter. The resulting tincture is a clear and limpid solution.

Diphtheria.—Dr. DeLaskie Miller (Chicago *Medical Journal*) advocates the following prescription as being antiseptic, tonic, restorative and eliminative:

R	Tr. Ferri Chloridi, Potas. Chlorat.	āā	ʒ ij
	Morph. Muriat.		gr j.
	Ac. Muriatic Dil.		ʒ ij
	Aq. Distill.		ʒ j
	Syrupi		ʒ iij

A teaspoonful should be given every second or third hour; or, in severe cases, every hour, without dilution. It also makes an efficient local application.

Chlorodyne.—Ed. McIngall, Jr. (St. Louis *Medical Reporter*), gives the following formula as the best method of preparing the compound:

Take of sulphate of morphia,	gr. lxiv.
Alcohol, 95 per cent.	f ʒ ij.
Chloroform, purif.	f ʒ vj.
Sulphuric acid	q. s.
Ext. cannabis ind. (Allen's)	ʒ ss.
Oleoresin of capsicum	gtt. xij.
Hydrocyanic acid (Scheele's)	gtt. xcvj.

Shake together the sulphate of morphia, alcohol and chloroform, then add the sulphuric acid, shake well until it becomes clear, then add the oleoresin of capsicum, ext. cannabis and hydrocyanic acid.

Subcutaneous Injections in the Radical Cure of Varicose Veins.—Dr. Stephen Smith, in the *Medical Gazette*, recommends the subcutaneous injection of the persulphate of iron in this troublesome affection. The patient being in the erect position, from 5 to 15 drops of Squibb's preparation of the persulphate may be forced into the cavity of the vein by the use of the common subcutaneous syringe, the vein being pressed by the finger. In a few minutes the clot may be detected by the finger and the needle may be withdrawn. The patient should remain in bed several days and cold applications be made to the puncture. To prevent the possible escape of a clot into the general circulation, a compress and roller should be applied to the trunk of the vein on the cardiac side. The larger trunks are usually injected, and at several points at the same sitting. The clot at once perfectly occludes the vessel.

Sulphate of Zinc in Dyspepsia.—Dr. Gillespie recommends the use of the sulphate of zinc in dyspepsia in doses of half a grain gradually increased to two grains, three times a day, combined with opium or hyoscyamus, at the same time regulating the diet. He thinks this drug "as safe and sure as quinine in intermittents."—*Boston Med. and Surg. Journal.*

Pruritus Vulvæ.—Prof. Maughs has found hyd. ch. cor. grj.-ij. h. tr. cantharid. ʒ i. an efficient remedy for this and other forms of pruritus in the vicinity of the genitals.

Sulphites in the Treatment of Fevers.—Dr. A. C. Simonton, in an article on this subject, after giving several histories of cases in which he had used this treatment in intermittent fever, says that as far as his experience has gone, the sulphites are the remedies, *par excellence*, to rid the system of the malarial poison, the nature and modus operandi of which are not yet fully established, when it causes intermittent and re-

mittent fevers. In all acute attacks he deems it advisable, first to check the paroxysms by the usual antiperiodics, after which the remedies under consideration will complete the work.—*Chicago Medical Examiner.*

Concussion of Spine followed by Paraplegia treated by Bromide of Potassium.—A healthy, robust man, of sixty-five years, was thrown from a wagon, and was picked up in an insensible condition, in which he remained for several hours. He gradually recovered consciousness, and was about in a few days, though complaining of pain in the left foot. The pain gradually became worse, and swelling, with considerable loss of power, coming on, he took to his bed. The limb was bandaged and the swelling reduced considerably, but the right limb then also became swollen and powerless.

He was soon in a pitiable condition, as he was unable to move. The spine was also excessively tender in the lumbar region. He had been treated by mercurials, and was left constantly under the influence of opium. The pulse was full and frequent, tongue dry and brown, and the skin jaundiced. The opiates were now entirely abandoned, and the bromide of potassium given in fifteen-grain doses three times a day, with an additional dose at night if necessary, to produce sleep.

The good effects of the change were immediately manifest in sound, quiet, and refreshing sleep, and a marked improvement in all the symptoms. The pain and tenderness in the spine have greatly diminished, and considerable power has returned to the extremities. He is now able to leave the bed, and is steadily improving.—Henry F. Andrews, M.D., *in Richmond and Louisville Medical Journal.*

Nævus Maternus.—N. W. Brennan, M.D., in the *St. Louis Med. and Surg. Journal*, describes an unusual case of this affection occurring in a half-breed Indian woman, who was suffering from phthisis and epilepsy. The nævus covered the whole trunk posteriorly, extending from the occipital region to the inferior nates, and from side to side. It covered the right mamma, and reached midway on the right thigh, and to the upper third of the left. It likewise reached midway on the arms. The parts so marked were uniformly black; not so black as a negro's skin, but resembling the rough skin of a Mexican dog. There was an unusual though sparse capillary growth an inch or two long on the entire discolored part. On the back, below the waist, particularly, there was a thick growth of hair, quite bear like, two inches long. She stated that the milk from the discolored breast always sickened the child.

She stated that her mother, while pregnant, went blackberrying, and in a thicket a large bear suddenly started up beside her and frightened her. She attributed the discoloration to the influence of the mental emotion excited by the fright.

Unity or Non-unity of the Negro and White Races.—In a letter to the *Richmond and Louisville Medical Journal*, Dr. E. B. Turnipseed says: "I am not aware that it is known to the scientific world, that the hymen of the negro woman is not at the entrance of the vagina, as in the white woman, but from one and a half to two inches from its entrance in the interior, with a passage below for the escape of the menses. I have examined a good many cases and have found this invariable. This I thought to be abnormal at first, but finding it constantly situated as above described, in examining cases during a practice of fifteen years, I have concluded this may be one of the anatomical marks of non-unity of the races. I will say, further, that in this race I have never found the hymen situated as in the white race, at the entrance of the vagina."

Earache.—Dr. D. D. Spear recommends the tr. of digitalis in this affection. His recommendation is to drop one or two drops into the ear and then exclude the air with a piece of dry cotton.—*Richmond and Louisville Med. Journal.*

A Remarkable Case.—At the last session of the Mass. Medical Society, in Boston, Dr. John M. Horton gave a history of the man Gage, who, while blasting rocks in Vermont, in 1847, had a tamping iron three feet seven inches long and one inch and a quarter thick, forced through his head, it entering the upper cheek and coming out at the centre of the top of the head. Dr. Horton, who attended him, stated that he recovered sufficiently in fifty-nine days to walk and ride, and soon was nearly as well as before, although his intellect was somewhat affected. After living in several different places, he finally went to San Francisco in 1859. In 1861, he was seized with epilepsy and died in May, 1861, twelve years six months and eight days after the receipt of the injury. Dr. Horton has procured the skull, and has presented it to the Warren Museum of Harvard College.—*Boston Med. and Surg. Reporter.*

Transfusion of Blood.—A German medical journal gives an account of a case of poisoning by exposure to the vapors of burning charcoal, in which transfusion of blood, from the arm of a robust man, effected a satisfactory cure, after every other effort at restoration had failed, and the patient was believed to be dead.—*Richmond and Louisville Med. Journal.*

Action of Bromide of Potassium in Onanism.—Surgeon J. H. Bill, U. S. A. (*American Journal Medical Sciences*), finds from actual experiments, that this salt appeases at first the venereal appetite in cases of Onanism, but in the end cures proved delusive. In treating these cases, the sensibility of the urethra was greatly lessened, so that catheterization, before unbearable, was easily borne. The salt acts locally, just like copaiba.

It is probable that Onanism, like "epilepsy," has a centric and excentric origin; the latter seated in the urethra, the former in the brain. He concludes that the powerful antaphrodisiac action of bromide of potassium is clearly demonstrated, and may be relied upon as an adjunct to other remedies. It should not be used continuously, but in single doses, and only when there is evidence that the urethra is excited—as by constipation, excessive continence, ascarides, etc., and is inciting the brain to the vicious act.

Bromide of Potassium in the Sickness of Pregnancy.—Dr. Packard (*Am. Journal Medical Sciences*) has employed the bromide successfully in several cases of this kind, when the sickness was due to reflex irritation of the stomach, and when all other common remedies had failed. The dose given was the ordinary one, viz.: gr. xx every three hours, until the symptoms began to yield.

Artificial Nose.—A very good substitute for the nose lost by accident or disease, has been devised by Dr. A. S. Dudley, of Salem, Mass. Fastened securely to the face, it is said to bear an excellent resemblance to the lost organ.

Cancer a Local Disease.—Charles H. Moore (*St. Bartholomew's Hosp. Reports*) has contributed an interesting article, showing that cancer is, at its origin, in all cases a local affection; and hence an early and complete extirpation is the mode of treatment to be adopted. This doctrine of the pathology of cancer is now rapidly growing in favor with pathologists.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEEMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, September 15, 1868.

THE TITLE OF OCULIST.

We have already noticed in commendatory terms the recent action of the American Ophthalmological Society, in regard to public announcements of devotion to special practice in diseases of the eye, and to the like assumption of the title of oculist. We are glad that such an action has been inaugurated by specialists, for, if we are correctly informed, a very large proportion, if not the majority of the members of this society are such. It is not then a movement actuated by any jealousy of the successful system of special practice. If it were so, or if the movement were made by general practitioners, with any motive whatever, it would certainly have caused offence. As the case now stands, no respectable practitioner in diseases of the eye can assume the title of oculist, or make printed announcement of his devotion to such practice, without full knowledge that the judgment of a large and respectable body of his peers is unanimously against him.

How, now, does this leave the subject of specialism or of exclusive specialism? Is it any condemnation of the system? Does it involve any abandonment of the plan, so prevalent and so popular in the larger towns and cities, of exclusive devotion to the study and treatment of the diseases of certain organs of the body? By no means. It leaves that system intact. This action has no reference to it. Specialism in practice is founded on the needs of suffering humanity, and all the resolutions in the world which may be made against it will be as impotent as bulls against a comet. But this action does do the following. It aims to cauterize the fungous outgrowths of a healthy movement. It frowns on advertising under whatever garb, on unprofessional assumption of any title, beyond that granted us by our diplomas, or achieved in a legitimate and authorized way.

General practitioners have always been compelled by the good sense of the ethics of the profession to attain their practice in the slow but certain method of careful devotion to the business which comes to hand, sent by some friend who knows what efforts have been made by the would-be practitioner to acquire the knowledge and skill necessary for his work, or in some other similar and professional manner. Why then should a young man, who after graduation in medicine has superadded to his general knowledge special investigation of any organ, claim any exemption from his brethren in this tiresome but honorable tarrying in Jericho till his beard be grown? Let such an one not fear that his claims will be overlooked. His professional brethren who have not enjoyed or wished the opportunities that he has, will be glad of his assistance in all cases belonging to his department.

The broad avenues to professional success—practice among the poor, participation in the proceedings of medical societies, the use of the medical journals, the cultivation of the acquaintance of medical men around him—are all open to him. This action checks any tendency to make specialists a separate class like the dentists, nor will they stand in any danger of being confounded with those pretenders and scoundrels whose only claim to practice is the assumption of the title of oculist, and the publication of long advertisements of skill and cures.

This action was needed. Unfortunately some men of deservedly high rank in the profession have assumed that by becoming specialists they became a law to themselves, and that they were not amenable to the code regulating the habits of general practitioners. We are not now referring to specialists in eye diseases particularly. They have taken the liberty, in the way of announcements, cards, etc., in the daily prints and through other unprofessional means, of calling attention to their especial study and practice. However much this innovation in professional habit may have been countenanced by men who should know better, and who would not allow it in general practitioners, we are confident that it would never have been permitted by the profession in general. It would be easy to show that such action is clearly against the spirit, if not the very letter of our code of ethics; that it is unjust to those who are practising in the same way, but who have not the position requisite to thus coolly scout the cherished principles of our ancient guild—but this is unnecessary. It is to be hoped that this action of the only national body of specialists in our country will not fail to be duly considered and acted upon by all of those members of the regular profession who, like them, are devoting themselves to the investigation and treatment of one class of diseases.

To be a good physician and surgeon is high honor; to be, besides this, *authority* on one class of diseases, is higher; but to set aside ancient titles, given on account of work done and knowledge acquired, in order to assume one of self constitution, or to attempt to advertise skill, is not honor, but disgrace. Let us go on together, each in his peculiar way, as his taste, skill, education, and opportunities best fit him; let us not be divided

into miserable factions, but be "one body fitly joined together."

Such a course will in no manner interfere with the development of ophthalmological, obstetrical, otological or other special societies, nor will it discourage special study or special practice; but it will stimulate all these to a healthy growth, while at proper times it will enable us as a profession to present a solid front to the hosts of quackery, under our honored name of Doctors of Medicine.

During the present month the different medical societies of this city will resume their sessions after the vacation, and now that we have been enabled to present to our readers all their important doings up to the time of recess of each, we shall endeavor in future, as far as the crowded state of our columns will admit, to insert our reports as near after their adoption by these bodies as possible. The other departments of the journal will be kept up as usual, and no pains will be spared to make them interesting and practical. Our increased facilities for reporting the lectures of the representative men of this and other cities enable us to promise a more than usual amount and variety of this sort of material.

Reviews and Notices of Books.

A Theoretical and Practical Treatise on Midwifery, including the Diseases of Pregnancy and Parturition. By P. Cazeaux, Member of the Imperial Academy of Medicine of Paris, Chevalier of the Legion of Honor, Adjunct Professor in the Faculty of Medicine of Paris, etc., etc. Revised and Annotated by S. Tarnier, Adjunct Professor in the Faculty of Medicine, Paris, etc. Fifth American from the Seventh French Edition. By W. R. Bullock, M.D. With one hundred and seventy-five illustrations. Philadelphia: Lindsay & Blakiston, 1868. 8vo. pp. 1107.

On Diseases Peculiar to Women, including Displacements of the Uterus. By Hugh L. Hodge, M.D., Emeritus Professor of Obstetrics and Diseases of Women and Children in the University of Penn. With Illustrations. Second Edition. Revised and enlarged. Philadelphia: H. C. Lea, 1868. 8vo. pp. 524.

If the general practitioner of to-day is not thoroughly informed in regard to the treatment of diseases of females and the science of obstetrics, it is not for the want of many excellent treatises upon these subjects which have been so lately published. To the comparatively long list of such works, which during the past two years have been issued from the medical press, we are called upon to add two others, in the shape of new editions of old and standard treatises.

The first of these, which has so long ranked as a classic in its branch, comes to us, alas! through strange hands—Cazeaux, the brilliant teacher, the experienced practitioner, the thoughtful adviser, the accomplished scholar, has ceased to be, and he only speaks to us through another. The reputation of the author of this admirable system of midwifery has been so well established that all recommendation of a work emanating from his gifted pen, is unnecessary. He himself lived to see it run rapidly through six editions in his own country and four editions in this. The present, which is the seventh French and fifth American, well sustains the reputation of its predecessors, for variety of matter, careful arrangement, minuteness of scientific detail, and practical application of facts. As the acknowledged text-book of the French schools, it not only does honor to the author, but reflects credit upon the whole domain of medicine. The French editor has labored to a purpose in bringing it up to the present requirements of the beginner and the advanced student; the doctrines of the leading physiologists and pathologists of the French school are succinctly set forth, and nothing is left to make the work what its title indicates. An immense amount of very valuable matter is crowded into the smaller type, making the book more than a thousand pages. Many of the views advanced are peculiarly French; but as these relate so much to the theoretical portion of the work, it will be none the less valued by the followers of the systems of other schools, who look only to the practical application of the principles. The translation is admirably done by Dr. Bullock, to whom the obstetricians of this country who are not fortunate enough to read French are under lasting obligations. The translated work has met with a great success on this side of the Atlantic, and well does it deserve it.

Professor Hodge's work is truly an original one from beginning to end, consequently no one can peruse its pages without learning something new. The book, which is by no means a large one, is divided into two grand sections, so to speak: first, that treating of the nervous sympathies of the uterus, and, secondly, that which speaks of the mechanical treatment of displacements of that organ. He is disposed, as a non-believer in the frequency of inflammations of the uterus, to take strong ground against many of the highest authorities in this branch of medicine, and the arguments which he offers in support of his position are, to say the least, well put. He maintains that the large proportion of the so-called cases of metritis are in reality nothing more than examples of irritation, in which inflammation has either subsided, or in which it has actually never existed. His plan of treatment for these affections is based upon this belief, and is given in all its details.

The second part of the work, devoted as it is to the mechanical treatment of misplacement, is filled with a discussion of the merits of the different forms of pessaries, the respective indications for their use, their mode of introduction, withdrawal, etc., etc., making altogether a very complete monograph upon this interesting subject. Numerous wood-cuts adorn this portion of the work, and add incalculably to the proper appreciation of the variously shaped instruments referred to by our author. As a contribution to the study of women's diseases, it is of great value, and is abundantly able to stand on its own merits.

A Manual on Extracting Teeth. By Abraham Robertson, D.D.S., M.D., Author of Prize Essay on Extracting Teeth, etc. Second Edition. Philadelphia: Lindsay & Blakiston, 1868. 12mo. pp. 188.

This little work is a very useful one of its kind, is thoroughly scientific in character, and is written by a gentleman who has evidently enjoyed a very extensive experience. The anatomy of the parts is first taken up; the pathology of toothache is admirably presented, with the appropriate treatment of the affection, which latter naturally drifts into some remarks upon the use of proper instruments. Lastly come some remarks on the accidents of teeth-drawing and their remedies. For the dentist, and the physician who, in the rural districts, may be compelled to perform dental surgery, it will be found a very practical, useful, and reliable guide.

THE MEDICAL REGISTER OF THE CITY OF NEW YORK AND VICINITY, to which is also added, Contributions to the Medical History of the City of New York, for the year commencing June 1st, 1868. Vol. VI. Published under the supervision of the "New York Medico-Historical Society." JOHN SHRADY, M.D., Editor. New York: Baker & Godwin, Printers. 1868. Pp. 419.

THIS excellent little annual, which is firmly fixed in professional favor, presents some difficulties to the reviewer, from its very nature. The material contained in it, however, is not only important in the way of information to those who will use it as a hand-book, but of great interest to all who are concerned in any way in the advancement of medical science and charitable effort. No one can glance over it without being struck with the identification of our profession with all the plans for the benefit of the race.

It would appear that there are nearly thirteen hundred regular practitioners of medicine in the city of New York and its neighborhood. Some of those registered are women; and without entering upon a question so lately discussed in a neighboring State with what seems to us to have been undue warmth, we may say that we regard it as highly proper that they, *when duly provided with those credentials which are demanded of their brethren*, should be allowed to fall into the ranks and contend for such measure of success as they can control.

Two of the societies whose names appear in this book we should be glad to see duplicated in every large city in the land. One is the "Society for the Relief of Widows and Orphans of Medical Men;" the other, the "Medico-Legal Society." It is surely needless to urge the value of such associations.

In conclusion, we would say that this volume is got up in a most tasty and convenient style. It is remarkably free from typographical errors, and is in every way a credit to the city of New York and the medical profession therein.

Reports of Societies.

MEDICAL SOCIETIES.—CLOSE OF THE LAST SEASON.

WE have been unable to make room for full reports of the last few meetings of the County Medical Society and the Medical Journal Association; but, to complete our record up to the summer vacation, we give a summary of the more important subjects presented. The reports of the current season will begin in our next number.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

ADJOURNED MEETING, APRIL 20, 1868.

DR. JACOBI completed the reading of the important paper upon *Croup*, referred to in our last.

DR. BOZEMAN followed with "An Examination of the relative Merits of some of the Specula, Sutures, and Positions which have been employed in the operation for *Vesico-Vaginal Fistula*, with a new plan of confining the patient." The paper was in great part statistical, and devoted to the vindication of the Doctor's own claims in connection with the operation. It was very fully illustrated by diagrams, instruments, and models.

STATED MEETING, MAY 4.

DR. GEORGE M. BEARD read a paper upon *Hypochondriasis*, an affection which he thought was wont to be too lightly considered. In one form or another it complicated nearly one-fourth of the cases the physician was called upon to treat; and its frequency was increasing, especially in our cities, and among professional men and merchants. It was closely allied to insanity—indeed, was often the incipient stage of this, or its sequel after partial recovery. The pathology of the two diseases was therefore essentially the same, both indicating some lesion of the brain. Both were due to hereditary predisposition, and excited by excessive and irregular mental labor or violent emotion, by insufficient nutrition, and by withdrawal of a customary nervous stimulus, as often in the case of men retiring from business. This last point suggested an important rule of treatment, that the hypochondriac should not be counselled to relinquish completely a life of mental activity for one of physical labor, but rather to regulate the former and relieve it by a proper amount of relaxation. The treatment should, in general, be moral and hygienic, together with such tonics and special remedies as in each case were indicated. General electrization had often proved of signal service. The Doctor related several cases from his own experience.

DR. ROOSA thought hypochondriasis quite as common among the poor and ignorant as in the higher classes, and that it was our inability to enter into their feelings which had led to the opposite view. He narrated cases in point.

DR. NEFTEL said that cases were often set down as hypochondriac which a more critical examination would have shown to belong to quite a different class. In an instance of the kind which had come under his own observation, a robust-looking man, who had complained for some years of general malaise and been considered an imaginary sufferer, proved to have enlarged spleen and white blood-corpuscles one-third as numerous as the red. The microscope had settled the diagnosis, and the patient's death followed in due time. In genuine hypochondriasis the best treatment was probably galvanization of the sympathetic nerve.

DR. PEASLEE said we ought not to forget the derivation of the term. In a male hypochondriac he expected to find, as a matter of course, some derangement of the stomach, or, at all events, of the liver; in a female, some uterine disease, commonly ulceration. The hypochondria was often transient, disappearing with its cause.

DR. WM. B. LEWIS exhibited the apparatus for urine-testing, figured and described in the RECORD for August 15th.

STATED MEETING, JUNE 1.

DR. R. J. O'SULLIVAN read a paper upon *Constipation*, with a detailed report of several cases. In the discussion which followed, several gentlemen brought out their favorite prescriptions.

DR. CHADSEY had found galvanism of the spine effective, but on the whole he preferred small doses of tartar emetic to everything else. Lead colic he treated with powerful doses of the same. The efficacy of Dr. James's pill was chiefly due to the eighth of a grain of this salt.

DR. J. C. SMITH had found croton oil very useful in the constipation prevalent in insane asylums.

DR. GARRISH insisted on the absolute necessity of a regular hour for going to stool.

DR. BIBBINS had found the following pill quite efficacious, especially in the habitual constipation of young females. His own name had got attached to it at the Demilt Dispensary, but the combination was Dr. Whittlesey's. ℞ Ext. Nucis Vom. gr. ¼, Pulv. Capsici, Quiniæ Sulph., āā gr. ss, Aloes gr. j.; M. ft. pil. One or

two thrice daily. The aloes must be of the best quality, or it might cause griping.

Dr. Messenger knew a family in which constipation had been hereditary for several generations. He believed in regular habits and Graham bread.

Dr. Peaslee thought the affection was undoubtedly constitutional in many cases. Some families had weak livers, as others had weak brains. The constipation of students was probably due in part to the withdrawal of nervous power from the digestive organs to the brain. A daily evacuation was of fundamental importance. To carry about for a week a column of fæces six or eight feet long was enough to ruin a man's self-respect and upset his social standing. The Doctor had once been struck by the remark of a clerical octogenarian, that he had taken a pill every night for fifty years. So, it necessary to secure regularity, he would let a patient keep this up for a lifetime. It was no worse than figs after dinner. It was well to have your laxative pill made for this purpose alone, and to give it at night, administering any tonics, etc., independently. Dr. Bibbins's pill might be taken as a basis, and modified by half a grain of ipecac, by the eighth of a grain of tartar emetic, or, especially for women with spasm of the sphincter ani, by a little belladonna.

Dr. Joel Foster had a pill which met the indication of affecting all parts of the alimentary canal: Take of Socotrine aloes, blue mass, Turkey rhubarb, each four parts; of ipecac, gamboge, carbonate of soda, each two parts; of oil of anise or other carminative, one part—all of the best quality. Mix and make into three-grain pills, of which four are to be given at bed-time.

Dr. Newman dwelt on the necessity of discriminating from others the various classes of cases amenable only to surgical interference. In the non-surgical cases, with impacted fæces, the first thing was to remove the hardened mass by injections, and, if requisite, by scooping it out. The injections should be at first of warm soap and water; coming gradually to simple cold water. The stomach-tube might be introduced, perhaps, sixteen inches—hardly several feet, as one gentleman had mentioned. To excite peristaltic action, a good substitute for electricity was methodical friction over the colon in the direction of its course.

Dr. Farnham stated that Dr. C. F. Taylor has an instrument for shaking the bowels, to bring about their action.

Dr. Rawson was confident that he had introduced a tube two feet and a half, in the case of a woman where the bowel proved to have been bound down by false membrane. Often, after introducing the tube a certain distance, it could be passed further by throwing in a little fluid.

Dr. Peaslee thought a bougie could not pass the sigmoid flexure if this was normal in length and relations. He had found it impossible upon the dead subject.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

Stated Reunion.

March 6, 1868.—Dr. Buck presented some interesting surgical cases.

March 13.—Dr. Bozeman exhibited, and gave the history of, his specimen, of which our readers have already had a full account.

March 20.—Dr. H. G. Davis remarked upon the *Treatment of Diseases of the Joints*, confining himself chiefly to the advantages, in hip-joint disease, of elastic extension, when properly applied and limited by the non-elastic strap. He stated the principles which should govern its application; and complained that his own splint had been so modified by others that its paternity was nigh being lost, and its good name brought into discredit. Several forms of apparatus were exhibited.

March 27.—Dr. S. B. Ward read a paper upon *The Sphygmograph and its Uses*, which we shall publish entire. The instrument was shown in operation, and the subject illustrated by diagrams and traces.

April 3.—Dr. Stephen Smith read a statistical paper upon *The Results of Amputation of the Lower Extremities*, prepared for the United States Sanitary Commission.

April 10.—Dr. E. R. Squibb discussed *The Nature and Uses of the so-called Carbolic Acid.* The remarks were of great interest, and we regret that we must reduce our full report to a bare outline.

This substance, which is really not an acid, but an alcohol (phenylic), was discovered many years since by Runge, who gave it the name by which it is commonly known. It is obtained in the distillation of coal-tar. This tar, until recently worthless, has become a valuable article of commerce; and the gas companies, even those in the villages, now have contracts ahead for all that they can furnish. The products of its distillation form three groups: 1. The "light oils," which come over at 170°–180° C. Benzole (or benzine), the most important of these, is now widely replacing alcohol in the arts, and is used also for the manufacture of the aniline dyes. 2. The "dead oil," or "heavy oil," which next comes over, containing the group of alcohols to which carbolic acid belongs. 3. The residue, which constitutes the artificial asphalt used for roofing, etc. The light oils and the asphalt are the valuable products; the heavy oil is very cheap.

Treated with an alkali, the heavy oil separates into two strata, one of which is an alkaline solution of the tar alcohols. After separating the alkali, there remains the carbolic acid as sold from the coal-tar distilleries—very impure, and fit only for disinfecting purposes. A redistillation fits it for medicinal use. But it is still a mixture of several alcohols—phenylic (carbolic acid), cresylic, and one or two others, which need not here be considered. The cresylic is in much the largest proportion; it has a different odor from the phenylic, is less soluble in water, boils at a higher temperature, and has not yet been crystallized. It is undoubtedly more effective, both as a disinfectant and as an antizymotic, than the phenylic, into which it seems to be converted under treatment with chloride of calcium or other dehydrating substance. Most of the experiments in disinfection have been made with the mixture of the two, the cresylic predominating. This mixture, when rectified so as not to change under the action of light, is the ordinary coal-tar creasote, almost the only creasote now in the market. It differs chemically from wood-tar creasote, though closely resembling it in medicinal effect.

Carbolic acid is a crystalline solid, nearly white at first, slightly pink after exposure to light, very deliquescent. The amount of liquid in the bottle should not exceed one-fourth in a good specimen of the "dry" acid. The crystals are completely soluble, at ordinary temperatures, in from two to five per cent. of water. The mixture of the alcohols is always liquid, varying in color from a light sherry to nearly black. It darkens upon exposure to light; but its medicinal properties seem unaffected thereby. The simplest test of its purity is its solubility in water, which should dissolve about two per cent. of the mixed alcohols, about six and six-tenths per cent. of the pure phenylic. Hence, in ordering a saturated solution, be particular to specify of which; for the one might desquamate a delicate skin, when the other would be borne with impunity. The mixture is

freed from tarry and oily impurities by washing and filtering. It is sometimes adulterated with acetic acid to increase its solubility; but this is easily detected by litmus paper; it should be neutral. A standard solution, every way equal to the crystallized article for external use, may be easily and very cheaply made by shaking a quart of the impure mixture in a barrel (40 gallons) of water; allowing the oils to rise, the tar and excess of alcohols to settle; and drawing off the solution between. For internal exhibition, however, the solution of the crystals should be commonly preferred; though it is not as efficient in checking yeasty vomiting, etc., as the solution of the mixture.

The prominent characteristic of this group of alcohols, with cresylic at the head, is that they are deadly poisons to the lower orders of life, whether animal or vegetable; and upon this seems to depend their chief utility in medicine. We see at once the use of carbolic acid in all forms of parasitic disease, and it has been found efficient also against vermin. As a mouth-wash it is perhaps the best cure for tartar. It at once arrests fermentation and putrefaction; hence its value in certain digestive disorders. Its effect in preventing suppuration has been made familiar to the profession by Prof. Lister, although he probably exaggerates its virtues. Its modus operandi here is probably not yet understood. In some forms of cystitis it has proved of great service. It has also recently been tried with considerable success in gonorrhœa. Its anæsthetic properties are remarkable, although long since recognized in some of the applications of creasote. No other application will so promptly and completely relieve the pain of a burn, and under nothing else does it so rapidly heal.

Dr. Hutchinson, of Brooklyn, gave, by invitation, an account of his somewhat extensive experience in the therapeutic use of carbolic acid; and was followed, in a long and interesting discussion, by Drs. Sayre, Whitehead, Percy, Peaslee and Elliott.

April 17.—Dr. B. S. Thompson read a paper upon *Yellow Fever*, of which an abstract has appeared in the Record for August 1.

April 24.—Dr. E. H. M. Sell read a paper upon *Rheumatism*.

May 1.—Dr. W. H. Atkinson read a paper upon *The Reproduction of the Maxillary Bones*. Drs. Neftel, Weber, and Buck followed in discussion.

May 8.—Dr. H. F. Guleke read a paper upon *The Galvano-caustic Battery and its Uses*, exhibiting the apparatus in operation upon a living animal.

May 15.—Dr. A. L. Carroll presented some original *Instruments for physical Diagnosis*, viz.: A pocket spirometer, and a simplified stethometer; and described a modification of the sphygmograph, to be applied to the subclavian. He gave upon the blackboard an elaborate analysis of some of the army tables of vital statistics connected with the respiratory function, exposing certain errors into which some English authorities had fallen. In this connection he discussed, with blackboard illustrations, the action of the sterno-cleidomastoids, claiming that "these muscles, acting together, do not bend the head forward, as is generally taught by anatomists, but rather hold it fixed. They are, however, brought into marked contraction by expulsive abdominal effort, and by strongly forced inspiration. One of their most important purposes is to fix the sternum and clavicle, and thus give a firm purchase to certain thoracic and abdominal muscles. They hold the thorax fixed against the action of the diaphragm, the external and internal oblique, and rectus muscles, and, with the aid of the trapezius, give a fixed point of traction to the subclavius and pectoralis major. The trapezius fixes the scapular end of the clavicle, and gives a *point d'appui* to the pectoralis minor. "Both the trapezius and the sterno-mastoid may therefore be considered as agents in forced inspiration."

Dr. Hamilton said that the sterno-mastoid should not be regarded as a unit in its action, but its different parts must be separately considered; and this would materially modify the conclusions just expressed.

May 22.—Dr. B. Howard made some remarks, illustrated by a manikin, on the *Radical Cure of Hernia*. We give a short-hand report of them elsewhere (p. 317). The subject was discussed by Drs. Post, Weber, Nott, of Mobile, Peaslee, and Foster.

June 5.—Dr. A. W. Stein read a *résumé* of the progress of the *Cellular Theory*, in the course of which he compared, and endeavored to harmonize, the views of Virchow and Beale. Drs. Peaslee, Hamilton and Neftel took part in the discussion.

June 12.—Dr. John P. Garrish read a paper upon *Vaccination and Re-vaccination*.

June 19.—Dr. W. Neftel read a paper upon *Some of the latest Discoveries in Pathology*, including some original investigations. It was illustrated by vivisections under the microscope. We have published it entire in the Record of July 15 (p. 222). Dr. Peaslee remarked at some length upon certain of the points presented, but our limited space precludes a report.

Dr. Ephraim Cutter, of Boston, by invitation, exhibited specimens of the *Palmella Gemiasma* of Dr. Salisbury, and gave an account of a recent visit to Dr. S. and of his style of working.

June 26.—Dr. Doremus, announced for the evening, was prevented from attendance by the sudden death of his child; and the Association adjourned until the fall.

Correspondence.

MEDICAL MATTERS IN PARIS.

(FROM OUR SPECIAL CORRESPONDENT.)

THE THEORIES OF THE DERMATOLOGISTS OF THE HÔPITAL ST. LOUIS.

To the Editor of the Medical Record.

Sir—Who, from the commander-in-chief to the smallest corporal in the vast army that wages war on disease, has not heard of the Hôpital St. Louis? Who, that makes the most flying visit to Paris, fails to contrive an excursion to its somewhat distant locality, for at least one walk through its great cool wards, through the brilliantly clean courts, and spots of refreshing garden? The whole forms a little city in itself, where the most repulsive forms of disease, assembled in an immense collection from all corners of Paris, and Europe, and the entire world, are stripped of a large share of their deformity by the influence of their surroundings, and a large share of their gravity by the enlightened skill of the brilliant coterie of physicians who make St. Louis the arena of their conflicts and triumphs.

These conflicts, it must be confessed, are not exclusively carried on between the doctor and the bodies, or skins, of his patients. It is often a war *intra muros*, a rivalry of opinion among the physicians, which is sustained with such vehemence, that the spectator asks himself nervously, what would be the consequence if the chiefs of opposing camps should encounter each other in the morning at the narrow stairway that opens into the Hospital grounds? The meeting would be more critical than that of Raphael and Michael Angelo in the Vatican, and, perhaps to avoid its chances,

the different physicians seem to arrange to arrive at their respective wards at different hours.

The names that are at present associated with the promulgation of any special doctrine, are those of Cazenave and Gibert, Devergie, Bazin, and his somewhat wavering satellite, Hardy. The two first are devoted pupils of Biett, who himself was an ardent disciple of Willan and imported the classification of the English dermatologist at the very moment that in another ward at St. Louis, Alibert was proclaiming his,—and planting his *arbre des dermatosis* in the imaginations of an entranced audience.

Their system, therefore—and I believe it is that best known in America—considers exclusively the primitive anatomical elements of cutaneous eruptions, classified as: 1st, Exanthemata; 2d, Vesicules; 3rd, Papulæ; 4th, Bullæ; 5th, Squamæ; 6th, Tubercles; 7th, Pustules; 8th, Maculæ. Gibert classes lupus elephantiasis, and several other exotic diseases, under the head of Tubercles; Cazenave makes of each of them, as well as Purpura and Pellagra, a class apart; and both recognize the Syphilides as a separate class.

This system is certainly characterized by an extreme simplicity, even an ostentatious absence of all pretension to theory or doctrine. Distrusting their own ability to discover any connecting links between the multiple phenomena of skin diseases, the authors confine themselves to making a simple statement of such phenomena, considered as purely local affections. In a volume published this year, M. Cazenave reiterates substantially his old principles, makes light of causes of diseases, which constitute the basis of Wilson's classification, entirely rejects scrofula even as an influence in dermatology, and only improves upon his original programme, by the introduction of certain researches into Pathological Anatomy, which, unfortunately, are more often hypotheses than researches. Thus he declares eczema to be an inflammation of the sudoriferous glands; impetigo, an inflammation of the lymphatic vessels; lichen, irritation of the papillæ of the derma: but brings no microscopic proof of his assertions, which are more or less plausible. Bazin admits the probable lesion of the sudoriferous glands in eczema. Devergie acknowledges that impetigo is generally grafted upon a lymphatic temperament; but Hardy observes that the papulæ of lichen and prurigo do not bear the slightest resemblance to the normal papillæ of the derm, either in their form or in their distribution, which in nowise recalls the regular concentric lines of the papillary stratum.

In view of the double difficulty in the way of anatomical researches occasioned by the infrequence of mortality from skin diseases, and their cessation at the occurrence of any serious malady, it may be questioned whether with the assistance of local anæsthetics a physician might not extirpate from the skin of a living patient such a minute segment as would be needed for microscopical examination. Many obscure points would thus stand a chance of being elucidated.

Besides this self-restriction to the anatomical characters of skin diseases, M. Cazenave is further noticeable (and especially in his recently published work on General Pathology of the Skin) for an entire rejection of vegetable parasites as intervening even in favus. Herein he is in complete accordance with the English dermatologist, Wilson. Now the rival school, composed of M. Bazin, supported by M. Hardy, and moderately admired by M. Devergie, is distinguished by its extensive adoption of cryptogamic etiologies, by its discontent with "lesions" of the skin, as the ultimate explanation of its diseases, and by the research after general constitutional causes for all affections that are not parasitic in their origin. The theories of Bazin have been for some time on the carpet, but as I believe that they have not widely circulated on the other side of the water, and as they are extremely interesting, and, if true, extremely important, I will expose them in some detail.

The starting-point of the theory is to be found in the generally acknowledged existence of the great class of Syphilides, affections which, though embracing the entire range of primitive anatomical elements, are all distinguished by characteristic features: copper color, circular form, white *liseré* (called Britt's, from the emphasis he laid upon this desquamation of the epiderm around a primitive element); blackish green crusts, grayish ulcerations with sharp indurated edges; smoothish but indelible cicatrices, etc. In this case the elementary *lesion* is common to specific and non-specific forms of disease; the *affection*, formed by the grouping of the elements, as an ecthyma, from pustules, ulcers, and crusts, is generally common also, although some forms are almost exclusively syphilitic; but the *malady*, the general constitutional conditions upon which the affections depend, and which give them their significance, alone are separate and peculiar, alone assume a distinct individuality, requiring a distinct therapeutic treatment. So imposing is this individuality, that it overpowers all other considerations; should microscopic analysis demonstrate absolute identity between the lesions of specific and non-specific eruptions, the prognosis and therapeutics of these latter would remain none the less dependent upon the diagnosis of the constitutional disease.

Setting out from this universally acknowledged doctrine, M. Bazin has inquired if the great class of non-specific eruptions might not also be brought under the influence of constitutional diseases. The result of his researches has been the integration of three great maladies, whose individuality is as distinct, and relation to cutaneous affections as important, as those of syphilis. These maladies are, Scrofula, Dartre, and Arthritis, and I name them in the order in which they have gained public credence. Devergie admits scrofula; Hardy, scrofula and dartre; Cazenave and Gibert deny even scrofula as regulating skin diseases; finally, only the pupils of M. Bazin believe in the existence of arthritis.

M. Bazin gives the following definitions of *Maladies, Diathèses*, and *Affections*:—

"A malady (or disease) is a state of the body which produces functional disorders, called symptoms, or material disorders, called lesions. A *constitutional disease* is a malady, acute or chronic, pyretic or apyretic, continued or intermittent, contagious or non-contagious, *characterized by an assemblage of morbid products, and of extremely varied affections, attacking any or all the organic systems.*

A *diathesis* is a malady, etc., characterized by the formation of a *single morbid product* that may be deposited in any or all of the organic systems. Tuberculosis and cancer are examples of diatheses, and several others are admitted, the hæmorrhagic, saccharic, fatty, etc.

An *affection*, is what we commonly call a *disease* of any particular apparatus, as the skin, and corresponds to an assemblage of elementary lesions and symptoms, of which, however, it is not the *cause* but the statement. The cause resides in the constitutional disease.

The problem of the diagnosis of any cutaneous disorder is, therefore, threefold. It is necessary to determine: 1st, the anatomical element, as for instance the vesicle as distinguished from papulæ, pustules, etc; 2d, the affection, as an eczema, distinguished from herpes,

scabies, or other vesicular affections; 3d, the nature of the disease of which the affection is the expression for the time being—whether, for instance, the eczema be scrofulous, or dartrous, or arthritic. Each case is characterized: 1st, by objective peculiarities proper to the affections of each constitutional disease; 2d, by the coincidence of general symptoms, equally characteristic of such disease, even in the absence of a cutaneous affection.

In the diagnostic of constitutional scrofula, M. Bazin does not greatly differ from the majority of physicians, with whom it is, of course, the most usual thing in the world to admit a scrofulous constitution, and to consider that it impresses a certain character upon *some* eruptions. Only Bazin calls a *disease* what others only name a *tendency* to disease; he engulphs the lymphatic temperament upon which Dévergie greatly insists as predisposing to scrofula) with scrofula itself, and he entirely rejects Cazenave's restriction, for whom chronic inflammation, or tubercular degeneration of the lymphatic glands, constitutes the sole expression of scrofulous disease.

Assuming an exact parallel between the evolution of syphilis taken as a type, and all other constitutional diseases, M. Bazin divides scrofula into four periods, each characterized by peculiar affections, and the two first by special affections of the skin.

First Period.—Mild cutaneous disorders, including *Gourmes* (which Cazenave regards as accidental, and Dévergie as depurative), eczema, impetiginous eczema, impetigo; also dry scrofulides, erythema, prurigo, lichen, psoriasis, acné simplex in all its forms, including acné sebacea; scrofulides of the mucous membranes; habitual coryza, seropurulent otorrhœa; glandular blepharitis; dacriocystitis, with lachrymal tumor and fistula; scrofulous ophthalmia and keratitis; reiterated bronchitis; amygdalitis, stomatitis; certain tenacious diarrhœas; certain inflammations of the vulva and vagina.

For all these affections, as will presently appear, with the exception of gourmes of the head in young children, M. Bazin admits the existence of other forms more dependent upon other diseases than scrofula.

Second Period.—Profound cutaneous affections leaving cicatrices; lupus, both the erythematous and tuberculous variety; papulo-pustular scrofulides; impetigo rodens; certain serious forms of acné, molluscum; also more obstinate affections of the mucous membranes, leucorrhœa, with erosions and granulations of the neck of the uterus; blennorrhagia with enlarged prostate, and urethral stricture.

To the *Third Period* belong affections of the bones and articulations, and to the *Fourth* visceral and parenchymatous lesions, generally tubercular, with *Hectic* absent or slightly marked, although Bazin admits a tubercular diathesis independent of scrofulous disease. You instantly appreciate the difference between this view and that which takes into account scrofulous constitution and scrofulous *diseases*, but not a scrofulous *disease*, with a regular evolution and distinct degrees and stagings. Of the three (scrofula, dartre, and arthritis), it is scrofula that approaches most nearly to the standard type, but even here the critic is forced to object that M. Bazin often strains his analogy beyond the warrant of facts. Tertiary syphilis never occurs without having been preceded by primary and secondary symptoms; while in scrofula, however frequent may be the instances of preliminary eczemas, impetigos, etc., M. Bazin himself admits that a cicatricial scrofulide, a lupus, may declare itself in a subject who has never suffered from any previous eruption. In this case he would claim that the links are supplied by some ganglionic scrofulide—some blepharitis,—and urge the example of syphilitic patients who suffer from osteocopic pains after the engorgement of the lymphatic glands has taken place, but without having exhibited any roseola, papuke, etc.

M. Bazin of course does not pretend to make all the terms of scrofula correspond to those of syphilis. The initial infection lacking in the first disease, the affections of its first and second periods, correspond to those of the second in the syphilitic malady. The third and fourth periods resemble each other in the two diseases.

Comparison of the objective characters of scrofulous affections is best made after the description of the two remaining constitutional diseases.

Dartre, as you know, is an old French word, formerly employed to designate all eruptions except those of the head, which were similarly huddled together under the name of *teignes*. Alibert retained the term, though greatly modifying its acceptation. Bazin, followed by Hardy, has revived the name, and applied it, not to a *tendency*, a *habit* of body, but to a distinct constitutional disease, with regular march, evolutions, symptoms, etc. He has adopted as a synonym, though without clearly explaining why, the word *Herpetic*, as the general term to characterize eruptions dependent upon dartric disease. The evolution of the dartre is divided into four periods, preceded by more or less well defined

Prodromata.—These—that would be more justly entitled, Indications of a predisposition—consist in: scanty transpiration, skin dry, irritable, subject to ephemeral eruptions; thinness; frequent diarrhœa; nervous affections, sick headaches, gastralgia; a disposition irascible and melancholy.

The *First Period* is marked by the appearance of pseudo-exanthemata, urticaria and zona. Eczema also is of frequent occurrence at this stage.

Second Period.—Dry herpetides, psoriasis, pityriasis, lichen; secreting affections, eczema, dartrous impetigo, mentagra, pituite, blennorrhagia, leucorrhœa, rebellious diarrhœas; often ascites, and hydropericarditis, increased irascibility, often insanity.

Third Period.—The cutaneous affections tend to generalize themselves, and visceral disorders occur.

Fourth.—Extreme emaciation; infiltration of cellular tissue; skin clinging to the bones, covered with scales, crusts, and inflammatory exsudations; hectic fever, death by syncope.

Of course the only cases where the symptoms of this fourth period are directly dependent upon cutaneous affections, are rupia, or pemphigus, and cachectic ecthyma. In all other instances a visceral disorder has been induced, under the influence of the constitutional dartre.

Before commenting on the substantiality of this pathological entity, I will quote the parallel description of arthritis, the third darling of M. Bazin's brain, and the most dearly loved of all, for the very reason that it is entirely ignored by the rest of the world:—

Prodroma.—Exaggerated transpiration; tendency to obesity and development of the muscular system; constipation, hæmorrhoids, sick headaches, congestion of the head, epistaxis, vertigo, ringing in the ears.

[This description applies evidently to persons with "a full habit," and subject to the inconveniences and consequences of constipation.]

First Period.—Articular rheumatism; eczema of the scalp (before puberty, afterwards it is more disseminated); erythema of the external organs of generation; œdematous erythema around the articulations; urticaria, zona, herpes, acute pemphigus, furuncles and anthrax; coryzas, bronchitis and ophthalmias; sick headaches and arthritic dyspepsia; vague muscular pains.

Second Period.—Attacks of gout and of acute articular rheumatism; cerebral congestions, anginas, obstinate coryzas; dyspepsia with burning at the stomach, pyrosis, constriction of the œsophagus; localized pruritus, especially at the nostrils, anus, and genital organs; sometimes anal fissure.

Third Period.—More serious lesions of the articulations, tophus, destruction of cartilages, caries of bones, ankylosis.

Fourth Period.—Organic affections of the heart; congestions and apoplexies; catarrhal asthma; various lesions of the liver and kidneys.

Although M. Bazin, in this extensive generalization, unites gout and rheumatism like a pair of Siamese twins, he by no means claims their identity. They both come under the great class Arthritis, but possess their individual and distinguishing characteristics. In the same way he attaches cardiac affections, not to rheumatism itself, as generally acknowledged, but to a more general condition, that embraces the two.

The elaborate specification—which I shall presently expose—by which affections, similar, but belonging to different constitutional diseases, are distinguished from one another, will bring our into much stronger relief the peculiarities that are supposed to characterize these diseases, than this succinct generalization is able to do. But with that alone before us, we can fairly criticise its basis, to the extent to which that is independent of the cutaneous disorders it professes to explain. Assuming—as I think can be proved—that cutaneous affections vary in four principal modes, conveniently designated as syphilitic, scrofulous, herpetic, or arthritic, and that to each of these modes is attached, more or less loosely, a liability to certain disorders affecting other parts of the economy,—we are not therefore obliged to conclude that each mode constitutes a disease, which constantly holds the patient in its clutch, menaces him even at moments that the temporary absence of all affections seems to leave him in perfect health, and can never be considered cured until it has completed its entire evolution, and been subdued at the fourth period. The proof of the existence of such a disease would be found in the regularity of its evolution, the absence of interversions, the constant reunion of a *sufficient* number of characters to establish its identity. Already scrofula—the nearest approach to the type exhibited by syphilis—begins to fail in some of these requisitions. (We mean of course scrofula in relation to cutaneous affections, not the type, glandular scrofula, which often has nothing to do with them.) Undoubtedly numerous instances exist, as I have had an opportunity of observing at St. Louis, where M. Bazin's descriptions are strikingly verified. But numerous exceptions exist also. Patients will suffer for years from rheumatism, even in its gravest forms, and then exhibit an eruption belonging to the first period of arthritis—a circumstance as embarrassing to the theory as if a gummy tumor should be followed, instead of preceded, by a chancre! Others develop so called constitutional affections, after a lifetime of perfect health, and I have observed that whenever M. Bazin has to do with a remarkably robust patient, who seems to have never exhibited a morbid symptom, he generally ranks him under the head of arthritis. Again, rheumatism is as frequent among thin, weakly people, who from their appearance ought to belong exclusively to the domain of Dartre, as to the constipated, obese individuals whom M. Bazin considers to be alone entitled to its afflictions. In this particular, the theory seems affected rather by old prejudices than by modern ideas. Again, without being so exigent as to demand that every patient should present the entire *cortège* of symptoms proper to his disease, we are at least entitled to expect the presence of a certain number, upon which to establish a diagnosis. Yet M. Bazin will sometimes claim an arthritis from the fact that the patient's father was subject to sick headaches; or a dartre because the patient has a bad temper, and suffers neither from hæmorrhoids nor constipation; or a scrofula, because the skin is white and the temperament lymphatic. In a word, M. Bazin, like all systemizers, being possessed of a vivid imagination, and a despotic resolve to subdue all facts to his system, refuses to admit that any diseases, with the exception of certain exotics, and the parasitic class, can exist except as dependencies of one of his four great classes, and consequently strains his theory, which, if left in its proper place, would be infinitely stronger and more valuable. For, having made all these deductions, and having changed the too absolute word, disease, into the more usual and acceptable term, diathesis (to which M. Bazin gives a forced and arbitrary signification), there remains an acute and suggestive generalization—which, as we shall presently see, affords much practical assistance in the comprehension, diagnosis, and treatment of diseases of the skin. M. Bazin has not condescended to support his views by statistics, but the suggestion might usefully set other people to work, to search for confirmation or condemnation of the theory. An inquirer, who admits that cutaneous affections may be either accidental or constitutional, will be less embarrassed in the establishment of constitutional influences, than if obliged *nail groin up*, to drag every eruption under such influence; and the relations between rheumatic and cutaneous diseases may be more clearly discerned, and the dartric diathesis, admitted in France from time immemorial, more precisely determined, by the observer who was not self-compelled to prove a regular evolution of a disease where facts only warranted the irregular connection of affections—rooted, not in a malady that had possessed the body, but in the innate tendencies of the body's tissues and component parts.

In my next letter I will describe the objective diagnosis, made out in obedience to M. Bazin's theory, but capable of application even by those who only admit this theory with modifications, and this will tend naturally to a brief notice of the therapeutics of St. Louis.

P. C. M.

PARIS, Aug. 21.

UNION OF WOUNDS BY FIRST INTENTION AFTER CHLOROFORM.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—A report of certain surgical operations made by my young friend, Dr. L. Smith, of Hudson, New York, —found in the number of your journal for August 15th, —commences with the following passage: "I am induced to report the following cases as being, in my private practice and hospital experience, rather remarkable results of surgical procedures; *and especially to prove that adhesion of cut surfaces by primary union, or by first intention, does take place after the use of an anæsthetic, which fact has been denied by some eminent medical teachers in your city.*"

Having myself given to this subject special consideration in my teachings at Bellevue, both in my clinics at the Hospital and in my didactic lectures at the College, I wrote to Dr. Smith to inquire whether he referred to me in the paragraph just quoted. The Doctor has frankly replied that he did, and he adds that I was understood to teach this doctrine by all the staff who were with him at the time.

Ordinarily, I would not think it necessary to correct

such an error, but this is of a character calculated, I fear, to do harm, if not set right.

My teachings have been wholly misapprehended. I have never held such opinions, nor do I know of any surgeon who has; indeed, it seems impossible that any surgeon who has employed anæsthetics would make such a statement. Scarcely a day passes in which I do not make operations, or see operations made, upon patients under the influence of anæsthetics, after which the wounds, to an extent greater or less, unite by first intention. I have an opinion, however, that union by first intention is not so apt to occur after the free use of anæsthetics; and that it ought to be regarded, therefore, as one of the many causes operating to the production of suppuration and its sequences. These opinions were given publicly at a Session of the New York Academy of Medicine in the year 1861, on which occasion, by appointment, I opened the debate. My arguments and opinions were then presented at length, and they were sustained by those experienced surgeons: Drs. Alfred C. Post and Gurdon Buck, of New York city, the late distinguished Dr. Joseph M. Smith, of this city, Dr. Miner, of Brooklyn, and others. The report of this debate will be found in the published Transactions of the Society for that year.

In the second edition of my work on Military Surgery, published in 1865, I have devoted a chapter to the discussion of anæsthetics, and have there advanced the same views.

I have referred to these published records in order that no one shall suppose, hereafter, that I ever taught, that after the employment of anæsthetics union by first intention could not occur. I wish also to state that I do not hold my young and much esteemed friend responsible for his error. It is probable that there has been some looseness in my mode of stating my opinions when he has listened to me.

Incidentally, permit me to say that many surgeons, both in this country and in Europe, have entertained opinions like my own. Said Velpeau: "After the use of these agents, wounds do not heal so readily by first intention." Jobert and others have said the same.

Yours truly,

FRANK H. HAMILTON.

EFFECTS OF BROMIDE OF POTASSIUM IN FUNCTIONAL EPILEPSY.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—The readers of your journal will recollect, perhaps, that in the number for February 15, 1868, I reported a case of *apparent* cure of epilepsy by the use of bromide of potassium, and on which case, with two others which I had under treatment, I promised to report at some future time, when, in my opinion, they had been under treatment long enough for me to judge more fully of the effects of the medicine. The case of *apparent* cure, the one of the young lady mentioned in the former report, remains as it was then. She has had no return of the disease. Of the other two cases alluded to by me in that communication, I have to report as follows: One of the cases, apparently depending on irregularities of the stomach and bowels, has not been much benefited by the bromide, although the attacks under its use have not been so frequent nor so severe. The other case was a soldier, in whom the disease appears to have been caused by a gun-shot wound of the spinal column. He has taken eight ounces of the mixture, and has had no attack since I commenced treating him, previous to which he would have them every two or three weeks. I have now under treatment a lady, who has for years had at every bi-monthly menstrual period very severe epileptic attacks. And the following is the history she gives me of her disease: Several years ago she was advised by a *lady friend* of hers to procure an abortion on herself by using a knitting needle; which, under the instructions of this woman, she did. She suffered a great deal of pain as a result of this operation, and was very sick, and from that time till she came under my hands she has had the attacks as above stated. I made an examination with the speculum, and found the uterus anteverted to such a degree that it lay almost horizontally across the pelvis, the posterior lip of the organ being bound to the upper and posterior part of the vagina by strong adhesions, so that it was with the utmost difficulty that I succeeded in drawing the os into view. I found the neck to be very much enlarged and very irritable. I pursued the usual local treatment for such conditions, and put her on the bromide mixture. I have now carried her over two of her bi-monthly periods without an attack, although at the first of them she had the usual premonitory symptoms. She is improving in general health, and I am in hopes that we shall have no more trouble. Of course, I cannot say how much of the result is due to the "local treatment," but I cannot discover by the sound or speculum, as yet, enough diminution in the local disease to account for the favorable course which the case has taken, and my opinion is that the result is owing to the effect of the bromide. In your number of April 15, 1868, Dr. Huse, of Rockfield, Ill., does me the honor to notice my communication, and in his remarks says, in effect, that we have in this remedy a powerful nervous sedative, but not a specific for epileptiform diseases. I entirely agree with him in his views, for I have seen it fail often enough to deprive it of the title of a "specific." Nevertheless, I get generally such good results from it in diseases of the nervous system that I do not feel so entirely helpless now as I formerly did, when applied to by the unfortunate epileptic.

I am, sir, yours respectfully,

JOSIAH F. DAY, M.D.

ALFRED, MAINE, August 26, 1868.

YELLOW FEVER AND QUARANTINE.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—In the number of the MEDICAL RECORD for August 1st, 1868, in the review of the "Report on Epidemic Cholera and Yellow Fever in the Army of the United States during the year 1867," the following passages occur:—"A few years ago, at a Quarantine Convention held in the city of New York, it was voted, almost unanimously, by the two hundred or more medical men present, that quarantine was useless against the yellow fever; our late fellow-townsman, Dr. J. W. Francis, being one of the six who voted in defence of quarantine. But a short time has elapsed and now it is demonstrated, by observations made in armies, where the mode of introducing diseases can be easily recognized, that quarantine, strictly observed, is an effectual preventive against the invasion of this disease."

The reviewer doubtless refers to the National Quarantine and Sanitary Convention which met in New York in April, 1859. In his interpretation of the action of that Convention he has unfortunately fallen into an error.

On the second day of the session Dr. Alexander H. Stevens submitted the following resolution:—

"Resolved, that in the absence of any evidence establishing the conclusion that yellow fever has ever been conveyed by one person to another, it is the opinion of this Convention that personal quarantine of

cases of yellow fever may be safely abolished." [See Trans., page 45.]

After an extended and deliberate consideration, the Convention adopted the resolution by a vote of 85 to 6. [See Trans., pages 233, 234.] It will be observed that the Convention was opposed to the theory of contagion, and was opposed to confining passengers from on board infected vessels in quarantine, provided such persons were thoroughly cleansed and attired with fresh clothing. By referring to the proceedings of the Association it will be found that it was almost unanimously admitted that a vessel coming into a harbor from a yellow fever port could spread the germs of disease to the neighboring shores, such diffusion being more general if favored by certain meteorological influences. And furthermore, as *fomites* included in baggage, and possibly in merchandise, may be conveyed to parts remote from the port of entry, and even to distant States, that, therefore, infected ships as well as their cargoes, under certain limitations, should be subjected to quarantine.

The Convention appointed a committee of five, Consisting of Drs. A. N. Bell, Elisha Harris, Wilson Jewell, R. D. Arnold and H. G. Clark to report, the following year, "specific recommendations of principles and measures of quarantine, as severally applicable to yellow fever, cholera, typhus and small-pox, having reference also to the variations which different localities require."

In their report (Boston, 1860) the committee say: "We will now refer to an almost unanimous decision of the last Convention,—that *fomites*, in the form of foul merchandise, clothing, and baggage of various kinds, is a more public medium for the conveyance of yellow fever than the body of the sick afflicted therewith. That the sick, when divested of *fomites*, may be permitted to enter a city with impunity, whilst vessels, merchandise, baggage and clothing, in certain conditions, brought from the same place, with or appertaining to the sick, must be detained until thoroughly expurgated. Such seems to be the interpretation of the resolution alluded to; and consequently ships, merchandise, clothing, bedding, and other kinds of baggage, etc. so far as yellow fever is concerned, the principal things and materials for quarantine restrictions." Specific measures of quarantine were then set forth by the committee.

The views entertained by the National Quarantine and Sanitary Conventions of 1859–'60, on the non-contagiousness of yellow fever, and as respects the quarantine regulations of vessels infected with yellow fever, have not been controverted by more recent investigators; on the contrary, enlarged observations in this country and Europe since that time, have confirmed the views then held, and shown the wise and deliberate action of those Conventions.

Respectfully,

GOUVERNEUR M. SMITH, M.D.

NEW YORK, 14 East 15th Street.

ARTIFICIAL RESPIRATION.—The most efficacious plan of artificial respiration is that of *Sylvester*. The arms are raised quickly over the head, which causes the chest to dilate. They are then returned to their position at the sides of the body, whilst at the same time vigorous compression is made to the abdomen and lower part of the chest.

PETROLEUM A VALUABLE INSECT DESTROYER.—The cheap and impure petroleum oil destroys all kinds of insects injurious to plants or animals. Mix thirty parts with 1000 of water, and apply when required. Vermin of houses may be destroyed by introducing into the holes or cracks a few drops of petroleum.

Medical Items and News.

PROFESSOR H. KNAPP has resigned his chair of Ophthalmology in Heidelberg University, and will remove to New York about November 1. We need hardly inform our readers that medical science in America will be much the gainer by the accession of Dr. Knapp.

DR. O. BECKER of Vienna takes the place vacated by the resignation of Dr. Knapp.

THE HARLEM DISPENSARY, which was opened August 3, 1868, is now in successful operation. Its medical staff is composed of the following gentlemen: Drs. A. N. Brockway, John L. Colby, Joseph O. Farrington, H. G. Forbes, Harvey H. Gregory, James Neil, Henry F. Patch, Ira B. Read, John Shrady, George Steinert, and Wm. G. Wood. The district is at present bounded by the Eighth avenue, 100th street, and the Harlem river, but will probably be extended so as to include 86th street. This will embrace a portion of the territory of the late Yorkville Dispensary.

DR. THOMAS C. FINNELL, of this city, has been elected corresponding member of the Medico-Legal Society of Paris, France.

COLORED drawings of pathological specimens from cattle who have suffered from the epidemic disease now prevailing, are being prepared by the Board of Health, under the supervision of Inspector B. Howard, M.D. This will be a valuable contribution to our knowledge of this disease, which, so far as we can learn, is a sort of fever.

DEATH OF DR. J. CALVIN MEAD.—At a special meeting of the House Staff of Charity Hospital, the following preamble and resolutions were unanimously adopted:

Whereas, It has pleased Almighty God to remove from us, in the full vigor of manhood, our beloved friend and associate, DR. J. CALVIN MEAD, by disease contracted while in the performance of his duties in this hospital:

Resolved, That, bowing in humble submission to the inscrutable wisdom of Providence, we deeply deplore the loss of one whose great natural talents, enriched by generous culture and an unusual experience, and developed by an energy peculiar to himself, gave promise of a brilliant future and a life of usefulness.

Resolved, That we will always strive to emulate the high moral tone and social qualities which rendered him respected and beloved by all.

Resolved, That while we mourn our own loss, we tender the bereaved family our deepest sympathies.

Resolved, That we attend the funeral and wear, as a mark of respect, the usual badge of mourning for thirty days.

Resolved, That we transmit a copy of these resolutions to the family of the deceased, and that they be published in the *New York Times* and the MEDICAL RECORD.

D. M. STIMSON, M.D.
J. D. SULLIVAN, M.D.
W. C. GOUINLOCK, M.D.
Committee.

At a meeting of the "Bellevue Hospital Medical Union," held August 25, 1868, the following resolutions were also unanimously adopted:

Whereas, It has pleased Divine Providence to remove from earth, J. CALVIN MEAD, M.D., our late associate and co-laborer upon the Medical Staff of this Hospital:

Resolved, That we receive with feelings of the deepest sensibility the intelligence of his death.

Resolved, That reverencing his purity of character, and respecting the high ambition that guided him in his professional pursuits, we shall ever cherish his memory, and sincerely mourn the loss of so genial, frank, and manly a friend and professional brother.

Resolved, That the proceedings of this meeting be communicated to the family of the deceased, the Medical Staff of Charity Hospital, and a copy for publication to the *Medical Gazette* and MEDICAL RECORD.

R. A. VANCE, M.D., *President*.
C. D. F. GIBSON, M.D., *Secretary*.

DR. KOZLOWSKI, Professor of Descriptive Anatomy in the University of Cracow, has requested to be retired; Dr. Teichmann, at present Professor of Pathological Anatomy, takes his place. Dr. Alfred Biesiadecki, Rokitansky's assistant, is selected for Teichmann's place.—*Allgemeine Med. Central Zeitung.*

PROF. ZEIS died from disease of the heart, in Dresden, on the 28th of June. Dr. Zeis was formerly Professor of Surgery in the University of Marburg.

PROF. BRÜCKE.—The Theological Faculty has entered a protest against the confirmation of Prof. Brucke as Dean of the Medical Faculty of the University of Vienna.

CHRISTIAN FRIEDRICH SCHONBEIN of Basle, the discoverer of ozone, died at Baden-Baden September 4, 1868, in the sixty-ninth year of his age.

MEETING OF GERMAN NATURALISTS AND PHYSICIANS.—The 42nd annual meeting of German naturalists and physicians will be held at Dresden, from September 18 to September 24.

TRICHINÆ IN THE CHICK.—The mysterious and fatal epidemic among poultry, known as the "chicken cholera," is discovered to be caused by the presence of trichinæ in the intestines.

MEDICAL FEES.—The *France Médicale* says that a banker in Saxony has opened a branch in which medical men are invited to send accounts against their patients. The banker takes charge of the bills, and is content with five per cent. discount.

A BREEDING MULE.—A curious occurrence at Mont-de-Marsan has been communicated at a recent meeting of the Société impériale d'acclimation, namely, that a female mule of 12 years of age has dropped a male colt, born at term and perfectly formed; the dam gives milk and the foal sucks, but the mother manifests a profound indifference for her offspring and does not exhibit the slightest solicitude when separated from it.—*Gazette hebdomadaire.—No.* 20.

SEWAGE OF PARIS.—The sewage question is attracting a good deal of attention in Paris; the problem is to remove the filthy waters from the town in the most practical manner. The amount of these waters is now 100,000 cubic metres a day. The scheme which is considered the most practicable and scientific, is the following:—Collect the waters in a large basin, and mix about 1 per cent. of sulphate of alumina with a cubic metre of this sewer matter. The organic matters are precipitated, and each cubic metre yields about 3 kilograms. of solid manure. The decanted fluid can be employed in the irrigation of soils; it contains small quantities of mineral matters in suspension, some nitrogenous and organic matter, and the whole of the alkaline salts. The deposit contains the whole of the phosphoric acid and nearly all of the organic matter; it is an excellent manure, and very fertilizing.

DEATH FROM CHLOROFORM.—Dr. B. F. Brown, of Oneida, Knox Co., Ill., mentions (*Chicago Med. Journal*) a case of death from chloroform in a healthy woman, æt. 35, mother of three children, who came to a dentist to have a tooth extracted. About two drachms of chloroform were poured on a sponge and held a short distance from her face. After three or four inspirations her respiration ceased, and she became pulseless. Stimulating applications and artificial respiration were at once resorted to, but without the least effect.

A FOUR-LEGGED CHILD.—The following history is extracted from the *Richmond and Louisville Medical Journal*:—

NASHVILLE, TENN., June 16th, 1868.

The undersigned, in response to the request of a number of physicians, and the relatives and friends of the unfortunate subject of this investigation, give the following testimony: The infant, *J. Myrtle Corban*, has four legs and two distinct external female organs of generation, with two external openings of the double rectum. The external genito-urinary organs are as distinct as if they belonged to two separate beings. The feces and urine are passed (most generally simultaneously, particularly the urine) from both external urinary and intestinal openings, situated respectively between the left and right pairs of legs. The head and trunk are those of a living, well-developed, healthy, active infant of about five weeks, whilst the lower portion of the body is divided into the members of two distinct individuals, near the junction of the spinal column with the *os sacrum*.

As far as our examination could be prosecuted in the living child, we are led to the belief that the lower portion of the spinal column is divided or cleft, and that there are *two pelvic arches supporting the four limbs*, which are situated upon the same plane.

Photographs of this infant have been made by the advice and under the supervision of one of our number.

The reality in this case surpasses expectation, and we are of the opinion that this interesting *living monstrosity* exceeds, in its curious manifestation of the powers of nature in abnormal productions, the celebrated "Siamese twins."

(Signed) JOSEPH JONES, M.D., Prof. of Phys. and Path., University of Nashville.
(Signed) PAUL F. EVE, M.D., Prof. of Surgery, University of Nashville.

THE NEW HOTEL DIEU OF PARIS.—The first floor of this new hospital is about completed, and it covers over 22,000 square yards, the hospital consisting of three separate blocks. The original Hotel Dieu dates as far back as the seventh century.

DISPENSARY WORK IN INDIA.—Rev. Edward Chester, M.D., late a resident of New York city, now a missionary of the American Board of Commissioners for Foreign Missions, in Madura, India, writes as follows: "In my dispensary, we have had 4,351 new cases this year, being 726 more than last year; and a total of 11,966 since the dispensary was first opened. These have come from more than 380 different villages. I have had many important surgical operations to perform this year, and know that, by the blessing of God, I have saved many a life. As the British Government has just furnished me, as a part of a grant, with a most valuable case of eye instruments, I have begun to operate for cataract. I have scores of these cases."

The dispensary was established by Dr. Chester, about three or four years since, after a great deal of difficulty.

LATERAL HERMAPHRODITISM.—Dr. Rawdon (*Liverpool Med. and Surg. Reports*) communicates a case of lateral hermaphroditism, in which a tolerably developed vagina and uterus were present. A Fallopian tube, round

ligament, and an apparent ovarium, were found in the left broad ligament, but no trace of either testicle or ovary; a Fallopian tube, a distinct testicle, with an epididymis, and a vas deferens, were found in the right broad ligament.

The conformation of the pelvic cavity was between the male and female types. The person stated that a partial occurrence of the menstrual secretion took place regularly.

The coexistence of a Fallopian tube and a vas deferens on the same side of the body, supports the view that these ducts are developed from distinct structure, viz.: from the Mullerian duct and the excretory duct of the Wolffian body.

The London Treatment of Quacks in the Fourteenth Century.—One Roger Clerk, having prescribed for a woman suffering from fever, the hanging of a certain document round the neck, containing words which he said were an antidote to the disease under which she suffered, was summoned before the Guildhall of London, to show upon what authority he practised the art of medicine. He was convicted upon his own confession, and he was ordered to be placed in the pillory and then punished. His progress to the pillory is thus described: "It was adjudged that the same Roger Clerk should be led through the middle of the city, with trumpets and pipes, he riding on horse without a saddle: the said parchment and a whetstone, for his lies, being hung about his neck, an urinal also being hung before him, and another urinal on his back."—*Lancet.*

Woods' Styptic for Hemorrhages.—Prof. James R. Wood makes use of the following styptic in hæmorrhages:—℞. Liq. ferri persulphat, ℥j; alumen, q. s., so as to form a paste.

Death from Swallowing Cantharides.—An inquest was lately held at Guildford on the body of a girl, twelve years of age, who had died from the effects of swallowing two cantharides, given to her by a boy in gooseberries. She died with all the symptoms of an irritant poison, and the appearances after death were indicative of that class of poisons. It appears that the boy had given the fly with the view of exciting the sexual passion of the girl.

A Hospital for Convalescents.—Plans for a new Convalescent Hospital, which is to be built at a cost of half a million, have been prepared by Mr. Dale, of New Inn. The intention of the founder, whose name is not allowed to transpire, is to provide an hospital, not for the very poor, nor for incurables, nor for those suffering from acute diseases, but for those who are betwixt the middle and lower classes—the respectable mechanic, clerk, and the like, who cannot usually get fresh air and change during recovery from illness. It is calculated that about one thousand visitors may be accommodated at one time. The architect has planned out six separate dining halls, library, reading, billiard, and smoking rooms, gymnasium, and baths, so that amusement and recreation of all kinds may be had within the building; and he has taken care that no violation of hygienic principles shall be committed in regard to ventilation, water-supply, drainage, and the like. Mr. Dale has circulated a pamphlet, containing an account of the plans, amongst many of the hospital physicians, and others, for criticism. It is not settled as yet where the institution is to be. An endowment of £25,000 a year is mentioned.—*Lancet, July* 25.

A Phthisiological Committee.—The Medical Society of the Hospitals of Paris have appointed a committee, whose duty will be to collect facts and documents bearing upon pulmonary phthisis, with a view of elucidating the questions connected with the pathology and treatment of this sad complaint. The committee intend to call upon their professional brethren for answers to a series of questions, which will probably be largely circulated.

Suicides in Paris.—In the year 1867, at Paris and the surrounding districts, there were 700 suicides, and 215 attempts at self-destruction. In the first group there were 79 married men, 22 widowers, 418 bachelors, and 70 men whose social position remained unknown; 38 married women, 24 widows, 39 spinsters, 3 women of unascertained classes; and 7 children—viz., 4 boys and 3 girls. In the second group there were 19 married men, 2 widowers, 107 bachelors, 3 children, and one uncertain; 31 married women, 10 widows, and 42 spinsters.—*Lancet.*

Refusal of Medicines by the Insane.—Dr. Van Holsbeck, in such cases, advises the medicinal substances to be reduced to powder, and taken in the form of snuff.

Homicidal Monomania.—A nurse at Geneva has recently been arrested on a charge of poisoning eight patients in succession who were placed under her charge. The explanation given is that it is an instance of homicidal monomania.

Dentists in Belgium.—In the bill now before the House of Representatives it is proposed that dentists should possess the degree of Doctor of Medicine and Surgery. If the bill becomes law the dental profession in Belgium will be on a footing with the profession at large.

Large Arteries Secured by Torsion.—In a case of amputation of the thigh, performed in Addenbrooke's Hospital, Cambridge, June 26, on account of malignant disease of the tibia, torsion of all the arteries was practised by Prof. Humphry, with perfect success. The patient, a man aged fifty, has recovered quickly. This is the third instance in which torsion of the femoral artery has been practised successfully in Addenbrooke's Hospital.—*Lancet.*

New Publications.

Books Received.

Conservative Surgery in its General and Successful Adaptation. By Albert G. Walter, M.D. Pittsburg: W. G. Johnston & Co. 1867.

Criminal Abortion, its Nature, its Evidence, and its Law. By Horatio R. Storer, M.D., LL.B., and Franklin Fiske Heard. Boston: Little, Brown & Co. 1868.

Vesico-Vaginal Fistula from Parturition and other Causes, with Cases of Recto-Vaginal Fistula. By Thomas Addis Emmet, M.D., Surgeon in Chief of the New York State Woman's Hospital. New York: William Wood & Co. 1868.

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Original Lectures.

NEGLECTED CAUSES OF INFANT MORTALITY IN NEW YORK:

A PAPER READ BEFORE THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK, SEPT. 14, 1868,

BY STEPHEN ROGERS, M.D.

MR. PRESIDENT:—It is proper that the Society should know that this paper was prepared with the view of presenting it as the *Report of the Committee on Diseases*, but, inasmuch as there was not a quorum at the called meeting of that committee, the original design was necessarily abandoned, and it is presented as my own paper, whose sentiments and material I alone am responsible for, the committee sharing the responsibility in no respect whatever.

Since the adjournment of the Society we have been visited by the hottest season recorded for many years. While the diseases known to the learned as zymotic have not been present as epidemic pestilence, *heat*, as a fruitful cause of disease and death, has been upon the people. Its results, in the destruction of human and brute life, have been more remarkable, perhaps, than ever before in this city; and this is especially true with respect to the number of infants it has carried off. As a cause of disease and death, solar heat should therefore be studied in, first, its relation to our annual infant mortality, in the production of which it vastly outnumbers all its other ravages, as we believe, and will constitute the first chief cause of those which we shall consider on this occasion. Its second relation, that of its destructive effect upon the adult, and upon the lower animals, may claim our attention on some future occasion.

Heat destroys the life of our infants by first directly depressing their vital forces, so that, if of low stamina, they sink, more or less rapidly, and die, with no sufficient local disease to account for dissolution. This fact is equally applicable to feeble adults, and is often demonstrated by the large mortality among the enfeebled, of all ages, which follows a few days of intense heat. Second, it produces harassing and exhausting cutaneous diseases, which torture and poison to death the already enfeebled frame of the little sufferer. Third, it indirectly destroys its health and life by its deteriorating effect upon much of the food habitually given to the infant and young child, whether taken from its mother's or other breasts, or from the markets; and by the generation of malarial agents, which the infants respire.

On account of the fact that it is very much the fashion with our health authorities to give these malarial causes great prominence in the causation of infant mortality, we will honor them with a first consideration also. We are by no means convinced, however, that such malarial agents play any prominent part in the production of the diseases which destroy the great numbers of children buried from our cities every summer. We more than suspect that these aërial causes, from unclean streets and soap-making establishments, etc., are by far too much emphasized by our health officers, because by so doing, the *prominence* given to them in the public prints, diverts attention from more potent causes of this mortality. As an example of this practice, we will quote from the public letter of our Registrar, of the 14th of last July:

> These external and most removable causes, it is true, are so associated with neglects of domestic and personal hygiene, among the ignorant and improvident classes, that it might be difficult to estimate the relative importance and force of the several causes, had it not come to pass that the regions worst afflicted now are not the old slums of the Fourth and Sixth wards, but, rather, the newer and less faithfully scavengered slums of the Twentieth and Twenty-second wards in New York. In the latter ward, beautiful in situation, elevated and not yet half built up, extending from Fortieth to Eighty-sixth street, the Central Park and Sixth avenue to the North river, there were no less than 65 deaths last week, and a still higher rate the past three days, or about 1 funeral to every 770 inhabitants now living in the ward; while in the intensely degraded and most overcrowded population of the Fourth and Sixth wards there was less than 1 death to the 1,000 living. Foul and ignoble as these latter wards are, never in twenty years have they been seen in so cleanly condition and so free from nuisances as at the present time; but as regards the filth of streets and gutters and the insufferable nuisances of the sickly quarter of the Twentieth and Twenty-second wards, these evils exceed description. After a careful inspection of them I deliberately charge them with the slaughter of a large quota of the 123 deaths which occurred in these naturally beautiful wards, now outraged by the worst and most preventable of nuisances.

A week later, when the mortality in these beautiful but pestilence-stricken wards amounted to 205 instead of 123, he writes as follows:

> Without intention to alarm, but only to save precious lives, we again, and with an urgency that no selfish concern of men shall prevent, call attention to the numerous and intensified causes of preventable mortality now afflicting the riverside half of the Twentieth and Twenty-second wards in New York. The death-rate in that naturally healthy region was never exceeded in the old Five Points slums, and to-day it is almost 70 per cent. greater than that of the Sixth ward. Again, in the First, Fourth, and Eleventh wards the fatal diseases that suddenly overtake crowded, ignorant, and filthy classes of inhabitants are costing more for funerals than it would cost to cleanse their tenements and bathe their unwashed bodies at the city's expense. The Seventeenth ward buried 120 of its inhabitants, every fourth death being one by cholera infantum.

We find, upon examination of the records, that during the week here referred to, ending July 18th, after the 22d ward, whose mortality was 1 for about every 900 of its population, the next up-town ward in point of high mortality was the 19th, which was 1 in less than 700 of its population. Considerably below them both comes the populous 17th ward, whose mortality equalled about 1 in 800; and, as is stated, one in four was from cholera infantum. Of the percentage of the 1 in 600 of the population of the 22d ward, during the same period, who died in infancy, we have no information; but it is fair to infer that such percentage did not differ much from that of the preceding week, which we are led to conclude was at least one in three. It therefore appears that the part of the 20th and the 22d wards, bounded by 34th and 59th streets, 6th avenue and the North River, and the 19th ward, are the most fatal up-town localities for infants. The 21st ward, on the contrary, has a low comparative mortality during the same period—1 in 1300—but we have no information as to the percentage of infants.

But we may perhaps get a more accurate knowledge of how much filthy streets had to do with this result in the 22d ward, during the week ending July 18th, from an examination of the ward mortality, than we get from this letter. It will there be seen that, for the weeks ending July 4th and 11th, the death rates in the 4th, 5th, and 6th wards amounted to about 1 in 1,700 of their population; while for the week ending July 18th, it amounted to at least 1 in 680 of the population of these wards—an increase of more than 100 per cent.; while the 10th ward had an increase of at least 50 per cent. Now, as neither the 20th

nor the 22d ward suffered an increase of 100 per cent. during this week, the error we are liable to be led into by such statements as the following may be understood:—

> The Fourth, Sixth and Tenth wards, which are far cleaner and better policed than in any former summer for twenty years, suffer no perceptible rise in their death rates, and they give very few diarrhœal deaths. The different sections of Brooklyn are teaching precisely the same sanitary lessons that New York is giving. And in both cities the most important duty is that which enforces cleaning and sanitary care in every household and every place.—*Registrar's Letter, July 29th*, 1868.

It is a source of unfeigned regret that the cleanliness of the 4th, 6th, and 10th wards did not save them, during this hot week, from an increase of more than 100 per cent. Now, as to what portion of our population especially suffered during this fatal period, the figures at the Bureau of Vital Statistics will afford us important information. It is there shown that, while, for the week ending July 4th, the mortality of children under two years of age reached about 50 per cent., that for the weeks ending the 11th and 18th rose to 60 per cent. of the total deaths in this city; and for the weeks ending July 25th and August 1st, it was nearly 70 per cent. But for the circumstance that during the week ending the 18th 132 adults died of sunstroke, the percentage of deaths under two years would have risen during that week to 70 per cent. also. Infant mortality then rose with the solar heat in July from 50 to 70 per cent. of all the deaths occurring.

It is therefore manifest that carbolic acid and chloride of lime are not all that are required to prevent this annual augmentation of mortality among infants in our city. It may be well enough to seize upon an appreciable stench, and insist upon its removal from beneath our nostrils, but we suggest that it first be proved that such stenches generate disease. It does not appear by the records that the gas-house localities are particularly insalubrious, and, as we have seen, the soap-boiling regions did not suffer so great an increase of disease during this hot week as others far removed from them. In regard to the soap-boiling fumes, it may be said that they exert most of their influence for good or for evil in this city upon a population quite remote from them, on account of the fact that the odoriferous vapors leave the tops of high chimneys, whence they do not descend till they have travelled greater or less distances. Murray Hill receives a large share of these, and we must take the vital statistics as our informant as to how much mortality is produced thereby in this highly salubrious portion of the town. And, while upon the subject of stenches, we desire to allude to the fact that mephitic gases are remarkable for not being deleterious to animal life, while, on the contrary, the most deadly gases and gaseous miasms are quite as remarkable for being odorless. Who, for example, ever smelt the miasm which produces the Panama, the Bengal, the African, or the yellow fever? Who ever smelt the fumes of cholera from afar, or the asphyxiating gases at the bottom of wells and cesspools? We have taken the pains to inquire extensively into the subject of the health of people employed in such work as soap-making, tallow-rendering, scavengering, gunmaking, cutting of dead horses and dead men, and similarly disagreeable-bodored occupations, and find no fact to support the popular and fast-rooted belief that a bad is necessarily deteriorating to health or destructive to life. All these people enjoy quite as uniform and as robust health as any other class of laborers. Therefore, as this matter stands, the correction of bad odors more properly belongs to the police than to the sanitary department of our government.

It is a subject still open to discussion, however, whether all stenches are innocuous; but it is obvious that many of them do little harm, or some of our population would ere this have been poisoned by the foetid exhalations from reeking heaps of old rids of lime, so lavishly thrown into some portions of our streets, and by the fumes of carbolic acid with which they have been deluged. This latter substance, by the way, has rather suddenly become *the* fashionable remedy, the panacea for all the ills that human and brute creatures are liable to. It is administered with food and with drink; it is applied by the inhaler, by the brush, and by the syringe; it is scattered broadcast over our streets and over our pasture fields. Its disgusting fumes invade the best atmosphere of our dwellings, and it is threatening to replace cologne upon our toilet tables. It has in fact become a sanitary nuisance, which the majority of our population and great numbers of patients would be glad to see abated. We venture to say that most of the localities thus rendered, to say the least, disagreeable, would be much more attractive and quite as healthful if less of these agents were employed and more Croton water. In justice to the soap-boilers and gas-makers, we should further call attention to the fact that, though their establishments were in full operation, the mortality in the 20th and 22d wards averaged 28 and 18 per week, respectively for the months of November, December, and January last, instead of 59 and 64 per week for July last.

The fact is, that the 22d ward has a mortality much below the general city average per 1000 of its population, during the winter, while it is just as far the other way in the heat of summer. The cause of this is to us manifest, and must be to any one who will go over that part of the city extending from 59th street and the 5th avenue, in a west and south-westerly direction to 34th street and the Hudson river. The filth of streets and of gutters, and the effluvia of slaughter-houses, and of soap and gas manufactories, are, in our estimation, the most insignificant among them. This portion of the city is in great part covered with the most wretched shanty habitations, and two-story wooden houses. These shanties are not only built along the streets, but in whole districts are set down over the surface of the whole square, on every space large enough to admit them. These regions are very badly, or not at all, supplied with water, and therefore one of the essential sources of comfort and life, in hot weather, is scarcely known among a great part of this population. This scarcity of water is not only an excuse for shocking personal uncleanliness throughout this region, but it is, what is far more destructive to life than filth, a source of great physical privation and disastrous want, especially among the children there confined. The same may be said of much of the 19th ward. Were this one want supplied, the destructive effect of solar heat upon the infant population kept in these wooden ovens might be greatly lessened. We have just alluded, however, to the chief destroying element prevalent in these localities, namely, summer heat. It is necessary to have visited these shanties and these wooden houses, especially the upper stories of the latter, at midday and at midnight, to obtain a correct appreciation of the degree of heat prevailing there during the early part of last July. The population of these localities, under such a temperature, are in unceasing torment; neither mother nor infant sleeps, except from sheer exhaustion. The perpetual process of perspiration horrors on the consumption of the vital forces, so that the powers of digestion are enfeebled, and all the train

of diseases of the alimentary tract follow, superinduced very generally in infants by the fact that, under these physical tortures, the breasts of the mothers dry up, or their secretions become abnormal and hurtful, reducing them, in the one case, to artificial feeding altogether, and in the other, subjecting the infant to the poisonous effect of its own mother's milk. If we add to all this the torments of lichen tropicus, and its consecutive cutaneous abscesses, we in part fill the measure of the misery of the infant inhabitants of the hut and wooden-house portions of the city. They have no relief by day or by night. Their little bodies are not even cooled by an occasional bath; a current of air never passes over their perspiration-bathed surfaces, to allay the burning temperature of their blood, for no air can circulate in these caves. With all the alleged filth of the adjacent streets, these pitiable sufferers would be better off, were their little couches spread upon the pavements at night, than they are, confined in these shanty abodes. To all these causes we have still to add the influence of this intense and continuous heat in souring the milk, and spoiling pap and other food, so generally given to these unfortunate beings. These are the *prime* causes which raise the mortality rate from less than 16 per 1000 per year of the population of the 22d ward during the winter months, to nearly 86 per 1000 per year during the heat of summer, and in the 19th ward from about 20 per 1000 per year to about 80, and in the 20th ward from about 19 per 1000 per year in winter to 63 per 1000 per year in the heat of summer.

Now if we turn to the 4th ward we find no such difference between the mortality of winter and summer. We find that this ward, whose population are protected by brick walls, and are well supplied with water, suffered for ten weeks in winter an average mortality of less than 14 per week, while for the five weeks ending August 1st, it suffered a loss of less than 19 per week, that is, from the rate of 37 per 1000 per year in winter to about 50 per 1000 per year in summer, of its population; while the 17th ward, with perhaps fewer comforts and more crowded, especially with children, yet with brick walls to shield its inhabitants, is raised from an average of 36 in winter to only about 70 in summer.

We therefore cordially agree with the Registrar in the sentiment expressed in his letter of the 14th July:

> Evidence upon this subject is painfully abundant, and it does not rest alone upon the fact that in the central field of these evils, extending in a narrow belt along the river from Thirty-fourth to Fiftieth street, there were 42 deaths by diarrhœal disorders last week, but the causes themselves are plainly there and can be described.

And we have described them. We have only to observe the class of buildings, and their supply of water, to understand why certain of the wards of Brooklyn have suffered a similarly alarming increase of mortality during this hot weather, at the same time that her Deputy Registrar assures us that no epidemic zymotic disease prevailed there. Brooklyn's infant mortality is notably large, summer and winter, but her shanty and wooden-house wards suffered severely during last July. The Registrar's letter of July 22d refers to this fact in the following language:

> The week's records in Brooklyn show that chiefly the undrained and filthiest sections have suffered the great excess of mortality. The 5th, 12th, and 16th wards are taking a severe lesson in sanitary experience.

Now these very wards will be found to resemble in great measure, as to the tenements and water-supply, the portions we have described of the 20th, 22d, and 19th wards of this city, and unquestionably the same statements equally apply to them. There can be no reason advanced why bad drainage alone should suddenly nearly double the death list, when the temperature for weeks before such sudden mortality, was high enough for the production of more or less rapid decomposition of garbage, and miasmatic exhalations.

It is to us, therefore, clearly vain, to hold up to the public the slaughter-houses, gas manufactories, soap-boiling establishments, and filthy gutters, as the pests of these localities, so long as it is so manifest to the commonest observer, that whether the shanties are in "Little Dublin" (between the 5th and 8th av., and 50th and 59th st.), or on the 11th av. and 38th st., the mortality is equally great in them. We see but one remedy for this desolating evil, and that is to improve the dwelling-places of these people. We have no doubt that, had the sums which have been spent during the last two years for *disinfectants*, and for the removal of so-called *nuisances*—had a tithe of the money spent on those unsightly and practically useless appendages, called fire-escapes—been appropriated to the tearing down of shanties, and to the erection of proper dwellings in their places, and supplying them with water, vastly more life would have been saved.* Then the 1st rule of the published *Rules for the Management of Infants during the Summer Months* would be applicable to them.

As a part of the history of the lost week of our health authorities during the last summer those rules deserve notice. They read as follows:

1. Preserve cleanliness of room, clothes and person of child, and procure fresh air by open windows; resort to parks, ferries, &c.

2. Use light flannel covering of chest and bowels at all times, and other clothing to suit the changes of weather.

3. Infants under one year should, if possible, have a wet-nurse. Until six months old they may nurse not oftener than every two or three hours: over six months five times in twenty-four hours.

4. If the child do not nurse it must still take milk, which should be prepared as follows: Boil a teaspoonful of barley (ground in a coffee mill, or take prepared barley) with a gill of water for fifteen minutes, to which add a little salt; to this add half the amount of boiled milk and a lump of loaf sugar; give it to the child lukewarm from a nursing bottle. The bottle and mouthpiece should be always kept in water when not in use.

5. If the child is over six months old, the boiled milk and barley water should be in equal quantities, with salt and loaf sugar. If the child is slightly costive, use farina instead of barley flour; if very costive, use oatmeal gruel, strained before it is mixed with the milk.

6. If the child is partly nursed, it should be fed sufficiently with food prepared as above directed—the child being nursed and fed alternately.

7. Beef tea or beef soup may be added to this food for infants of five months or older; when ten or twelve months old they may suck rare-done beef-steak.

8. No child under two years of age should be allowed the miscellaneous diet of the table.

9. On the first appearance of the symptoms of summer complaint—vomiting and purging—place the child under the care of a physician.

Now it is very clear to us that, of all these rules, the only one of any value to the shanty population, and to much of the tenement house population also, is the last one, viz.: when the child falls sick send for a physician; and even this is superfluous, for that is just what the parents would do in any case. And as to the scientific

* This subject of the improvement of the dwellings of the laboring people is a most practical one. Building associations in various parts of the world have done wonders in this branch of human wants. The results of the labors of the "co-operative building companies" may be witnessed at Mulhouse and Dornach in France, and at Birmingham, Glasgow, and Edinburgh in the United Kingdom. We throw out these hints, upon which we hope to see our Citizens' Association elaborate.

merit or practical value of any of these rules, we do not hesitate to challenge any one to defend them. For example, rule No. 2 directs us to cover the trunk of the child with flannel at *all times*. Now as nature's means of preventing the overheating of the blood and structures of the body is the evaporation of perspiration from the surface, and as all woollen fabrics directly oppose this process of cooling, it is clear that a flannel cover over the body of an infant, sweltering under a temperature of above 90, not only opposes nature, but is unscientific and inhuman. We have long since been convinced that the universal and indiscriminate use of woollen rags upon infants in this city, summer and winter, kills vastly more than it saves from disease. The true condition of an infant, during such weather as we had in this city in the early part of July last, is that of perfect nudity; but as a compromise they may endure a covering of the lightest linen or well worn cotton fabric, which readily becomes moistened by the perspiration, and thus by evaporation acts as a cooling wet sheet. If, in addition to this nude condition, these roasting shanty and crowded tenement house babies could be sponged from head to foot with tepid water, as often as these rules allow them to take food, their comfort would be immensely enhanced, and their powers of digestion, assimilation, and recuperation greatly invigorated. This result would be more certainly attained if, in addition to this external use of water, the child, at all ages, were allowed an unrestrained run to *iced Croton water* as a drink. We are convinced that thousands of babies are sacrificed in this city to a popular hydrophobia, and especially to an iced-water-phobia, which too many of the practising physicians of the town still cultivate, and which our health rules are silent about.

As to rule No. 3, we need only relate a single instance of its effect, as a commentary upon its practical value. A model mother and most estimable lady called us to advise her, relative to a supposed colic which her infant, about one month old, had been some time afflicted with. Winslow's syrup and many similar remedies had been administered with only temporary benefit. The baby awoke in one of the attacks during our visit, and as it appeared to us to desire food more than anything else, we asked the mother to give it the breast. To this she replied that it was not yet time, for it had nursed only an hour and a half before. When asked what that fact had to do with the child's desires, she replied that she had been told, by the women, that the Board of Health said that infants under three months should not be allowed the breast oftener than once in two hours. We lost no time in correcting this absurd impression; the child took the breast, and its colic was instantly cured.

Again, we are forced to take the same ground with respect to rule No. 4. Now if, as is here stated, the child must still take milk, why, we wish to know, should he not have the fresh, pure, uncontaminated, unpolluted, and unprepared milk of some available animal? Are we to believe that a decoction of barley adds virtue, digestibility, or any conceivable value to good cow's milk, or even to poor milk? What is deficient in the milk of the cow that barley can add to it? Let us see. Barley is a vegetable substance very poor in plastic or building material. Besides this, it contains *dextrine*, a substance which, even in the adult, is difficult of digestion, and, *a fortiori*, must be so in an infant. Its starch corpuscles are less soluble in the gastric juice, its decoction is slightly acrid, and it is somewhat laxative. We are at a loss to explain, therefore, what good barley can do cow's or any other milk, but we can easily see how it may produce disease. The same remarks are equally applicable to all of the many farinaceous substances so universally given in combination with milk to our young infants.

That this should be the result, may be understood from a glance at the chief constituents of these various materials. Besides the indigestible dextrine, starch, and insoluble casein, barley, were it all easily digestible and assimilable, is only about half as nutritious as milk; it has about six of the heat-making to one of the tissue-building constituents, instead of three to one as in cow's milk. Arrow-root has about twenty-five to one, and tapioca and sago, about twenty-five, while corn-starch has about forty to one. This is supposing, however, that the infant has the physiological development which enables it to digest these starchy ingredients of vegetable substances, which is not the truth. Before the appearance of the teeth, the salivary secretion of the child is little or nothing, and therefore the known change effected in the digestion of starchy materials, by insalivation, cannot occur in the young infant. Now, as to whether this absence of salivary function is made up by any peculiar gastric or intestinal activity, the investigations of Guillot will afford us some light. His attention having been directed to the changes which food given to children underwent, and to the excessive mortality among them in the French hospitals, where the routine management of the sick infant was to withdraw it altogether from the breast, and to substitute for the milk some farinaceous substance made fluid by boiling arrow-root, gum-arabic, rice, or some similar substance in water, he instituted a series of investigations with special reference to the state of the contents of the bowels of the children thus treated to death. He was struck with the uniform presence, in the bowels, of a jelly-like substance, lining in some instances both the small and great intestines. Upon analysis, this substance was found to be nearly pure starch. It would therefore appear that the infant, whose salivary apparatus and whose teeth are not developed, has neither his gastric nor duodenal nor other intestinal glands ready to digest the starchy substances of a farinaceous diet.

Hence we ask if it is not true that, after the milk of the healthy human mother, or the wet-nurse, the milk of some animal is the best food for infants? There can be but one answer to this question. Experience and physiology and common sense unite in declaring it the simplest and best, and it is best without any *preparation* with vegetable substances. Of course we recognize the propriety of the appropriate addition of water to the milk of the cow, and the addition of a proper amount of sugar, especially the sugar of milk, and of common salt and of lime or other alkalies. We protest, however, against such loose directions as "a little salt" and "a lump of sugar." How much a little salt to a pint of food would be, or how big "a lump of sugar" must be added, we have no instructions in these rules of the Metropolitan Board of Health. In view of the fact that a very large share of the infant disease and mortality of this city is the unquestionable result of pap, barley, farina, and other forms of artificial feeding, in which milk enters often as a secondary constituent, it appears to us particularly unfortunate that our health authorities should, by this 4th rule, have done what they could to continue this unphysiological abuse. Among the tenement-house population it is the rule that infants are fed more or less on pap and starch from the day of their birth, and those who live exclusively upon the mothers' breasts are the exceptions. This practice is by far too common also among the better classes.

The remarks of Dr. Routh upon this subject, in his excellent little work on infant feeding, are so applicable to our own people, and illustrative of what we are denouncing, that we deem it sufficient excuse for intro-

ducing them here. He says: "I cannot conceive anything more injurious than this popular arrow-root feeding. I believe it is a cause of the death of many infants." He illustrates the hold this fallacy has upon the London people (and it is not less tenacious among our own) by relating the following history: "A poor woman had five children; all had been fed artificially on arrow-root, and all had died. A sixth in due time was born, and she was strongly urged to try nourishing food, such as milk, beef-tea, &c., instead of arrow-root. This she agreed to do. Meeting her some time afterwards, the friend, who had given her this advice, inquired about the infant. She replied: "Oh! it is dead; but it was no fault of mine, as I fed it on the best arrow-root that could be procured." What practitioner among us does not every day of his life hear of infants feeding upon *good arrow-root*—upon everything, in fact, from clam-broth down to gum and bran-water, upon everything except the food which Divine Providence in his wisdom has prepared for the young of all warm-blooded animals, milk! milk!! milk!!!

We do not propose to go into the trifling discussion of the possibility of raising children on purely farinaceous food. That apparently has been done in a few instances, though very high authority doubts it; but we can venture to say that no vigorous child thus raised has ever come to our knowledge. We, therefore, believe it to be our duty to advocate an exclusively milk diet either of the breast, or cow, or goat, for the first six months, and that even after that period this rule should be with great caution departed from, and that departure in favor of some animal diet, till the child has teeth with which to masticate food. This we can only expect to do sucessfully, by first correcting the wide-spread and deep-rooted delusion possessing the minds of our people, and it may no doubt be added, of too many of our physicians also, that the milk supplied to this city is of bad quality, impure and hurtful. It is, on the contrary, a demonstrable fact, that no city in the world of the size of this, is so well supplied with milk; that in fact bad milk, diseased milk, or adulterated milk is now rarely seen here. An equally dangerous, and still more groundless and more stupid fallacy, which, strange to say, practising physicians are constantly cultivating, is that, if not originally bad, the mixture of the milk of many cows, like that brought to the city, makes a dangerous compound for the infant stomach. Any thinking being needs not to be told that this very mixing is the only true way to secure an average good milk, and the very thing we should seek for in selecting food for infants. Strange enough, however, the very persons who teach the mixed-milk delusion advocate the use of the condensed milk, which in its beginning was the same mixture. There certainly never was any material transported into a city, of a more desirable character for the food of infants, than the Orange County milk and cream supplied by Woodhull & Gouge, by the Orange County Milk Association, by the Producers' and Dealers' Company, and by several smaller parties engaged in the business in the city. It is a mistake, fatal to thousands of children, that any manufactured milk, or any possible compounded food, can equal the milk delivered at the doors of our tenement-houses and at the shanties of the poor by these companies and individuals. We urge these sources of supply upon the attention of the people; we call the attention of the practising physicians to their obvious duty in the correction of this almost universal neglect to supply milk for the food of the large number of infants that are now annually killed by pap compounds, with the hope that the mortality among them may be markedly decreased, instead of regularly and annually increased in defiance of all the sanitary efforts of our health officers, as the following statement will show: According to the City Inspector's report the deaths from cholera infantum during the months of July and August, 1864, numbered 934; for the corresponding months of 1865, 1034. According to the Metropolitan Board of Health's report for 1866, the deaths from this cause during July and August numbered 1273; for the corresponding period in 1867, 1122; and for the corresponding period in 1868, 1479—nearly sixty per cent. more than it was five years ago, and more than sixteen per cent. more than in July and August in the *great* cholera year, 1866. The remarkable fact, that during the summer months, when the demand for milk among the infant and child population of this city is at its maximum, the amount brought into the city is less than during any other part of the year, is a significant commentary upon this large and increasing baby mortality.

We shall have no more opportune occasion to allude, in terms of reprobation, to what we shall term *Public Health Canards*, by far too often issued from our Metropolitan Bureau, the very place where they should never originate. The so-called Texas cattle disease, which recent evidence by no means shows to have at all belonged to the Texas cattle, has been a fruitful theme with which these documents have, for a considerable time, excited public attention and unfounded alarm. The following extract from a city paper of August 24th, or thereabout, is a sample of one of the forms these canards take:

Increased Mortality in the City.—From the mortality record for the week ending at twelve o'clock yesterday, it appears that during the week eighty-nine more persons died than during the week preceding. The President of the Board of Health says that he believes the extraordinary increase in the death rate may be laid at the door of the diseased cattle. He says he has made personal inspection of the streets of the city, and he never found them in better order, and more pains have been taken lately to keep them clean than for many years. Even the gutters are washed daily, under the direction of the Board of Health.

Now the records show that 30 of this 89 excess, over the deaths of the previous week, were under 2 years of age; 25 of consumption; and 12 of starvation, old age and pneumonia; a total of 67 of the 89, who in all probability did not taste of any meat, and some of whom would have been the better had they eaten a little diseased meat. The same records show that, during the week in question, there was an increase of deaths from diarrhœa of 32 over the previous week; which, taken in connection with the well-known fact, that diarrhœa was extensively produced, during the two or three weeks ending August 22, by derangements of diet resulting from abstinence from accustomed beef, and resorting to various other kinds of meat, or to vegetable diet purely, from fear of being poi-oned by diseased beef, renders it very probable that public alarm killed more than the diseased beef would, had it reached the markets; which, by the way, there is no evidence that it ever did reach. Still further in proof that this official statement had no foundation in truth, is the fact that of this 89 excess, 55 died in our public institutions, where, we know, the diet is carefully (?) watched; and 26 of these were babies in that delectable institution, known as the *Infant Hospital*, which we shall devote a little time to presently. Now it belongs to us, the representatives of the people in this city and county Society, to protest against this kind of unauthorized sensation circulars. Had there been no other sufficient cause for this increase of weekly mortality, and had there been any well-established reason for believing that diseased meat had been fed to those

who died, this statement would have had some excuse, *if made to the health officers*, but there could never be any defence for making it to the people through the prints.

This excess of mortality during the week ending August 22 is precisely what we might look for, knowing what the meteorological record for the week, as compared with the week previous, was. A very marked increase of heat or humidity of the atmosphere, other conditions being equal, is attended by increased mortality. What the exact relations of heat and moisture are to this result we have not been able to establish, but the following statement will afford some insight into this interesting subject. For the week ending July 4, 1868, the mean temperature was:

			Total Deaths.
July 4.....	80°	and humidity 70%	413
July 11.....	80	" 76.5	614
July 18.....	88	" 69.5	1112
July 25.....	78	" 78.5	781
August 1.....	80	" 75.5	730
August 8.....	78	" 74	750
August 15.....	74	" 82	643
August 22.....	76	" 77.5	732
August 29.....	74	" 75	656

It will be seen that the correspondence between the meteorological conditions and the number of deaths, in July and August, is remarkably close. The records of 1867 also show that of all the weeks of July and August of that year, the one whose sum of temperature and humidity was greatest had the highest mortality.

These are facts that so prominent an officer in the Board of Health should know, and should take into consideration before issuing such an alarming bulletin. So far as we have been able to obtain information relating to the history and pathology of this cattle disease, we have found no reason to believe that it differs in any essential point from the conditions produced in man and in beast by prolonged exposure to summer heat, and to hunger, thirst, and fatigue. We regard the treatment of cattle and other animals, by droves, as a vast field for the labors of the "Society for the Prevention of Cruelty to Animals." If this humane organization can prevent the frightful suffering and abuse that animals on the way to our cities are exposed to, we shall rarely experience the disastrous interference with the meat supply to our market that we have recently witnessed.

With this outline of the more potent causes of our infant mortality among the class of population who pretend to take care of their off-spring, let us now turn to those hapless beings whose parents make no such pretense; let us visit them at the "Infant Hospital," or foundling hospital. We have taken occasion heretofore to speak of the shocking loss of human life at this institution, and we are sorry to say that no improvement is yet manifest there. The average weekly mortality there, for the five weeks ending August 1st, was twenty-six, or about ten per cent. per week of its average number of babies, the average daily number for July having been, as we are informed, about 250. This is nearly one per week more than their whole admissions during 1867. Whether the institution is doing a larger business this year, in both receiving and killing, the figures at the close of the year will tell; but, so far as they instruct us up to the 1st of August, the destroying element is in the ascendant, and promises to ultimately reduce the inmates to the recent arrivals; for, while at the close of last year they numbered about 300, on the first of the following August there were about 250 in the institution. To speak the most favorably possible, there does not seem to be any reason to expect that any improvement is being realized in the present locality and management of the Infant Hospital.

Therefore, as the mortality of foundlings or motherless infants was last year seventy per cent. of all received, and as we may expect this year's record to be no better, the institution is regarded by us as a scandal to our city. To understand how frightful this mortality is, we need only compare it with the statistics of institutions for motherless children in other parts of the world. Watteville, a recent author upon this subject, states that the average mortality, in all France, of foundlings in the hospitals is fifty per cent. during the first year. And this is much above some other countries.* In our hospital we find that, without waiting for the conclusion of the first year of life, seventy per cent. of all such infants died the same year they came into the hospital. This would undoubtedly raise the mortality in the hospital far above seventy per cent. during the first year of the foundling's or motherless infant's life, a result about as bad as any precedent can be found for in the vital statistics of the world.†

The cause of this would have been very apparent to the observing visitor, had he passed through the wards of our Infant Hospital any day during the latter part of July last. He would have been informed, as we were, that of the 250 babies, nearly 100 had mothers who could in whole or in part furnish breast-milk for their own babies; and some twenty of this number could each in part supply another babe besides her own. And this is the extent of the much-talked-of supply of wet-nurses for our Infant Hospital, a plan which thus far has been impracticable, at least so far as getting them to reside in the hospital is concerned. The remaining, about 150 babies, were dependent entirely upon hand-feeding, and this by no means of the best quality, because the material almost wholly used was the condensed milk, as we were informed, in one or the other of its forms. No fresh cow's, or goat's, or dairy milk ever reached these 150 babies; the little the few animals belonging to the institution gave, being consumed, as we were told, in making up the deficit of breast-milk for the *first* 100 babies. This manufactured milk is habitually made still more unlike the natural food of infants, by the addition of various farinaceous and starchy substances, and by compounding it into pap. But a condition still worse, and less excusable than these, was the frequent decided sourness of the milk thus prepared, when given to the child. This any visitor, who had the temerity required, could have convinced himself of during any of the hot days of July last, by removing the sucking-bottle from the baby's mouth to his own.

He would also have seen that the rooms occupied by the babies, though arranged for excellent ventilation, were a perfect glare of light, and, as a consequence, these wretched infants were inundated with flies. It is true that there had been a praiseworthy effort made to protect them from this diurnal torment, by providing

* Dr. Bertillon reports that 16,000 newly born children are now annually sent out of Paris into the country to be nursed; 8,000 are cared for as cheaply as possible. Of these 8,000, half die in the first year, and of the remaining 8,000, who are better cared for, nearly one-third die in the same period. In Bavaria, Dr. Angel represents things as even worse. He says that mothers there, in some of the districts, even among the lower classes, hardly ever suckle their children. More than half of the children in these districts die within twelve months after birth. *Half Yearly Compendium of Medical Science. Part II., p. 86.*

† The number of infants who leave this institution just in time to die elsewhere in the city no one can tell; but no one at all acquainted with the matter doubts that it is large. Numerous instances of infants leaving it in time to be saved in other institutions, public and private, have come to our knowledge.

netting to cover them with; but it had been a fruitless effort on account of the inefficient employment of it. And, even when employed as designed, it is very doubtful if more harm than good was not effected, on account of its shutting off from the child the little circulation of air that it enjoyed when uncovered. But the torment of flies was small in comparison with that of mosquitoes, which was perfectly dreadful during the latter part of July and August in that locality, even for an able-bodied adult. The babies were so disfigured by the bites of these merciless insects, that recognition by one familiar with their little faces would have been, in some cases, quite impossible. Such is the life, while it lasts, of these innocent victims of *paid* nursing; depleted and devoured day and night by mosquitoes and flies, screaming themselves into an exhaustion which induces sleep, despite all the discomforts which rapidly consume their vitality. No humane person can pass through these wards, and resist the impulse that he every moment feels to raise these helpless little creatures from their couches, where they scream by the hour, from the pain and discomfort that the prolonged recumbent posture induces. He finds himself constantly exclaiming, how can children be expected to live long under such circumstances! And yet these are the conditions, and these the little people, about which the Medical Register, the source whence the physician is supposed to obtain truthful information, makes the following highly satisfactory statement:

The mortality, according to the records, was never much less than 85 per cent., but excluding the infants from time to time adopted, it is believed that not an infant survived the year. In 1866 a separate hospital was established, and an experienced matron, with paid subordinates, appointed. The infants were *tenderly* cared for, but the mortality continued nearly the same. In June, 1867, the wet-nurse system was introduced, and since then the improvement has been manifest. The mortality now averages about *one-half* that of last year.

The Italics are our own. We wish to know how the 70 per cent. of deaths of all that went into the institution in 1867 can be made out as about half of 85 per cent., the previous rate of mortality for the first year of life. We have already seen that the rates for 1868 are likely to be far above 85 per cent. for this class of infants. We exonerate our respected friends of the Register, however, for this utterance of a manifest falsehood, for they undoubtedly supposed that the sources of their data were reliable. (See also Report of the Commissioners of Charities and Correction for 1867.) Upon the same subject the worthy Warden also makes the following report for the information of the powers that govern and of the public:

A ward has been set apart as a quarantine for the little waifs, who, as soon as they arrive, are, under the supervision of the matron, cleansed, warmly clad, and fed. After remaining in quarantine, under doctor's care, for a certain length of time, they are, if healthy, transferred to the nursery, there to be comfortably provided for. There are at present in the department upwards of fifty wet-nurses, whose sole duty it is to care for the orphan children in connection with their own child. Each ward (of which there are five set apart for this purpose) is in charge of a competent nurse, whose principal duty it is to see that the orphan children, given to the women to nurse, receive their due share of attention. A dining-room has been set apart and furnished for the use of the wet-nurses, wherein they are daily supplied with an ample quantity of nutritious food, in connection with other articles of extra diet, such as ale, eggs, milk, etc. These supplies are kept constantly on hand, subject to physician's orders.

The children of one year and upwards are, for the most part, cared for by the elderly female inmates of the Almshouse, who perform no other labor whatever. They have exclusive charge of the children entrusted to their care, subject, however, to the orders of the matron in every case. I have no doubt they receive all that attention and care which a mother can bestow upon her offspring.* The appearance of the children in general, is, of itself alone, a sufficient verification of the afore-mentioned fact.

Owing to the large increase in the number of children, and the great lack of accommodation, we have been placed in quite a strait. Under these circumstances it gives me great pleasure to know that you have decided upon removing them to more comfortable quarters at Ward's Island, where, I have reason to believe, there is all the accommodation to facilitate the successful continuance of this very laudable charity.—*Report of the Commissioners of Charities and Correction*, 1867, *p.* 391.

It is our duty to present the picture as we saw it, and a most disagreeable one it is. We are sorry to say that this last effort of this "laudable charity" is a most lamentable failure. It is but poor consolation for our people to take to themselves, that foundlings die in all countries at very heavy rates, and that our experience is by no means unprecedented, though, as we have heretofore stated, it will be difficult to find a precedent in the history of foundling hospitals for our frightful results. The only one we have any knowledge of in modern times which equals our infant hospital in its mortality, is the Foundling Hospital of Montreal, Canada, which in fact is by its very organization entirely incomparable with our own. In 1867 this institution is reported as having lost nineteen in twenty of all admitted to it. It is not enough for us to do no worse than others do, in taking care of motherless infants; we should not stop short of doing better. When we have adopted all available and appropriate means to save these children, and fail to obtain the results sought, then it will be quite time to compare. When we have so perfected the management of our Infant Hospital as to be able to say, conscientiously, that we *kill* no more children, then we may compare results; and when we can say that we save from starvation and death more than any other country, then, and only then, shall we be able to congratulate ourselves. But, as it is, we can only condole. We have hardly taken the first step in the direction of improvement. Our Infant Hospital is now little else than a place for infants to die in, and die quickly. It lacks every chief requisite.

First in order, it lacks food. No institution of that kind should be permitted on the face of the earth, without an abundant provision of fresh warm milk, from some domestic animal, for every child not fully supplied by its mother. In this respect, as we have seen, our Infant Hospital lacks food. While it is an abundantly demonstrated fact, that children in private life may, as a rule, be brought up in fine condition upon the milk furnished this city by the various dealers, yet it is at the same time unquestionably true that the transportation of such milk, especially its transportation by railways, effects such changes in its quality as, when subjected to the routine carelessness of a hospital, to render it a very unreliable source of supply for its infants. Besides its often being absolutely spoiled before they get it, the weak digestive powers, so common among hospital infants, render the digestion of any but the freshest and most natural milk, difficult or impossible. Milk, therefore, for the use of an infant hospital should not be transported, much less should it be

* This certainly is a most remarkable fact, if it be a fact, occurring just at the time when both France and England are bestirring themselves to protect young children and infants from the careless and wicked acts of paid nurses. A society for this purpose was organized in France, in 1865, under the title of "La Societe Protectrice de l'Enfance." In England both the medical and the secular papers are urging the adoption of a similar measure.—*Lancet*, Dec. 21, 1867.

cooked, and still less should it be condensed and again diffused by the addition of water, as is too much practised. What! we are asked, do you propose that the city of New York keep a herd of cows and goats to supply milk to its pauper, orphan, and foundling babies? We do, emphatically. Our Infant Hospital will continue to be a disgrace to the city and the country till such a measure is effected.

Next in order is the locality of the hospital, and the effect of the transportation of very young children to it. At present the motherless infant runs a very great risk of starvation before the circumlocution of getting it into the hospital can be gone through with. Application is made for it, by some party who has assumed the task, at the office of the Superintendent of Outdoor Poor, now at No. 1 Bond street, or at the Bureau of Medical Relief, at Bellevue; a permit is then issued; and the steamer has then to be waited for which conveys the little pauper to its final residence. Now, while this may appear to many as a very short and easy proceeding, it is one attended with inconvenience, and is consequently dreaded and avoided as long as possible by the parties who finally submit to it. The result is, that in great numbers of cases these steps are deferred till, by want of care and food, the infant is often delivered at the hospital almost moribund. There can be no doubt that others are destroyed rather than take these means of placing them in hospital; and the private establishments for the reception of foundlings and illegitimate children obtain their support from this want of ready accessibility of the public hospital. And we take this occasion to repeat, what, in effect, we have before said, that it would, so far as experience teaches us, have been vastly better for the infants, if the inaccessibility of this public hospital had been so great as to have kept them out of it entirely, and sent them all to private ones. Large numbers, whose dust now enriches the Potter's Field, would undoubtedly have been saved by it. It is too obvious to call for any argument for its refutation, that the principle entertained and advocated by many of our good citizens, that it will not do to render the escape from sin too easy, cannot be applied to the parents of illegitimates, at the risk of the life of the offspring. It is clearly our duty, if we can by so doing save the life of the illegitimate, to make it easy for the parent to dispose of it; and, on the other hand, if we can punish the sins of the transgressor in no other way than by destroying the fruits of the transgression, or, in other words, by killing the infants, it is much better that we leave their punishment to the Almighty. The hospital for the foundlings, and for the immediate reception of the destitute mothers, should therefore be at such a point as to be accessible any hour, day or night. Whatever subsequent arrangements might at leisure be made, the receiving hospital should be as ready of access as any church or theatre in town.

The third and last requisite, to which we will now call attention, is that the foundling or infant hospital, thus situated and provided, be placed under the absolute management of a single executive head, who shall not only possess the intelligence required to direct the feeding of infants, and to treat their diseases, but the energy to see that his orders are obeyed. So far as it may be practicable, one should be selected whose heart is in the cause, and whose reputation is staked upon the result of his administration. It is dangerous to diffuse responsibility in such institutions through too many persons.

Were we asked for suggestions as to the plan of effecting the changes which we have pointed out as requisite, we should call attention first to the fact that, inasmuch as the finest street of our city counts among its palaces one which, to the disgrace of our people, is a gaudy monument to infanticide, placed where the crowds on their evening drives to our Park may gaze upon it, the asylum for those infants who escape this iniquitous institution should have an equally conspicuous and accessible place. And such an one our city has, already prepared for its use, in the buildings located near the north-east corner of the Park, so nobly and justly devoted during the war to the comfort of our soldiers, and known as the Central Park Hospital. At trifling expense, these buildings would furnish every possible requisite for an infant hospital. The cows, goats, and any other animals that might be thought proper for supplying all the fresh milk necessary, could be fully provided by the grass and hay taken from the surrounding park, and any additional food such animals might require, for any necessary modification of their milk, could be raised upon, and transported from, the adjacent islands. The almost worthless sheep that now wander on the Park lawns might with great advantage be replaced by goats that would serve the double purpose of ornament and supply of milk for the hospital. Added to these advantages of this location, is the facility with which the institution may be visited by the charitably disposed of the city, for purposes of contributing whatever may be acceptable and calculated to conduce to the comfort and welfare of the helpless inmates—acts which their present locality renders next to impossible, even to the unfortunate mothers. How many visits, and how many contributions of money and useful articles, would then be made to the Infant Hospital, that are now hardly thought of, no one can tell; but there can be no rea-onable doubt that the number would be very large. And again, this easy accessibility would in all probability lead to numerous adoptions that now are prevented by the absence of the children from those who wish to adopt, and the great difficulty in reaching them. For the prompt reception and the proper care of the infant, whatever may be its social status, the facilities for easy and frequent visits to it by its unfortunate mother, who may thus be allowed an opportunity to foster a natural affection for her offspring, and to ultimately remove it to her own home, and for the effective diminution, if not the abolition, of infanticide in this metropolis, the plan above suggested, or some similar one, must be adopted.

Since writing the foregoing remarks, it has come to our knowledge that this same subject has received the attention of a very important body of our citizens, and through the kindness of a friend we are enabled to present the results of their deliberations in the following highly important and instructive document, presented by the Grand Inquest of the County of New York to the Court of Oyer and Terminer, at one of its terms during the early part of the present year. It was in response to a suggestion of the Justice of that Court that the Grand Jury instituted an investigation into a certain private asylum for infants in this city, with the view of issuing an indictment against its manager for the crime of alleged infanticide:

GRAND JURY PRESENTMENT.

To the Hon. the Court of Oyer and Terminer:

The Grand Inquest of the County of New York respectfully present to the Court:

That they have given special attention to that portion of the charge of Hon. Daniel P. Ingraham, Justice of this Court, suggesting investigation into a certain private asylum for infants in this city, wherein it has been alleged, by the Board of Health, that, through the carelessness or wanton and intentional neglect of those persons having the management of it, the mortality has been so excessive as to render them amenable to criminal prosecution.

They communicated, immediately after organization, with the District Attorney, and requested him to initiate a prosecution.

The District Attorney has since advised us, that however strong might be our convictions of the moral culpability of the managers of this asylum, he regretted that, conceding the evidence in his possession, and before the Coroner's jury, to be true, there were positive legal bars against the success of any indictment.

They conclude, from the facts which have come to their knowledge respecting many of the "private lying-in asylums" in this city—some of which are, it is believed, institutions wherein abortion may be committed and concealed, or if this crime is not committed, wherein children born out of wedlock, come, for want of affectionate care and tender nursing, to early death—that there is great difficulty, on account of the privacy which surrounds them, of procuring, against the so-called managers of these institutions, evidence which will prove criminality; and that the secret, and, as it may be called, professional crime of infanticide is not to be prevented by indictment, unless there be sufficient evidence to substantiate the charge.

The increasing crime of infant-murder, so easy to accomplish and so difficult to prove, we believe can be checked only by the erection of a large Foundling Hospital, similar to those which exist in all of the principal cities of Europe.

The argument in favor of the erection of such an institution, and that the existence of such a hospital is the only preventive of the crime of infanticide, so prevalent in this city is very ably and tersely presented in the closing paragraph of a recent editorial in the *New York Tribune*, written in reference to the censure of the Coroner's jury of the keeper of the institution to which our attention has been called by the Court:

"The Coroner's jury very properly censured the keeper of this infamous establishment, and recommended that all such houses should be broken up, as they were 'the means of causing great infantile mortality and tended to increase immorality and crime.' But suppose you break them up, will you put a stop to the immorality on which they thrive? Experience has proved that the illicit intercourse of the sexes cannot be sensibly checked by legislation. If you place difficulties in the way of disposing of illegitimate children, you do not prevent illegitimacy; you only foster murder. Give us well-conducted foundling hospitals, and you break up the trade of women like 'Madame Parselle' for ever. No civilized country in the world is without such charitable foundations, except our own; and whatever effect they may have upon prostitution, there is no question that they greatly diminish child murder and abortion. In Europe, the unfortunate woman who has fallen into sin can commit the fruit of her lawless love to the care of the charitable, and, while her fault is unknown, she has a good chance of reformation; beside which, the child may grow up a useful member of society; but here the mother has to choose between indelible disgrace and the abandonment or direct murder of her offspring. In a vast majority of cases she chooses the last-named alternative. You may say that to relieve the mother of her burden is only an encouragement to sin. We doubt it. In Stockholm prostitution is a penal offence, yet *one-half* the children born in that city are illegitimate. At any rate, murder is worse than prostitution, and we see no way of preventing the wholesale slaughter of infants, which goes on every day around us, except by the establishment of asylums where the children which would otherwise be sacrificed may be received in secrecy, and conscientiously cared for."

It is surprising that in the city of New York—wherein are institutions for almost every conceivable form of benevolence, charity, and protection, and receiving support from the city and State—there is no Foundling Hospital. They have existed for centuries in all of the large cities of Great Britain and the continent of Europe, and are supported by the central and local governments. We believe that a Foundling Hospital, under the supervision of the county authorities, would prevent the existence of such institutions in this city as the one which has been recently the subject of investigation by a coroner's jury. There may be private asylums in this city, which are properly and humanely conducted, but as they are not the recipients of assistance from the state and city, they are obliged to charge board for the infants committed to their charge, "a provision which renders them necessarily exclusive and partial in their usefulness." Such institutions are consequently available only to those who possess the means to conceal the offspring of an illegitimate relation, but they are closed to a great majority—to those who have "to choose between indelible disgrace and abandonment or infanticide."

The investigation of this important subject has led to our discovering that the Legislature of 1865 passed a law, entitled "An Act to incorporate the New York Infants' Asylum," the incorporators of which embrace some of our most eminent citizens. The objects of this asylum are "to receive foundlings and other infant children of the age of two years and under, and to provide for their support and moral, physical, intellectual and industrial education." The Mayor of the city of New York, the President of the Board of Supervisors of the city and county of New York, the President of the Board of Commissioners of Public Charities and Correction, and the President of the Board of Metropolitan Police, were constituted *ex officio* managers of the said corporation, and co-operatives with the citizens named in said Act. The said corporators were authorized to erect, not more than thirty miles from the city of New York, a suitable building for an asylum for the children intrusted to their care. The Board of Supervisors of the county of New York were directed to levy and collect by tax, and to pay over to the officers of this asylum, sixty dollars for each child intrusted to the care and custody of this corporation. We believe that the provisions of this law have never been carried into operation by the eminent citizens whose names appear as incorporators. The immediate necessity for a Foundling Hospital is so apparent, after the recent public developments of the manner in which the "private lying-in asylums" and "infant homes" are conducted, that we would recommend to the gentlemen who are invested with the authority to complete the objects of the bill, to do so immediately, or recommend to the legislature that the powers, duties, and privileges conferred on them be transferred to some county officers.

We most respectfully submit to the attention of the Court, the county authorities, and the community, these considerations upon a subject that appeals to the emotions of sympathy and humanity which have been lately awakened by developments leading to a strong suspicion that some have committed, but of which we are advised there is no legal evidence, the crime of infanticide.

See the Laws of New York for 1865, p. 179. The articles of the law above referrred to, which interest us in this connection, are the 1st, 2d, 5th, 6th, 22d, and 23d. Seventeen highly respectable citizens of this county are named as incorporators, including four members of this Society. The implied censure of these incorporators, in this presentment of the Grand Jury, for non-performance of duty, may be unmerited. We politely asked one of them—who, by the way, is an active member of the Board of Health—for information relative to the present status of the corporation, to any acts it may have done towards a compliance with the provisions of the law, or what difficulties they had encountered. He has not deigned a reply. To say nothing about the personal incivility of this behavior, we regard it as an act of wilful determination to withhold from the public information that it has a right to possess. We therefore have no reason to believe that it is unmerited; on the contrary, we believe that the Grand Jury treated their most criminal inaction with great mildness. They stand so condemned before the community, that less than a public explanation of a satisfactory character will not exculpate them.

This law, as it now stands, assumes the asylum already in full operation, and then provides for its management in the future. Had the tax, provided for by

this law, been payable to the Commissioners of Charities, at the rate per child under their care of $60, as a fund to defray the initiatory expenses of the contemplated asylum, there can be little doubt that the incorporation would have been at work long ago. Additional legislation is therefore necessary to make this law available for the care of our pauper infants. The urgent necessity for such legislation may be inferred from the fact that even a coroner's jury recognizes it, as may be seen in the following clause in the late verdict in the Grindle-Lattin case:

We further recommend the Legislature to so enact a law whereby all such establishments shall be under the supervision and control of the Board of Health or any other recognized authority. We further condemn the practice of any regular medical college recognizing students connected with any such establishment.

To this Society, more appropriately than to any other body of citizens, belongs the duty of securing such legislation. We therefore suggest that it organize a committee to attend to this important matter; and that such committee invite the co-operation, and seek the counsels, of the Citizens' Association. If it be thought expedient that our infant asylum be placed under the supervision of a distinct corporation, as the act referred to contemplates, we have nothing to say to the contrary, providing that no time be lost by so doing. But if time and infant life can be saved by investing our present Commissioners of Charities and Correction with the management of such an asylum, let it by all means be done, and done at once. Meanwhile let every one of us exert his influence upon the proverbially humane and charitable people of this county and city in behalf of these wretched children. Suggest to them that, while they donate to the poor, to the aged, to the crippled, and to the blind, they retain a little for the pauper babies, who cannot yet ask nor tell their own story of woes. Remind them that the cream consumed at the charitable strawberry festivals might save from the pangs of starvation whole crowds of infants who are not responsible for their presence in this world, be they orphans, foundlings, or bastards.

Clinical Department.

BELLEVUE HOSPITAL.

MEDICAL CLINIC OF AUSTIN FLINT, PROF. BELLEVUE HOSPITAL MEDICAL COLLEGE, SEPTEMBER 18, 1868.

CASE I.—*Pneumonia: Treatment by Cold.*—Dr. Flint first showed some morbid specimens from a man recently deceased in the hospital. The patient had entered ten days before, much prostrated, having been taken out of the river, into which he had probably fallen while intoxicated. Previous history unknown. On examination, the sub-crepitant rale was heard on both sides of the chest, which may perhaps have been due to the man's having drawn some water into his lungs. But later the crepitant rale was heard upon the right side, and two days afterwards evidences of pulmonary solidification manifested themselves. The case, seeming a favorable one for it, was treated by the German method of the application of ice-cold water to the chest over the lobe affected. Compresses wrung out of ice-water were applied from half an hour to an hour at a time, being renewed every few minutes. This seemed at first to give very satisfactory results. The temperature of the body was lowered, as well as the number of respirations and heart-beats. But the inflammation spread rapidly, and finally invaded the left side; the patient became weaker, and succumbed one or two days later.

The autopsy showed that the disease was much more extensive than had been supposed. The lower lobe of the right lung was enlarged, solidified, and in the condition between the second and the third stage of pneumonia. But the solidification had not extended over the whole lobe, an unusual occurrence in the lobe primarily affected. Upper lobe less solidified, the inflammation being of the kind known as lobular. Lobular pneumonia is the form which occurs in pyæmia, the affected parts rapidly breaking down into a puriform liquid. Lower lobe of left lung in second stage of pneumonia, but only partially solidified; here also the disease was lobular and very extensive. Upper lobe more or less solidified. The kidneys were enlarged, congested, and apparently fatty, but had not yet been examined microscopically. The disease of the kidneys may have had some influence upon the termination of the pneumonia, as it is well known that the prognosis of pneumonia is very unfavorable in cases where renal disease exists.

CASE II.—*Rupture of Heart.*—Dr. Flint next exhibited the heart of a patient who had died suddenly, in Charity Hospital, from cardiac rupture. Previous history unknown. During life the four organic murmurs of the left side of the heart existed, viz.: aortic direct, aortic regurgitant, mitral direct, and mitral regurgitant. At the post-mortem the pericardium was found filled with blood. There was a rent an inch long in the wall of the upper part of the right ventricle, and the wall was rather thin at that point. The seat of the rupture is unusual, it being generally in the left ventricle. There was also fatty degeneration of the heart, which was soft, and of a tawny-yellow color; the microscope showed that the striæ had disappeared. Aortic valve calcified at its base, contracted, and insufficient; the mitral valve was similarly affected. Death resulted from compression of the heart by the effused blood.

CASE III.—*Extreme Aortic Insufficiency.*—The case of this man was chiefly remarkable for the very marked pulsation, plainly visible at a considerable distance, of the carotid, brachial, and even the radial arteries. Had the pulsation been venous, it could have been stopped by slight pressure above the clavicle, which was not the case. The aortic direct and the aortic regurgitant murmur could be heard even over the radial.

CASES *of Hydroperitoneum.*—After defining œdema, anasarca, local and general dropsy, Dr. Flint illustrated the distinctions clinically by introducing a number of cases. Neither cardiac nor renal disease ever gave rise to purely local dropsy of the peritoneum. Its most frequent cause was cirrhosis of the liver, obstructing the portal circulation. Hence mechanical venous congestion, and effusion of serum into the peritoneum by hydraulic pressure. A tumor pressing upon the portal vein before its entrance into the liver, thrombus of this vein, or waxy liver, would also give rise to hydroperitoneum; the last, however, to a less extent than the other conditions. One of the cases presented showed the conservative efforts of nature, when portal obstruction occurs. The superficial abdominal veins were greatly enlarged, owing to their anastomosis with the veins of the portal system through the hæmorrhoidal plexus. Dr. F. remarked, as bearing upon the ætiology of cirrhosis of the liver, that it occurred, in the majority of cases, in persons who had been addicted to the use of spirituous liquors, taken pure, or but slightly diluted, and on an empty stomach. Patients with hydroperitoneum often improved after admission into hospital, even with-

out therapeutical treatment, from their better hygienic conditions. In the present case, therefore, the improvement could not be attributed entirely to the diuretics which had been employed. Since this disease was due to some form of portal obstruction, it was not an easy matter to introduce remedies into the general circulation by internal administration, although it was generally appropriate to employ, first, diuretics. If these fail, hydragogue cathartics should be tried, especially elaterium, unless contra-indicated by too great depression and debility. He was in favor of performing paracentesis much earlier than commonly recommended. It should not be regarded as a last resource, since it was neither very painful nor dangerous, and not unfrequently the dropsy failed to recur for a long time afterwards. He had known some cases in which the effusion did not return for several years.

THE EFFECTS OF TIGHT LACING.—The *Lancet* thus sums up the evil effects of the fashionable custom of compressing the female thorax:

1. Tight lacing seriously limits, indeed almost annihilates, the respiratory movements of the diaphragm; for the pinch comes just on that portion of the ribs to which the great muscle of inspiration is attached, and squeezes them together so as to throw it almost or altogether out of work. 2. The constant pressure of the corset on the muscles which should support the spine gradually impairs their nutrition, so that they are no longer able to do their work, and the victim of tight-lacing feels wretched the moment her artificial supports are removed. 3. The hindrance to breathing with the diaphragm throws the work of respiration chiefly, if not altogether, upon the upper intercostal muscles and the muscles of the neck, and a permanent condition of imperfect aëration of the blood results, causing general languor and debility. 4. The abdominal viscera, especially the stomach and liver, are violently squeezed, and driven downward from their natural position; and the never-failing result of this is impairment of digestion and assimilation. This dyspepsia may or may not be attended by pain and other obvious symptoms; these generally exist, but their absence does not imply the absence of mischief. 5. The uterine functions are always more or less perverted. Lastly, it may be mentioned that the pressure on the bust is very often productive of great suffering. The glands are so squeezed, and especially the nipples are so flattened, from an early period after puberty, that when the time arrives for nursing an infant, the young mother finds either that she cannot suckle at all, or must do so in great misery, from inflamed nipples, abscesses, &c.

Altogether, a more totally indefensible sin against the laws of health and good taste than tight-lacing could not be found. If there be a spark of right and honest feeling left among our women, of whose purity of character we are so fond of boasting, now is the time for them to show it by refusing to listen to the impudent sophistries like those to which we have referred.

MOTLEY TRIPLETS.—About four weeks ago, at the residence of Mrs. Young, in this (McCracken) county, a negro woman gave birth to three children, two of whom were white and the other intensely black. The mother is also quite black. The children lived but a few days. Only a few cases of this character have been recorded.

We heard of a similar case in Christian county, Ky., though not so extensive. A negro woman in that county gave birth to twins, one white and the other black.—*Paducah (Ky.) Herald.*

THE SPOT ON THE SUN, now visible, is 5,500 miles long.

IMMIGRATION TO THE UNITED STATES.—"Since 1790, and up to the first of January last, the immigration to this country has amounted to 6,701,481 persons.

"The number of immigrants arriving in this country during the year 1867 was about 300,000, of whom 251,753 arrived at New York, 10,107 at Boston, 9,337 at Baltimore, 5,001 at San Francisco, 3,764 at Portland, and the remainder at other ports.

"During the last six months prior to 1st January, 1868, 137,000 arrived in this country.

"The principal ports from which these immigrants departed were Liverpool, Bremen, Hamburg, Glasgow, London, and Havre.

"The nationalities of these people who came to this country during the last year were as follows: About 125,000 were from Great Britain and Ireland, principally from Ireland, 124,803 were from Germany, 5,236 from France, 3,938 from China and Japan, and the remainder from other portions of the world.

"Of the total immigration to the United States during the last year nearly nine-tenths were under forty years of age; their avowed avocations were as follows: 30,120 were farmers, 60,490 were laborers, 24,752 were mechanics, 13,947 were merchants, 8,458 were miners, and the occupations of the remainder were not given."—*Report on the Encouragement of Immigration, presented in the House of Representatives by the Committee on Foreign Affairs.*

A DOUBLE-HEADED CHILD.—The Lynchburgh *News* learns that Mrs. Stepp, the wife of Mr. George Stepp, living in the Southeastern part of Campbell county, near the Appomattox line, gave birth recently to a male child with two completely formed heads, one on each shoulder. These heads protruded from the shoulders without any perceptible sign of a neck to either. In other respects there was no malformation about the infant, all the parts being perfectly developed, as in ordinary children. This singular freak of nature was alive four days after its birth.

THE BRUNSWICK MEDICAL SCHOOL.—A communication from REV. DR. HARRIS, President of Bowdoin College, in reference to the proposed removal of the Maine Medical School to Portland, is published. The citizens of Portland are called upon to contribute the necessary funds to establish the school there. It is thought the amount will be raised. The new Medical School building on the grounds at Brunswick will be used for a scientific school, soon to be established in connection with the college.

PHOSPHORUS.—A recent memoir by a foreign chemist asserts that the poisonous action of phosphorus is entirely due to the formation of phosphurretted hydrogen gas, which, in passing into the blood, rapidly combines with the oxygen present. Hence it is concluded that death from phosphorus is nearly equivalent to death by suffocation.

MEDICAL STUDENTS AT BERLIN.—In the winter session 1867-1868 the Faculty of Medicine at Berlin registered 425 students, of whom 361 belonged to Prussia, and 64 to other countries. This is a falling off compared with last year, when the numbers were 24 above the present amount.

POPULATION OF MINNESOTA.—The annual increase of the population in Minnesota is reckoned at 20,000 births, 20,000 "Yankee" immigrants, 10,000 Scandinavians, and 10,000 of other nationalities.

THE POPULATION OF ROME.—The census has just been made. There are 217,378 inhabitants in Rome and the suburbs. Since last year there has been only an augmentation of 1,805, while from 1866 to 1867 of nearly 5,000.

This difference is partly on account of the cholera last summer, which made nearly 8,000 victims.

M. Claude Bernard, the celebrated physiologist has been elected at the French Academy to the seat which the demise of Flourens had left vacant.

M. Chassaignac, whose labors and inventions are universally known, has been elected a member of the Academy of Medicine of Paris. Seventy-six voters took part in the election, and M. Chassaignac had fifty-six votes.

Hints to Bathers.—Dr. Christian and Sieveking (*Lancet, Aug.* 8, '68,) have framed the following practical rules for bathers, which have been accepted by the Royal Humane Society:—

"Avoid bathing within *two* hours after a meal.

Avoid bathing when exhausted by fatigue or from any other cause.

Avoid bathing when the body is cooling after perspiration; but

Bathe when the body is warm, provided no time is lost in getting into the water.

Avoid chilling the body by sitting or standing *naked* on the banks or in boats after having been in the water.

Avoid remaining too long in the water. Leave the water immediately when there is the slightest feeling of chilliness.

Avoid bathing altogether in the open air, if, after having been a short time in the water, there is a sense of chilliness with numbness of the hands and feet.

The vigorous and strong may bathe early in the morning on an empty stomach.

The young, and those that are weak, had better bathe three hours after a meal. The best time for such is from two to three hours after breakfast.

Those who are subject to attacks of giddiness and faintness, and those who suffer from palpitation and other sense of disconfort at the heart, should not bathe without first consulting their medical adviser."

Silkworm Disease.—M. Pasteur has been making some fresh observations in silkworm disease. He thinks that the entophytic growths are favored by bad digestion. M. Pasteur reduced a quantity of mulberry leaves to pulp with water, and found in a few hours that fungi identical with those found in the silkworm were present.

Poisoning by Fly-Paper.—A singular case of poisoning is reported from Lancaster. A girl, three years of age, drank the water from a saucer in which had been placed a sheet of the prepared paper popularly known as "catch 'em alive's," which is used for the destruction of flies; she soon became ill, but with medical assistance recovered. The paper is said to have contained sufficient arsenic to poison two or three children.—*Lancet.*

A Surgeon Poisoned by Laudanum.—A very melancholy event occurred recently at Congleton. Mr. Henry Schofield, surgeon, having a considerable practice in that town, being much afflicted with toothache, has been in the habit of taking laudanum to mitigate the pain. This time, however, he took a larger dose than usual, and symptoms of poisoning were immediately perceived. Medical aid was obtained as quickly as possible, and every effort was made to eject the liquor, but without success. Mr. Schofield died in great agony.—*London Times.*

Bisulphide of Carbon as a Cure for Nervous Headache.—George Kennion, M.D., F.R.C.P., Lond. (*Medical Times and Gazette*), advocates the following remedy for nervous headache; it is the application of bisulphide of carbon. A small quantity of the fluid (about ʒ ij.) is poured upon cotton wool, with which a small wide-mouthed, glass-stoppered bottle is half filled. When the remedy is to be used, the mouth of the bottle is to be applied closely (so that none of the volatile vapor may escape) to the temple, or behind the ear, or as near as possible to the seat of pain; and so held for from three to five minutes. After it has been applied for a minute or two, a sensation is felt as if several leeches were biting the part, and after the lapse of two, three, or four minutes more, the smarting and pain become rather severe, but subside almost immediately after the removal of the bottle. Redness of the skin is seldom produced. The effect of this application is generally immediate; it may be reapplied, if necessary, three or four times a day.

He is disposed to attribute the *modus operandi* to the sedative effect of the vapor of the sulphide, absorbed through the skin, and acting upon the superficial nerves of the part to which it is applied.

The First Operator for Fistula in Ano.—John Arden, an army medical officer, who accompanied the army of Edward the Third at Creey, first practised the operation for fistula in ano. He also made some improvements in the trephine.

Inoculation of Cancerous Matter.—It would appear from the experiments of M. Gaujon, mentioned in the *Gazette Hebdomadaire*, that he succeeded in causing not only the appearance of a cancerous tubercle on the skin of a guinea-pig inoculated with the matter of epithelioma, but also an eruption of the same morbid manifestations on the mucous surface of the intestinal canal.

A Chance for Reformers.—The *Times*, commenting on the sanitary condition of Ireland, points out a practical outlet for the energies of those who desire to promote the welfare of that country, in the attempt to diminish "the frightful neglect with which a large portion of her population treat some of the simplest and most obvious laws of health."

Hereditary Hare-Lip.—M. Demarquay lately asked the advice of the members of the Surgical Society of Paris touching a little girl, five years old, who presented a double hare-lip. Some difficulties will be encountered in the operation, but the interest of the case lies in the fact that, in the family, from the grandparents downwards, eleven children have been born with hare-lip, or with a peculiar conformation in the lower lip—namely two openings on either side of the mesial line, traversing the whole labial thickness, with a peculiar form of the lip itself. To this latter defect M. Demarquay had called attention, in the *Gazette Médicale*, as early as 1845.

A real Blue-stocking.—Madame Chemin, who obtained, some few years since, the degree of Bachelor of Science at the Paris Faculty, took honors, a few weeks since, in Mathematical Science.

High Honor Awarded to a Noted Surgeon.—Nélaton, the celebrated Parisian surgeon, has been elevated by the Emperor to a seat in the Luxembourg as Senator of France.

Obituary.—Benjamin Travers, Jr., the younger son of the celebrated Benjamin Travers, of St. Thomas's Hospital, died suddenly, in London, in the sixtieth year of his age. Several contributions to surgical literature were made by him.

Cholera made its appearance in Morocco last month.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, October 1, 1868.

THE NECESSITY OF RECITATIONS IN MEDICAL COLLEGES.

THAT so efficient a means of instruction as the daily recitation should be so generally neglected in our medical schools, seems, at first, unaccountable. A little retrospection, however, shows the cause of this omission, as well as the origin of many of the other anachronisms and anomalies which impede the progress of the modern medical student. When our grandfathers were young, they learned the healing art by personal contact with the teacher of their choice. Pounding drugs in the office of the village doctor; reading his books while he was away from home, and reciting their contents during his hours of leisure—this was the only way of learning that was open to the majority of professional aspirants. The necessities of the times permitted nothing more liberal; and when, at length, it became possible to add a course of winter lectures, in Philadelphia, or Boston, or New York, there was no great number of young men who could afford to pass many weeks in the distant city. It was, consequently, well understood that the principal responsibility of instruction devolved upon the private preceptor; while the medical school modestly presumed to offer only such supplementary advantages as could not fall within the range of individual practitioners. Young students were, therefore, willing to pay liberally for the privilege of studying in the offices of distinguished physicians, who in return felt bound to give the best possible tuition. As a consequence of this co-operative system, the medical men who flourished two generations ago were as thoroughly acquainted with the principles of their art as any men the world has ever seen. During the past fifty years, however, though in theory it has continued without change, this plan has been practically modified to a degree which now seems nearly equivalent to its complete surrender. As the schools increased their attractions, the estimation of the functions of the preceptor suffered a corresponding decline. To the student, the brief but brilliant lecture term became by far the most interesting portion of the year. Gradually the functions of the quiet country preceptor were pushed into the background. Students became more unwilling to fee their instructor: they were hoarding their pennies for a winter in the city. Very naturally, the men who had once zealously helped the blundering neophyte through the first lessons in anatomy, were now quite indifferent to the proceedings of young men who, though registered as their pupils, were not backward in manifestation of their allegiance to some dashing professor of surgery in a rising medical school. Hence the decay of those ancient intimacies which were so advantageous to the preceding generation, until it has come to pass that the schools are left to do all that is demanded for the education of their classes. To the medical faculties have been resigned a series of duties which lie outside of the line which originally bounded their share in the field of instruction. If the schools exist for the sake of the extra-professional advantages which may accrue to the members of their faculties, it is hoping too much to expect that these men will cheerfully assume the burden thus pressed upon them; but if the advancement of knowledge be the true end for which they are conducted, it becomes an imperative duty to adapt the method of instruction to the altered conditions of the age. The professors have destroyed the relations which formerly existed between pupil and teacher, and they are in honor bound to make good their loss.

The time has come when the medical schools can no longer be suffered to linger behind the march of improvement which has brought every other department of instruction to such a degree of efficiency. The military schools, the scientific schools, the colleges of law and of divinity, all conduct their students through an intellectual drill by means of the daily recitation under the care of tutors and professors connected with the institution. No one familiar with the bearing of medical men can fail to remark the superiority of those who have been thus exercised in early life, when they are subjected to the test of oral examination in the class-room, the society-hall, or the court of justice. It may be urged that this superiority does not imply greater mental ability, nor more perfect knowledge; that it is merely a parrot-like facility, which comes from practice in the art of expression. But this facility implies a corresponding faculty of order and a methodical conduct of ideas; a method which compels full comprehension of every subject under consideration. By the majority of students this clearness of thought will seldom be attained except under the stimulus of public discussion before witnesses. Herein consists the essential value of the open class-recitation: the student is compelled in spite of himself to arrange his knowledge. When conducted upon a large scale by men thoroughly conversant with the best methods of instruction, assisted by accessories which few private teachers can procure, no process of education can be more perfect. The value of this mode of instruction has received from our leading schools a

partial recognition in the "*quiz*" which exists by sufferance during the otherwise unoccupied evening hour. Occasionally we find a full-blown professor so nearly conscious of duty that once a week he will question those who volunteer from the class, for half an hour before lecture-time. Very naturally, however, these extraordinary ministrations are not universally popular with young men who each day are wrestling with six lectures, a hospital visit, and a dissecting exercise, to say nothing of manifold note-books and studies for a thesis. The day is past when *haste* is a becoming watchword for a college faculty. As the boon of anæsthetics enables the modern surgeon to operate with deliberation and safety, so the increasing wealth of the country should render the course of our medical students methodical and wise. The brief weeks of a winter term may to the lecturer seem long, but they do not afford time sufficient for the necessities of the student. Time enough is demanded for the employment of such measures as experience and common sense have shown to be most conducive to perfect education. Our professors can no longer be suffered to hide their shortcomings under the cloak of a mythical country preceptor. That gentleman has fulfilled his mission; the medical colleges have driven him fairly out of the field, and they must recognize the consequences.

It must not be supposed, however, that we favor the abandonment of instruction by means of lectures. We would not convert the amphitheatre into a simple recitation-room. Many of our most brilliant lecturers would look like Pegasus before a meat-wagon were they hampered by the conduct of a recitation. Students are in no danger of hearing too much during the three years of their training. But we would have the course of instruction so arranged that all the advantages of the lecture and the recitation may be secured. This can only be accomplished by lengthening the term, by diminishing the daily tale of lectures, and by increasing the number of teachers. When the number of our professors is supplemented by a sufficient corps of tutors; and when no student is permitted to hear more than four lectures, or to recite less than twice daily, our medical schools will have taken a decided step towards the position which all other institutions of learning have long since occupied.

The second number of the *American Journal of Obstetrics and Diseases of Women and Children* has come to hand, and we take this opportunity of calling the attention of our readers to it. The editors are E. Noeggerath, M.D., and B. F. Dawson, M.D. The former gentleman is well known in this city as a gynecologist of high rank and well versed in the ailments of children, and the latter is particularly well adapted to discharge the duties of the editorial chair.

It is a quarterly journal of ninety-four pages, beautifully printed, on clean, white paper, in large, plain type. The leading articles are as follow: "Case of Rupture of Vagina during Labor," by T. B. Stirling, M.D.; "The Rectum in its relation to Uterine Disease," by Prof. H. R. Storer; "The Evolution of the Embryonic Germ," by F. G. Snelling, M.D.; "Polypi and Fibroids of the Uterus," by G. Treskatis, M.D. It is to be hoped that the medical profession of this country will gladly give their support to the establishment of this quarterly on a sure and firm basis.

The California Medical Gazette, is the title of another Medical Journal started in July last, in San Francisco, California, to be published monthly. Its columns exhibit several well-written original communications, followed by the current literature of the month, closing with articles of a miscellaneous character.

The Pacific coast is a large field, from which an enterprising medical journal can easily gather vast experiences in medicine and surgery. The first number contains twenty-eight pages of closely written matter, carefully selected, and well printed, on thick and heavy paper.

If the future numbers of this periodical are kept up to the high standard already marked out by the editor, it will undoubtedly receive the support of medical men not only in California but throughout the country.

The great amount of interest manifested in the subject of Dr. Rogers' paper on the part of those who listened to it, and the probability of its provoking a profitable discussion hereafter, have induced us to spare more space than we usually allow to one article.

Progress of Medical Science.

Lithotrity.—In a lecture delivered at the University College Hospital, London, Sir Henry Thompson made the following remarks on the operation of lithotrity:

Usually when you have a large stone to deal with, you begin with the fenestrated instrument—that is, one in which the female blade is entirely perforated, allowing the male to pass through it. This is always a more or less dangerous instrument; hence it is used as little as possible. I never use it unless the stone is actually so large that it cannot be crushed by the flat-bladed instrument. The edges of the instrument exactly meet, and are sharp, and the fragments made by it are always rough and irritating. Always when it is possible I use the lithotrite with flat blades—blades which reduce the stone to powder. The blades do not meet each other, and cannot catch or hurt the bladder, and the movement altogether is easier than that of the other instrument. [A patient is placed on the table.] I have told you that there is a difference in the mode of introducing the lithotrite and the catheter. You know that in passing a catheter, we, in this country, stand on the left side of the patient; in France the surgeon stands on the right side. In passing the catheter for a recumbent patient you hold it somewhat horizontally; draw the penis gently over it, and give a gentle sweep, in this way, into the bladder. In passing the lithotrite a different movement is required. You may stand on either side, but it is better to be on the right side, because that is the convenient side for operating, and it is awkward to go round the patient to operate after

passing the lithotrite. Well, then, standing at his right side, and partly turning your back to him, you let the lithotrite slowly and easily find its way until the shaft reaches nearly the vertical direction. Arrived at this point you retain it in that position for a few seconds, allowing it to go on in that position by its own weight, in order that it may slip under the pubic arch. This done, you gently depress the handle, and it slides readily into the bladder. There is no more easy instrument to pass than the lithotrite with ordinary management. I have now introduced the lithotrite, and have to find the stone and seize it. In order to do this I simply open and close the blades; the stone is between them. I touch the little button here, which changes the sliding movement into a screwing one, turn the handle and crush. I then disengage the button, again open and close, and now I have a large fragment between them, and, repeating the action, again crush. A good quantity of débris results; less than a minute has been occupied, and I withdraw the lithotrite slowly and gently, and here is the débris, which you see is uric acid, between the blades. There is no trace of blood, and the patient has made no complaint of pain. If you ask him he will, I dare say, tell you it was not agreeable; but it is nothing to take chloroform for—nothing like extracting a tooth, for example.

Now let me give you a hint about crushing, which is a very useful one. Whenever you have found a stone, or a good-sized fragment, and have crushed it, keep the lithotrite exactly in that place, and although you may have had some trouble in finding it, you will now continue to find it several times running. It reminds me of fishing for perch; when you have caught one, you may catch, perhaps, twenty or thirty more out of the same hole, if you will but stop there, and not go fishing about among the shallows. It is the same in lithotrity. You will go on seizing and crushing if you contrive to keep the lithotrite precisely in the same place. In fact, there is what may be called a certain favorite "area" in every bladder in which to operate—a certain spot which is a favorite haunt, so to speak, for fragments of stone. If you find that out in each bladder you will always be able to crush; if you do not, you may often have some difficulty in discovering your stone. The area will, of course, vary somewhat with the position of the patient. If the patient was standing, for instance, the area would not be the same as in a lying posture. It is best to raise the pelvis two or three inches; then you get an area for operating which is not too close to the neck of the bladder. The neck of the bladder is a very sensitive part, and you should always avoid it, because in pulling out the male blade you may impinge against the neck of the bladder if you are not careful. One of your maxims in lithotrity should be never to pull out forcibly the male blade. You should pull it out carefully and delicately, so as to *feel* the neck, and it is a bad lithotrite, remember, if the male blade does not slide with perfect ease.

Fungoid Growths Formed in Colloid Silica.—Mr. H. J. Slack (*London Medical Mirror*) has found that the branching forms which are found in colloid silica obtained by a dialytic process are fungoid growths, which become imbedded in the silica while liquid, and are retained after it becomes hard. He states that the well-known dendritic forms which are found in natural flint undoubtedly formerly existed in the soft condition.

Plica Polonica Denied.—L. P. Yandell, Jr. (*Richmond Medical Journal*), writing from Vienna, finds that Hebra denies the existence of the disease known as *Plica Polonica*. He affirms that the matting of the hair and the exudation which cover it are due to syphilis, or to some other disease of the scalp, and that the affection is not in the hair itself.

Treatment of Cancrum Oris.—Mr. Croly (*Medical Press and Circular*) attended a boy aged five years, at the Dublin Hospital, with this disease. His left cheek was swollen and shining; fetid saliva dribbled from his mouth. An ashy gray-colored slough was found, extending from the angle of the mouth at the left side to behind the last molar tooth. Treatment: A piece of soft wood, chewed at the end, in strong muriatic acid, was applied to the diseased part. A piece of lint, saturated with olive oil, protected the teeth. Fifteen-grain doses of chlorate of potash, in tincture of bark, were given three times a day. A chlorate of potash gargle was ordered. Wine and beef tea were prescribed. The slough became detached in two days; the part assumed a healthy appearance, and the boy very soon recovered.

Aluminum Plates.—Aluminum as a base for artificial teeth has not been sufficiently tested to allow of its recommendation. The most perfect sets of teeth, as beauty and healthfulness are concerned, are those made on platinum, and known as the continuous gum work. In these dentures there are no interstices for the lodgement and decomposition of food, consequently great purity is secured. The teeth being set separately, each case is permitted to be a special study as an artistic relation is concerned; that is the denture is made up in the mouth, and the teeth can be manipulated until common harmony with the features is secured. The fusion finally of teeth gums and plate makes a continuous piece; and if the dentist is an artist and physiognomist, it is next to impossible to distinguish such sets from the natural organs.—*Half Yearly Compendium of Medical Science.*

Expulsion of Large Calculus through Female Urethra.—Prof. Botti, of Genoa, relates the case of a woman 54 years of age, who, having suffered for several years from symptoms of stone, spontaneously expelled an enormous calculus in October, 1867. At the time of its expulsion it weighed 6 ounces, and was still 65 grammes in weight four months after. No ill consequence followed the great dilatation, the patient being able to pass her urine at will two days after. This is one of the cases illustrative of the advantages of rapid dilatation over cystotomy in females.

Paralysis following Forcible Dilatation of Sphincter Ani.—Prof. N. S. Davis refers to a case (*Chicago Med. Jour.*) of complete paralysis of sphincter ani which had lasted for six months after the operation for forcible dilatation.

Treatment of Trichinitis.—In the *Deutsche Klinic* for May 23, 1868, Dr. Aug. Dyes concludes a series of valuable articles on this dangerous complaint by some useful practical observations. He prefers to call the disease caused by the trichinæ, *trichinitis*, regarding it as a real inflammation of the muscular structure. If, he goes on to say, the trichinitis is to be classed among inflammatory diseases, two indications are to be observed in its treatment: (1) the expulsion or destruction of the trichinæ in the stomach and intestines, and (2) the reduction of the inflammation of the muscles caused by the presence of these parasites in them. The first three patients suffering from trichinitis whom he saw he supposed had cholerine, and gave them in consequence strong doses of chlorine water (aq. chlor. 3 parts, aq. distil. 1 part), and found all the symptoms rapidly disappear. Afterwards he tried the same means in fourteen well-marked cases of trichinal disease with complete success. Very soon after the exhibition of the chlorine the colicky pains, diarrhœa, and nausea disappeared,

and in a few days all the other symptoms. To achieve this result, however, full doses must be used. Those who have tried these means without avail failed, because they used dilutions which had no effect on the animals. The dose recommended is a teaspoonful of the mixture, of the strength already mentioned, every two hours until the symptoms abate, when the same quantity administered every three or four hours will answer. He adds that given in these doses the same remedy will destroy the poisons of diphtheria, scarlatina, typhus, and cholera, with almost equal certainty. He is of the opinion that purgatives, such as calomel and castor oil, are at best negative, and may be positively injurious.—*Half Yearly Compend. Med. Science.*

Severance of the Spinal Cord, without Extinction of Life.—Paul F. Eve, M.D., Prof. of Surgery in Medical Department Univ. Nashville (*Am. Journal Med. Sciences*), mentions seven cases of complete severance of the spinal cord without extinction of life. The authorities are as follows:—

1st. United States soldier, lived a month; see catalogue, Army Medical Museum, War Department.

2d. Surgeon Bontel, French soldier; lived twenty-six days.

3d. Sir Astley Cooper.

4th. Dr. Parkman, of Boston; lived two months.

5th. Prof. Gross, lived three and a half days.

6th. Surgeon Page, Carlisle, England; lived fifteen months.

7th. Surgeon Alexander Shaw, Middlesex Hospital, London; lived twenty-two years.

That death does not necessarily follow a division of the spinal cord, is indisputable.

Treatment of Intestinal Obstructions.—Thomas Head, M.D. (*St. Bartholomew's Hospital Reports*), makes use, in these affections, of large quantities—not less than three pints—of warmed oil; one pint of water, with a few drops of laudanum, in cases of irritable rectum, is first injected.

Drainage Probe.—Dr. H. Lenox Hodge lately exhibited a drainage probe, before the College of Physicians of Philadelphia, which possesses several advantages over Chassaignac's "drainage-tubes." It is made of flexible silver, and terminates at either end by an olive-shaped bulb. Its length is six inches, and the diameter is about the same as the ordinary surgical probe. Its presence causes no irritation to the tissues; climate does not affect it; being non-absorbent it keeps pure and clean. It does not swell like lint and vegetable structures, and thus confine the pus. *The fluid always flows along its sides and escapes.* When inserted, it can be retained in its place by a strip of adhesive plaster. The employment of the drainage probe would do much to remove abscesses and cavities containing fluids. Even in mammary abscesses it causes no inconvenience; pus soon ceases to be formed, milk flowing along the probe instead, and the woman continues to nurse her child.

Convulsions in Children.—Samuel Gee, M.D. (*St. Bartholomew's Hosp. Reports*), treats infantile convulsions as follows: (1.) During the convulsions, and for a week afterwards, give the bromide of potassium or ammonium in doses (say to a child of a year old), of four grains three or four times a day. (2.) When the convulsions have been absent for a week or two, begin with ol. morrhuæ and vin. ferri.

Case of Sudden Delivery while at Stool.—Dr. H. A. Robbins (*Am. Journal Med. Sciences*) reported a case of this kind before the Clinico-Pathological Society of Washington, D. C. The wife of a soldier arrived at Armory Square Hospital on the eve of first of June, 1863, after travelling day and night from the northern part of the State of New York. The pangs of labor came upon her, while in the water-closet, on the night of her arrival, and before she could rise the whole contents of the uterus disappeared through the opening in the seat. In the course of a few minutes the child was extricated from its filthy surroundings, and, much to the astonishment of the Doctor, the placenta and cord were found attached to it. The infant was a well-developed male child, weighing eight pounds. The mother was a small woman, with an unnaturally large, rigid pelvis. Cold applications checked the hæmorrhage. She had given birth to two children prior to this one.

Tobacco Amaurosis.—*The Medico-Chirurgical Transactions*, vol. l, 1867, and *Royal London Ophthalmic Hospital Reports*, vol. vi. part ii., April, 1868, contain a statistical paper by Mr. Hutchison, embracing a three years' experience of the form of amaurosis supposed to be in connection with tobacco. The author carefully distinguishes between cases of secondary atrophy preceded by neuritis, and those in which the atrophy is primary (at least so far as the optic disc is concerned). The latter only are the cases tabulated. It is estimated that a hundred cases of this kind are admitted at the Moorfields Hospital every year. The chief fact brought out is the comparative rarity of the disease in women. In a former report on this subject, Mr. H. had found the proportion to be three women to thirty-seven men, and in the present one we have thirty-four men to only three women. Almost all the men had been heavy smokers, and in a large majority of the cases no other cause could with any plausibility be assigned. In most of the cases there was little or no evidence of disease of the nervous system other than the amaurosis, the patients usually remaining in excellent health. Mr. H. discusses in some detail the other possible causes of disease, which may be supposed to bear unequally upon the two sexes, and is unable to suggest anything more plausible than the tobacco hypothesis. Whilst avoiding the expression of any definite opinion, he yet urges that the evidence is quite sufficiently strong to make it an important duty, on the part of the surgeon, to advise abstinence whenever the early symptoms of this disease are present. He explains the general immunity of smokers, by supposing that tobacco only acts prejudicially in certain peculiar constitutions, just as we know that some persons are easily poisoned by iodide of potassium, belladonna, arsenic, etc.—*Half Yearly Compendium of Med. Science.*

Treatment of Chronic Rhinitis.—T. F. Rumbold, M. D. (St. Louis *Medical Reporter*), reports twenty-one cases of "Chronic Rhinitis," which came under his own observation, sixteen of which are reported as cured. He inspects the naso-pharyngeal cavity with the rhinoscope; not only is his instrument useful in the examination, but it is essential in the treatment. The local treatment is accomplished by throwing the solution of common salt, ℥j to ℥ij, or chloride of potassa ℥j to ℥v, or permanganate of potassa ℈j to ℈ij, or chloride of zinc gr. xv to gr. xxx, to the pint of *warm* water, up behind the soft palate into the naso-pharyngeal cavity, with a syringe made for the purpose. This washing is continued as long as the secretions are so excessive as to form collections in or about the nasal fossa. When the secretions are freed from the surface, steam from warm water is forced into the nostrils for twenty to thirty minutes, having a sufficient amount of ammon. carb. in it to cause a free flow of mucus.

Then the mucous membrane is covered by nebulizing the solution of iod. gr. j, pot. iodid. ℈j, glycerine ℥j.

This *local* treatment occupies from three-fourths of an hour to one and one-half hours at each sitting, which is repeated three times per week.

The *constitutional* treatment is such as agrees with general principles. Tonics and chalybeates are in a large majority of prescriptions.

THE EXPLOSIVE POWER OF SODIUM.—The explosive power of sodium is equal to that of about 25 lbs. of gunpowder, or 2½ lbs. of nitro-glycerine. A spoonful of water coming in contact with 200 oz. of sodium would occasion an explosion equal to that which would be occasioned by the ignition of 5,000 lbs. of powder, or the concussion of 500 lbs. of nitro-glycerine.

NASAL POLYPUS REMOVED WITH TINCTURE FERRI CHLORIDI.—G. Troupe Maxwell, M. D., Fernandina, Florida (St. Louis *Medical Reporter*), reports a case of a very large nasal polypus, which was attached by a pedicle to the inferior spongy bone of the left nostril.

Professor Paul F. Eve had extracted several nasal polypi from this same lady during previous years. An examination revealed a large, pear-shaped, wrinkled tumor behind the uvula, hanging in the throat.

Reducing the officinal tincture mur. ferri one-half by the addition of water, with an ordinary glass penis syringe about ʒ ij were injected into the nostril, holding her face up, so as to prevent the fluid from escaping too quickly from the external opening.

The application caused very little pain or irritation in the nasal cavity. She was put in a darkened room, where she lay upon a bed and slept an hour or two. Upon awaking she expressed great relief from all her sufferings. The tumor had shrivelled decidedly. The husband was directed—as she lived quite a long distance off—to repeat the operation twice daily until the mass sloughed off, and then reduce the tincture to one-fourth or less.

In a few days he received a message that "the whole thing, roots and all, had come away."

Her relief was complete; health improving and spirits fine. The growths will not be permitted to return, for an occasional application of the tincture will destroy any recurrent polypus.

PROLONGED MENSTRUAL LIFE.—Mr. Robert Cowie states that, whereas in the rest of the British dominions menstruation ceases at the age of 45 or 46, it lasts in the Shetland Isles till the age of 50 to 54—the mean age for the entire British possessions being 48 to 54.

DRESSING FOR WOUNDS.—The following formula makes a good dressing for wounds:—A solution of potassa chloras (2 drachms) in glycerine (4 fl. ounces), mixed with alcohol (2½ ounces), forms a clear liquid, which is readily absorbed by linen, and does not soil the clothing. It keeps the dressing moist for twenty-four hours, is easily washed off with lukewarm water, and is adapted for soft granulations.

DIAMETER OF SPIDER THREADS.—Leevwenhoek has computed that 100 single threads of a full grown spider do not equal the diameter of the hair of the head, and when the young spiders begin to spin, 400 of them are not larger than one of a full growth, consequently 4,000,000 of a young spider's thread are about the size of a single hair of a man's beard.

SUNFLOWERS AS ANTI-MIASMATICS.—From time to time the common sunflower (*Helianthus Annuus*) has been spoken of as a corrective of the miasmatic poison of low lands. This observation was first made in this country, but has not received the general attention which it merits. Latterly it has attracted considerable notice in the Netherlands, and articles have appeared upon it in several of the Dutch journals. One of them, by Dr. Ali Cohen, is referred to in the *Prager Vierteljahrschrift* for April. Dr. Cohen relates that a certain Mr. Van Alstein possessed a swampy tract on the Scheldt, which was so unhealthy as to induce the Government of Belgium to take official steps to remedy it. Mr. Van Alstein had suffered from the miasmatic fever three times, and was only cured by a change of air. He at last commenced raising sunflowers. He planted three or four groups of them about forty or fifty yards from his house, in various directions on some poor spots of ground. They flourished astonishingly, raising large heavy flowers. They derive their nourishment more from the air than the soil. Ever since then—now some ten years since—he, and his family, including a number of laborers and visitors, have been entirely free from the fever. Those of his neighbors who have followed his example enjoy a similar immunity, while those who have not, suffer just as much as before from the periodical pest. The seeds of the sunflower yield a useful oil, and their stalks make a very fair fuel.—*Half Yearly Compend. Med. Science.*

WASTE OF MUSCLE DURING EXERCISE.—Dr. Hermann communicated articles on this subject to the *Berliner Klinische Wochenschrift*, May 11, 1868, in which he attempts to explain the fact that while after moderate exercise there is no increase of nitrogen excreted, there *is* an increase after violent exercise. He considers that the contraction of a muscle during life is analogous to, or perhaps identical with, the post-mortem rigidity, both being caused by the coagulation of myosin, the chief nitrogenous element of muscle; and that, as after death, the earlier stages of rigidity can be checked by passing arterialized blood through the vessels, so during life the circulation acts whenever a muscle has been contracted. He shows that stiffness after death is hastened by constant irritation of the muscle; and he supposes that in the cases where, after excessive exercise, more urea is secreted than before, the muscle has been so much used that some of its fibres have become permanently contracted beyond the power of the oxygen in the blood to reinstate them in their normal condition, and consequently the coagulated myosin, and indeed the whole fibre, must be eliminated and replaced. He supposes that in ordinary contractions the myosin is partially coagulated, and then immediately brought back to a condition of fluidity by oxygen, so that the same nitrogen is used over and over again. He also supposes that the heat produced constantly in the tissues is not caused by their consumption or combining with oxygen, but by the consumption of some undetermined carboniferous substance in the circulation itself.—*Half Yearly Compend. Med. Science.*

TREATMENT OF SPASM OF THE GLOTTIS.—Professor Henoch (*Berlin Klinische Woch.* 1867, *No.* 18) has employed the following remedies in spasm of the glottis, but saw but little good result:—White oxide of zinc, in doses of from one-quarter to one grain; an enema of assafœtida, in the dose of twenty grains; musk, in doses of from one-half to one grain. A dose of from one-half drachm to a drachm, in 4 hours, of bromide of potassium, was a success in one case. In most of the cases which came under his attention, remedies adapted to promote the nutrition of the system proved superior to all others; especially a good diet of milk, wine, animal broths, etc., with exercise and pure air. Cod-liver oil and iron are the most efficacious medicinal agents. Under this tonic treatment the disease disappears within from six or eight weeks. Prof. H. also speaks highly of simple, aromatic and malt baths.

Reviews and Notices of Books.

Diseases of Children: A Clinical Treatise, based on Lectures delivered at the Hospital for Sick Children, London. By Thomas Hillier, M.D. London, Fellow of the Royal College of Physicians, Physician to the Hospital for Sick Children and to the University College Hospital, London. Philadelphia: Lindsay & Blakiston, 1868. 8vo, pp. 393.

A short time since we took occasion to review a work on the surgical diseases of children, based upon observations in the Hospital for Sick Children in London; and the present one, emanating from the same locality, and by a gentleman connected with the same institution, gives us a contribution to the medical side of the question. We say contribution, because the work before us, based upon a course of lectures, is professedly nothing more, dealing only with the most common affections, in a clinical point of view, which are presented for treatment to the general practitioner. It is, in fact, a book made up of a series of more or less complete monographs upon these affections, and recommends itself to the working physician more on account of its practical utility than its size or comprehensiveness.

The introduction, in which the author takes great pains to present, in a concise and interesting form, the peculiarities of children's diseases and the different modes of conducting an examination, is full of valuable suggestions to the novice, and of good hints to the more experienced.

Our author has made a good selection of subjects, as the following enumeration of diseases, treated in detail in the body of the work, will show: 1, Pneumonia, general and lobular; 2, pleurisy; 3, rickets; 4, tuberculosis; 5, diphtheria; 6, acute hydrocephalus and meningeal tubercle; 7, chronic hydrocephalus, tubercle of the brain, and other cerebral affections; 8, pyæmia and otorrhœa; 9, chorea; 10, paralysis; 11, ascites; 12, scarlatina; 13, typhoid fever; 14, various skin diseases; 15, epilepsy and convulsions. The appendix is principally occupied with an account of some of the author's favorite formulæ.

The arrangement of his subjects is most admirable, and in the departments of diagnosis and treatment he is particularly systematic and practical. He rightly concludes that the difficulties in the differential diagnosis are of the greatest importance to consider, and devotes a good deal of space in the consideration of each disease, and to the enumeration of those other diseases with which the one in question may be confounded. In this task he has a happy faculty of presenting to the mind of the reader the truly salient points for study. As to treatment, being an acknowledged advocate of the vis medicatrix naturæ in children, his treatment is by no means so heroic as that of many of the members of the British school, and he bends his energies more towards support than depletion, and is unwilling to advise any course but that based upon the soundest principles of common-sense. The formulæ in the appendix, of which there are a goodly number, are made in accordance with the British Pharmacopœia, and can, with the usual modifications, be easily adapted to the wants of the American physician. The work, as a whole, is written in a very attractively practical style.

Twenty-Third Annual Report of the Executive Committee of the Prison Association of New York, and Accompanying Documents; for 1867. 8vo, pp. 303.

This is the annual report of one of the most useful associations of the State of New York. It has now been in existence twenty-three years, and the amount of practical good it has accomplished can scarcely be conceived. It is one of the many voluntary philanthropic societies supported by private charity in our State, which is constantly and beneficently at work in the useful sphere it has marked out for itself—an honor to our citizens and to humanity itself.

The objects of the Association are, 1st. The amelioration of the condition of prisoners, whether detained for trial, or finally convicted, or as witnesses; 2d. The improvement of prison discipline, and the government of prisons, whether for cities, counties, or States; 3d. The support and encouragement of reformed convicts after their discharge, by affording them the means of obtaining an honest livelihood and sustaining them in their efforts at reform.

The Society was incorporated in 1846, and has annually reported to the Legislature an account of its doings. From these reports we gather the following important facts:

During the year 1867, Mr. Abraham Beal, the general agent, has visited 4,659 persons in the detention prisons of New York and Brooklyn, who were poor, friendless, or in need of advice and assistance; has examined 835 complaints; 275 complaints were withdrawn on his advice as being frivolous or founded in mistake, prejudice, or passion; 246 prisoners were discharged from custody by the criminal courts on his recommendation, who were innocent, or very young, or clearly penitent, and resolved to "sin no more;" 1,423 liberated prisoners were aided with board, tools, or money; 127 discharged convicts were provided with work and situations; 177 released prisoners were supplied with clothing to a greater or less extent.

The results of twenty-three years' labors are as follows: 83,314 persons visited in prison; 23,716 complaints examined; 6,508 complaints withdrawn; 7,215 prisoners discharged from custody; 14,481 released prisoners aided with board, clothing, tools, or money; 3,804 discharged convicts provided with situations, the majority of whom have done well, regaining a respectable standing in society—being a total of 137,841 cases, in which relief, moral, material, or both, has been extended to persons who have been arrested and imprisoned, whether justly or unjustly, on a charge of crime. Besides the aid thus given to the accused and convicted, more or less relief has been afforded to thousands of persons connected with the families of prisoners, besides numerous and valuable improvements in the organization, structure, arrangement, government, and discipline of prisons, effected through the agency of the Society.

The present prison law of our State is the work of this Association; the punishment of the lash has been abolished by law; and yet so common was it, when the Society commenced its operations, that more than 1,000 lashes *per day* were inflicted in one of our prisons alone; twenty-five years ago each keeper punished his own men *ad libitum*; now, the right of punishing is confined to the head of the prison, or the officer who is more directly charged with the administration of the discipline. Libraries, ample in size, and composed of well selected books, are now found in all our State prisons. Secular instruction is given to all convicts in our State prisons who need and desire it, by regularly appointed teachers.

Thousands, who were totally illiterate on their commitment, have acquired the rudiments of an English education—reading, writing, and cyphering—which they have turned to good account on their liberation. The *dietary* of our prisons has been greatly improved, both as regards the quality and variety of the provisions furnished; vegetables are now freely furnished, which has been the means of banishing scurvy, which for-

merly prevailed to an alarming extent. The principle of *rewards*, as a stimulus to industry and good conduct, has been adopted as an element of prison discipline, which has produced the very best results in the reformation of the inmates.

In conclusion—for our limits will not allow a longer notice—we regard this prison law, passed by our State, as the most important step in prison discipline taken in the United States within the last half century; and it only needs to be followed up by other measures of a like character and tendency, with the whole administration of our prisons committed to upright, humane, and enlightened men, to accomplish one of the greatest and most desirable reforms of our age.

Clinical Observations in the Ophthalmic Department of the Rochester City Hospital, by Charles E. Rider, A.M., M.D., Ophthalmic Surgeon to the City Hospital and St. Mary's Hospital, etc., Rochester, 1868. pp. 22.

Dr. Rider has done a service to the profession in publishing this little pamphlet. He has thus not only set a good example to surgeons of similar institutions, but he has made for the general practitioner a substantial contribution to the science of ophthalmic surgery. Seven interesting cases are reported in full, viz., cataract (modified linear extraction was successfully performed), ophthalmia tarsi, sympathetic ophthalmia, choroidal staphyloma (the eye-ball was enucleated), corneal staphyloma (abscission and removal of the lens), atrophy of the globe, conical cornea (iridesis). Dr. Rider's style is careful and readable. We earnestly wish that this pamphlet may have a wide circulation.

Alphabetical Lists of the Names of Persons Deceased, Born, and Married in the City of Providence, during the Year 1867. Prepared by Edwin M. Snow, M.D., City Registrar. 8vo., pp. 76.

Dr. Snow is entitled to the thanks of every student of vital statistics, for setting an example in his reports, which we would rejoice to see followed in every city, town, and village in our country. His annual reports embrace, for example, in regard, first, to *decedents*—the name, age, birth-place, and parentage of each person are given, together with the date of death, and the page of the records upon which each death is recorded; the names being arranged alphabetically, and also in the order of the dates of death.

In relation to *children born*, the name of each child is given, with the date of birth, the name and birth-place of the father, the name of the mother, and the page upon which the birth is recorded. The names of the children are arranged in strict alphabetical order, making a correct and complete index of the records.

In regard to *persons married*, the pamphlet shows the name, the birth-place, and the names of the parents of each person married in Providence in 1867, together with the date of each marriage, and the page of the records on which it is recorded. The names of the groomsmen, even, are given, and arranged in a strictly alphabetical order.

Thus, in regard to all persons, whose names are in the record, sufficient information is given to identify each individual in his or her family relations, while precise reference is given to the page of the records where more full information may be obtained. Even in relation to births, where the names of the children are often wanting, the name and birth-place of the father, and the name of the mother, will generally be sufficient to identify the child. This pamphlet contains the names and other information relating to 4,295 persons recorded in 1867, and divided as follows: *Decedents*, 960; *children born*, 1,625; *persons married*, 1,710.

Why cannot our *Metropolitan Board of Health* at least cause such records to be kept, and annually published, in all the towns and villages within their district? Some spasmodic efforts have been made, we know, in this direction, but failed, like many other important measures, for want of zeal and energy in carrying them out. No record appears to be kept of the names of persons interred, much less of those born or married.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept. 9, 1868.

Dr. Wm. B. Bibbins, President, in the Chair.

On motion, the Report of the Committee on Microscopy was deferred until the next meeting.

ANEURISM OF THE AORTA.

Dr. Austin Flint, after presenting a history for a candidate for admission, exhibited a specimen of aneurism of the aorta, which presented some features of interest. The history was in brief as follows:—

The patient, a male aged about thirty, was admitted into Bellevue Hospital on the 29th of August. Owing, however, to his great feebleness, absence of voice, and dyspnœa, the previous history that could be obtained was quite imperfect. It was ascertained, however, that he had suffered in the first place from pain referable to the upper part of the chest for nearly a year, and for several months from dyspnœa, which latter, together with loss of voice, constituted his chief source of suffering.

When admitted into the hospital he was found to be considerably reduced in strength, his respirations were habitually labored, and, even under the most favorable circumstances, there was laryngeal or tracheal stridor—showing evident obstruction of the larynx or trachea. The respirations were not increased in frequency, although they were more or less labored, but in the paroxysms (which occurred repeatedly many times during the day, and always after little exertions), he suffered a great deal of distress, attended with marked lividity of the face. For several days before his death the severity of the paroxysms was such that it seemed as if it could not be possible that he could in turn survive them. The pain continued, although it was not very great. There was complete aphonia, and the patient spoke in a pure soft whisper.

There was a very distinct heaving impulse at the upper part of the chest on the left of the sternum, and also an impulse very distinct and heaving somewhat behind this space. Within this space of impulse there was marked dulness on percussion, as well as two murmurs—the systolic and diastolic—both of which were marked.

These were the prominent symptoms, and upon them the diagnosis of aneurism was based, which lesion it was supposed was situated in the descending portion of the aorta, involving the recurrent laryngeal nerve and pressing upon the trachea. It should have been stated that there was a certain amount of difficulty of deglutition, and that he could only partake of solid food. He died on the 6th ult. in one of the severe paroxysms referred to.

At the autopsy the heart was found to be of normal size and was quite flabby, which latter circumstance was due in all probability to cadaveric change. On inspecting the aorta there was found to be an enlargement beginning about three-quarters of an inch above

the semilunar valves, and just below the point the lining membrane of the vessel showed a softened velvety change. The dilatation extended from this point to the parts beyond, forming altogether a cavity whose capacity might be estimated by eight or ten fluid ounces.

The interesting point of the specimen centred in the incorporation of the recurrent laryngeal nerve with the lower portion of the aneurism, a few of its fibres being also to some extent sprayed out. The trachea was somewhat contracted at this point, and gave other evidences of some little pressure upon the tube. The larynx showed no signs of any local disease.

Dr. F. supposed that the prominent symptoms of dyspnœa were due in part to the paralysis of the laryngeal muscles, and in part to the contraction of the trachea and pressure of the tumor.

THE IMPORTANCE OF ASTHMATIC SYMPTOMS IN ANEURISM.

Dr. Rogers asked how long a period had elapsed since the patient first suffered from any disturbance of the respiratory functions.

Dr. Flint remarked that the previous history of the case was very unsatisfactory, owing to reasons already stated; in fact, the slightest exertion of the patient, necessary for an examination to be made, was sufficient to bring on one of the severe attacks of dyspnœa. He could only, in answer to the question, give the statements of the patient's friends to the effect that the difficulty of breathing, which was supposed to be due to asthma, and the aphonia dated back several months.

Dr. Rogers then asked if Dr. Flint had knowledge of any case in which this kind of trouble was first accompanied by paroxysms of what was supposed to be asthma long before any disturbance of the circulatory organs could be discovered by auscultation.

Dr. Flint did not see why this disturbance should not be the first symptom, but had no means of stating the length of time that might precede the auscultatory phenomena.

Dr. Rogers remarked, in that connection, that he had a gentleman under his observation whom he had occasion to see for the first time two years ago in what he took to be an attack of asthma. He suffered three distinct attacks of dyspnœa within as many of the following months. There were no signs of aneurism at this time to be made out by physical exploration. About a year ago the patient went down to the seashore and performed quite a number of extraordinary swimming feats, a day after which he suddenly lost his voice. Several weeks since he presented himself to Dr. R., who was then enabled for the first time to recognize an aneurism of the arch of the aorta of a most marked character.

Dr. Flint stated that loss of voice, occurring in a male over 40 years of age, not due to disease of the larynx itself, should always give rise to the suspicion of the existence of aneurism, more especially if accompanied with occasional paroxysms of dyspnœa.

EXTIRPATION OF THE EYE.

Dr. Roosa exhibited an eyeball which he had removed from a man æt. 24, a patient of the Brooklyn Eye and Ear Infirmary, who had been a soldier, and while firing a Springfield musket, in 1862, a fragment of percussion cap entered his right eye. He did not pay much attention to the accident, not being sure that the portion of the missile had done more than strike the eye. He soon had, however, severe inflammation of the globe, which, passing away in due time, left the organ almost sightless. He had been subject during the last six years to such repeated attacks of inflammation of the eye that he was compelled very often to give up his work. He never had any treatment whatever for the inflammation. He finally presented himself to Dr. Roosa, at the Brooklyn Eye and Ear Infirmary, on Friday last, who recognized the previous existence of severe inflammation of the globe. He also discovered that the iris had been at the time of the injury torn out at one side, corresponding to the insertion of the rectus externus muscle, and that the lens was in an atrophied and calcareous condition, and floating in the vitreous fluid. The vision was $\frac{1}{200}$. The globe itself was much softened. The opposite eye, strange to say, was in a normal condition. He was assisted in the operation by Dr. Agnew, who stated that it was a very unusual case, in that the cap was found floating free in the vitreous, and that the retina and optic nerve were in such good condition. The macula lutea was pigmented. A beautiful preparation of the diseased organ, made by Dr. W. B. Lewis, was exhibited.

Dr. Noyes remarked that it would be natural to expect that, with the eyesight gone and the eyeball softened, the retina would have been found more or less detached.

HÆMATIC CYSTS.

Dr. Whitehead exhibited the contents of an hæmatic cyst, with the following history:—

Case I.—*Hæmatic Cyst.*—John D——, æt. 26, barkeeper, married, came to Northern Dispensary Aug. 13, 1868, with a tumor of left shoulder, about as large as a medium-size orange, situated over the clavicle and resting on it, but not adherent, as it could be slightly displaced laterally at its base. For several years the patient had a small tumor, about the size of his index, of a brownish color, indolent and painless, which remained about the same size until eight or ten days before coming to the Dispensary, when, as he states, after roughly feeling the tumor, it suddenly commenced to swell, and in one night acquired nearly its present size.

The tumor is globular, slightly flattened, perfectly smooth, tense, and of a rather dark, purplish appearance, having thickly disseminated over its surface superficial and arborescent varicose veins of extreme tenuity, and of a deep vermilion color.

Tumor could be very slightly lifted from the middle of the clavicle upon which it rested. There was no pulsation, vibratory thrill, or impulsion communicated through the tumor. It was distinctly circumscribed, and measured in its anterior posterior circumference a fraction over 4 inches, and in its transverse 3¼ inches. On plunging an exploring needle into the tumor there was experienced some resistance, which diminished as the point of the instrument reached the centre of the mass; on withdrawing the shaft a few drops of dark grumous blood escaped through the canula. Afterwards the tumor was punctured with a medium-size trocar, and about 1½ ounces of the same dark fluid blood evacuated, and on withdrawing the trocar, with a narrow, curved, and sharp-pointed bistoury, I divided the tumor antero-posteriorly, and more blood escaped. The remaining contents of the cyst slightly adhered to its walls, and, forming probably about one-half of the mass, were broken loose with the end of the finger and removed. The substance removed is evidently the product of an exudation having undergone a certain organic development; and on being removed, and before being thoroughly washed of all the blood, looked somewhat like the substance of the interior of the heart, but was much less firm on pressure, and easily broken into separate masses. There was some clot, though not much, adherent to these solid portions of the tumor. Preserved in carbolic acid, it at present offers very much the same

appearance and consistence it did at first, but is slightly paler. Examined under the microscope in the fresh state, there were observed (Ocular No. 3, Objective No. 5. Nucleated large, irregularly oblong cells, without nuclei or granulations, interspersed with a few perfect, and some disintegrated blood corpuscles. Treated with acetic acid, the cells became more distinct, but retracted. Did these cells in this tumor mark one of the phases of fibrinous development of a healthy formative process, or, on the contrary, did they point to an ulterior multiplication of elements, the result of a local perversion of nutrition? In other words, had this tumor been let alone indefinitely, would this apparently exudative product have formed a firm, thick, and resisting cell-wall to the cyst, of sufficient healthy vitality to have resisted degeneration, incommoding only by the size of the tumor and its pressure on contiguous parts?

The tumor was stuffed with cotton, saturated in equal parts of sweet oil and carbolic acid, covered with oakum, and a slightly compressive bandage.

This variety of tumor, he remarked, was interesting on account of its rarity. It probably occurred in this way: A small cyst existed in the first place into which blood was effused, the fibrine of which, in its turn, became organized.

A few days after the occurrence of this case, by a singular coincidence, another was met with—an hæmatic cyst, occurring on the inner aspect of the knee of a large, stout Scotchman. He was a ship-carpenter by trade, and was struck on the inside of the knee by a glancing blow from a large piece of timber drawn on wheels. This tumor contained the same kind of lemon-colored fluid as in the previous one.

Dr. Gurdon Buck exhibited a patient, a young lad, upon whom he had operated for the restoration of parts of the mouth and nose which had been previously destroyed, exhibiting also photographic representations of the previous condition of the parts. (The case will be given in detail hereafter.)

PROF. POST'S NEEDLE DIRECTOR.

In the course of his remarks, which he requested should not at that time be reported in full, he spoke of the great value of Prof. Post's needle director (vide Medical Record, Vol. 1, page 195), in this and all similar operations where great nicety and precision were required in introducing sutures.

THE BEST SUTURES.

Dr. Noyes stated in this connection that the most delicate, firmest, most flexible and strongest sutures were to be made from the finest sewing-machine silk, which was marked with two ciphers.

Dr. Cutter remarked that such a material could be obtained from the manufacturers in a loose condition at half the price it could be had when wound on the spool, and was for all practical purposes just as good.

Dr. Whitehead asked if there was any difference in the irritating properties of different colored silks.

Dr. Buck had not noticed any. He most generally employed the red.

Dr. Rogers remarked that his experience with ligatures had induced him to prefer those which were not waxed as being least irritating, and referred to a case in point of the use of one such in ligation of the femoral artery, where, at the end of fourteen days, not even a redness was to be found in its neighborhood, the wound having been thoroughly united by that time.

ANEURISM OF HEART.

Dr. Sayre presented an aneurism of the heart, the first he had ever seen taken from a woman, 60 or 70 years of age, who died in the service of Dr. Ambrose, of the Almshouse. Very little was known of her previous history, except that she had been suffering for a considerable time from angina pectoris. Death occurred suddenly, and at the *post-mortem* examination the heart was found filled with blood clots. On the left ventricle were found two cysts, one containing organized fibrine, the other was empty and ruptured; the larger tumor, which was empty, connected with a good sized cul-de-sac opening into left ventricle below the semilunar valves of the aorta; the empty cyst also connected with the cul-de-sac, with a smaller opening. These cysts appeared to be a dilatation of the substance of the heart, and were not connected with any vessel.

Dr. Post remarked that Dr. Sabine had reported a case of aneurism of the heart, situated above the mitral valve, the size of a cherry, which projected from the auricle into the ventricle.

GUNSHOT WOUND OF AURICLE.

Dr. Britton exhibited a heart and portion of the thoracic wall removed from a man who was shot in a restaurant by another over whom he was stooping in an attempt to strangle him. The ball entered an inch to the left of the median line and an inch and a half above the nipple, penetrating the right auricle and passing out through the left auricle by the spine. Death occurred instantaneously; the pericardium being of course filled with blood.

OLD PERICARDITIS.

A second specimen, presented by the same gentleman, was simply one of old pericarditis, which was of interest on account of the thickness and density of the deposit. There were no valvular lesions.

Dr. Flint remarked that the last case was an important one as proving the fact that the walls of the heart, which were subject to pericarditis and adhesion without valvular lesion, became more or less atrophied instead of hypertrophied as generally believed.

The Society then went into executive session.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, September 14, 1868.

Dr. Thomas C. Finnell in the Chair.

The Chairman announced the admission to membership of Drs. Thomas Bruce Stirling, Henry G. Piffard, and Calvin Brooks McQuesten.

INFANT MORTALITY IN NEW YORK.

Dr. Stephen Rogers read a paper upon "Neglected Causes of Infant Mortality in New York," which we print in full elsewhere (p. 337).

Dr. F. A. Castle wished to state, as he could from positive knowledge, that many of the statements concerning the diet at the Infant Hospital were incorrect, doubtless owing to the very limited time spent by the Doctor in his investigation of the Hospital arrangements.

Dr. Dunster moved that, in view of the great importance of having all the points of the subject brought clearly before the Society for discussion, the paper be referred to the Comitia Minora, with request to print; and that the discussion upon it be postponed until it could thus be placed in the hands of the members.

Dr. Biebbins and others raised objections on the score of the Society's by-laws and of the state of its finances; and the matter was finally laid upon the table, it being

understood that the RECORD report would appear October 1st.

DR. HARRIS was surprised at the aggressive character of the paper and its tone with reference to the Board of Health and the Commissioners of Public Charities and Correction, all whose interests and aims were certainly at one with those of the profession, and should secure for them the professional courtesy. He was amazed, also, at the freedom with which it made assertions based only upon newspaper paragraphs, and quite unwarranted by facts. For example, the Board was not responsible for the "canard" attributing the increased mortality to the consumption of diseased meat, although it had been so reported in the papers. Again, the "Rules for the Management of Infants" had, indeed, been presented to the Board for adoption, but it had decided that it was unadvisable to issue them officially. They had, however, found their way into the daily papers as sanctioned by its authority. To Dr. Jacobi, their author, was due the ere lit which justly attached to them. If the subject came up for discussion, the speaker whould wish to present a statement, which he feared might prove tedious, of the real causes of infant mortality here, as deduced from unequivocal statistics.

THE CHAIRMAN having stated that the next regular meeting of the Society, on the 6th October, would be its anniversary, and that the discussion of this subject would not then be in order, it was, upon motion of Dr. Hubbard, voted that when this meeting adjourn, it be to the second Monday in October, and that the discussion of Dr. Rogers' paper be made the special order for the evening. Adjourned.

Correspondence.

NÆVUS SUCCESSFULLY TREATED BY COLLODION.

TO THE EDITOR OF THE MEDICAL RECORD.

DEAR SIR—In No. 58 of your journal is a communication, entitled "Nævus Successfully Treated by Collodion," which recalls a similar case in my own practice.

June 19th, 1867, my attention was called to a female child, two months old, which presented over the right parietal bone a bright red nævus, three-eighths of an inch in diameter, and gradually enlarging. As an experiment, I advised that a drop of collodion be applied once a day. The child living a considerable distance from my residence, I did not see it again until July 9th, when not only had the nævus entirely disappeared, but a small deep depression had been caused by the too long continued application of the collodion.

Respectfully,

WM. BADGER, M.D.

Hastings-upon-Hudson, Sept. 3, 1868.

ETIOLOGY OF TUBERCLE.—Prof. Crocq, of Brussels, believes that gray granulation is a product of inflammation, particularly assimilated with pus, while the yellow granulations are formed by the same cellules in different degrees of fatty degeneration. He considers the intervesicular connective tissue to be the seat of the disease.—*Boston Med. and Surg. Journal.*

SOURCES OF COLORS.—Dyes, like perfumes, are often derived from the most repulsive sources; gas-tar gives the magenta and mauve, so fashionable of late; picric acid, from the same source, produces orange and yellow tones.

New Instruments.

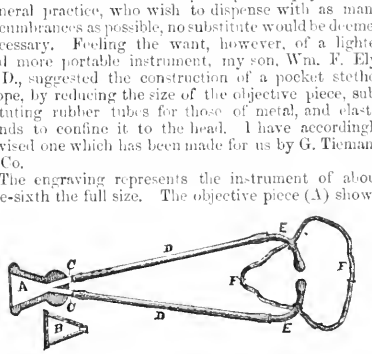
A POCKET BINAURAL STETHOSCOPE.

BY W. W. ELY, M.D.,

ROCHESTER, N. Y.

THE "self-adjusting stethoscope" invented by Dr. Cammann is so highly appreciated by auscultators that it is superfluous to urge the importance of the binaural principle in the construction of this instrument. The Cammann stethoscope, however, is heavy, and the inflexible conducting tubes render it unfit to be carried except in a case. In its latest improvement the tubes may be disjoined, thus reducing its length; but the instrument in two parts still requires a box or case for its transportation. Were it sufficiently compact for physicians in general practice, who wish to dispense with as many encumbrances as possible, no substitute would be deemed necessary. Feeling the want, however, of a lighter and more portable instrument, my son, Wm. F. Ely, M.D., suggested the construction of a pocket stethoscope, by reducing the size of the objective piece, substituting rubber tubes for those of metal, and elastic bands to confine it to the head. I have accordingly devised one which has been made for us by G. Tiemann & Co.

The engraving represents the instrument of about one-sixth the full size. The objective piece (A) shown



in section, is two and a quarter inches long. A conical, hollow plug (B) fitting air-tight into the cavity, and projecting a little, answers for a second, smaller objective. A groove at the base may be used to secure a thin membrane if it be desired to have the end covered. Short, thin, metallic tubes (C C) are screwed into the head of the objective piece, having flanges to hold the rubber tubes. We thus obtain direct, uniform, and smooth passages for sound, which must be preferable to the uneven surface of spiral wire by which the connections are made in the "self-adjusting stethoscope." The rubber tubes (D D) are about ten inches long, and one quarter of an inch calibre. Into these, the ear-pieces (E E), made of hard rubber, are inserted, and retained by flanges. The ear-pieces have flanges also one inch and a quarter from the aural extremity to support the elastic bands (F F). Each band is furnished with a slide or buckle to allow of variation in length, and adjustment of the ear-pieces to the ears. The bands may be worn vertically, or around the forehead and occiput. It will be seen at a glance that this stethoscope must be convenient for auto-stethoscopy. It may also be used with one ear, like the single flexible stethoscope. It weighs about half as much as Dr. Cammann's, is much cheaper, may be crumpled in the hand, and carried in the pocket. An objection which will at once suggest itself is the use of the bands. As springs cannot be substituted in a pocket instrument, the force of the objection should be duly considered. A great deal of real or simulated awkwardness may be exhibited in their application. With a little knack, however, their use becomes simple and easy. To facilitate the process, at first, the following directions

may prove useful: Take an ear-piece in each hand, and extend the shorter band on the thumbs, and the larger one on the fingers, and apply the former one behind; then stretch the front band and carry it over the head to the forehead without moving the hair. The ear-pieces will fit, and entirely close the auditory canals, if the bands have been fixed of the proper relative lengths.

We have not by any means supposed that this little instrument would supersede Dr. Cammann's. It was made for our own use, and has proved so convenient, that we have thought proper to offer it to the profession simply as a light pocket stethoscope. We may add that for acoustic purposes it is inferior to no other. By combining the single and the binaural principles it will always be available. It is recommended by its cheapness; and after a little practice its application will be perfectly simple and easy.

ROCHESTER, N. Y.

Medical Items and News.

DEATH OF DR. CHARLES CULVER.—Died, at Ellington, Ct., September 7th, Doctor Charles Culver, House Surgeon, Charity Hospital, Blackwell's Island, N. Y., aged 21 years.

At a special meeting of the House Staff of Charity Hospital, the following preamble and resolutions were unanimously adopted:

Whereas, it has seemed good to our Heavenly Father to take from us within the short space of two weeks a second friend and associate, Doctor Charles Culver, by disease contracted while he was faithfully and ably performing his onerous duties in this hospital.

Therefore, *Resolved*, That lamenting the loss of one so sound of judgment, and so firm of purpose, so true to his better nature and so conscientious in the performance of all his duties, to friend or patient, we cherish his memory by emulating his many virtues.

Resolved, That we tender the bereaved family our deepest sympathies, and wear the usual badge of mourning for thirty days.

Resolved, That a copy of these resolutions be sent to his family, and that they also be published in the local papers, and the New York MEDICAL RECORD. Drs. Geo. E. Sherman, J. P. Sugg, Charles H. Leonard.

UNIVERSITY OF PENNSYLVANIA.—We are requested to state that Dr. Lizars, of Toronto, has been appointed to the chair of anatomy in the Eclectic College rejoicing in the above title instead of the time-honored Medical school of the University of Pennsylvania. The chair in the latter college is still occupied by the talented Prof. Leidy.

DEATH OF THE FIRST LIGATOR OF THE INTERNAL ILIAC ARTERY.—William Stevens, M.D. (*Medical News and Library*), died at Malvern, England, aged eighty-two. He was the first to ligate the internal iliac artery, and the originator of the saline treatment of cholera. He also published, in 1832, a work *On the Healthy and Diseased Properties of the Blood*. He was a pupil of the celebrated Allen Burns, of Scotland.

THE CALOMEL VAPOR BATH.—Dr. Henry Lee, of St. George's Hospital, London, has treated syphilitic albuminuria successfully by the calomel bath.

CEREBRAL RHEUMATISM.—A fatal case of what is called cerebral rheumatism is reported by Dr. Foster in the Queen's Hospital, Birmingham.

MENSTRUATION IN VARIOUS COUNTRIES.—M. Lagneau, Jr., read a paper upon "Menstruation in Various Countries," before the International Medical Congress, at Paris, August, 1867. His researches were based on a statistical table of 15,948 cases. The mean age at which the first menstruation appears in North Germany, as established by 4,234 cases, is 16 years, 9 months, 16 days; England, among 3,759 cases, 14 years, 11 months, 2 days; France, among 5,661 cases, 15 years, 1 month, 21 days; Southern Asia, among 1,140 cases, 12 years, 11 months, 17 days.

REMITTENT FEVER IN ROME.—M. Pantaleoni, of Rome, says that the remittent fever which prevails in that city is found in two distinct forms. 1st, the gastric, which is mild and easily managed; 2d, the nervous form, which is ataxic, but different from typhoid in many of its characteristics, as the absence of abdominal symptoms, pain, diarrhœa, &c., and of the rose spots, as well as the anatomical lesions discoverable in typhoid after death. The French soldiers, during their stay in Rome, had typhoid fever the first six months, and after that would contract nervous fever.

TUBERCULOSIS IN NORWAY.—For a period of ten years (1853 to 1863) the number of deaths in Norway, attributed to consumption, were 7,792 in a total of 57,869, or in the ratio of 134 to every 1,000.

MANAGEMENT OF NEPHRITE ALBUMINEUSE, OR BRIGHT'S DISEASE.—Prof. Crocq, of Brussels (*Boston Med. and Surg. Journal*), advocates large and progressive doses of iodide of potassium, in the treatment of Bright's Disease. He commences with two or three grains a day, increasing the dose in the ratio of one gramme every two or three days till a dose of fifteen or twenty grammes *per diem* is reached. The iodide or perchloride of iron, and tannin, are sometimes administered, at the same time. He makes three distinct periods or stages of the disease: 1st. Congestion; 2d. Exudation; 3d. Fatty transformation. The first two stages only are considered curable by him.

STOMATOSCOPY.—Dr. Milliot, of Russia (*Boston Med. and Surg. Journal*), exhibited at the late International Congress, in Paris, his plan for the exploration of the internal organs of the body by illumination, which he has called "Stomatoscopy." The system is founded upon the transparency of the splanchnic cavities. The body is rendered transparent by introducing into the œsophagus or rectum a glass tube containing platinum wires connected with some electric apparatus, by means of which the electric light is made to pass through the tube and illuminate the interior of the body.

The various abdominal viscera, as well as the interior of the stomach, are investigated by this means.

ANTI-GALACTIC PROPERTIES OF BELLADONNA.—Dr. D. W. Stormont, of Topeka, Kansas (*Leavenworth Med. Herald*), mentions two cases of mammary abscess, in both of which the secretion of milk was stopped by the application of belladonna (ext. belladonnæ ʒ ij, aquæ f ʒ j), painted over the breast. The lacteal secretion may be restrained, or entirely dried up, at the option of the physician, in one breast, without producing much effect in the other. Hence he considers it invaluable in mammary abscess, both as a prophylactic and as a curative agent. The patient should be cautioned against nursing the child from the breast to which the belladonna has been applied.

A CASE OF SUICIDE by carbolic acid is reported in a recent number of the *Lancet*. The blood remained incoagulable five days after death.

TENIA SOLIUM AND RAW MEAT.—Dr. Pietro Grilli states, in *L'Imparziale*, that in the course of seven months he came across seven cases of tænia, three of which were his own. The cases all referred to children who had partaken of raw meat. The author states that good mechanical or chemical means to destroy the cysticercus are as yet wanting. *Primâ facie* it would seem as if complete trituration might answer the purpose.—*Lancet.*

THYMIC ACID.—This acid, obtained from the essential oil of thyme, has been proposed as a succedaneum of carbolic acid or creasote. It emits no disagreeable smell, and is powerfully antiseptic. Its composition is $C_{20}H_{14}O_2$. In a concentrated form it may take the place of nitrate of silver; and, as an antiseptic, it should be dissolved in 1000 parts of water, with the addition of a little alcohol.

COLUMBUS'S EGG.—M. Groussin mentions a fact of some interest in the *Tribune Médicale* of July 12th, to show how much simple means, untried before, may accomplish when all other measures have failed. A boy about nine years old had forced a steel ring on one of his fingers; all attempts at removal by filing, cutting, &c., having failed, in a village near Paris, the medical man advised the mother to go the next day to town, and apply at the Hôtel Dieu. The surgeon endeavored to cut the ring in various ways, but the œdema was so great that he failed, and amputation of the finger was proposed. The mother left the place, and met a surgical instrument maker in the hall. The latter, having heard the nature of the case, asked her to come to his shop, where he placed the ring in a vice and broke it. Our first idea in these accidents is cutting and filing, but it is plain that well-regulated compression is more expeditious and effectual.—*Lancet.*

DR. JOHN ELLIOTSON died in London, on July 27th. He was born in the year 1786, in High street, Southwark, where his father carried on an extensive business as a chemist and druggist. He was educated mainly as a private pupil of the rector of St. Saviour's. He then entered as a fellow commoner of Jesus College, Cambridge. Subsequently he studied at Edinburgh, where he did not particularly distinguish himself, and took the degree of M.D. in 1821. He also studied at Guy's and St. Thomas's Hospitals, and was elected physician to the latter hospital on the demise of Dr. Currie, in 1822. He had previously been elected a fellow of the Royal College of Physicians of London.

Very early in his career as a hospital physician he was struck with the lamentable deficiency of clinical teaching in the metropolitan hospitals, not a clinical lecture being given in any one of them at that time, if we except those by Dr. Belling at the London Hospital. Elliotson became the most energetic teacher of the day in the wards of the hospital, and for many years, both at St. Thomas's and the North London, lectured on every case that came under his care. He was the first then to give an impetus to this important branch of teaching in London. His reputation suffered somewhat from his unfortunate association with the founders of mesmerism in 1837.

PECULIARITIES OF VACCINE LYMPH.—A paper was recently read by M. Chauveau, before the Academy of Sciences of Paris, giving the results of his experiments with vaccine lymph. M. Chauveau believes himself able to state definitely that the clear fluid of the vaccine lymph possesses no power of inoculation; the activity residing entirely either in all or in some of the small insoluble organic particles which float in and accompany it. M. Chauveau's experiments with samples of lymph diluted in different proportions of distilled water were quite in favor of the view he had already been led to hold, for he was able to effect successful vaccination, though rarely, with lymph which had been diluted with even so much as 150 times its weight of water. With fifty times its weight it often failed, but with from two to fifteen times its weight it succeeded nearly as frequently as the pure lymph. When successful, even with the greatest dilution, the progress of the disease was identical with that effected with the pure lymph. Even with the higher degrees of dilution, moreover, if the entire amount was injected into the vessels, it generally succeeded. One important conclusion may be drawn from these experiments—namely, that, in case of scarcity of the lymph, dilution with ten times its amount of distilled water does not materially diminish its activity.—*Lancet.*

NOVEL TREATMENT OF SUNSTROKE.—Dr. F. G. Herron, one of the City Physicians of Cincinnati, Ohio (*Med. and Surg. Reporter*), has tried in two cases, with success, the following treatment in sunstroke: Warm water was applied to the head, on cloths, as warm as the skin could bear without injury. Consciousness was very soon restored. Liquor ammoniæ acetatis was administered internally as a stimulant.

CONCEPTION AN ELECTRICAL PHENOMENON.—Harvey L. Bird, M.D., Prof. of Obstetrics in the Medical Department of Washington University, Baltimore, Md. (*Med. and Surg. Reporter*), believes that fecundation or impregnation is *always* an electrical phenomenon; and whether it occurs from the artificial injection of the male semen, or whether the spermatozoa enter the female vagina via naturali, *it results* from the *completion of an electric circle—the union of positive and negative* electricities.

OS-ARTIFICIAL FOR PROTECTING EXPOSED NERVES.—Dr. Charles L. Houghton, of Poughkeepsie, N. Y. (*The Dental Register*), advocates the use of Os-Artificial—frequently called "Oxy-Chloride of Zinc," "bone filling," etc.—for filling over and protecting exposed nerves.

This substance is the most perfect non-conductor in use, and, in his hands, has proved highly satisfactory in every case. The escharotic properties of the liquid sometimes cause severe pain at first, which, however, passes off in a few minutes. The painfulness can be obviated in a degree by introducing the filling while in a stiff paste, and not while the surface looks watery.

CHOLERA IN INDIA.—We have intelligence of cholera in the Bengal Presidency up to the beginning of June last, by which it would appear that from March to the 3rd of June the attacks of cholera among the troops amounted to thirty-four, with a mortality of twenty-three.—*Lancet, Aug.* 8.

New Publications.

BOOKS RECEIVED.

THE SCIENCE AND PRACTICE OF MEDICINE. By WILLIAM AITKEN, M.D., Edinburgh, Prof. Pathology, Army Medical School, 2d American from 5th London, with large Editions. By MEREDITH CLYMER, M.D., Ex-Professor of the Institutes and Practice of Medicine in the University of New York, etc., in two vols. Vol. I., Philadelphia: Lindsay & Blakiston. 1868.

CONSTIPATED BOWELS, the various Causes, and the different Means of Cure. By O. B. BIRCH, M.D., Member Royal College of Physicians of London, etc. From 3d London Edition. Phila.: Lindsay & Blakiston. 1868.

Original Communications.

CLINICAL PAPERS ON AURAL DISEASE.

By D. B. ST. JOHN ROOSA, M.D.,

PROFESSOR IN THE UNIVERSITY MEDICAL COLLEGE.

NO. III.—FOREIGN BODIES IN THE EXTERNAL AUDITORY CANAL.

EVERY month or two the reader of the medical journals finds that a new instrument has been invented for removing foreign bodies from the external auditory canal. We also occasionally find a case of death arising from the inflammation of the ear, and con-cecutively of the cerebrum, caused by unsuccessful attempts to remove a body from the above-named situation. These facts naturally give prevalence to the idea that it is usually a very difficult matter to extract a foreign body which may have entered the auditory passage. My experience has led me to the firm conviction that in the majority of cases there is no such difficulty as we are sometimes led to believe, but that nearly all the trouble in which the matter is involved is due to the neglect of the simple means always available for the removal of substances from the *meatus auditorius externus*.

The foreign bodies which are usually found in the auditory canal, are very naturally placed under two heads, viz., insects or the like which creep into it, or articles placed in by children or childish adults in sport. The pain from an insect in the ear is excessive. The creature probably bites the membrana tympani, one of the most sensitive parts of the body.

There can be no question about the best way of removing such an offender; an injection of warm water will accomplish two things,—it will first drown the animal, and then bring out his dead body. Notwithstanding this truth which ample experience has verified, we are often gravely advised to drop something into the ear, with which to kill the insect, and then to extract it by means of a forceps or other dangerous instrument. It is not always an easy thing to remove an object from the auditory canal, even when the parts are well illuminated, if we use a forceps for the purpose. It is almost impossible to do so, if the parts are not illuminated when these attempts are made. The instrument is certain to strike the very sensitive integument of the auditory canal, causing great pain, and sometimes hæmorrhage. It may easily perforate the membrana tympani, which, as will be remembered, is only of the thickness of thin letter paper. After either of these things has happened, it is well-nigh impossible to induce even an adult to submit to any more surgical interference of this sort.

The substances which are placed in the auditory canal by children are usually such as buttons, shot, grains of corn, bits of bread, etc. They are scarcely ever wedged in, but, if small, rest on one of the walls of the tube, or if larger, are stopped just beyond the orifice. If seen at this time, the same means suggested above, syringing with warm water, will in all cases be sufficient to remove the foreign body.

There is a proper and improper way of syringing the ear, simple procedure as it is. If we use one of the miserable little glass syringes, so commonly sold for injecting the meatus, without taking hold of the auricle at the same time, in order to straighten the auditory canal, the upper wall of which, in a normal condition, falls down towards the lower or anterior wall, very little of the fluid will enter the ear.

If, again, the vessel in which the water is to be returned from the ear be not properly held, the fluid will run over the patient's neck, and cause very unpleasant sensations.

In order to syringe the ear properly, a hard rubber syringe should be used, and a thin bowl be held close under the lobe of the ear, well up into the fossa at the articulation of the lower jaw with the temporal bone. The patient himself, if he be a large child, or an adult, will hold this bowl better than an assistant. The surgeon then straightens the meatus by gently pulling the auricle in an upward direction with one hand, while with the other he uses the syringe. It is well to allow the water to first pass into the concha of the auricle, and not immediately into the canal, in order that the patient may judge as to the temperature of the water, which should be lukewarm. The ear will not usually tolerate a cold fluid.

Performed with a good syringe, and with such precautions as have been named, syringing the ear becomes very pleasant to the person who is subjected to it. Children who have already been to a physician who has manipulated in the auditory canal with a forceps or other instrument, will, of course, object to the syringing, from fear of pain; but if no such attempts have been made, the youngest child can *soon* be coaxed out of any unwillingness to submit to the operation. I was once, however, compelled to etherize a child, in order to remove a pea by syringing, which had been previously hunted for with instruments.

It is theoretically reasonable that the injection of water is a potent agent in removing a foreign body from the ear. It is sufficient to remove a plug of wax, which has been impacted for years, and which has completely plugged up the auditory canal. How much more potent must be the stream of water, when there is sufficient space through which it may get behind the foreign body and wash it forward by the returning current! Experience also confirms what theory thus indicates. There are no cases on record, I think, where syringing, when undertaken before any other attempts have been made, failed to remove a foreign body from the ear.

Unfortunately, however, those who believe in the efficacy of the simple procedure of syringing do not always see these cases at first. The foreign bodies are often impacted, or so situated that a stream of water cannot pass behind them. There is often also very great inflammation of the parts, caused, not by the foreign body, but by the attempts to remove it. If it be plain that the foreign body is not causing the severe symptoms, a little delay may be advised, until proper local treatment—the use of leeches, and the instillation of warm water—has subdued the inflammatory process. If it be probable that the foreign body is wedged in upon the drum, or perhaps pushed through it into the cavity of the tympanum, there is nothing to be done, but to remove it at all hazards. Perhaps the best way, in case all attempts by means of delicate instruments introduced into the canal (which is at the same time well illuminated by a concave mirror placed on the forehead by means of a band) have failed to reach the body, will be to adopt Trolsch's suggestion and detach the auricle posteriorly, and thus reach the body from behind. Having thus separated the auricle from its attachment, the membrana tympani will be thoroughly exposed, when it will be very easy to remove anything which may be upon it. Of course all other reasonable and safe means should be employed before resorting to this operation, although it cannot be considered a dangerous method, which can hardly be said of the forcible attempts made through the auditory canal.

Years ago a case was recorded in the *Lancet*, and copied in Pilcher's work on the Ear, where a bit of nail

was hunted for in the ear of a child for a long time; pieces of bone were removed, but no nail. The patient finally died from meningitis induced by the attempts to remove something which the post-mortem examination showed was not there. I have heard of a similar case as occurring in this country.

I once had a case which gave me a great deal of uneasiness. A child was brought to me who had placed a button in the ear. The button, although lying very near the drum, was plainly to be seen. Several attempts had been previously made to remove it with the forceps, but they had only pushed the button farther in, and caused great pain. Faithful syringing had no effect. I then caused the child to be etherized, and, under a good illumination of the parts, attempted the removal with delicate instruments. These attempts also failed. Poultices were then placed over the meatus, and the button was brought to the orifice of the meatus by suppuration, when I removed it a number of weeks after. With my present experience, if such a case were to present itself, I should not use the forceps at all, but after the syringing had failed wait, until some disturbing symptoms arose.

We may sometimes place the head of the patient in such a position while syringing as to favor the exit of the foreign body better than by the ordinary upright position. Voltolini once removed a foreign body from the meatus by syringing the ear while the head was hanging over a chair.

The impossibility of securing binocular vision while operating in the ear, unless we are at a great distance from it, when it is very indistinct, which renders one unable to estimate depth, is one of the principal reasons for the failure of attempts with instruments to reach the offending substance.

In concluding, I might remark that the condition of things when a foreign body is in the ear is not quite analogous to that of the presence of one in the eye, where, as is well known, the removal of the foreign body is imperative. In the first place, there is no danger of sympathetic otitis; secondly, a foreign body in the ear is rarely an immediately dangerous matter. Thirdly, improper attempts to remove any foreign body from the organ of vision will probably only destroy the sight. The same sort of procedure in the ear not only involves the hearing, but also the life of the patient.

In view of these things we cannot be too earnestly warned against the hasty adoption of the numerous instrumental means for removing a foreign body from the ear, to the neglect of the simpler manipulation of syringing.

REMARKS ON PULMONARY PHTHISIS AND ITS CURABILITY.

By C. BOTH, M.D.,

OF BOSTON, MASS.

(No. 3.)

Before entering upon the field of treatment, it is necessary to mention a condition of the lungs which, although quite different in its causes and nature, can, in the end, become so similar to tuberculosis that it may be almost impossible to distinguish the two in life or at the post-mortem examination. I refer to what has been erroneously named "a chronic pneumonia." By pneumonia I understand that condition which occurs when the quantity of blood forced into the lungs by the heart exceeds the capacity of them, so that the circulating fluid cannot pass through quick enough. Under normal conditions (as mentioned in my first paper) the blood-serum only is permitted to pass through the walls of the capillaries; the fibrine and globules remain in the vessels. But when the pressure of the heart is increased abnormally, the capillary vessels, extended beyond their capacity, permit fibrine to pass through the dilated walls. This would be a pneumonia with simply fibrinous exudation. Should the pressure of the heart increase still further, the capillaries can become so distended as to burst, and blood globules are thrown into the tissue which, if they were not removed through the bronchi, will undergo the same changes which we see in tuberculosis. *The deposited cells with which we have to deal are, therefore, the same in pneumonia as in tuberculosis; the process by which they are thrown out is, however, a totally different one.* Inflammation of the tissue of the lungs produced by other causes should not be confounded with the process described, and which, I think, should alone be named pneumonia. A solidification (hepatisation) of the lungs in consequence of a pleuritic exudation is certainly different from that caused by mechanical hyperæmia of the capillaries. An inflammation of the lungs (an affection of tissue cells) in consequence of bronchitis, abscesses, or similar causes, is likewise different, and should rather be called *pneumonitis* to distinguish it from *pneumonia*.

An old pneumonic exudation, when seated in the lower lobes, can easily be distinguished from tuberculosis; but when in the apex, especially when in both, it may be impossible to distinguish the two forms. Post-mortem the pneumonic exudation would present more of a uniform solid mass, while tuberculosis would show more of the original structure of the meshes of the elastic tissue; however, if the degeneration has progressed far, it may be impossible in some cases to tell by the eye whether it was originally a pneumonic or a tuberculous deposit of cells. As it is not my object to extend these lines beyond the limits of tuberculosis, I shall not allow much space for old pneumonic exudations, the more as they are ably discussed in Niemeyer's treatise. I have only touched upon this latter affection for the purpose of marking the distinction between it and tuberculosis.

I will state, what I have accepted as a fact, namely, that any cell which is taken out of its natural place and connections must cease to live as such; neither can it grow or divide, since it is deprived of proper nourishment; *yet we are sure that its retrogression is dependent upon the place and surroundings into which it falls.* If a blood-cell leaves the vessel it must change into a pus-cell or a fat-cell, or it may calcify, or it may decay. These forms are identical with the gray tubercle, the yellow tubercle, the calcified tubercle; and the gangrenous decay represents the process known as "galloping phthisis." We can see these forms as well in old pneumonic exudations as in tuberculosis, and I consider both equally dangerous to life. If we are able to control the degeneration of such cells which cannot be removed altogether, we are enabled to modify this disease greatly, even if we cannot cure it.

I presume that enough has been said in the two previous papers regarding the prevention of tuberculosis in early youth; and it is likewise well known by experience what circumstances tend to create it during the progress of life. My object here is to show what we can do in those cases which have thus far baffled the skill of men and of time; I mean the developed tuberculosis, which makes its appearance slily and without any acute attacks whatever, and which always begins in the apex of the lung.

All medical men know, to-day, that tubercles have been found in a condition which may be called healed

or arrested, and that this condition always and invariably showed them in a calcified state. Such calcified tubercles have been found especially in the brain and lungs, and generally in individuals whom nobody ever suspected of being affected with such disorder. Common sense teaches that, as nature is able to arrest the decay of such displaced cells by calcification and, so to speak, accidentally, we should be able, or at all events aim, to gain the same end by art. This end then would be the "*artificial calcification*" of all displaced and degenerating cells which we are unable to remove from the body.

I wish distinctly to be understood that the especial treatment hereafter to be mentioned for the above purpose does not suit all cases of phthisis, especially those showing symptoms or evidence of acute inflammatory attacks. These cases require, as Niemeyer urges so strongly, absolute rest in bed. In cases of gangrenous decay of the deposited cells, or of loss of substance occasioned by large emptied cavities, or in cases of chronic pneumonic deposits solidifying a whole lobe, or in abscesses of the lungs, this treatment is not suitable. An accurate diagnosis, so very necessary in all these cases, is not difficult when the physical examination is compared with the rational signs.

The cases in which this treatment is effective are those occurring between the ages of 15 and 40 years, and in which physical examination denotes moderate, not absolute, dull percussion in the apices, the lower lobes being free. Expiration is remarkably sharp, and I should call it dry crepitation—(moist crepitation, as in pneumonia, is a sign of blood extravasation or of acute inflammatory processes). These cases never exhibit any acute exacerbations, and only occasional expectoration of small quantities of blood; expectoration is generally small in proportion to the coughing; skin dry, hot, and pale, with occasional night-sweats; the nails and lips showing a peculiar bluish paleness; pulse variable, sometimes febrile. Appetite generally better than the digestion. Gradual loss of flesh, the thorax showing the tendency to lean forward; no elasticity in the motion of the ribs and scapulæ. Such patients generally exhibit a remarkable fickleness, fancying themselves well one hour and being dejected and peevish the next. *Although the lungs of these patients show the same aspect in general, the individual circumstances are always of different character; consequently the direct treatment of the lungs is in principle always the same, while the general treatment must vary according to circumstances.*

Besides the cells which we find lodged in the meshes of the tissue, we meet, occasionally, with epithelium-cells, mucus, blood coagulum, and cells which only obstruct the finer bronchi and alveoles. To remove these must be our primary object. If we succeed in accomplishing this object we shall not only regain neglected alveoles and bronchi for respiration to some extent, but shall also restore the pressure on the tissue; consequently we can calculate upon the restoration of capillary circulation in some degree which finally enables us to act through the blood on the incarcerated cells, the removal of which is an impossibility without destroying the tissue. The cleansing of these obstructed bronchi and alveoles can only be accomplished through coughing and deep inhalations of air excited by irritation of the respiratory nerves. And this irritation must be done without exciting the motion of the heart, or we should miss our object entirely, and produce congestion and effusions into the surroundings of the sick parts. Under normal conditions the produced carbonic acid is one of the strongest irritants on the respiratory nerves. We consequently, after having once cleansed the bronchi and alveoles, must effect again the production of carbonic acid. This irritation may be brought about through tension of the muscles of the thorax, which by reflex action causes the patient to respire with more force than he could by his will only.

Our next object is to bring the blood of the patient to normal proportions. Some patients show symptoms of fibrinous, some of albuminous blood; all of them are affected more or less by leucocythæmia; their blood is full of imperfected and superfluous nitro-carbon combinations, and it contains fatty acids to which the perspiration owes its odor. Under all circumstances a complete digestion is necessary for this purpose. By introducing vegetable acids we are enabled to diminish fibrin, by salts albumen; by addition of vegetable substances containing sulphur, we can stimulate the action of the liver and increase the efficacy of the secreted bile; by increasing the activity of the glandular system generally, we enable the blood to throw off superfluous material; we can finally introduce lime into the blood in quantities sufficient for the calcification of displaced and incarcerated cells.

The insufficient knowledge with which physiological chemistry has thus far furnished us will make our calculations on these points somewhat hypothetical; and I give my views with the desire to submit them to fair criticisms, which must prove beneficial to all concerned. I only claim that the practical results are satisfactory, and I feel confident that this treatment is correct in principle.

In a few words, our endeavor should be, in the direct treatment of the lungs, *to extend and cleanse all the bronchi and alveoles through forced inhalations of air excited by irritation of the respiratory nerves, without exciting the motion of the heart.*

The principle in regard to general treatment is: *to bring the several constituents of the blood to normal proportions through well regulated digestion, and the introduction of such articles of food as are required in each case to attain this object. Further, to introduce lime into the blood in a form which will enable it to become a constituent thereof, and in quantities sufficient for the calcification of such degenerating cells as cannot be removed.*

It is hardly necessary to say that all those means should be taken advantage of which are known to be conducive to the welfare of such patients. Thus pure and dry air is preferable to damp and foggy air; the surroundings should be pleasant; sleeping apartments well ventilated and open to the sun; all occupations avoided which tend to compress the chest or annoy the patient; bathing and rubbing properly employed, etc. As to climate I am of the opinion that this is of but little consequence, each having its advantages and its disadvantages. The special treatment which I intend to advance, in my next article, shows the same effect in any climate.

Centenarians.—The greatest age ever attained in New Hampshire by any person whose age was positively known was that reached by Mr. Lovewell, of Dunstable, who died at 120. William Perkins, of New Market, reached 116, and Robert Macklin, of Wakefield, 115. Mr. Perkins died in 1732, and Mr. Macklin in 1787. The age of Flora Stewart, who died in Londonderry recently, is not positively known, but it was at least 108.

An Old Spring Revived.—The old Lafayette Spring, in Ballston, after fifty years of quietude, has again commenced flowing.

Consumption of Grapes in Paris, France.—Six million kilogrammes of grapes were consumed in Paris during the past year.

TRAUMATIC ANEURISMS OF ASCENDING AORTA.

ABSORPTION OF PORTION OF STERNUM—RUPTURE OF SAC EXTERNALLY.

By H. LE BARON HARTT, M.D.

NEW YORK.

On the 2nd of April, 1867, Joseph Marshall, machinist, aged 43 years, came to my class at the Eastern Dispensary in this city, with a tumor just perceptible between the first and second ribs, about an inch to the left of the sternum. The skin covering it was somewhat discolored. It pulsated strongly, and the diagnosis of aneurism of the aorta was evident. There was no bellows murmur; the sounds of the heart were heard distinctly behind the tumor.

The general symptoms were not striking; some cough (which had only existed for a few weeks), very little dyspnœa, pulse normal, impulse of the heart natural.

The patient gave the following history of himself: For a number of years he had been addicted to the very free use of alcoholic stimulants. In 1861 he enlisted, and at the battle of Bull Run, in July of that year, during a cavalry charge he was knocked down and trodden upon by a horse, when he felt something give way in his chest. He was in the hospital for several weeks; remained in the army, however, until 1864, having several furloughs on account of the state of his health. He suffered much from attacks of pain, mostly in the left side.

In the autumn of 1866 he was under medical treatment, suffering from pain, cough, and dyspnœa, but the presence of an aneurism was not detected, and he was pronounced cured of what was probably an attack of pleurisy. No history of aneurisms in any other member of the family, many of whom died young. I ordered the patient to keep perfectly quiet and to follow the general rules, long since recommended by Valsalva, from which such good results have lately been reported by Dr. Tuffnell.

Digitalis was ordered. Of course, not expecting any improvement, the treatment was merely palliative.

He neglected in a great measure to follow my directions, and in July went to work. Up to this time the external tumor was not increased. In October and November, it grew considerably larger, and the patient was troubled with aphonia, probably from pressure upon the recurrent laryngeal nerve. At the time he did not suffer much either from dyspnœa or dysphagia. After a very severe attack of pain and dyspnœa, about the 10th of December, during which the patient thought he was dying, the tumor became rapidly much larger and the aphonia disappeared.

About the 15th of March, 1868, the external swelling measured nine inches across from side to side, and eight inches from above downward; the base was six inches transversely; the elevation above the level of the walls of the chest nearly three inches; the whole forming nearly a hemisphere.

About the 20th of March the skin began to ulcerate, and during the last month of the patient's life, was destroyed over a space of three inches in diameter. During this time there was great pain posteriorly under the right shoulder; and constant dulness on percussion, with very much diminished respiration over the left lung.

The pulse *could* be felt in the arteries of the lower extremities. In the right radial it was stronger than in the left.

On the 18th of April, at 7 A.M., the aneurism broke externally, and in a few minutes a hæmorrhage of nearly a gallon occurred. The patient rallied somewhat; a slight oozing of blood was restrained by the application of liquor ferri subsulphatis.

On the 19th, at the same hour, there was another smaller hæmorrhage; and on the 20th, at 9¼ A.M., a third. The patient was then sinking rapidly, and at 1 P.M. the same day the hæmorrhage returned, while I was present, and proved fatal in a few minutes.

Post-mortem examination made twenty-two hours after death, in the presence of Professor Jacobi, Dr. Jos. Worster, and my father, Dr. H. A. Hartt.

There were two distinct aneurismal sacs arising from the ascending aorta just before the innominata is given off. One extended backward and to the right, was about four inches in diameter, and nearly filled with dense grey fibrinous deposits. The other was much more recent, and was given off nearly opposite the first, and extended forward and to the left. It contained clots in different stages of organization.

The descending arch of the aorta was studded with an immense number of points of fatty and cretaceous degeneration, some nearly half an inch in diameter. There was one small aneurismal sac in this portion of the vessel as large as a cherry. The innominata was enlarged. The right carotid and subclavian were affected with fatty degeneration to a smaller extent.

There was not as much absorption of bone as appeared probable during life. The sternum, however, was destroyed from half an inch below the manubrium throughout its entire diameter transversely, and 1½ inches vertically. The first left rib was partially absorbed.

Small fragments of bone were found nearly detached from their connection.

There was a very large pleuritic effusion in the left side, which was the cause of the diminished respiration and dull percussion sound.

MURDER OF DR. BRAMAN, U. S. A.—Dr. Chandler B. Braman, of Brighton, Mass., Acting Assistant Surgeon U. S. A., and Post Surgeon at Baton Rouge, La., was murdered recently. One of the Doctor's friends, Lieutenant Clark, had been robbed of his watch and a considerable sum of money. Suspicion fell upon Second Lieutenant William McGee, an officer of the same regiment. Lieutenant Clark, who is a member of the Masonic fraternity, as also was Dr. Braman, informed him of his loss, and the Doctor expressed his doubts of Lieutenant McGee. Their suspicions coming to the knowledge of General Sykes, the commanding officer of the garrison, he ordered an investigation, but nothing was proved against McGee. Dr. Braman then wrote a letter to General Sykes, regretting his action; said that his zeal as a Mason led him to help a brother Mason (Lieutenant Clark); that, in an interview with McGee, the latter removed his suspicions, and that he would do everything possible to counteract what had been done. McGee, however, was not satisfied, and at dusk, on the evening of August 15th, went to Dr. Braman's room with a revolver, and without any warning, shot him while in the act of rising from his chair. Dr. Braman immediately ran to a hospital tent near by, and was placed on a bed, where he died. McGee is only seventeen or eighteen years of age. He entered the army as a drummer-boy in the Thirty-Third New Jersey Regiment, and a year ago obtained a commission in the Regular Army. Men who have been discharged from his regiment represent him to be of dissipated habits, and often seen on duty under the influence of liquor.

DR. NÉLATON has been made a Senator of France.

Clinical Department.

BELLEVUE HOSPITAL.

OBSTETRIC CLINIC OF FORDYCE BARKER, M.D., PROFESSOR BELLEVUE HOSPITAL MEDICAL COLLEGE.

SEPTEMBER 18, 1868.

DR. BARKER called the attention of the class to the extraordinary number of complicated cases which had occurred in the wards since September 1st, 1868, and made brief remarks upon them. We append a table of all the cases delivered in the hospital during this period, for which, as well as for other notes, we are indebted to Dr. Charles S. Bull, House Physician.

Case.	Pregnancies.	Presentation and Position.	Stages. 1st. H.	M.	2nd. H.	M.	3rd. M.	Remarks.
1	Primipara	Vertex—R.O.A.	7	0	4	30	10	
2	Primipara	Vertex—L.O.A.	6	0	0	15	15	Secondary hæmorrhage on 3d day.
3	Primipara	Face	6	0	50	0	15	Powerless labor—Version—Forceps—Craniotomy.
4	Primipara	Vertex—L.O.A.	4	0	17	0	10	Powerless labor—Forceps.
5	Multipara	Transverse	2	0	40	0	10	Deformity of pelvis—Version failed—Spontaneous evolution.
6	Multipara	Vertex—L.O.A.	16	0	0	2	10	Very quick.
7	Primipara	Vertex—L.O.A.	9	0	0	15	10	
8	Multipara	Vertex—L.O.A	2	0	1	30	5	
9	Multipara	Vertex—L.O.A	0	30	1	0	15	Slight hæmorrhage
10	Multipara	Breech	5	0	1	0	5	
11	Multipara	Vertex—L.O.A.	28	0	2	0	10	Tedious labor.
12	Primipara	Vertex—L.O.A.	2	0	0	15	—	Membranes unruptured.
13	Multipara	Vertex—L.O.A.	18	0	4	0	2	
14	Multipara	Breech	18	0	0	5	20	Six months' fœtus—Adherent placenta—Secondary hæmorrhage on 4th day.
15	Multipara	Vertex—R.O.A.	10	0	1	0	15	
16	Primipara	Vertex—L.O.A.	24	0	4	0	15	
17	Primipara	Vertex—L.O.A.	9	0	4	30	30	
18	Multipara	Vertex—L.O.A.	8	0	1	0	10	
19	Multipara	Vertex—L.O.A.	2	0	5	0	10	
20	Primipara	Vertex—L.O.A.	12	0	1	30	30	
21	Multipara	Vertex—L.O.A.	3	0	1	30	15	
22	Multipara	Vertex—L.O.A.	6	0	1	0	10	Cord twice around neck.
23	Primipara	Vertex—L.O.A.	36	0	6	0	15	Tedious labor.
24	Primipara	Vertex—L.O.A.	7	0	2	0	15	
25	Primipara	Vertex—R.O.P.	4	0	2	0	10	
26	Primipara	Face	40	0	34	0	5	Powerless labor—Forceps—Craniotomy—Delivery.
27	Multipara	Vertex—L.O.A.	17	0	2	0	10	
28	Multipara	Vertex—L.O.A.	18	0	0	15	5	Cord around neck.
29	Multipara	Funis	20	0	4	0	5	Prolapse of funis—All attempts at replacing cord failed.
30	Multipara	Transverse } shoulder }	12	0	8	0	5	Prolapse of Funis—Version — Delivery.
31	Primipara	Vertex—L.O.A.	24	0	2	0	10	Puerperal convulsions—Powerless labor—Delivery by forceps.
32	Primipara	Vertex—L.O.A.	20	0	6	0	10	
33	Primipara	Vertex—L.O.A.	20	0	1	30	5	
34	Primipara	Vertex						Puerperal convulsions, 13 in all—controlled by chloroform.

L.O.A., right occipito-anterior; L.O.A., left occipito-anterior; R.O.P., right occipito-posterior.

Thus in 34 consecutive cases there were 27 vertex presentations, of which 23 were L. O. A., 2 were R. O. A., 1 was R. O. P., and 1 unstated; there were 2 face presentations, 2 transverse, 2 breech, and 1 funis presentation. There were 4 cases of powerless labor, 2 of these being face presentations, in both of which delivery by forceps was attempted and failed; craniotomy was then performed, and delivery effected. Puerperal convulsions occurred in 2 cases, in one of which the forceps were used, and in the other chloroform proved sufficient. Secondary hæmorrhage occurred in 2 cases; in 1 of these, with a six months' fœtus, the placenta was adherent. There was 1 case of prolapse of funis.

After-pains.—Dr. Barker alluded to the three varieties of these, which demanded different therapeutical procedures for their relief. The first variety was due to the retention of coagula within the uterus, and the efforts of the uterus to expel them. Manifestly the best security against the occurrence of this form was to ensure perfect contraction of the uterus after delivery. For this he was accustomed, in all ordinary labors to give a dose of ergot just as the child was being expelled, besides, of course, following down the fundus uteri with the hand. The ergot was a prophylactic against the after-pains as well as against post-partum hæmorrhage. He almost never employed it as an oxytocic. To relieve the pain a teaspoonful or two of paregoric, or ten grains of Tully's powder* might be used. This last he employed in preference to Dover's powder, in many cases, as less liable to produce nausea and unpleasant head-symptoms. The second variety of after-pains was due to intestinal irritation, and yielded generally to a laxative or mild purgative, such as castor oil, citrate of magnesia, or compound extract of colocynth, with a little of the alcoholic extract of nux vomica. Castor oil he never used where there was any tendency to hæmorrhoids. His favorite laxative, which always acted very easily and pleasantly, and gave great relief to hæmorrhoids, where they existed, was composed of equal parts of sulphate of magnesia, carbonate of magnesia, sublimed sulphur, and the bitartrate of potassa. Dose from two teaspoonfuls to a tablespoonful of the powder. The third variety was apparently neuralgic, yielding to five-grain doses of sulphate of quinia three times a day, but not to opium, even when carried to the point of narcosis.

Version.—Dr. Barker then remarked upon version in transverse presentations, stating that instead of attempting to turn by drawing down the feet, it was much easier to hook the finger over the anterior, or sub-pubic, knee. This was also less objectionable, since the hand did not require to be introduced so far within the uterus, as in the usual procedure recommended in the books.

Trismus Nascentium.—In the wards was a case of trismus nascentium in an infant three days old. The child had refused to nurse, and subsequently had convulsive movements of its limbs and head. It had urinated, and its bowels had moved. Dr. Barker believed that trismus nascentium was a disease of the nervous system, due to some zymotic poison, since it had been especially noticed as occurring during epidemics of puerperal fever. The prognosis was always very grave. Nevertheless he had been successful in the treatment of an infant, some time ago, who had, in addition to the other symptoms, well marked jaundice, and bleeding from the umbilicus. There was fatty degeneration of the placenta and also of the funis. The hæmorrhage was completely checked by applying plaster of Paris to the navel. Brandy, mixed with milk, was administered freely, to the extent of two ounces of brandy per day. It was after a time rejected by the stomach, and was then given by the rectum. This was continued for nearly a week, at the end of which time the child had so far improved as

* ℞ Morphiæ sulphat. gr. j., pulv. camphoræ, cretæ præparat., pulv. glycyrrhiz., ää 9j. M. Dose the same as that of Dover's powder.

to be able to nurse; and finally it made a complete recovery. It was now about two years old, strong and healthy.

SEPTEMBER 24, 1868.

Acute Hydrocephalus.—Infant boy of Mary S., born August 16, 1868. Labor natural. Child apparently healthy. Nothing abnormal manifested itself until the sixth day, when the mother noticed that the baby's head began to grow larger. Since then it has steadily increased in size. The child's bowels were at first confined, but are now regular. It at first passed very little urine. Iodide of potassium, two grains three times a day, was given with the hope of carrying off the fluid in the cranial cavity, but proved unsuccessful, although the amount of urine excreted was much increased. Oil of juniper was then given by inhalation, half a drachm three times a day in a teacup of boiling water. Under this treatment the fluid appeared to subside, but soon increased as before. Today, the circular measurement of the head is 19¼ inches, the bi-parietal 10¼ inches, and the occipito-mental 18½ inches. The sagittal suture is from an inch to an inch and a half wide, the coronal half an inch wide. The anterior fontanelle extends down to the origin of the nose; the posterior is well marked, extends to the base of the cranium, and is an inch and a half by two and a half or three inches in dimensions. This child has had no convulsions, cries little, sleeps much, and nurses well, the most marked evidence of its disease being the appearance of the head. The mother is perfectly healthy, and presents no signs of scrofula or tuberculosis.

After explaining the formation of the fontanelles, Dr. Barker remarked that the posterior fontanelle was rarely, if ever, found in healthy children. Hydrocephalus occurred in two forms, the acute and the chronic. In the acute form it might be either symptomatic or essential; symptomatic, when dependent upon disease of the cerebral meninges, or of the encephalon, or upon intra-cranial tuberculosis. Acute essential hydrocephalus, *i. e.*, rapid intra-cranial effusion, not consequent upon disease of the encephalon or upon its meninges or tuberculosis, was rare; yet cases had been recorded by Breschet, Aran, Andral, Trousseau, and others. But ordinarily acute essential hydrocephalus was consequent upon some other disease, especially scarlatina, and next in order of frequency, upon measles, and pneumonia. Chronic hydrocephalus was generally congenital, *i. e.*, it was developed during fœtal life, and was very rarely acquired after birth. Hydrocephalus was frequently a cause of difficult labor, necessitating the forceps or craniotomy. If the child were born alive, effusion was apt to occur rapidly. At present the cause of this disease was unknown. Some women seemed to have a tendency to give birth to children thus affected. In one case in his own practice, a woman having Bright's disease of the kidneys, gave birth to five hydrocephalic children, all still-born. Moral emotions, injuries to the mother during pregnancy, and deficient nutrition of the fœtus, were supposed to stand in a causative relation to the disease. It was also affirmed to be proportionally more common in unmarried women from moral causes; but, in reply to this, the effect of tight lacing to conceal pregnancy had been urged as an adequate physical cause to account for the occurrence of the disease in such cases. Habitual drunkenness of the father was still another condition thought to have a bearing upon the aetiology.

Hydrocephalus was almost always fatal, yet occasionally cases recovered. Dr. Barker had had two recoveries in his own practice. Acute essential hydrocephalus was more apt to end in recovery than the other forms, which depended upon vices of conformation or intra-cranial diseases. In spite of the gravity of the affection, it was always well to attempt to save life in any case. The treatment he had been led to believe the most efficacious was, in addition to securing good nutrition and perfect hygiene, the use of diuretics and absorbents, such as squill, digitalis, nitrate of potassa or iodide of potassium, especially the last, in two grain doses three times a day, the dose to be increased every second or third day till a decided impression was made, short of gastric irritation or other contra-indicating effect. In the present instance, he should follow this treatment, pushing the remedy, if necessary, till two grains were given every hour during the day. In cases where he had been unable to obtain diuresis by these remedies, he had produced rapid and profuse diuresis by inhalations of the vapors of the oil of juniper, administered half a drachm to a drachm in a teacup of hot water two or three times a day. In this case, the effect of this remedy had not been marked as yet. The external application of the compound iodine ointment had also been employed in some cases.

The surgical treatment of hydrocephalus consisted in strapping the head uniformly, so as to maintain equable pressure; tapping had been recommended by some authors. Dr. Barker had never seen the latter resorted to with good results. One author stated that two out of every seven cases did well under it, but this was contrary to Dr. Barker's general experience, and those infants upon which he had seen it tried, died speedily. The evacuation of the fluid was merely a palliative, the fluid rapidly re-accumulating. Nor had he seen any better results from strapping. He had never tried it in his own practice; in the cases he had seen subjected to this treatment, convulsions ensued. He was, therefore, led to place more confidence in the diuretic and alterative treatment above stated. As an instance of its efficacy, he mentioned the case of a child who took iodide of potassium constantly till his third or fourth year. During this period he had more than one hundred convulsions, sometimes as many as eight or ten in one day, and yet he recovered after his fourth year. At fifteen, he was nearly the same as other children in general physical and mental development, and he is now a promising young man in his twenty-seventh year.

SURGICAL CLINIC OF ALFX. B. MOTT, M.D., PROF. BELLEVUE HOSPITAL MEDICAL COLLEGE.

SEPTEMBER 19, 1868.

CASE I.—*Necrosis of Lower Jaw: Operation.*—A middle-aged man, a worker in soda and potash, had had the first lower molar of the left side extracted nine weeks before. At the time considerable pain was felt, which, on the second day, became so intense that he had to suspend labor. The face swelled and the eye closed on the affected side. Three weeks later pus was discharged from the mouth, and afterwards from external openings, which formed over the body of the jaw-bone and on the left side of the neck. The probe, introduced into these openings, touched dead bone.

Operation.—Chloroform administered, followed by ether. Dr. Mott made a curved incision, about two inches in length, along the base of the jaw, through the most anterior sinus, dividing the facial artery and avoiding the vein. Both ends of the artery were ligated, which Dr. Mott strongly recommended doing whenever this artery was severed. After dissecting up the periosteum, he removed a small plate of dead bone, the size of the thumb nail, and afterwards two larger pieces, each about half an inch by two inches. One of these

extended from the articulation to the angle of the jaw, and in most of its extent through the entire thickness of the bone. The sinus in the neck, which was quite superficial, was freely opened. There was some oozing from the incision over the jaw, so that it was temporarily left open, and pressure applied by means of sponges. It would not be completely closed, since it must heal from the bottom by granulation.

Dr. M. declared this the most rapid case of extensive disease of this bone he had ever witnessed, and attributed it to fracture of the jaw from violence when the tooth was extracted. He could not, of course, say whether the man had not, subsequent to the extraction of his tooth, been exposed to noxious emanations, such as those from phosphorus, although the history did not indicate such exposure. This being the most frequent cause of necrosis in this bone, it was always advisable that persons engaged in working in phosphorus should not return to work immediately after the extraction of teeth, or until the socket of the tooth had healed.

Dr. M. exhibited the patient Sept. 26th, one week after the operation. Wound healing well. No pain, and no discharge from mouth.

Case II.—*Popliteal Aneurism.*—Man, æt. 35, Irish peiler. Admitted August 10th, 1868. Always healthy, a great walker, and accustomed to carry heavy loads. Had had, for several months, a swelling in the left popliteal space; four weeks ago, after a long walk, the tumor became inflamed, and for this he entered the hospital. Aneurism was diagnosticated. Slight hæmorrhage occurred from rupture of the sac, ten days after admission, for which the femoral artery was tied by Dr. Mott, August 20th. The ligature came away on the fourteenth day, and about the same time the tumor began to slough. The wound of operation had now nearly healed. The bone, at the seat of the tumor, was denuded from pressure of the tumor upon it, and was indicative of a longer existence of the disease than the patient had reported. An interesting feature in the case, and one which perhaps bore upon the causation of the aneurism, was congenital deformity of the left arm and leg. The leg was about two inches shorter than the right one, and the foot contracted, somewhat resembling talipes equino-varus. This shortness of the leg would necessitate greater muscular effort upon its part. The man also had constitutional syphilis, as shown by the coppery blotches on his legs; this taint might also have had some bearing upon the predisposition to his disease.

September 26, 1868.

Case III.—*Popliteal Aneurism: Ligation of the Femoral in Scarpa's Space.*—This case differed from the preceding, in that the man was healthy, and his disease arose from injury received by jumping from a cart and falling between two rocks, probably rupturing the popliteal artery. He had the sensation, at the time, of "blood pouring into his boot," although, on taking it off, no blood was found. The aneurism was of nine months' standing, growing steadily from the time of injury. It was a much more favorable case for operation, since, apart from his excellent constitutional condition, the disease was in the second or more fluid stage than the previous case, and therefore less likely to slough—whereas, in the previous case, the aneurism was of such long standing as to have produced disease of the bone. Ether and chloroform were given freely, and the artery was tied in the usual way. Dr. Mott remarked that it was not unusual to wound some of the small veins overlying the artery and entering its sheath. Blood would well up suddenly in the wound, and we might imagine that we had wounded the artery, but this hæmorrhage would generally cease in a few moments. He preferred the common silk ligature, tied in two single knots so as to form one flat knot, to the double knot, which was not tight. The two ends of the ligature depending from the wound were knotted together. Interrupted sutures and strips of adhesive plaster placed between the sutures. Leg extended and slightly flexed, and enveloped in cotton batting, maintained in position by a light bandage, preferably of flannel.

Case IV.—*Sloughing of both Feet from Frost-Bite: Contraction of the Tendines Achillis: Tenotomy.*—The man had lost both feet, at about the tarso-metatarsal articulation, three years ago. The attachments of the anterior muscles being lost, the tendines Achillis had gradually drawn up the heels of both feet, so that he had become unable to walk, and had crawled upon hands and knees for some time. Dr. Mott cut the two tendons, and applied an apparatus intended to draw the anterior ends of the stumps upward; it consisted essentially of a strong india-rubber band attached to the front of the shoe and above to the leg; the heel of the foot was firmly secured by a strap over the instep. The difficulty of applying an apparatus in this case arose from the want of sufficient stump to obtain good leverage. The man had constitutional syphilis of four years' standing. In performing tenotomy on this tendon, Dr. Mott prefered to cut from above downward, after the knife was introduced through the skin.

Case V.—*Ligation of Femoral twice, and subsequent Ligation of External Iliac.*—A young man had wounded his right femoral artery, with a penknife, in the lower part of Scarpa's space. A silver ligature had been placed around the artery in the upper part of that space by another surgeon, but did not constrict the artery sufficiently. Hæmorrhage occurred, and Dr. Mott tied the artery with a silk ligature, beneath Poupart's ligament. The ligature came away in fifteen days, and hæmorrhage again occurred. He then tied the external iliac, and the patient had entirely recovered. Dr. Mott strongly advised using silk for ligating arteries; silver wire was not secure, and should be used only for sutures.

Case VI.—*Pott's Disease.*—Boy. Disease of three years' standing. Dr. Mott remarked that in treating this disease we should imitate nature. Nature attempted to establish a discharge from the carious bones by forming abscesses, which would open in the back or loins, or, if neglected, the pus would find its way out through a psoas abscess. Hence, from a large experience in these cases, he strongly advised establishing an issue early; even in cases in which paraplegia existed, he had seen the use of the limbs partially restored under this treatment in the course of two or three weeks, and ultimate recovery take place. Two issues on the sides were better than one only. Support to the sides of the trunk by appropriate apparatus, and tonics with nutritious diet would complete the treatment.

Case VII.—*Pulsating Cervical Tumor.*—Woman, æt. 57. Had been in the habit of carrying heavy weights on the head. Generally healthy. Drank spirits more or less. Had received hard usage from her husband, having frequently been beaten over the head. A pulsating tumor extended along the course of the right carotid artery from its origin, and extended tortuously upward from opposite the thyroid cartilage. The tumor was movable, and was probably the carotid dilated to more than double its natural size. There was no aneurismal bruit, and no other evidence that the disease was aneurismal. Its peculiar "elbow-joint" bend might be a provision of nature to prevent the formation of an aneurism.

BELLEVUE HOSPITAL MEDICAL COLLEGE.

CLINICAL LECTURES OF PROF. WILLIAM H. VAN BUREN.

SEPTEMBER 17 AND 24, 1868.

[From the cases presented at these lectures of Dr. Van Buren, we select the following.]

CASE I. *Tuberculous Testis.*—Irishman, middle-aged, boiler-maker. Partially deaf, an effect of his occupation. Has been in the United States twenty years. Mother died æt. eighty years, and father æt. fifty. One brother died at forty-six, of consumption. He himself was generally healthy, drank more or less, had a slight cough, and only a moderate appetite; he disliked fatty food. Never had hæmoptysis. Has physical signs of pulmonary tuberculosis; pulse more frequent than natural. Three years ago he fell and broke his right arm and injured his head, but was not aware of having injured his scrotum. Three months later, his right testicle began to swell, and was opened; blood alone was discharged. Subsequently an abscess formed, and opened spontaneously at several points. There was no pain or dragging sensation in the scrotum. The right spermatic cord was thickened; the testis was hard, and slightly elastic; the epididymis was more solid. The skin was adherent over the tumor. Thin, unhealthy pus was discharged from the sinuses.

This was a case of tuberculous deposit in the testis, probably beginning in the epididymis, which is generally the history of this class of cases. Transportation over the ocean seemed to be a fertile source of the development of tuberculosis in the Irish. It had been popularly affirmed that fifty per cent. of our Irish population perished of this disease in its various forms. As manifested in the testicle, the inflammation was painless from the first, and indolent, the sinuses refusing to heal. It was more apt to attack young men, because the functional activity of the organ was greater in youth. In the present case, it is not unlikely that the primary tuberculous infiltration occurred in early life, but gave rise to no symptoms. The dislike to fatty food was a point to which Dr. Van B. had been led by his experience to attach great importance as bearing upon the existence of tuberculosis. The treatment in this case would be, first, to correct the constitutional condition as far as possible by enjoining the use of fatty food, especially in the form of cod-liver oil, and by giving a little stimulus, such as lager-beer. The sinuses would not heal rapidly. If constitutional means did not prove successful, castration might become necessary. This was probably as safe an operation as any in surgery. Tuberculous disease of the testis was also interesting as having many points in common with pulmonary tuberculosis.

He briefly recounted the case of a young man with the former disease in both testes; he had urethral hæmorrhage antecedent to its development, and subsequently double hydrocele; these were symptoms comparable with hæmoptysis and pleuritic effusion.

CASE II. *Syphilitic Testis.*—The patient was Irish, thirty-four years old, married five years ago. Had had two children, of which one had died. Had had several chancres—the first fifteen, the last three years ago—but could remember no subsequent eruption on the skin. Had come to this country when ten years old. His father died of "fever" at forty; his mother was living and healthy. One brother died young. He himself had been generally healthy; had yellow fever in New Orleans five years ago, but had been well since. Was a moderate eater, and rather thin. About five weeks ago he noticed slight pain in the lower part of the hypogastric region, and, while examining for its cause, accidentally discovered that his right testicle was enlarged to about its present size. On examination at this time, it was uniformly hard and smooth, and not painful on pressure. Owing to the existence of two strictures—one three inches and the other five inches from the orifice of the meatus urinarius—and of some gleet, he had pain radiating from the back down the legs. He had had clap three times. The left testis was healthy. The left inguinal glands were enlarged, and scars of buboes existed in the groins. There had been no headache or sore-throat. He was pallid, and, on a cursory examination, two tertiary blotches on the skin were found, which were as good evidence as many to a trained eye.

This was a case of syphilitic sarcocele, or syphilitic testicle, as it was now called. In many points, as illustrated in these cases, it was similar to tuberculous testicle. Hydrocele occurred in both diseases. In the syphilitic, after tapping, we would find an enlarged syphilitic testicle behind. The appropriate treatment was specific. Dr. Van B. was very fond of giving a little biniodide of mercury, and a great deal of iodide of potassium. It often took a long time to reduce syphilitic testicle. In the present case he would give five grains of iodide of potassium, well diluted, two or three times daily, and increase by a grain or two every two or three days, until the testicle became softer and smaller. The syphilitic exudation between the tubuli seminiferi and the coils of the seminal duct, was similar to that of the so-called gummy tumors, and would be removed by iodide of potassium; hence some value might be attached to this drug in a diagnostic point of view, in case any doubt existed as to the character of the disease. In cases of syphilitic hydrocele, it was not well to inject tincture of iodine into the sac.

In regard to the differential diagnosis of the tubercular and syphilitic affections of the testicle, the information to be derived from an appreciation of the local features, was in Dr. Van B.'s observation unsatisfactory; and this naturally followed from the similarity in the pathological features of the two diseases. There is in each a deposit of morbid material in the glandular parenchyma—in the one, of tubercular matter; in the other, of the gummy exudation peculiar to syphilis. The symptoms which follow naturally resemble each other in the two diseases. Both are chronic and painless. In both hydrocele is liable to occur, and both testes are apt to be affected. In both, after a time, there is a tendency to get rid of the morbid deposit by indolent and generally ineffectual suppuration and ulceration, with liability to sinuses and fungous testis. The syphilitic testis is more smooth and globular or ovoid in its shape, and when both testes are involved—which is often the case—the sexual powers are abolished, which is not often the case in the tubercular disease. The safest ground on which to base a diagnosis, is in the recognition of the patient's diathesis, and this is generally sufficient. Where both the tubercular and syphilitic diatheses coexist, as is sometimes the case, the tentative administration of the iodide of potassium offers the best chance: for the syphilitic deposit will disappear under its influence, whilst tubercle is not affected by it.

CASE III. *Enlarged Prostate: Suprapubic Puncture of Bladder.*—Dr. Van Buren gave the history of a case he was treating. A merchant, aged sixty-six years, reported himself unable to pass his water. Catheterism unsuccessful. An olive-headed bougie was finally passed, and the water drawn off. The posterior lobe of the prostate was very large, and pushed up the mucous membrane of the bladder, so as to form a kind of pocket at the beginning of the urethra. The difficulty recurred. Bougies and Mercier's catheter failed to pass. Forced catheterism was thought of, but not adopted. The patient had become delirious, and had fever and a

high pulse. Puncture of the bladder through the rectum was next thought of, but given up on finding that the finger could not reach the base of the posterior lobe of the prostate. Hence puncture over the pubes was resorted to. A straight incision was made in the median line down to the walls of the bladder. With the tip of the finger in the wound, a trocar and canula were guided down to the bladder, and thrust in and maintained in position by adhesive plaster. Three pints of urine were drawn off. The fever gradually subsided as well as the delirium. The operation was made five days ago. We may hope that, in a week or two more, the urethral inflammation will have so far subsided that it will be possible to pass a catheter, and teach the patient how to use it himself in future, which he may have to do the remainder of his life.

Progress of Medical Science.

Cysts in the Mammary Gland.—Dr. Birkett recently delivered a lecture in Guy's Hospital, London, on a class of tumors containing fluid, developed in the female breast. Details of twelve cases were given. These tumors depend on the development of the membranous sac of the echinococcus. From the report of Dr. Birkett's lecture in the *Lancet*, we take the following hints on the diagnosis and treatment of this form of tumor.

First, in relation to the ages of the patients at the time when the tumor was observed. The extremes were thirty and fifty-four years; eight of the whole number being between forty and fifty-four. Now that happens to be the period of life at which carcinoma is most commonly developed, and when any woman discovers a hard tumor in her breast at this age she at once concludes that it must be cancer.

We may next observe that six of the patients were married women, and six single. But of the six married, four were sterile. The physiological fact deduced from this examination of the procreative function is, that these simple cysts are probably associated with a state of the breast produced by functional inactivity. For in one case only had the affected gland performed its natural functions; in eleven it had never been stimulated to do so.

The general health of the patients was usually good. Some had been slightly inconvenienced by catamenial irregularities, but not to a severe degree.

We must next fix your attention on the aid derived from the tactile examination of the tumor. The objective signs are firmness, even hardness, a globular, uniform body produced by some circumscribed growth embedded between the lobes of the gland, or rising upon their surface. But you should be cautious how you estimate the size of the tumors. If you grasp the tumor and surrounding gland-tissue between the fingers and thumb, you will imagine that there is a much larger growth than really exists; but if you carefully define the limits of the tumor alone by using the point of the index-finger only, its dimensions may be meted with sufficient accuracy. The patient may be placed in the recumbent posture with advantage during the examination; but in every objective examination of a tumor developed in the breast, the surgeon has to decide, first, whether it consists of a solid growth or a fluid, or of both together. This, the primary object in the examination, must be ascertained with the utmost precision. Now, by repeated practice you will be able to discriminate between a cyst containing fluid and a solid growth by the sensation termed "fluctuation," which fluid, compressed, communicates to the finger tip. If this sensation be not distinctly felt, which happens when the cyst-wall is tightly stretched, the elasticity of the tumor forms a marked characteristic of small circumscribed collections of fluid. Sometimes in these cases a very peculiar furrow has been felt running round the tumor between it and the gland-tissue. That circumstance I regard as a very important aid to diagnosis. Having then arrived at the conclusion that the tumor contains fluid, the surgeon should insert a very fine trocar and canula with the object of obtaining some of it for examination. That done, and a few drachms of colored, clear, or turbid serum having flowed out, which on examination shows an alkaline reaction, and which does not coagulate either with nitric acid, or when heated, the diagnosis is clearly established. Thus, in adopting the above measure, we at the same time perform the operation suited for the cure of the complaint, as the cases show that the cyst does not refill.

Physiological Effects of Alcoholic Drinks on Man.—Professor N. S. Davis, of Chicago, Ill. (*Am. Journal Med. Sciences*), after a series of experimental inquiries concerning the physiological effects of alcoholic drinks on man, gives the following conclusions: (1.) The presence of alcohol in the blood directly interferes with the normal play of vital affinities and of cell action, in such a manner as to diminish the rapidity of nutrition and disintegration, and, consequently, to diminish the functions of elimination, calorification, and innervation; showing alcohol to be a positive organic sedative instead of a diffusible stimulant, as is popularly supposed. (2.) That alcohol acts in the system exclusively as a foreign substance, and is excreted or eliminated without chemical change.

American Pepsine.—Jas. S. Hawley, M.D. (Greenpoint, L. I.), has prepared two forms of pepsine, which he considers superior to the preparation of M. Bodault, of Paris. The American pepsine is destitute of color, and possesses but a faint odor. The following are the forms in which the remedy will be offered:

1st. Powdered Pepsine. Dose, 15 to 20 grains.

2d. Liquid Pepsine. Dose, 1 or 2 drachms.

Pepsine is incompatible with alkalies, astringents, and alcohol.

Treatment of Abscess by Chloride of Zinc.—At a meeting of the Clinical Society of London, Mr. de Morgan read a paper on the use of Chloride of Zinc Solution in the treatment of abscess connected with diseased joints, insisting upon the utility of antiseptics in general, which he considered a great boon in the treatment of hospital patients. At the Middlesex there had been a remarkable diminution in the number of cases of pyæmia and erysipelas occurring in the wards since these remedies had been generally used. The chloride of zinc seems to form a coagulum over the wound, and this is incapable of decomposition, and fluids in the wound are thus kept free from taint. After some remarks respecting the causes of putrefactive decomposition, he mentioned several cases in which abscess was treated with the chloride under the most unfavorable circumstances. Their cure had been as rapid as could be the case in abscess of the same extent in the most healthy persons placed under the most favorable conditions. The cases related were chosen simply because they all happened to be in the hospital at the same time.

Treatment of Diarrhœa in the London Hospitals.—At the *Middlesex Hospital*, as many as sixty diarrhœa patients per day have been prescribed for by the resident medical officer, and others. The favorite prescription in this institution is the mistura haematoxyli of the London Pharmacopœia. It is made as follows:

extract of hæmatoxylon, sixty grains; tincture of catechu, two drachms; caraway water and boiling water, of each five drachms; to be taken every four hours. Five or ten minims of tincture of opium are added in some cases to each dose. All patients are ordered to their beds, and to restrict themselves to milk.

During the past season a large number of persons have applied to the *Charing Cross Hospital* for treatment. The hall porter gives to casual patients a simple astringent mixture, made of rhubarb and chalk mixture. These articles constitute the basis of the treatment of diarrhœa at this hospital. Dr. Julius Pollock gives dilute sulphuric acid with tincture of krameria, opium, and cinnamon-water, when the flux lasts quite a time. He also orders, when there is abdominal pain, mustard and linseed poultices, or hot fomentations to the belly.

Between July 4th and 18th, 112 patients with diarrhœa were treated at *St. Thomas's Hospital*. Twenty-four pints of diarrhœa mixture were given out by the porter in single doses. A great many of the cases were children. For infantile diarrhœa, Dr. Jervis gives decoction of logwood mixed with lime-water. Dr. Barnes uses kino, catechu, or krameria, with the decoction of logwood. The resident medical officer, for casual cases, gives a dose of the hospital mixture, made as follows: tincture of rhubarb, half a drachm; tincture of opium, ten minims; aromatic spirit of ammonia, one drachm; and peppermint water, an ounce and a half; combined with a couple of grains of calomel. When there is vomiting associated with diarrhœa, Mr. Whitefield orders twenty minims of chlorodyne combined with five or ten grains of carbonate of soda.

The usual treatment in the *London Hospital* has been, when the stomach was foul at the commencement of the disease, castor-oil and laudanum, and patients directed to place themselves in the recumbent posture, with farinaceous diet. When the tongue was clean, aromatic sulphuric acid, with logwood decoction, pategoric, and chloric ether, was ordered. From June 29th to July 27th, 5,719 patients applied for treatment in this affection.

Dr. Daffin, of the *King's College Hospital*, gives castor-oil, followed by chalk mixture. The regular diarrhœa mixture of his hospital is composed of castor-oil, tragacanth, and oil of cinnamon.

Between 200 and 300 patients daily have attended the *University College Hospital*, although it is situated in a healthy locality. But persons come from Whitechapel and the south side of the Thames, because the diarrhœa mixture given out there is so agreeable to the taste—being composed of dilute sulphuric acid in an aromatic water; now a small amount of as-afœtida has been added, which does not make it quite so agreeable.

At *Guy's Hospital*, the ordinary treatment is by astringents, the chalk, opium, and catechu mixture. Sometimes a little Dover's powder is prescribed in the julep ammonia of the Hospital Pharmacopœia.

Dr. Basham's favorite prescription at *Westminster Hospital* is sulphuric acid and laudanum, five minims of the former and three of the latter to an ounce of water. The compound rhubarb mixture (containing tincture of rhubarb and chalk) is often prescribed at this hospital. Chalk mixture is mostly given to children.—*Med. Times and Gazette, Aug.* 1, 1868.

Diagnosis of Cancrum Oris.—At the Dublin Hospital (*Med. Press and Circ.*) Mr. Croly, one of the hospital surgeons, made some remarks in reference to the diagnosis of this disease, after an operation made on the person of a little child 5 years of age. He stated that cancrum oris is a curious sequela of measles, and found among delicate and ill-nourished children. This disease is often confounded with mercurial salivation, but may easily be diagnosed by an account of the case, and by the fact of this disease attacking only *one* side of the mouth, while mercurial sloughing occurs at both sides.

Treatment of Tongue-tie.—Mr. Maunder, of London Hospital, lacerates or tears the membrane with the fore-finger. The finger is introduced into the mouth under the plea of examining the deformity, when pressure is made downwards and backwards towards the floor of the mouth, and the frænum is torn by the finger-nail. This plan, he states, is very acceptable to mothers.

To Relieve Pain in Open Cancer.—In the London Middlesex Hospital (*Lancet*, Aug. 8, 1868) the intense pain of open cancer is best relieved by the stramonium ointment. The following formula is the one in use at that institution: Half a pound of fresh stramonium leaves and two pounds of lard; mix the bruised leaves with the lard, and expose to a mild heat until the leaves become friable, then strain through lint. The ointment is spread upon lint, and the dressing changed three times a day.

Prolonged Suppression of Urine.—Dr. Gallina, of Leno Bresciano, mentions (*Gazetta Med. Ital. Lombardia*) the following remarkable case: A mother, aged 27, married, applied to him for treatment after suffering for five months from amenorrhœa and leucorrhœa, and had not passed any urine for the previous twenty-four hours. He removed by the catheter a few drops of dark coffee-colored fluid. For the next eight days no urine appeared, and leeches were applied to the perinæum and the nitrate of urea given. Leeches and tepid baths were constantly made use of until the patient reached the twenty-fifth day of suspension, when she consulted Dr. Albertini, of the Milan Hospital. Her general health had not suffered. After a careful examination of two hours, nothing could be detected amiss aside from the absence of a secretion of urine. Professor Rodolf, of Brescia, was also called in consultation, and was persuaded that the suspension was due to amenorrhœa. Emmenagogues were given, which produced the menstrual flux. Six hundred grammes of urine were drawn off by the catheter on the forty-third day after the suspension. The day after the withdrawal of the urine it passed spontaneously, and continues to do so at last accounts, her health not having suffered from this prolonged suspension.

Thymic Acid.—The essential oil of thyme is the parent of this acid. Its composition is $C_{20}H_{14}O_2$, and is without smell, with powerful antiseptic qualities. In a concentrated form it may be substituted for nitrate of silver. As an antiseptic, it should be dissolved in 1000 parts of water, with an addition of a little alcohol.—*Lancet.*

A Case of Ulceration of the Ear.—Quite an interesting case of ulceration of the ear, with chronic inflammation of the auditory canal, and thickening of the vocal cords, is narrated by T. F. Rumbold, M.D., St. Louis, Mo. (*The Humboldt Med. Archives*). A female, aged 22, stated to him that when seven years old she had an attack of typhoid fever. Upon recovery it was observed that she was entirely deaf, so much so that the loudest thunder was not recognized.

For several years she was answered by signs after speaking to those around her. In the course of time she was sent to the Felton Institution for the Deaf and Dumb, and graduated there. On her return home she had forgotten the language of ordinary conversation, and conversed "on her fingers."

In the spring of 1863, her hearing improved to such

an extent that she could hear a large hand-bell when rung near her head.

On examination, the view of the tympanum of the right ear was obstructed by a thick muco-purulent secretion. By washing this out, the tympanum was found to be absent, and the mucous membrane of the middle ear was so much thickened as to fill up the canal. In the left meatus, muco-purulent secretion was also found, a perforation about one line and a half in diameter was noticed, and the mucous membrane of the middle ear protruded through the orifice in the tympanum. After the removal of the secretion and cleansing of the meatus, she thought there was an improvement in her hearing.

The rhinoscope showed, that the mucous membrane of the naso-pharyngeal cavity was much thickened, and inspissated secretions closed the orifices of both Eustachian tubes.

A solution of hypo-sulphite of soda, grs. x., to water, ʒj., was made use of, by means of a brush or sponge, so as to keep both ears and naso-pharyngeal cavity clean, and nebulization with the same solution. The secretions in and around the mouths of the Eustachian tubes were removed by a curved instrument armed with a sponge. A solution of iodine, gr. j., potass. iodide, ℈j., in glycerine, ʒj., was nebulized upon it long enough to insure the entire surface being covered. This treatment was continued once every day for two weeks. A marked improvement followed; the secretions were not so abundant; the fetor was entirely relieved. Iodized air was also forced through the Eustachian tubes, by means of the Eustachian catheter and Dr. Buttles' apparatus; and the application of localized electricity.

Poisoning by Absorption of Carbolic Acid.—E. S. Machin, Esq. (*British Med. Jour.*), refers to three cases of itch where the parts were dressed with carbolic acid and symptoms of poisoning ensued, consisting of smarting pain at the point of application, headache, and coma. Two of the patients actually died, and the third was only rallied with considerable difficulty. The acid used was that known as Calvert's, and about six ounces were employed upon the three cases.

The Use of Pepsine in Infantile Diarrhœa.—James S. Hawley, M.D., of Greenpoint, L. I., advocates the use of *American pepsine* in the diarrhœa of infants, for the purpose of converting the ingesta into nutriment. The food going through the intestinal canal in an undigested form, becomes an irritant. And this is not all: the food does not always remain a simple, foreign substance, but undergoes putrefaction, decomposition adding new and more active sources of disease.

The indications in this disease are as follows: *First*, to remove all sources of irritation from the quality of the ingesta; *Secondly*, allaying irritation by sedatives; *Thirdly*, artificial digestion by the administration of pepsine.

M. Corvisart and M. Barthez, of Paris, have made use of pepsine, both in adult and infantile cases, with success.

Dr. H. has been in the habit of administering pepsine in the diarrhœa of fed and teething infants for several years, with favorable results.

Cases are detailed by him, where the following simple prescription terminated the disease:

℞ Am. Pepsine, Subnit. Bismuth, āā gr. v. every three or four hours.

℞ Am. Pepsine, Subnit. Bismuth, āā ʒj.; Pulv. Opii, gr. j.; divided into twelve powders, and one given every two to four hours, according to circumstances.

In conclusion, he commends pepsine in the treatment of infantile diarrhœa, especially during the period of dentition. It has no noxious or perturbing qualities, and to some extent has borne the test of experience.

Absorption of Fibroid Tumors of the Uterus.—J. C. Peters, M.D. (*N. Y. Medical Gazette*), had a case of fibroid tumor, which diminished and almost disappeared under the continued use of tincture of cannabis indica in twenty to thirty-drop doses, persisted in for over two years. It was given for the purpose of arresting hæmorrhage and relieving pain, without disturbing the digestion.

The pains about the uterus, pelvis, hips, and thighs, ceased under this treatment; the appetite and strength improved, and finally the tumor diminished in size, and the remains of it can now only be detected by careful manipulation. All hæmorrhage has ceased for over a year.

Uterine Displacements.—In an article on "Uterine Displacements," in the *Lancet*, by Alfred Meadows, M.D., M.R.C.P., the following facts are presented: *First*, that married women are more subject to uterine displacements than single women. *Secondly*, if sterility is not caused by these displacements, it is associated very often with them. *Thirdly*, abortions are very often found in women with uterine displacement. *Fourthly*, the average number of pregnancies, including abortions, is four and one-quarter for each fertile woman, which suggests the idea that disorders of the uterus may be caused by frequent gestation. *Lastly*, we find that a great proportion of these displacements happen between the ages of twenty-five and thirty-five years, when the uterus is heavily taxed for the procreative function.

The Diagnosis of Rectal Diseases.—Prof. Horatio R. Storer, of Boston, in an article published in the second number of the *American Journal of Obstetrics*, on "The Rectum in its Relations to Uterine Disease," gives some useful hints on the diagnosis of rectal diseases in women.

Of late years he has thrown aside every form of anal speculum, save in the treatment of diseases, and depends not only upon the digital examination, but upon eversion through the anal orifice by pressure within the vagina.

On account of the aversion to rectal examinations by ladies, instead of examining the rectum in the first place, as he passes his finger along the recto-vaginal septum in making the vaginal touch, as he formerly was accustomed to do, the following method is substituted for it: The recto-vaginal wall is examined in the descent of the finger from the *fornix vaginæ*, and before withdrawing it fully, the operation of eversion is performed; the act being accomplished before the patient has time to object. This part of the examination being over, she is far more ready to allow the finger to be passed through the anus from without. The finger should be besmeared with some unguent, and he uses for this purpose a weak solution of carbolic acid in glycerine, and the operator can scent it with bergamot, &c.

When the examination is productive of great suffering, ether, in preference to chloroform, should be employed as an anæsthetic; the nausea, vomiting, &c., can be prevented by the use of bromide of potassium. Anæsthesia destroys the patient's feeling of disgust, and relaxes muscular contractions.

Treatment of Paralysis by Hypodermic Injections of Strychnine.—M. Gonzalez Echeverria, M.D., in a paper read before the Connecticut Medical Society, May 28th, 1868, narrated several cases of paralysis

treated by him, by hypodermic injections of strychnine, with remarks on infantile palsy.

These cases were selected by him as evidences of subcutaneous injections, proving by themselves an efficient means of treatment.

Case I.—A soldier, after being on picket duty all night, in water up to his knees, was admitted into the Central Park U. S. A. General Hospital, with paraplegia. The limbs were blue and cold, without sensibility, up to the knees. Lithates were abundant in the urine. The bowels and bladder were torpid. By the application of electricity to the limbs, and the internal use of tonics and strychnine, the paralyzed condition was slowly relieved. One-sixtieth of a grain of sulphate of strychnine was injected below the knee. The operation was repeated four or five times, at intervals of three days, and from the first injection, the patient, to his great joy, could walk without crutches. A feeling of warmth was noticed after the first puncture, with marked diaphoresis.

Case II.—A gentleman, on account of a sudden exposure to cold, while playing tenpins, became paralytic in the right leg. The patient, from the onset, was in constant agony from pain. Slight temporary relief was obtained by the use of blisters over the hip-joint, and the employment of narcotics. Soon the muscles of the thigh and leg began to waste away, and hyperæsthesia persisted to such an extent that the slightest touch of the skin would cause excruciating pain. Chlorides were found in excess in the urine.

After one-fiftieth of a grain of strychnine was injected into the thigh, the application of electricity was resorted to—as the patient stated that electricity had given him some relief previously. After the first puncture, more power and warmth were felt all over the limb. The pain subsided, and for the first time he enjoyed a night of uninterrupted rest. Diaphoresis followed, and the pupils dilated. More or less gurgling of the bowels seemed to be one of the earliest effects of the subcutaneous injection of strychnine. At intervals of four days, the same dose of strychnine was injected three times more. Power was restored to the paralyzed muscles, by a tonic regimen, with electricity; the hot and cold douche to the limb, and two more subcutaneous injections of one-fiftieth of a grain of strychnine.

Cases III. and IV.—These were cases of simultaneous paralysis in two children, brother and sister; the boy one and a half years old, the girl three. They were seized with symptoms of spinal meningitis, produced by sitting on the wet grass. The children were seen after the acute stage of the disease was passed. The girl had lost all power of both legs and right arm. The boy was only paraplegic. Hypodermic injections of strychnine were suggested, which being approved by the attending physicians, he injected five times—once every three days—one-fiftieth of a grain in the legs of the boy and over the lower part of the spine, who was able to walk, with a little unsteadiness, in the course of six weeks. Tonics, warm baths, electricity, and strychnine by the mouth, finished the cure. The girl did not progress as fast. She had fourteen injections of one-fiftieth of a grain of strychnine during three months. She could stand or walk, but became fatigued very easily, and the arm and hand recovered power to grasp more firmly. Electricity and the same treatment were kept up as with her brother, but she was not cured, though benefited considerably, on account of the absence of the parents from New York.

In these cases—as in other similar cases—fibrillar contractions of the muscles in the limbs, lasting for a minute or two, were noticed.

Case V.—A boy four years of age, affected with paraplegia, which had existed for two years, was treated by him. The paralysis followed a fever. The muscles of both legs were much wasted from the knee down to the feet, which were affected with talipes equinus. The child could only move about on his knees. When first seen he was suffering with bronchitis, following scarlatina.

Local applications of electricity to the palsied muscles were advised, with hypodermic injections of strychnine. The injection was practised in the anterior region of the limbs, one-sixtieth of a grain of strychnine being introduced in the tibialis anticus. Every third day, during four months, one-sixtieth of a grain was injected, also the daily application of electricity, for half an hour. The child recovered to such a degree that he could stand or walk, with the assistance of an orthopœdic apparatus.

Several more cases were described at length in his paper, but the five already mentioned show the importance of subcutaneous injections of strychnine in the treatment of paralysis.

The results observed by the author, and by physicians quoted in his paper, "strongly indicate the cardinal part of the sympathetic in the pathogeny especially of infantile paralysis."

Strychnine administered by the mouth, or hypodermically, has an entirely different effect. By the former, the quantity may be increased and repeated unsuccessfully, while by the latter—in a smaller dose—the lost muscular power is restored.

As to the manner of performing the injections, his own language will explain: "Generally, I insert the trocar of the syringe into the paralyzed muscle, and draw part of it out to avoid throwing the solution directly into the blood-vessel. The injection should be practised very slowly; by having a solution with one-hundredth or a smaller fraction of a grain to a drop, the strychnine may be so diluted as to allow carrying its action at the same time into more than one of the palsied muscles. The general effects are more rapid and decided when the solution penetrates no deeper than the cellular tissue, or when the puncture is made along the spine."

Treatment of Vertigo.—Dr. Ramskill, in an article on "vertigo" (Reynolds's System of Medicine), alludes to the common mistake of attributing the symptoms to a surplus of blood in the brain, and states, that in most cases it is due to reflux innutrition of the brain from arrested digestion in the stomach; in some, to mental exhaustion; in others to feeble heart; and a smaller class, to diseases of the bones of the head, and the brain itself.

Gastric vertigo is treated by alkalies, strychnine, and other bitters. Wine should be given to persons of advanced age. Vertigo, brought on by over-work, is best managed by bromide of ammonium, generous diet, and wine. Weak hearts should be toned up with belladonna, larch, and digitalis.

Medicated Vaginal Suppositories.—At one of the meetings of the New York Obstetrical Society, Dr. E. R. Peaslee, of this city, exhibited to the members some vaginal suppositories of butter of cacao, which could be medicated as follows; Five grains of bismuth, three to five grains of sulphate of zinc, with one-twentieth of a grain of atropine in each. Seven or eight hours would be required for them to melt in the vagina.—*American Journal of Obstetrics.*

Cresyl Alcohol is said to be a powerful agent in cleaning green substances off of damp pavement.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, October 15, 1868.

THE PRACTICE OF MEDICINE IN A PECUNIARY POINT OF VIEW.

No one ought ever to enter any of the professions for the *sake* of making money. Those whose tastes incline or whose circumstances compel them to make the acquisition of money the principal object of life should keep as far away as possible from literature, science, art, philosophy, and, in short, from everything that has to do with the higher and better nature of humanity.

The money of the world is made by traders, merchants, manufacturers, speculators, and by business men in general. The familiar remark, "professional men live well, work hard, and die poor," is not entirely or universally true except in the last phrase, "die poor." There are many, perhaps the majority, in the professions who cannot afford to "live well," and in our large cities, at least, there are not a few whose only "hard work" consists in trying to get some work to do. Always and everywhere professional life is a life of poverty. Our clergymen are proverbially poor. Our lawyers are poor. One of the prominent advocates of the New York bar remarked a few years since to a professional brother, "The lawyers of this city are poorer than the carmen." A country lawyer in good practice stated to us, a few years before the war, that "a lawyer who did a business of $1000 a year in a country village was doing well." Our teachers are all poor, from the presidents of colleges to the humble instructor in the district school who gets his pay by "boarding around." Our sculptors and painters are distressingly poor, and the phrase "poor artist" has passed into a proverb. Our literary men—who depend on their writings unaided by the profits of publishing—are all poor. Editors and philosophers, novelists and historians, poets and mathematicians, have usually less money in the bank, as the direct profit of their intellectual creations, than mechanics and laborers. Physicians are poor, in the city as well as in the country. There are those who by fortunate speculations manage to secure a competency or a moderate fortune, but the number of those who have acquired wealth by the practice of medicine, as such, has always been exceptionally small.

It is true that *relatively* good incomes have been, and are made, by a few of the votaries of literature and art. Mrs. Stowe received over $20,000 for her Uncle Tom's Cabin. Dickens and Collins are paid what are called enormous prices for their novels. A few of our most popular lecturers demand and receive from one to two hundred dollars a night. Sir Astley Cooper received, we believe, one fee of $20,000 from a West India planter. Nélaton is said to have an annual income of over one hundred thousand francs, and the fact is so exceptional that it has gone the rounds of the secular newspapers. The income of Bowman, the famous London oculist, is reported to exceed $60,000. Besides these there are a very few physicians and surgeons in the great capitals of the world—London, Paris, and New York—who return, perhaps, an average income of from $20,000 to $30,000.

These figures may appear large, as they truly are, when compared with the moderate returns of the rank and file of the profession; but when contrasted with the profits of successful business they are ridiculously small. There is chance for fallacy in this comparison of the incomes of the different callings. It is not fair to offset the receipts of the few or exceptionally successful leaders in medicine with those of the *average* of business men. We should compare the best in the one calling with the best in the other, and go on through the various grades of mediocrity and inferiority. We must compare the incomes of the Coopers, the Nélatons, and the Bowmans in medicine and surgery with those of the Rothschilds, the Barings, and the Astors in finance. This method of comparison, which is the only fair one, shows at a glance how insignificant are even the largest incomes of professional men. It is probable that Vanderbilt could buy up, if he chose to do so, the real and personal property of *all the living graduates of Yale and Harvard.*

Even medical quacks do not, as a rule, make large fortunes. It requires a good intellect as well as a bad heart to be a successful swindler. Josh Billings somewhere remarks that "when a man makes up his mind to be a rascal he had better stop and consider whether nature hasn't better constituted him to be a *fool.*" Many, perhaps the majority, of quacks fail of achieving very great financial success. Vendors of patent medicines are not, of course, to be ranked among professional men.

The lesson which these facts teach us is this, that science, literature, and art are not the avenues to wealth. No one should enter any of the learned professions who does not love his calling more than he loves money, who cannot be happy in its successful practice without regard to its financial rewards, and who cannot be content to see his contemporaries in business and trade

rolling up their millions while he acquires only the necessities and comforts of existence.

There are compensations for all this poverty of literary and professional men, but it is not for us to speak of them here. But it must be allowed that these compensations are not always satisfactory even to the most favored geniuses. Trumbull, the artist, spoke discouragingly to Church, when he sought to become his pupil, on the ground that a life devoted to art would be a life of struggle with poverty. One of the most celebrated of our living painters has a son who inherits his father's genius, and desires to follow the same profession. This son, however, is not allowed to gratify his taste even in the slightest degree; and actual force has been resorted to by his father in order to compel him to enter some pursuit where he can make money. It is well known that Sir Humphry Davy tried to dissuade Faraday from a life of science for the same reason; but fortunately for the world he did not succeed.

"If these things be done in the green tree what shall be done in the dry?" If the most favored and most successful of professional men are thus disheartened by the poor reward of their labors, how must it be with the great mass who reap neither fame nor fortune? As a matter of fact, we find that many physicians discourage their sons from entering the profession of their fathers, and urge them to manufactures and trade, averring that a living income cannot be made in the practice of medicine.

We hold to the contrary. We believe that a living and a competency can be made, and made honestly, in the profession by all who have the proper talent and energy. For the benefit of those who are sceptical in this matter, for the benefit of those who are disheartened with the poor returns of their life-labor, and for the benefit especially of those young men who have a native taste for medicine, who have thoroughly mastered its general principles, and who desire to learn the best methods by which their skill and knowledge can honestly subserve their financial interests, we venture to offer these *four* suggestions.

1. Make yourself a *practical therapeutist*, and not a scientific theorizer. The first, last, and greatest duty of the physician is to relieve and cure disease. So far as he fails in that, just so far does he fail in attaining the object of his high calling. Men of abstract science are needed, and we honor those who are willing to devote their lives to quiet study, investigation, and experiment, that are to bring silver and gold to other generations after they have passed away. We envy those whose private fortunes enable them to do so. Claude Bernard, the great physiologist, is thus fortunate. It is said that a fortune was early settled on him, with the understanding that he should never see a patient, but devote himself wholly to physiology.

But to one Claude Bernard there are one thousand physicians who must make their profession pay their office rent and butcher's bills.

Now patients, even the most intelligent of them, care little for abstract science. Of pathology they know not even the meaning. They wish to be relieved and cured of their distresses. Cripples and epileptics, the blind and the paralytic, eagerly followed the Lord Jesus, not because he was a good diagnostician and pathologist, but because he *cured* their diseases. Humanity is the same to-day. The sick wish to be cured, and, as a general rule, are grateful to their deliverers.

We would not discourage scholarship. Rather let our practitioners encourage a loftier standard of science, a severer literary taste, a purer culture, and a broader range of acquirements. But let us bring our scholarship, our knowledge of science, of languages, of art, of history, and philosophy, our literary culture, our acquaintance with human nature, our moral force, and consecrate all on the altar of *Therapeutics*. There are those who affect to despise therapeutics, and the criminal fashion of reducing the science of medicine to the single element of *diagnosis*, which was originally imported from Paris, has not yet lost its hold on the profession. There are those who, by the organic constitution of their natures, despise everything that is *practical*. These we can best reprove in the expressive simile of Jean Paul Richter: "Beautiful is the eagle when it soars aloft in the sky and plumes its distant flight toward the sun, but more beautiful still when it descends to the earth and brings food to its helpless offspring in their nest; so the man of science excites our cold admiration when he lives above the world in the pure atmosphere of philosophy, but he commands our deepest respect and warmest love when he descends from his lofty flights and brings hope and comfort to the suffering sons of men."

2. Make your patients *feel their dependence* on you, and never allow yourself to exhibit any feeling of dependence on them.

Better to be patronizing than to *be* patronized. The patients should receive the impression that we are doing them a favor by treating them, and not that they are doing us a favor by giving us a call. We should insure their *respect* before we seek their *love*. Love that comes before respect is too apt to degenerate to pity or familiarity. A proper dignity at first sweetens all subsequent courtesies. Our patients are our pupils. They come to us for instruction, relief, guidance, and we should treat them as all successful and popular teachers treat their pupils, with kindly dignity and reserved but sympathetic familiarity. We should deal with them frankly and authoritatively, and make them feel that our will is to be their law. For the sake of our therapeutics we may indulge a patient in whims that we know to be silly, but in matters of importance we should never compromise ourselves for an instant. In the long run it is better to lose a dozen patients than to fail on our knees before any. Brusqueness and eccentricity seemed to pay in Abernethy's time; but in our generation and country patients prefer to be treated like human beings. Patients like to have a physician frank, out-spoken,

clear, and above all *positive*. To doubt, query, or study a case in the presence of a patient is to lose half the battle. Better let the diagnosis be positive even though it be wrong. Doubt is the practitioner's worst enemy.

3. Let your *maximum charges be high*, and carefully *graduate* them according to the circumstances of your patients.

In regard to this matter of charges these two points are indisputable—first, that those patients who are able should pay well for their medical advice and treatment, just as they pay for everything else; and secondly, that those who are poor, or in moderate circumstances, should not pay as high as the wealthy. If advice is worth anything it is worth a great deal, and should be paid for accordingly. In our stores and markets the poor and the rich pay alike for the same quality of articles, and if any one is unable to buy the best of everything, he can get a poorer quality or go without entirely. In the matter of medical advice it is not so. Sickness visits alike the throne and the cottage. It is not a matter of choice, and when it comes, the poor man desires and needs the best advice. All who are not positively destitute should pay something, and the rich should pay roundly, just as they pay for everything else that they purchase. We are all too much afraid of driving away our patients by high charges. Ultimately, however, the courageous physician wins the victory. It is really a blessing to lose some patients. We can afford to hire some individuals to keep away from the office. Mean prices are apt to bring in mean patients; and the presence of mean patients deters and repels many who would pay large fees. It is hard to raise prices even with the wealthy, and therefore we should begin by making our fees as high as will be borne. Better to begin too high than too low, for it is easier to lower our prices than to raise them. The profession are too easy in this respect. They are apt to charge too little for their labor, and nothing at all for their opinion. Physicians are something more than mechanics, and should charge for their opinion even more than for their time and muscle. The observance of these rules will never drive away patients who are worth keeping. By charging high charges and carefully graduating them when necessary, we shall secure the respect of those (of whom there are many, especially in our larger cities) who take pride in paying dearly for everything they get, and shall retain all—both poor and rich—whose patronage can be of permanent service. To raise the standard of prices is a duty that we owe not alone to ourselves but to the profession at large.

4. Be *prompt and active* in rendering and collecting your bills.

If medical advice and services are worth being paid for at all, they should be paid for promptly. Our patients should be impressed with the idea that our profession is to support us, and that their bills must pay our expenses. If we wish to retain our patients permanently we should insist on prompt payment; if we wish to make them ashamed to call on us, and to drive them to other physicians, we have only to allow them to neglect our bills. There need be no delicacy in this matter of collecting, whether done in person or by proxy. A proper independence of manner is the surest way to independence of fortune.

To those who live in large cities, and who desire to make themselves *authorities* in medical science, we say give special attention to some department that is congenial to your tastes, and make yourself a necessity to the profession in that department. This is best accomplished by cultivating scholarly and practical thoroughness, and by communicating the results of our investigations through the medical journals, at the meetings of societies, and by personal influence.

In our dress, manners, equipage, and in the location of our office, we should conform to the approved customs of the class among whom we desire to practice. Our furniture and apparel should at least not repel, even though they do not positively attract. Goethe says that we ought to conform to the world in trivial matters in order that we may more successfully oppose it in subjects of vital import. This should be the rule for physicians.

As a general rule the majority of our patients will be like ourselves. The attraction of character is as natural and as irresistible as that of gravity, and like doctor like patient is probably as true as "like priest like people." Cultivated, scholarly, high-minded physicians will have cultivated, scholarly, high-minded patients, who will gravitate to them by the law of unconscious affinity.

Those who attempt to build up a practice on a higher plane of culture and character than that to which they belong, and for which they have affinity, will usually fail. Expensive dress, elegant furniture, and showy turn-outs will not permanently compensate for the lack of character. Those who expect to jump into a permanently lucrative practice by the aid of mere externals will usually be disappointed. They may "grow into it," as the expression is, but their growth will be like that of trees, slow, silent, and almost imperceptible.

The Canadian Medical Association was organized in Montreal during the first week in September last by numerous delegates from the different Provinces under the Colonial Government, and Dr. C. Tupper, C.B., was unanimously elected President. None of the delegates elected by the American Medical Association were present.

We are happy to learn that this gentleman (Dr. T.) has been charged with the duty of introducing into Parliament the excellent and judicious "Health Bill" (drawn up last session by Dr. Wm. Marsden, at the instance of the Dominion Government), when the Legislature meets in February next. On its passage, we

are glad to learn that the Government intends to avail itself of the vast experience and professional services of Dr. Marsden by appointing him the "*Medical Officer of the Privy Council*" under the bill, thus placing him at the head of the "Department of Public Hygiene" for the Dominion.

We are not surprised at this; for there is no medical man, probably, in the Dominion who is better qualified to fill this responsible position than Dr. Marsden. He is also most favorably known to the whole profession of the United States, as one of the leading men of the age in everything relating to sanitary science, especially as connected with the laws governing the causation and spread of epidemic and contagious diseases. To him the whole medical world is indebted for the very best plan of quarantine, in all its details, ever yet devised. This has been acknowledged on every hand, and especially by the "American Medical Association," who, at its last session, paid him the high honor of admitting him an honorary member of their body.

The Committee on Commerce, also, of the United States Senate, before whom he appeared, in session of 1867, and explained his system of quarantine, unanimously acknowledged its great merits, and would have recommended it for adoption to Congress, had they not doubted the constitutional power of the general government to establish quarantine for the different States, which have always claimed this as a State right. We believe we express the unanimous voice of the profession when we say that there is no medical man in America whose appointment as head of the Health Department of the Canadian Dominion, would give such general satisfaction as that of Dr. Marsden; for it would inspire a sense of security against the introduction of cholera into the United States through the Canadian ports, as happened in 1832, when this dreaded scourge, creeping up the St. Lawrence by the gate of Quebec, carried death and dismay through almost every section of our Union.

Reviews and Notices of Books.

Contributions to Dermatology: Eczema, Impetigo, Scabies, Ecthyma, Rupia, Lupus. By Silas Durkee, M.D., Consulting Physician of the Boston City Hospital, &c., &c., Boston. Published by David Clapp & Son. 1868.

Dr. Durkee has been known for many years as a most careful and devoted practitioner in cutaneous diseases, and, indeed, to have made them a special branch of practice, and we are glad to have him put on record the result of his long and varied experience. It is in this way that progress in our profession is attained. Dr. D. has confined his remarks in the present paper to six of the leading forms of these diseases, giving to eczema more than a third of the whole work, to which it is entitled, as well for its greater frequency as from the variety of forms which it assumes, most of which he describes more or less in detail. He does not incline to favor the views of those dermatologists of the present day, who regard eczema and bile as varieties of the same disease; but thinks that the name eczema should be confined to the form which is vesicular in its elementary character, and not including that which is papular. We regret to have him say that the question whether eczema is contagious should receive a "qualified action." The mere fact that the secretion from a moist surface may, and sometimes does irritate the surrounding sound skin, has no analogy with contagion; and we feel that the use of the word in this connection may, and not unfrequently does, cause needless alarm and anxiety. Dr. D. says that in "the ordinary sense of the word it is not contagious;" but we prefer, for practical purposes at least, to say emphatically that it is not so in any sense.

We do not propose in this short notice to give an analysis of the plans of treatment which our author has found most successful, as they are mostly those recommended by leading practitioners in this class of diseases, much less to add any others which our own experience might suggest. Our object is merely to direct our readers to a work containing reliable directions for the treatment of a class of affections which baffle so many, and for the treatment of which the experience of a practitioner like Dr. Durkee is so valuable. We would merely add that success depends not so much upon the special remedy or remedies used as in their appropriate application to proper cases at the proper time—a result which experience alone can give.

Dr. D. is familiar with the German school of practice, and has incorporated some of its leading features with his own.

The present modest work is a reprint from the *Boston Medical and Surgical Journal*, and we think will be followed by similar contributions, until the author has gone over the whole field of cutaneous pathology and therapeutics.

The Physician's Visiting List for 1869. Published by Lindsay & Blakiston. Philadelphia.

This handy little pocket *Visiting List* has been published yearly, by the above enterprising publishing house during the past eighteen years, and can be recommended to the medical profession.

On opening it we find that Marshall Hall's ready method in asphyxia is fully explained; poisons and their antidotes are noted; blank leaves for visiting list, for twenty-five patients per week, in every month of the year, are neatly ruled, with a table of signs. The remaining blank leaves are printed and ruled for the following purposes: "Monthly memoranda," "Addresses of patients and others." "Accounts asked for," "Obstetric engagements," "Record of births and deaths," etc.

Altogether, this is a well-arranged and valuable pocket companion for either a country or city practitioner.

The Philadelphia Medical Register and Directory. Edited by John H. Packard, M.D., Secretary of the College of Physicians of Philadelphia. Philadelphia: Collins, Printer, 705 Jayne street. 1868. Pp. 238.

This volume, which is probably more essentially a directory than its compeer and prototype, the New York Medical Register, commends itself to the favor of those who may be interested in the current history of the profession in a neighboring city. It contains, in a condensed form, a valuable amount of useful information regarding societies and institutions. The arrangement is good, and the Index sufficiently copious.

The enterprise should be sustained by our brethren of Philadelphia, if for no other reason than that the price is barely remunerative, and out of all proportion to the indispensability of the volume.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, SEPT. 23, 1868.

DR. WM. B. BIBBINS, PRESIDENT, in the Chair.

MATTED HAIR FROM OVARIAN CYST.

DR. FINNELL presented a specimen, consisting of a mass of matted hair removed from an ovarian cyst of a patient 54 years of age, who was the mother of several children. Three years ago she first complained of a pain in the left iliac region, soon after which a swelling made its appearance in that locality. The pain continued for a period of two years, when she was temporarily relieved of her suffering by the formation of an abscess which opened into the rectum. Every two or three months she would have attacks of pain and distress in that region, and would be relieved of the same in like manner. She finally began to waste away on account of these repeated abscesses, and died a short time ago.

At the post-mortem examination the pelvis was found filled with pus and fæcal matter, which latter had found its escape through a considerable-sized opening in the rectum, situated two inches above the anus. The contents of the pelvic cavity were so disorganized and infiltrated with the products of inflammation, that no satisfactory idea of the relations of the ovaries and other parts could be made out.

DR. ROGERS asked if any theory had been formed in reference to the origin of this hair.

DR. FINNELL supposed that it had been formed in the ovarian cyst, which latter had ulcerated, discharged its contents in the manner indicated, and had given rise to the extensive inflammation in the pelvic cavity.

DR. ROGERS asked if there was any possibility of its being an extra-uterine fœtus, which had become gradually absorbed.

DR. FINNELL remarked that the patient's age at the time her symptoms commenced (51 years), would seem to preclude such a possibility.

DR. CUTTER did not think that the hair resembled that from the head, as it was too coarse and too much matted.

DR. NEFTEL remarked that it was very common to find such collections of hair in ovarian cysts.

DR. ROGERS was aware that the latter observation was true, still he imagined there was ground for a suspicion to the contrary, in that the tumor was rather suddenly developed, followed by suppuration, which was not a usual course for ovarian cysts to take. The ball of hair had, however, the characteristic odor of those found in the ovary.

TUMOR OF HEART—SUDDEN DEATH WHILE WRESTLING.

DR. FINNELL exhibited a second specimen—a heart removed from a man 25 years of age. He had been engaged wrestling with another man, in a quarrel, when he suddenly fell down and expired. His death was attributed to the quarrel, but a post-mortem examination failed to give any reason for the suspicion, no cause for death being found, save a rather peculiar condition of the heart. In the walls of the left ventricle was an irregular, scattered mass of fibrinous deposit, which invaded the entire thickness of that wall of the organ. The heart was otherwise sound. It seemed evident to him that this was the cause of death, the heart being overtasked while in that crippled condition. One of the kidneys removed from the deceased weighed but two ounces, and the other eight ounces.

DR. FINNELL remarked that this was the third case of this sort of deposit which he had met with. In one of these the exudation existed in both ventricles.

DR. NEFTEL thought that this was a case of myocarditis, with probable fatty degeneration of the substance of the heart.

DR. ROGERS did not think it was improbable that the man had depurative disease of the kidneys, and other organs, in which case the deposit would answer to the reaction of iodine.

EXTIRPATION OF UTERUS AND BOTH OVARIES BY ABDOMINAL SECTION.

DR. JAMES B. CUTTER, of Newark, presented a specimen of uterine tumor, with the organ and appendages attached, which he removed by abdominal section, Monday, September 14th, 1868, the result proving fatal on the fourth day from exhaustion. He gave the following history: Patient, Miss McC., of Harlem, N. Y., aged forty; unmarried. About eight years ago first had her attention attracted to an enlargement of the abdomen, upon the right side, which was uniform in size and distinctly hard to the touch. It gradually increased in volume, excited her alarm, and she consulted a number of physicians, many of whom, at this early stage of its growth, mistook it for ovarian disease, and advised its removal.

About four years ago she consulted Prof. Charles Budd, of this city, who examined the case in connection with Dr. Emil Noeggerath. The opinion given at this time was, that the tumor was distinctly uterine; nothing was done or advised, and the patient soon passed out of the hands of Dr. Budd, and was without treatment for some two years, when she next consulted Dr. Wooster, of Ninth street, who it seems recognized the difficulty, and she informs me divided the cervix uteri with the object of arresting the growth of the tumor.

She had almost constant hæmorrhage—the quantity lost at times, particularly at the catamenial periods, was enormous; while at other times it had consisted of a passive drain or excessive leucorrhœal discharge, producing such weakness and exhaustion that at times her death was looked for as imminent.

On examination the uterus felt as large as a seventh or eighth months' pregnancy; hard and lobulated to the touch, and filling the cavity of the abdomen somewhat uniformly, slightly inclined, if any, to the left side, freely movable, and well lifted out of the cavity of the pelvis, giving the impression of a long, slim attachment. Per vaginam the organ was felt well up in the pelvis, the os presenting a normal feel, and no evidence remaining of the os having been divided.

Upon introducing the uterine sound, it entered readily into the cavity to the depth of six inches, passing off to the right side of the uterus, and being distinctly felt through the walls of the abdomen at this point, giving the impression that there was a large fibroma springing from the left wall of the uterus and crowding the organ over to the right side.

This was accounted for—as was demonstrated at the time of the operation—by the uterus having made a partial turn, its anterior surface looking toward the right iliac region, consequently bringing the broad ligament of the left side of the uterus directly into the line of incision.

Wishing to have my opinion fully corroborated, Drs. Emmet and Peaslee were requested to see the patient in consultation on the following day, when both confirmed my previous diagnosis.

Very little encouragement, as regards an operation for the removal of the tumor, was given the patient, and she returned to her home, and was not seen or

heard from until three months had expired, when she presented herself at my office much in the same condition. She had been seriously ill in the interim, and stated that she thought the tumor had grown considerably, at least an inch and a half in the past six months. She expressed herself as decidedly in favor of an operation, and wished its performance upon the following month. Her condition at this time was as follows: Pulse eighty-five, weak and compressible; insomnia; constipated bowels; scanty urine; appetite capricious; pain through the loins and back, with considerable uterine tenesmus.

The usual preparatory treatment having been pursued, the patient's general condition was as good as could be expected under the circumstances, and on Monday, September 14th, at 1 P.M., the operation was begun. I was kindly assisted by Drs. Lewis A. Sayre, Charles A. Budd, Benjamin Howard, and Robert Newman—the latter gentleman taking charge of the anæsthetic. To the skill and good judgment of these gentlemen I am much indebted, and I take this opportunity of expressing my thanks.

Gentlemen present, Drs. H. P. Dewes, John Shrady, Whittlesey, Gregory, Brockway, Williams, Southworth, Reid, and Steinart.

The anæsthetic (chloroform being relied upon, ether having a bad effect) occasioned considerable vomiting, and much time was consumed in bringing the patient fully under its influence.

An incision was made in the median line of the abdomen, some three inches in extent, the abdominal wall, which was exceedingly thick, carefully divided upon a director; owing to the exceeding thinness of the walls beneath the layer of adipose tissue, the tumor itself was slightly wounded, from which there was an inconsiderable amount of venous blood; this was readily controlled with a sponge and firm pressure, the tumor being well pressed against the walls of the abdomen. No blood was allowed to enter the cavity of the abdomen. A large sized steel urethral bougie was now passed around the tumor, and no adhesions discovered; the wound was enlarged with the scissors to some distance above the umbilicus, and the tumor rolled from its bed; a stout silk ligature was passed around each broad ligament and tied firmly. Storer's clamp shield was next applied above the ligature, including the entire pedicle, which was separated close to the tumor by the écraseur. At the suggestion of Dr. Sayre three ligatures were passed through the stump to keep it elevated and under control, while the clamp was relaxed, and a stout double ligature passed around the mass below and tied firmly. Not a drop of blood followed the removal of the clamp; the superfluous ligatures were now removed, the principal ligatures about the pedicle brought out of the lower corner of the wound, which was closed by eighteen interrupted silver sutures; there was no sponging out of the cavity of the abdomen, as I stated before, Dr. Sayre having carefully kept the tumor well pressed against the walls of the abdomen.

The time occupied in removing the tumor was at least two hours, and frequently the pulse flagged and stimulants had to be pretty freely administered.

Very little blood was lost during the operation, certainly not more than two ounces, and this was pure venous hæmorrhage, and came from the tumor alone.

Treatment and Result.—For forty-eight hours everything went on as promisingly as could be possibly wished for, under the most favorable circumstances, and I looked for a favorable result. Nausea was persistent, and was relieved by ice taken in small quantities for the first twenty-four hours; morphine was introduced subcutaneously to the extent of four grains in all; enough was given to simply control pain and uneasiness. She rested well the first night, and upon the following slept three full hours in succession, and frequently a half hour at a time. The pulse did not exceed 100 until the beginning of the third day, when all the symptoms changed for the worse, pulse getting weak and rapid, reaching as high as 130 per minute; before this rapid acceleration, the pulse was but 96, and of good volume. Vomiting came on soon after the beginning of the third day, and she ejected from the stomach a dark green and bitter offensive fluid. It soon became lighter in character, and sweetish to the taste, and continued until death. Vomiting could not be controlled or relieved by champagne, ice, or any of the usual remedies. Strong juice of beef was injected into the rectum, quinia subcutaneously, all of which seemed to have not the least beneficial effect, and she died of sheer exhaustion, having survived the operation seventy-five hours.

The temperature of the body did not exceed at any time 101°; the urine was abundantly secreted; there was but little tympanites and no pain to speak of upon pressure over the abdomen; the mind was clear and active throughout, and at no time was there complete narcotism.

Sectio Cadaveris twenty hours after death. Present—Drs. Brockway, Gregory, Colby, Reid, J. Shrady, Steinart, Whittlesey, and A. P. Williams. Rigor mortis well marked; a slight uniform distension of the abdomen. Upon removing the eighteen sutures a considerable amount of force was found necessary to break up the adhesion which had taken place throughout the whole extent of the incision.

The intestines were distended with flatus, and that portion in contact with the ligature was covered with a slight plastic effusion. A careful examination could detect *no clots* within the peritoneal cavity; no evidence of peritonitis; liver somewhat friable but otherwise healthy; in the gall-bladder, however, were found three large concretions, each with a well marked facet; lungs and heart normal.

The pedicle.—The stump of the pedicle was found to have been well guarded against hæmorrhage; it was found that the tumor was cut off just above the cervix, and that the ligature had partially cut through the neck of the uterus, allowing a probe to readily pass into the cavity of the abdomen, establishing a means of egress for any discharge which would have answered full as well as an opening made through Douglas's cul-de-sac.

In answer to a question from Dr. C. C. Lee, Dr. Cutter remarked, that death was in his opinion due to the shock of the anæsthetic rather than the operation. He further stated that chloroform was first used, then ether, and on account of vomiting he was compelled to use Squibb's chloroform.

Dr. Sayre considered that if any operation of the sort should succeed, this certainly was one such. She was a woman in as comparatively good a condition of health as could be expected under the circumstances. She had never had any peritonitis, and there were no adhesions to any part of the abdominal wall, which fact was easily recognized before the operation by the mobility of the uterus. If any operation of the kind was justifiable, this certainly was. The operation itself could not have been performed better nor with more care, and not a particle of blood escaped into the peritoneal cavity.

He stated that the abdominal walls were very thick (two and a half inches), but the peritoneum was so thin, from being stretched over the surface of the tumor, that it was a mere apology for a membrane. It was this extreme attenuation of the peritoneum that caused the

incision to be made into the tumor, from which alone there was any hæmorrhage during the operation.

The profuse use of the anæsthetic, with all deference to Dr. Newman, who administered it, was in opposition to his judgment at the time, and since. He thought that the amount given was more than is usually justifiable, and would prefer to allow the patient to run the risk of some pain during an operation of any great length, than to invite death from the effects of the anæsthesia afterwards. The patient was more than two hours in a state of complete anæsthesia, and were it not for the occasional use of brandy and ammonia, he believed that she might have died on the table.

He thought it due to the credit of the operation and the skill with which the operation was performed to make these statements.

Dr. Newman contended that every necessary precaution was taken to guard against the administration of an undue amount of the anæsthetic. It was with extreme difficulty that he could get her under the influence of chloroform, half an hour being consumed in the attempt before the first incision could be made. The operation lasted over three hours, and during a considerable portion of that time the patient was allowed to come up from under its influence, so that at times she would be conscious enough to know all who were about her. At times she became very restless also, and suffered considerable pain. Notwithstanding the length of time that the anæsthetic was administered, he believed that less than three ounces were used.

Dr. Howard, who was also present at the operation, stated that his opinion at the time was that hardly enough chloroform was given, and several times the patient became so restless that he wished her, for the sake of herself and for the danger of interference to the progress of the operation, more profoundly anæsthetized.

Dr. Sayre, in answer to a question, being informed that those returns to consciousness were after the écraseur was applied, contended that there was not enough inconvenience as to pain in the other steps of the operation to warrant perfect anæsthesia, as after the pedicle was so perfectly constricted all chances of pain beyond were destroyed.

Dr. Rogers asked if it were known before the operation that the uterus was extensively involved in the tumor.

Dr. Cutter answered in the affirmative.

Dr. Rogers remarked that the circumstances of the case brought to his mind the opinion of Dr. Peaslee, expressed to the Society some time ago, in regard to the practicability of performing such an operation, to wit, that no attempt should be made to extirpate a uterine tumor if the operation involved the cavity of the organ in any part.

Dr. Cutter did not see why such a procedure should be attended with more danger than craniotomy with extensive adhesions and a large fleshy pedicle.

Dr. Neftel remarked that Prof. Goltz had shown the reflex influence of the nerves of the peritoneum on the nervus vagus. Striking repeatedly on the abdomen of a living frog, he produced paralysis of the heart by reflex irritation of the vagus (the heart remained in diastole). But when, during the experiment, he simultaneously excited the sensitive nerves of the extremities with a faradic current, the reflex action of the peritoneum on the vagus was prevented. In Dr. Cutter's case, as in a great number of others in which the peritoneum had been operated upon, and where, at the post-mortem, we find no peritonitis, no hæmorrhage, death, in Dr. Neftel's opinion, was caused only by the reflex action on the vagus, either by producing paralysis of the heart, or keeping up vomiting and nausea. Under these circumstances, he thought the irritating of the skin with a faradic current during the operation would prevent this fatal reflex action on the vagus, whereas chloroform must increase the danger.

FIBROUS TUMOR.

Dr. Newman presented a fibrous tumor of the uterus with the following history: In August last I was called to Mrs. T. J. S., in West Thirty-fifth street, to perform ovariotomy. Several physicians had already examined the patient, and had no doubt that she was suffering from an ovarian tumor.

Mrs. S. is 46 years old, is married 26 years—sterile—menstruation regular, but always with violent dysmenorrhœa. In March last had a troublesome menorrhagia, and April 25th her last menstruation; after that time her menses have not reappeared. She first noticed a tumor growing in left inguinal region about eight years ago. This tumor has increased steadily and gradually, but more rapidly since last New Year. Lately anasarca has appeared in her feet, which sometimes disappears again. The size of the abdomen enlarges sometimes, and again diminishes suddenly. She suffers from dyspnœa, and cannot endure the recumbent position. Therefore is much reduced for want of sleep.

EXAMINATION—MEASURES OF ABDOMEN.

From ensiform cartilage to umbilicus.....	9	inches.
" umbilicus to symphysis pubis.....	9½	"
	18½	
From umbilicus to anter. super. spine, right..	8½	"
" " " " left..	8½	"
Circumference around umbilicus.....	34½	"
" lower around spines.....	36	"

Countenance amiable, healthy, but anæmic.

Complexion sallow, does not present the pallid, yellowish, or waxy hue, as observed in ovarian tumors.

Emaciation is marked in face, and more so on the muscles of the chest.

Palpation.—The tumor is irregular, as the measurement shows, a solid mass more distinct hanging down from umbilicus, pointing downward, and more on the left side. The margins of the solid tumor can be felt distinctly, and the edges almost lifted up. In right inguinal region, low down, is a small flap, bulging out from the large tumor and connecting with it, like an outgrowth, hanging on a pedicle. The whole tumor is smooth and firm. No nodulations.

Adhesions cannot be found.

Succussion.—No fluctuation at all.

Percussion flat over the whole tumor. The upper part of the abdomen above umbilicus and most places lateral on both sides give a tympanitic sound. These places swell and reduce in size sometimes suddenly, which fact shows that it must be gas, and no fluid.

Auscultation.—A vascular murmur on each respiratory act, like placental bruit, can be heard distinctly.

Pressure on abdomen gave no pain.

On vaginal examination the solid tumor could be felt distinctly in the whole pelvis, and pressing down from Douglas' space almost into the vagina. It seems as if tumor and uterus were one mass. The uterus is low down.

Cervix Uteri pressed down by the tumor, and almost tilted over, is very small.

Os Uteri.—Normal virgin-like.

The uterine sound could be passed easily to the depth of six inches, not in an upward direction, but straight, as if the uterine cavity was on the floor of the pelvis.

Micturition is normal, without pain or any other trouble. Urine of a dark color.

Bowels regular, move once a day.

Appetite good, and she relishes her food.

Feet a little œdematous.

Thorax painful; emaciated. She became weak from the examination, and could not bear a further investigation.

Auscultation over heart gave a mitral regurgitant murmur.

Diagnosis.—It seems that the anasarca is the consequence of the heart's action (valvular disease of the semilunar valves of the aorta) and the extreme anæmia. The tumor is a vascular fibroid of the uterus. Operation of ovariotomy therefore refused.

Prognosis.—She will probably succumb from disease of the heart and lung.

In reference to the disease of the lung and heart another examination and consultation was proposed. But before this could be obtained she died, on August 28th.

Post-mortem was held on August 29th, seventeen hours after death, assisted by Dr. C. C. Terry. Rigor mortis well marked. After the first opening into the abdominal cavity was made, a large amount of gas escaped, and thereby diminished the large size of the abdomen. The tumor was found to be a vascular subperitoneal fibrous tumor of the uterus. Here is the specimen. You will find, Mr. President, that the description in the ante-mortem examination corresponds exactly with the specimen here presented. The normal uterus is imbedded into the solid mass, and its former boundaries can be traced on the lower margin, after this sound is introduced into its cavity. The ovaries, broad and round ligaments are all imbedded and attached to the tumor. The right ovary is perfect, but shrivelled up, without a trace of a single corpus luteum, which proves that the menorrhagia in March, and following amenorrhœa was due to "the turn of life." Some parts of the tumor extend even lower than the cervix uteri. The os tincæ is round and small, virgin-like. The os and the cervical canal are the only parts of the uterus which are external of the tumor, and visible; all other parts are imbedded in the solid mass.

The *left pleural cavity* was filled entirely with serum, and compressed the left lung to a complete hepatization. The right lung was œdematous, and some parts of it emphysematous.

Liver a little enlarged, but healthy.

Heart.—The left ventricle a little dilated. Here I present a part of the heart, with its semilunar valves; one particularly will be found insufficient in its action, with atheromatous and calcareous deposits, which explains the mitral regurgitant murmur during lifetime. Her death is caused most by this lesion. The tumor itself has not caused much trouble.

For the preservation of the specimen I am indebted to Mr. Clark, 713 Broadway, who has kindly presented me with his newly invented fluid for embalming bodies. Before this was applied the tumor rapidly decomposed, and could not be kept with our ordinary means, as carbolic acid, etc. I have since preserved other specimens with this fluid with perfect success.

He next presented an *ovarian tumor*, with the following history:—

Saw Mrs. F. C. Gardner in March last; she was twenty-eight years old, married ten years, had two children, the last seven years ago, one abortion six years ago.

Has observed a tumor growing for the last seven years, but the rapid enlargement dates only about four months ago. Menstruation has been regular, first, then for eighteen months had metrorrhagia almost every week. Since June, 1867, until now, absolute amenorrhœa and leucorrhœa. Patient is very anæmic and emaciated. Bowels are regular, micturition is frequent and troublesome. No anasarca or ascites.

EXAMINATION.—MEASURE OF ABDOMEN.

From ensiform cartilage to umbilicus	10¾	inches.
" umbilicus to symphysis pubis	8	"
	18⅝	"
From umbilicus to anter.-super. spine, right	10	"
" " " " " " left	10	"
Circumference	36	"

Countenance emaciated, worn out.

Complexion of a yellow color.

Emaciation well marked, all adipose tissue absorbed, the bones prominent—abdominal walls very thin

Palpation—Tumor is a little irregular, a solid mass distinctly felt on left side, margins distinct; another smaller solid mass is felt indistinctly on right side. The tumor is equally divided on both sides, but extends more above umbilicus than below, as may be judged also from the measures above.

Adhesions cannot be found.

Succussion gives a *decided* fluctuation, except over the solid mass. The fluid must be within the cyst.

Percussion dull all over, and more so over the solid mass.

Auscultation per stethoscope, no *bruit de souffle*, but an indistinct murmur, which is absent entirely over the solid mass.

Pressure over the solid mass caused some pain.

Uterus is low in pelvis and movable. Uterine cavity measures 2¾ inches per sound.

Diagnosis, ovarian tumor, and ovariotomy proposed as only possible remedy. The patient consented, but disappeared for six months.

Aug. 22, reappeared after an absence of six months in a miserable condition. She has run down frightfully, and is emaciated to a skeleton. Ascites is another complication, which has dilated a circumscribed place around umbilicus, by which an umbilical hernia is formed by the serum pressing outward. The covering tissue of this umbilical hernia is as thin as paper, and the serum oozes out constantly for several days, and wets her clothes. She is very weak, has dyspnœa, and her whole condition is so wretched, that ovariotomy is altogether out of the question. Only relief is possible. Therefore, *Aug.* 24, paracentesis abdominalis was performed with the assistance of Dr. L. A. Rodenstein. The fluid from the abdominal cavity was the usual serum, but from the cyst a thick semi-fluid, like calf's-foot jelly, was let out; the whole quantity was about eight quarts. After the tapping, the solid tumor could be felt and even seen, and was exactly as I suspected on making the first examination in March. The principal solid mass is on the left side, and another mass almost as large is on the right side.

She has not menstruated at all for fourteen months, and it is therefore possible that both ovaries are diseased. For about a week she felt comfortable, and felt relieved. Soon after she caught a cold, and peritonitis ensued. She sank gradually and died September 13th.

Post-mortem ten hours after death, with the assistance of Dr. Finnell. Around the tumor were found large masses of lymph, recently thrown out, and slightly adherent; in fact the tumor was covered entirely with this product of inflammation.

In the specimen here, Mr. President, you can easily separate this lymph from the tumor. The specimen is a multilocular ovarian tumor, consisting of so many small cysts that it is impossible to state the number. A large pail of fluid of a dark yellow color, with flocculent

masses, was let out to the amount of ten quarts. Only in one place were found strong fibrinous adhesions connecting the tumor on the right side to the ascending colon, which was dilated. And even these adhesions were of a recent nature.

The tumor by one strong partition is divided into two parts, the left one by far the larger. These two divisions represent the disease of the two respective ovaries.

The pedicle is very thin, 3' wide, about 1' long; commenced on the left side and ran over the fundus of the uterus. This pedicle had no ramification of vessels, and had given no trouble in an operation. The right ovary is lost in the mass. The tumor occupied the whole pelvis, and the intestines were pushed upwards, towards the diaphragm.

In conclusion I call attention to one point in differential diagnosis. Some authorities say that fibrous tumors rise upward in the abdominal cavity, and therefore we find the uterus high up, sometimes not within the reach of the finger on vaginal examination; whereas the uterus is low in ovarian tumors.

From the related histories above, it will be seen that in both cases the uterus was very low, but more so in the fibrous tumor, where the cervix was pressed down so far that it even tilted over. I have examined to-day a lady with a fibrous tumor, where the uterus was very high; but on other occasions in ovarian cysts the uterus varied, sometimes high, at other times low. Therefore I conclude that tumors will assume shapes as they grow, and they will grow as they like, and raise or push down the uterus accordingly. Hence the above-mentioned sign in differential diagnosis has no value.

DISCHARGE OF A FŒTUS THROUGH THE RECTUM.

Dr. Koehler exhibited the skeleton of a fœtus that had been passed per rectum. A lady, twenty-four years of age, became pregnant for the second time. The first three months of the pregnancy were passed under continual hypogastric pains. Then, suddenly, a pint of coagulated blood escaped through the vagina, whereupon the pains decreased and discontinued. She went to a physician well known to me for advice. When he tried to introduce the uterine sound into the orifice, he was unable to succeed. The cervical portion of the uterus was scarcely accessible. The patient consulted several other physicians, who advised her to await events. Normal movements of the fœtus from the end of the fourth month to the end of the pregnancy were ascertained. The prolimina of the birth appeared at the right time. The pains, however, had no effect; they lasted for three weeks, decreased by and by, and finally subsided. Then the secretion of milk took place. The patient became emaciated and cachectic. Two months after the end of the normal duration of pregnancy, a rectitis and an abscess in the anterior wall of the rectum made their appearance, and a quantity of decomposed pus and ichor soon escaped through the rectum. Hairs of a fœtus were detected in the discharged matter. The skeleton of the fœtus then escaped through the rectum within the period of three days. The bones of the cranium following the other bones were removed by means of a polypus-forceps, either entire or broken. The aperture of the abscess was located one and a half inches above the anus. The diameter of the opening when relaxed, measured one inch. One month after the evacuation and removal of the bones perfect convalescence and menstruation took place.

The enlargement of the abdomen during the whole period of the pregnancy was uniform, not lateral, and the cervix uteri, even at the end of that period, was for a closer examination inaccessible. The patient was not confined to bed. Adjourned.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Sixty-third Anniversary Meeting, Oct. 5, 1868.

Dr. James Kennedy, Vice-President, in the Chair.

The Chairman announced the admission to membership of Dr. S. B. Tuthill.

The reading of the minutes of the Comitia Minora and of the Treasurer's report was postponed to Oct. 12th, to which time it was voted that the present meeting adjourn.

The Librarian's report was presented and accepted. The library was in the same condition as last year, except for the addition of the Transactions of the State Medical Society for 1867.

The remainder of the evening was occupied in balloting for officers, with the following result:

President, Dr. George T. Elliot; Vice-President, Dr. Abraham Jacobi; Recording Secretary, Dr. Alfred E. M. Purdy; Corresponding Secretary, Dr. Benjamin Howard; Treasurer, Dr. Wm. B. Bibbins; Censors, Drs. Edward S. Dunster, Ellsworth Eliot, Edmund R. Peaslee, Wm. T. White, and Wm. R. Whitehead; Delegates to the State Society, to fill two vacancies, Drs. Nathan Bozeman and James L. Little.

Adjourned.

Correspondence.

THE LATE MEETING OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

PROPRIETORSHIP OF PRESCRIPTIONS, ETC.

To the Editor of the Medical Record.

Sir—The 16th Annual Meeting of the American Pharmaceutical Association was held in Philadelphia on the 8th, 9th, 10th, and 11th of September. The new Hall of the College of Pharmacy, not yet fully completed, was arranged temporarily for the accommodation of the Convention. This hall is an important addition to the buildings devoted to the several branches of medicine in our city. It is centrally located on 10th street, north of Arch street; and besides ample lecture-rooms, cabinet, library, and assembly rooms, has a large apartment on the first floor designed for analysis, and for a practical laboratory for instruction in chemistry as applied to medicine. On the occasion of the late meeting, the lower floor of the College building was appropriated to an exhibition of objects of interest pertaining to pharmacy. Among these the chemical manufactures for which Philadelphia is famous were largely represented. The splendid masses of crystals attracted the eye of every visitor; while the chemist, who could appreciate the rarer products of the art, was interested in the alkaloids and other active principles from the organic kingdom. Pharmaceutical apparatus and preparations were displayed in considerable variety, generally of fine quality. One of the leading features in the exhibition was the display of living plants, from Dr. Wood's and other botanic gardens—cinnamon, cloves, pepper, and camphor trees; also sugar-cane, sago palm, the gum elastic, and other tropical plants, yielding articles of materia medica.

About 125 delegates and other members were in attendance, forming the largest meeting of the Association yet held. From the Montreal Chemists' Associa-

tion two delegates appeared, one of whom, Dr. J. B. Edwards, formerly of Liverpool, England, was an active and very intelligent participant in the proceedings. Members from New Orleans, Leavenworth, Kansas, Louisville, Chicago, and other remote places, exhibited their interest by attending and participating. Among the most interesting reports was an elaborate one, by Daniel Robbins, of New York, on the Drug Market. Viewing drugs from the stand-point of the importer and wholesale dealer, they were shown to bear far more than their share of the National burdens; and yet from the comparatively small aggregate derived from this source, it was made evident that the duties could be greatly reduced without materially affecting the resources of the Government. The subject of the special examination of drugs at the custom-houses, with a view to the exclusion of inferior, adulterated, and sophisticated articles, was discussed freely while this report was under consideration. The law as it now stands was instigated mainly by those who were active in establishing this Association, and the leading members could not consent to the free-trade doctrines contained in the report. In fact, it only obtained admission to the printed volume of "Proceedings" by a resolution of dissent being coupled with it. Whatever may be thought of the liability to abuse of power by the special examiners, and of the evils of restrictions calculated to divert the national course of trade, all admit that the checks placed upon the introduction of inferior drugs used in medicine, have been most salutary. The deterioration of certain articles of materia medica in commerce, of which rhubarb is the most conspicuous instance, has been the subject of remark for several years. An able paper by Dr. Squibb, of New York, was illustrated by the exhibition of some valuable original packages of this drug, showing the quality which can generally be procured where there is sufficient liberality on the part of the importer. The chief reason of the deterioration of the valuable medicinal drugs seems to be the restrictions placed upon the price in ordering them, due in the first instance to the unwillingness of jobbers and retailers to pay the full cost of importation, with a reasonable profit to the importer. In the case of rhubarb, however, the sources of supply have been affected by the withdrawal of the rhubarb formerly sold as Turkish or Russian, and the throwing upon the market of vast quantities of what was formerly condemned.

Another valuable report was that upon the legal aspects of pharmacy in the United States; this was written by Prof. Maisch, of Philadelphia, and showed how varied and inadequate are the legal provisions in the several States, designed to protect the public against the indiscriminate sale of poisons, and to regulate the practice of pharmacy. With a view to produce something like uniformity in these laws, and, if possible, to secure the influence of the State Governments on the side of legitimate pharmacy, a committee was appointed to prepare a memorial and the draft of a law to be reported next year, which, if approved, is to be presented to the Legislatures of all the States of the Union.

In this connection it may be of interest to your readers to learn that the question of the proper ownership of prescriptions was the subject of a spirited discussion. The East River Medical Society presented to the meeting held last year, in New York, some resolutions affirming the principle that a physician, after issuing a prescription, had a right to restrict its renewal by the pharmacist. In fact, this medical society assumes the ground that a prescription is the property of the physician issuing it, and that it is an infringement of his right to extend its use beyond the particular occasion for which it was given. In the course of remarks made by members in attendance from widely separated sections, it became evident that the general practice is and has been, from time immemorial, to renew prescriptions on the application of the individual by whom they were originally presented, or by others bringing the numbered label placed on the vial or package when first dispensed. Copies are always made on application, and in some instances these are handed to the applicant, the original prescription being retained on file, while, in others, the original is considered as the property of the patient, and a copy retained for convenience in renewing it—the latter course having the sanction of long usage in England. The evils sometimes resulting from the long continued renewal of prescriptions, intended for temporary use, were fully recognized, and it was the judgment of intelligent speakers that every pharmacist should exercise a supervision of his renewals, with a view to warning those who are ignorantly persevering in the use of remedies liable to produce injurious effects; but the right of the person to whom a prescription has been given by a physician, to have it compounded as often as he may choose, was universally recognized by the speakers. By some, the ownership of the prescription was considered as inhering in the pharmacist; by others, in the patient; by none, in the physician. The resolution unanimously adopted by the Association was respectful in its tone, but positive in its assertion of the impracticability of any attempt to contravene the general and well-established practice in regard to the renewal of prescriptions.

Of the numerous scientific and practical papers read, perhaps none was of more interest than that of Dr. Squibb, upon the so-called Carbolic Acid, for which he prefers the name of Creasote, appropriating to the old remedy to which that name is applied, the more distinctive name, Wood Creasote. The chemical facts compiled and ascertained by the author of this paper, are of less interest to physicians than those relating to its numerous uses; these are mainly due to its somewhat peculiar antiseptic properties, which are admirably combined with the power of preventing putrefaction and destroying fungoid growths. Suppositories, having cocoa butter as a base, have grown into such common use for application to the rectum, vagina, uterus, and urethra, that their composition and modes of preparation have been prominent subjects of discussion in the meetings of the Association for several years past. The statement that spermaceti and wax, much used for giving consistence to cocoa butter, are unfitted for this purpose by their fusing point being so much higher than that of cocoa butter, being contrary to general experience, gave rise to some discussion; and the question, how far these ingredients will separate from each other in the process of fusion at the temperature of the body, was referred to a member of the Association, to be ascertained by experiment and reported on next year. The system of eliciting information by a reference of queries to members competent to investigate the subjects, has elicited many valuable papers, which, having first appeared in the Proceedings of the Association, annually issued, have found their way into the standard works. Another prominent method of promoting knowledge among the members, is the publication annually of a Report on the Progress of Pharmacy, in which brief notices are given of new books and of new discoveries relating to materia medica, chemistry, and pharmacy. That of the past year was prepared by Louis Diehl, of St. Louis, Mo.,—a very competent compiler.

In the foregoing sketch I have given a very imperfect outline of the proceedings of the Association at the late meeting. I must not omit, in conclusion, to refer to the social advantages of these annual re-unions. Many

ladies accompany the members to the meetings, and in the arrangement of local committees the entertainment of these is amply provided for. In Philadelphia a special guide-book to the city was prepared and presented to the visitors. A *conversazione* was held at the college hall on the first evening, at which a large and brilliant company were brought together, and regaled with fruits and ices; the museum of chemical, botanical, and other objects of interest being thrown open. A subsequent entertainment by the leading microscopists of the city, was an object of interest, and a musical soirée at the Blind Asylum occupied one evening of the week. The Academy of Natural Science, the Academy of Fine Arts, the Wistar and Horner Museum at the University, the Mercantile Library, Franklin Institute, &c., were freely opened to the members, and, at the close, a grand steamboat excursion on the Delaware and Schuylkill rivers left a pleasant impression on all who were privileged to be present.

* * *

GRATUITOUS MEDICAL SERVICES.

To the Editor of the Medical Record.

Sir—I noticed with pleasure a short article in "The Record" for September 1, on the Abuse of Medical Charities, which I most fully endorse, and to which I desire at least to add the influence of a single opinion and complaint.

It is a shame that people should take advantage of an institution for the gratuitous relief of the poor, to obtain for nothing that which they can and ought to pay for; and if persons are to be found who have no more honesty or principle than to practise such a meanness, it is a shame that the managers and directors of such institutions should permit it.

It would be presumptuous in one without access to reliable statistics, even to guess at the amount of gratuitous medical services rendered in the city of New York every year, but it must be something enormous—a more real, palpable, and perennial charity, than any other class of men can boast of.

But surely, this is no reason why we should be imposed upon, and compelled, in addition to the poor, to treat numbers whose only recommendation is, that they are too mean to pay, but not too mean to stoop to a virtual falsehood in order to avoid it.

Nor is this evil confined to the city alone, but spreads its pernicious influence to all the country places in its vicinity, from which multitudes daily go to the city to obtain gratuitous advice, who own property, and are abundantly able to recompense the giver.

This evil, I well know, cannot be entirely prevented, but surely something can be done to lessen it, how I cannot even suggest; that must be left to the executive wisdom of trustees, managers, etc.; but, as far as I know, nothing is even attempted for that purpose at present.

The well established and successful medical men of the city may feel but little personal interest in this matter, but there are numbers of young men attached to our medical charities, whose present emoluments from the profession are but small, who must feel indignant at the injustice of being obliged daily to prescribe for those who are far more able to pay for their services than they are to render them for nothing; and the more successful, who frequently make professions of their willingness and desire to aid the young and struggling members of the profession, have an opportunity of fulfilling their promises by lending their aid to this much-needed reform.

Medicus.

Yonkers, N. Y.

Prof. Martin has been elected Dean of the Medical Faculty of the University of Berlin.

Medical Items and News.

Election of Officers for the East River Medical Association.—At the annual meeting of the East River Medical Association, held October, 6, 1868, the following were elected:

President—John Shrady; *Vice-Presidents*—William Newman, Robert A Barry; *Secretary*—William J. Purcell; *Treasurer*—Truman Nichols.

Death of Dr. John H. Sheppard.—At a stated meeting of the East River Medical Association, held October 6, 1868, the following preamble and resolutions were unanimously adopted:

Whereas, It has pleased the Almighty Ruler of the Universe to remove from our midst our esteemed associate and co-laborer, Dr. John H. Sheppard; therefore be it

Resolved, That the East River Medical Association, of which he was one of the earliest members, have always recognized, in their intercourse with the deceased, the courteous, high-toned gentleman, and well-informed practitioner.

Be it also resolved, That while the Association deeply deplore his sudden demise in the prime of his usefulness, they desire to tender to his relatives and friends the assurance of sympathy in their bereavement.

Be it still further resolved, That a copy of these resolutions, duly authenticated, be transmitted to the immediate family of the deceased, and be published in the Medical Journals of the city.

Robert A. Barry, M.D.,
Richard J. O'Sullivan, M.D., } Committee.
N. H. Chesebrough, M.D.,

College of Physicians and Surgeons.—Introductory Address of Prof. Bumstead.—The opening exercises of the sixty-second regular session of this college took place on the evening of Thursday, the 1st inst. Prayer was offered by the Rev. Dr. Hitchcock, when the venerable President, Dr. Delafield, addressed the students in a few words of welcome and counsel. The introductory address was delivered by Prof. Bumstead. It was eminently practical, and well fitted to guide the young student out of the perplexities which beset him at the beginning of his medical course. After a few preliminary remarks, the speaker addressed himself specially to this class, taking as his theme the best arrangement of a three years' term of study. Custom had ordained this as the limit of time required here, although there were many reasons for extending and modifying the course, to conform more nearly to those of the older countries. But in point of fact our young physicians realized that their professional education is merely begun at graduation; and such as were able pursued it for a year or two longer, either in our own hospitals or in those of Europe, before commencing practice.

To make the most of a three years' course, it must be thoroughly systematized. The first year should be devoted to anatomy, physiology, and chemistry, both because these lie at the foundation of the more practical branches, and because, having reached a higher degree of scientific accuracy than the latter, they afford a better mental discipline. Anatomy must be studied in the dissecting room, and not from the picture-books becoming of late altogether too popular. On the cadaver, too, must be gained dexterity in surgical operations. Physiology is rapidly being made a subject of demonstrative teaching by means of vivisections. Chemistry must be learned in the laboratory; and then it will lose the dryness which most medical students are wont

to attriiute to it. In connection with all these, the microscope should be made familiar. It has now become indispensable to every well-trained physician. This closes the first year.

In taking up the other branches there is a natural order which may be followed. Surgery and midwifery, pathology and practice, materia medica and pharmacy, are the logical successors of anatomy, physiology, and chemistry. The last of these students are too prone to neglect, especially city students, who get almost no practical acquaintance with drugs. One cannot do better, during the leisure months of the second or third year, than to take a clerk-hip in a drug-store; and in securing such a place he will have less difficulty than he might suppose. Let him not be ashamed to dispense castor oil and catnip, and he will find himself richly repaid in a practically available working knowledge of the tools of his trade.

By the end of the second year most of the branches will have been gone over, leaving time in the third for special courses and hospital attendance. The great advantages of hospital study are not to be over-estimated; but the student, if he is wise, will let the clinics severely alone until the second year, when he will be gaining the theoretical knowledge requisite to make bedside study serviceable. Hospital walking is not hospital work, and, without the proper preparation, it is at best a waste of time, even if it do not delude the student into mistaking superficial observation for thorough knowledge. Clinical instruction must supplement, and not supplant, didactic. Another mistake, and a fatal one, is that of following chiefly the brilliant cases in the surgical wards, to the exclusion of the more common-place cases, especially the medical ones, that are the types of what will constitute the great bulk of one's practice.

Among the other topics touched upon by Dr. Bumstead were the relative advantages of lectures and reading, which might best be combined by taking one standard work in each department and interleaving it for notes of lectures; and the great importance, the necessity indeed, of a familiarity with the French and German languages.

Women's Medical College of the New York Infirmary.—The first session of this medical college will commence on November 2d, and will continue five months. The following persons comprise the corps of lecturers: Dr. Godfrey Aigner, Principles and Practice of Medicine; Dr. Emily Blackwell, Obstetrics and Diseases of Women; Dr. Robert Weir, Surgery; Dr. Sam'l B. Ward, Anatomy; Dr. G. H. Wynkoop, Physiology; Dr. A. B. Ball, Materia Medica; Dr. Arthur M. Edwards, Chemistry; Dr. Elizabeth Blackwell, Hygiene; Dr. Lucy M. Abbott, Clinical Midwifery.

Relief of the Ruptured and Crippled.—From the last "Annual Report of the New York Society for the Relief of the Ruptured and Crippled," it is found that 6,972 patients have been treated at that institution from May, 1863, to May, 1868; of which there were 3,972 males, and 3,000 females. Over 21 years of age, 3,318; between 14 and 21 years, 497; under 14 years, 3,127. 2,416 patients were treated for *rupture*, of which 1,916 were males, and 502 females.

The most prevalent ailments of children 14 years were as follows:—Lateral curvature and caries of the spine heads the list (being 202); club-feet, hip-diseases, paralysis and consequent deformity, white swelling, bow-legs, weak and knock-knees.

The diseases peculiar to females were, prolapsus uteri, and varicose or enlarged veins.

Entente Cordiale—The Medico-Legal Societies of Paris and New York.—The following letter will explain itself:—

Paris, June 19, 1868.

To the Members of the New York Medico-Legal Society:

Gentlemen:—The *Paris Medico-Legal Society*, at its last meeting, accepted with the greatest pleasure the overtures made towards it by the *New York Medico-Legal Society*. It will be happy to forward to the Society, at the end of each year, the result of its working, which will be published in the *Annales d'Hygiène et de Médecine Légale*, published by Baillière and Son.

It will embrace, also, every opportunity to place itself in communication with the New York Society.

The Society was above all touched at the mark of esteem and consideration shown to it by the New York Society in naming its President, M. A. Devergie, an honorary member, and by a unanimous vote has conferred the same title on Dr. T. C. Finnell, President of the New York Medico-Legal Society.

It has, also, conferred the title of Corresponding Member on Dr. J. F. Chauveau, Corresponding Secretary of the New York Society.

We are happy to be the interpreters of the good feeling of this Society.

We beg you, gentlemen, to accept the expression of our high esteem.

The President: A. Devergie.
The Corresponding Secretary: F. Gaillard.

The Female Physician Question Abroad.—The University of Zurich has already conferred the medical degree on Mdlle. Souslowa. Her experience, and that of her companions in Russia, is not the least interesting episode in the history of medicine studied under difficulties. In company with several other ladies, Mdlle. Souslowa began her studies at St. Petersburg in 1862, and attended for two years the lectures on natural philosophy, chemistry, and anatomy, at the Medico-Chirurgical Academy, without objection either by the professors or their fellow-students. Suddenly, however, an order came from the Imperial Government forbidding the professors to admit women to the scientific class of the academy. The reason given by the Government was that "women did better as such, when they knew nothing, and understood nothing." With one exception the female students were thus compelled to leave the classes. Mdlle. Souslowa then resolved to try her fortune abroad, and after some delay gained admission to the University of Zurich, with the result as above stated. She now intends to seek admission once more to the medical examinations at St. Petersburg, in order to obtain a legal qualification to practise in her own country.

Dr. Charles L. Ives, of New Haven, has succeeded the late Dr. Worthington Hooker as Professor in the Yale Medical School.

Dr. A. Colberg, Prof. of Pathological Anatomy in the University of Kiel, died July 3, 1868.

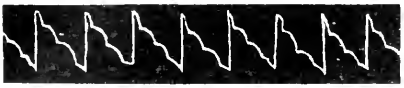
Prof. Carl Braun has been elected Rector of the Vienna University for the ensuing collegiate year.—*Allgemeine Wiener Med. Zeitung.*

Legitimate Medicine in Ohio.—Ohio will allow no one to practise as a physician without a diploma, after September.

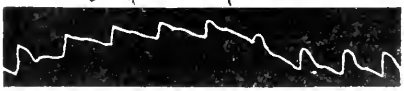
Prof. James R. Wood, our fellow-townsman, has returned from Europe, and is prepared to resume the duties of his profession with renewed energies.

M. Giraldès has recently issued a volume upon the Surgical Diseases of Infants.

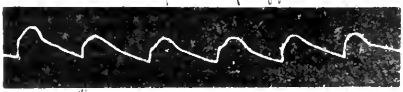
1. Pulse in health.



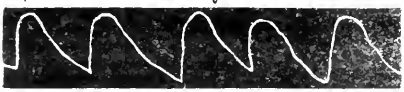
2 Polycrotic pulse



3. Violent expiratory effort



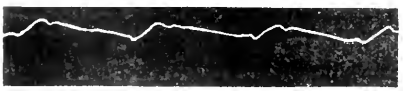
4. Senile calcification.



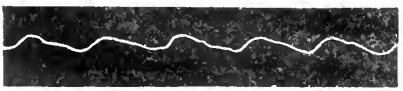
5. Senile calcification.

6. Collateral circulation.

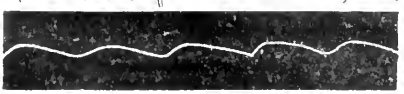
7. Collateral circulation.



8. Collateral circulation.



9 Aneurism of innominate. Rt. radial

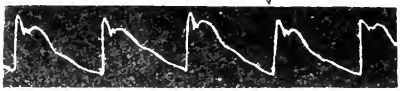


10. Same case as fig 9. Left radial.

11. Popliteal aneurism. Healthy limb.

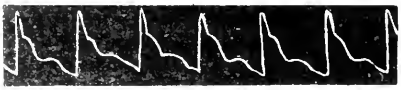
12. Same case as fig. 11. Diseased limb.

13. Aortic aneurism. Left radial.

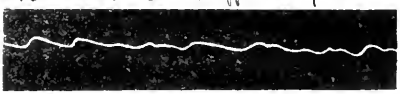


14. Same as 13. Right radial.

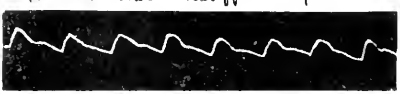
15. Aortic obstruction.



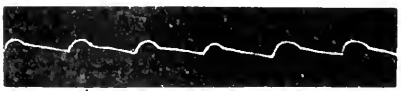
16. Aortic insufficiency.



17. Mitral insufficiency.



18. Mitral obstruction.



19. Tricuspid insufficiency.

20. Complicated heart disease.

All copied from Marey, except figs. 1, 2 & 3.

Original Communications.

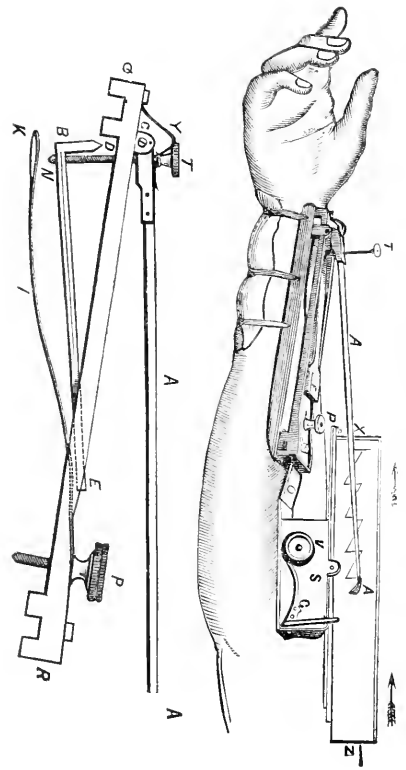
THE SPHYGMOGRAPH, AND SOME OF ITS USES:

BEING THE SUBSTANCE OF A PAPER READ BEFORE THE NEW YORK MEDICAL JOURNAL ASSOCIATION,

By SAMUEL B. WARD, M.D.,
NEW YORK.

DESCRIPTION OF THE INSTRUMENT.

The best instrument which we have at present for the study of the pulse is Marey's Improved Sphygmograph. As the name is formed from the two Greek words σφυγμος, the pulse, and γραφειν, to write—so the instrument itself may be considered as composed essentially



of two portions: first, that by which the wave of blood in the artery is translated into the motion of the long arm of a lever; and second, that by which the motion of the end of the lever is accurately and permanently recorded. The two portions are immovably attached to a metallic frame, by which the whole is firmly bound over the artery, the pulsations of which it is desired to investigate.

The construction of the first portion will be readily understood by an examination of the woodcut, fig. I. QR is a brass rod, immovably fastened to the frame. K is a flat piece of ivory, intended to lie over the artery, and attached to the rod QR by the spring I, which keeps it firmly pressed against the artery, and yet allows it to move up and down with each pulsation. By means of the screw P the amount of this pressure can be increased or diminished. DBE is a comparatively light brass rod which rotates freely around a pivot at E, and which is terminated at D in a knife-blade. CA is a long, light lever, which rotates around the point C, the only resistance being the light, curved spring Y, which presses it downward. The end of the lever A is armed with a pen. The instrument needs to be applied quite firmly; and the pressure made by the artery against the piece of ivory K carries it, with the spring to which it is attached, upward, until the upper surface of the spring touches the rod BE. It then carries this rod, which rotates around the fixed point E, still further upward, until the knife-blade D touches the under surface of the lever CA at a point very near the centre of motion, C. The bar DBE is in a different plane from the bar QR, and moves freely past it without touching. Now it is necessary that the end of the lever A should vibrate opposite the centre of the paper on which the trace is to be received; otherwise the pen would be raised too high with each pulsation, or drop too low after the wave had passed. This object is accomplished by means of the screw TN, which is a long screw with a milled head, working entirely free both of the lever CA and the bar QR, but which is screwed through the bar BE, and the point of which, N, rests on the spring I. Now, if when we have applied the instrument to the forearm, the point D presses the lever A upward, with just sufficient force to bring the pen opposite the centre of the paper, we have no use for the screw; but if the point D does not quite reach the lever it is only necessary to turn the screw downward. The point N becomes fixed against the upper surface of the plate K, and the bar BD is carried upwards by the screw until the point D reaches the lever and raises the pen to the desired level.

Fig. 2 represents the entire instrument in position; and here the *registering* portion is shown. It consists of a perfectly smooth brass plate, XZ, to which a strip of glazed paper is fastened, and which is moved along, in the direction indicated by the arrows, by a little watch-work contained in the box S. The watch-work is wound up by turning the screw-head V, is set in motion by moving the lever G in one direction, and is stopped at will by moving it in the opposite direction. The motion of the watch-work is perfectly uniform, and the passage of the entire length of the plate past the pen, A, occupies ten seconds. Both of these figures are modified from woodcuts contained in Marey's *Medical Physiology of the Circulation of the Blood.*

By changing the form of the frame the instrument can be adapted to any artery which lies sufficiently near the surface. This particular form, which is the most generally applicable at the bed-side, is intended for the radial, and is attached to the forearm by a tape passing backward and forward underneath the limb and over hooks on the frame itself. This same instrument can, with a little management, be applied to the posterior tibial if any lesion—an aneurism of the popliteal, for instance—renders it desirable.

From the construction of the instrument it is evident that the trace is the result of the action of two forces. If the paper stood still and the lever alone moved, the pen would describe a short arc of a circle, which for practical purposes may be considered as a vertical line. If the pen stood still and only the paper moved, the line described would be perfectly straight and horizontal. If the pen moves up and the paper moves forward with the same velocity, the trace will be a diagonal, making an angle of 45° with the horizontal; and so on *ad infinitum*. The more rapidly, then, any line ascends or descends, the more rapid must have been the ascent or descent of the pen, and the more sudden must have been the change in the tension of the artery.

In Marey's instrument the short arm of the lever measures about one-twelfth of an inch, and the long arm rather more than five inches and a quarter; therefore, each variation in the pulse is magnified about sixty-five times.

ITS HISTORY.

Of the history of this instrument we can only say a few words. The first instrument for rendering the character of the pulse more evident than it is to the sense of touch was the invention of Hérisson, and was called the *sphygmometer*. In its essential points it was exactly like the instrument which Dr. Hammond exhibited some weeks ago, designed to measure the pressure of blood in the brain. It consisted of a metallic cylinder or drum, over the bottom of which was stretched an elastic membrane. To the top of the drum a cork was fitted through which ran a glass tube, and the instrument was filled with mercury, which rose a certain distance in the tube. The bottom of the instrument was placed over an artery, and with each pulsation the mercury rose and fell in the tube. This instrument magnified the pulse considerably, but was open to two objections. The oscillations were due in a great degree to the *vis inertiæ* of the heavy liquid when once set in motion, and not solely to the motion of the blood in the artery; and, in the second place, they were not recorded.

Soon after this instrument appeared, it occurred to Ludwig that it would be desirable to record the oscillations of the mercury in Poisseuille's manometer. To effect this, a piece of light wire was driven into a wooden float, and the float was placed on the surface of the mercury. The wire was long enough to pass up through the tube and project above its open end, and, of course, partook exactly of the motion of the mercury. It was then bent at right angles, armed with a pencil-point, and made to trace a curve on a strip of paper moved by clock-work. This was an important step, because the instrument left an accurate, written trace of the oscillations of the mercury.

Vierordt next made an effort to devise an instrument which should magnify the pulse, as did that of Hérisson, and should record it, as Ludwig's recorded the oscillations of the mercury in the manometer. He succeeded to a certain extent; but the objection to his instrument was that the long arm of the lever acquired a momentum from the impulse of the wave, which carried the pen far beyond the point to which the motion of the artery alone would have taken it. Marey, by making the lever of wood and aluminum, so as to be exceedingly light, and by using the spring, Y, instead of a weight, to keep it down, has avoided this source of error.

It appears, then, that we have here an instrument which registers, with almost perfect accuracy, the character of the pulse, so that copies of it can be sent from place to place, or engraved to illustrate a text; that, in endeavoring to convey to another person an idea of the character of a given pulse, we are no longer confined to the use of such ambiguous and confusing terms as hard, thready, wiry, contracted, formicant, gaseous, etc.; and what is more important still, we have an instrument the delicacy of which far exceeds that of any finger, no matter how well educated.

So much, then, for the instrument itself; let us next consider the trace which it registers.

CHARACTER OF THE TRACE IN HEALTH.

Fig. 1, in the accompanying lithograph, is copied from the trace of my own radial artery, taken in Aug., 1866, at which time I was in perfect health. Probably the most noticeable point to a person seeing a sphygmographic trace for the first time is, that with each beat of the heart we have the lever raised twice, which means that there are two pulsations in the radial artery—the second much weaker than the first, but nevertheless perfectly distinct. This phenomenon is called *dichrotism*, and the pulse is said to be *dichrotic*. The second beat is not always so well marked as in this case; but it exists almost universally in healthy persons. Careful auscultation shows that there is only one beat of the heart, though there are two pulsations in the radial; and this latter phenomenon was at first accounted for by supposing that the second pulsation was due to the contraction of the aorta and large blood-vessels after they had been filled from the ventricle and the aortic valves had closed. The contractility of certain portions of the arterial system is a well-settled fact; but the rhythmic contractions of arteries never have the frequency of the heart-beat. To investigate this subject, as well as many others connected with the circulation of the blood, Marey constructed what he calls a *schéma*—an artificial heart and system of blood-vessels—in which the arteries are replaced by simple, elastic, rubber tubes, and all the physical conditions of the organs of circulation are reproduced as accurately as possible. With this schéma Marey obtained a perfectly dichrotic pulse—in fact in all essential points the trace was the same as that in the figure. And, since rubber tubes are merely elastic and not contractile, he concludes, after a series of well-conducted experiments, that the phenomenon of dichrotism is due to two causes: "first, the acquired velocity of the column of blood thrown into the vessels by the ventricle; and, second, the elasticity of the vessels, which causes the liquid column to oscillate alternately to and fro." He afterwards proved, by experiment on a living horse, that at the instant when the second pulsation is felt there is actually a backward flow through the artery.

There are many variations in the amount of dichrotism. In senile ossification, when the arteries have lost their elasicity, we might expect that it would cease entirely; and so we find that it does. Both in health and in disease the number of rebounds may increase to three, four, or even five, under certain conditions. Fig. 2 is copied from the trace of a patient of mine who has aortic regurgitation, and it will be noticed that there are four distinct rebounds with each beat of the heart. In certain diseases—typhus fever, for instance—the pulse loses its dichrotism; and Dr. Grimshaw, in an article in No. LXXXV. of the *Dublin Quarterly*, makes the statement, based on some three thousand observations, that the first and surest sign of convalescence is the return of dichrotism.

It will next be noticed, in still further examining Fig. 1, that a line running along the tops of the curves would not be straight, but curved. It is evident that any cause which increases the tension in the radial artery while the instrument is applied to it will increase the

diameter of the artery and raise the lever, and *vice versâ*. If while the instrument is applied to the right arm the left arm be raised up quickly, the weight of the column of blood in that arm adds to the tension in the rest of the arterial system, and the lever rises. If a forced expiratory effort be made with the mouth and nares closed, the aorta will be compressed, together with the other contents of the thorax, the blood will be forced into the radial, the diameter of the artery will be increased, and the lever will rise. This is well shown in Fig. 3 taken from the radial of a friend under these circumstances. The same phenomenon is observed in coughing, in sneezing, and in a less degree in ordinary respiration. No pathological importance is to be attached, therefore, to the mere fact that the apices of the curves are not in the same straight line.

A much greater importance is to be attached to the shape of the trace of each individual pulsation. To simplify the study of these they may be divided into three parts—a period of ascent, a summit, and a period of descent. The *ascending* line expresses, by its form and the angle which it makes with the horizontal line, the manner in which the blood enters the arterial system. If the ventricle is strong and the current meets with no opposition, the lever will rise almost instantaneously. If the arterial tension is considerable, the ventricle meets with more or less resistance in emptying itself, and the ascending line is more or less oblique. When it is sufficiently oblique we can always notice that it is a curve, showing that the pressure varies at different instants.

The *summit* of the curve may vary from a sharp point to a perfect arc of a circle, and this part of the curve is always to be carefully scrutinized. In health a certain instant of time must always elapse during which the pressure of the ventricle and the resistance of the peripheral portion of the arterial system will nearly counterbalance each other. In disease, and especially in aortic insufficiency, as we shall see presently, the lever, light as it is, is carried up so rapidly as to fly past the point to which the increased diameter of the artery would carry it, and then returns almost in the same line, leaving a very sharp point.

Immediately after the lever has reached its highest point the sigmoid valves close and the blood in the arteries is subject only to the effects of the elasticity and contractility of the coats of the arteries, under the influence of which it oozes into the venous system through the capillaries. If this takes place perfectly evenly the line of *descent* will be a regularly descending curve. The phenomenon of dichrotism which takes place in this portion of the curve we have already discussed.

Having now gained some idea of the character of the curve in health, let us glance at a few traces taken in disease, see how they differ from that of health, and what these differences signify.

SENILE CALCIFICATION OF THE ARTERIES. FIGS. 4 AND 5.

In advanced life, before calcareous deposit actually occurs in the coats of the arteries, these coats lose their elasticity, and often more or less degeneration takes place. This change does not generally bring about any important derangement in the circulation, but seems to be a predisposing cause of cerebral hæmorrhage, and is certainly sometimes followed by rupture of the large vessels. A positive detection of the disease will therefore be of considerable value in aiding a prognosis.

This condition of the coats of the arteries is almost constantly accompanied by two other lesions, hypertrophy of the left ventricle and dilatation of the aorta and its immediate branches, both of which latter are the result of the former in this way. It is capable of demonstration that, with an intermittent flow, more fluid will run through an elastic tube than through a rigid one, both having the same diameter and the same pressure being applied in both cases. The loss of elasticity in the arterial coats requires, therefore, more energetic action on the part of the heart, and induces hypertrophy of the left ventricle. And the fact that the blood is thrown with greater force against vessels which have already lost their elasticity induces their dilatation.

What we should naturally expect, under these circumstances, is that the ventricle would pour the blood rapidly at first into a vessel almost empty, and very slowly toward the end of the systole when the almost inextensible arteries were already nearly full; and since we have seen that dichrotism is in great part dependent on the elasticity of the arteries, we should expect it to disappear. This is precisely what we do find, as shown in the figures.

The principal characteristics of the senile pulse, then, are the following: 1st, Great breadth of the trace; explained by the ventricular hypertrophy and the large volume and inelasticity of the artery. 2d, The ascent is rapid at first; because a powerful ventricle is emptying itself into a non-contractile vessel which has lost, through the capillaries, a great part of the fluid which it received with the last beat. 3d, The summit of the curve is rounded or flattened; the systole being prolonged because the aorta cannot stretch to receive the wave at once. 4th, The curve falls rapidly immediately after the flattened or level portion. This character is not constant, and is due to the fact that the sigmoid valves, after their closure, bulge more or less toward the ventricle, lowering the tension in all the arteries suddenly, though not to any very great degree. 5th, The almost constant absence of dichrotism; which has been already explained.

COLLATERAL CIRCULATION. FIGS. 6, 7, AND 8.

We all know that immediately after an artery has been tied in its continuity, no pulsation can be felt beyond the point of ligature, and that the parts are subsequently supplied with blood by enlargement of the anastomotic vessels. A certain amount of anxiety is always felt, lest gangrene should supervene, until we know that the collateral circulation is fully established, and the sphygmograph is the most certain mean of detecting this. Fig. 6 is the trace of the carotid pulse of a healthy horse. Immediately after this was taken the artery was ligated, and the instrument, applied immediately beyond the ligature, made the trace represented in Fig. 7, which, though excessively weak, is perfectly distinct. Ten minutes later the trace represented in Fig. 8 was obtained, and it shows with what rapidity the collateral circulation was gaining ground. It is worth while to remark that when Fig. 7 was taken no pulsation whatever could be detected by the finger, and precisely the same circumstance has been noticed in the radial artery of the human subject when the current of blood through the brachial artery had been stopped.

ANEURISM OF THE ARTERY OF ONE OF THE EXTREMITIES. FIGS. 9–12.

In this case we have a vessel of a given diameter opening into a large elastic pouch, from the opposite side of which goes out another vessel of the same diameter as the first. A moment's consideration will show us that this arrangement ought to act like the large receiver of a fire-engine, which receives the water from the pump in sudden jerks and sends it from the nozzle of the hose in nearly a steady stream. The elasticity of the air in the receiver has the same effect as the elastic coats of the aneurismal sac.

In the affection which we are discussing, by comparing the traces from the two radial arteries in case of the upper extremity, or from the two posterior tibials in case of the lower, we find that this is precisely the result we have. In some cases the difference between the pulsations on the two sides can be felt; but in others it cannot, though the sphygmograph renders it evident. The case represented in Figs. 11 and 12 was curious in two respects; first, in the immense influence of respiration, caused by the patient's lying on his face when the trace was taken; and, second, in that the pulsation on the affected side could not be felt at all, though the trace is sufficiently clear. In every case the trace taken on a suspected tumor itself is almost perfectly pathognomonic. If it is really an aneurism the trace will be *very* wide, while if it is merely a tumor lying over an artery there will be no pulsation at all, or it will be simply a reproduction of the trace of the corresponding artery on the other side of the body, diminished in intensity.

It has been pointed out that, in an aneurism of the kind we are discussing, the pulsation of the artery on the affected side will be slightly behind that on the side not affected. I am not aware that this had ever been explained until it was shown, by Marey's experiments, that the point of the lever commences to rise on both sides at the same instant; that on the healthy side the upward motion is sudden, and the pen reaches the highest point almost instantly, while on the affected side it rises slowly, and the highest point of the curve is reached only after the lapse of a very sensible period. Since the finger refers the moment of pulsation to the highest point of the curve, the pulsation on the affected side will, of course, appear to be a little behind the other.

AORTIC ANEURISM. FIGS. 13 AND 14.

One of the most reliable symptoms of this disease, aside from those which arise from the physical examination of a pulsating tumor in the chest, is the difference between the pulsations of the two radial arteries. In the case shown in Figs. 13 and 14 the finger could not detect any difference with certainty. This dissimilarity between the pulsations of the two radials is probably to be accounted for by the fact that the portion of the arch from which the innominate arises is more involved than that from which the left subclavian is given off, or *vice versâ*.

VALVULAR DISEASE.

Lastly, we will consider briefly the diseases of the orifices of the heart itself. Many of the most interesting uses of the sphygmograph have not been touched upon in this paper, because they are purely physiological and because any comprehensible account of them would occupy far too much time.

By a series of experiments which were in many respects original, and which were made with an instrument differing somewhat in form from this one, but constructed on the same principle, Marey was led to adopt the most generally received opinion with reference to the causes and order of succession of the heart-sounds. The order is: the first sound accompanied by the stroke of the heart against the thoracic walls; a short silence; the second sound; a long silence. These four phenomena, taken together, constitute a revolution of the heart. The first sound he attributes to three causes: first, the closure of the auriculo-ventricular valves; second, the sudden change in the form of the ventricle; and third, the contraction of the muscular walls of these cavities. The second sound is caused by the sudden closure, and consequent clacking, of the valves of the aorta and pulmonary artery. The two ventricles contract perfectly simultaneously, and the valves of the aorta and pulmonary artery close at the same instant.

Now it is not always easy in a diseased heart to fix each of these acts as it takes place; and although we know the point where, in a perfectly normal heart, each of the sounds ought to be heard most distinctly, yet this organ is liable to be hypertrophied or to be displaced by various causes. And, still further, a particular disease of a particular orifice does not always occur alone, but is frequently complicated by some other disease of the same orifice or by a disease of some other orifice. So that, in actual practice, an accurate diagnosis of a disease of the heart is often far from an easy task, and the introduction of any instrument which will assist us should be hailed with joy.

Marey has often at the bed-side of a patient diagnosed the disease which affected his heart by the use of the sphygmograph alone; but that was only when some one else had made a diagnosis by auscultation, and one means served as a check upon the other; and it is in this way that the two means of making a diagnosis should assist and control each other.

Each orifice of the heart is liable to two distinct kinds of disease. Its diameter may be diminished—there may be obstruction; the valves which close the orifice in health may be insufficient—there may be regurgitation; and these diseases may be combined in almost any way.

Aortic obstruction. Fig. 15.—Let us begin with the aortic opening. If this be obstructed the wave of blood is impeded in leaving the ventricle, and we might expect to have the line of ascent of the lever a gentle curve; and since the coats of the aorta are elastic, the sudden impulse will be converted into a more equable pressure and the summit of the curve will be rounded. The shape of the trace is somewhat like that in ossification, because in both instances there is obstruction to the flow of blood at the close of the systole, making the summits of the two curves more or less alike; and there is often absence of dichrotism because the blood enters the arteries so slowly as not to give rise to a rebound. The two curves differ materially from each other in the shape of the first portion of the line of ascent, because in the one case the flow is obstructed and in the other it is not. It not unfrequently happens that these two diseases, aortic obstruction and senile calcification, occur together, and we have a trace which combines the characteristics of the two. Fig. 15 is the trace of a patient suffering with aortic obstruction.

Insufficiency of the aortic valves, or aortic regurgitation, is almost invariably accompanied by hypertrophy of the left ventricle; and Corrigan long ago called attention to the very strong pulse which always accompanies this disease, attributing it to the strength of the ventricle. Marey's experiments show, however, that the pen does not rise much higher after rupture of the aortic valves of a horse than before; but they show distinctly that the reflux of blood into the ventricle lowers the tension in the arteries, that the lever falls to a much lower point, and that the absolute breadth of the trace is due to the fact that the pen starts from a point lower than normal, rather than that it reaches a point higher than normal.

The trace of aortic insufficiency, Fig. 16, shows that the blood leaves the ventricle very rapidly, and that after the apex is reached the tension is again rapidly lowered. The prominent characteristic of this trace is the sharp-pointed apex which *always* accompanies this disease. If, in a given case, one were in doubt whether a blowing sound over the aortic valves accompanied the first sound of the heart or the second, or whether it continued through both—that is, whether it

were due to aortic obstruction, aortic regurgitation, or a combination of the two—the sphygmographic trace would settle the point at once.

Lesions of the pulmonary valves are comparatively rare, and the influence which they exert on the pulsation of the radial is, of course, slight. As yet no characteristic of the trace obtained in these diseases has been noted; if, therefore, we were in doubt, in a given case, whether an existing lesion were one affecting the aortic or the pulmonary orifice, the trace might be of great service in deciding.

The most noticeable points in the trace of *mitral insufficiency* are, that the breadth of the trace is diminished (Fig. 17), that the traces of successive pulsations differ from each other, and that the heart beats irregularly. Dichrotism is almost always present, and is in many cases more marked than normal.

The principal points in the trace of *mitral obstruction* are that the breadth is somewhat diminished (Fig. 18), that there is more or less irregularity in the curves, and that respiration has a marked effect on the trace taken as a whole. The character of the pulse in affections of the mitral orifice appears most important because the trace differs so entirely from that obtained in affections of the aortic valves, while these lesions are precisely those which give rise to sounds occurring at the same time. It never would be possible for an instant to confound the trace of aortic obstruction with that of mitral insufficiency, or that of aortic regurgitation with that of mitral obstruction.

Insufficiency of the tricuspid valve (Fig. 19) is usually accompanied by a venous pulse; and the sphygmograph gives evidence of this even when the finger and eye fail to detect it, or when we cannot be sure whether the pulsation which is seen or felt is in the vein itself or is only transmitted from an underlying artery.

Fig. 20 is the trace of a patient suffering with insufficiency of both the mitral and aortic orifices, and the characteristics of each lesion are sufficiently evident.

We have now pointed out some of the most simple uses of the sphygmograph. There is a large class of diseases, however, namely fevers, in which it is probable that experience may prove that the sphygmograph will render valuable aid both in prognosis and in indicating treatment. It certainly gives us a better indication than can be obtained in any other way of the degree of arterial tension; and as this is controlled in a great measure by the contracted or relaxed condition of the capillaries, we have a very good index of the state of these last-named vessels. Enough observations have not yet been made to enable us to decide how great is the importance of this point; but as the capillaries offer the greatest part of the resistance experienced by the heart, their condition as to contraction or relaxation cannot be without importance.

Dr. Grimshaw, as has been already said, has shown the importance of the return of dichrotism; and it is probable that further experience in this subject, which is still in its infancy, will bring to light many other important points.

206 West 42nd street.

Illumination by the Magnesium Light Eclipsed by Zircon.—M. Caron employs zircon, which is infusible, and burns with brilliancy in the oxy-hydrogen flame. Only the portion of crayon exposed to the flame need be made of zircon, the body can be formed of magnesium, which will be a saving in expense. M. Caron, after employing the same piece of zircon for an entire month, could not detect the slightest trace of wear or tear.—*La France Médicale.*

A NEW

METHOD OF TREATING HYDROCELE, VARICOCELE, AND VARICOSE VEINS.

By G. P. HACHENBERG, M.D., U.S.A.,

Post Surgeon, Ft. Randall, Dacotah Territory.

To reduce a surgical operation to its most simple form, and to lessen its tendency to danger, should be the surgeon's highest aim. Influenced by these motives, I present the following operations for hydrocele, varicocele, and varicose veins. The practice suggested itself to me from the manner in which a seton was disposed of in the case of a patient some years ago. He was a professional gentleman, and labored under amaurosis.

When inserting the seton in the nape of the neck, I pinched up a large mass of the integuments, through the base of which I inserted the seton, in order to retain it for many months. Notwithstanding every precaution to keep it intact, the seton sloughed away in about four or five months.

I. In 1855, B. N. B., aged 76, had had hydrocele of the left scrotum two years. The case was unhappily complicated with an organic disease of the portal system. He was highly cachectic. I did not consider it safe to attempt the treatment by exciting inflammation of the tunica vaginalis by the injection of stimulating fluids. Without resorting to paracentesis, I inserted a seton of saddler's silk through the lower anterior part of the scrotum, embracing nearly two inches of the tunica vaginalis. I left the seton for months, until it sloughed away, when the patient was permanently cured of his trouble. The seton at no time seriously incommoded the patient.

I did not repeat this operation, as I adopted a still less painful and simpler method, referred to in a recent number of the Transactions of the American Medical Association. This consisted in letting out the fluid by paracentesis, after which a gum elastic bag, or rather scrotal compress, was adjusted to the scrotum, which the patient wore, without the least inconvenience, for weeks, or until the cure was effected. At no time is the patient confined to bed. These scrotal compresses are made of pure caoutchouc, thin, light, and elastic; are of different sizes, are self-adjusting, and need no bandage to keep them in place. They do not, in my opinion, cure by exciting adhesive inflammation, but by restoring the enfeebled tone of the secretions of the tunica vaginalis.

II. In 1864, while surgeon of the Veteran Reserve Corps at Nashville, Tenn., a soldier presented himself with varicocele on the left side. The spermatic veins were most prominently involved. In operating, by careful manipulation, I isolated them from the cord, and with the fingers secured them to the side of the scrotum, in as small a compass as possible. I then secured them within the loop of a seton. After the operation the scrotum was treated with ice-water applications occasionally through the day, in order to maintain an astringent effect as well as to counteract active inflammation, and at one time phlebitis in particular. The treatment we had in view was to graduate the inflammation—slowly to bring about such infiltration of serum and fibrous deposit as would so compress the veins as to cut off their circulation long before they were severed by the seton. The scrotum was well supported by the ordinary suspensory bag, and after we had a certain degree of induration and tolerance from the seton, by the aid of a frail elastic band fixed over the left inguinal region by adhesive strips, a gentle tension was kept on the loop of the seton. This, and, at a later period,

the use of the savine ointment applied to the seton, greatly facilitated the sloughing, until the seton finally dropped out, leaving the patient relieved of his disease.

Certain cases of varicocele I have relieved by the use of the caoutchouc serotal compress, and found it an invaluable article for the treatment of sarcocele, hematocele, and in the latter stages of orchitis.

III. Last spring, on taking charge of the U. S. Post Hospital at Ft. Randall, D. T., the wife of one of the sergeants of the 22d U. S. I. came under my treatment for varicose veins. The saphenous of the right leg was very much distended, so that its bursting was apprehended by the patient. I began by a system of laxatives, the cold douche, and having her maintain a recumbent position, the leg being kept higher than the body. By this course the heat and venous congestion of the leg soon subsided. We now environed the vein, about four inches above the ankle, with a seton of silver wire, taking care not to transfix it with the needle. For a few days the parts were dressed with cold water application, and the patient kept in bed. After the parts became somewhat inured to the presence of the seton, at least when there was less tendency to an active inflammatory action, she was permitted at times to go about, and even to attend to her household affairs, still keeping up the cold water dressing. A month after the insertion of the seton a gentle elastic tension on the wire was instituted, which was kept up until it sloughed out. This tension was varied according to circumstances; when it aggravated the inflammation and pain too much, it was suspended for a day or two. In about two months the wire worked itself out, and left the circulation of the leg so altered as to give great relief to the patient. The seton might have been disposed of in less than a month, but only by incurring more inflammation, pain, and perhaps danger.

This procedure does not cause, comparatively, a very active inflammatory action if judiciously managed, and therefore is not attended with any unhappy consequences. A seton, after a certain stage, maintains strictly a reparative process. Nature struggles to get rid of it, and therefore all the soft integuments must give way to it. On the principle of disintegration, the seton is thus disposed of. As the advance tissues are broken down by the influences of its presence, it leaves behind its course the works of reparation. As we progress outwards with the seton, slow as it may be, we have all the time only a small perforated ulcerative wound to contend with, so trivial as to cause, usually, little or no constitutional reaction.

I would ask attention to one point of this paper. A slow, morbid action, artificially induced, is never so formidable as one suddenly brought about.

A NEW METHOD OF APPLYING EXTENSION TO FLAPS OF STUMPS.

By FRANK P. FOSTER, M.D.

LATE RESIDENT SURGEON TO THE NEW YORK HOSPITAL.

In the treatment of stumps it often becomes an object to make the most of what remains, in the way of flaps, after sloughing has taken place. For this purpose Dr. R. F. Weir employed elastic extension in the hospital under his charge at Frederick, Md., during the early part of the late war, and at about the same time I observed excellent results from its use in the New York Hospital during my pupilage at that institution. In some of those cases I applied the weight and pulley in the same manner as they are used for fracture of the thigh, and in others (leg stumps), where there was extensive ulceration over the crest of the tibia, with a tendency of the soft parts to fall backwards *en masse*, leaving three or four inches of the tibia exposed, I placed the stump in a fracture-box, sustaining it by a broad strip of adhesive plaster passing under it, and thence upwards on either side over the edge and down the outside of the side-board of the box; and finally attached a weight to the end of the box, by a cord running over the foot of the bed.

I have recently met in private practice a case in which, from the tender age and great restlessness of the patient, a child sixteen months old, some modification of the appliance was called for. This I effected in the following manner:—

A U-shaped piece of stiff iron wire, wound with adhesive plaster, was applied so that an arm of the wire passed up on either side of the stump. The counter extending straps were fastened to rings at the free ends of the wire, and the ordinary extending stirrup was fastened to the cross-bar by means of a strip of elastic webbing. A large bag of bran was then placed under the ham, and secured to the limb by means of strips of muslin passing around the leg and thigh. This bran-bag was made so large that any ordinary amount of tossing about on the part of the patient would neither disarrange the appliance nor injure the face of the stump. The flaps soon came into apposition, and the patient made a good recovery, the cicatrix being no larger than if primary union had taken place.

33 E. 28th st., New York, Oct. 5, 1868.

Original Lectures.

THE HYGIENE OF INFANCY:

ABSTRACTS OF LECTURES

DELIVERED AT THE BELLEVUE HOSPITAL MEDICAL COLLEGE,

By GEO. T. ELLIOT, JR., M.D.,

PROF. OF OBSTETRICS AND THE DISEASES OF WOMEN AND CHILDREN.

[Reported expressly for THE MEDICAL RECORD.]

GENTLEMEN:—The subject to which I shall call your attention, in the four lectures of this preliminary course, is of the first importance to the rational study and treatment of the diseases of infancy; for many of these owe their existence to infraction of the laws of hygiene.

To diminish the terrible—though to a certain extent inevitable—mortality of infancy, to avert evil influences, to develop the good, to diminish the necessity for drugs, and so to carry these helpless little ones through the perils of infancy that they may reach the less dangerous years of childhood with well developed constitutions, are tasks which demand both the knowledge and the application of the best hygienic laws.

While it will be impossible for me to attempt to exhaust the subject, I shall avoid at least useless details, and endeavor to fix your minds only on what may be direct and practical; nor shall I hesitate to set the hygienic indications in a clearer light by illustrating pathological conditions which may follow their neglect, as well as those which may forbid success.

If time would permit our thorough study of the subject, we should commence with those hereditary predispositions and influences which affect for good or ill the fœtus and the man, and those conditions of the mother's health and hygiene which are liable to affect gestation; but, passing over these interesting questions, we come at once to a broad division of the subject.

I. DUTIES OF THE PHYSICIAN TO THE NEW-BORN CHILD.

Establishment of Respiration.—Hitherto in the womb it has drawn its supply of oxygen from the mother,

through the placental circulation; now it is obliged to obtain this vitalizing agent from the outer world, through organs whose functions have rested in abeyance. Hence our first duty is to see that the function of respiration is fully established. Fully, I say, because it not unfrequently happens that unless this be thoroughly done, portions of the lungs are left unexpanded, collapsed as they were in the womb before respiration was necessary; and thus, sufficient machinery not being set in action, after a while oxygenation is not thoroughly accomplished; the respiration labors; the vital power fails; more lung tissue ceases to work, perhaps collapses; the surface becomes blue, the nerve tissue poisoned by black blood, the senses benumbed, the vital warmth displaced by the advancing coldness of death. This unexpanded condition of the air-cells, which may obtain from the failure to establish respiration, and to which the lungs of infants are liable to revert in conditions of debility and catarrh, is known under the name of atelectasis. Prevent these dangers by insuring such full and continued respirations as may make you morally certain that all the cells have been distended. Hearty and continued cries from the child generally attest this result.

Now children are often born in natural labor, and in labors attended by special dangers, in a condition of apparent death. A broad distinction is drawn by authors between those apparently dead or apparently dying, with a congested or a pallid surface of the body. Treatment has been formulated in accordance with these obvious signs. I do not dwell upon them. No greater congestion of the internal organs has ever come under my observation, in the autopsy of these children, than in cases where the surface has been pallid. Congestion of the skin does not kill, it is congestion and extravasation within that we dread. Skin congestion accompanies internal congestions, but these latter may exist without the former. Signs of strength and vigor may permit treatment contraindicated in premature and puny children. Do not believe that the liver and brain must be pallid, because the skin is white.

Do not assume that, because a child is born and shortly dies with a thoroughly congested and blue surface, it died from "the blue disease," or cyanosis. Cyanosis, to constitute a disease, must be recurrent; or if believed to have caused the death under the circumstances we are considering, something more than a patent foramen ovale must be shown by the autopsy. The foramen ovale would be patulous, as a matter of course. How could it have closed in so short a time, even if its persistent patency were assigned as the cause of cyanosis?

When, therefore, children are born and do not respire, is blood to be let? Is the indication to be based on the color of the skin? What method is to be preferred? Shall we allow blood to flow from the cord, or take it by leeches? I mention the latter advice only for condemnation. If you allow blood to flow from the cord, hold it well, as you would a cut axillary artery, so that you can control it at once. A teaspoonful is a limit beyond which I would very rarely go. But I very seldom allow any blood to flow, and still more rarely until I have rapidly tried the measures to which I now invite your attention. Establish respiration thoroughly, and the sluggish circulation becomes active, the ruddy glow of health colors the skin.

Free the mouth and nose from mucus and vaginal discharges. Note that there be no malformation. It has been noticed that a simple band of skin over both nostrils, easily divided with a bistoury, has powerfully affected the respiration of a new-born child. Women relatively breathe more with the thorax, men with the abdomen; perhaps the new-born child, destined in lactation to rely so much on the nostrils, may physiologically need them more than we. Free the nostrils and the mouth thoroughly, both in order to admit air, and because in the first inspirations these materials may be drawn into the air-passages and occlude the bronchi. Such conditions may have obtained in utero from premature inspiratory efforts. Liquor amnii and meconium may be demonstrated in the air-passages by the microscope. The child yet contained within the unbroken amniotic pouch, compelled to respire prematurely by reflex irritations, or by that respiratory need awakened by interference with the placental circulation, may thus be drowned in the womb of its mother, and the cause of death demonstrated at the autopsy. Try to prevent this accident to the respiratory passages when the child is born, and in your hands.

When the child is separated from the placenta, if the stimulus of the respiratory need, and the transition to the cool air of the room are not sufficient, spank it over the buttocks with the tips of your fingers, and rapidly use Marshall Hall's or Sylvester's method for the resuscitation of those who have been drawn from the water. If not promptly successful, plunge the body of the child in warm water (which should be ready in advance), and then into cold water. You thus keep up the warmth, draw blood to the surface, and increase the shock of the cold application. Spur the diaphragm and intercostals by brisk sprinkling of water; a lump of ice or a column of water to the epigastrium; then back again to the warm water, so as to diminish internal congestion and the benumbing influence of continued cold. From the warm water place the child on a blanket, on the floor or bed, and I thoroughly try Hall's or Sylvester's method. I prefer Hall's, but use both, and have seen children saved exclusively by each. It is not necessary to draw the tongue forward. It is important to keep the chin in line with the sternum, and to keep the trachea somewhat prominent. Remember to prevent the child from getting too cold. Hot and cold water again. Slap, sprinkle, blow on the surface of the body, and the slow and struggling expiration by gentle pressure on the chest. Have a battery on hand. Place the poles on the sides of the neck (third and fourth cervical), and over the diaphragm. The theory is to stimulate the phrenic nerve. The battery, however, under my observation, has proved less valuable than the other methods detailed, and I therefore only indicate the most important application. During this time abstraction of blood will have been considered. Do not let the water be too hot; you may scald the insensible child. Too hot water has been asserted to have caused trismus. Shall you inflate the lungs with your own breath? If so, be sure that the air enters the larynx. With skilful manipulation a catheter makes this certain. Generally the stomach is blown up, unless precautions be taken. Do not blow into the lungs so as to produce emphysema. I have seen emphysema, however, in new-born children, whose lungs had not been thus inflated. If you inflate the lungs, do not blow when the child is making a respiratory effort. In one word, my personal experience makes me rank this method of inflation as secondary to alternations of heat and cold, stimuli, and the methods of Hall and Sylvester.

Persist in these trials as long as the heart can be felt or heard, and a little longer than it can be heard. The quickest way to feel the heart is to put the pulp of your finger under the ribs and lift up the diaphragm. Pulsation can be felt thus when it cannot be touched through the thorax. Persist a while after the heart has apparently ceased to beat. A life for which you are

responsible hangs upon the effort. There is nothing more surprising than the tenacity with which some infants cling to life, except the facility with which others lose it.

But, gentlemen, all your endeavors will often fail. For your satisfaction, and for the satisfaction of the family, obtain an autopsy. The pathology of fœtal life and of the still-born yields to none other in interest or value. It is a microcosm but too little explored. It is melancholy to see the neglect of the subject in practice and in the records of great hospitals. A still-born child one would suppose to be a child still-born from some unexplained and sufficient general cause. Start clear from such apathy, such delusions. The autopsy may show that you struggled against hope, that the establishment of respiration was hopeless, or its continuance impossible. Gather this consolation when you can. Search at least for truth. The respiratory passages may be proved by the autopsy to be absent in whole or in part. Trachea or bronchi may be replaced by impervious cords. Cysts, peritoneal effusions, pleuritic effusions, may have developed themselves in fœtal life, may not have killed the child, but may prevent air from reaching the lungs, the diaphragm from descending, the lungs from expanding. The pulmonary artery may be absent or barely pervious. The heart may be in front of the neck, within the abdomen, outside of the thorax; it may be unfitted for the strain of the altered circulation from malformation and from intra-uterine disease. The diaphragm may be open, and the intestines have crowded into the thorax and stopped the lungs from expanding. Extravasations on the brain and into its tissue may have caused the death. Those extravasations may have occurred before the labor commenced. I have said enough to show that you may have the consolation of knowing and proving that your responsibility has been discharged, that the cause of death bore no relation to your management of the labor, or to your choice and use of means to establish respiration, when respiration was impossible.

Ligation of the Cord.—In ligating the cord, always examine the umbilicus thoroughly for hernial protrusion. Cut far enough away from the body to leave space for a second ligature, in case it become necessary to apply it after the occurrence of hæmorrhage. The gelatinous material composing the envelope of the cord is very apt to make the first ligature slip.

Knots in the cord may be found, but they rarely produce death. Their occurrence has been explained by supposing that the head of the child passed down through a loop in the cord. The cord is often twisted about the neck; and it is sometimes necessary to use forceps to effect delivery in these cases; I have never, however, had to cut the cord before delivery. A cord shortened from this or other reasons may produce delayed labor; and, if the forceps be used, the resistance due to the cord may be felt upon attempting traction in increasing ratio to the advance. It is difficult or impossible to diagnosticate these cases, until the head is well down in the vagina, or until the head is delivered.

Warmth and Ventilation.—After having secured the establishment of respiration, it is of the first importance to see that the infant be kept warm. Of all the young mammals the human probably requires the most care in this respect. Yet exceptio ad instances may be cited indicative of the opposite condition. Children exposed in the streets and taken to foundling hospitals often die from cold. The competent monthly nurse takes the greatest care of the warmth of the child. Sleeping with its mother is the natural means for warming the child, a species of incubation, but is attended with liability to accidents; the child may be smothered beneath the bedclothes, by the mother or nurse, either accidentally or intentionally, overlaying it. The mother or nurse is also very apt to nurse the child too often at night, and thus institute a bad habit both for herself and for the infant. Moreover, the air of the mother's bed is more or less impure from the lochia.

I now wish to advise you particularly to see that there is constantly in the nursery a sufficient supply of fresh air. No observations illustrate my remark better than those made in the Dublin Lying-in Asylum, where for twenty-five years the mortality was 1 in 6. On the introduction of proper ventilation, the mortality fell to 1 in 19¼, and subsequently to 1 in 58½. A thousand cubic feet of space are ordinarily regarded as desirable for an adult; a young child requires no less than an adult. Apart from the respiratory troubles overcrowding produces, it increases the liability to epidemics, to ophthalmia, and depraved nutrition.

Residence.—Very frequently it will be found that a change of residence will prove of decided benefit to the infant, especially when some depressing or contagious atmospheric influence exists in the neighborhood where the child is residing. A change from one part of the city to another may be sufficient. Often, however, the sea-side or the mountain may offer special claims, especially for escape from heat.

Urination.—It is of great consequence to see that the infant passes its water. Urine is secreted and passed in utero, and may be passed during and just after birth. In some children the urine has been retained, and the distension of the bladder has been so great as to prove a cause of delayed labor. Cystic kidneys have done the same. In one case the bladder was found capable of containing two quarts of urine; in other cases it has ruptured before birth. After birth, almost before the child draws its first breath, it often passes its urine. Should it not do so within the first twenty-four hours, we should learn why not. It may happen that the bladder was emptied immediately after or during labor. It may be that so little milk has been taken that the kidneys have not been called upon to act freely. Babies urinate in direct proportion to the amount of milk or liquid nourishment they receive, in a ratio five or six times as great in proportion to bulk as in the case of the adult. Hence, whenever we learn that the infant is passing but a scanty amount of urine daily, it is always safe to ask whether it is receiving milk enough from its mother or the wet-nurse.

Obstruction to the passage of the urine may occur from deformity or the partial or total absence of the organs necessary to the function of urination; such as partial or complete absence of the urethra, absence of the bladder with compensatory openings, or of the kidneys, or impervious ureters. Perhaps the bladder may be very capacious or atonic. A cause of obstruction to the flow of urine shortly after birth, in boys, is dependent upon simple agglutination of the urethral walls. (I have more frequently found urine in the bladders of still-born boys than in those of still-born girls. It is natural that it should be so.) This condition is easily remedied by the introduction of a silver probe curved into the form of a catheter; the urine generally trickles out along its sides, and then flows freely. The reflex irritation thus produced is often all that is necessary. Whenever you are told that the water does not pass by the natural outlet, always examine thoroughly for some abnormal opening through which it may be passing unperceived, especially for vesico-vaginal fistula, cloacæ, and hermaphroditism. Sometimes, but not very frequently, a condition occurs, known as hydronephrosis, in which the bladder and ureters may be immensely dilated, so as to resemble the fœtal intestines, and the kidneys affected

by the pressure of the retained urine. In one case under my observation, in which this condition was found, my explanation was that, owing to the shallowness of the pelvis and the obliquity of its brim, the bladder had fallen forwards, after dilatation had commenced, thus producing an angular flexure of the urethra or neck of the bladder, preventing the discharge of the urine, for the urethra was normal in size; accumulation had then occurred, and by the "back-water" action produced the changes in the urinary tract, distending the ureters, calices, pelves, and causing absorption of the cortical structure. Retention of urine may also occur from pressure upon the ureter, as by the passage across it of a supernumerary branch of the renal artery. I have never seen a case in which puncture of the bladder was demanded in the new-born child for retention, but if necessary, I should prefer the supra-pubic method.

Cleanliness.—The education of the infant should begin with the first days of its extra-uterine life, and a point of no little importance is to see that it does not lie in wet or soiled diapers. Let these be removed immediately after it has soiled them, and soon it will learn to indicate by its cries its disapproval of damp diapers. See that the napkins are not dried in crowded rooms before the registers. Moreover, if a child is allowed to lie almost constantly in its own excretions collected in the napkins, erythematous eruptions or even ulcerations will be formed upon its nates, and these may sometimes have a very suspicious appearance. Now, gentlemen, do not be in a hurry to diagnosticate all ulcerations you find upon the buttocks of an infant as necessarily syphilitic in character. Appearances should not always be interpreted against the infant. Uncleanliness, and neglect to apply other clean, dry napkins as soon as the first are soiled, is a very common source of sores about the infant's buttocks, simulating syphilitic cachectic ulcers. By removing the cause of the trouble, applying a mild lead wash or other lotion, and seeing that the child is well nourished, we can generally heal up these ulcerations without difficulty, and dissipate the mistaken diagnosis. In diarrhœa redouble precautions: cleanliness, lead water, calamine powder, disinfectants.

Passage of Fæces.—The liquor amnii does not as a rule contain meconium. When the finger, introduced into the vagina, encounters this, its presence is commonly supposed to indicate the death of the fœtus, or a breech presentation. But even when there is no breech presentation, we should not lay too much stress upon this symptom in making our prognosis, except in so far as it is indicative of great danger to the fœtus. There are very few positive signs of death of the fœtus. Inability to recognize the fœtal heart-beat is not sufficient evidence that the child is dead. There are few very strong evidences of its death. No pulsation distinguishable after a long lapse of time in the cord; second, the perception by the finger that the parietal and occipital bones collapse and move about on pressure, while the skin peels off on friction. If you do not recognize by the touch that the child is putrid, try to deliver promptly and revive it if possible.

Always inquire the first day after birth if the infant has had a passage from its bowels. If it has not, examine it carefully. An examination of the external orifice alone is not sufficient. Introduce a probe into the rectum, and see whether it does not end in a cul-de-sac. It may be that parts of the intestines which you cannot reach consist only of fibrous bands, and in these various contingencies the question will arise as to the formation of an artificial anus.

Obstruction of the intestinal canal may occur from infarction by an accumulation of epithelial scales.

In children born without an anus, there may be a connection of the rectum with the vagina or the bladder. In the former case, we should make an incision in the median line, establish an anus in its usual situation, and later in life heal the recto-vaginal fistula by the usual procedures. In the latter wait developments, or if possible follow the same course.

Simple closure of the raphe or lower part of the rectum is the easiest malformation to detect and treat. When the question arises as to the advisability of groping one's way with bistoury, scissors, and fingers, where the rectum ought to have been, and then of plunging a trocar into something above that we believe to be intestine, or when we select the alternative of an artificial anus, our duty is clear, to represent fully the uncertainties and dangers to the family, with the limited chance of success in the last contingency. If the parents refuse, a painful and unsatisfactory operation need not be performed. If they assent, or saddle you with the whole responsibility of the decision, you must even make the artificial anus, for it has saved life in the history of the operation, though you will probably fail. The alacrity to be felt in the operation is in direct ratio to the expectation of speedily reaching the intestine from below. Before performing it, wait for the intestine to be distended, if you cannot feel it, but not too long.

Clinical Department.

BELLEVUE HOSPITAL.

CASE OF FACE PRESENTATION—POWERLESS LABOR—ATTEMPTED VERSION—CRANIOTOMY AND DELIVERY BY THE FORCEPS.

SERVICE OF DR. ISAAC E. TAYLOR.

Reported by Chas. S. Bull, M.D., House Physician.

ELLEN MCDERMOTT, aged 24, a native of Ireland, and by occupation a domestic, was admitted to Bellevue Hospital in August, in apparently perfect health, and pregnant with her first child. Her last menstrual period was about November 20th, 1867.

Labor pains first came on about 2 o'clock on the morning of August 31st, 1868, though she had had premonitory pains for several days previously. A vaginal examination was made, but owing to the thickness of the membranes, the position could not with certainty be made out, though it was plain that the head was presenting. The fœtal heart was heard in the right iliac fossa. The pains came on at unusually long intervals, and were very slight. At 8 A.M. of same day the membranes ruptured, and a second examination revealed the fact that the child was presenting by the face, the occiput being to the right sacro-iliac synchondrosis. In about two hours the pains had almost entirely ceased, and the head could still be pushed up above the superior strait. The bowels were moved by an enema, and whiskey was administered at intervals of two hours. Early on the morning of the first of September the pains returned more forcibly, and the head soon became firmly jammed in the superior strait. The patient now stated that she had not been able to pass her water for nearly twenty-four hours. On attempting to introduce the catheter, it was at first found impossible, as the head of the child was pressed firmly against the bladder, completely blocking up the orifice of the neck. At length, by directing the point of the catheter obliquely to the right side and using firm pressure, it entered the bladder, and about twenty ounces of urine were drawn off. The head made very little

progress, and the lips of the os had become rigid and œdematous. The warm douche was applied for fifteen minutes, every hour. Dr. Taylor saw her at 12 M. September 1st, and directed that the patient should be kept partially under the influence of an anæsthetic.

At 7 P.M. the labor had made no advance, and a consultation of the House staff having been called, it was decided to send for Dr. Taylor. He arrived at 8 P.M., and, after examination, decided to attempt podalic version.

The patient having been fully anæsthetized, the hand was introduced slowly into the vagina in the intervals of pains, and an attempt made to push up the head, assistance being rendered at the same time by pushing from the outside; but it was found almost immovable, and the attempt failed. On introducing the hand into the uterus, it was so firmly grasped by that organ as almost to paralyze its action. By slow movements, however, following each expiration, Dr. Taylor was at length enabled to grasp one knee of the child, and soon one foot. By degrees this was brought down into the vagina and a loop passed over the ankle and held by an assistant. After a much longer trial the other foot was reached and brought down, and then gradual but firm traction was made upon both, but without the slightest effect. The breech was pushed down from the outside, at the same time that traction was made, but the child was immovable, and after nearly an hour's continued labor, Dr. Taylor decided to give it up, and perform cranio-omy.

The skull was perforated at the anterior fontanelle and the brain thoroughly churned up. The crotchet was then used, guarded by the finger, but failed completely in removing any of the skull. The blunt hook was then essayed, but proved of no avail. As a final resort the forceps were applied and firm traction resorted to, but the head would not budge.

It was now about 1 o'clock in the morning of September 2d. The question now came up of evisceration, but Dr. Taylor concluded to give the woman a full dose of opium and leave her till the morning, in hopes that the uterus might regain strength and perform its work. The patient slept quietly all night, and ate a hearty breakfast. No return of the pains.

At 9 A.M., September 2d, Dr. Taylor reapplied the forceps, and, by firm traction for about half an hour, the head was finally brought down upon the perineum. The forceps were then removed, and by the aid of Dr. Taylor's blunt hook, which has the hook at right angles to the shaft, the head was delivered. The shoulders soon followed, and at 10 A.M. the child was delivered. The placenta came away in about fifteen minutes, and there was no hæmorrhage. The perineum was not ruptured in the slightest degree.

The patient was placed immediately upon brandy in large amount, and beef tea, and quinine in doses of grs. v, administered three times a day, with gtt. x. of Magendie's solution of morphia every two hours. In about three hours after delivery the labia began to swell, and some tympanitis appeared, but no hypogastric pain. Ten drops of the tinct. nucis vomicæ *ter die* were ordered, and a lotion of muriate of ammonia applied to the labia.

The urine was drawn three times a day, and brandy freely administered. The following is the daily record:

September 3d.—Labia very much swollen; some tympanitis. No pain anywhere. Pulse 132. Respiration 21. Tongue moist. Absence of any vaginal discharge.

September 4th.—Labia still swollen, and the lower portions look black as if a slough were forming. Complains of pain over hypogastrium, which was relieved on drawing the urine. Slept well during the night. She was ordered Magendie, minims xv., and a turpentine stupe over the uterus. Injections of carbolic acid, and lead and opium wash to the labia.

September 4th.—2 P.M., pulse 120; resp. 30; Mag. minims xv. 6 P.M., pulse 116; resp. 21; Mag., minims x.

September 5th.—10 A.M., pulse 124; respiration 18; Mag., minims x. No urine secreted since 2 A.M. of this day. 3 P.M., pulse 120; respiration 20; Mag., minims xx.; urine is again secreted abundantly. 6 P.M., pulse 118; respiration 24; Mag., minims xv. 10 P.M., pulse 114; respiration 18; Mag., minims x.

September 6th.—10 A.M., pulse 130; respiration 18; Mag., minims x. 12 M., pulse 128; respiration 20; Mag., minims xv. 2 P.M., pulse 132; respiration 20; Mag., minims xv. 4 P.M., pulse 132; respiration 20; Mag., minims xv. 6 P.M., pulse 128; respiration 18; Mag., minims x. 9 P.M., pulse 122; respiration 21; Mag., minims xv. 11 P.M., pulse 1.5; respiration 21; Mag., minims xx. Tinct. verat. viridis, minims viii.

September 7th.—1 A.M, secondary post-partum hæmorrhage quite profuse; controlled by ergot in large doses, and ice locally to internal surface. Pulse 135; respiration 14; Mag., minims x. Tinct. verat. viridis, minims viii. 3 A.M., no hæmorrhage; pulse 130; respiration 16; Mag., minims x.; Verat. viridis, minims x. 5 A.M., pulse 120; respiration 15; Mag., minims v.; Verat. viridis, minims x.

September 7th—10 A.M., pulse 132; respiration 24; Mag., minims xv.; pulse so weak that the veratrum was discontinued. 12 M., pulse 120; respiration 36; Mag., minims xx. Another small hæmorrhage; easily controlled.

From this time on the morphia was stopped, as it was deemed useless. She became wildly delirious—vomited constantly, and the pulse became scarcely perceptible. The stimulants were administered with an unsparing hand, but were of no avail, and she died at 3 A.M., September 8th.

Autopsy—thirty-six hours after death.

The brain and membranes were somewhat congested—otherwise normal. The lungs were congested; the heart weighed fifteen ounces, and was very fatty, but there was no valvular lesion. The liver and spleen were normal; the kidneys were large and were the seat of fatty degeneration. The urine had been examined several times before death, but no albumen nor casts had been found. There was not the slightest trace of any peritoneal inflammation anywhere in the abdominal cavity. The uterus was very large and flabby, and contained several clots of blood. There were no signs of any metritis, nor was there any pus in the uterine sinuses. A slough had formed on both labia at their lower portions, but had not separated. The case has interested me a great deal, for the woman had all the symptoms of puerperal peritonitis, and yet the autopsy revealed no lesion. She must have died from exhaustion produced by the profuse hæmorrhage, and perhaps from the toxæmic effects of urea, as her kidneys were very much diseased.

Homœopathy Prohibited in Russia.—*Le Courrier Médicale* announces that, in consequence of the numerous victims of homœopathic treatment, the Emperor of Russia has issued an order which prohibits the practice of homœopathy in any part of the Russian Empire, under pain of a fine of 500 roubles, and two years' transportation to Siberia.

New Lunatic Hospital.—The lunatic hospital at Middletown, Conn., which will be one of the models of its kind in this country, is almost completed.

Progress of Medical Science.

FIBROUS TUMOR OF UTERUS REMOVED BY ENUCLEATION AND AVULSION.—In the "*California Medical Gazette*," John Scott, M.D., F.R.C.S.I., F.E.S.L., etc., Surgeon to the California State Woman's Hospital, publishes the following interesting account of the removal of a fibrous tumor by enucleation and avulsion. A married lady, aged 45, married twenty-four years, applied to Dr. S. for the suppression of hæmorrhages which had occurred constantly, for three out of every four weeks, for a period of five years previously. The quantity of blood lost at times, particularly at the catamenial periods, was enormous. On examination, the uterus was as large as a four and a half months' pregnancy; hard and lobulated to the touch, and lying over to the left side; the organ was found to be low down in the pelvis; the os was thin and dilated to a little more than the size of a dollar, with a firm, smooth tumor projecting through it. The finger could be passed between the tumor and uterus in front and to right side; but posteriorly and to the left side, it was found attached by connective tissue, which was easily broken up by the finger. On the insertion of the speculum, a glistening tumor was seen protruding through the os.

As the patient had recently lost a large quantity of blood, an operation was recommended for its removal, to which she at once consented. The cervix was divided with scissors, and the bleeding was controlled by perchloride of iron on lint. Preparatory to the operation an aperient was ordered. The process of enucleation was commenced by breaking up with the finger, as high as he could reach, the connective tissue which bound the tumor to the uterus. As the os was not sufficiently dilated to allow of the passage of the tumor, the incisions were enlarged on each side. An écraseur was introduced, carrying a steel wire, and, after some manipulation, the tumor was divided. On extraction, about one-third of the mass was found to have come away. The hand now could be passed higher up, and by means of the écraseur the greater portion of the tumor was cut through; after this was extracted, the hand was passed up and the remainder was detached. The interior was then explored, when a small fibroma was found at the highest portion of the cavity, which was shelled out with the finger and then extracted. The operation lasted one hour and ten minutes, and only six ounces of blood were lost. The patient recovered quickly, and has continued to gain health and strength. The bleeding has never returned. The menstrual discharge following the operation, lasted between four and five days, and then ceased. An examination was made one month after the operation, and on finding the uterus harder and somewhat larger than natural, and that a whitish discharge existed, the cavity was dilated with a sponge tent, and tincture of iodine injected, which had a happy effect.

The tumor weighed two pounds, was seven inches in length, twelve inches in circumference, nodulated, and had a distinct fibro-cellular investment. It had evidently been an intra-mural growth, its nidus being high up in the left wall of the fundus, from which it had been extruded by uterine contractions.

A NEW STYPTIC—THE TREE HAOFASH AND ITS PROPERTIES.—The Paris *Moniteur* gives an interesting account of a tree called "haofash," which grows on the mountains of Baria, in French Cochin-China. It grows wild in the forests, hidden among lianas and other creepers which render the wooded mountains of that country almost impervious to the traveller. Nor do the inhabitants, generally speaking, know the botanical or medicinal properties of this plant, so that it remains a secret in the hands of the bonzes and physicians. MM. Condamine and Blanchard, two French travellers, have at length succeeded, after much fruitless research, in finding this tree, having conquered the conscientious scruples of a worthy bonze, who seems to have been perfectly alive to the virtues of the French Napoleon. The Annamites, who gain their livelihood by selling the bark of the haofash to professional men, wait till the tree has attained its third year before stripping it of its bark, its usual height at that age being about twenty-four feet, with a circumference of a foot and a half or thereabouts. The operation is performed in June, when the tree has neither blossoms nor fruit; it is hewn down and then denuded of its bark methodically, in slices about two feet long and three or four inches broad. These strips are made up into bundles weighing from thirty to forty pounds. A man will carry two of them at a time fastened to the ends of a pole resting on his shoulder.

The bark of the haofash is outwardly of an ash-gray color, and inwardly brown. It has a strong aromatic smell and a slightly bitter taste. When chewed it reddens the saliva; it is a powerful styptic, and is administered by the physicians of the country in case of colic, diarrhœa, and dysentery. The dose for a decoction is generally from six to ten grammes in one hundred grammes of water, boiled down to one-fifth; but sometimes they merely put a bit of bark into hot water, occasionally rubbing the former against the rough sides of the earthen pot used for the purpose, and then make the patient drink the liquid, which is then sufficiently strong to cure a simple colic

ALOPECIA, etc.—At the Hôpital Saint-Louis, says the *Gazette des Hôpitaux*, the following formula is in daily use:—

1. In *alopecia*, when not due to syphilis, nor a parasitic affection, M. Hardy recommends the following pomade:—

Ox fat	60 grammes
Castor-oil	25 "
Gallic acid	2 "
Essence of vanilla	a few drops.

A slight degree of chronic pityriasis is not considered an obstacle to the employment of this pomade.

NOVEL APPLICATIONS OF THE CUPPING-GLASS.—Dr. L. Hamon extols, in *La France Médicale*, the advantage of a new cupping arrangement called *la ventouse mécanique*, with which he has made some novel applications. He repeats a case of acute tonsillitis cut short by a single application; a case of conjunctivitis, keratitis of the right eye, with extensive opacity accompanied by ulceration of the cornea, perfectly cured after two applications of this wonderful instrument; intense traumatic phlegmasia of the right eye, escape of blood in the two chambers, rapid cure after three applications; traumatic inflammation of the region of the knee-joint, above and in front, from the kick of a horse, cut short by a single application; paralysis of the tongue cut short by a single application; aphonia from cessation of the menses cut short by a single application. The details of these cases are given in No. 61 of the current year; in No. 6 Dr. Hamon narrated his successes in treating anthrax in the same manner.

THE PROTOXYDE OF AZOTE IS BEING EMPLOYED AS AN ANÆSTHETIC by Dr. Seymour in the extraction of teeth, producing complete insensibility in two minutes. It is said to be perfectly innocuous, and to be respired without difficulty or repulsion.—*La France Médicale.*

Ophthalmic Diagnosis in Nervous Diseases.—M. Bouchut recently sent to the Academy of Sciences of Paris the results of his more recent researches on the utility of the ophthalmoscope in diagnosticating diseases of the cerebro-spinal system. Through the novelty and interest of the subject we are induced to sum up briefly the more striking features of this memoir. Most of the diseases of the membranes of the brain and spinal cord being accompanied by optic neuritis, neuro-retinitis, inflammation of the choroidal membrane, and papillary atrophy, it can be understood how the ophthalmoscope enables us often to detect in the interior of the eye disorders of circulation, of secretion, and of nutrition, which indicate an organic disease of the cerebro-spinal system. It is through the anatomical and physiological connections of the eye with the spinal cord and brain that we may explain the law of coincidence of optic neuritis with organic injuries of the nervous system. Each time that some violent impediment to cerebral circulation is brought on by the existence of some injury of the cerebrum and of the spinal cord, papillary and retinal hyperæmia is the consequence. When it is the brain which is the seat of acute or chronic phlegmasia, the inflammation may extend to the eye by following the course of the optic nerve. On the other hand, diseases of the anterior columns of the cord may, through the anastomosis of the parts with the great sympathetic nerve in the situation of the two first dorsal pairs, produce in the eye various phenomena of papillary hyperæmia, which bring on at a subsequent period wasting of the optic nerve.

These facts show through what mechanism diseases of the nervous system stamp themselves on the eye so as to be detected by the ophthalmoscope. Other results are mentioned by the author which may be of use whilst determining the diagnosis. Thus the optic neuritis and the neuro-retinitis produced by the acute or chronic diseases of the nervous system are generally observed in both eyes; in cases of injury of the brain, or of its membranes, optic neuritis is habitually more marked in the eye corresponding to the hemisphere which is more seriously affected; changes of the optic nerve and retina, complicated by disorders of sensibility, intellect, and movement, invariably indicate an organic disease of the encephalon. It may be added that the alterations of the optic nerve and the retina should not be isolated from the other symptoms of the morbid condition. When considered thus, detection of their presence gives to the diagnosis an undeniable certitude.

The author concludes by naming the diseases of the nervous system in which optic neuritis and neuro-retinitis are observed, and he draws up the following list:—Phlebitis of the sinuses, acute or chronic meningitis, chronic encephalitis, cerebral hæmorrhage, tumors of the brain, contusion and compression of the brain, chronic hydrocephalus, abscess of the brain, acute myelitis, locomotor ataxy, essential or idiopathic contraction, and certain cases of epilepsy, of paralysis, or of neuroses, associated with an organic lesion of the nervous substance.—*Lancet.*

Ungent for Prurigo.—Dr. Chauvet (*Bull. Gén. de Thérap.*), after an experience of twenty years, believes that the following ointment is an infallible cure for prurigo: Axunge, simple or camphorated, sixty parts; citrine ointment three parts; mix. A small portion of this should be spread over the affected surface.

In Indurated Hemorrhoids, M. Hillairet employs suppositories containing one-tenth part of iodoform. In a few days the hæmorrhoids soften and wither.

New Treatment of Acute Rheumatism.—At St. Mary's we have noted of late several patients recovering from acute rheumatism, and learned something of the plan which has been adopted by Dr. Sibson during the last year in all cases without exception. It may be described as embracing three points. 1. Removal of pressure and tension of joints. 2. An even and warm temperature. 3. Removal or relief of pain. To accomplish the first of these ends, the patient lies in bed, and his joints are muffled in cotton wool and flannel, a cradle being placed where the weight of the bedclothes is painful. For the second, the patient wears a flannel dressing-gown, and the blankets touch the skin of the lower extremities, sheets being placed only over the upper part of the bed. For the third, the linimentum belladonnæ [R. Ext. Belladonnæ ʒ j, Linim. Saponis f. ʒ viij. Ed.] is applied to painful joints, and covered over with wadding. Occasionally, where the pain is very excessive, from an eighth to a quarter of a grain of morphia is injected subcutaneously. For the rest, he has now and then found it useful to apply a leech or two to a swollen joint or to the cardiac region. In cases where there appears to be a gouty complication, Dr. Sibson employs a little iodide of potassium; but apart from this he does not give any potash to his patients. He tells us, in answer to an inquiry, that he finds the urine rarely containing acid after the first few days of treatment. As regards food, his experience and practice are not a little interesting. The patient is allowed from the first, roast meat, rice pudding, and porter. We ascertained, moreover, from inquiry of the nurses, that this diet was not only ordered by the doctor, but was consumed by the patient, with very rare exceptions. Some patients to whom we spoke confirmed this statement; and added, also, strong testimony to the immense relief derived from the application of belladonna in the way described. The nurses said that the patient generally slept well at night.—*Lancet.*

Length of the Colon in Young Children.—At a stated meeting of the N. Y. Obstetrical Society, a specimen of hemicephalus or anencephalus was presented by Dr. Jacobi. The child weighed nine pounds. The viscera were well developed, and the colon was unusually long in this case. Dr. Smith made the remark that he had measured the colon in thirty cases of children under six months, and discovered that from one quarter to one third of the large intestine lies below the brim of the pelvis. Dr. Jacobi stated that the descending portion of the colon in the young infant was nearly twice the length of that of the adult. It crosses over diagonally toward the right side, instead of lying parallel to the long axis of the body. There is no proper sigmoid flexure as in the adult, but on account of the great length of the colon a number of flexures are found.—*Am. Journal of Obstetrics.*

A New Mode of Dressing Wounds.—In Belgium, a new mode of dressing wounds has been adopted. A sheet of lead one-fiftieth of an inch in thickness is applied to the seat of injury, and made to assume its shape by pressure. By means of strips of adhesive plaster the lead is secured, and a current of fresh water is passed over the surface of the flesh once or twice a day.

Iodoform is being employed by M. Lallier in venereal ulcers with great effect.

A Hospital for Lepers.—Bhan Daji, of Bombay, a native physician, who has achieved somewhat of a reputation for his treatment of leprosy, has established a special hospital at that place.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

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Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA

New York, November 2, 1868.

INVENTIONS IN MEDICINE.

THERE is hardly a young medical student or young graduate to be found who does not catch himself day-dreaming of future greatness, who does not unfrequently give his ambition a loose line to soar into the realms of a prospective reputation. This disposition under the circumstances is natural enough for every aspirant for medical distinction, who cannot but be impressed with the conviction that there is enough to be done in the different lines of investigation to give every earnest worker a chance for some new discoveries. Each generation makes in turn its own contribution towards advancing legitimate knowledge, and each member of a succeeding crop derives encouragement from its predecessors to press forward in the search after truth. But how few are willing to calculate the labor that must necessarily prepare the way for original researches! It has become the fashion nowadays to trace every man who within the last fifty years has made a fortune to the youth who comes to a large city with a traditional fifty cent piece in his pocket, and whose wardrobe was comprised in a small bundle slung over his shoulder. These anecdotes may serve a very good purpose in stimulating ambition, but the practical boy of the present day finds it very hard, in fact impossible, to found them upon fact. He very wisely comes to the conclusion that in the great competition for our ordinary daily bread all the golden opportunities for picking up gold in the streets have passed away, and that he has to knuckle down to his work in a very dull, prosaic way, content under ordinary circumstances to keep his place in the ranks or take the chances of elbowing himself ahead.

To the would-be original investigator of the present time very much the same set of difficulties present themselves. He soon becomes aware of the fact that no great discovery is now likely to be made by accident; there is no obliging dairy-maid to hint to a second Jenner the protective properties of vaccine virus; such an individual must dig out the truth for himself.

In the present time he is apt to find the ground of investigation so thoroughly occupied that he is more in danger of stumbling over somebody else's remains than of striking an original trail. How frequently do we hear concerning a supposed invention, or a seemingly new idea, that some antediluvian had the same conception and perhaps carried it to a greater fruition? A gentleman who now desires a reputation as an inventor has to keep himself in constant dread that a counterpart of his device may be unearthed from some ruins of Pompeii, or some idea similar to his be found by some medical bookworm upon the page of one of the fathers of medicine.

To be certain of one's position it would seem that a knowledge of all that has been done before should be necessary as the precursor of any new line of thought of his own—a task which it must be admitted is really herculean. But, dreadful as is this penalty, it must necessarily be paid by all of our inventors, as the profession are not much given to that charity which admits of a real discovery being made a second time by a person having no possible communication with his predecessor.

But this should not discourage the man of true original ideas, for the very nature of his mission compels him to move onward in spite of every obstacle. The real man of determination is one who is willing to work on the slightest hopes of ultimate success, who stubbornly sets himself to work to surmount obstacles that are insurmountable to other men. He really enjoys his gradual successes, and feeds his determination on the difficulties that beset his path. Such men are always useful as pioneers in the great march of science, and are not to be daunted by the scoffs and sneers of others who hide themselves within the four walls of their libraries, and refuse to look for truth beyond the pages of their favorite authors. There are too many among the profession whose timidity of men and whose abject homage of authorities will not allow them to have any ideas of their own, and who can only suit their appetites to food that has grown stale with age, whose whole life is spent in singing the praises of their ancestors instead of following their original examples. It becomes us as men of science to pay due respect to our authorities, but that of itself is no reason why we should not be prepared to strike out into new paths and enlarge our domain of positive knowledge. It is a singular fact that every grand discovery in every science, and every new idea that has been promulgated, have emanated from the really progressive minds who have dared to work more or less independently of others, who have been bold enough to differ with authorities on the strength of a well-grounded conviction of truth. The great Napoleon was jeered at by the military bookworms of his time when he proposed to cross the Alps in mid-winter; and had he listened to the words of dis-

couragement that were so freely offered him, history would have been denied the record of one of the most splendid achievements of his century.

Every one who sets himself to work for a discovery cannot always of necessity succeed, but he is sure to develop some new experiences which will be of value to others who may have the desire to follow him in the new line of investigation.

The profession of medicine is certainly peculiar in respect to the liberality it extends to all free thinkers. No one can commit a heresy in medicine; no matter how his views may vary from the expressed ones of his leaders, he has only to support them with sound reasoning, careful judgment, and reliable experience, and they soon recommend themselves to countenance and adoption. Every medical man has a presumptive right to differ from another in opinion, and view any particular case in accordance with his own judgment. The other professions of law and theology are under certain restrictions which tend to forbid such a liberty; free progress in the former is hedged about by certain ruling decisions which cannot by an ingenious reasoning be overruled save in a certain orthodox manner. A certain judge decided so-and-so, and beyond that decision under ordinary circumstances no attorney dare go; and in theology the division into sects, and the arbitrary rules imposed by each denomination upon its exponents, compel them in all their studies never to lose sight of absolutism more or less complete. We cannot suppose that there are no differences of opinion among the followers of the other two professions, but we have a right to presume that their good standing would be more or less jeopardized by giving them expression. Medicine, however, acknowledging allegiance to science alone, throws open the doors of her temples and invites each and every honest searcher after wisdom to enter and satisfy himself in his own way.

The trials of every original investigator are of course numerous; for as soon as he raises himself above his peers, he is a prominent target for the envious shafts of ridicule. But as each one is conscious that such attempts to impede laudable efforts do not alter the grand truths upon which researches are based, it does not generally disturb his purpose. It is another matter, however, when one is coolly robbed of the rewards of his labors by another claimant as audacious as he is unprincipled. The knowledge of this fact tends more to dishearten honest efforts than anything else, and it is discreditable in the extreme to the members of an honorable profession that so many disputes concerning prior rights, etc., should stain the glorious banner of progress. Every one who has made a discovery, who has worked faithfully in developing a new idea or in constructing a new device, should at least be paid in the poor coin of a recognition of services. Such discoveries are made the common property of the profession, and its members should not allow the meritorious donor to go unrewarded.

We must always suppose that there is a higher motive that stimulates each one to add his mite to the common stock of knowledge, but at the same time it is always grateful to the feelings of any benefactor to be conscious that his services are appreciated.

It is the duty of every votary of science to make some sort of contribution to our stores; if he can accomplish what appears to him to be but little, he has no moral right to withhold it, for never so feeble a primary effort may eventually result in a revolution. The idea that may be thrown out may be comparatively a trivial one, but by being brought to the surface may, like the little fish, cause a ripple on the smooth surface of the waters that may catch the reflection of the sun and rivet the attention of the multitude.

We must not be understood as implying that much is not already done for good in this way, but we believe that much more can be accomplished in the same line if there were more of a disposition to do it. The medical journals throughout the civilized world stand ever ready to herald every progress in our art, but alas! though the harvest is plenty the laborers are too few too many "grow weary from the burden and heat of the day," and many more are too timid to enter the field.

Our three Medical Colleges have all opened their regular sessions with large classes; and a fourth, for women, begins its first session, under excellent auspices, on the 2d inst.

The College of Physicans and Surgeons has abandoned the preliminary course, commencing its regular term a fortnight earlier, on the 1st October. Some advantages might follow the adoption of this plan by all the schools, so that the first of October should come to be generally recognized as their regular opening day; but as yet the others hold the preliminary course in favor. The college building has been renovated, and greatly improved in the matter of ventilation and convenience.

At the Medical Department of the University, Prof. Darling has initiated a movement for the encouragement of dissection among practitioners in the city, the ticket of Practical Anatomy being offered gratis to all graduates in regular practice here, who have before pursued a course of dissection. The amount of clinical instruction given in this college has been increased; while its proximity to the New York Hospital gives the students ready access to the excellent clinics there held.

At Bellevue Hospital Medical College the resignation of their active duties by Profs. Taylor and Wood has effected considerable changes in the obstetrical and surgical departments. In the former, Profs. Elliot and Barker will now exchange subjects every year, each giving didactic lectures during one half of the term, and clinical instruction during the other half. This season Dr. Barker takes Midwifery, and his colleague the Diseases of Women and Children. In the surgical

department, Prof. Hamilton resigns to Prof. Van Buren the Principles of Surgery, retaining Practice of Surgery, and taking from Prof. Wood the chief part of Operative Surgery. Prof. Van Buren retains Diseases of the Genito-Urinary System, and their operative treatment. To Prof. Mott's chair of Surgical Anatomy are now attached the Operations upon Arteries, Aneurism, and Hernia. Prof. Sayre retains Orthopædic Surgery, and the operations pertaining to it.

The Woman's Medical College of the New York Infirmary starts with a progressive plan of instruction, embracing a three years' course, with annual examinations—a feature which our older colleges would do well to emulate. In the Faculty are some of our younger men who have already distinguished themselves in special fields of investigation, and the Board of Examiners includes some of the ablest professors in our other colleges. This school is fortunate in having secured for its departments of Chemistry and Materia Medica the use of the rooms and apparatus of the School of Pharmacy.

All the schools will reap the benefits of the new Clinical Theatre which is soon to be erected in connection with Bellevue Hospital. An excellent design is already accepted.

We learn that the governors of the New York Hospital have passed, at a recent meeting, a resolution to the effect that it is expedient to lease the institution and its grounds, and remove to a more eligible part of the city. This design, if carried out, will not only extend the usefulness of this noble and ancient charity, but will tend materially to remove much if not all of that pecuniary embarrassment that has crippled its better intentions for years past.

On perusing the Transactions of the Indiana State Medical Society for the current year, we are surprised to find it stated by the retiring President that the medical profession of that State are in want of a medical journal to represent their commonwealth. At the risk of giving information already possessed by the worthy gentleman, we would call his attention to the *Western Journal of Medicine*, edited by our talented friend, Dr. Parvin, and published in Indianapolis. This periodical has been long enough in existence to be generally known throughout Indiana, as is proved by the appreciation with which it is received in other parts of the country.

Our intention to keep our clinical department replete with interesting cases has caused such an accumulation of material as to force us to be at a loss at times to find room for it in our columns. This is the case in the present number with some material from the New York Hospital, which we hope to be able to present to our readers in our next.

Reviews and Notices of Books.

Vesico-Vaginal Fistula from Parturition and other Causes; with Cases of Recto-vaginal Fistula. By Thomas Addis Emmet, M.D., Surgeon-in-Chief of the New York Woman's Hospital, etc., etc. New York: William Wood & Co. 1868. Pp. 250.

The author of this work is well known by the medical profession of this country and abroad, as the accomplished and successful Surgeon-in-chief of the New York State Woman's Hospital, an institution which receives patients from all parts of the country, afflicted with maladies which were considered, prior to the application of the metallic suture by Dr. Sims, as uncertain in result.

In his preface, Dr. Emmet states, as a good explanation for writing this interesting little work, that the material was collected with a view of furnishing, through the pages of the *American Journal of Medical Sciences*, Philadelphia, a record of interesting cases. But it was found that justice to the subject would be impossible within the allotted space of a journal. He has accordingly endeavored to illustrate, in as concise a manner as possible, the various difficulties which he has met with in operating for these injuries, "and having, however, no wish to inflict upon the reader a mere array of cases, he has excluded all but those useful in demonstrating some practical point."

In regard to the execution of operations for these classes of cases, he modestly declares that: "No more brains or tact is needed in the execution of this than in many other operations of surgery, which have long since become familiar to the many."

During the past five years, for nine months in each year, he has averaged nearly two operations a week, in public and private practice. Most of these have been in hospital practice, and have been witnessed by different members of the profession, unconnected with the hospital.

Previous to October, 1867, about two hundred and seventy cases came under his observation. Two hundred were cured, five were regarded as incurable, and between fifty and sixty returned home improved, and if they return will be cured. Excessive obesity, which prevented the parts from being brought into view, caused him to cease operations in some of the cases. In others, on account of great irritability of the nervous system, the patients were unable to remain on their knees long enough to bear the operation. Several women returned home, by his advice, to recuperate, or to await the efforts of nature previous to another operation, and perhaps from want of faith, have never returned. Others, being satisfied with their improved condition, went away, without waiting for an operation which would effect a complete cure.

Twenty-six new cases have been admitted to the hospital, from November, 1867, to May 1st, 1868. Of these, ten have been cured, three have returned home without waiting for an operation, but when admitted will be easily cured. Two were discharged as incurable; one of these had lost the urethra from syphilitic sloughing. The other was a negro woman, from Wilmington, N. C., in whom the vagina had been obliterated, without a trace of the uterus, together with the loss of the whole base of the bladder, with the urethra and tissues under the arch of the pubes. Even this case could in time have been restored, and the fistula closed, notwithstanding a grave complication existed in an exostosis found on the inner side of the pubes. On account of this growth he believes it impossible to form a new

urethra, without opening so high as to make it necessary to wash out the bladder daily. The remaining cases in this hospital, under his care, will, he is convinced, be cured within a few months.

The book opens with a chapter on the *Definition and Cause of Vesico-Vaginal Fistula—Delay dangerous after Impaction—Extent of Injury due to Position and not always in proportion to the Length of Labor—Treatment after Reception of Injury—Preparatory Operations, etc.*

The cause of ve-ico-vaginal fistula is attributed, in almost every case, to delay in delivery after impaction has taken place. The exceptions to this rule are those cases which have occurred on account of forceps delivery. He argues, that as a rule, when impaction has taken place, it is unsafe to wait for nature to accomplish the delivery unaided. Since the foundation of the Woman's Hospital (twelve years ago), not more than three of all the cases of fistula which were received resulted from instrumental delivery.

In *Chapter* 2, the following instruments are mentioned for operation: A speculum, several tenaculi, a blunt hook, scissors of various curves, a ball and socket knife, needles, needle forceps, a "feeder" forceps for securing the wire in the silk loop, twisting forceps, a shield, and in addition a number of probang sponges, proper silver wire, and two block-tin catheters. He regards Sims' speculum as the best instrument by far in these operations, if used properly. But if a good assistant cannot be obtained, a self-retaining speculum, originated by him, and made by W. F. Ford, called "Emmet's Speculum" (*vide* MEDICAL RECORD, vol. i. p. 116), makes an excellent substitute. Wood-cuts, neatly done, of the speculum, and of the other necessary instruments, are scattered through this chapter. For several years our author has used scissors, to the exclusion of the knife, in freshening the edges, before bringing the parts in position, as the scarification can be done in half the time, and no portion is left undenuded. Very little hæmorrhage follows.

In *Chapter* 3, *the Operation and After-treatment* is detailed at length. For securing the edges of the fistula, the simple interrupted suture is the one now used by him. Notwithstanding Dr. Sims always insisted that the sutures should be introduced with great care, so that the points of entrance and exit should be at the same distance from the edges of the fistula, it is found that it is practically impossible to introduce them with any such degree of accuracy. If they are properly shouldered at the time of securing them, this great accuracy is unnecessary.

In *Chapter* 4, *Vesico-vaginal Fistula, with laceration of the Cervix Uteri*, is treated *in extenso*. Eleven cases are detailed, with the pathological condition of each. All of these proved successful, either by the first or second operation. The laceration of the cervix uteri is of more frequent occurrence among those who have borne several children, and have the abdominal parietes much relaxed, rather than the result of the first labor.

In *Chapter* 5, five cases of *Laceration of the Cervix, with extensive loss of the Soft Parts from Sloughing*, are recorded. Three of these were cured by one, the other two were closed by two operations.

Nine cases of *Fistula involving the upper portion of the Vagina, with sloughing of the Cervix Uteri*, are mentioned in *Chapter* 6—seven of which were closed by one operation. These fistulæ occurred in five of these patients after instrumental delivery, and after a labor extending from forty-six to seventy-two hours.

Chapter 7. *Fistula confined to the upper portion of the base of the Bladder.* Five cases of this variety were cured by one operation. In one case of vesico-vaginal fistula, nineteen attempts had been made to close it previous to admission.

Fourteen cases of fistulæ involving the base of the bladder are minutely given in the next chapter. One case was a woman, æt. forty-six, who had given birth to ten children. Her labors were all tedious; eight were natural and two were terminated by craniotomy. Her sorrows were ended by one operation.

The treatment of three cases of fistulæ, with occlusion of the vagina, partial or complete, posterior to the opening into the bladder, is minutely described in *Chapter* 9. In one case, a transverse fistula extended across the vagina, about two inches from the mouth of the urethra, and, from its posterior lip, the vagina was entirely occluded beyond. The fistula was closed by uniting its anterior lip to the posterior wall of the vagina.

Four cases of *Fistulæ with partial occlusion of the Vagina anterior to the opening into the Bladder*, fill *Chapter* 10. In these cases, the duration of labor was respectively as follows: Forty-eight hours; twenty-eight hours; fifty-one hours. The last case of labor extended over one hundred and fifteen hours, and the delivery was accomplished by forceps; the vagina was almost closed at the depth of an inch and a half, with destruction of the cul-de-sac. The vagina was opened after two operations, and the fistula in front of the cervix closed by one operation.

Chapters 11 *and* 12 are devoted to four cases of *Fistulæ, situated immediately behind the Rami*, and four cases of *Fistulæ, involving the Urethra, from laceration or sloughing*, are recorded in *Chapter* 13.

The formation of a new Urethra by the aid of Plastic Surgery, is described in full in *Chapter* 14. The operations are new, and are original with him, and of themselves are sufficient to accord to him the enviable reputation of a bold, thoughtful, and successful operator.

The limits of this notice will not permit us to follow the author any further at length, but we trust that we have succeeded in outlining to our readers the contents of this truly invaluable contribution to uterine surgery. No other work of its size has so much enriched the literature of gynæcology as this one, and yet it is avowedly nothing more than a collection of remarkable cases that have come under the eye of our author. As a scientific work it may be declared nothing but a simple record of experience; but each one who carefully peruses its pages, will be convinced that the record is one of a master in his art.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Oct. 14, 1868.

DR. WM. B. BIBBINS, PRESIDENT, in the Chair.

REPORT OF COMMITTEE ON MICROSCOPY.

THE Committee on Microscopy reported upon two specimens presented at previous meetings, one by Dr. Bauer for a candidate, styled scirrhus of the stomach, and one by Dr. Finnell of deposit in the substance of the heart. The former was declared by the committee to be a well-marked example of perforating ulcer of the stomach; the latter, as an original interstitial deposit of lymph in the muscular substance of the heart.

POISONING BY OXALIC ACID.

DR. FINNELL presented the stomach, bladder, and portions of the intestine removed from a man thirty-six years of age. He had been ailing for a few days and

had come to the conclusion to take a dose of senna and salts. His wife took what she supposed to be the salts from a package that had been lying upon the clock for two or three months, and mixed it in due proportion with the senna. Immediately after he had taken the dose he complained of its intensely acrid and unpleasant taste, so different from salts which he had taken before. Being shortly after seized with a burning sensation in his stomach, suspicion of a mistake in the medicine was sufficiently strong to warrant the administration of an emetic of ipecac. The patient soon vomited very freely, and seemed to be in a measure relieved. A physician was soon after called and attended him day by day until the tenth day, when the patient died. Dr. Finnell saw the patient on the seventh day, and found him suffering with great pain and distress about the stomach; the mouth and throat were much inflamed, and the inner surfaces of the lips were covered with gangrenous patches. He passed no water for seven days, notwithstanding the catheter was daily introduced. On the eighth day after, half a pint of urine was voided, which was the first that he had passed since swallowing the poison. The pulse was at no time above 70 throughout the illness, and his general prostration was such as to prevent him from sitting up more than a few minutes at a time. It was of course presumed that oxalic acid had been taken in mistake for the Epsom salts.

The post-mortem examination was made twenty-four hours after death. The inner surface of the mouth, the upper surface of the tongue, as well as the fauces, showed signs of nervous inflammation, and were covered with a thick and ropy mucous exudation. The stomach presented a dark, blackened and mahoganized appearance, was considerably puckered, the rugæ being proportionately prominent. The internal surface of the intestines, from the stomach downwards for three or four feet, was of the same color and general appearance as that noted in the former organ. The bladder contained only a few drops of urine, but there were discovered two or three points of ulceration in the internal surface of the organ, which were evidently due to the catheter which had been so frequently introduced. Dr. Finnell desired to call attention to this fact as showing that notwithstanding the greatest amount of care, the frequent introduction of an instrument in the bladder may give rise to lesions of the lining membrane of the viscus.

The two lower lobes of the right lung were the seats of pneumonic inflammation, the lowermost being in a state of gray hepatization. It was doubtless from this commencing pneumonia that the patient had made up his mind to take the dose that, with the pneumonia, killed him. The kidneys were both healthy. In concluding the history of this case he stated that suppression of urine was not referred to as one of the usual symptoms of poisoning by oxalic acid.

POISONING BY STRYCHNINE.

Dr. Finnell next exhibited a portion of the thoracic aorta taken from a gentleman 47 years of age, the victim in the "Spicer strychnine poisoning case." The portion of the artery presented showed extensive atheromatous deposit upon its internal surface. Mr. Spicer complained on a certain Saturday of a distress and tightness across his chest, shortly after which he took a drive in the Central Park, and when he returned stated that he had had no satisfaction in it. On the Sunday morning following he was still complaining of feeling unwell, and asked his wife to send for a seidlitz powder. This she did and mixed and handed it to him. Immediately on swallowing the mixture, he said, "This is not seidlitz powder; it has a queer taste like camphor." A physician was immediately sent for, and a homœopath soon arrived. He went back to his office to procure an emetic, and when he returned he found the patient in a dying condition. The wife had procured and administered some coffee in the interval, and the result was a very free emesis. In twenty minutes from taking the powder the patient died.

The body was soon afterward placed upon ice, and in twenty-four hours the autopsy was made in the presence of a number of medical gentlemen. The body on being handled was found to be quite limber, which fact did not bear strongly upon the suspicion of strychnine. On opening the head nothing of importance was discovered. One pleural cavity contained a quart, and another a pint of fluid blood. Search was made for the origin of this blood, but none could be found, and it was supposed that one of the intercostal arteries had given way, and allowed the gradual oozing of blood, thus explaining the tightness of the chest complained of by the patient the day before his death.

The contents of the stomach were analyzed by Dr. Doremus, who found evidences of the presence of strychnine. The poison was also found in the intestines; none, however, was discovered in the materials vomited.

The point of interest consisted in there being few or no signs of rigidity after death, although, according to some bystanders, there were present at the moment of dying well marked spasms, as well as opisthotonos.

Dr. Markoe thought that the effusion in the chest was bloody serum rather than fluid blood, as according to the account of Dr. Finnell no coagula were found.

Dr. Finnell stated that the fluid had not been examined by the microscope.

PERITONEAL CYST.

Dr. Cutter presented a unilocular cyst. He stated that a year ago he exhibited to the Society a specimen of serum, which he had removed by tapping from what was supposed to be a unilocular ovarian cyst of the left side. The fluid drawn off was non-coagulable by heat. At the time referred to, the patient was three months advanced in pregnancy, and the question was, whether it was better to bring on miscarriage or allow nature to take its own course. It was decided in favor of the latter, and a fine female child of full term was safely born. The cyst did not fill rapidly until after parturition. He saw the patient for the first time two years ago; she was then a lady 30 years of age, and the mother of three children. She discovered the tumor shortly after the birth of the first child; it was distinctly felt upon the left side, and was so movable that it would roll about in the abdomen when she was rocking herself in a chair. Dr. C. was aware that Dr. Adee had seen the case, and from what he could learn had pronounced it one of ovarian dropsy. The patient had been advised to have the operation performed, but had given up such an idea, as a case similar to her own in the neighborhood had resulted fatally.

Dr. Cutter operated upon the case on the first of October, assisted by Doctors Howard, Newman, and several other medical gentlemen.

The incision was made in the median line four inches in extent, and the division of the different layers was carefully made. The sac was found adherent to the anterior surface of the abdomen, and the sound on being introduced could be swept around only to a very limited extent. He decided to remove the cyst, and for this purpose had to separate it from the an-

terior walls of the abdomen. The adhesions, however, were not at all firm. It had no peculiar attachment except two or three small bands the thickness of a lead pencil. The cyst being removed, the cavity of the abdomen was carefully sponged out, and the wound closed with eight sutures.

She went on after the operation without any unpleasant symptoms, save the appearance of an abscess in the site of one or two of the sutures. The rest of the wound united by first intention.

Dr. C. wrote to Dr. Atlee in regard to the case, and received from that gentleman a reply to the effect that, in consequence of the fluid of the cyst being non-coagulable, he had made the diagnosis of peritoneal cyst originating in the broad ligament of the left side. Dr. C. remarked that this was the first case of the sort that he had met with. He found but three cases on record that were similar,—two reported by Spencer Wells, and one by Dr. Thomas in his late work on Diseases of Women. In answer to a question from Dr. Krackowizer in regard to the inspection of both ovaries, he answered in the negative. He took occasion to refer to the benefits of including a good portion of the peritoneum in the sutures, as proved by the limitation of the abscess to the walls of the abdomen. He was convinced that had not this practice been followed, the pus would have found a way direct into the peritoneal cavity.

In conclusion he referred to a case in point that had occurred to Dr. Atlee. That gentleman at the time of the operation stated to some medical gentlemen present, that if the fluid was non-coagulable by heat and perfectly clear, the diagnosis must be peritoneal cyst, and further stated that he would in that case remove only a portion of the cyst and leave the rest in the abdominal cavity. He did so. The lady, who was a patient of Dr. James R. Wood, recovered to go to her home in Washington, but a few months after died. A *post-mortem* examination showed that the case was one of ovarian tumor, which had become inflamed, and discharged its contents into the peritoneal cavity.

Dr. Bauer remarked that he had under observation at that time, and for four years past, a case that bore a remarkable resemblance to the one related by Dr. Cutter. When he first saw the patient, she was an inmate of the County Hospital. Dr. Norgerrath saw the case with him. There were evidently two tumors in the abdominal cavity; one was the impregnated uterus, and the other was presumptively a cyst. She was perfectly healthy otherwise, and was even robust. How long the cyst had been growing he had not ascertained. She gave birth to a healthy child, which is still living. Soon after this event, she left the institution, and became a resident of Brooklyn. From this time she had repeatedly called upon Dr. Bauer, or his friend, Dr. Willets, to have tapping performed. The diagnosis was, cyst connected with the left ovary, but whether it might prove to be a peritoneal cyst or not, he could not say. She has been tapped some forty times, the cyst being accustomed to refill in the course of every four months. The serum removed at these tappings has not contained the least trace of albumen. The patient lost her husband during the war, since which time she has been enabled, without injury to her general health, to support by her own exertions three children and an aged mother.

Dr. Cutter remarked that these cysts were very slow in growth, were usually without any attachments, had thin walls, and usually originated in the broad ligament. In his case, he presumed the adhesions were due to her last pregnancy.

Dr. B. Howard remarked:—The striking point in this case is, that an abdominal tumor so large should have no pedicle. For this phenomenon I would offer an explanation different from that of my friend Dr. Cutter and others. In approaching a diagnosis there are three things to be suggested; a distended Wooffian body; encysted abdominal dropsy; dropsy of a Graafian vesicle. Is it a case of dropsy of a Wooffian body? No; it is too large; they rarely reach the size of one's double fist. Is it a case of encysted dropsy of the abdomen? My first remark on examination of the patient's abdomen was that it looked wonderfully like it, but in that case the walls of the cyst would be different, consisting only of condensed cellular tissue. It is to the structure of its coats we must look, then, for direction towards our final decision. Now, on recurring to the steps of the operation, Dr. Cutter will remember that the incision being made through the walls of the abdomen and through the parietal peritoneum, fairly exposing the tumor, the next incision was made through another coat of peritoneum, which was the serous coat of this tumor; that beneath this was a dense white, shining, fibrous coat. Now, had we but one other link, viz., proof that the interior of the tumor is lined with tessellated epithelium, I think the chain of evidence would be complete to determine this as a case of dropsy of a Graafian vesicle. How now shall we explain the absence of a pedicle? It must be remembered that the easy sweep made by the sound around the tumor at the preliminary exploration revealed a remarkable absence of anything like inflammatory action in the history of the tumor. Well, when the incision was made into the serous coat of the tumor, we found it peeled up so easily that we proceeded to strip the tumor, and did it in this way: I held the part already detached upon the abdomen, using a warm sponge instead of my fingers, to avoid tearing, while Dr. Cutter slowly rolled the tumor from me, outwards, until coming to the last remaining part, as we were waiting to seize the pedicle, we were not a little surprised to find the complete tumor rolling free up on the table.

Where we expected the pedicle there were but two or three shreds of cellular tissue, which were torn without the slightest trouble. The mass of reflected peritoneum which we had thus stripped off was dropped back into the abdomen, and the operation was over. Now my explanation is that this tumor had a pedicle; that it was continuous with its peritoneal coat, just as the stalk of an orange is continuous with its rind; and that as we may peel and remove the orange pulp, leaving both the rind and the stalk behind, just so the fibrous capsule of this distended Graafian vesicle was enucleated completely, leaving behind its peritoneal investment, and eluding the pedicle formed by its convergence.

This explanation is more satisfactory to my own mind than anything else which occurs to me just now; but in order that it may be properly investigated, I move that the tumor be referred to the Microscopical Committee, when the presence or absence of the tessellated epithelium will be pretty conclusive as to the value of this explanation. It was accordingly so referred.

Dr. Emmons in this connection remarked that he had a case which Dr. Peaslee regarded as spontaneous recovery from ovarian disease. The contents of the sac had been discharged through two openings at the umbilicus.

Dr. Cutter stated that there were such cases on record which recovered after the first tapping. Dr. Peaslee had met with one or two in his practice, and the same thing had occurred to Spencer Wells.

CURIOUS EXOSTOTIC GROWTH.

Dr. Hutchinson presented the malar bone with the

corresponding half of the inferior maxilla, removed from a patient of the Brooklyn City Hospital, who died of dysentery. While under treatment for this disease his attending physician, Dr. Crane, called the attention of Dr. Hutchison to the existence of anchylosis of the jaw. On examination a bridge of bone was discovered to extend from the malar bone to the inferior maxilla, following the anterior margin of the masseter muscle. An operation for his relief was devised, and would have been performed had the patient recovered from his dysentery. At the *post-mortem* examination an exostotic growth was found to take its origin in the malar bone, and extend to the maxilla, being connected with the latter by a firm ligamentous attachment. The articulations of that side of the jaw remained healthy. This growth of bone was attributed by the patient to a fall upon the side of his face some years before, while on shipboard.

A SINGLE KIDNEY.

Dr. H. next exhibited a kidney weighing 12 ounces, which had been removed from a man who had died as the result of injuries received by being knocked down in the street. This was the only kidney the man had, was perfectly healthy, and apparently performed all the functions of two organs. Dr. Sheppard, who made the *post-mortem*, failed to find even a rudimentary kidney upon the left side.

Dr. Lewis stated that a man died recently at Charity Hospital, and the same anomaly was found. The kidney was the seat of cancerous degeneration, and weighed 22 ounces.

Dr. H. presented, also, a fibrous polypus, removed by operation from a woman forty years of age. He was requested by her husband to see her in great haste, and was informed that her womb had come down, and that a physician who had been called in had failed to reduce it. On the way to the house, Dr. H. learned that for two or three years the menstrual period had been somewhat prolonged, but that she had had no discharge of blood in the intervals. She had also suffered somewhat from bearing-down pains. On examination a polypus was found protruding through the vulva, with the pedicle within the labia. This pedicle was attached to the posterior portion of the os, was an inch broad, and one-fourth of an inch thick. A darning needle, armed with a double ligature, was passed through the pedicle, and the mass was divided with a scissors. The tumor was as large as a fœtal head at term.

EPITHELIOMA OF THE STOMACH.

Dr. Bauer exhibited a specimen of epithelioma of the stomach, removed from the body of a man æt. fifty years. He saw him only a few weeks before his death, and could consequently give only a fragmentary history of the case. The patient was afflicted with almost incessant vomiting, coupled with copious discharges from the rectum of black, homogeneous, excessively fetid, semi-fluid substances. There was a very deep-seated pain in the gastric region, near the liver, in which situation distinct indurated masses could be felt,—most of these, on account of the thin, abdominal walls, could be seen. He had a good appetite, could swallow a good quantity of food, and, although he would occasionally vomit afterwards, no food could be recognized in the ejection, which would always be of that dark color which characterized the discharges from the rectum. Dr. B. presumed this dark substance was made up principally of altered blood. The patient finally died of exhaustion, without presenting any marked cachectic appearance.

The tumor found in the stomach was situated around the pylorus, and conglomerated in irregular masses, leaving the pyloric orifice comparatively free.

In order to check the discharge of blood, Dr. B. administered iodine dissolved in glycerine, which had the desired effect. This was fifteen days before the patient's death.

EMPHYSEMA CAUSED BY PERTUSSIS.

Dr. Lewis Smith presented a specimen of lung taken from an infant that died at the age of nineteen months in the Infants' Hospital on Ward's Island. This child during the summer months had suffered considerably from diarrhœa, but was convalescent, when about three weeks before its death pertussis commenced. This pursued its usual course until September 27, when it was seized with clonic convulsions, which terminated in coma and death in the course of the next twenty-four hours.

On opening the cranial cavity, about half an ounce of transparent serum was found upon the surface. The brain itself and meningis presented nearly their normal appearance. The cranial sinuses were somewhat distended, most of them containing dark and soft clots. The lateral sinuses contained clots which were in part whitish and in part yellowish. There were also some soft and dark clots, similar to those found in the other sinuses. The whitish and yellowish clots extended down into the jugular vein. On opening the pleural cavities the superior lobes of the lungs were somewhat enlarged above, the other lobes presented a whitish and pneumonic appearance, felt doughy, and gave evidence of commencing emphysema. The other portion of the lungs were healthy, except the posterior lobes of the left side, which were considerably hepatized. The left ventricle of the heart was almost free from blood. On the right side the ventricle contained a whitish clot, which could be traced to the lungs.

There were two points of interest in this case: one was the occurrence of thrombosus (for it was evident that thrombosus occurred in one of the lateral sinuses probably a day or two before death). The severe cough of pertussis evidently retarded the circulation of blood, then the child had coma, and these, together with the reduced state of the general system, may be considered the causes of the lesion referred to. To the same causes was attributed the formation of a clot in the left ventricle of the heart extending to the lungs.

Another point of interest was the association of emphysema with the cough. Rilliet and Barthez state that emphysema does not follow pertussis, as the force of the cough is expended in expiration rather than in inspiration.

TUBERCULOUS DEGENERATION COMMENCING IN BRONCHIAL GLANDS.

A second specimen by Dr. Smith was removed from an infant twenty-two months old. The patient was found at the autopsy to have had tubercular disease of the bronchial glands, while only a few miliary tubercles were discovered in the lungs. The point of interest centred in the fact that the tuberculous disease seemed to have commenced in the glands.

Dr. Krackowizer thought that the deposit in the glands was at first nothing more than a cheesy degeneration from inflammation, as in cheesy pneumonia, and that from the enfeebled state of the patient's health, tuberculous degeneration took place afterwards.

FORRICO FAVOSA IN THE MOUSE.

Dr. W. B. Lewis exhibited a mouse as an instance of

extensive porrigo favosa. The deposit covered both ears, closed the right eye, and involved the whole of the left side of the head. Adjourned.

NEW YORK MEDICO-LEGAL SOCIETY.

ANNUAL MEETING, Oct. 21, 1868.

DR. THOMAS C. FINNELL, PRESIDENT, in the Chair.

THE routine business of the Society having been suspended on motion of Dr. Nealis, the

ANNUAL ELECTION

was declared in order, and resulted in the choice of the following gentlemen for the ensuing year:—*President*—Thomas C. Finnell, M.D. *Vice-Presidents*—Jacob F. Miller, Esq., James J. O'Dea, M.D. *Recording Secretary*—Jeremiah C. Morton, M.D. *Corresponding Secretary*—Jean F. Chanvean, M.D. *Treasurer*—Augustus Wohlfarth, M.D. *Curator*—Thomas Bruce Stirling, M.D.

THE ANNUAL REPORTS

of the Recording and Corresponding Secretaries were read and accepted. According to the former of these, this Society is the prototype of a similar organization in Paris; and to Dr. Wooster Beach, Jr., was accorded the honor of having conceived the idea of its inception. The report of the Treasurer was also accepted.

The President then announced that the diplomas of membership were ready for delivery, after which the Society adjourned.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

ADJOURNED ANNIVERSARY AND ADJOURNED STATED MEETING, Oct. 12, 1868.

DR. E. R. PEASLEE, PRESIDENT, in the Chair.

THE Treasurer's report was read, showing the finances of the Society to be in a satisfactory condition, with a balance on hand of about three hundred dollars.

The thanks of the Society were tendered to the College of Physicians and Surgeons for the gratuitous use of its lecture-room during the past year.

The reading of the minutes of the Comitia Minora was postponed to the first Monday in November, to which time the anniversary meeting was again adjourned.

DISCUSSION OF DR. ROGERS' PAPER.

DR. CHADSEY offered a series of resolutions relating to the chief points of the paper, with a motion that they be taken up *seriatim*, so as to determine the opinion of the Society upon each of the questions indicated. After some debate they were laid upon the table.

DR. CASTLE read from Dr. Rogers' strictures upon the Infants' Hospital [*vide* MED. RECORD, Oct. 1st, pp. 343, 312]:

> First in order it lacks food. No institution of that kind should be permitted on the face of the earth, without an abundant provision of fresh, warm milk, from some domestic animal, for every child not fully supplied by its mother. . . . . The remaining, about 150, babies were dependent entirely upon hand-feeding, and this by no means of the best quality, because the material almost wholly used was the condensed milk, as we were informed, in one or the other of its forms. No fresh cow's, or goat's, or dairy milk ever reached these 150 babies; the little the few animals belonging to the institution gave being consumed, as we were told, in making up the deficit of breast-milk for the *first* 100 babies.

Dr. Castle could state positively that since April, 1866, no other milk than fresh cow's milk had been furnished to the bottle-fed babies in the Infants' Hospital. Whenever this exceeded the amount these required, the surplus was given to the infants nursed in part at the breast. That this milk was of good quality he could testify from having himself tested it in 1866, from its having been repeatedly tested by members of the house-staff, and from having again tested it himself since the reading of Dr. Rogers' paper. The good quality of the condensed milk used in the institution was assured by the fact that it is examined frequently by a competent chemist. The speaker was informed by the Warden that Dr. Rogers had spent but twenty minutes in his investigations at the hospital, appearing to be in great haste to leave, and declining to see many things the hospital officers would have shown him, or to listen further to their statements.

DR. CHADSEY had hoped to see the paper discussed systematically upon the basis of his resolutions. He wanted the Society to express an authoritative opinion upon the several questions. He believed the excessive heat of the summer months productive of more infant mortality than any other cause. He thought there was nothing worse for infants than feeding them with anything but pure milk until the eruption of the teeth, before which the salivary glands were not capable of furnishing the saliva requisite for the digestion of farinaceous food. Any other than a pure milk diet, before dentition, endangered the infant's life. He had for years considered it a disgrace that we had no foundling hospital; and the proper location for such an institution was a question of grave moment.

To be continued.

Correspondence.

THE PROPRIETY OF REMOVING THE OVUM IN HÆMORRHAGE FROM ABORTION.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—In a paper recently read before the Medical Society of the County of New York by Dr. Barker, on the subject of abortions, I was happy to find him against the use of instruments for the removal of the whole or portions of the ovum in cases of profuse hæmorrhage, "regarding the method as dangerous, and never in his experience necessary." But Dr. Elliot, in remarking upon the paper, stated "that in regard to the introduction of instruments into the uterus he could not fully agree with Dr. Barker. He had formerly, following Dubois, rigidly avoided their use; but experience had now convinced him that they must sometimes be employed if we would save the woman's life. Still this should only be done by experienced hands. He would sketch a case from his own experience, and it was but a type of many. The woman has bled profusely; the cervix has been tamponed, and the opportunity seized to feed and stimulate her; her head is kept low, her limbs in the air, their arteries compressed; the windows are open, the patient being warmly covered. At last, after some hours' rest, you hope that if the tampon is withdrawn the ovum may come with it. You find the cervix well dilated; but a portion of the ovum remains in the uterus where you can just touch it with the finger. What are you to do? Go over the whole ground again, with the prospect of finding yourself hours afterwards confronted by exactly the same conditions?

You carefully introduce a pair of delicate, well polished forceps, cautiously seize the ovum and lightly draw upon it; it comes away, and the whole thing is over." And Dr. Barker in response to a question said: "There is a class of cases with profuse hæmorrhage in which the woman's only safety lies in the removal of the whole of the placenta, though it be necessary for this purpose to use some slight force in the introduction of one finger or even three. He had spent an hour in getting the first finger through the cervix, and an hour longer in dilating it sufficiently to effect the object. Hæmostatics are not to be trusted; nor can the tampon be wholly relied upon, for it will so dilate the cervix as to allow the escape of blood."

This subsequent qualification of Dr. Barker in connection with the remarks of Dr. Elliot makes exceptional cases; and would seem to point to those attended with profuse hæmorrhage as the ones in which instruments should be used generally. I suppose neither of the gentlemen meant to be so understood, yet, from what they said, the rule of practice in these cases is not very clear. Allow me to ask then to what class of cases of profuse hæmorrhage does the immediate removal of the ovum apply? This is an important question not only for the suffering woman but for the attending physician, especially if he have no experience to guide him, and he be far removed from the advice and aid of experts in this branch of our profession. If the rule apply to any cases occurring within the third month, or not beyond the fourth, and to which the tampon has always been considered applicable, I can hardly conceive of circumstances in which it would become necessary to enter the uterus with instruments. I would respectfully inquire if Dr. Barker's case of forced dilatation of the cervix could not have been safely treated by tamponing the vagina and further delay? We all naturally fall back upon our experience, and I must say that in upwards of thirty years of general practice (in the country, to be sure) I have not met with a case in which anything more than rest and the tampon has been required to restrain the hæmorrhage and bring the woman safely through. This is a simple and safe practice in the hands of almost any one, and if sufficient in all emergencies, why not a preferable one?

To enter a little more in detail: When called to a case of supposed abortion, I have first examined the uterus with the finger, to be sure that abortion must ensue. That decided, if the discharge of blood required to be immediately averted, I have at once introduced the tampon, filling the whole vagina, and this has never failed to accomplish the purpose. The next day I have removed it; and if the flooding returns, and the parts are not in a condition in which the ovum can be hooked away by the finger, I have immediately introduced another; and have thus proceeded from day to day until hæmorrhage has ceased and the ovum is dislodged, or has disappeared. Instruments in the hands of Dr. Elliot or Barker might perhaps have terminated some of the cases sooner, and safely too; but in the hands of less skilful persons they could hardly have failed of producing mischief; and favorable results show that they were not actually necessary. Even in the case "sketched by Dr. Elliot as a type of many in his experience," why, after the cervix was tamponed (I prefer to plug the vagina) and the hæmorrhage was arrested, and the woman recuperating, should there be any haste to remove the tampon? and why, when the tampon was removed, and no hæmorrhage followed, should there be anxiety for the immediate removal of the ovum; and if flooding did follow, why not reintroduce the tampon? I suppose it would be answered that we are anxious for the earliest possible removal of the ovum through fear of septicæmia; but is not danger from that source less than from the additional loss of blood sure to follow, and the injury of the uterus, and consequent metritis, very liable to follow efforts at dislodgment by instruments?

Women of cities, from a difference in constitution, may be more liable to septicæmia than those in the country; at all events, it has been my good fortune never to meet with a case following abortion, in my own, or any other physician's practice in the country; and I have known the ovum retained for many days, the hæmorrhage restrained by the tampon. And in one case the placenta of a fœtus of about four and a half months did not come away in three months and three days, and was then discharged without the slightest evidence of decomposition in it, or any inconvenience to the woman. On the other hand I have known the most lamentable consequences follow the use of instruments. In one case, after fruitless efforts to remove the ovum, the blood all the time pouring out, the patient was finally deserted by the operator and shortly after died of the loss of blood.

In another a state of extreme exhaustion was followed by a low grade of metritis and finally death; and in a third life was left, but health never recovered. And in several cases, after repeated attempts at dislodgment by the fingers, wire hooks, spoon-handles, etc., and so long continued that exhaustion became extreme, the women appearing more like dead than living persons, have I seen the introduction of the tampon in a proper manner at once arrest the discharge of blood, give time for restoratives, and afterwards the ovum come away of itself. Drs. Barker and Elliot are authorities in all things relating to obstetrics; and what I have written may seem to them presumptuous, and entirely uncalled for, inasmuch as they spoke of exceptional cases; but as the young doctor, on his way to his first confinement case, is very apt to have his mind filled with visions of placenta prævia, presentations of the shoulder, convulsions, etc., so the inexperienced attendant upon abortion is apt, when the flow becomes severe, to imagine that his case is one of the exceptional ones in which he has understood these professors to teach that the immediate removal of the ovum is necessary.

To sum up the foregoing remarks:

First. It is right and highly necessary (as I understand the subject) that it should be distinctly stated, and emphasized, that instruments for the removal of the ovum or any parts of it in abortions are not to be used. In the words of Dr. Barker, "the method is dangerous and in (his) experience never necessary."

Secondly. That there may occur cases in connection with dangerous hæmorrhage that are exceptional to this rule; *but that they are made exceptional rather by the extra skill of the accoucheur than by the nature of the case.*

Thirdly. That inasmuch as cases of profuse hæmorrhage in abortion are always serious for the patient, and often perplexing and anxious ones for the physician, therefore the principles of practice in relation to them should be plainly and unmistakably laid down.

M. C. HASBROUCK, M.D.

NYACK, ROCKLAND CO., N. Y., Oct. 6th, 1868.

HONOR TO A NOTED AMERICAN SURGEON.—Our distinguished countryman, Professor S. D. Gross, of Philadelphia, was elected an honorary member of the British Medical Association at its last session held in Oxford.

VITAL REGISTRATION IN THE METROPOLITAN DISTRICT.

To the Editor of the Medical Record.

Dear Doctor—The excellent Health Officer and Registrar of Vital Statistics in Providence, R. I., has called my attention to a statement which he justly regards as conveying an incorrect and injurious impression regarding the Vital Registration in the Metropolitan District of New York. This statement appeared in the last number of the Record, at page 355, and it reads as follows:—

"Why cannot our *Metropolitan Board of Health* cause such records" (viz., the vital statistics of births, deaths, and marriages) "to be kept annually published in all the towns and villages within the district? Some spasmodic efforts have been made, we know, in that direction, but failed. . . . No record appears to be kept of the names of persons interred, much less of persons born or married."

The casual reader would fail to discover that the writer of the foregoing paragraph may not have designed to include the cities of New York and Brooklyn in his criticism; and the author of that review, moreover, is in error in stating that there have been spasmodic efforts at birth and death registration. The fact is simply this, viz., that no such registration has yet been attempted in either of the four Metropolitan counties beyond New York and Brooklyn; and although a few towns are said to have made some attempts, years ago, to carry into effect the statute of 1847, regarding the registration of marriages, there has been no public registry of vital statistics except in these two cities. And whatever registry of vital records is now made by the Metropolitan Bureau for the rural towns of the district, has to be made at this Central Office, and as a *gratuitous service* for the towns, because the statutes have not provided for defraying the expense of registration for any portion of the Metropolitan District except the two cities. It is hoped that this Board may soon order returns to be made from every town in the four suburban counties of the district, but until then we can only take faithful care of the voluntary certificates which are returned by physicians and clergymen in those towns. This we do, and these rural returns are constantly increasing.

The annual publication of the names, etc., registered in the current year by this Bureau of Vital Statistics, would doubtless produce some good and some bad results. Dr. Snow, the Registrar of Providence, R. I., has just made his *first* experiment in this undertaking. His closely printed record of 4,295 persons fills 76 pages. The same kind of skeleton abstract of names registered in the Metropolitan Bureau the past twelve months would fill over *twelve hundred* (1200) *pages*. This Board has neither the means nor the authority to issue such a volume; yet the contents for one that shall exceed any that has ever been published, in regard to completeness of details, can be furnished for printing at a day's notice.

Respectfully yours,
Elisha Harris,
Registrar, M. B. H.

Bureau of Vital Statistics,
301 Mott Street, N. Y., Oct. 9th, 1868.

The Quantity of Salt in Saratoga Waters.—The Iodine Spring has 23.4 grains of common salt to the pint; the Pavilion Spring a fraction of a grain more; the Union Spring 30.4 grains; the Congress Spring 19 grains; and the famous Star Spring 47.5.

Medical Items and News.

Commencements of Medical and Other Colleges.—Bellevue Hospital Medical College, despite the inclement evening, had a brilliant opening, October 14th ult.

Prof. Lewis A. Sayre delivered the introductory lecture, which was replete with valuable and well-timed suggestions regarding the reciprocal relations of the physician and the public. He dwelt at length upon the hardships of the physician's lot, but inasmuch as the physician assumed them willingly they partook of the nature of a contract. In alluding to the readiness of the ignorant and malicious to institute lawsuits for malpractice against the surgeon, he could not refrain from deprecating the encouragement too often afforded by members of the profession itself. He thought, too, that legislators, in view of the charitable offices so liberally accorded the public, might grant the physician the boon of a commission of his peers, whose business it should be to aid the prosecution if necessary, but, above all, to reject merely frivolous or malicious charges. In this way the reputation as well as the time of the physician might be saved. The practitioner, he averred, ought, however, to be so well grounded in the principles of his profession as to demand rather than to dread these investigations. Much was sacrificed through timidity.

Prof. James R. Wood, in response to the urgent call of the audience, gave an interesting account of his visit to the Old World, sketching in a pithy style the habits, the appearance, etc., of the distinguished savans of the Medical profession. He also described the various anatomical museums, the college lecture-rooms, the hospitals, etc., which he had visited. The more prominent preparations in the museums, possessed of historic interest, also came in for a share of attention. The head and right hand of Scarpa were still preserved with religious care in the Paduan institution, as well as the specimens of John Hunter showing his mode of treating aneurism in England. His statement that Bellevue could seat in its lecture-room 400 students was received with surprise, since as a general thing the professors of the Old World discoursed to meagre classes in ill-ventilated, cramped, and dingy apartments. Students of the New World had better opportunities of perfecting themselves in their profession at home than abroad—nowhere in the wide world was there such a wealth of pathology as in New York. The conscientious, hard-working investigator need not go beyond this metropolis in his pursuit after anatomical, surgical, or pathological lore.

The professor's remarks were well received and frequently interrupted with applause.

University Medical Department.—Introductory Address of Prof. Draper.—The regular Session of this College opened Oct. 12. Professor Henry Draper delivered a long and elaborate address, only a few points in which we have space to mention:

It is the *theoretical* knowledge of medical science which must first be mastered; and on this the practical must be engrafted. Medicine is too prone to empiricism; to the mere enumeration of names and prominent symptoms of diseases, with "what is good for them;" and so too frequently some newly-discovered remedy, *e.g.*, iodide of potassium, is given for all sorts of troubles, with "If it does good, well; if not, we are no worse off than before." As well might a savage attempt to adjust the motions of a delicate chronometer. We should not insist too strongly upon knowing only

what is practical. To know a little for the sake of knowing will calm the mind, and give the strength for renewed practical work. Yet the history of science has shown that studies whose uses seemed purely intellectual are certain, presently, to develop the most important practical relations."

Discussing the relations between the several branches of the course, the speaker dwelt upon Chemistry, which traces the same laws through dead and living matter, and the organism of man himself, whether we regard it as a complex motor machine, or as a pseudo-permanent form of ever-shifting substance, like the candle-flame. Through this form we must trace the particle of food in all its metamorphoses, yielding up at each step something of that force which it received as light and heat from the sun.

The Doctor drew from Simpson a brilliant picture of the future of medicine and its allied sciences, and concluded with an illustration from astronomy of the chain of intimate relationship that binds the polyp to man, the smallest atom to the universal whole.

The College of Veterinary Surgeons commenced its regular course of instruction Oct. 19th ult., with an introductory lecture by Prof. A. Large, "On the Similarity of Diseases of Animals and Man," delivered in the building of the New York Historical Society.

The lecturer opened his discourse with liberal quotations from Aristotle, whose attention had been directed to this very subject. This philosopher had instituted parallels between the man and the larger domestic animals. He proposed to add to the horse and ox the pig, sheep, and dog, and confine himself to these five animals and their diseases. These animals were subjected to the same wounds and bruises as man, and required for their cure very nearly the same treatment. Similar causes will engender like diseases in these animals and man, as atmospheric changes, error in diet, over-exertion and the like. Varicose fevers were common to the animals he had named. Large numbers of sheep were destroyed by small-pox in England in 1857; and for this reason he claimed that these animals frequently should, in being brought to this country, be subjected to rigid quarantine. The sheep should be kept apart from clothing or other substances that had been exposed to eruptive diseases. In this connection he referred to the cow-pox and discoveries of Dr. Jenner in reference to vaccination. The same disease—that is, small-pox—exists among horses, and might be communicated as from the human subject. Many swine and sheep have often shown a disease like the measles. Scarlatina, though considered among veterinary surgeons as not existing among cows, was, he was fully convinced, a distinctive disease of the cow. He spoke of sore mouths being imparted to human subjects by drinking the milk of cows affected with this disease. The typhoid state was frequently shown in domestic animals, as the hog cholera among hogs and rinderpest among cattle. Since this last disease had shown itself in England no less than two hundred thousand cattle had been lost. The arrest of the cattle plague was among one of the greatest triumphs of veterinary science. What was lately reported in the papers in this country as the cattle plague was not the genuine disease, as shown in its not spreading, as is usual to this plague. In this connection he considered it a disgrace that there were so very few veterinary surgeons in this country. Passing from this topic he spoke of hydrophobia. This disease was generally supposed to show itself only in summer; but this is a mistake, as it appears in the dog at all seasons. He gave his theory as to the proper treatment of dogs supposed to be afflicted with the disease. In all cases where any person had been bitten he advised not to kill the dog, as it might turn out not to be rabid—a fact which would give great relief to the person bitten. Speaking next of glanders, he pronounced this one of the most infectious and obstinate diseases known to the veterinarians. To prevent the disease it was necessary to kill the animals infected and thoroughly fumigate the stables. This disease could be communicated to the human subject. A Russian lady, who laughingly said her horse had kissed her, died from being inoculated with the disease. He gave other instances of similar fatal results to human subjects. Cholera, to which the human subject is liable, is a disease frequent among the lower animals. He gave instances of its contagion, as a horse drinking from troughs used in the cholera wards of a hospital. Consumption, in its various types, he next showed entered alike among men and certain animals.

After having shown the similarity of the diseases enumerated, among men and animals, he proceeded to show the deficiency in attention to animal diseases existing in this country, and enjoined a more extended study of comparative diseases and comparative treatment. Aside from the sanitary benefits resulting from this enlarged study he claimed that great benefits would result in a commercial and agricultural point of view. He claimed further that large benefits would result in a physical, social, and moral point of view from the study of comparative diseases. In conclusion he spoke of the two great classes of food—vegetable and animal food. Vegetable food might be destroyed by premature blight or frost, or too much moisture, and it therefore became necessary to substitute animal food, and so *vice versâ*. He hoped that before long the people would wake up to the importance of the topics he had treated, and that instead of there being only one veterinary college in this country, as now, they soon would be as numerous as other regular medical colleges.

Prof. Gamgee, of the Royal Albert Veterinary College of London, followed in a few remarks germain to the lecture.

The New German Hospital.—The trustees of the German Hospital and Dispensary of the City of New York, announce that one of the four wings of their main building and the kitchen and engine-house have been completed, and will be ready for the reception of patients as soon as the necessary furniture has been obtained and the grading, flagging, and fencing of the grounds finished. That this has not been already accomplished is owing to the want of means. The contributions received so far, amounting with the accumulated interest to over $150,000, have been expended, and the further sum of $80,000 is required to pay the existing debts and to complete and furnish the building.

The Introducer of the Needle and Ligature.—To Ambrose Paré, surgery is believed to be indebted for the introduction of the needle and ligature, being about the year 1569.

An Offset to the Death-Rate in Brooklyn.—Mrs. Catherine Fitzpatrick died October 17, ult., in Brooklyn, N. Y., aged 108 years. The deceased was born in Ireland, in the year 1760, and leaves several generations of kindred to mourn her decease.

New Hospitals in Ohio.—Cleveland is to have three hospitals, if all the projects now before the public are carried out.

Hôtel des Invalides.—Louis XIV. founded the Hôtel des Invalides at Paris, in 1597.

Anti-Tobacco League in Paris.—An Anti-Tobacco League has been formed in Paris, numbering 1,200 active members, each of whom contributes three francs towards the publication of pamphlets against the use of this plant.

Prof. Peaslee has resigned the chair of Anatomy and Physiology in the Medical Department of Dartmouth College, occupied by him the past 28 years; and has been transferred to the chair of the Diseases of Women. Dr. Lyman B. How, of Manchester, N. H., has been elected to the vacant chair of Anatomy and Physiology.

Phenomenon Attending the Fall of Leaves.—The researches of M. Tricue and others show conclusively that a phenomenon occurs just before the fall of the leaf, similar to the process which accompanies the shedding of horns in animals. The vessels at the base of the petiola or leaf-stalk are found to be obstructed. The multiplication of cells, which first commences in the parietes of the vessels, causes this obstruction. On account of the increase and multiplication of the cells, the vessels are closed at the insertion of the leaf, and a differentiated plane is formed, across which the leaf-stalk breaks, and the leaf falls.

Real and Apparent Death.—A French nobleman, *Marquis of Ourches* by name, has presented to the Academy of Medicine of Paris £1,000, for a prize to the discoverer of an accurate means of distinguishing between real and apparent death.

He gives this great prize on condition that the means of diagnosis shall be open to non-medical persons; if none but the profession can use it, the sum is reduced to £200.—*Medical Press and Circular.*

First British Writer on Gun-Shot Wounds.—Thomas Gale, Sergeant-Surgeon to Queen Elizabeth, was the first British surgeon who wrote upon injuries arising from the use of gunpowder. Two works by him bear the date of 1563—namely, one upon "Gunshot Wounds," and one upon "Wounds, Fractures, and Dislocations."

A Novel Prescription for Gun-shot Wounds.—About the years 1665 and 1666, *Richard Wiseman*, who had served in the armies of James I. and Charles II. as surgeon, advocated the following formula for gunshot injuries: "Boil in two pounds of oil of lilies two new-whelped puppies till the flesh fall from their bones; add some earthworms in wine. Then strain, and to the strained liquor add ℥ij of turpentine, and an ounce of spirit of wine."

The Structure of the Tactile Corpuscles Demonstrated.—M. Ronget (*London Med. Mirror*) believes that he has succeeded in demonstrating the structure of the tactile corpuscles; from frequent observations he is warranted in saying that the nerve-fibres actually enter the substance of the cone-like corpuscle instead of being merely coiled around it, as was formerly believed. His specimens are prepared by soaking them for some time in acidulated water, and then acting on them with strong nitric acid, which stains the nerve-fibres, but not the other tissues.

A New Method of Manufacturing Glass.—M. Peloüze has made glass by melting forty, fifty, sixty, and eighty parts of alumina with two hundred and fifty parts of pure sand, one hundred parts of carbonate of soda, and fifty parts of carbonate of lime. In glass of this composition the index of infraction increases in proportion to the amount of alumina employed, all the rays of light in the spectrum being more bent; but the dispersive power of the glass decreases, the whole spectrum occupying a smaller field. In crystal glass both the refraction and dispersion increase with the percentage of lead employed.—*London Med. Mirror.*

To make Linen Fire-Proof.—Dissolve a quantity of phosphoric acid in lime-water, and add to this a little ammonia, then the whole is to be filtered and discolored with animal carbon. It is then to be put on the fire and left to evaporate until it is concentrated, when gelatine and five per cent. silicic acid are added, and again reduced to a crystallic substance by evaporation, which is dried and pulverized. This powder is called "Hottina," from the name of the inventor. The cloth to be made fire-proof is dipped in a solution made of thirty per cent. of the above powder, thirty-five per cent. of gum, and thirty-five per cent. of starch. When the cloth becomes dry, it will be perfectly fire-proof, and the color will be preserved.

Army Surgeons' Fees in the Reign of Edward III.—Soon after the battle of Crecy, in 1347, surgeons were engaged to attend upon the troops. The engagement was limited to the duration of hostilities, or for a particular day's service. Four pence per day was allowed, as the rate of pay, with the privilege of shaving the men, and receiving monthly from every soldier two pence in the shape of what was called "regards."

John Arderne was the only medical officer present at the siege of Calais, or at Crecy, in 1346 and 1347.

The Originator of the Glasgow Medical School.—Peter Lowe, the first Scotsman who attained eminence as a surgeon, after his retirement from the army, settled in Glasgow, and founded the medical school of that city.

The Qualifications of an Edinburgh Surgeon in 1505.—In 1505, the surgeons of Edinburgh were in no way behind the other schools in the three kingdoms, and we are somewhat surprised to read that "when the surgeons of Edinburgh were in 1505 incorporated under the denomination of surgeons and barbers, it was required of them to be able to read and write, to know anatomie, nature, and complexion of every parte of the human bodie, and lykeways to know all vayns of the samyn that he may make *phlebothomie* in due time, together with a *perfect knowledge of shaving beards.*"

New Publications.

Books Received.

Physician's Hand-Book for 1869. By William Elmer, M.D., and Albert D. Elmer, M.D. New York: W. A. Townsend & Adams. 1869.

The Philadelphia Medical Register and Directory. Edited by John H. Packard, M.D., Secretary of the College of Physicians of Philadelphia. Phila.: Collins. 1868.

A Hand-Book of Vaccination. By Edward C. Seaton, M.D., Medical Inspector to the Privy Council. Philadelphia: J. B. Lippincott & Co. 1868.

Outlines of Physiology, Human and Comparative. By John Marshall, F.R.S., Professor of Surgery in University College, London, etc. With additions by Francis G. Smith, M.D., Professor of Institutes of Medicine in the University of Pennsylvania. Illustrated by numerous woodcuts. 8vo. pp. 1026.

The Transactions of the American Medical Association. Vol. XIX. Illustrated. 8vo. pp. 497.

Original Communications.

THE APPLICATION OF THE THERMOMETER TO THE DIAGNOSIS, PROGNOSIS, AND TREATMENT OF TYPHOID FEVER:

A PAPER READ BEFORE THE NEW YORK ACADEMY OF MEDICINE, OCTOBER 15, 1868,

BY W. NEFTEL, M.D.,

NEW YORK.

MR. PRESIDENT AND GENTLEMEN—The original object of this paper was to demonstrate that by means of chemistry, physics, histology, applied at the bedside of patients, the physician is often enabled not only to make a correct diagnosis and prognosis, but at the same time to adopt an exact method of treatment. Following up this plan, I soon found, however, that such a paper would amount to a whole volume, or else treat the subject in too superficial a manner. I therefore prefer to divide it into a series of separate papers, each discussing one particular method of medical treatment, thus allowing me to go more fully into the subject, bring forth some interesting details, and do more justice to the distinguished body before which I have the honor to read.

The present paper treats of *the Application of the Thermometer to the Diagnosis, Prognosis, and Treatment of Typhoid Fever.*

As in all other branches of practical medicine based on exact observation, here, too, we have to begin with Hippocrates, who considered the increased heat of the body as the most important symptom of acute diseases. Galen,* and his followers down to modern times, maintained the same opinion; and Sanctorius—who introduced weighing as a diagnostic and prognostic means, and as a guide to therapeutic intervention—constructed the first thermometer, and applied it to the examination of animal heat. He died in 1638.

One hundred years later, Boerhaave takes up the thermometer and commends its use in medicine, although he considers the action of the heart and the condition of the system of circulation as the only essence of fever.

Of his pupils, Van Swieten, in 1745, urges upon the profession to substitute Fahrenheit's thermometer for the use of the hand in the appreciation of the temperature of the body; and De Haen, also a pupil of Boerhaave, and professor in Vienna, pursues a series of thermometrical observations, both in the healthy and diseased condition. The results of these researches were left in oblivion until very recently, when they were again brought to light, and proved of the utmost importance. De Haen had made an extensive use of the thermometer, especially in febrile diseases. In these he noticed the rising of the thermometer at the evening exacerbations, its lowering in the morning remissions, as well as the increased temperature during the febrile rigor. He was also aware of the higher temperature peculiar to old age. He used the thermometer as a test for the efficacy of the treatment, taking for the only sign of recovery the return of the normal temperature of the body.

In England, John Hunter began his thermometrical experiments in 1766. He showed that animals can bear the external cold because they produce heat themselves; and Blagden, in 1774, demonstrated the remarkable fact, that a healthy man preserves his normal temperature in rooms heated to the boiling point of water, and even higher.

The famous researches of Lavoisier, who found the cause of animal heat in the chemical combination of hydrogen and carbon with oxygen during respiration (combustion), placed in the lungs the seat of production of animal heat.

Since De Haen, however, the most practical application of the thermometer to the treatment of diseases was made by an English physician, James Currie, in 1797.* He examined every one of his patients with the thermometer, and from the changes in the temperature of the body judged of the effect of cold and warm water, alcohol, opium, digitalis, strict diet, etc.

Of recent writers, as very important in a practical and clinical point of view, I will mention the articles of Zimmerman, in 1847.† This latter energetically advocated thermometrical examinations at the bedside, and published many valuable observations. He was the first to ascribe the production of increased heat to local inflammatory processes.

In France, H. Roger‡ published his thermometrical observations in reference to diseases of children. His papers, "*De la Température chez les Enfants à l'Etat Physiologique et Pathologique*," are very rich in the most valuable information.

But a new era began for the use of the thermometer in medicine with the classical researches of Traube,§ in Berlin. With an exactness quite characteristic of all his researches, he shows the indispensability of the thermometer at the bedside, especially in febrile diseases, for it cannot be replaced by any other means. The thermometer in hand, Traube demonstrates the correctness of the old Hippocratic doctrine of crises and critical days, and the really antifebrile properties of digitalis in diminishing the temperature of the body. He then takes the initiative in introducing the graphic representation of the course of fever, by a curve following the systematic thermometrical examinations.

Immediately after Traube appear Barensprung's‖ remarkable investigations, and immensely enlarge our knowledge of animal heat in the adult and the fœtus, in health and disease.

But Wunderlich¶ brings to an amazing number his thermometrical observations. During sixteen years he has had all the patients of his clinic thermometrically examined at least twice a day; those in a feverish condition four or six times a day, and often even every two hours day and night; so that his notes on more than 25,000 patients amount altogether to several millions.

These observations definitively prove the urgent necessity for the thermometer in diagnosis and prognosis, and often show it to be the only means of judging of the progress of the disease, and of the effect of our treatment. They, moreover, confirm the existence of distinct types in diseases, and demonstrate that these types either run their, so to say, normal course, or present certain irregularities—a fact previously admitted from a pathological point of view by Rilliet and Barthez. Besides these authorities, quite a large number of physicians have made valuable thermometrical observations,

* S. WUNDERLICH: *Das Verhalten der Eigenwärme in Krankheiten.* Leipzig, 1868, p. 31.

* "*Medical Reports on the Effect of Cold and Warm Water as a Remedy in Fever and other Diseases.*"

† ZIMMERMAN: *Klinische Untersuchungen zur Fieber-Entzundungs und Krisen-Lehre.* 1854.

‡ Archiv. gener. 1844, tom. iv., p. 261.

§ L. TRAUBE: *Die Symptome der Krankheiten des Respirations- und Circulations-Appirats.* Berlin, 1867, p. 68.

‖ Muller's Archiv. 1851.

¶ WUNDERLICH: *Vortrage uber Krankenthermometrie.* Arch. der Heilkunde. 1865.—*Das Verhalten der Eigenwarme in Krankheiten.* p. 50.

amongst whom I will name Brown-Séquard,* Charcot,† Liebermeister,‡ Ziemssen,§ Billroth,‖ O. Weber,¶ and others. At the present day, thermometrical examinations are made in all the clinics and hospitals of Germany, and the best European physicians make it a point to use the thermometer in private practice.

Before speaking of the practical application of the thermometer, I beg to be allowed a few words upon the theory of heat, principally animal heat. A modest medical practitioner, Dr. J. R. Mayer,** proclaims, in 1842, his great mechanical theory, the law of the conservation and transformation of force. According to it, all the imponderables—electricity, heat, and physical and chemical processes—are modifications of one force, derived from one inexhaustible source, the light of the sun. A given quantity of force always remains the same, though it be converted into it's different modifications, into chemical action, heat, or mechanical work. The only source of animal heat is the chemical action brought into play between the ingested food and the inhaled oxygen. This theory, the correctness of which is now experimentally demonstrated, and admitted by all the natural philosophers and physiologists, became generally known only twelve years after its discovery, namely, in 1854, through Helmholtz's†† admirable paper.

We have already seen that Lavoisier considered oxidation (slow burning) as the source of animal heat, and the lungs as the only place where the heat is generated. But the investigations of modern physiologists undoubtedly prove that animal heat is generated in every organ and tissue—in the circulating blood as well as in the active muscles, in the secreting glands, and wherever chemical processes take place.

The modes of wasting animal heat are also various. It is wasted partly by radiation from the free surface of the body, partly by conduction to the colder surrounding medium, and again by the evaporation of water, and with the excretions.

I may here mention, that all the thermometrical observations I shall speak of in this paper, have been made with the French Centigrade scale, which is exclusively used for scientific purposes in Europe (England excepted), and which I have been in the habit of using during many years. But the degrees of the Centigrade scale can be easily reduced to Fahrenheit's, by multiplying by 9 and adding 32. By the way, I hope that the American nation, which is a progressive one *par excellence*, will soon adopt the modern French weights and measures.

The average temperature of the healthy man, examined in the axilla, is 37° (98.6 F.); in the mouth under the tongue 37.1 or 37.2 ; in the rectum or vagina 37.3 or 37.4 . According to Barensprung, in the fœtus the temperature is 37.7 , but very soon after birth it falls to 37.2 or 37.3 . The temperature in very advanced age and in the child is a few tenths higher than in the adult; but there is scarcely any difference of temperature as to the sexes; and but a slight fluctuation of a few tenths is noticed among st the healthy at different times of the day. The lowest temperature is in the night between ten and one o'clock, and in the morning between six and eight; the highest between four and five in the afternoon. The temperature does not differ, from the normal during menstruation or pregnancy, but after delivery Barensprung observed a decline in it, though it ascended again in the course of a few hours.

It is a general law that the normal temperature is 37° (98.6 F.) and should not exceed a few tenths of a degree on either side. When the system produces a greater amount of heat, for instance, by increased oxidation during muscular contraction or otherwise, it will at the same time increase its losses by enhanced conduction, perspiration, and other regulators of heat, so that the general temperature remains constantly the same. And when the waste of heat is excessive, the system will augment its production. But if the production be not equivalent to the waste, the system will at once get diseased; and whenever the thermometer shows a considerable deviation from the normal standard, it is an undoubted pathognomonic sign of disease. The healthy organism, submitted even to a considerable degree of cold or heat, can stand it by its own regulators, without change in its proper temperature: and only when exposed to a long trial and to a temperature differing much from its own, it loses the equilibrium between its production and waste of heat, and very soon after perishes.

Walther‡‡, of Russia, shows that rabbits die as soon as they are cooled 9° (16.2 F.) below their normal standard; or if exposed to the direct action of the sun at 30° (86 F.), they die when their own temperature rises to 46° (114.8 F.). Claude Bernard found that animals exposed to high temperature die invariably as soon as their proper heat increases 4 to 5°. I will here mention one of Chossat's experiments from his classical researches§§. He showed that in animals exposed to hunger, followed by a great loss of flesh, the nervous centres still preserve their normal weight. This explains the fact that consumptives, though arrived at the highest degree of emaciation, retain their intellectual powers until death. The animals, according to Chossat, invariably die as soon as their body diminishes to one-fifth of its original weight, because then the temperature of the nervous centres has arrived at a minimum incompatible with their functions, respiration and pulsation of the heart ceasing in consequence of the medulla oblongata being deprived of the heat necessary for its functions. This can be proved by increasing the animal's temperature by external heat, for then it revives, though yet exposed to hunger.

Great muscular exercise and a copious meal slightly increase the temperature, perhaps for a couple of tenths; a strict diet diminishes it but very little, as long as it does not amount to a continued hunger. Alcoholic liquors in toxic doses decrease the animal heat, probably by diminishing the metamorphosis of the tissues. A cold bath or an application of ice diminishes the increased temperature, but will excite in the healthy a greater production of heat, that may sometimes even call forth a consecutive augmentation of it.

According to Traube‖‖, digitalis considerably lessens the animal heat, and Brown-Séquard¶¶ finds that opium, belladonna, hyoscyamus, tobacco, camphor, hydrocyanic and other acids do the same.

Constipation of the bowels, and retention of urine or suppression of menstruation, especially during disease, augment the temperature; but a free defecation and, still more, vomiting, considerably diminish it.

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* Brown-Séquard: Journal de Physiologie. I, p. 497; II, p. 551. Medical Examiner. Philadelphia, 1852, p. 554, et seq.

† Charcot: Gazette des Hôpitaux. 1856. No. 89, et seq.

‡ Liebermeister: Purger Vierteljahrschrift. 1865.

§ Ziemssen: *Pleuritis und Pneumonie im Kindesalter*. 1862.

‖ Billroth: Archiv für Klinische Chirurgie. 1862 and 1864.

¶ O. Weber: *Experimentelle Studien über Pyämie, Septicämie, und Fieber*. Deutsche Klinik. 1864 and 1865.

** J. R. Mayer: *Mechanik der Wärme*. 1867.

†† Helmholtz: *Ueber die Erhaltung der Naturkraft*. Königsberg, 1854.

‡‡ Virchow's Archiv, xxv, p. 414.

§§ Gazette Médicale. 1850, p. 402.

‖‖ Chossat: *Recherches Expérimentales sur l'Inanition*. 1843.

¶¶ Annales der Charité. 1850, p. 622.

* Comptes Rendus de la Societe de Biologie. 1849.

Becquerel and Breschet,* covering rabbits with an impermeable stuff, found one hour and a half later their temperature 14–18° (25.2°—32.4° F.) lower, and the animals soon died. Edenhuizen† found that animals die from lowered temperature, if one-sixth of their surface be covered in this manner. The cause of the decreased temperature and death is probably the retention of some excrementitious matter, that diminishes the respiration and the production of heat. Death after a burn of a large portion of the skin can probably be ascribed to the same cause. And perhaps also the impossibility for even the best swimmer to remain in water over an hour, can be explained in a similar way.

An increase of temperature is called forth by coffee, musk, and in the highest degree, according to Voisin‡, by woorare, which produces, after being hypodermically injected, a real febrile condition—rigor, heat, and profuse perspiration, with a high temperature of 40·4° (104.72° F.).

Billroth and O. Weber have shown that pus or decomposed animal matter, injected hypodermically, or brought directly into the circulation, greatly increases the animal heat, sometimes as much as 2·2° (4.168° F.) The same probably takes place in pyæmia and septicæmia.

Frese§ made, in Virchow's Pathological Institute, in my presence, the following important experiment: After letting out many pounds of blood from a dog, till syncope, he found the temperature, that at first had lowered, rise very soon considerably over its original standard. The same is known to take place in disease after venesection, although in a less degree.

That under certain nervous influences the animal heat can increase, we know since the famous experiment of Cl. Bernard.‖ He discovered that, after the section of the cervical part of the sympathetic nerve, an increase of temperature follows on the corresponding side of the head, especially in the ear. He explains this fact by the filling of the blood-vessels in consequence of the paralytic condition of the vaso-motor nerves, which all, according to him, come from the sympathetic. Brown-Séquard¶ found that the section of one side of the spinal cord in the dorsal region, will produce increased temperature of the corresponding posterior extremity, and diminish the temperature of the opposite extremity.

As the normal temperature is 37° (98.6 F.), every deviation from it is a proof of sickness. Persons considered healthy but with a higher, so called subfebrile, temperature, have some concealed disease of the lungs, heart, kidneys, or other organ; and on the other hand, the thermometer is often the best means of detecting simulated diseases. But, even in the diseased condition, the temperature cannot deviate much from the normal. The highest temperature ever recorded was 44.5° (112.1° F.) observed by Simon in a fatal case of smallpox; and approximatively the same was observed by Wunderlich**, in fatal cases of nervous diseases, as for instance in tetanus, where even after death the temperature still continues to rise (Leyden††). But generally the highest temperature yet compatible with life, that which we meet in dangerous diseased conditions, goes not beyond 42·5° (108.5° F.) On the other hand, the lowest temperature observed only in the most fatal cases, as in the collapse of cholera for instance, stops at 33° (91.4° F.), and even then it remains over 35° (95° F.) the rectum and vagina.

As soon as the heat of the body is above 38° (100.4 F.) we must consider the patient in a febrile condition; and fever may already be suspected, when the heat exceeds 37.5 (99.5 F.); so that, according to modern views (Virchow*), the only pathognomonic symptom of fever is the increased temperature; without it there is no fever.

The increased temperature, as is generally accepted, can originate either from the excessive production of heat, or from diminished waste of it (as thinks Traube†), or, more probably still, from both sources combined. But why the system produces more or wastes less heat, has been answered by a great variety of hypotheses, which it would take too long to enumerate. Zimmerman was the first to show that local inflammatory processes are always accompanied by increased production of heat, or fever. Claude Bernard, from the result of section of the sympathetic, pronounces the increased temperature in fever a purely nervous phenomenon. In zymotic diseases the increased temperature is ascribed to a sort of fermentation produced in the system by the introduction of decomposed substances, or perhaps of small vegetable or animal organisms. This is probable, because fermentation outside the system and without oxygen is always accompanied by the production of heat. At any rate, all the observers are unanimously of the opinion that increased heat is the essence of fever; that the more moderate the temperature the milder the fever; the higher the temperature, on the contrary, the more dangerous it is, and arrived at a certain degree, it is incompatible with life. Hence our therapeutic plan of treatment has to be directed principally against increased heat, it being the immediate cause of danger.

At the beginning of many acute diseases, and of every paroxysm of ague, a rigor sets in, with a feeling of extreme cold. The thermometer then shows the temperature of the trunk excessively high—40° (104 F.) and more,—and that of the forearms and hands, of the legs and feet, of the nose, chin and forehead, under the normal. The rigor lasts until the temperature of the distant parts gets equal to that of the trunk, and only then a general sensation of heat is felt. Under some conditions, there is another mode of development for a rigor. It is when the usual temperature of the body is below the normal, perhaps only 35° (95 F.), as, for instance, in cancerous diseases, in diabetes, in excessive anæmia, and in some incurable mental diseases with the character of depression. In such cases, as soon as the temperature suddenly rises 2° or 3°—that is, to the normal standard—a sensation of extreme cold is felt, with shivering and chattering of the teeth.

In some diseases the febrile heat is continuous, the thermometer showing very slight fluctuations during the twenty-four hours (continued fever); in others it rises and falls alternately (exacerbations and remissions—remittent fever); in others again, at certain times it descends to the normal (intermittent fever). When during a febrile disease the temperature falls much below the normal, it is collapse. The daily fluctuations of the temperature are very different, and subject to certain laws quite characteristic of the various types of diseases. They can be graphically represented by a

* Comptes Rendus de l'Academie des Sciences. 1841.
† Zeitschrift for Rationelle Med. 1863, p. 35.
‡ Journal de l'Anatomie. 1867, p. 114
§ Virchow's Arch. xl., p. 303.
‖ Bernard: *Leçons sur la Physiologie et la Pathologie du Système Nerveux*. 1858.
¶ Brown-Séquard: *Experimental Researches applied to Physiology and Pathology*. 1853, p. 73.
** Wunderlich: Op. cit., p. 195.
†† Leyden: *Beiträge zur Pathologie des Tetanus*. Virch. Arch., 1868, p. 382.

* Virchow: *Handbuch der Spec. Pathologie und Therapie*: Art. *Fieber*. I. p. 36.
† Traube: *Die Symptome der Krankheiten des Respirations und Circulations-Apparats*. p. 80.

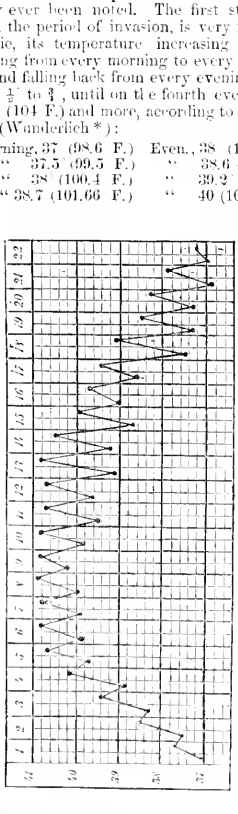
curve, showing the maxima and minima of temperature, and tracing the whole course of the disease.

As an illustration of the practical application of the thermometer to the study of disease, I take *typhoid fever.*

The thermometer I am in the habit of using is made by Geissler, the world-known glass-apparatus maker in Berlin. It distinctly shows one-tenth of a degree, and is highly correct. I generally examine the temperature in the axilla, taking care that the small cylinder containing the mercury should be hermetically surrounded by the skin, and left for a quarter of an hour to attain the temperature of the blood. If the heat be intense, the thermometer will rise very rapidly; but, even then, it must be kept for at least a quarter of an hour in the same position, to be sure that we obtain the correct figure—because a few tenths can be decisive for the prognosis.

Typhoid fever, like other acute diseases, can have a mild or grave course, and its different stages, following almost always a regular weekly or half-weekly period, are distinctly recognized with the thermometer. Nothing can be said of the period of incubation, for it has scarcely ever been noted. The first stage of typhoid fever, the period of invasion, is very regular and characteristic, its temperature increasing in regular zigzags, rising from every morning to every evening by 1° or 1½°, and falling back from every evening to every morning by ½° to ¾°, until on the fourth evening it has attained 40° (104° F.) and more, according to the following figures (Wunderlich*):

1st day, Morning,	37° (98.6° F.)	Even.,	38° (100.4° F.)
2d "	" 37.5° (99.5° F.)	"	38.6° (101.48° F.)
3d "	" 38° (100.4° F.)	"	39.2° (102.56° F.)
4th "	" 38.7° (101.66° F.)	"	40° (104° F.)



This curve is quite characteristic for the diagnosis of typhoid fever, and no other disease presents similar fluctuations of temperature. So the thermometer proves of the highest importance here, for by no other means can we make a positive diagnosis of typhoid fever in the first four days. With the thermometer we can say at once that there is no typhoid fever when on the first evening or second morning the temperature has risen to 40° (104° F.), or when it approaches the normal on the second, third, and fourth evenings. There is, again, no typhoid fever when the temperature remains the same during the first two or three mornings, or two or three evenings; or when but once a descent in the temperature below that of the same hour on the previous day can be detected on either of the first mornings or evenings.

The second stage—the acme or fastigium—runs as follows. The heat continues to rise during the exacerbations until it arrives at its maximum, 40°—41.5° (104°—106.7° F.) and remains so for several consecutive evenings, falling off in the morning remissions from half a degree to a degree and a half. Then, at the end of the second week, sometimes after a critical perturbation, but generally at once, begins the period of defervescence. During it the exacerbations become lower, and the remissions fall considerably deeper, until all difference between the morning and evening temperature has disappeared, and the return of the normal 37° (98.6° F.) announces the convalescent stage.

This is the curve of the regular mild typhoid fever, and even in the most severe cases, the first and last stages remain characteristically the same. Between them only can run the underside period (Wunderlich's amphibolous period), lasting from a few days to several weeks, presenting a great variety of irregularities in the fluctuations of the temperature, which generally remains as high as during the fastigium. Sometimes the amphibolous stage begins with a prolonged remission, after which the heat suddenly rises nearly to the height of the fastigium, and with only very short morning remissions. Or the temperature will gradually diminish, arrive near the normal, and keep ascending again for a few consecutive days, repeating it several times over. When by no other means a disturbance can yet be detected, this irregular rising of temperature is the early and sure sign of some local trouble, either in consequence of new deposits in the intestinal canal, or of some complications, or of a relapse of the disease. When, on the other hand, the temperature has suddenly fallen, sometimes much under the normal, it is the earliest symptom of perforation of the bowels, or hæmorrhage.

The amphibolous stage goes over either into the defervescent or into the proagonic stage; in which last case the heat continues to rise enormously, without remissions, to 42.5°—43° (108.5°—109.4° F.).

In the convalescent period the temperature falls to 37° (98.6° F.), and continues to remain normal. As long as this is not the case, the patient cannot be considered convalescent, or out of danger, though he may appear so in every other respect.

With regard to *prognosis*, the thermometer is again our best guide. A case is always severe when the morning temperature exceeds 39.5°—40° (103.1°—104° F.), and that of the evening gets over 40.5°—41° (104.1°—105.8° F.); when the exacerbations begin early, or continue after midnight, and the remissions commence late, and are of short duration—in general, every irregularity in the thermometrical curve must arouse our suspicion, and every case with an amphibolous stage is intensely dangerous.

According to Wunderlich,* the temperature of 41.2°

* Wunderlich: *Das Verhalten der Eigenwärme in Krankheiten*, p. 279.

* Op. cit., p. 292.

(106.16° F.) is of very great danger; at 41.4 (106.51 F.) twice as many patients die as recover; and from 41.5 (106.7 F.) upwards recovery is an exception. If the morning temperature rises to 41.2 (106.16 F.), death is certain. According to Liebermeister an excess over 42 (107.6° F.) is incompatible with life. Uhle takes as the extreme for possible recovery 41.2 (106.16 F.); Thomas, 41.5 (106.7 F.); Fiedler, 41.7 (107.06° F.)

For an exact diagnosis and prognosis the thermometrical observations must be carried on systematically. But sometimes a single observation may at once reveal the nature of a disease; so, for instance, we can without a mistake recognize intermittent fever, if even once, in the first days of a febrile disease, the temperature approaches the normal. This early diagnosis is of the highest importance in the pernicious quotidian intermittents, which often simulate typhoid, and, if not properly treated, soon become continuous, and may terminate fatally. Very instructive is the fact that, when after intermittent fever the patient is considered cured by himself and his physician, the thermometer will detect the presence of malarious influence in the system, and show an increased temperature—38 (100.4 F.) and more. In such cases the paroxysms are sure to return, unless the specific treatment be continued until the temperature has become constantly normal.

It is not necessary to dwell long on the treatment of typhoid fever. We know that the degree of its intensity and danger to life depends on the high temperature. However the action of excessive heat upon our system may be explained theoretically—whether by producing some parenchymatous changes in the muscles (Zenker*, Waldeyer†), heart, nervous centres, or otherwise—for the practical physician there remains but one predominating indication, to subdue the heat. Hence every means of diminishing it must be resorted to, and the contrary avoided. We find a favorable change in the patient, and the thermometer shows a decline, after a mild aperient, or calomel, or digitalis, during the first stages of the disease; and a rising of temperature and increase of fever after stimulants. But for regulating the temperature of the body with mathematical precision, we possess but one means—cold, in its various forms and methodically applied.

Already in the last century James Currie had made extensive thermometrical observations, and introduced the rational treatment with cold water. My first acquaintance with the use of water in diseases was during the Crimean war in 1853. I was then attached as a physician to the Imperial Russian Guard, where a murderous epidemic of typhus fever prevailed, with a most distressing figure of mortality, resisting all our efforts to subdue it by every known method of treatment. Following then only the instinct of the patients, and watching closely the immediate effect of cold water, I soon began to appreciate its beneficial influence upon the course and termination of the disease, and commenced treating all the cases with cold sponging and affusions. The result surpassed my hopes, and was far better than that obtained by any other method. I was myself attacked by the disease, and was saved from death only by my own mode of treatment. But still my treatment then was purely empirical and symptomatic.

In 1861 Brand‡ published his first monograph on the treatment of typhoid fever with water. Jürgensen§ and Liebermeister* confirmed his method by excellent scientific investigations; and in the large hospitals of St. Petersburg this plan of treatment has been tested on a wide scale, and with excellent results, by Zdekauer,† Grunewaldt, Rauchfuss, and others.

Brand's principal rule is never to allow the temperature to rise above 39.5 (103.1 F.); and as soon as it comes to it, immediately to cool the patient according to the degree wanted. The mildest degree of cooling is attained by sponging the body with cold water, or by keeping the patient continually in a wet sheet, or again by a full tepid bath, and especially with cold water gradually added to it; the next degree by a tepid half-bath with cold affusions; the highest degree by cold affusions, shower bath, or cold bath with cold affusions‡.

The treatment is as follows: Brand§ gives his patients a tepid half-bath with cold affusions four or six times per day. As the greatest heat occurs from 10 to 12 A.M., and from 4 to 6 P.M., a bath is given just before 10 and before 4 o'clock, and besides, at every other time when the thermometer shows 39.5 (103.1 F.) The patient is left in the bath from five to fifteen minutes. The cold bath diminishes the temperature of the body from 1 to 3 (1.8—5.4 F.), according to its intensity and duration. In order that the evaporation of water should continue to produce cold, the patient is not dried after the baths, between which he is occasionally sponged over. A wet cloth is laid on the head, and another on the chest and abdomen, so that a continual refrigeration is kept up on one third of the body. Every quarter of an hour, if the patient is not asleep, he is offered a little cold water to drink, and every three hours, nourishing food in a fluid state. The room is kept well ventilated, and stimulants are avoided, unless a collapse should take place; that, however, does not occur under this treatment.

The effect of this treatment is so wonderful, that those familiar with typhoid patients will not recognize them. By keeping the temperature below 39.5 (103.1 F.) the exacerbations are avoided and the fever kept in a continuous remission. The patients are never unconscious, never delirious; the tongue always remains moist and clean; the bronchial catarrh is very slight; so is the diarrhœa, if any at all. There is no tympanites, no hæmorrhage, no complication, and we have every reason to believe that the intestinal ulcerations do not occur at all. The patients, aided by some one, have strength to walk to their bath; they have a good appetite, and very quiet, refreshing sleep. On coming out of the bath, they generally eat and take a sleep. Under this treatment the course of typhoid fever is very mild and short, the convalescence very rapid, and the mortality none whatever (Brand). From my own experience, I may say, that a great number of patients, treated by myself according to this method, have all recovered without exception. In this city I had a patient, whose morning temperature once reached even 41.3° (106.34 F.)—a case absolutely fatal under every other treatment; she is nevertheless recovering.

As the principal seat of the affection is the intestinal canal, I generally begin the treatment with the administration of a mild aperient, to free it from the irritating contents. This is always followed by a diminution of the temperature. In the course of the fever I occasionally give injections of cold water, which, as I have observed, reduce the heat sometimes by a whole degree,

* F. A. Zenker: *Ueber die Veränderungen der Willkürlichen Muskeln im Typhus Abdominalis.* Leipzig, 1864.

† Waldeyer: *Ueber die Veränderungen der Querstreiften Muskeln bei der Entzündung u. d. Typhus process.* Virchow's Archiv, Bd. 34, p. 473.

‡ Brand: *Die Heilung des Typhus.* Berlin, 1868.

§ Jürgensen: *Klinische Studien über die Behandlung des Abdominaltyphus mittelst des kalten Wassers.* Leipzig, 1866.

* Deutsch. Archiv für Klin. Med. Bd. I., IV., p. 413-435.]

† Petersburg. Med. Zeitschrift, 1864, p. 47.

‡ Brand: Op. cit., p. 61.

§ Op. cit., p. 81.

to the greatest comfort of the patient. For all the rest, I strictly adhere to Brand's plan of treatment.

In this sketch I have tried to make manifest that the thermometer indicates with the greatest exactness the condition of the animal heat, the presence of fever, and its degree of intensity and danger. It traces the laws of the course of different types of disease; indicates the transitions from one stage to the other, the ameliorations and aggravations, and the return of the normal condition. It shows the effect of our remedies; enables us to form a correct diagnosis and prognosis; and gives us positive therapeutical indications.

REPORT ON

RESECTION OF THE LONG BONES.*

By JOSEPH W. THOMPSON, M.D.,

OF PADUCAH, KENTUCKY.

Case IX. *Ulna: four inches removed.*—Wm. M——, private, Co. H, 14th Louisiana Infantry (Confederate), was wounded November 27th, 1863. Four inches of the right ulna were resected on the battle-field by Dr. J. H. White, now of Richmond, Virginia. The wound healed without any untoward symptoms. Dr. White states that "he recovered without impairment of the motions of flexion, extension, pronation or supination. The flexor tendon of the little finger is permanently contracted. This may be wholly or in part due to the gangrene that attacked the hand." Dr. W. says that he now has a useful arm, although the muscles of the fore-arm are somewhat atrophied, and, in consequence, the strength is somewhat impaired. The articulations with radius and humerus are undisturbed.

The result of this resection has been good. All the important functions of the arm are unimpaired.

Case X. *Humerus: three inches, including head of bone, removed.*—J. M——, Co. K, 34th Va. infantry, was operated upon as above in June, 1862. During last winter he stated to Dr. Bagby, now of this city, that the arm had given him no inconvenience since he recovered from the operation. Dr. Bagby states that he has examined this case repeatedly since the operation, the last time during the winter of 1867–8, and found the arm to be of great use.

As the limb was healthy and useful five years after the operation, this may be regarded as a success-ful resection.

Case XI. *Humerus: five inches, including head, removed.*—Mr. A——, soldier (late Confederate), was wounded during our recent war. The injury to the humerus was so extensive that five inches of its upper end were resected. The arm is healthy, and has been so since six weeks after the operation. There is some want of power in directing the movements of the limb, though it is of great advantage to the patient.

This is a very successful case, considering that five inches of the bone were removed, including the head. Dr. Bramack, of McMinville, Tenn., operated. Dr. A. S. Waterfield, of Cottage Grove, Tenn., kindly furnished me the notes of the case.

Case XII. *Tibia, middle third: four inches removed.*—A regular United States soldier, while his command was stationed at Gallatin, Tenn., in February last, was amusing himself, with his comrades, by firing off an anvil. It exploded, a piece striking his right leg about the middle of the anterior portion, producing a compound comminuted fracture of the tibia, and injuring the fibula. The soft parts around the wound were very much lacerated, and the blood-vessels and nerves were injured. Dr. Schell, of Gallatin, Tenn., was immediately called, and earnestly advised amputation, but the patient would not consent to it. Dr. Schell then carefully removed all the fragments of bone, smoothed the ends, and closed the wound as well as he could. There was a loss of four inches of the tibia. The limb was treated after the proper plan. It was placed in a fracture-box, filled with sawdust. For about six weeks the drains from the wound continued very great, and, as mortification was threatened, Dr. Eve, of Nashville, Tenn., was consulted. Amputation was immediately performed. The patient failed to rally from the operation, and died in about sixteen hours.

This was a case for primary amputation and not for resection. The injury to the blood-vessels and nerves of the limb, and the extensive laceration of the soft structures, precluded the admissibility of resection. The principle has been long since established, that when the large blood-vessels and nerves are injured, amputation is the proper and only remedy. If primary amputation had been performed, in accordance with Dr. Schell's advice, the patient's life might have been saved; at least, this would have given him the only chance for it.

Case XIII. *Humerus: three and one-half inches, including head, removed.*—Wm. H. B——, a soldier of the late Confederacy, was wounded, June 3, 1864, at the battle of Cold Harbor, by a Minié ball, fracturing the upper portion of the humerus. Three and a half inches of the bone were resected, including the head. The operation was performed by Dr. McGuire, Surgeon of the First Tenn. Regiment. The wound continued to suppurate slightly for about eight months; since that time the limb has been healthy. Patient states that he can use the arm in performing all ordinary business; can raise as much with it as he could before he was wounded; and that the arm is just as serviceable as it ever was, except in elevating it above his head.

This has proved a very successful case of resection. After the lapse of four years, the arm is of the greatest advantage to the patient.

The notes of the last two cases were kindly furnished me by my friend Dr. Bush, residing near Gallatin, Tenn.

Case XIV. *Elbow-joint: two and one-half inches of bone removed.*—General James A. Walker, commander of the noted Stonewall Brigade at the surrender of the Confederate armies, was wounded during the late war through the left elbow-joint. About two and a half inches of bone were ex-cected. The arm has been healthy since the wound first healed. He can use the limb almost as well as before he was wounded, except that he cannot elevate it above his head as freely. The General states that the arm is of great advantage to him.

General Walker gave me the notes of his case by letter, and they are clear and intelligent; but, not being a medical man, he failed to state how much of the humerus was removed, and what portion was taken from radius or ulna. But he states that it was a resection of the elbow-joint, about two and a half inches of bone being removed. Such an excellent result makes the case an interesting one.

* Being a continuation of the report in THE RECORD of March 16, 1868, p. 92. In an accompanying note the writer states that he is still engaged in collecting cases for an extended report upon this subject, and will be glad to receive any that may be furnished. He desires especially to obtain the records of resections performed during the late war, as sufficient time has now elapsed to warrant practical deductions from them. The reports should give name and post office address of patient, and, if possible, also of operator; date of wound, and battle where received; character of injury, and kind of missile producing it; date of operating; exact seat and extent of resection; amount of shortening of the limb; extent to which its functions are impaired, stating whether it is, on the whole, better than no limb or an artificial one. It is also requested of any [illegible] to have [illegible] amputated as nuisances.

Case XV. *Humerus, lower end; two and three-quarters inches removed.*—J. H——, a soldier in the late Confederate army, Company H, Sixth Arkansas Regiment, was wounded July 21, 1864, in the lower portion of the humerus, by a Minié ball. Resection was performed immediately, removing two and three-fourths inches of the lower end of humerus. A portion of the olecranon process was carried away by the ball. Abscesses continued to form around the wound occasionally until April, 1866, nearly two years, in consequence of caries and necrosis of the bone. In April, 1866, Dr. S. H. Bayless, of Falcon, Arkansas, removed the diseased fragments of bone; and since that time the arm has been healthy. The patient has good use of the arm; he can plough, use an axe, write, lift heavy weights, in fact, use it in every way, except flexing it.

The result in this case has been good. I think it probable that had the fragments of diseased bone been early removed, the abscesses would not have continued to form as long as they did. The operators were Dr. Sam Turner, now of Texas; and Dr. McFadden, of Pocahontas, Arkansas. The notes of this case were kindly furnished me by Dr. S. H. Bayless of Falcon, Ark.

Case XVI. *Humerus, lower third; nearly five inches removed.*—Captain A. Benson Brown, Co. C, Ninth New Jersey Volunteers, was wounded at the battle of Fort Darling, the 16th of May, 1864, buck and ball striking the lower portion of right humerus, and making a compound comminuted fracture. Very near four inches of the humerus were exsected, the exsection extending to within about an inch and a half of the elbow-joint. Abscesses formed occasionally for about a year; since that time the arm has been healthy. The operation was performed by Dr. A. W. Woodhull, then surgeon of the regiment, now of Newark, N. J. On the 8th of August, 1864, Captain Brown applied to Prof. Joseph Pancoast for advice, and became his patient. Prof. Pancoast introduced a screw which drilled its way obliquely through the ends of the bones, to hold them together and keep up irritation, with a view to bring about bony union. Captain B. informs me that the screw remained in the bones for seven months. He states that, about a week after its introduction, he was attacked with fever, and continued to be quite ill for some time. Captain Brown is of the opinion that the introduction and presence of the screw was the cause of the attack of fever. I am not prepared to give an opinion in reference to that, as I did not see the captain while he was sick, and, in fact, never met him until a few days since, when on examination I found complete bony union existed.

The result in this case is highly gratifying. The arm is very useful; and when we consider that complete bony union has taken place, it proves to be a case of more than ordinary interest. I examined the arm and made the notes of the case as given above.

New Lunatic Asylum in Pennsylvania.—The Legislature of Pennsylvania have appointed commissioners to locate the new Hospital for the Insane in that State. A farm near Danville, on the bank of the Susquehanna, has been chosen for its site. The building is to be a magnificent structure, 1,142 feet, or almost a quarter of a mile in length. Dr. Shultz, of Harrisburg, is to be the Superintendent.

New Works to be Published by the New Sydenham Society.—Four works will be published by this learned Society during the year 1869. The second volume of *Trousseau*, the second of *Lancereaux*, a Biennial Retrospect for 1877–8, and a sixth fasciculus of the Atlas of Skin Diseases.

Original Lectures.

PUERPERAL CONVULSIONS:

ABSTRACT OF A CLINICAL LECTURE* DELIVERED AT BELLEVUE HOSPITAL,

By FORDYCE BARKER, M.D.,

PROF. OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN, BELLEVUE HOSPITAL MEDICAL COLLEGE.

Cases I. & II. *Puerperal Convulsions: Puerperal Mania: Convulsions in the Infant: Recovery of both Mother and Child.*—Bridget D., æt. 25, Irish, primipara. Admitted into hospital last July. Labia, vulva, and lower extremities then so much swollen as not to pit upon pressure. Frontal headache and pain in lumbar region on first admission, but all these symptoms soon disappeared. Neither casts nor albumen found in the urine previous to confinement, although several examinations were made. On the afternoon of Sept. 16th, the patient was suddenly seized with a convulsion, characterized by all the usual phenomena, lasting five minutes, and leaving her in a semi-comatose condition. A more protracted convulsion followed about twenty minutes later. Dry cups were applied to the loins, and three drops of croton oil placed upon the tongue; chloroform was then administered freely, and continued whenever convulsions were threatened, until the labor ended. As, after a proper interval, the croton oil did not act, an enema of an ounce of castor oil, with three drops of croton oil and a pint of warm water, was given, which moved the bowels in about ten minutes. At 7 P. M., three convulsions occurred in rapid succession. During the intervals between them the patient was semi-comatose, with pupils markedly contracted. No recurrence of the convulsions till 4 P. M. of the 17th, when three occurred rapidly. There was an intermission till 3 A.M. of the 18th, when three more occurred; and ten minutes after the last the child was suddenly expelled alive. The placenta soon came away; the uterus contracted well; and there was little hæmorrhage. The mother had three convulsions after delivery; puerperal mania then developed and lasted nearly two days. She had since done well, had a good appetite, and complained only of headache. On the day of the first of the postpartum convulsions, the urine contained a small amount of albumen, but no casts. On the first day after delivery, the urine contained about twenty-five per cent. of albumen, and no casts. To-day, the albumen was barely appreciable. The treatment consisted in applying dry cups over the kidneys, after which the patient soon became conscious, and was able to swallow. Bitartrate of potassa, two drachms four times a day, was then given. For some days she had been taking two grains of sulphate of quinia, with fifteen drops of tincture of the chloride of iron, three times a day, and had been put upon nutritious diet. After delivery the child had a convulsion precisely similar to those of the mother, and in the course of two hours, two more. It had since done well, had had no more convulsions, nursed well, and was thriving.

Dr. Barker stated that fourteen years ago he had published a table of cases of puerperal convulsions, which he had collected from all the sources accessible to him, and in it had shown that 32 per cent. of all cases which occurred before and during labor ended fatally, and 22 per cent. of those after delivery. The statistics of the present day would show that the fatality had been greatly diminished, owing to our increased knowledge of the pathology of the affection, and to im-

* The cases are given from notes of Dr. R. A. Vance, House Physician.

proved therapeutical measures. The mortality was probably diminished 50 per cent.

Apoplexy did not produce convulsions, except by pressure; but it might be a consequence of them, and a very dangerous one. Dr. Marshall Hall had first clearly explained how convulsions may produce apoplexy. The convulsive fit has the effect of interrupting the circulation: first, by direct pressure of the platysma myoides on the jugular veins, preventing the return of the blood from the brain; second, by the spasm of the glottis impeding respiration, and preventing the passage of venous blood into the lungs; third, by the pressure on the venous circulation of the extremities, the blood, by the spasmodic contractions of all the voluntary muscles, being forced too rapidly forward into the great central trunks; fourth, by the increased pressure on the venous circulation in the uterus, in consequence of its more powerful contractions.

On the ætiology of convulsions, Dr. Barker continued:

Physiology has demonstrated that all convulsions must arise from some irritation of the true spinal system—which includes the spinal marrow within the theca vertebralis, the medulla oblongata, and the corpora quadrigenina—and that no irritation of the cerebral system—that is, of the brain and cerebellum and that part of the spinal cord which conveys sensation and voluntary motion to and from the brain—will produce them. These causes may be divided into two classes: 1st, those which act directly on the spinal system, or the centric causes, as they have been termed; and 2d, those which act indirectly, or the reflex causes. The centric causes are said to be: 1st, pressure upon some part of the true spinal system, from congestion, from serous effusion, or from coagula; 2d, deficient nutrition of the spinal system, from anæmia; and, 3rd, toxæmia. The reflex causes are those which produce irritation of the incident or excitor nerves, that react upon the spinal system; as morbid excitation of the peripheral nerves of any of the vital organs of the body.

For some years past, the prevailing opinion, with a great majority of writers on this subject, has been, that puerperal convulsions result, in a very large proportion of cases, from toxæmia, the special poison being uræmic, and that this is demonstrated by the presence of albumen in the urine. I take it for granted that none of you suppose that albuminuria, that is, albumen in the urine, is the cause of the convulsions; but the belief has been, that, where this is found, the urea is retained in the blood, and that this substance is, directly or by its decomposition, a poison which produces a most deleterious and profound impression on the nervous system. Many eminent authorities have gone so far as to assert that, excluding hysterical convulsions occurring in puerperal women, the cases not due to this cause are exceptional. Considered with reference to their cause, they in fact regard puerperal convulsions as occurring under two forms, uræmic and hysterical. Albuminuria is regarded by them as conclusive evidence of some lesion of the kidney, that is, congestion from pressure, or the structural disease known as Bright's disease.

Now, that convulsions occur sometimes during the progress of Bright's disease is an accepted fact in medicine. That puerperal convulsions are frequently associated with albuminuria is also well known. But it seems to me that there are many reasons for doubting whether this association necessarily proves the relation of cause and effect. In the first place, there are many cases of puerperal convulsions, having all the characteristic phenomena which attend this fearful malady, in which there have been no symptoms indicative of any lesion of the kidney. The most careful examination has failed to detect either albumen or casts in the urine, either before or after the occurrence of the convulsions. In many cases, when death has resulted from the convulsions, only the most trivial lesion of the kidney, as slight congestion, has been found in the autopsic examination. Secondly, I am sure that many others, as well as myself, have often had cases of marked albuminuria during pregnancy, in which convulsions have not occurred. I will make the assertion still stronger, by saying that in the very considerable number of cases of albuminuria during pregnancy, that I have seen, convulsions have occurred in but few. Even M. Blot, one of the early and most zealous investigators in regard to this affection, met with but seven cases of puerperal convulsions in forty-one women who had albuminous urine. Some writers have met with a larger proportion than this, but I am not aware that any one has claimed that they occur in one-half of the cases of albuminuria. Thirdly, in many cases where the most careful and repeated examinations of the urine have failed to detect albumen, convulsions have occurred, and afterwards the urine has been loaded with albumen. In the case we have before us, several examinations were made of the urine, and neither albumen nor casts were found; but after the convulsions occurred, the albumen was abundant. It seems to me, therefore, that there may be some reason for inquiring whether the same profound impression on the spinal system which in the pregnant or parturient woman culminates in puerperal convulsions, may not also so modify the functions of the kidney as to result in albuminuria; or, in other words, instead of regarding the albuminuria as the cause of the convulsions, whether we have not some reason for believing that both the albuminuria and the convulsions are the effect of some common cause, the exact nature of which science has not yet determined.

Robin, in his recent work on the fluids of the body, has demonstrated that urinary albumen has not the same composition as the albumen of the blood, and that the albumen of Bright's disease differs essentially from the temporary albuminuria of pregnancy, which can easily be shown by special chemical reagents. The albumen of the urine in Bright's disease, when brought in contact with the oxide of copper in a solution of caustic potash, assumes a beautiful reddish violet color, and produces a more or less abundant flocculent black precipitate. Now, the urinary albumen of pregnancy, where Bright's disease does not exist, while it coagulates readily by heat and nitric acid, does not exhibit any such reaction from contact with the oxide of copper. So also Robin has demonstrated that the granular casts are not characteristic of any particular morbid state or pathological change of structure.

I am inclined to believe that, even if a large majority of the profession in this country do not accept the extreme views of Professor Braun of Vienna,—namely, that puerperal convulsions are generally the result of Bright's disease in an acute form, which, under certain circumstances, spreading its toxæmic effects on the nutrition of the brain and whole nervous system, produces this fearful accident,—they at least regard them as the result of some functional disturbance or lesion of the kidney, of a temporary character. I have long entertained doubts as to the soundness of these views. I have long been accustomed to warn medical students against the popular use of the term, Bright's disease, in connection with their puerperal patients, because the public have come to associate the term with an inevitably fatal termination, and the influence of the *morale* on this class of patients cannot be overestimated.

It is to be hoped that, in the advance of science, we may yet be able to clear up many of the obscurities which still overcloud this subject, and I think we can even now report progress. I have already alluded to the distinction which Robin has established between the temporary albuminuria of pregnancy and that of Bright's disease. A work has recently appeared "On the Nerves of the Uterus," by Frankenhaueser of Jena, based on the most careful dissections, and illustrated by most beautiful plates, in which is demonstrated a direct connection between the nerves of the uterus and the renal ganglia. This discovery may be the means of leading to an explanation of the true pathology of puerperal convulsions. Frankenhaueser reasons from his discoveries that the theory that the albuminuria of eclamptic patients is due to the pressure of the distended uterus upon the large abdominal vessels or the renal vessels, is highly improbable. He says that, to be sure, many circumstances seem to favor such a view; for example, the more frequent occurrence of eclampsia in twin pregnancies, in primiparæ with unyielding abdominal parietes, in persons of small stature, etc.; only the same causes could equally well serve to excite the renal nerves and those in connection with them. Besides, we observe frequently that women have no convulsions, who have suffered from albuminuria, both before and during pregnancy, the direct result of renal degeneration, in which, therefore, renal congestion really existed. It therefore remains questionable whether the access of albumen which is observed after puerperal convulsions, is the result of congestion or is due to the excitation of the uterine plexus. The sudden occurrence of the eclamptic attack upon all external sources of irritation (as pressure of the fœtal head upon the cervix, digital examinations, introduction of instruments, &c.), appears rather to speak for the nervous system, and not the vascular system, as the starting-point. He says that the changes observed in the kidneys of women dying from convulsions are too trivial, and too transitory, to indicate a long-continued congestion. Further in confirmation, are to be counted the undeniable cases of convulsions where no albuminuria has existed. All these facts point to the importance of the connection between the uterine and the renal plexus.

Finally, gentlemen, you may ask me what do we really know about the causes of puerperal convulsions. I should answer that our knowledge amounts to about this:

First. We know that we have puerperal convulsions arising from uræmia, caused by Bright's disease of the kidneys.

Second. We know that we have convulsions associated with congestion of the kidneys and albuminuria, but it is not yet proven that the convulsions and the renal congestion bear the relation of cause and effect.

Third. We know that we have convulsions that arise from reflex irritation and congestion of the true spinal system, without evidence of any renal affection.

I will add a few words in relation to one point in the treatment of this case. You will remark that thirty-six hours elapsed from the time of the first convulsion until the child was delivered, and yet it was born alive and is doing well, a very unusual result when a child is born so long a time after the first attack of convulsions. As a general principle I think it safe to say, that the danger to mother and child bears a certain relation to the duration of the labor. In such a fearful complication of labor as puerperal convulsions, the feeling that the sooner the labor is completed, the sooner the danger to mother and child will be over, may sometimes prompt to injudicious measures to terminate the labor. Indeed we were formerly taught that it was our duty, in all cases of convulsions, to deliver by any means in our power as speedily as possible. In this case the temptation was strong to apply the forceps, long before the child was born. I visited the patient several times for this purpose, but fortunately my reason instead of my feeling decided me to wait. The principle which should govern us in such cases is this: Whenever delivery by art can be effected with less irritation than would be produced by the continuance of the child in the parturient canal, it should be resorted to. I am convinced that I have formerly erred in some cases, from my great anxiety to see the labor terminated.

You will remark that the child had three convulsions after birth. Whether these were due to the transmission of some toxic element from the maternal to the fœtal system, or to the perturbation and shock of the fœtal nervous system from the convulsions of the mother, it is impossible to say.

Clinical Department.

BELLEVUE HOSPITAL.

SURGICAL CLINIC OF FRANK H. HAMILTON, M.D., PROFESSOR BELLEVUE HOSPITAL MEDICAL COLLEGE.

SEPTEMBER 21, 1868.

Remarks on Amputation of Finger at First Phalangeal Articulation.—DR. HAMILTON presented a lad, a private patient, upon whom he had, some time before, made an amputation of the index finger at the distal end of the first phalanx, through the joint. The boy was able to flex the remaining phalanx to a right angle, proving what repeated examples had before shown—that after this amputation the patient did not lose the power of flexing the stump. The Doctor remarked: It will be remembered that neither the flexor sublimis nor the profundus has any direct attachment to the first phalanx; and Lassus argued from this fact, that amputation at the first phalangeal articulation would leave the stump permanently extended and immovable, and that for this reason it would be better to amputate at the metacarpo-phalangeal articulation. Lisfranc held the same opinion; and it was he, I think, who suggested that, prior to making an amputation at the first phalangeal articulation, it was advisable to incise the tissue on the first phalanx, and thus secure an adhesion of the flexor tendons to the shaft of the bone. But it need scarcely be said that the circumstances under which such a procedure could be proper must be rarely present. Still farther, Lisfranc taught that, if the condition of the finger was such that the two last phalanges must be sacrificed, it was advisable, generally, to amputate one inch above the metacarpo-phalangeal articulation, through the metacarpal bone itself, because the great breadth of this last articulation left an awkward space between the adjacent remaining fingers. M. Champion, and also many of the English surgeons, advised the same. I have seen this advice followed in one instance during the late war. But, not to speak of the greater difficulty and much greater dangers attending the amputation above the joint, through the metacarpal bone, which exposes to suppuration the structures in the palm of the hand—not to speak of these objections, it is sufficient to say that neither the mutilation proposed by Lassus nor that by Lisfranc is necessary. *The motions of the first phalanx*

are not lost by amputation at the first phalangeal articulation. This I have now verified by a large number of examples. During the last winter I brought before the class two such examples, and I now present to you another in the case of this lad. Although the amputation has only recently been made, and the soft parts are swollen and tender, he can flex the phalanx to a right angle; and this is as far as it can generally be flexed in a sound hand.

In seeking for an explanation of this fact, we find that it is correctly stated by anatomists that neither the flexor profundus nor the sublimis has any direct attachment to the first phalanx; but the flexor sublimis has indirect attachments, which most anatomists have overlooked or failed to describe. Velpeau has alluded to them in his work on operative surgery, and they are described in Gray's Anatomy as the *vincula accessoria tendinum*, which pass from the flexor sublimis, near the distal extremities of the first phalanges, to be inserted into the under surfaces of the phalanges. This vinculum I show you in this hand which has been carefully dissected for me by Dr. Graham, and in this hand prepared for me last winter by Dr. McMaster.

We have a further observation to make, and I do not know that this has been made by any other surgeon. Here is an adult patient upon whose hand one of the house-surgeons—Dr. Cross, I think—made an amputation of one of the fingers through the *middle* of the first phalanx; and this man also can flex the finger, though not so completely as the lad I have just shown you. In this case the attachment even of the vinculum is lost. How shall we then explain its motion? The answer must be that the power of flexion is retained through the action, first, of the palmar interossei, which, arising from the metacarpal bones of the first, third, and fourth fingers, rather upon the palmar surface, are inserted into the sides of the bases of the first phalanges, and into the aponeurotic expansions of the extensor tendons on the backs of the first phalanges; second, of the lumbricales, which, as accessories of the flexor profundus, arise from its tendinous divisions in the palm of the hand, and pass forwards, terminating in broad aponeuroses which are inserted, like the palmar interossei, into the tendinous expansions of the extensors.

It is proper to conclude, therefore, that, in case of amputation at the first phalangeal articulation, the stump will be flexed through the action of the vinculum just described, and of the two muscles last named; and that its motions will be complete. And in case of amputation through the shaft of the first phalanx, the motion of flexion will be preserved alone through the action of the two small muscles just described; and that its motions will be less complete.

October 10, 1868.

Dislocation of Humerus into Axilla; Reduction under Richardson of Methylene.—The patient, a strong laboring man, fifty-eight years old, fell down a flight of stairs while intoxicated, striking, probably, on the shoulder, and dislocating the upper end of the humerus into the axilla. The accident occurred three days ago, and the shoulder was much swollen. Dr. Hamilton pointed out the differential diagnosis between this accident and a fracture of the surgical neck—the most important means of diagnosis being the so-called "Dugas' test;" but this could not be well employed in this case until the anæsthetic was administered.

Dr. Goodwillie, dentist, at the request of Dr. Hamilton, used for the purpose of inducing anæsthesia the bichloride of methylene, which was administered by the apparatus invented by Dr. Goodwillie. Complete anæsthesia was produced in a short time without nausea. The effects of the bichloride were very similar to those of chloroform, except that the lips became blue as in the exhibition of nitrous oxide gas, and the anæsthesia did not continue so long as that from chloroform. The pulse was at one time quite feeble, but the patient rallied quickly after the reduction, and walked out of the amphitheatre moving his limbs as if laboring under locomotor ataxia.

The reduction was easily accomplished by the house surgeon, Dr. Bosworth, under Dr. Hamilton's instructions, with the heel in the axilla, according to the method recommended by Sir Astley Cooper. The arm was then simply secured by a roller to the side of the body.

October 12, 1868.

Scirrhus of Mamma: Removal.—An unmarried female, aged thirty-eight, was presented with a scirrhus in the right breast, which had commenced one year ago. The tumor was about four inches in circumference, hard, nodulated, and irregular; the skin adherent over portions of the surface and slightly discolored; no adhesions to the pectoral muscle. One axillary gland was also slightly enlarged. The patient had no cough.

Under the influence of ether, the small axillary gland was first removed by an incision directly upon it. The breast was then removed by a double elliptical incision, and all points of the surface of the wound presenting a suspicious appearance were carefully excised. Three vessels were tied, and the wound was closed by adhesive straps, compress and roller. The arm was secured to the side of the body to prevent motion of the pectoral muscle.

Upon this case Dr. Hamilton remarked, in substance: 1st. The patient has never borne children. Cancer of the breast is more apt to occur in women whose breasts have never performed their proper function than where they have furnished milk. 2d. The facts that the nipple is not retracted, that the mass is not adherent to the subjacent tissues, that it is growing rather slowly, and that the health is unimpaired, warrant the excision. The existence of one superficial enlarged axillary gland, under these circumstances, would hardly be sufficient to contra-indicate a surgical operation. If several were enlarged it ought not to be made. In case, after commencing an operation, the surgeon should discover several axillary glands enlarged, the instructions usually given to carefully remove them all, should not be followed. The operation ought not to have been undertaken as the disease had progressed too far to encourage any hope of success; and the prognosis could not be improved by any amount of dissection. The chances were, also, that you would find enlargement of some of the glands lying close upon the axillary artery and vein; and the attempts to remove them had more than once cost the patient her life by a wound of one or both. It is better altogether to leave them undisturbed; no one can repeat a case where, these having been cut away, the disease has not returned. 3d. The whole breast must be removed, and its very atmosphere cut away. 4th. Sound and healthy integuments must be saved as far as possible, in order to insure apposition and speedy union. 5th. Vessels should be tied which bleed freely, remembering the danger of secondary hæmorrhage; but no more ligatures should be employed than are necessary, since they prevent union by first intention. 6th. Close the wound by adhesive straps, large and long; over these and upon the wound lay a piece of lint covered with cerate, and over this a compress of cotton batting; and, finally, secure the whole with

a tight bandage. By these means the danger of secondary hæmorrhage is in a great measure obviated, and speedy union insured. The most important consideration is that the wound shall close speedily, if we are desirous to prevent an early return of the disease. As to the prospect of its eventual return, certainly the chances are that it will reappear; but I have removed at least three cancerous breasts in which, after the lapse of six, eight, and ten years, or more, there has been no recurrence.

Are there Internal Remedies which Cure Cancer?—Again and again, from the earliest periods, such remedies have been offered, but all have in succession been proven to have failed in the vast majority of cases, if not in all. It has been noticed, however, that in fat and sanguine women cancer makes the most rapid progress. There are almost constantly over on the Island old, emaciated women, with cancer of the breast, who live a long time in this condition. I have seen one case in which a woman lived with a cancer of the breast over twenty-eight years. Furthermore I have noticed that cathartics, diuretics, with a vegetable diet, often sensibly retard the progress of these cases. This is, indeed, the only class of internal remedies which I have ever observed produce any sensible effect.

There is one point in the history of hard cancer which is of much interest. It generally originates in secernent glands, such as the mammæ, the testes, the parotid, etc.; and I cannot recall an instance in which it has made its first appearance in an absorbent gland. This observation concurs with the recent observations of pathologists, that cancer-cells are modified epithelial cells; and it would follow as a natural sequence that cancer should be found originating in tissues lined by epithelium, such as, for example, the lactiferous tubes. The present specimen shows, under the microscope, an abundance of cancer cells.

Progress of Medical Science.

The Neurotic Origin of Angina Pectoris.—At the last annual meeting of the British Medical Association, Dr. Anstie read a paper on neuralgia, of which the *Lancet* furnishes the following synopsis:—1. Under the heading of cardiac neuralgia the author included every variety of the affection commonly known as angina pectoris. He endeavored to show that, whatever the amount of organic change present in the heart or vessels, the essential feature of the disease, and that which constitutes its interest and its danger to life, is the element of neuralgic pain; or rather, that condition of the nervous system of which that pain is the prominent expression. So far is angina from being always, or nearly always, a rapidly fatal disease, that the author is convinced, from his own experience and from the study of recorded cases, that in the great majority of instances, this affection runs a decidedly chronic course, with intermissions, which completely characterize the neurotic origin of the disorder. In support of this position three series of facts were adduced. The first series included the narration of striking cases in which the anginal spasms recurred during fifteen or twenty years, and death at last took place, not from heart-spasm or heart-palsy, but from degenerative disease of the nervous centres. The second series of facts was concerned with the evidently close relations between angina and the ordinary neuralgias (as shown by the frequent occurrence of the latter in anginal patients), and with the intimate connection evidently existing between spasmodic asthma and angina pectoris. The third series of considerations included the arguments from hereditary taint, and these are, perhaps, the strongest of all. Not only is angina itself frequently a direct inheritance (as in the celebrated case of Dr. Arnold, whose father had died exactly as he did), but the most ordinary care in inquiring about pain by history will not fail to produce a striking effect on the physician's mind by showing the extraordinary frequency—one might almost say universality—with which anginal patients will be found to have descended from a race strongly marked by tendencies to the more severe neuroses. These positions were illustrated by cases which had come under the author's notice; and the following general conclusions were drawn: 1st. That the essence of angina is a neuralgic condition, which (by reflex action on the cardiac motor nerves) may produce either cardiac palsy or cardiac spasm. 2nd. That the tendency to this neurotic condition is constitutional, and nearly always congenital. 3rd. That the various organic lesions which have from time to time been found in anginal patients acted merely as greater or lesser *provocatives* to the neurotic disorder. The author then discussed in detail the treatment of cardiac neuralgia.

Cases of General Paresis.—T. W. Fisher, M.D (*Boston Med. and Surg. Journal*), reports twenty cases of general paresis which have been received into the Boston Lunatic Hospital.

The average age, in these cases, was thirty-nine years. The number of females, one. The average duration, after admission, was seven months; and the approximate duration before entrance, eight months.

The following are the predisposing causes: intemperance, six; hereditary insanity, four; sunstroke, one; injury to head, one; sexual excess, three; no cause was assigned to five.

The treatment is not detailed, but merely a palliative one was adopted, as suggested by the exigencies of each case. The disease proves fatal at last, although a partial remission of the most prominent symptoms once or twice occurred.

On examination after death, in several of these cases it was found that the grosser lesions have been quite constant, indicating the gray matter of the hemispheres as the chief seat of disease.

Cucurbita Pepo as a Vermifuge.—Dr. D. W. Hershey, of Nebraska City, Neb. (*Boston Med. and Surg. Journal*), relates a case of tænia, which was expelled by administering an emulsion of Cucurbita pepo, about eight ounces, in the morning fasting, and following it with castor oil. The result was, the expulsion of a tænia fifteen feet in length. Vitality of the segments was extinct, showing the anthelmintic value of this remedy.

Slippery Elm Bougies as Porte-Caustics in the Treatment of Spermatorrhœa.—W. A. Byrd, M.D., of Lima, Ill. (*St. Louis Med. Reporter*), has used, in two instances, slippery elm bougies in the treatment of spermatorrhœa, as substitutes for Gross' and Lallemand's porte-caustic, when not at hand. These bougies were moulded into the size and shape he required, and then placed with about two inches and a half of their vesical ends into a solution of nitrate of silver, of the strength of ʒj ℥j. They were allowed to remain in the solution about three hours, when they were taken out and dried, ready for use. Slightly moistening one of the bougies, it was passed up the urethra, after the manner of using the catheter. He allowed it to remain for half an hour, and after withdrawing it, the bougie was the

found considerably swollen, and the nitrate of silver well soaked out. Several of these applications were made from time to time in each of his cases, and, in conjunction with tonics, the patients recovered.

In conclusion, he states that medicated bougies are not new to the profession, but by using the elm bougie, soaked in a medicated solution, the instrument is fully impregnated with the active principles desired, and the salts will be retained until redissolved by the secretions of the urethra. When the secretions become damp, part of the dissolved medicine is driven into every lacuna or crypt of the canal.

Those whose lot may be cast in some place distant from the haunts of civilization, may become their own instrument-makers.

A Complete Recovery from Senile Pneumonia.—Dr. E. R. Peaslee (*Am. Journal of Obstetrics*) has recently seen a case of pneumonia in a man ninety-two years of age, in which a complete recovery took place, although for more than a week the pulse ranged from one hundred and forty, and the respirations were forty per minute. The case is alluded to, as recoveries from senile pneumonia, especially at so advanced an age, are rare.

Myoma of the Uterus.—Dr. Noeggerath (*Am. Journal of Obstetrics*) recently presented a specimen of myoma of the uterus, with the manner of removal, before the N. Y. Obstetrical Society.

He was called to see a woman forty-seven years of age, whom he found prostrated from loss of blood. She had always been healthy; was twice married, and had two children by her first husband. Between the death of her first husband and her second marriage, she worked extremely hard, and she attributed her ill health to the hardships she endured at that time. She was married the second time seventeen years since, and had not been pregnant within that period. About seven or eight years ago she began to suffer from her present ailment, and her family physician thought he discovered a small fibroid. Dr. N. found the os-uteri quite patulous, so that he could easily reach the point of attachment of a tumor occupying the cavity of the womb.

On the following Sunday the patient was placed under the influence of ether, and he commenced to remove the growth. The os was contracted to half its previous size, and a great many adhesions were discovered between the tumor and the walls of the uterus. Some of these were removed by the scissors, but the écraseur could not be used for the want of space. On removing the lower segment of the mass, and the tumor being held by a hook, a pair of embryotomy scissors were introduced with the blades closed, and the attachment was gently broken up by expanding the blades. The remaining adhesions were cut with a knife. The tumor was removed with great difficulty through the os, after it had been freed from its attachments.

The patient made a good recovery.

Parasites in Vaccine Lymph.—In the fluid of true vaccine lymph, Dr. Haller, of Jena, found large quantities of red or reddish-brown micrococcus and mycothrix chains. The particles of the former are so
" that even with a magnifying power of 1000 linear
" appear as mere points. When cultivated on
a variety of fungiform growths appeared,
" all belonged to one species, and
ing series:—1. Aerospora, corres-
ergillus glaucus of Link. 2. Thece-
r mucedo of Fresenius. 3. Amae-
rophytic spores—that is, the Ustilago carbo of Tulasne. 4. Fructification, which is the Eurotium herbariorum of Corda. 5. Pycnides, with the subordinate forms, Torula rufescens, Botrytis Jonesii, and Cladosporium.

The micrococcus appears to proceed from the Torula rufescens or Oidium lactis. This torula and its highest state of development, the botrytis, prefer dark places. The eurotium also thrives best in darkness, which is interesting in connection with observations made to the effect that variola heals up without a cicatrix in the dark, and with the observation of Herr v. Bulmerincq, that direct sunlight soon renders vaccine lymph inoperative.

Radical Cure of Varicocele.—In the *Lancet* of Aug. 1, there is a report of four cases of varicocele which were cured by ligation of the enlarged veins, in the Royal Free Hospital, London. The cases were under the care of Dr. John Hill. The operation which he selected was the simple twisted suture of Velpeau, with the addition of a piece of bougie placed across the pins and beneath the ligature (as practised by Erichsen). The practical points to which Mr. Hill directed his attention are thus briefly stated:—

1st. *As to the necessity for an operation.* These patients were unable to follow their ordinary employment by reason of pain in the groin, loin, or testicle, which became increased upon exertion, notwithstanding the constant support of a suspensory bandage. Moreover, they had naturally become alarmed at the wasting of the testicle; hence the desirability of an operation.

2nd. *In the performance of the operation* there are three points worthy of notice:—1. To keep the patient in the erect posture until immediately before the pins are inserted, so as to enable the operator to make out the exact outline of the veins while distended, and thus to avoid the danger of wounding them. 2. To inclose as little of the scrotum as possible within the ligature, so as to secure direct pressure on the veins, and thus obviate corrugation or fluting of the scrotum. 3. To exert only sufficient pressure with the ligature to obliterate the veins, so as to guard against ulceration or death of the skin by tightening the ligature too much.

3rd. *As to the after-treatment.* In these, as in all other operations for a radical cure, much depends upon the after-treatment. 1. To regulate the bowels, and obviate pressure on the venous trunks, and to support well the scrotum with a pillow. 2. To slacken the ligatures as œdema and tenderness become developed, and to remove the pins on the first approach of inflammation. 3. To remove the pins from below upwards, and to slacken the ligatures in like manner. 4. To keep the patient entirely in the recumbent posture until the veins are quite solid; and, lastly, to instruct the patient to wear a suspensory bandage for three weeks after he is allowed to get up, thus affording support to the supplementary vessels until they are capable of maintaining the current of blood.

Treatment of Syphilitic and other Warts.—These excrescences may be removed by clipping them with scissors, or by application of strong acetic acid, or persulphate of iron, on a lucifer match.

Common warts on ladies may be removed by the use of strong acetic acid, applied in the same manner.

A Good Hair Tonic.—Hillier recommends the following formula: ℞ Olei amygdalæ dulcis, Liquoris ammoniæ, *aā* ʒj; Spiritus rosmari, ʒ iv; Aquæ rosæ, ʒ ij. Misce. Apply with a sponge.

The Medical Record.

A Semi-Monthly Journal of Medicine and Surgery.

George F. Shrady, M.D., Editor.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 Walker Street, New York.

FOREIGN AGENCIES.

London—Trübner & Co.
Paris—Bossange et Cie.
Leipsic—B. Hermann.
Rio Janeiro—Stephens y Ca

New York, November 16, 1868.

THE LATE POISONING CASE IN PHILADELPHIA, AND THE RENEWAL OF PRESCRIPTIONS.

A fatal case of poisoning from atropia has recently occurred in Philadelphia, from the ignorance and carelessness of an apothecary, whose sole excuse for the mistake was, that the medicine had been renewed so often from the same prescription, that the chirography had become so blurred from repeated reference to the file, that he mistook the word *assafœtida* for *atropia*. The consequence of this was, that the patient, a sister of the prescribing physician, took three grains of atropia instead of three grains of assafœtida, and died in consequence of the poisoning.

The facts, as gleaned from the evidence given at the Coroner's inquest, and from the personal statement of some of the physicians who had been called in, are as follows:

Dr. Philip De Young, an experienced and well-known practitioner of Philadelphia, had some time ago prescribed a cathartic pill for his sister, a Mrs. Hecht, composed of assafœtida and some other ordinary ingredients, which she had been in the habit of renewing from time to time, from the original prescription on file at the pharmacy of Mr. H. A. Bower, at the corner of Sixth and Green streets.

On the day in question Mrs. Hecht, having occasion to take these pills, sent the box in which they had been dispensed before, to have the medicine renewed, and upon receiving it, took the dose as usual, and soon succumbed to the influence of the atropia. The nature of the poison was soon learned, and several physicians were quickly in attendance, among them Prof. Gross and several of his clinical assistants, who relieved each other during the day in keeping up artificial respiration, applying the galvanic battery, administering flagellations, etc. A short time before her death she gave evidence of consciousness under the influence of the injunction of veratria ointment and the stimulus of galvanism.

The unfortunate dispenser, young Mr. Bower, has been in great distress of mind since the accident, and we have heard that it may be necessary to place him under appropriate medical treatment in consequence.

In this melancholy catastrophe we see still another reason for physicians to forbid the renewal of prescriptions without their knowledge and written consent. Had it not been for this custom the unfortunate accident had not occurred. Still, in the present instance, the fault lay more in the ignorance of the apothecary, who does not appear to have been aware of the nature of the drug he administered.

When will all apothecaries pay sufficient salaries to competent and responsible graduates of pharmacy, so that economy to themselves will not compromise the efforts of the physician? If an incompetent clerk dispenses an improper drug, is not the proprietor of the store responsible?

We trust that those physicians in New York, and elsewhere, who have been agitating the subject of the proper disposition of prescriptions, will make use of the present case to insist upon the adherence of apothecaries to their views in the dispensal and renewal of recipes. The prescriptions emanate from the physicians, and it requires but a single combined effort to have this subject managed to suit themselves. They have the controlling power in their own hands, and need only to wield it.

There is, however, another lesson which this sad case should teach the prescribing physicians, and that refers to the too frequent carelessness in their chirography in ordering their medicines. We do not mean to infer that the prescriber in this instance was guilty of such carelessness; still, illegibility was urged as an excuse, on the part of the dispenser, for the mistake. It may be urged by reformers that all remedies should be written in "plain English," as the phrase goes, and the use of Latin should be entirely ignored. This at first sight would seem to be easy enough if uniformity in the names of even the more important drugs could be secured. But such has been found to be practically impossible; for, aside from the danger of a confusion of apparently synonymous terms, the use of Latin is absolutely necessary in designating articles that have no common or ordinary names. Many such are purely chemical compounds, known only to the physician, chemist, and pharmaceutist. We cannot reasonably expect to remedy prescription-writing by foolishly ignoring the use of a dead language, but there are other matters connected with prescription-writing which can and must be remedied. This, as we have before intimated, plainly refers to legibility. Too many physicians in large practice drift almost insensibly into the habit, not only of abbreviating their terms in defiance of any known rules, but of writing even these abbreviations in such a hurried and careless manner as not unfrequently to test the ingenuity of the most acute compounder. We have often been told by apothecaries that some of the

prescriptions sent to their shops could not be deciphered by the writers themselves if they were asked to do so an hour or two after the prescription was written.

If this atrocious carelessness were confined to a few isolated cases it would be of comparatively small importance; but the fact is, it is becoming so general that it is time that each and every one of us should apply the remedy, should give no chance for a mistake on the part of even a comparatively incompetent druggist, before the loss of some precious life shall bring us to a proper appreciation of our duty in the premises.

We would call attention to the clinical lecture of Dr. Barker, which appears in this number, as embodying views too little known, or at least too rarely heeded, by the majority of the profession.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, OCT. 28, 1868.

DR. WM. B. BIRBINS, PRESIDENT, in the Chair.

MORE CONCERNING THE PERITONEAL CYST.

THE Committee on Microscopy reported upon the so-called peritoneal cyst presented by Dr. Cutter at the previous meeting. They arrived at the conclusion that the cyst had its origin in a single Graafian vesicle.

DR. A. CLARK, who did not happen to be present at the previous meeting, nor hear the minutes of the same read, gave, in connection with the report of the aforesaid committee, an account of Dr. Atlee's case of so-called peritoneal cyst, which had been given in substance by Dr. Cutter on the occasion of the presentation of his own specimen. (*Vide* MEDICAL RECORD, p. 402.) The lady was first a patient of Dr. Clark, and was advised by him to consult Dr. James R. Wood. After the operation the patient was relieved for a time, but her abdomen soon began to enlarge again, and she came into Dr. Wood's hands a second time. Dr. Clark was then called to see her, and recognized the existence of fluid and air in the peritoneal cavity. This fluid could be made to give the sign of succussion. Tapping was advised, but she felt that she had had enough of operation, and it was not done. Being very anxious to return to her home in Virginia, she departed for that place, but in consequence of her feeble condition she was enabled to get no farther than Washington, where she died. He thought that the case at the post-mortem proved the fallacy of the main point in the diagnosis, viz., the non-albuminous character of the fluid, and thought that the sooner surgeons were informed of the fact the better. He also drew attention to the too easy admission that serous tumors of the appendages of the uterus could be allowed to attain such an enormous size, it being very generally admitted that when comparatively small they induce peritonitis and death.

CALCAREOUS DEPOSITS UPON AORTIC VALVES.

DR. FINNELL presented two specimens. The first, for which he was indebted to Dr. Wooster Beach, consisted of the semilunar valves of the aorta removed from the body of an English clockmaker, fifty-nine years of age. He was reported to have had a severe attack of pleurisy some time since, from which he recovered and remained seemingly well up to the day of his death. On that morning he was seized with a severe pain in his head, soon after which he became comatose and died in two hours. The autopsy revealed an hypertrophied heart, the anterior face of which was intimately attached to the pericardium. On the upper surfaces of the semilunar valves of the aorta were extensive deposits of calcareous matter, one of the said valves having its arterial surface completely occupied by the deposit. Dr. F. thought it strange that a patient with such an amount of serious disease should be able, without any apparent inconvenience, to live along, and be considered by himself and others in a healthy condition.

DR. KRACKOWIZER asked if the brain had been examined, and Dr. Beach answering in the negative, he suggested that the head symptoms were in all probability due to an embolus.

ACUTE GASTRITIS—SINGULAR FIBROUS TUMOR OF UTERUS—CORPORA LUTEA, ETC.

The second specimen exhibited by Dr. Finnell was on behalf of Dr. Knox, and consisted of the uterus and appendages taken from the body of an unmarried female, forty-two years of age. She arose on the morning of October 28, complaining of pain in the stomach; soon after which she commenced vomiting: this lasted two hours and terminated in her death. At the post-mortem examination the lining membrane of the stomach was found intensely congested and inflamed. To the anterior face of the uterus was attached, by a long pedicle, a small fibrous tumor, which, Dr. F. thought, had it grown very much in size, might have been easily mistaken for an ovarian cyst. At the time of her death the woman had just ceased menstruating, and each ovary showed a well-marked corpus luteum, which had been burst evidently at one and the same time. A small fibrous tumor was commencing to develop itself in the broad ligament of one side, and another of the same character on the posterior face of the organ.

ENLARGED PROSTATE AND PROSTATIC CALCULI—FALSE PASSAGE IN THE BLADDER.

DR. J. K. MERRITT, of Flushing, L. I., presented a specimen of the urinary apparatus taken from a gentleman fifty-seven years of age, made up of the kidneys, bladder, ureters, and a portion of the urethra, and also some small calculi taken from the posterior surface of the prostate gland. The patient had been suffering from urinary troubles for the space of ten years. At the time his troubles commenced he was a cotton broker in New Orleans. All his symptoms were referred to difficulty in passing his water and pain in the lower part of his spine. This had gone on for a number of years, and in 1861, at the breaking out of the war, he came North. In 1864, his difficulties increasing, he went to St. Louis to put himself under the treatment of his nephew, a prominent physician of that place. What the diagnosis was could not be ascertained, but the treatment consisted in dilatation with bougies, which, however, gave him great distress, and invited, according to his account, a considerable amount of sediment in his urine. In the spring of 1865 he returned to Flushing, and having exposed himself to cold was attacked with retention of urine. Many endeavors were made to introduce a catheter for his relief, but these failing, Dr. James R. Wood was sent for, who emptied his bladder. The instrument was retained as directed during the night, and the following day the

attending physician passed a catheter only with great difficulty, the procedure being followed by an escape of blood with the urine. This practice was kept up with a like result during the greater part of the summer, and the following fall Dr. M. first saw him. On that occasion he was suffering from congestion of the liver, and in a short time he was relieved of that trouble, the Doctor not being then acquainted with the facts of his urinary difficulties. Last spring he was induced to go to Berkley Springs. While there he bathed in the waters and injected them, as he stated, into the bladder, with benefit. He returned from the Springs this fall, and went to the south side of the island for the sake of shooting. While there he caught cold again, and his old symptom of difficult urination came on. He was treated by a physician there, who attempted to pass the catheter, but was unable to do so; the patient being, however, able to pass of himself a small quantity of urine at a time, plentifully mixed with pus. About three weeks before the meeting he came to Flushing proper in a very prostrated condition, having been using opium very largely both *per rectum* and by the mouth. When Dr. M. then examined him, his urine was loaded with pus; urination was frequent and extremely difficult, and he complained very much of pains in his loins and back. An attempt was made to pass the catheter, but when the instrument reached the prostatic portion of the urethra it was found impossible to make it go farther without violence. A very large prostate was recognized by examination per rectum. Nothing could then be done but a resort to the soothing and sustaining treatment. He died a few days before the meeting.

The post-mortem examination was made twenty hours after death. The third lobe of the prostate was enormously developed, and was deflected to the right side of the urethral passage. There were no evidences of stricture in the membranous portion of the urethra. Near the outlet of the bladder was a separation of the walls of the viscus to some extent, which was thought to be an abscess originally occasioned by violence in the previous introduction of instruments. The bladder itself was very much hypertrophied, and its mucous lining was in places much lacerated. The left ureter was very much distended and enlarged, the left kidney being contracted in a lobulated form, the right kidney contained a good-sized abscess and was extensively degenerated. A number of small calculi were removed from the sheath of the prostate posteriorly. There were no other matters of interest connected with the specimen.

OVARIAN TUMOR, WITH MALIGNANT DEPOSIT UPON INNER SURFACE—OVARIOTOMY, ETC.

Dr. Merritt also exhibited an ovarian tumor with the following history:—In February, 1867, he first saw Mrs. D——, who was apparently suffering from a bilious colic, which was, however, readily relieved at the time with an anodyne. A month afterwards she suffered from what appeared to be a similar attack, but the symptoms proved to be due to a strangulated femoral hernia, which was, after a persistent effort, reduced. At that time Dr. M. observed that the abdomen was very large, and when questioned as regards its cause, she being the mother of five children, stated that three years before, after the birth of her fourth child, she remained much larger than was usual. Her last child was three months old at the time the examination was made. She also stated that after the birth of these two children she had suffered from prolapsus. An examination per vaginam confirmed this latter statement as far as her present condition was concerned. She was not seen again until nearly a year had elapsed, when she consulted the Doctor in reference to suppression of the menses and an increasing enlargement of her abdomen—she being under the impression that she was pregnant. A very careful examination was then made, and resulted in the suspicion of an ovarian tumor. Tonics were administered with a view of bringing on her menstrual flux, and she was not seen again until the latter part of April. Her abdomen was then found to have increased very much in size, and in accordance with his advice she was requested to consult Dr. Krackowizer. This she accordingly did; he confirmed the diagnosis, and tapped her with a view of preparing her for the radical operation. She returned to Flushing after a short time and continued much relieved until the earlier part of October, when she observed that her abdomen was again enlarging. Dr. Krackowizer saw her again, recommended an immediate operation—referred her back to Dr. Merritt to perform it, and generously offered his assistance. The operation was made October 21, assisted by Drs. Krackowizer and Kammerer; Drs. Hicks and Prout being present by invitation.

She was first placed under the influence of chloroform, and the anæsthesia maintained with ether. Her bladder was emptied by the catheter, and an incision was made in the median line four inches in length, commencing about two inches below the umbilicus. The parietes of the abdomen were very thin, and the peritoneal cavity was reached with scarcely any hæmorrhage. A curved sound was introduced, but no adhesions were found except in the vicinity of the umbilicus.

The incision was then extended an inch towards the navel, the hand introduced, and the adhesions, which numbered four or five, were easily separated by the fingers with the exception of one broad one, which required ligation, and division with the scissors. The sac was then tapped, and ten pounds of fluid were drawn off of the consistency of maple sap, the sediment of which was formed of flocculent material. The sac was then cautiously drawn from the abdominal cavity, and it was observed that there was quite a large pedicle, three inches long and not more than one inch in breadth.

The walls of the abdomen were closely approximated, and the pedicle was ligated with a strong silk ligature, the ends cut off, and the whole dropped back into the pelvic cavity. The pedicle was found to originate principally from the left ovary. The incision was then closed by four deep silver sutures, so introduced as to include the peritoneum, and two superficial ones. The wound was then dressed with a compress and firm straight bandage. She passed a comfortable night, urinated several times, and the following morning her pulse was only 80 per minute. Without entering into too much detail, it is sufficient to say that the patient recovered without an untoward symptom.

Dr. Krackowizer stated, that at the time he tapped the patient he drew off a large water-pail full, being equivalent to two gallons. That operation was performed in the middle of May, and when he saw her again, a month afterwards, he could hardly find any trace of the previous tumor; there seemed to be only a little fulness on the left side of the cervix, but no hardness. The uterus could be moved in every direction.

The sac shown consisted of one cystic cavity. In front were the remnants of the strong adhesions in the neighborhood of the umbilicus, and a little higher up was the site of a piece of adherent omentum that had been strangled by fine silver wire cut off close and returned into the peritoneal cavity. The pedicle was

vious to the operation as large as at the full term of very long and slender, and was twisted twice and a half around its own axis, and before it could be removed it had to be untwisted. The extent of the fallopian tube was then shown. Dr. K. remarked that there was a suspicious point on the posterior aspect of the cyst wall, which corresponded internally to a button of firm tissue, and which under the microscope was composed of large cells of an epithelial character, but the nuclei could not be made out, as the specimen had unfortunately been immersed in carbolic acid. He was of the opinion that the growth was malignant in character, and it was of interest in showing how such could be engrafted on an innocent tumor. Had this grown to any great extent, as it would undoubtedly have done if left to itself, it would have seriously complicated the diagnosis.

Dr. Cutter thought that the pedicle was of such a character, that its division by actual cautery would have greatly diminished any risk of hæmorrhage.

FATTY DEGENERATION OF LIVER WITH CIRRHOSIS.—EXTENSIVE EFFUSION OF BLOOD UPON BRAIN.

Dr. A. Clark exhibited a liver, the seat of fatty degeneration upon which had been engrafted cirrhosis. He regretted, however, his inability to present the brain from the same patient, as it had been by mistake thrown away by the janitor.

He then read the following history of the case, drawn up by Dr. Tracy:

"Patient was an unknown man, with no history; apparently about forty years of age, and of athletic form. He was admitted to ward 6, at one o'clock P. M., October 23 d, in a semi-comatose condition. He could not speak, and apparently heard nothing that was said to him, but was restless, and endeavored to get out of bed and leave the ward. He was partially hemiplegic upon the left side. His pupils were natural, and reacted feebly to light. There was a boggy swelling behind the right ear, supposed to be due to a contusion received from a fall, but no fracture of the skull could be detected. Soon after admission he had a convulsion, which was followed by others, at intervals of ten or fifteen minutes, which continued until half an hour before death, which took place, after gradually deepening coma, at seven P. M.

"Autopsy sixty-three hours after death. There was considerable hæmorrhage in the scalp, behind the right ear, and in the corresponding situation between the cranium and the dura mater, compressing in some degree the cerebellum. Large clots covered the right hemisphere on the surface and at the base, filling the anterior and middle fossæ, and lacerating the anterior lobe. There was also considerable hæmorrhage at the base upon the left side. A fissure of the skull was found extending from the occipital protuberance transversely towards the right, passing nearly across the petrous portion of the temporal bone. There were slight pleuritic adhesions in both lungs, and about 4 ounces of serum in each pleural cavity. The pericardium was firmly adherent to the heart throughout its whole extent. Heart weighs 12 ounces. Small atheromatous patches in the aorta. Valves healthy. Liver weighs 81 ounces. Kidneys, 11 ounces. No ascites.

Dr. Clark remarked that the point of interest to him in this case was the extraordinary amount of hæmorrhage that had resulted from the accident, whatever it had been. The presumption was, that the patient had been intoxicated, and had fallen, striking his head behind the ear against a stone. The impossibility of affording any relief to the patient by surgical means was apparent, and the case illustrated besides the tendency of hæmorrhages from violence, to the surface of the brain.

STRANGULATED HERNIA—OPERATION—ULCERATIVE STRICTURE OF INTESTINE.

Dr. Mason presented the liver and portion of the intestine removed from the subject of an operation for strangulated hernia. On the 17th of October he was sent for to see a man at the Charity Hospital, who was said to be suffering from a strangulated hernia. The patient was sixty-eight years of age, and had been suffering from a left inguinal hernia for the last six years. Five days previous to his admission, while getting over a fence without his truss, the hernia suddenly went up. From that time he suffered from pain and constipation.

On turning down the bed-clothes there were no signs of a hernia visible, but the abdomen was very tympanitic, and there was great tenderness on pressure over the former seat of the hernia. On passing his finger up the inguinal canal he was almost certain that he recognized an impulse when the patient coughed, and the conclusion was accordingly arrived at that there was a concealed strangulated hernia. This diagnosis was alone confirmed, out of the number present, by Dr. Carmalt.

The patient being etherized, the operation was commenced. The inguinal canal was very short, and nothing was found in it; but nearly over the external abdominal ring, and projecting through the aponeurosis of the external oblique muscle, was a pouch which contained omentum, very firmly constricted. The aponeurosis around this sac was divided without wounding the peritoneum, and he was enabled to relieve the strangulation.

After the operation a grain of opium was administered. The next morning after the operation he was comfortable, though still suffering from peritonitis. On that evening the patient was attacked with vomiting, which persisted almost to his death, on the evening following.

At the autopsy, twenty-two hours after death, some fluid was found in the peritoneal cavity, together with the evidences of old peritoneal inflammation, in the shape of firm adhesions to the adjacent abdominal walls. There was no peritonitis in the region of the operation; the omentum had been returned, the intestines in the neighborhood being only slightly injected. On examining the intestine about eight inches from the rectum, a stricture was discovered, capable of admitting the little finger, the seat of the structure being very markedly ulcerated. The heart was healthy, the lungs somewhat tuberculous, but the liver contained what appeared to be, on close inspection, cancerous deposits. The mesenteric glands were not enlarged.

POLYCYSTIC TUMOR OF OVARY—OVARIOTOMY, ETC.

Dr. Cutter, in rising to present a polycystic tumor of the right ovary, remarked that the case reported at the last meeting had entirely recovered, although the wound had not healed throughout by first intention. This latter was attributed to the manner in which it had been dressed, the abdomen being surrounded by a wet flannel bandage, over which was a layer of oil silk, the whole acting as a poultice. The dressing, in a word, was too heavy and non-evaporating to allow of primary adhesion.

He next gave the points in the specimen that he wished to present that evening. The lady was an unmarried female, æt. 28 years. The tumor was only 11 months in growing, and seemed to have originated after an exposure to cold, and the abdomen was pre-

pregnancy. The patient had consulted several persons previously, who had made the diagnosis simply of abdominal dropsy. When Dr. C. saw the case he advised the immediate removal of the tumor. The operation was performed on the 15th of October, assisted by Drs. Hutchinson, Howard, and Newman, the latter gentleman administering the chloroform. The usual incision was made, and after introducing the hand and sweeping it around and finding no adhesions, it was extended to five inches, by the scissors. The pedicle was four inches in length, and was secured with a clamp. The wound was closed with sixteen silver sutures, including a large portion of the peritoneum.

The wound was afterwards dressed with a light compress saturated with a weak cold solution of carbolic acid covered with oil silk; the whole being protected from pressure of the clothes by a hoop arrangement. The wound healed by first intention, and the patient recovered, with no more constitutional disturbance than after any ordinary surgical operation, never having lost her appetite. He attributed his success in all similar cases to the rapidity with which the operations were performed—using, of course, all necessary care.

DR. WHITEHEAD'S CASE OF HÆMATIC CYST AGAIN.

Dr. Geo. A. Peters presented a tumor removed from a patient of the New York Hospital, which was a sequel to the one recently reported by Dr. Whitehead as a case of hematic cyst.

He then read from the Medical Record the previous history of the patient as given in Dr. Whitehead's report (*Vide* Medical Record, vol. iii, page 356).

Immediately after Dr. Whitehead's operation the tumor commenced to grow in the same locality, and at the time of the last operation at the Hospital it had attained the size of an orange. Its external appearance resembled very much that described by Dr. Whitehead, with the exception that from a portion there was pressed out a fleshy-looking substance, not disposed to bleed on handling and resembling muscle. The removal was accomplished without difficulty. None of the glands in the neighborhood were involved. On examination by Drs. Krackowizer and Peters after removal, the growth was found to have undergone malignant degeneration.

Dr. Whitehead remarked that he had anticipated somewhat the future character of the tumor in his report of this case, and in proof of the statement made the following quotation:—

"Did these cells in the tumor mark one of the phases of fibrinous development of a healthy formative process, or, on the contrary, did they point to an ulterior multiplication of elements, the result of a local perversion of nutrition? In other words, had this tumor been let alone indefinitely, would this apparently exudative product have formed a firm, thick, and resisting cell-wall to the cyst, of sufficient healthy vitality to have resisted degeneration, incommoding only by the size of the tumor and its pressure on contiguous parts?"

Dr. Allin thought it rather remarkable that none of the cervical glands should be involved, and instanced a comparison with a case of cancer of the antrum, for which he had removed the upper maxilla of one side, in which also none of the glands in the neighborhood were implicated.

THROMBUS OF LEFT RENAL VEIN.

Dr. Janeway exhibited two kidneys taken from a child six weeks old, a patient of the Infants' Hospital, Ward's Island, who died after being in a drowsy condition for three days. At the autopsy the left renal vein and its branches were completely blocked up with a thrombus that extended as far as the vena cava; the kidney itself being one and a half times larger than its fellow from congestion. On microscopical examination of its structure, there was a granular condition of the convoluted tubes, with blood corpuscles in their interior, and engorgement of the Malphigian bodies. There was noticed that after death there was some slight œdema of the surface. No urine could be obtained from the bladder. The existence of the thrombus was explained by the feeble state of the child previous to death.

Dr. Rogers presented two specimens for candidates.

THE TWO MITRAL MURMURS.

Dr. Austin Flint also presented a specimen for a candidate of mitral contraction, and exhibited another of a more marked character, in which both mitral murmurs existed—the mitral direct and the mitral regurgitant. He had had frequent opportunities of calling the attention of different medical gentlemen at the hospital to the respective characters of these murmurs, and of proving the correctness of the diagnosis by a post-mortem examination. The mitral contraction was such as scarcely to admit the end of the little finger, while the other conditions necessary to produce the murmurs were also present, viz.: flexibility of the curtains, without calcareous deposit—conditions which admitted easy vibration.

RUPTURE OF ANEURISM IN PERICARDIUM.

Dr. Terry presented an aneurism of the arch of the aorta, that had burst by an exceedingly small opening into the pericardium. The patient was a male 21 years of age, who fell over dead while stooping down to tie his shoe. A pint of blood was found in the pericardium. The point of interest was the enlarged thymus gland present.

Dr. Mason doubted that it was a true thymus gland, and moved that the specimen be referred to the Committee on Microscopy.

EXTENSIVE CYSTIC DEGENERATION OF KIDNEYS.

Dr. Terry lastly exhibited a specimen of extensive cystic degeneration of both kidneys, removed from a man sixty years of age who had died of meningitis. He only presented the organs for the purpose of showing upon what a small amount of kidney tissue one could live.

The Society then went into Executive Session.

Another Death from Chloroform.—At the Essex Lunatic Asylum, Warley, a male, aged 28 years, died while under the influence of chloroform; it was administered to the patient previous to amputation of a finger. The quantity used was, it was stated, only one drachm. The verdict of the jury was, "That death resulted from convulsions resulting from fatty degeneration of the heart." Three doses of chloroform of twenty minims were administered on a handkerchief, and maintained during the operation. Tubercle was found at the base of the brain, the heart was soft and fatty, the liver heavy and soft.—*British Medical Journal.*

Mosquitoes in England.—In the current number of *Science Gossip* it is shown that the statements recently made affirming the presence of mosquitoes at Woolwich, Portsmouth, and other parts, are erroneous. The insects dignified by the title of mosquitoes are certain species of British gnat, especially the *anopheles maculipennis.*

A small-pox hospital is about to be erected at Calcutta. The expense of building and repairing it will be borne by the Government; that of its administration, by the municipality.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

ADJOURNED STATED MEETING, OCT. 12, 1868.

DISCUSSION OF DR. ROGERS' PAPER.

(Continued from p. 404.)

DR. HARRIS.—I would be obedient to your call, Mr. President, but I confess I am unprepared to enter upon the discussion of a subject so broad, under the circumstances which have attended the promulgation of this paper. I am wholly averse to any polemical discussion of questions that depend upon accurate statistics and exact observations. It is well known to you, sir, that the author of this paper has, from time to time, reported upon the public health, as secretary of a committee of this Society. Sitting in this room, I have heard statements made by him that seemed to me incorrect in their statistics and in the deductions drawn therefrom, and yet have not thought it worth while to make any comment upon his statements. The Society could take his deductions for what they were worth, precisely as it might my own or any other gentleman's.

But when this paper was thrown before us, at our last meeting, I arose, hoping that I might possibly stay the tide that was sweeping it before the public without any attending statement. But the discourse had already been voted into type, and all discussion upon it suspended until medical journals and the daily press should have given it broadcast to the people. Now, after this course has been taken by the gentleman's paper, is it proper or desirable for the persons and the institutions that have been thus attacked, to come forward and discuss the all-important subject of *preventable causes of infant mortality* upon the basis of that discourse? For one, sir, I must now decline to enter upon the discussion on such a basis, after the discourse has been a fortnight published in the daily papers.

Moreover, the discourse itself fails to supply the groundwork that is requisite for a proper discussion of the subject. It deals with the most important questions in an *ex cathedra* style; it deals largely in denunciations; and, sir, many of its statements are incorrect, its use of statistics is inaccurate, its deductions are unjust, and its arguments, like its style, are calculated to do harm. It purports to be a discourse upon preventable causes of infant mortality; and it is to be observed that the whole of it is taken up with criticisms and assaults upon whatever institutions and men at present chance to have any care for the sanitary interests of the infant population. From the delusions of sanitary officers in regard to the recent sickly season, the author hastens to discuss the cattle disease; from the cattle disease he turns to scorn the chemistry runes of disinfectants; and then taunts the officers of the Board of Health with the charge of publishing *canards*. Lastly, the Commissioners of Public Charities, a noble and admirably conducted Board are charged with flagrant neglect of duty. Then, too, in the last onset of criticism, another noble Board of Trustees—noble every one of them—the 17 Trustees of the Infants' Hospital, founded by the pious Mrs. Richmond—and watered with her tears for the fearful death-rate that prevailed in it—are denounced for having transferred the few survivors in that asylum to the more successful and effectually established Nursery and Child's Hospital in 51st street. Indeed, the author of the paper declares the action of these Trustees was criminal. Nearly the entire discourse is thus taken up with this kind of attacks upon our medical brethren and their best efforts.

In the few paragraphs which make any allusion to scientific questions, the same virulent and morbid tone is perceived. Shall we here refer to a few points that illustrate this characteristic in the discourse as it lies printed before us? It opens as a scientific discourse, with the subject of the last summer. But at once, in the first column, we come upon this remark: "It is very much the fashion with our health authorities to give these malarial agents great prominence in the causation of infant mortality," etc. [The speaker here read from the RECORD report, p. 337, the passage including extracts from Registrar's letters of July 14th and 21st.] The quotations are correctly given; but we come now to the argument, and let us see what it is: "It is therefore manifest that carbolic acid and chloride of lime are not all that are required to prevent this annual augmentation of mortality among infants in our city," etc. [p. 338, first col.] Then, sir, opens an argument to the effect that nuisances and stenches are not injurious.

This method of discourse goes on; and we escape from the defence of soap-boiling, nuisances, and stenches, as being not proved mischievous, into a very severe criticism [pp. 339, 340] upon a schedule of nine suggestions concerning the management of infants, which the author says were published by the Board—but erroneously, as explained at the previous meeting of this Society. [Dr. Harris said that he had then stated that the Board of Health failed to publish any such card of advice, though urged by several distinguished physicians; and that to one of the oldest teachers and authors upon the subject of infantile diseases, was due all the credit of the card of suggestions to mothers and nurses which the discourse so derided.] And yet we find the derision and the criticism concentrate upon the use of the phraseology "lump of sugar" and the advice to swathe the sick child's abdomen in light flannel; while the critic offsets against this homely advice from the experience and good judgment of our best physicians, his own discovery that "the true condition of an infant is *perfect nudity*."

From such criticisms and a labored defence of the great nuisances of the city, and with part of two columns in his discourse devoted to derision of disinfection and the cattle disease, the author of the discourse goes on to treat of the public institutions for the care of infants. He opens upon the new Hospital for Infants, under the Commissioners of Public Charities, by asserting—very incorrectly—that "no improvement is yet manifest there." He adds the remark that, "Whether the institution is doing a larger business this year, in both receiving and *killing*, the figures at the close of the year will tell."

The author of the paper has attempted to show that even the few deductions and lessons that the Bureau of Vital Statistics ventures upon are erroneous. He quotes the remarks made by the Registrar, upon the mortality in the Sixth and the Twenty-second wards last July, when in the latter ward the death rate far surpassed that of the Sixth or any other ward in the city; and he attempts to show that the Registrar's deductions and statistics were erroneous. Now here is a diagram that shows the relative rates of mortality in those two wards, and the scale of their computation with each other, during the three summer months. [A scale diagram was here exhibited, to show the degree of excess in the Twenty-second ward.] Yet, as stated by the paper, facts, deductions, and principles are all erroneous. I would not pursue this subject further. The attempt which the author made to throw discredit upon public institutions, statistics, and men, we may safely leave to itself; but upon such

a foundation we cannot frame the good work that is needed to prevent the waste of infant life in our cities. [In conclusion, Dr. Harris remarked that it was not the personalities of the discourse, so much as its reckless and denunciatory spirit, that he deprecated. He had spoken frankly and fearlessly of these qualities, and he deeply regretted that duty compelled so free an expression of the reasons which led him to decline accepting that paper as the basis of any scientific or statistical inquiry.]

Dr. Bibbins deprecated all discussions of a personal nature, to the careful avoidance of which he traced the recent prosperity of the Society. He had not come prepared to discuss the subject *in extenso*, but from a service of upwards of eleven years as Visiting Physician to the Demilt Dispensary, during which he had been visiting tenement-houses almost daily, he had come to consider inherited disease one of the chief causes of infant mortality among the lower classes. Many of the mothers were the victims of constitutional syphilis, said to be cured perhaps, but not cured. Was it any wonder that so many of these waifs of society died almost as soon as they were born—before birth, indeed, in very many cases, for abortion was becoming fearfully prevalent? Abortion was often attempted after the fœtus was viable, and the premature infant was doomed to early death. Then, the mother was often intemperate and could not support her child; she wished it out of the way; had perhaps failed in the effort to get rid of it as a still-birth, so compassed the same end by neglecting it till ready to die, and then turning it over to some public charity. Improve the morals of the community, and you would save much of its infant life.

Certain conditions were essential to the health of infants—pure air, cleanliness, proper clothing, exercise, good food, good attendance. As to the first, this city crowded more persons into one house than any other city in the country; and any physician visiting the upper stories of our tenement-houses, during the hot season, would appreciate the truth of Dr. Rogers' description. This evil of crowding had been greatly aggravated since the restrictions of the Tenement-House Law had discouraged the building of new tenement-houses. The matter should receive the careful consideration of the Board of Health. Bathing was a good thing, but it might be made a very bad one. If nurses were not watched they would put the child into water too hot or too cold, or even give it a douche under the Croton pipe. Babies demanded exercise; it was torture to them to be left in the cradle—not to be carried about the room and into the open air. One prolific source of infant mortality had not been mentioned—cold. Whoever had visited the tenement-house infants in winter knew that many of them died from exposure, bringing on pneumonia and other forms of chest disease. The upper stories and the damp basements showed a greater mortality than ever, from this cause, since the public authorities had stopped the gratuitous supply of fuel. With regard to ventilation, only those who had been called to visit the crowded dormitories in early morning could have any conception of their reeking atmosphere. The doctor might order the windows opened, but the moment he was fairly out of sight they would be closed again. Even in hospitals, the nurses could hardly be brought to obey orders in this matter.

Dr. Gallish rose, as a married man, to protest against the aspersions his bachelor friend had cast upon the poor Benedicts. Syphilis was *not* a prerequisite to matrimony, even in shanties; and to accuse the pauper babies of dying of such a disease was an insult to them and to their mothers. They all succumbed, of course, to cholera infantum, or some equally innocent affection. As to our tenement-houses, it was obvious that we must do away with every one of them.

Dr. Calkins thought infants were too often drugged to death, or idiocy, with such opiates as paregoric or "Mrs. Winslow's Soothing Syrup." Mothers, as well as nurses, would thus relieve themselves of cradle-rocking.

Dr. Stone felt that Dr. Harris had properly vindicated himself and the Board of Health against the erroneous charges that had been made. As a member of the Board, the speaker had taken the pains to investigate some of them. The "Rules for the Management of Infants" were never published by the Board, and he did not know how they got into print. But it did no good to inveigh against the Board of Health, which tried to do its duty, he believed. To develop a subject so vast, so obscure, so vitally important as that under discussion, required the cordial co-operation of all. It must be taken up in no captious spirit, and in no small way, but rather in its broad aspects and relations; and where all were ignorant, all must be willing to learn. The causes conspiring to affect the public health were numberless. Some of the more petty ones could be met at once, more or less effectually; but the grandest of them, those acting on the largest scale, must be modified only by the slow progress which is measured, not by years but by decades and generations. We might shut up the butchers' shops and the gut-factories, we might even clean the streets; but how deal with the terrible ignorance and indifference of the herding masses? They must be benefited in spite of themselves, for they would give us no help. If the tenement-houses could be cleared out, and their dwellers scattered over, say, the whole of Westchester county, a great step would be gained. After a practical experience of their bettered condition, they would hardly return to the old ways. But for this we must have railroads; and they were yet to be built. Then, too, the stable question was not a small one—how to escape the evils of keeping in our midst the herds of horses that the city business and pleasure demand. We should hardly solve it till our drays and omnibuses were all drawn by machinery.

Dr. Elliot.—There is no topic, Mr. President, that has always interested me so deeply, appealed so warmly to my heart, so enlisted the best powers of my mind, as the prevention of infantile mortality. I was intimately associated with the organization of the Nursery and Child's Hospital; it originated in a conversation in my office with Mrs. Dubois. I have faithfully labored in that institution; but there, as well as in private practice, I have been condemned to feel, as a father and as a physician, that, do what we may, we cannot lay the spectre of the inevitable mortality of childhood. This discussion cannot be conducted in the elevated spirit that should characterize it, until full confession is first made of this inevitable mortality. You must not confine your view to one city, to one country, to one zone. Go through the whole world; take reports of exploring expeditions; examine the statistics of mortality in families placed under the most favorable hygienic conditions in the world; go among your own patients of the most favored classes—where is the family that has succeeded in raising all its children, even under the best conditions and with the best medical advice? By considerations of this kind, much of all that which has been deprecated in the paper and the discussion would be at once eliminated, and we could turn to the subject in the right spirit. Let any man devote himself to the care of a ward of neglected infants, bearing in their bodies traces of hereditary diseases which he cannot control, even with the best appliances all at his disposal, and he

will find it most disheartening. Then let him look at the physicians and fathers of families constituting the Board of Health, and—from my stand-point of full knowledge of the earnest, ardent, faithful spirit these men and the Commissioners of Charities have put into the effort to overcome these evils—I do not see how he can begin a discussion of this subject by upbraiding any one of them for his inability to prevent this inevitable mortality.

I am glad to see this subject brought to the notice of this Society and of the profession; and I trust that by united effort we may at length be able to achieve results less utterly discouraging.

Correspondence.

MEDICAL MATTERS IN PARIS.

(From our Special Correspondent.)

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF SKIN DISEASES.

To the Editor of the Medical Record.

SIR:—The most remarkable instance of the application of Bazin's theory in the diagnosis of cutaneous affections is afforded by eczema. According to Hardy, this is always *dartrous*, and always—in its chronic forms at least—to be treated by arsenic. For Dévergie it is a constitutional disease, belonging to no particular diathesis, but expressing a depuratory effort of nature, and consequently must not be cured, especially in children. Cazenave pooh-poohs this ideal, as in fact do almost all the other physicians, and declares eczema to be an accidental affection, whose principal characteristic is expressed in saying that it is a lesion of the sudoriparous glands. But M. Bazin divides eczematous affections into three great classes, belonging to scrofula, arthritis, and dartre. Syphilis is represented by a vesiculous eruption, or false eczema. Each affection requires a different treatment.

Urticaria, as a manifestation of dartre, is rather pale, and occurs under the influence of moral emotions. The arthritic variety is deep red, and occasioned by cold and gastric disturbance. It frequently complicates rheumatism, springing as it does from the same diathesis. The same distinctions may be made for *acute pityriasis*, as when arthritic complicates rheumatism, when herpetic is accompanied by sick headaches, and determined by moral emotions.

In arthritic *herpes* is noticeable the inequality of the vesicles, already mentioned as a characteristic of eczema. M. Bazin adds—but very inappropriately—the peculiarity of occupying uncovered parts of the skin. He thus passes over the well-known fact that herpes labialis is an extremely frequent complication of fevers (other than typhoid), and thus may be found on individuals of all constitutions. The herpes of children is certainly much more frequently under the influence of dartre or scrofula than of arthritis, which rarely manifests itself at an early age.

Herpes circinatus is regarded by all the St. Louis physicians, with the exception of Cazenave, as a parasitic disease, originating in a cryptogam, identical with that producing herpes tonsurans of the hairy scalp, and sycosis of the beard. The cryptogam is named tricophyton, and M. Hardy classes these three diseases together as one, tricophyte.*

In herpes zoster, same distinctions in regard to the vesicles and antecedents; besides, the pains in arthritic zona are burning, deep-seated, muscular, and often disappear with the appearance of the eruption. In herpetic zona (that is, under the influence of the dartre), the pain is lancinating, neuralgic, and generally lasts after the eruption has disappeared.

In herpetic chronic pemphigus, the bullæ contain a transparent citrine colored fluid, are isolated, and equal in size. In the arthritic form, the bullæ are sero-purulent, unequal, and united in large erysipelatous patches. But the cachexia of pemphigus is the type of what M. Bazin calls the cachexia of dartre, arrived at its ultimate term, and this is true, however the *début* may be characterized by slight differences. *Acute pemphigus*, according to Hardy, is merely an accidental erythematous eruption, the bullæ being quite secondary to the erythematous patches upon which they appear, like the phlyctenæ in erysipelas.

A curious case of this affection entered M. Hardy's ward the other day. The patient was a man just recovering from an attack of lead colic, and had been similarly affected with pemphigus at the same period of a previous convalescence from the same disease. On admission, he was as red from head to foot as a boiled lobster. The fiery patches were not absolutely coalescent, but so nearly so that the effect was almost as vivid. Upon the greater number the epiderm was elevated in bullæ of different sizes. A slight febrile movement accompanied the eruption. It was treated like an eruptive fever, let alone, and in a week had almost entirely disappeared, leaving brown stains in the place of the patches, that in their turn faded rapidly. The affection was therefore essentially distinguished from real pemphigus, by expending itself in a single eruption, whereas the more formidable disease is noted for the desperate tenacity with which fresh crops of bullæ continue to appear. M. Bazin has a little pet variety of chronic pemphigus—invented by himself—and entitled, Hydroa with little bullæ. This pretty name is applied to a variety almost as chronic as the ordinary form, but affording infinitely greater chance for cure. In fact, whenever a patient affected with pemphigus gets well, M. Bazin calls his malady Hydroa. But the objective feature is the small size of the bullæ, some of which are not larger than vesiches. They appear successively, but only one or two at a time, and are covered by very thin crusts. The general health of the patient does not suffer the deterioration so remarkable in ordinary chronic pemphigus.

Bazin professes to distinguish psoriasis, lichen and prurigo into arthritic and herpetic varieties, but the line is not very well defined. He observes that the old herpetic affections are always symmetrical, the arthritic almost always irregular, and not extending in large confluent patches. Certain horse-shoe and circular forms of psoriasis, with a shining coppery hue to the skin, instead of the raw ham look of the non-specific variety—belong to the cutaneous manifestations of syphilis. The diagnosis is evidently of the utmost importance. Besides these affections, containing varieties that belong either to arthritis or dartre, are certain others, peculiar to one of these constitutional diseases. Erythema nodosum, and papular erythema, are both arthritic, according to M. Bazin. So also, St. Anthony's fire, or *couperose*, which he carefully distinguishes from the acne rosacea, of which it is a frequent complication. But the pustules belong exclusively to the acne; the couperose is constituted by dilatations of the cutaneous capillaries. Acne is always either arthritic, or scrofulous, or syphilitic, never herpetic. The scrofulous acne develops on the face; the arthritic affection (except the in-

* I excuse me if I have mentioned the above ideas somewhat dogmatically, as if on the supposition that it was entirely unknown at home. But Wilson does not mention this theory, and Cazenave disputes it, and as their works are the best known in America, I have ventured to be somewhat explicit.

dicated form, which is facial and distinguished from scrofula, principally by the antecedents, &c.), appears on the back and shoulders; syphilitic acne is disseminated all over the body, and noticeable by the characteristic color of the areola, and the fine epidermic scales that remain after desiccation of the pustules. M. Bazin insists upon this latter sign, and in his clinic mentions cases where its absence has served to correct diagnoses of syphilis obstinately applied to young persons whose character was above reproach. Mentagra may be arthritic or scrofulous (scrofulous sycosis), but is not herpetic. The arthritic eruption consists of pustules, seated on indurated tubercles, which occupy nearly the entire thickness of the derm. The eruption is in circumscribed patches occupying the beard on the chin, cheeks, or naso-labial sillon. The crusts are thin, brown, and broken. In scrofulous sycosis, the crusts are yellow, thick and moist, the lips are swollen, and the face generally occupied by acne indurata. The tubercles are more superficial.

Syphilitic acne of the beard, which closely resembles the mentagra, is still more profound than the arthritic variety; the sub-cutaneous cellular tissue is inflamed and indurated. Finally, parasitic sycosis, constituted by the same cryptogamic vegetation as produces herpes tonsurans (the tricophyton), is noticeable for the alteration of the hairs, which become gray and lustreless in color, broken irregularly, and covered over the roots with a fine gray powder. On the other hand, non-specific roseola is always considered as a manifestation of dartre; one of its early symptoms, as papular erythema of arthritis. A certain form of impetigo, which M. Bazin calls melitagra, is ranked as herpetic, and distinguished from scrofulous impetigo—which occupies the head, and appears in large confluent patches—by appearing symmetrically on the trunk and limbs, in psydracious pustules more or less isolated.

M. Hardy calls impetigo simply the second stage of eczema, of which pityriasis is the third, sometimes also the initial period.

Finally (for M. Bazin's dissertations on syphilis do not greatly differ from those of the rest of the world, and may be left out of the question), the great class of scrofulides, divided into benign and malignant, occupy the third place in the category of affections dependent on constitutional disease—the first, perhaps, in importance. It is unnecessary to repeat the symptoms of general scrofula, recognized by everybody. M. Bazin errs, perhaps, in absorbing into scrofula the *lymphatic temperament*, which, though tending towards scrofula, is distinct from it. As symptoms of the first period of scrofula, he reckons the benign scrofulous eruptions, classed as exsudative, erythematous, and papular, and distinguished from the malignant scrofulides by leaving no mark or cicatrice. In the first class (exsudative), are red gum, eczema, impetigo, and acne sebacea. The characters distinguishing eczema and impetigo have been mentioned above. All forms of sebaceous acne, whether fluid or concrete, are recognized as scrofulous. An interesting case of this troublesome affection was admitted to M. Bazin's ward a little while ago. A girl of sixteen, florid and stout, without, however, any appearance of scrofula elsewhere, or any derangement of health, had been unsuccessfully treated for a year in the attempt to remove a patch of concrete sebaceous matter, about three centimetres long, situated just above the right eyebrow. If this were scraped away it immediately reproduced itself, and constituted a disagreeable deformity, being a thick, yellow, unctuous mass, clinging like a plaster to the forehead. Treatment by cod-liver oil, and daily *alkaline* baths, removed the patch entirely, but the patient declared, from former experience, that it would return as soon as the treatment was interrupted. She is still at the hospital.

The papular scrofulides are somewhat discutable. Strophulus is certainly often an accidental affection. *Prurigo mitis*, with large papules, and only a supportable degree of itching, is considered scrofulous, while prurigo ferox always belongs to dartre. Erythema papulatum can be distinguished by no objective characters from arthritic erythema. I have mentioned above that facial acne was always scrofulous, that is, the varieties simplex and punctata, and occurring in young persons.

Among erythematous scrofulides M. Bazin counts chilblains; especially those accompanied by deep-seated chronic inflammation of the subcutaneous tissue,—locality affected in preference by the scrofulides.

The following are the characters common to all the benign scrofulides:—Tenacity, persistence in the same place (in opposition to dartre, so noticeable for its mobility); *début* by the head, gradual extension to the ears, face, and body; inflammatory process secreting, suppurating or hypertrophic: participation of the lymphatic glands, and subcutaneous cellular tissue; absence of pain or of intense itching. This latter circumstance is due to the deep seat of the inflammation. If it chance to be superficial, itching becomes quite intense.

The malignant scrofulides (which, according to Cazenave, are all manifestations of hereditary syphilis) are remarkable for their extension to the deep layers of subcutaneous tissue, for their well-defined limits, and persistence in one place, for the absence of all pain or itching, and for a strong tendency to relapse after cure. These eruptions are divided into three classes: ulcero-crustaceous, tuberculous, and erythematous. The crustaceous scrofulide contains two important varieties, inflammatory-ulcerating, and ulcerating with fibro-plastic formations. The first commences with tubercles or pustules simply inflammatory, which degenerate into ulcers, that destroy surrounding soft parts, but are arrested by the bones. These ulcers cover themselves with thick, green crusts, imbedded in the skin, and formed of superposed and concentric layers. Impetigo rodens and rupia are here included. After the crusts have fallen, and the ulcers healed, there remain white, irregular cicatrices, retracting the tissues like those of a burn, and adherent to the bones. In the second variety, the tubercles are fibro-plastic, caused by a proliferation of the cellular tissue, and the ulcers attack the bones as well as the soft parts. It is to this variety that M. Bazin especially applies the name of lupus vorax, which is considered an independent disease by some other dermatologists. He admits the title also in the second class, or tuberculous scrofulides. The primitive element is in this case the same as in the other, an inflammatory or fibro-plastic tubercle, but it remains stationary, without ulcerating on the surface. Curiously enough, however, the cicatrices are produced precisely as in the case of open ulcers, new fibrous tissue being called upon to fill up the place left vacant by the subcutaneous destruction of cellular tissue. Cure is only obtained at the expense of such cicatrices.

The same is true of the third class, erythematous scrofulides. These appear as a circumscribed patch of erythema, at first seeming to be as innocent as the ordinary ephemeral eruptions. But it presently reveals its real nature by its long persistence, its dull, pale red color, the pasty subœdematous feeling on pressure of the subcutaneous tissue, the absence of all burning, itching, pain or fever—finally, the appearance of a white irregular cicatrix in the centre of the patch, which gradually extends to the circumference.

Among erythematous scrofulides M. Bazin also includes the singular affection described by Devergie as Herpes cretacea. In the case quoted by this latter writer, and which was, according to him, *mistaken* for an erythematous scrofulide, the disease began by an intense redness of the end of the nose, which persisted with great tenacity; then the surface became furrowed, and from the furrows oozed a yellowish secretion, which hardened into thick, yellowish, prominent scales. The form of the patch was round, and it extended by new rings at the circumference.

Malignant scrofulides are distinguished from cancer, by the edges of the ulcers, which are undermined, instead of prominent, bosselated and indurated; by the bottom, which does not present the hard, fleshy granulations of cancer; by the *début* with several tubercles grouped together, instead of a single one, and by the complete absence of pain.

The diagnosis with syphilis is often much more difficult, since the eruptions in both diseases are painless, indolent, chronic, and composed of similar elements. But the syphilides are less chronic than the scrofulides; they date by months, but the latter by years. This is especially true of the erythematous scrofulide; a case in M. Hardy's ward now, has lasted ten years. In fact, there seems to be hardly any tendency to spontaneous cure.

Again: all forms of syphilides, ulcers, tubercles, or crusts, are surrounded by the characteristic coppery areola, and the tubercles are an obscure livid red. In the scrofulides there is frequently a bluish areola, and the tubercles are semi-transparent. Syphilitic crusts are blackish-green, and with edges detached from the skin; in scrofula, the color is clear green, and the crusts are firmly imbedded, often like a watch crystal in its case.

Exostosis and necrosis accompany syphilis; caries is produced by the eating ulcers of scrofula. Syphilitic ulcers are round, with characteristic edges, and grayish surface. The regular form is especially noticeable in the ulcers arising from gummy tumors, and in these the bottom is, in a number of stages, formed by successive growths of deep-seated gums. The scrofulous ulcers are irregular in form, the edges undermined, the bottom pale-red. Finally, syphilitic cicatrices are smooth, shining; scrofulous cicatrices irregular, and formed by the irradiation of innumerable retracting bands.

Scrofulous eruptions are much more frequent at the face; syphilitic affect the limbs, especially the lower ones; but, as is well known, often attack the face also, where they possess favorite localities.

A few words about the therapeutics of St. Louis. M. Bazin's treatment is in the main ranged under three heads: cod-liver oil, iodide of iron, and sulphur baths for scrofulides, malignant or benign; alkalies, taken internally, and also in baths for the arthritides; arsenic internally, and saline baths for the herpetides. He declares sulphur to be positively injurious to the dartre, for which it has long been the popular remedy, and believes that its reputation is based on cures of scrofulides mistaken for herpetic affections. The use of alkalies, especially bi-carbonate of soda, for arthritis, seems to have been suggested by their employment in rheumatism, which the theory supposes to be akin to the eruptions in question. But the effect upon the cutaneous affections, —especially the influence of Eau de Vichy,—is often very remarkable. In other words, I have seen skin diseases, presenting the characters assigned by Bazin to the arthritides, treated perseveringly and unsuccessfully by arsenic, while similar cases in his wards recovered rapidly on the alkaline treatment.

The local treatment is pursued with great care, and comprises various resources. The actively inflammatory periods of all eruptions, as eczema, impetigo, pityriasis rubrum, and acute pemphigus, are treated by emollients, powdered with starch, or covered with cataplasms. These latter are applied also to indolent pustulous scrofulides, to remove the crusts. Only in zona and rupia, care is taken to preserve the crusts and vesicles intact, until the ulcer shall have healed underneath.

M. Hardy obtains extraordinary success by covering the eruption with vulcanized India-rubber. This retains the insensible perspiration, and keeps the part immersed continually in a natural vapor bath, which reduces inflammation, allays burning and itching, and removes incrustations in a very short time.

An India-rubber cap is often of signal service in eczema capitis, with its tormenting irritation. In one case of severe herpetic eczema occupying both arms the rubber casing was at first applied to one only. In a week the scales had fallen, the secretion dried, the fissures to a great extent healed, and the angry redness was entirely subdued. The other arm, which only experienced the effect of the general treatment (tisane of wild violets and senna, acting as a derivative purgative, a favorite remedy with M. Hardy in the early treatment of all exsudative eruptions), remained in precisely the same condition as at first.

Vapor, cold and sulphur baths, and douches, are of course largely included in the local treatment, but with about the same indications as are observed in other places than St. Louis. But many forms of disease are treated more boldly on a substitutive plan, than is generally the case elsewhere. Acne, for instance (which Hardy pronounces an accidental disease), is attacked by mercurial ointments and lotions of corrosive sublimate, with or without general medication.

Malignant scrofulides are painted with tinctures of iodine, ordinary or caustic, with oil of juniper, or of mahogany nuts. The two last remedies seem, in M. Bazin's hands, to exercise a real and marked influence over lupus and other scrofulides; and I have seen the mahogany oil succeed in several extremely severe and obstinate cases, that have resisted every other application.

M. Bazin advocates also creasote, nitric acid, nitrate of mercury, also perchloride of iron for Lupus vorax. But I have never seen him apply either. The iodine does not seem to be so generally successful, though it succeeds in some cases.

The ordinary application for psoriasis is tar ointment. If that produces too violent irritation, a pomade of oxide of zinc and camphor, or calomel ointments are substituted. To calm the torments of lichen and prurigo, ointments of cyanide of potassium, 5-10 centig. to 30 grms. of lard, are employed. Also, ointments containing 1 grm. of calomel and 2-3 grms. of tannin to the 30 grms. Similar applications are made in chronic eczema, which is also treated by the bichloride of mercury in ointments and lotions, by M. Hardy.

For pemphigus foliacea, and cachectic or syphilitic ecthyma, much reliance is placed upon a mixture of quinquina and powder of worm-eaten wood, as a palliative.

Bazin pronounces decidedly upon the appropriateness of curing eruptive affections of children. Cazenave admits the same advisability, though he recommends precautions. Both observe that the affections left to themselves, frequently tend to become inveterate, and assume worse forms; infantile eczema degenerating into chronic lichen, benign scrofulides becoming malignant, &c. As long as the patient remains under the influence of the constitutional disease, a relapse of the affection or of its equivalent, is to be expected as a matter of

course, and the physician must be prepared to combat it afresh, until the disease be exhausted. But the dangers of repercussion (upon which Devergie still insists) have been greatly exaggerated, and are chiefly based upon the fact, that the intercurrence of an acute disease causes the temporary cessation of the cutaneous affection, even though that be parasitic, as scabies. This (the parasitic also) returns after convalescence from the intercurrent malady. The true interpretation of the relation between the internal and external affections has, therefore, according to the St. Louis physicians, been precisely inverted.

P. C. M.

PARIS, Oct., 1868.

Medical Items and News.

PROFESSORS GROSS AND PANCOAST.—In the foyer of the Academy of Music of Philadelphia, a brilliant reception was recently given by the students and alumni of Jefferson Medical College to Professors Samuel D. Gross and Joseph Pancoast, on the occasion of their return from a sojourn in Europe. It was in every respect a most brilliant and success-ful affair, participated in by some four hundred of the prominent gentlemen of the city, including representatives of the several professions, the arts and sciences, and those standing high in the literary world. A number of ladies were also present adding additional interest to the affair, which was one in every respect as complimentary to its recipients as deserved by their talents and worth.

BROOKLYN EYE AND EAR HOSPITAL.—Dr. D. B. St. John Roosa has been appointed one of the surgeons to the above institution.

EFFECT OF SEWING MACHINES ON MENSTRUATION.—At the meeting of the N. Y. Obstetrical Society, held January 7, 1868, the experiences of the members on the *effects of the use of sewing machines on menstruation* were given. Dr. Chamberlain mentioned a case of enlargement and prolapse of the right ovary, which he was treating, evidently caused by operating on a sewing machine. Dr. Perry recollected two or three cases of severe uterine disease, in one of which death occurred, that were due to working on the machine. Dr. Peaslee had a patient under his care who had operated on a sewing machine a great deal, and was afterward forewoman of an establishment where fifty women and girls operated on machines. She stated that a majority of the girls suffered from dysmenorrhœa and leucorrhœa. During the catamenial flow, in consequence of the great derangement of the menstrual function, they were obliged to absent themselves from work. It has been recently observed that the motion of the limbs in working the machines occasions a sexual excitement.

CLINICAL REPORTS OF HYDROPATHIC TREATMENT from the practice and pen of M. Fleury, will hereafter be regularly contributed to the columns of *Le Mouvement Médical*, the first contribution having been published in the number for Aug. 9.

TREATMENT OF CHRONIC ECZEMA.—The following prescription is found to be useful in the treatment of this disease: Iodine, gr. viii.; Iodid. potass. ʒ i.; Liq. Potass. Arsenitis, ʒ ss.; Syrupus Simplex, ℥ vii. Misce. Sig.: teaspoonful three times a day.

THE AUSTRIAN DEPARTMENT OF EDUCATION has confirmed the election of Prof. Brücke as Dean of the Faculty of the University of Vienna. This is the first time that a Protestant Dean was elected and recognized.

NEW IRON SALT.—M. GAUDE, of Montmartre, has sent to the Académie Impériale de Médecine the formula of a new salt of iron, the chlorate of the sesqui-oxide of iron. (*L'Evénement Médicale.*)

THE ALBANY CHARITABLE EYE AND EAR INFIRMARY was opened October 7. The following-named gentlemen are the Surgeons of the Institution: C. A. Robertson, M.D., E. B. Hun, M.D. Consulting Surgeons, Prof. James McNaughton, M.D.; Prof. Thomas Hun, M.D. Patients are received daily, except on Sunday and Monday.

THE WOMAN'S MEDICAL COLLEGE OF THE NEW YORK INFIRMARY, 126 Second Avenue, opened its First Session on the 2d inst.

The introductory address was delivered by Dr. ELIZABETH BLACKWELL. She spoke of the slow and silent growth of all great movements at their beginning; alluded to the first projection of a medical institution for women, in a private parlor, in 1853; to the actual establishment of a small hospital in Bleecker street, in 1857; and rejoiced at length to see the opening of the present long-desired college. To some the interval of fifteen years might seem needlessly long; and doubtless the promoters might have done as others did, and opened long since a college at which women might have received learned-looking parchments entitling them to the degree of M.D. But a *poor* college was no desideratum to them; and it had been impossible before the present time to found a medical school wherein women should receive a thoroughly good education; which should issue diplomas commanding the respect of the whole profession. The doctor spoke strongly of the responsibility incurred by sending forth unqualified women as physicians, and argued that a long and thorough course of study was the only safeguard against the temptation of rushing unprepared into practice, to which women were even more exposed than men. After commenting on the extreme difficulty of raising funds for the establishment of a principle not yet popular, and on the obstacles thrown in the way of obtaining able professional aid by prejudices lately general, she expressed her satisfaction that at length a solid, though small, pecuniary basis had been secured; and referred to the list of the Faculty in proof that prejudice was no longer able to deprive women of the best medical instruction. She congratulated New York on being the first to establish such a college for women; quoted the remarks of an eminent Boston physician, who regretted that the initiative had not been taken by his own city; and mentioned the satisfaction expressed by the really qualified medical women, in all parts of the country, that students would now be relieved from many of the difficulties with which they themselves had contended.

The doctor then dwelt on those points in the college scheme which would deserve the special approval of the profession, viz.: the requirement of *three* full annual sessions instead of two; the large share of practical instruction and the weekly recitations which would be joined to the lectures; and the carefully arranged succession of studies. She stated that the Faculty had determined to adopt the most advanced system of medical education; and that though by so doing they probably limited the number of students, and deferred the chances of immediate success, she felt sure that they would be more than repaid as the medical public came to appreciate the quality of the education offered, and the value of the diplomas to be bestowed. She then spoke of the prominence to be given to hygienic study, and expressed a hope that by means of medical women much sanitary knowledge would be diffused among

their own sex, and much infant mortality prevented.

The doctor concluded with a declaration of the catholic spirit of the college, and the earnest desire of the Faculty to invite the cooperation of all, that the work which had progressed so slowly and patiently during fifteen years, may now rise rapidly on its deep-laid foundations, and insure the success so long waited for.

The Hon. H. J. Raymond, as one of the Board of Trustees, expressed his own great satisfaction, and that of his colleagues, at the opening of the college; and felt confident that as its work went forward and its real worth became known, it would have largely increased support from the whole community.

Dr. Willard Parker protested strongly that the unworthy prejudices of which Dr. Blackwell had spoken were things of the past; that New York physicians were ready and glad to welcome merit wherever it appeared; and that, now woman was taking her true and proper place as the co-worker with man, he, in the name of his profession, stretched out to her the right hand of fellowship, anxious only that she in her turn should be thoroughly and duly qualified to fill the place to which she aspired.

The Rhode Island Hospital was formally dedicated at Providence on October 1, ult. The structure has been erected at a cost of nearly $500,000, by contributions in twenty of the cities and towns of the State. The edifice is 400 feet long, and is believed to be without a superior in the world. It has an endowment of $150,000, and at the meeting on Thursday thirty free beds were endowed by contributors of $4,000 each.

Work for the Anti-Tobacco League.—The Paris *Figaro* publishes the following interesting details of the tobacco trade:—Asia produces annually 155,000 tons; Europe 141,000; America 124,000; Africa 12,000, and Australia 400 tons. The annual consumption in France averages:—Snuff, 7,800 tons; smoking tobacco, 18,441 tons; chewing tobacco, 756 tons; and cigars of various denominations, 3,004 tons. The volume of snuff is equal to thirty columns, each equal to the Colonne Vendome; the smoking tobacco is equal to a cube equivalent to the Arc de l'Etoile; and the cigars placed end to end represent a total length of 74,360 miles—nearly thrice the circumference of our globe.

Medical Education of American Women in Paris.—The following letter recently appeared in the *Boston Daily Advertiser*.

In your paper of this morning you draw attention to the fact that an American lady has been admitted, within the last few weeks, to the first of the series of medical examinations in Paris, and that those examinations are now thrown open to all women. I wish to direct attention to the manner in which this has been done, for it is an admirable illustration of the views which I have for many years pressed upon the American public. There was no clamoring for rights—they were earned and taken. There was no assault upon established barriers—they yielded to the first competent force.

The lady in question received her first instruction at the hands of Dr. Zakrzewska. Of the best connections in the city of New York, and entitled to the best social helps, she went abroad almost without letters, determining, as she expressed it, to stand only on her own feet. Her steady demeanor interested at once persons of influence. While she worked on, utterly innocent of the fact that her quiet walk was the theme of observation, the wife of the Minister of Public Instruction watched her narrowly. When the proper time came, this lady asked her husband to open the gates of the university to this one student by the exercise of his authority. It was quite uncertain whether more could be done. The bearing and success of the first student has thrown them open to all women. If women would only stop declaiming, and earn what they seek, like Dr. Zakrzewska and Miss Putnam, their friends would find no special pleading necessary.

Caroline H. Dall.

141 Warren Avenue, Oct. 20, 1868.

We learn that there are two errors in the above letter. Miss Putnam studied with Dr. Elizabeth Blackwell and Dr. F. A. Brown, of this city, before going to Boston. She was not indebted to the wife of the Minister of Public Instruction for her admission to the Ecole de Médecine. Her personal acquaintance with the Minister may have facilitated the consideration of her application; but the admission was conceded to her not as a favor granted by caprice, but as a justly earned privilege.—Ed.

German Vintages.—In the *Wein-Chronik*, of Germany, it is recorded that between 1626 and 1835, both remarkable as good wine years, there were 27 excellent, 50 good, and 116 bad years in the wine districts. The present year will be one of excellent wine productions.

The Act Abolishing the Medical Department of the Freedmen's Bureau, passed by the last Congress, is to take effect January 1st, 1869.

Dr. Jengken, Prof. of Clinical Surgery in the University of Berlin, has retired from active duties after forty years' service as a medical teacher.

Prof. Middeldorpf, the famous surgeon and inventor of the galvano-caustic, died in Breslau, June 29, 1868, from inflammation of the bowels, in the 44th year of his age.

New Publications.

BOOKS RECEIVED.

A Treatise on the Principles and Practice of Medicine. By Austin Flint, M.D., Prof. of Principles and Practice of Medicine, Bellevue Hospital Medical College. 3d Edition, thoroughly revised. Philadelphia: H. C. Lea. 1868.

The Medical Formulary, etc., etc. By Benj. Ellis, M.D., late Prof. of Materia Medica and Pharmacy in the Philadelphia College of Pharmacy. 12th edition. By Albert H. Smith, M.D., Fellow College Physicians. Philadelphia: H. C. Lea. 1868.

Microscopic Examinations of Blood. By J. H. Salisbury, M.D. Morehead, Bond, & Co. 1868.

Atlas of Venereal Diseases. By A. Cullerier. Translated from the French, with Notes. By Freeman J. Bumstead, M.D., Prof. Venereal Diseases in the College of Physicians and Surgeons, New York. Part V.

A Rational Treatise on the Trunkal Muscles; elucidating the Mechanical Causes of Chronic, Spinal, Pelvic, Abdominal, and Thoracic Affections, etc., etc. By E. P. Banning, M.D. New York: W. A. Townsend & Adams. 1868.

A Practical Treatise on Bright's Disease of the Kidneys. By T. Grainger Stewart, M.D., F.R.S.E., Fellow of the Royal College of Physicians, Lecturer on General Pathology, Surgeon's Hall, Pathologist and Extra Physician to the Royal Infirmary, etc. New York: Wm. Wood & Co. 1868.

Original Communications.

CONTRIBUTION TO THE ÆTIOLOGY OF VAGINISMUS.*

By W. NEFTEL, M.D.,

NEW YORK.

During the last two years I have had the opportunity of observing three cases of lead-poisoning, particularly interesting by their combination with vaginismus. All three were young women of good social standing, and one of them had been married for several years. In all these cases the phenomena of lead-poisoning were so characteristic that I was able to make a correct diagnosis. The patients were unable to lift the hands and fingers, or to abduct the thumb. There was complete paralysis, with atrophy, of the extensor digitorum communis, extensor carpi ulnaris, radialis, pollicis longus, and abductor pollicis; but the supinator muscles, as well as the deltoid, biceps, triceps, and others were normal. The electro-muscular contractility and sensibility were much diminished or entirely lost. The cause of the lead-poisoning in all these cases could be attributed only to the long-continued use of a cosmetic containing lead.

But the most remarkable feature in these three cases was the combination of lead-poisoning with vaginismus in its intensest degree; and in consequence of the latter the married lady was sterile, as sexual intercourse was quite impossible. In none of these cases could any particular cause of this hyperæsthesia be detected.

My first two patients were entirely cured by electricity (faradaic and galvanic current's), together with the use of medicines (iodide of potassium, sulphur), not only of the paralysis but also of the vaginismus—against which, however, no particular treatment had been directed—and the married lady has since borne a child. I will add, that in the married patient the vaginismus was already developed to the highest degree, while the extensor muscles of the hands were not yet completely paralysed, but only weakened, and the forearms painful. Accordingly the greatest attention was paid to the condition of the sexual apparatus, which was considered by the attending physicians as the source of the supposed hysterical paralysis. With my present experience, I am inclined to adopt quite a different opinion. I would consider the lead-poisoning as the cause of vaginismus, and the treatment of lead-poisoning sufficient to cure vaginismus, in the same way as it does an analogous condition—saturnine colic.

The third case mentioned was a patient of Dr. Sayre. On the 28th of September last, he kindly invited me, together with Dr. Marion Sims, to see a young lady suffering, as was thought, from some obscure disease of the spine, for which she had worn a brace for two years. On hearing the account of the symptoms, I at once stated my conviction that the case was one of bad palsy, which, on the subsequent examination, was fully confirmed. Here, too, vaginismus accompanied the paralysis of the extensor muscles of the hands.

I bring these few instances before the profession, in order that more numerous observations should either confirm my idea of the ætiology of vaginismus, or prove that in my cases the lead-poisoning was an accidental complication.

126 West Forty-second St., Oct. 1868.

* Read before the New York Medical Journal Association, Nov. 13, 1868.

CASE OF MALARIAL NEURALGIA TREATED SUCCESSFULLY WITH THE SULPHITE OF SODA.

RESEMBLANCE OF URINE CONTAINING SULPHITES TO URINE CONTAINING ALBUMEN.

By HOWARD PINKNEY, M.D.,

SURGEON OUT-DOOR DEPARTMENT, BELLEVUE HOSPITAL, N. Y.

Mr. S——t called upon me in May last, complaining of a facial neuralgia, from which he had been suffering (at more or less regular intervals) for a period of two years. He formerly resided in South Carolina and Louisiana, and while there had frequent attacks of intermittent fever. The paroxysms of neuralgia came on at more or less regular intervals, but were always much worse every seventh day. The first treatment that I used was full and frequent doses of sulphate of quinine given during the intervals, and cannabis indica during the paroxysm. This treatment afforded but little relief, although the patient by it was thoroughly cinchonized. Stopping the use of quinine, I commenced the use of the sulphite of soda in scruple doses four times a day. Under this latter treatment he gradually improved, and was almost if not entirely relieved of his neuralgia.

During the time that he was taking the sulphites he complained of pain over the region of his kidneys. His peculiar anæmic appearance in connection with this pain led me to examine his urine for albumen, which I did in the usual way. On the application of heat to a portion of his urine placed in a test tube, it soon acquired a milky appearance that I at first supposed to be due to either albumen or an excess of the phosphates. On the addition of nitric acid the opacity was increased. Another specimen of the same was treated with nitric acid. It slowly became opaque, the opacity gradually increasing. The first experiment clearly showed that the opacity could not be due to the excess of phosphates, and the very gradual increase of opacity and deposit of a white powder in the second led me to believe that it could not be due to albumen. I therefore tested it in the following manner for the sulphite of soda, and was gratified to find the above changes were entirely due to its presence.

Test 1.—To a portion of the suspected fluid I added a small quantity of a solution of acetate of lead, that immediately threw down a white precipitate of the sulphite of lead which readily dissolved in strong nitric acid. After standing a short time the sulphite became converted into the sulphate that again caused an opacity of the fluid.

Test 2.—To another specimen I added a portion of a strong solution of nitrate of silver, that immediately threw down a white deposit of sulphite of silver; on application of heat, finely divided silver was thrown down, leaving nitric acid and sulphate of soda.

P. S.—In the chemical examination of the above specimens I was much aided by the suggestions of my friend, Mr. F. Rauch.

24 East 41st Street, October 7th, 1868.

A Primitive Water-Closet.—A householder at Appledore, Devon, has been summoned for neglecting to supply proper privy accommodation to a cottage occupied by eight persons, there being no other convenience than a bucket, which was emptied into the quay. The nuisance inspector stated that there were scores of cottages in a similar plight. No doubt rural ideas of sanitary requirements are mostly of the primitive order, but it is high time that more enlightened views were enforced.—*Lancet.*

HORSE-HAIR SUTURES.

[By J. S. WIGHT, M. D.
OF BROOKLYN, N. Y.

Being a paper read before Kings Co. Medical Society.

It is our object to introduce to the attention of the profession the *horse-hair suture*. In doing this we claim no originality, for the subject is not new. We are influenced by considerations of practical importance; and wish that others may know and profit by the advantages to be derived from these appliances.

Allow us to remark here, parenthetically, that *sutures* are used to retain opposite surfaces in apposition, in order that there may be *union*. And let us state that wounds may be divided practically into two classes, viz: first, those that may be expected to unite by *first intention*; secondly, those that may be expected to heal only by *granulation*. In the first class, sutures should always be used; in the second class they may sometimes be used, but will not in general be necessary.

Is the *horse-hair* sufficiently *strong*, when used as a *suture?* Some horse-hairs are *weak*, while others are *strong*; the former are unfit for use, the latter make *superior sutures*. Hence it is evident that the strong hairs should be selected, in order that the surfaces of wounds may be securely held in contact. We have never known a selected hair to break. From actual experiment we have found that a single *horse-hair* will sustain one pound and a half; and that a *horse-hair* doubled will easily sustain *three pounds*. Hence we have a suture by which we can apply *traction*—on each side of a wound at a single point—*equal* to *three pounds*. And it is evident that, with five such sutures, we can apply *traction equal* to *fifteen pounds*. Within certain limits the number of sutures can be diminished or increased, so as to meet all the indications required by circumstances. We must conclude, not only from experiment, but also from experience, that the *horse-hair suture* is strong enough for all *practical purposes*.

It has been asked: Is it possible to tie the *horse-hair?* A suitable answer to this question is, *a properly constructed knot will never untie*. In tying the hair, make two turns for the first part of the knot; and in making the turn for the last part of the knot, do it in accordance with the principles of the "reef-knot." If you make two turns for the first part of the knot, it will not in many cases be necessary for an assistant "to put on his finger to hold it," until the last turn of the knot is made. Instead of the knot already described, it may be convenient and proper sometimes to construct the simple reef-knot, for the simple reef-knot will answer every purpose. The ends of the suture should be left at least four inches long—six inches will be better—in order that the knot may be conveniently and well constructed. It seems to us, that no other suture can be more readily tied; and the ends may be cut as closely to the knot as would be advisable in any other suture.

One property pertaining to this suture—and belonging to no other—is its *elasticity* which tends to keep the surfaces of wounds in constant and perfect apposition. This elasticity is not impaired, however long the suture may be left *in situ*.

The horse-hair suture does not absorb fluids—such as *blood*, *serum*, and *pus*; it is not affected by any appropriate dressings. In this respect it is superior to silk or cotton, and is on a par with metallic sutures. It is *unirritating*, not only because it is *smooth*, *flexible*, and *elastic*, but also because it does not *absorb fluids*.

Horse-hair sutures may be left *in situ* for an indefinite period. We have lately removed them from the stump of an amputated hand eighteen days after they were put in. We have left them in a longer time than this. Sometimes it may be necessary to remove them early; of course "circumstances alter cases." In a case of *hare-lip*, we used these sutures, and left them in thirteen days; and after one year it was impossible to find cicatrices where they entered.

The *horse-hair suture* in one respect is superior to any other in this, that it can be removed with the greatest facility and safety. Any one may know how difficult it is sometimes to remove a silk suture—opening the wound and tearing the surfaces. Metallic sutures are often removed with difficulty, on account of a want of flexibility. Now all these objections are obviated by the *horse-hair suture*.

To recapitulate: The *horse-hair suture* is sufficiently *strong*, and continues so for any length of time it may be left *in situ*; it is readily *tied*, and does not *untie*; it does not *absorb fluids*; it does not *irritate*; it *may* be left in *indefinitely*; it is more readily removed than any other, and therefore, combines more good qualities than the sutures in common use. These sutures are abundant, cheap, and always easily obtained.

HYDRONEPHROSIS OF THE RIGHT KIDNEY,

FROM OBSTRUCTION OF THE URETER BY A CANCEROUS MASS;

FATTY DEGENERATION OF THE LEFT KIDNEY, EPITHELIOMA OF THE UTERUS, INVOLVING THE BLADDER AND VAGINA AND RIGHT HALF OF THE PELVIS, PERFORATING THE HIP-JOINT.

By R. C. VAN WYCK, M.D.,
OF NEW YORK.

Ellen Marshall, æt. 65, Ireland, domestic, was admitted to the medical side Bellevue Hospital, Feb. 24, 1868. Patient stated that her family history was free from disease, that her general health had been good, and that she was the mother of seven children. She further stated that she had always been well until a few days before admission, when she complained of severe pains in the hips, knees and shoulders, due, she thought, to a severe exposure to cold. At the time of admission she was able to use her limbs, walked into the ward, and at the time her medical attendant first saw her, she was sitting beside her bed. She, however, was pale, anæmic, and said she felt completely worn out. She also stated, that fifteen years ago her menses ceased, but that four months ago she had metrorrhagia, which continued unabated for four weeks. There was a swelling in the right inguinal region, having a baggy feel, and by careful palpation deep fluctuation could be elicited. The anti-rheumatic treatment was used, with tonics, stimulants, and good nourishing diet, and the patient confined to her bed. Warm poultices were placed over the swelling. The abscess soon became larger, and as there was every appearance of an early opening, it was incised by Lister's method for opening abscesses. For five days after the opening, the discharge was very slight, and it seemed as if it would heal. But after this it became very unhealthy, discharging a thin, sanious pus. Her general health failing, she was transferred to the surgical side, April 23, 1868.

When admitted she was pale, anæmic, countenance expressive of suffering, her strength entirely gone, so that she was unable to stand, and was brought to the ward on a stretcher. Her tongue was dry, and coated

with a brownish fur: appetite gone. Pulse was rapid and feeble,—urine and fæces passed naturally. The lungs were examined, and presented nothing more than emphysema. There was an opening two inches below Poupart's ligament, deeply excavated, with unhealthy and irregular edges. The floor of the opening was deeply undermined, formed by the adductor muscles of the thigh, and destitute of granulations. The opening passed upward and seemed to pass under Poupart's ligament. The discharge was large in amount of a thin unhealthy pus, and very offensive odor. The spine was carefully examined, and found normal. The right leg, thigh, and hip, from its attitude and general appearance, presented nothing abnormal, and she moved it as she did the other, turning in bed without pain. As there were no symptoms pointing to diseased hip, it was not examined. There was no unnatural fulness of the abdomen, no tympanites, and no tenderness complained of. Her condition was such that no other organs were examined. She complained at this time of nothing but weakness. Bed sores had already appeared on the sacrum. A solution of carbolic acid was applied to the opening with a graduated compress, secured by a spica bandage. She was given quinine, stimulants, beef-tea, beef-steak, eggs and milk. She, however, partook of it with a great deal of reluctance, as in fact she did of all other articles.

April 29.—Patient in a very poor condition; vomits nearly all her food; wound looking more unhealthy and the discharge increased in amount.

May 2.—Patient a little better, is able to retain her food, but requires a great deal of urging, and then takes it as quickly as possible.

May 5.—Patient failing rapidly; general surface of body cold; appetite entirely gone; tongue dry and furred, lips cracked, sordes on the teeth, subsultus tendinum. Patient unable to answer questions, and in a semi-unconscious state. Died May 6, 8 A.M., of asthenia.

Autopsy 51 hours after death; rigor mortis disappeared; cadaver excessively emaciated; dura mater adherent to the skull; more than natural amount of serum in the lateral ventricles; heart normal; old adhesions over the right pleura; both lungs emphysematous in all their lobes; superficial fibrous induration at both apices; old adhesions between the liver and intestines, and abdominal wall, on the right side, with evidences of old peritonitis over the whole peritoneal cavity; liver weighs two pounds ten ounces; spleen softened, but otherwise presented nothing abnormal. The intestines were firmly agglutinated together. The ileo-cæcal valve, the cæcum, ascending colon, ilium, and part of the jejunum, were bound together by firm adhesions, and on separating them pus freely escaped. The adhesions at this point were also very marked, not only to the intestines, but to the abdominal walls. On the left side there were adhesions, though not to such an extent. The sigmoid flexure, with the rectum, was bound down and pus infiltrated between the meshes of the adherent bands. The mesenteric glands were enlarged, and many of them contained purulent fluid. The kidney on the right side was much enlarged, being nearly twice its natural size, and pushed out of its position, upward, so that it was behind the right lobe of the liver. The ureter on that side was enormously dilated, and firmly adherent to the intestines by old adhesions. On dissecting the ureter carefully down to the bladder, it was found partially occluded at its entrance into the bladder, by new tissue. An opening was made into the ureter, above its entrance into the bladder, and a fine bristle passed into the bladder with some difficulty. On cutting into the kidney, its pelvis was found enormously dilated—the infundibuke large and distended, the papillæ absent, and the calyces flattened and most of them absent. The pyramids were flattened, encroaching upon the cortical substance, and the cortical substance quite thin. On section being made and examined microscopically, the pyramidal portion was in some parts destroyed, in other parts contracted, and was fatty and granular. The uriniferous tubes were denuded of their epithelium, and covered with oil globules and granular matter; in other parts the epithelium was in each, but fatty and granular. The convoluted tubes were many of them broken down, their intervals filled up by connective tissue and débris of collapsed and ruined structures. In other parts they were denuded of their epithelium, and filled with oil globules and granular matter. Where the epithelium was not removed, they were fatty and granular—in no part were they found normal. The Malpighian bodies were in many places absent, in other parts near the surface they were enlarged, lying in unnatural proximity, and enveloped by condensed fibrous tissue; their intervals filled up by granular matter, and débris of renal structure. The left kidney was enlarged and in an advanced stage of fatty degeneration, but its ureter normal. The surface of both kidneys was smooth, their capsule thin, transparent, and adherent, so that it could not be peeled off without tearing the glandular tissue. The bladder was distended with urine, and was firmly adherent to the uterus. The uterus and surrounding vagina were the seat of epithelial cancer, which had also ulcerated into the bladder, so as to partially obstruct the ureter on the right side. The uterus was bound down to the rectum and pelvis by firm adhesions, and pus infiltrated between its meshes. The soft tissues around the ilium were affected by the malignant disease, and the ilium and body of ischium, pubes, and acetabulum, were also found involved. On dislocating the right femur, the acetabulum was found perforated, and the head and neck eroded. The opening below Poupart's ligament was found to extend upward beneath the ligament, along the course of psoas and iliacus muscles, which were thoroughly disintegrated, and far advanced in fatty degeneration.

The points of interest in this case appear to me as follows:

1st. The development of cancer to such a general extent, in so limited a time, for three months previous the patient states that she was in good health.

2d. The extensive disease of both kidneys in the midst of an exhaustive disease, without giving rise to any symptoms of uræmia.

3d. The destructive disease of the pelvis, involving the acetabulum, and perforating it without any symptoms referable to that part; at the time of admission, the patient being able to walk around the ward.

Professor Fick, of Zurich, has accepted an invitation to the chair of physiology in the University of Wurzburg.

Treatment of Gun-shot Wounds in 1514.—The first published work on gun-shot wounds bears the date of 1514, its author's name being *Antonio Ferri*, physician to Pope Paul III., and its title *De Sclopetorum sive Archibursorum Vulneribus*. From these pages we learn that the orthodox treatment for gun-shot injuries was to pour into the wounds boiling oil. The method of performing amputation was somewhat novel. The part to be removed was simply chopped off by a hatchet, and the bleeding checked by the application of a red-hot iron to the stump.—*London Medical Mirror*.

Original Lectures.

ABSTRACT OF A LECTURE UPON THE THERAPEUTICS OF WAKEFULNESS:

DELIVERED AT BELLEVUE HOSPITAL MEDICAL COLLEGE,

By WILLIAM A. HAMMOND, M.D.,

PROFESSOR OF DISEASES OF THE MIND AND NERVOUS SYSTEM.

Brushing the hair, or friction of the skin, as by rubbing the palms of the hands or the backs of the arms, will in some persons tend to induce sleep. Soothing sounds have sometimes a similar effect. On the other hand, persons whose occupations are noisy are apt to awake when the noise to which they are accustomed suddenly ceases. A miller has been known to wake up when the noise of the machinery stopped, and a man, who had for many years lived within sound of the roaring of Niagara Falls, was unable to sleep at first on removing from the locality.

But agents more efficacious than such external ones, are those which lessen the amount of blood circulating in the brain. First may be mentioned food and drink, of whose happy influence a frequent illustration is given in the case of a late supper. During digestion more blood circulates through the gastro-intestinal vessels than when the abdominal organs are unemployed; and this additional amount of blood must come from some other part of the body, since a marked excess of this fluid cannot exist in two different parts at the same time, except in cases of disease. That the amount of blood in the brain is diminished during digestion is evinced by the feeling of drowsiness commonly experienced, which is a perfectly healthy sensation. The food, thus taken as a therapeutic agent, should be easily digestible. The sensible physician will hardly resort to drugs, if such pleasant medicine as a good supper can be given with equally good effect.

In persons weak or anæmic, especially women who have been rendered so by hæmorrhages, a dose of some one of the various preparations of alcohol at bedtime is frequently advisable. Of these, wines are not generally so admissible as the stronger preparations, such as spirits; in this country whiskey will be most easily attainable. A Methodist clergyman, who came under my care, had been unable for seven or eight weeks to sleep more than two hours each night. I prescribed a dose of whiskey to be taken at bedtime. He at first strongly protested against taking it, upon grounds of principle and his previous habits of total abstinence, but finally agreed to try the remedy. The first night he slept five or six hours, the second, seven or eight hours; his whiskey was then reduced in amount gradually, from half a glassful to none at all. He continued to sleep well, and had not formed any habit of drinking.

In healthy persons, coffee is calculated to produce wakefulness; in others it acts as a hypnotic, much as other stimulants do in asthenic cases. For the latter purpose, do not trifle with it by administering a little of a weak infusion, but give strong doses at once. Much depends upon the method of making it. Exhaust the strength of three or four ounces of ground coffee by percolation, with a rather small amount of boiling water; and give without milk or cream. Tea is not to be compared with coffee as a therapeutic agent, in this connection. It acts in a similar manner, but not so efficiently.

Sometimes sleep may be produced by physical exercise taken regularly about two hours before bedtime. This acts best in sthenic cases. It has been often noticed that change of air and carriage exercise produce sleep. The modus operandi of this I cannot explain, any more than the familiar fact that the rocking of a cradle puts an infant to sleep.

Some time ago, in England, there was constructed a table, known as Darwin's table, for the purpose of producing sleep in the insane. It was circular, and rotated upon a screw at the centre. On this the patient was placed, with his head at the centre, and the table was turned, thus producing sleep according to correct physiological principles, although those principles were not then known.

The warm bath may be used as a hypnotic. In employing it, the head should be prevented from becoming heated, as by putting cold water upon it while the body is immersed; the application of cold water is, however, rarely necessary in the case of infants. The temperature of the bath is best regulated by the hand. Sometimes cold water alone applied to the head proves sufficient, without the warm bath. I remember having read somewhere in Graves' writings that the Indian women sometimes put their babies to sleep by giving their heads a cold douche; this was also applied in the British army at one time as a punishment, and, it was found, with the almost invariable effect of producing sleep.

Another remedy, often of much value, is the application of a sinapism to the epigastrium. How it acts I do not know; it cannot well do so through the circulatory system, but may by impression upon the nervous system.

The position of the body is important. In many cases, holding the head down produces wakefulness; such persons should, in case of wakefulness, go to sleep in the erect position.

Certain drugs form another class of agents for the production of sleep. That which has been longest in use is opium. As regards its power of bringing on sleep, the dose of opium varies in different patients. In small doses of half a grain to three-fourths, as an average, it acts as a stimulant; in moderate doses of one or two grains, it is hypnotic; and in larger ones it produces stupor, and not true sleep. Narceine, one of its constituents, has been found to produce profound and continuous sleep, but the ordinary preparations of it are too uncertain to be relied upon, and it is too expensive for frequent use.

Hyo-cyanus sometimes acts excellently; it has the advantage over opium of not producing headache and constipation the following day. The tincture, especially Neergaard's, may be given in doses of a drachm to a drachm and a half three times a day, if necessary.

Oxide of zinc may prove serviceable in some cases. It came into use in the treatment of the nervous condition preceding delirium tremens. It has also been of value in hysteria when everything else has failed. Its dose is, as a maximum, two grains three times a day; as much as four grains may be given at the same intervals, but this quantity will generally produce irritability of the stomach.

Phosphorus is a remedy which has come into use more recently, in the class of cases of which we are speaking. It is supposed to act by supplying a deficiency in the elements of nervous tissue, increasing the amount of protagon. Owing to its chemical properties, it is not easily administered. It can be given in the form of phosphorated olive oil, in the proportion of four grains to the ounce. It is preferable, however, to boil twelve grains of phosphorus in one ounce of

almond oil, and filter. The oil absorbs four grains of phosphorus, so that each minim contains 1-120 of a grain. Half an ounce of the oil is now mixed with an ounce of gum arabic, and fifteen drops of some aromatic oil are added. Of this mixture the dose is fifteen drops, equal to five drops of the phosphorated oil, and containing 1-24 of a grain of phosphorus. I have used this remedy in eight cases with success, and failed in two cases. I try to get three doses taken before bed-time, and thus far have generally succeeded in producing the desired effect on the second day, if I had not on the first. The dose may be increased a drop a day, till twenty drops are taken, or signs of gastric irritation supervene. I would not advise giving it in larger doses. In one of my cases, nausea was produced on reaching twenty drops, but sleep ensued also.

But of all the sleep-producing agents at our disposal, the bromide of potassium is most deserving of the name of hypnotic. I have never seen it fail when given in sufficient quantity. A healthy adult may take from twenty to thirty grains three times a day; the latter dose is not too large when it is needed at all. Sometimes it produces, among its other effects, great weakness in the legs, and a staggering gait, strongly resembling that of a person intoxicated with alcohol. In fact, I know of a gentleman who, while under the influence of this drug, was twice arrested in our streets for drunkenness. Bromide of potassium occasionally produces also great lowness of spirits and a disposition to cry. It should be administered very much diluted. It may be conveniently prescribed one ounce to four ounces of water; a drachm dose of this to be given in at least half a tumblerful of water.

A remedy which I have used recently, especially in cases of nervous excitement where a sedative seemed indicated, is sumbul. This is a plant of the same family as valerian. I have used it in conjunction with bromide of potassium in epilepsy, with the result, as I think, of increasing the effect of the latter. The dose of the fluid extract (Neergaard's) is from twenty drops to a drachm three times a day.

Progress of Medical Science.

The Relief of Pain in Open Cancer.—The field for experience in cancer at Middlesex Hospital is, as is well known, an unusually large one, and opportunity has therefore been afforded for testing fairly the action of remedies in affording relief in this distressing disease. We learn that the exquisite pain which belongs to open cancer is found to be best relieved by the stramonium ointment, which is employed at this institution. The following is the formula for this in the hospital pharmacopœia:—Half a pound of fresh stramonium leaves, and two pounds of lard. Mix the bruised leaves with the lard, and expose to a mild heat until the leaves become friable, then strain through lint. The ointment thus prepared is spread upon lint, and the dressing changed three times a day.

New Treatment for Strangulated Hernia.—A correspondent of the *Lancet* writes as follows regarding a case of strangulated hernia:—"The patient was put into a warm bath, and taxis again tried in the bath, without making any impression on the tumor. Mr. L, not knowing the nature of the illness when he left home, did not provide himself with chloroform or surgical instruments. He gave me directions secretly, without the patient's knowledge, to procure from one of the attendants some cold spring water from the well. This being done, the patient's eyes were covered with a towel, and the leg of the affected side flexed on the abdomen. Mr. L. grasped the tumor, and I dashed the cold water (above a pint) suddenly over the thoracic and epigastric regions. The patient gave a quick and deep inspiration, and the hernia slipped up into the abdomen. The man did well."

Intestinal Obstruction Cured by Electricity.—*L'Union Medicale* for August records from the *Annals de la Société de Médecine de Gand*, the case of a woman of sixty-eight years of age, attacked by colic, with retention of fæces. Injections and purgatives were administered without result. Finally vomiting set in with considerable tympanites, unaccompanied by limited points of tenderness on pressure. Dr. Hephel resorted to nux vomica. The age of the patient, her slowness of movement, her state of temper, with entire absence of pain, and the presence of an abdominal tumor, naturally led to belief in the existence of an intestinal paralysis, symptomatic of some nervous affection. Two grains of nux vomica were administered in twenty-four hours. At the same time the belly was covered with ice, and cold injections administered with the œsophagian sound. The sound was introduced into the rectum without difficulty, as far as the junction of the descending colon with the transverse colon; still, the obstruction remained constant. The meteorism increased, and stercoraceous vomiting followed the watery and bilious vomiting. Prostration, alteration of countenance, irregularity and slowness of pulse, all denoted the approach of death.

It was decided in consultation to employ the application of electricity with the portable apparatus of Gaiffe. An olive-shaped electrode was introduced into the rectum; the other, in the form of a moistened sponge, was applied over the belly. The application was continued for ten minutes. The electricity produced sensations of heat and pain all through the abdomen; and these sensations persisted for a long time after the interruption of the current. A second application was made in the evening about nine o'clock. The patient felt better. The following night there was no vomiting, and the next morning there was a slight evacuation of soft consistence. Electricity was again employed. A second evacuation ensued, speedily followed by a third. The peristaltic progression of the fæces once established, all the symptoms disappeared, and in a few days this woman was attending to her domestic affairs.

Iodide of Potassium in Chronic Bronchitis.—Dr. *Clarke (Gazz. med. di Padova)* obtains good effects in cases of chronic bronchitis with irritation and tumefaction of the mucous membrane without secretion, by the administration of iodide of potassium (1 décigramme) combined with tartarized antimony (8 milligrammes) in water (25 grammes) holding in solution acetate of ammonia (3 grammes). This medication is to be suspended on the return of the expectorant on, or when there is danger of hyposthenia. Dr. Clarke finds in the cases mentioned, that alcohol is not indicated, though it may be given when there is abundant secretion, with difficulty of expectoration. This stimulant is otherwise but rarely indicated, save in cases of old people and infants.—*L'Union Medicale.*

Cinchona in Jamaica.—It is expected that from 8,000 to 10,000 plants of the *Cinchona succirubra* will be ready for sale in the Island of Jamaica, at the plantation at Gordon Town, in the spring of 1869.

Ether Spray is used successfully in Lyons, France, to render painless the operation of uprooting hair when necessary in cases of cutaneous disease.

New Base for Ointments—Glyceleum.—Mr. Grove proposes the following formula to replace and supersede glycerole of starch:

Tourteau* of sweet almonds, dried, pulverized, and passed through a sieve of silk	15 grammes
Glycerine	30 "
Olive oil	90 "

Mix in a mortar, using a spatula, and adding the oil at intervals. Thus is obtained a soft paste, semi-gelatinous, readily emulsioned when mixed little by little with water. This glycerole of almonds may replace gum, magnesia, for opiates, electuaries, &c., with castor oil, cod liver oil, copaiba, &c. Twenty-five centigrammes will emulsify forty-nine grammes of oil. A hot infusion, filtered and sweetened, affords a very useful and nutritious syrup.—*Union Pharmaceutique.*

Cryptopionine, a new Alkaloid from Opium.—Messrs. T. & H. Smith (*Pharm. Journ. & Union Pharmac.*) have discovered a new alkaloid in opium—*Cryptopionine.* We may have sulphates, muriates, azotates, thebolactates of cryptopia. This substance is colorless, inodorous, of a bitter taste, giving rise to a subsequent sensation of cold in the tongue and palate, similar to that produced by peppermint. It is insoluble in benzine, ether, spirits of turpentine, and almost as soluble in chloroform as is narceine. Nothing is said of the physiological properties of this new alkaloid.—*L'Union Médicale.*

Operation of Tracheotomy in Croup.—Dr. Krackowizer (*Am. Jour. of Obstetrics*) has operated by tracheotomy for croup 56 times with the following results: deaths, 40; recoveries, 16.

Causes of Death.—Asphyxia during operation, 1; granulations from cicatrix, 1; infections diphtheria, 3; exhaustion and pulmonary œdema, 4; scarlatina, 1; descending croup and bronchitis, 30; total 40.

Dr. Jacobi has saved by the operation thirteen out of sixty patients.

If the operation is resorted to in the early stages of the disease, the percentage of successful cases rises as high as from twenty-seven to forty-five per cent.

Treatment of Typhoid Fever during Convalescence.—Dr. Hudson gives the following excellent advice in the management of typhoid patients during their convalescence, in his lectures now being published in the *Medical News and Library.* Absolute rest must be insisted on, all stimulants prohibited, and the blandest nourishment only allowed to be given. It must be recollected that a large proportion of cases of perforation of the intestine occur during this period. Counter-irritation by means of small blisters, or by tincture of iodine, should be employed, if there is protracted diarrhœa, or pain and tenderness on pressure over the cæcum. Avoid irritating purgatives; the bowels should be opened every third day by an enema of warm water, or perhaps, occasionally, by a small dose of calomel, or gray powder combined with opium.

To improve the condition of the intestinal ulcers and of the mucous membrane, nitrate of silver and the turpentines are the most worthy of the confidence of the physician. Poultices to the abdomen are important in this stage.

Cauterization of Hemorrhoids.—Mr. Henry Smith, of King's College Hospital, London, treats hæmorrhoids and prolapsus of the rectum by seizing the tumors with a clamp, cutting them off with scissors, and cauterizing the bases with the hot iron. Numerous cases of cures by this method are reported.

* The dry residue of a nut, &c., after extraction of the oil.

Administration of Bromide of Potassium.—C. V. Berryman, M.A., M.D., Prof. Mat. Med., Victoria Med. College, Toronto, Canada (*The Dominion Med. Journal*), administers bromide of potassium in *epilepsy*, in doses of grs. x or xv three times a day for a month, and then increases it, say by grs. v. to each dose. In *delirium tremens*, grs. xxx should be given at once, and repeated in two hours if sleep is not promoted, and after that, if awake, the dose should be administered every four hours. He has had but one case where these doses produced irritation of the bowels. In the latter affection, by this mode of procedure, his best wishes and anticipations have been realized—restorative sleep and quietude have invariably followed.

In *epilepsy*, all of the cases under his care at the Toronto General Hospital, with the exception of one, were controlled by its use.

Pneumonia of the Apex of the Lung.—At the Hôpital St. Engénie (*The Dominion Med. Journal*), cases of pneumonia of the apex have been noted by M. Barthez. Convulsions, which lasted from three to four days, marked the outset of the disease in two cases. The disease did not become apparent until the fifth day, and on the seventh, resolution had already taken place. In another child the disease assumed the character of typhoid fever, the symptoms of which disappeared when pneumonia manifested itself on the fifth day.

M. Besnier insists upon the peculiar interest of these cases in the study of infantile pneumonia.

Acute Phthisis and Treatment.—M. Colin (*The Dominion Med. Journal*) records cases of "galloping consumption" in Hôpital Val de Grâce; death ensued in one case, after the symptoms of typhoid fever presented themselves. M. Colin recommends *digitalis* in this disease, administered in small doses, so as to combat the fever and dyspnœa, and suspend the fatal course of the disease, at least during a certain period of time.

Success of Tracheotomy in Croup.—In four Paris Hospitals, in May, 1868, 19 cases of croup appeared. Tracheotomy was performed in 17 of these cases, 4 were successful; 13 of the patients died. In one case, which terminated successfully without tracheotomy, the oleo-resinous extract of cubeb had been given. In 8 cases, the operation was performed by *M. Barthez.*

The Solubility of Diphtheritic Membranes.—MM. Brichetau and Adrian (*Union Pharm.*) have made a number of experiments to test the solubility of "false membranes" in various medicinal substances; and announce, among other things, the following results:—

A false membrane maintained for an hour in the midst of vapors of sulphate of mercury is not dissolved; it is only softened as by vapor of water; retained in a concentrated solution of pepsin maintained at a temperature of 30° C., it is not dissolved but at the end of 12 hours; but if 6 to 10 drops of lactic acid be added to the pepsin, the solution is accomplished at the end of 8 minutes. Caustic acids (hydrochloric, sulphuric, azotic) do not dissolve false membranes. Acetic acid renders the diphtheritic membrane transparent, gelatinous, but does not dissolve it completely. Citric acid produces a similar effect. Lactic acid, in the proportion of 2 drops to 5 grammes of water, dissolved a tough membrane of the weight of 20 centigrammes in 3 minutes. With lime-water, the effect is still more rapid; lactate of lime is without action. Water alkalinized by soda or potassa, dissolves the membrane in 8 or 10 minutes, and better than their concentrated solutions. Bromine water, and bromine in statu nascente, only disintegrate the membrane; bromide of potassium has no apparent

action; salts of soda and potassa, such as sulphate of soda, sulphate of potassa, the bicarbonate, nitrate, &c., are without action, as also chloride of zinc, and chromic acid. The chlorates of potassa and soda dissolve membranes, but slowly.—*L'Univ. Med.*

Ceanothus Americanus.—Dr. D. L. Phores (*Atlanta Med. and Surg. Journal*) recommends the use of this drug in splenitis; and so well satisfied is he of its efficacy, that he has used nothing else for enlarged spleen. He says: "In this affection I have never found any remedy superior to Ceanothus Americanus. I have yet to hear of its failure in a single case, however inveterate." He uses it in the form of a tincture, and gives it in doses of from ℥ ss. to ℥ j three times a day. He directs it also to be rubbed over the region of the spleen twice a day.

Idiopathic Tetanus in Jamaica.—Dr. F. D. Lente, in a communication to the *N. Y. Med. Journal*, says: "This disease is very common in Jamaica and other West India islands. It is generally induced by sudden chilling of the body or suppression of perspiration. The mortality, compared with that of the traumatic variety, is not great: though it presents all the terrible suffering of the latter. The traumatic form is also very common, and follows the most trivial accidents. Two remarkable cases occurred at Horowa, on a plantation near Matanzas. Two little negroes, brothers, had each got a 'chigoe' in the toe, and the mother, as usual, opened the sac with a needle, and pressed out the animal, filling the cavity with some simple preparation. Both were attacked the succeeding day with tetanus. Within three days one had died, and the other recovered only after a severe illness." Bright's disease is very common in Jamaica, and appears to be on the increase.

Carbolic Acid in Cutaneous Disease.—Dr. F. P. Mann (*New York Medical Journal*) cal's the attention of the profession to the efficacy of carbolic acid in the treatment of diseases of the skin, particularly those which are known to depend upon or are accompanied by the development of fungi. He reports three cases; one of chronic eczema, one of impetigo, and one of psoriasis inveterata. In the former case the incrustations covered the head and entire trunk and limbs. The secretions were intensely acid. By a course of alkaline treatment the improvement was rapid, but fresh groups of eczema pimples continuing to be reproduced, carbolic acid, of the strength of ℥ ss. to water ℥ iv., was applied three times a day. The effect was immediate, and the vesicles disappeared promptly. In the cases of psoriasis, the carbolic acid was applied in conjunction with the administration of Donovan's solution. The disease soon yielded to the treatment.

External Use of Liquor Ammoniæ Acetatis.—Dr. Tolmatschen of Kasan (*Deutsch Klinik*) has tried the local application of spts. mindereri in several cases of muscular rheumatism as well as in some cases of pneumonia. The affected part was well bathed with the medicine and then dried. On being again covered with the usual bed-clothing, in each case the affected part broke out in a moderate perspiration, with amelioration of the pain. The internal use of the medicine was sometimes combined with its external employment.—*N. Y. Med. Journal.*

Singular Effect of a Burn.—Dr. S. P. Crawford is the authority for the following history: A lady being in the last stages of gestation, was so severely burned upon the face, body, and extremities, that she survived the accident but twelve hours. A short time before death she gave birth to the child, at full maturity, but still-born. It bore the mark of the fire corresponding to that of the mother. Its legs, arms, and abdomen were completely vesicated, having all the appearance of a recent burn.—*Nashville Journal of Medicine and Surgery.*

Asthma.—Dr. Beglie cured two cases of asthma of long standing, where the patient had renounced all hope of benefit from drugs, by the use of bromide of potassium in free doses morning and night.—*Hamb'dt Medical Archives.*

Bromide of Potassium and Antimony in Puerperal Convulsions.—Dr. T. N. Simmons reports a case of violent puerperal convulsions, in which the inhalation of chloroform had failed, cured by brom. potass. and tart. ant. et pot., 40 grs. of the former and ½ gr. of the latter at first, and then 10 grs. bromide with ½ gr. ant. every hour or two until six doses in all had been taken. The convulsions gradually subsided, and convalescence was rapid. He recommends the same combination in delirium tremens, sometimes adding a small quantity of morphia.—*Phila. Med. and Surg. Reporter.*

Inguinal Hernia Strangulated by an Artery.—Dr. John Cleland reports in the *British Med. Journal*, a case of strangulated inguinal hernia, in which the cause of the constriction was found to be an artery, probably "an obturator artery, arising from the epigastric, and arching upwards in its course, or by a common trunk of unusual length, from which the obturator and epigastric arteries were given off nearer the middle line." The vessel was first ligated in two places, and then cut between the points of ligation; the strangulation was at once relieved, and the patient ultimately recovered.—*N. O. Journal of Medicine.*

The Counter-Irritation of Cups Increased.—Mr. E. J. Leyburn has invented a cup which increases the efficacy of cupping, as a counter-irritant. The invention consists of an adjustable irritating disk of serrated wood, which by coming in contact with the integument, under the pressure generated, establishes a harmless but very effective irritation.—*Richmond and Louisville Med. Journal.*

On the Action of Aconite and Quinia in Neuralgia.—H. M. Jones, M.D., in the *Medical Press and Circular*, communicates an article on this subject, in which he advocates the use of these remedies, and cites a case in which they acted promptly and gave a speedy recovery. The article concludes by saying that quinine may be used as an adjunct to aconite: 1st. In neuralgia occurring in anæmic or debilitated persons, without any nerve-lesion or exciting cause. 2d. In old cases of neuralgia, where the primary disease has produced a state of the circulation at the part affected not in accordance with health. 3d. In all cases where to a temporary relief we would add permanency of cure.

The Treatment of Hemorrhoids.—The *Medical Press and Circular* publishes an article from J. Mulvaney, M.D., in which he strongly urges the use of belladonna for hæmorrhoids. The first case which he reports was one where the piles were internal and of two years' standing. The tumors were large, protruded, and bled during defecation. The patient was much emaciated, and suffered from general debility, consequent upon constant suffering and repeated hæmorrhages. The treatment consisted in clearing out the bowels with oil, and then in the administration of the fluid ext. of belladonna in two-and-a-half drop doses every four hours, with lavements of cold water twice a day. "In two days the bleeding had quite ceased, and in ten days the hæmorrhoid had entirely gone and did not return."

Another case is reported in which the same general plan of treatment was used in a lady eight and one-half months pregnant, with like success, the cure being completed within a week.

A Novel Case of Rupture of Vagina.—Dr. M. A. Pallen (*Humboldt Med. Archives*) alluded to a case of rupture of vagina before the St. Louis Medical Society, which had been supposed to be uterine hæmorrhage, and which had been arrested by the use of the tampon. Upon examination with a speculum, it was found that the hæmorrhage had not resulted from the uterus, but from a rupture in the wall of the vagina, extending from the right side, near the os uteri, into the posterior cul-de-sac. The lady attributed the accident to a sudden effort, while much excited, in lifting her infant, which had received a serious fall. He proposed keeping the edges of the rent in apposition by the introduction of sutures.

Immunity of the Negro from Sunstroke.—Dr. Boisliniere, a member of the St. Louis Medical Society (*Humboldt Med. Archives*), says, that the peculiar immunity of the negro from sunstroke is, as he believes, owing to the fact of his having, as it were, *two livers*, one interior, the other exterior—his skin. The black pigment deposited there is, in fact, black bile, or the constituents of bile, and this hydrocarbon keeps up that glo-sy, ebony hue. The negro never gets bilious. A large quantity of bile is required to keep him black. Hence, *en passant*, results the fact of the peculiar adaptation of the negro to work in southern countries.

Remedy for Toothache.—Dr. Blake, of London, advocates the following remedy for toothache: Alum, reduced to an impalpable powder, two drachms; nitrous spirits of ether, seven drachms; mix and apply to the tooth.

Gossypium as an Emmenagogue and Parturifacient.—Dr. Bellamy, of Columbus, Ga. (*Atlanta Med. & Surg. Journal*), speaks highly of the common cotton plant, gossypium, as a substitute for ergot; the former he regards as superior to ergot in promoting the various functions of the uterine organs. For difficult, painful, and contracted labors, and in controlling all the irregularities of females, besides alleviating their peculiar monthly sufferings, he looks upon it as a sure, speedy, and safe remedy. If administered during pregnancy, its effects are so powerful as to produce miscarriage. The root should be gathered when it is as old as possible, without being injured by severe frosts; consequently, it should be dug during the months of October and November.

A Depilatory.—For hair that will persist in growing where it ought not, a mild depilatory like the following may answer: Dry carbonate of soda, two parts; quicklime, one part, in powder, mixed with lard, eight parts. —*Drug. Circular and Chemical Gaz.*

Retained Placenta in Abortion.—John C. Pearson, of Ursa, Adams Co., Ill. (*Med. and Surg. Reporter*), in a communication to that journal, recommends the use of the tampon in cases of retained placenta in abortion, it being brought to his notice by reading an article on this subject by Dr. C. B. Suckling, Accoucheur of Queen's Hospital, Birmingham. He reports the last case of retained placenta as illustrating his mode of procedure.

A female, thirty-four years old, miscarried in the fourth month of pregnancy. The after-birth could not be delivered by gentle means, such as traction of the funis, manipulations over the uterine region, and irritation of the os uteri with the finger, and he proceeded to plug completely the vagina. Twenty hours subsequently he returned, and on removal of the tampon, the placenta was lying loose in the vagina, and was removed at once without pain. He concludes that in cases of this kind it is best to introduce the tampon, use some of the "tincture of thyme," and twenty-four hours afterwards the after-birth will be found loose in the vagina.

A Powerful Hypnotic.—Opium combined with hyoscyamine produces the most powerful hypnotic action. Each increases the effect of the other. Morphia and hyoscyamine will—being of themselves insufficient to produce sleep—when combined, speedily induce that condition.—*Med. Gazette.*

Position in the Reduction of Inguinal Hernia.—Dr. J. B. Bond (*Medical Times and Gazette*) mentions several cases of inguinal hernia which he has seen, where, after repeated trials in the recumbent position, he has been obliged to have the patient stand up before the reduction could take place. In fact, he states that he has never failed to effect a reduction in a few minutes with the patient in the erect posture. In femoral hernia, the recumbent position is the best.

A Case of Monstrosity.—R. U. Long, M.D., reports that he was called to attend a lady in her ninth confinement, eight months advanced. An examination revealed a knee presentation. The feet were brought down. In examining the breech, no genital organs could be felt, but a tumor was distinctly made out on the left hip, nearly as large as a pullet's egg, soft and compressible. After the delivery of the breech, something was felt protruding from the vagina. An examination proved it to be the liver of the child and the abdominal viscera, and that the child was neither male nor female, there being no trace of the genitals or rectum. The abdomen was contracted, and the viscera developed on the outside, surrounded by the membrane which had been ruptured. The opening was perfectly closed. There was some deformity of the lower extremities, but the heart, thorax, and upper extremities were well developed.—*Chicago Medical Journal.*

Oleum Morrhuæ in the Treatment of Urina Lactea. —A patient had for some time been afflicted with a condition of the urine which presented an appearance of tea and milk, and a similar consistency. At times there was difficulty in passing water, and after standing for some time it presented a gelatinous-looking substance, and possessed the odor characteristic of diabetic urine. Various remedies were used, but these gave him at best but temporary relief. Cod liver oil was then prescribed, and in a few days the patient's urine regained its normal color and consistency, and retains both until the present time, more than four years.—W. Mason Turner, *in the Western Journal of Medicine, translated from the Portuguese.*

A Case of Long Retention of the Ligatures after Amputation of the Leg.—Dr. A. G. Craig (*Western Journal of Medicine*) reports that a man applied to the Commercial Hospital, Cincinnati, upon whom an amputation of the right leg had been performed nine months before. He stated that the ligatures on the posterior tibial artery had come away in about a month after the operation; but the one on the anterior tibial was still attached. How much longer it remained could not be ascertained, as the case was soon lost sight of.

Dr. W. H. Simon reports (*Western Journal of Medicine*) having removed from over the lower portion of the sacral vertebræ, "a soft ball of sandy hair about

half an inch in diameter." The patient had complained of soreness and pain in this region for nearly ten years, and for some time there had been a sanious discharge from two fistulous openings below the tumor. The fistulous tracts were opened, and the ball of hair was found to be the cause of the trouble. Nothing like the remains of a cyst could be seen, and the periosteum was intact.

Bromine in Diphtheria and Croup.—M. Ozenam, in an article upon the treatment of diphtheria and croup, published in the *Journal des Connaissances Médicales* of Paris, France, claims that bromine has an elective action on the pharynx, the velum pendulum palati, and the larynx. He likewise claims that the agent in question first hardens and then disintegrates the membrane.

As a prophylactic against epidemic diphtheria, Dr. Ozenam administers from ten to twelve drops of bromine in the course of the day in sugar and water, in the proportion of from twenty-five to fifty grammes of the latter per drop. This liquid solution must be kept in the the dark, since light would cause the formation of hydrobromic acid. The vial must be kept well stopped, and its contents must be changed as soon as the light amber color has disappeared. To the patient the solution is administered in drops, hourly, in a tablespoonful of sugar and water, so as to give from one to two grammes of the former in the course of twenty-four hours. In cases of croup, Dr. Ozenam prescribes fumigations of bromine. A basin with hot water is placed before the patient; a large pinch of bromide of potassium or else common kitchen salt is thrown in, and then, in the course of five minutes, three teaspoonfuls of the above bromided solution are added. The patient inhales the vapor of bromine thus evolved through a glass funnel.

Chloroform Locally Applied in Tetanus.—The *Humboldt Medical Archives* mentions several cases of tetanus, which had been successfully treated by a local application of chloroform to the entire spinal column by means of cloth saturated with it, and evaporation prevented by covering the cloth with oiled silk. The application was made just at the approach of a paroxysm. As a result of the application the paroxysm was averted, and the patient fell into a calm and natural sleep. On feeling a returning paroxysm the same application was made, and the paroxysm again averted. For forty-eight hours the occasionally threatening tetanic symptoms immediately yielded to the application of chloroform, and the subsequent convalescence was very rapid.

Alcohol in Mushroom-Poisoning.—Dr. Poulet of Plancher-les-Mines (Haute-Saône), France, has sent in a paper to the Academy of Sciences, to show that alcohol taken in large doses is a sure specific in cases of poisoning by mushrooms, especially by those of the amanite genus. He further states that mere boiling in salt and vinegar is by no means sufficient to render the poisonous kinds innocuous.

Charcoal as an Absorbent of the Salts of Arsenic.—*Mr. Skey* has recently discovered the capacity of prepared charcoal for absorbing salts of arsenic, such as the official arsenic of commerce, from their solutions. If a few drops of a salt of arsenic are put into a few ounces of dilute sulphuric acid, and the mixture agitated with freshly prepared charcoal, the clear liquid obtained by filtering out the charcoal fails to afford any indication of the presence of arsenic by Marsh's test. Tungstic acid he finds to be similarly removed from acid solutions by charcoal.—*London Medical Mirror.*

Pruritus Vulvæ as a Sign of Diabetes.—Dr. T. Gaillard Thomas (*Am. Journal of Obstetrics*) stated before the New York Obstetrical Society, that he had met with five cases of diabetes mellitus coexisting with pruritus vulvæ; the latter he regarded as a sign of diabetes in these cases. The attention of the Society was called to this fact, as he was not aware that it had been mentioned in any publication.

Fluid Extract of Frostwort.—Hubert Primm, Ph. D., Prof. Practical Pharmacy, St. Louis, Mo. (*The Humboldt Med. Archives*), submits for the use of the profession, a formula for the preparation of a fluid extract of frostwort. It is as follows: ℞. Frostwort leaves, 16 oz. troy; alcohol, 16 fluid oz.; water, a sufficient quantity; sugar, 8 oz. troy. The frostwort is reduced to a coarse powder, and macerated in a covered vessel for eight hours, with 12 fluid ounces of the alcohol. Transfer to a suitable apparatus for displacement, and when the liquid has ceased to flow, mix the balance of the alcohol with four fluid ounces of water, and gradually add them to the mass in the percolator until the liquid displaced measures 12 fluid ounces which liquid should be, by aid of a water bath, evaporated to 4 fluid ounces. The marc remaining in the percolator should be treated with one pint of cold water by maceration for twelve hours, and subjected to strong pressure until one pint of liquid is obtained, which should be evaporated to 8 fluid ounces, and mixed with 4 fluid ounces previously obtained, and the sugar dissolved in them by agitation.

This fluid extract has the characteristic properties of the plant, and the dose is readily adjusted, as every fluid ounce represents a troy ounce of the drug from which it is made.

Operation of Iridectomy.—Wm. Dickinson, M. D. St. Louis, Mo. (*The Humboldt Medical Archives*), reports the following operation of Iridectomy: A male, aged 30 years, was attacked with epilepsy, and the paroxysms attained a climax of frequency and severity during the first six months; after which they declined, and ultimately ceased entirely, after a period of twenty months from the first attack.

The mental faculties suffered no observable impairment; but the organs of special sense did not escape so happily. In the right eye, vision was totally destroyed without injury of any of the parts composing the organ anterior to its fundus. The left eye also suffered from extensive corneal inflammation and ulceration. He was treated with benefit at the New Orleans Charity Hospital, and one year later returned to St. Louis, and applied for treatment for an attack of acute corneitis.

By constitutional and local treatment, the absorption of pus in the anterior chamber was secured, the ravages of the corneal ulcer were arrested, and in due time its cure was accomplished by granulation; but in its site a dense leucoma remained. Although the circumferential zone of the cornea, not implicated, regained a good degree of transparency, it availed naught for useful vision, inasmuch as the large leucoma was of such dimensions as to obstruct *direct* vision throughout the entire area of the imperfectly expanded pupil.

The following summary has been synthetically elaborated, viz.: 1st. The existence of a transparent portion of the cornea, of some extent, and also of an anterior chamber; these are known by inspection. 2d. The integrity of the lens and vitreous body; also the integrity of the receptive and conducting power of the retina, Jacob's membrane, optic nerve, &c.—in brief, the visual circle—except the anterior tunic of the organ; *these* are demonstrable by subjective signs.

From these data it is to be supposed that the power of vision remains, but its exercise is prevented by a physical impediment. Vision would return if this obstruction was removed; but this is impossible. Surgical art can yet avail in utilizing some portion of the cornea still transparent, either, 1st, by dislocation of the natural pupil to a position directly behind it, by the operation termed Iridesis, thus leaving the pupillary margin free; or, 2d, by the complete excision of that part of the iris, constituting the operation of Iridectomy. In the case under consideration the latter was recommended and performed. After the operation was completed, by gentle pressure upon the cornea a drop of blood was expressed which had escaped into the anterior chamber. The speculum was removed, the lids closed, and a cold water compress was applied persistently for two or three days. No pain or inflammation was experienced. Inspection on the third day disclosed the fact that the operation had been entirely successful, and that the artificial pupil employed was all that could be desired. The access of an unaccustomed amount of light through it at first occasioned slight photophobia. The hour of the day by the watch was readily distinguished, and in the short period of a week he came alone to the office of the operator, "seeing" and able to read readily fine script in a letter just received. In ten days he was seeking employment, and in two weeks he returned to his former vocation—that of silver plater, where he continued at last advices.

Gangrenous Separation of Intestine.—M. Mazel publishes in the *Montpellier Méd.* of July, a case in which the above-mentioned phenomenon took place. The patient was forty-five years old, had never worn a truss, and was operated on the third day after strangulation. A portion of small intestine in a pretty normal state was returned; and the patient remained in a precarious state until the fourteenth day after the operation, when he discharged what he called a piece of skin. This proved to be a piece of small intestine, and the patient slowly recovered. Both Professor Benoit (of Montpellier) and the operator are in doubt respecting the mechanism of this gangrenous separation of intestine.

Venereal Parasites.—Numerous investigators have, for the last thirty years, endeavored to explain venereal phenomena by the presence of microscopic creatures in the secretions, but no approach to certainty has as yet been made. One of the more recent observers, Prof. Hallier, calls the vegetable parasite which he has found in the above-named secretions "micrococcus," with varieties according to the kind of venereal complaint. He has further, in examining the secretions of glanders, discovered micrococci similar to those observed in syphilitic pus, thus establishing a supposed connection between the two diseases. The value of Prof. Hallier's conclusions must of course be tested by further investigations.—*Lancet.*

Over-distension of the Stomach as a Cause of Death.—Dr. T. C. Finnell recently related the following case before the "New York Medico-Legal Society:" A man, after remarking upon a large meal which he had taken during the day, and which, according to his expression, was "a good breakfast, a good dinner, and a good supper all in one," called for his pipe. While engaged in the usual preliminaries, he suddenly threw up his arms, and with an exclamation of "Oh dear!" expired.—The autopsy revealed literally nothing except a stomach enormously distended with half-digested food. Dr. F. also remembered a parallel case—that of a sailor who had been over-feasted by politicians.

Dr. S. Rogers supposed that death resulted in these cases from pressure upon the heart and large vessels, or possibly upon the solar plexus of nerves. The breeders of canary birds carefully abstain from giving moistened bread to their pets, and pap-fed children were exposed to the same danger of sudden death. Analogous cases among horses and cattle were not rare—the stomach, becoming distended with gas, was relieved by "tapping," and the life of the animal saved.

A New Gas Light.—Bourbouze is the name of a new gas light now used in France. It is reported to be as bright as the oxyhydrogen light, while it costs less. Coal gas, intimately mixed with atmospheric air, is urged by gentle pressure through a tube and passes through a metal plate full of little holes. Many jets are thus formed, which, after being driven through a fine tissue of platinum wire, are lighted. The platinum soon becomes white hot, and so brilliant that the eye can hardly bear it. Thirty-five feet of gas were consumed per hour.

Electro-Galvanic Battery.—A French chemist suggests the following compound liquid for electro-galvanic batteries:—Twenty parts of protosulphate of iron in thirty-six parts of water, seven parts of sulphuric and one part of nitric acid. He declares this to be the most powerful and economical exciting liquid, attacking iron, zinc, and other metals, without any evolution of hydrogen or binoxide of nitrogen.

A Physiological Discovery.—The *Lancet* says: The observations of MM. Cyon and Ludwig, involving as they do the discovery of a physiological fact of great interest, deserve more than a passing notice. These observers believe they have established, on an experimental and sure basis, that one of the cardiac branches of the pneumogastric contains fibres which possess the remarkable power of effecting dilatation of the vessels, and of coincidently diminishing the frequency of the beats of the heart. They propose to call it the *depressor* nerve. A double interest is attached to this, since, if correct, it adds another instance to those already known of inhibitory nervous action, whilst it is opposed to the general proposition laid down by Marey, that the heart beats more frequently in proportion to the diminution of the resistance offered to the discharge of its contents.

The nerve in question springs, in the rabbit, either from the superior laryngeal alone, or from that nerve and the pneumogastric trunk, applies itself to the carotid artery, and runs down close by, but quite distinct from, the sympathetic nerve. It terminates by uniting with branches of the ganglion stellatum, and forming a plexus between the aorta and pulmonary arteries.

Spectrum Analysis made Practical.—G. Hurd, M.D. (*Can. Med. Repertory*), says that spectrum analysis is capable of rendering great service in chemical and pathological inquiries. By means of optical spectra, urine containing blood is easily recognized; in some forms of albuminuria, blood is also seen, though charged with the coloring matter of bile. The blue end of the spectrum is absorbed by highly jaundiced urine, but as the green, red, and orange rays are unaltered, the two bands of scarlet cruorine are easily distinguished. Recent menstrual fluid, when diluted and dissolved, gives the spectrum of scarlet cruorine.

Congenital Imperforate Rectum Successfully Treated without a Cutting Instrument.—J. D. B. Stillman, A.M., M.D. (*California Med. Gazette*), successfully treated an infant, four days old, with congenital imperforate rectum, in the following manner: On exploration, the point of a catheter was carried through a

well formed anus about three-fourths of an inch, when it was arrested. The nature of the difficulty was confirmed by an examination with the finger. A perfect cul-de-sac was felt, the fundus firm, and resisted all the force he thought proper to use. Its depth was about three-fourths of an inch.

The parents were informed that there was not much prospect of saving the child, before commencing the operation.

A passage was first attempted with a No. 12 English bougie; but it was abandoned for fear of transverse laceration of the gut, and a conical-pointed wax bougie, of the size of about No. 6, was pushed in the direction where the upper portion of the rectum ought to be found. This was carried up about two inches, or until resistance ceased. When the instrument was taken out, the color of the meconium showed that he had accomplished the object. The larger bougie was then introduced, and carried up in the track of the smaller one, and, upon its withdrawal, about four ounces of meconium with flatus was discharged. A free passage was afforded, by distension with larger instruments. The vomiting ceased, and the child rallied from the operation. Some months afterward defecation was difficult, but not enough to justify interference, and when three years old it entirely disappeared.

Operation for Laceration of the Cervix Uteri.—In Dr. Thomas Addis Emmet's work on *Vesico-vaginal Fistula*, just published, the following case is recorded: Mrs. T., aged twenty, native of the United States, was admitted into the New York State Woman's Hospital, from Worcester, Ohio, October 2d, 1865. Menstruated for the first time at fourteen, married at nineteen. Labor with her first child began at 8 A.M., Tuesday, March 1st, 1865. She saw a physician on Wednesday morning. At 11 A.M. the membranes ruptured, and twenty-four hours afterward she was delivered by craniotomy. The urine had been allowed to accumulate from early Wednesday morning until after 12 o'clock on Thursday. No slough was passed, but on the third day after delivery a putrid and watery discharge came on; the quantity increased until, within a day or two afterward, the urine involuntarily escaped by the vagina. Menstruation returned three months before admission, and was regular afterward.

Pathological Condition.—A fistula of about an inch in length and half an inch in width, was situated in front of the cervix, and on a line with the vaginal junction a sinus was found, communicating with the cervical canal from the fistula.

The case is of interest in so far as it illustrates the reparatory efforts of nature. Union took place through the lacerated anterior lip from above downwards, bridging over the fissure so as to leave a sinus at the bottom, while the fistula in the base of the bladder remained unchanged.

October 6th.—One limb of a pair of scissors was passed along the sinus, and by cutting through the united edges, the original condition was reproduced. The tract of the sinus was then removed, and the edges of the fistula scarified beyond the angle of the fistula nearest the neck of the bladder, so that the whole could be brought together without puckering the edges at this point. Two sutures were introduced into the neck and six into the base of the bladder. They were removed October 17th, and the case was discharged cured soon afterwards.

Inoculation of Tubercle.—Dr. J. Burdon-Sanderson's investigations concerning the communicability of tuberble by inoculation, confirm the fact of the production in certain rodents of a tuberculous malady in consequence of the inoculation of tuberculous material taken from man, but lend no further help to the interpretation of the fact. In the investigations carried out by Dr. Sanderson, he seeks to ascertain, first, if it be true that the inoculation of tuberculous matter produces in the lower animals morbid changes so constant in their anatomical character and development that they may be regarded as constituting a disease, and, if so, in what terms it could be defined. And, secondly, in what respects the morbid results produced by the inoculation of tubercle resembled or differed from other diseased conditions communicable by the same process, particularly pyæmia, glanders, and syphilis, and to what extent they are comparable with the effects produced by the introduction into the circulation of inert solid matter in a state of fine division. For the determination of the question relating to the inoculation of tuberculous matter, experiments were made on fifty-three guinea-pigs. Dr. Sanderson brings together the following facts "as established with some degree of certainty, and as having an important bearing on the question of the development of the morbid process—that is, on the mutual relation of the several lesions to one another":—

1. Suppuration occurs in nearly all cases under the skin at the point at which the tuberculous material is inserted; and, in most, the suppurative process is propagated to the subcutaneous areolar tissue in its neighborhood. It is, however, not essential to the production of the internal lesions; for in two cases there was no trace of suppuration anywhere around the wound.

2. In every infected animal the lymphatic glands corresponding to the place of inoculation were enlarged; usually there was softening; there was always caseous degeneration.

3. In eight infected animals the lungs were free from disease.

4. The liver was in no instance absolutely healthy, but the lesions were very variable, no less in their nature than in their extent.

4. In one animal the spleen appeared to be of natural size and structure. With this exception, the organ was always enlarged. In many animals there was no apparent change of structure. In others there were new growths, which appeared to consist of overproduction of those elements which the spleen has in common with lymphatic glands.

6. The internal lymphatic glands receiving their tributaries from diseased organs were always themselves enlarged, indurated, and caseous.

The results of the three series of experiments now related afford an answer to the first of the questions proposed at the outset, so far as relates to the species of animal used. They show that the inoculation of tuberculous matter produces in guinea-pigs morbid changes so constant, both in their anatomical character and development, that they may be regarded as constituting a disease; for in all the organs the appearances observed are much less variable than those we are accustomed to find in idiopathic tuberculous disease of man. The true relation of the human disease to its bestial derivative cannot yet be determined.

The second part of the question cannot be decisively answered at the present stage of the inquiry. Anatomically the disease may be defined as primarily an overgrowth of the lymphatic glands, and of those structural elements of other organs which they have in common with the lymphatic glands. But anatomical characters afford no sufficient basis for a definition.

Mr. Simon subsequently asks: "What is tubercle?" This is rather hard upon poor professional nature.

It is not sufficient to be about to be driven from our most cherished notions of the "constitutional" nature of tuberculous disease, and to be called to widen our ideas as to its possible origin in a fashion which might appal the most far-seeing; but we are even to confess our ignorance of the precise meaning of the very word which we are apt to use as the expression of our highest knowledge. It is this questioning, however, which leads to true knowledge, and it is already pushing the mind along paths of the richest promise, if heedfully followed.—*Lancet.*

ANIMAL STARCH IN THE YELK OF EGG.—M. C. Dareste has succeeded in isolating granules of starch from the yelk of egg. The yelks are washed in ether, to remove the greasy matters they contain; this manipulation must be performed rapidly, to prevent coagulation of the albumen; its solubility not being altered, this is removed by washing with pure water. The residue is heated with acetic acid at different times, and during a prolonged period (three months). Towards the end of this time very minute particles are precipitated, which are almost entirely composed of amyloid substance. These particles present the following properties: they swell and burst by the action of sulphuric acid, of potash, or of soda, and they are not attacked by ammonia and acetic acid. They are colored blue by iodine. Under the microscope they present the optical characters discovered by Biot in examining starch granules by polarized light. Finally, when they are digested for several hours in water acidulated with one one-hundredth part of sulphuric acid, they become dissolved, and the solution, freed of the sulphuric acid by carbonate of baryta and filtered, furnishes the reactions of a solution of glucose.—*La France Médicale.*

OPIUM AS A HYPNOTIC.—In an article on "Wakefulness, sleep, anæsthesia," by S. Henry Dickson, M.D. (*Am. Journal of Med. Science*), opium alone is said to be the only hypnotic offered us by nature.

Neither the hop, nor the lettuce, nor belladonna, nor any other so-called narcotic, has this unequivocal soporific quality. They may be useful in some forms of disease, but in *every varied mode of administration*, the familiar degrees of bodily pain and mental distress are overcome by opium, and, consequently, sleep is easily procured in a healthy adult. He recommends the hypodermic injection of opiates, as a great improvement over the ordinary method of administration. Analgesia is not attained, under the ordinary method, in less than from half an hour to an hour; while by injections of morphia into the cellular tissue, pain ceases in from three to eight minutes.

He cannot consent to the common arrangement of opium among stimulants, as this drug has often been administered by him to patients without perceiving the slightest effect upon the heart's action; but, on the contrary, a tranquillizing influence from the very earliest moment was observed.

THE BEST METHODS OF EXPEDITING NATURAL LABORS.—W. H. Davies, M.D. (*California Med. Gazette*), advocates in cases of labor where there is a want of frequency and force in the uterine contractions, rigidity of the os, etc., the following agents: The judicious use of tartar emetic will always be found of service, when the os is dry, hot and rigid, while at the same time the pains are regular and severe, but without advancement of the head. In doses of from one-sixth to one-eighth of a grain every fifteen minutes until vomiting is procured, it will rarely fail to produce free dilatation of the os, regular effective pains, and a copious mucous discharge. The warm cervical douche and Dr. Barnes' water-bags are highly spoken of by him. The cervical douche is always at hand, pleasant to the patient, and easy of application.

Dr. Barnes' bags are always reliable as a powerful dilating agent, but require tact in application. A small-sized bag should be used first, introduced carefully within the os, dilated with water until it becomes wedged, and then allowed to remain until it drops out, when a larger size may be substituted if necessary. The os becomes thick, dilatable, and soft, and the surrounding parts are bathed by a profuse mucous discharge, while the pains increase in strength, regularity, and expulsive power. If the accoucheur is armed with tartar emetic, a syringe, and Dr. Barnes' bags, great credit may be reflected upon the attendant many times, and vast satisfaction afforded to the patient.

ALCOHOL DRESSING TO SURGICAL AND TRAUMATIC WOUNDS.—W. F. McNutt, M.D., M.R.C.S.E. (*California Med. Gazette*), has followed M. Nélaton in the wards of l'Hôpital des Chinques, during the years 1864 and 1865, and found that his wards were nearly free from the heavy, disagreeable odor so common to surgical wards. He ascribes the purity of the atmosphere to the free use of an alcoholic dressing, to the exclusion of all others, to incised and traumatic wounds and suppurating surfaces. Wounds granulate with but very little pus.

Brandy combined with camphor is used by M. Nélaton and diluted to suit the requirements of each case. The camphor would seem to be of very good service as a local stimulant and disinfectant. When alcohol is applied to a recent wound, the soluble albumen on its surface is coagulated, the tissues are corrugated, and the open mouths of the capillary and lymphatic vessels are contracted. The flaps, after amputation, should be sponged with this dressing, before bringing them together, for from fifteen to thirty minutes, and then the best chance for adhering by first intention has been given them. Besides the local effects of alcohol to the wounds, it possesses the advantage of being a stimulant to the general system, by its being absorbed. M. Nélaton's method of applying this dressing is to saturate charpie in the solution, and spread it over the wound. He keeps the charpie covered with oil-silk, and changes it as often as is necessary to keep the dressing wet.

TREATMENT OF LEUCORRHŒA.—John Forman, M.D., of Edinburgh (*Chicago Med. Journal*), treated a married lady, suffering with leucorrhœa, as follows: On examination, the os uteri was found to be of normal size and free of abrasion; the cervix was plugged with an albuminous secretion; the vagina and labia were of a deep red color, excoriated and extremely sensitive. The day after the cessation of her catamenial period a small sponge tent was introduced into the cervix uteri to dilate it so as to admit a syringe freely, when the uterus and vagina were injected with tepid water, and followed with an injection of two grains of nitrate of silver, dissolved in half an ounce each of glycerine and water. Smart uterine pains were induced for about two hours, when it ceased. The vagina was injected daily with tepid water, and a pessary introduced containing two grains of oxide of zinc. Quinine and iron, with phosphoric acid in a bitter infusion, were ordered. The pessaries were continued two weeks. A weak alum solution was injected for two or three weeks when she recovered.

PROTECTION FOR REGULAR PHYSICIANS.—The new law in Ohio, compelling all physicians to suspend practice who have never received regular diplomas, went into effect October 1.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HEEMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA

New York, December 1, 1868.

PATENT RIGHTS IN MEDICINE.

FOLLOWING the remarks which we took occasion to make concerning inventions in medicine, some thoughts upon the practicability of taking out patents for medicines and devices may not be out of place. In attempting the discussion of such a subject, we are well aware of the different opinions that have been expressed by men of high standing in our ranks, and we do not propose in the present article to review the subject in all its detail, but merely to interpret the views of the majority of the medical men in this and other civilized countries concerning the propriety of such a measure.

Every one who has made a discovery, either in the action of a remedy or in the peculiar adaptation of a particularly constructed piece of mechanism, has naturally a desire to profit by it pecuniarily. The only way that this is seemingly done is by a protection in the shape of a patent, which of itself privileges the holder to enjoy a monopoly of its manufacture, or to dispose of rights, at his option, to others for certain pecuniary considerations. With the common artificer who constructs a particular machine or the like, this protection would seem to be necessary as a matter of mere trade, where in pay for such work, which may minister either to luxury or the labor-saving propensities of the age, only a moneyed equivalent is demanded.

In a liberal profession, such as that of medicine, however, the case is so entirely different, that the very arguments which might be used in favor of the mechanic can with equal force be employed against the medical man. The sphere of the physician is such a wide and useful one, that the mere gaining of a few dollars is so secondary as to be left almost entirely out of consideration. He is a humanitarian in the broadest sense of the term, and must not be suspected of restricting the good offices which may be performed through his instrumentality, within the firm barriers of a patent. There is no doubt but that much money can be made if the examples of the ordinary quack or the mechanic be followed, but his must be a higher aim. As a good priest in the healing art, his very calling renders it obligatory for him to sacrifice every new idea upon the common altar of humanity, receiving only in return the consciousness of having performed an agreeable duty. If his discovery is a good one, so much the more gratification he should have in allowing the suffering human family to benefit by it without delay.

No one can urge any possible excuse for obtaining a patent, except that which centres itself solely in the obtaining of money, and he must necessarily be considered as prostituting the talents he may possess. If an inventor be a cheerful giver to his peers, he seeks along with their good esteem the priceless satisfaction of being a benefactor to his race. He rightly concludes, if any discovery in the healing art will gladly be paid for in money by his suffering fellows, its very value to them is the strongest possible reason for him to willingly give it, rejoicing in an opportunity so to do His object should be to do the most good with it in the shortest possible time. Can this be the actuating principle of a patentee who monopolizes its manufacture under protection of the law? Can any single individual, or a limited set of individuals, expect to meet the ready demand for an article throughout the length and breadth of the land? He is virtually forced to acknowledge himself as the merest tradesman, who is only ambitious to extend his facilities for supplying a demand in proportion to the extent of actual money gain that may reward him. But this phase of the question can so readily be settled in the right way by every conscientious man, that it needs no further reference.

Let us throw out of the question the pecuniary element, and we find that the existence of a medical patent is a direct insult upon the judgment of the profession, in that one person or sets of persons presume to be alone competent to manufacture certain articles or apparatus, and are not willing to trust them, except under these conditions, in the hands of their peers. By so doing they throw out of consideration the right which every medical man has to think for himself, and to follow out indications with such modifications as the circumstances of individual cases may admit. Investigation and experiment in a particular line are hampered by prospective infringements; and the holder of the patent by virtue of his office has not only the simple pecuniary profits that may accrue from his invention, but dares to place a more or less complete check upon the developing ideas of his confrères. In the case of patented medicines, the ingredients of a compound are kept secret, and the practitioner who cares to use them must pin his faith upon the absolute competency of the patentee, and content himself to work in the dark, denying himself the practical results of such experience as he may thereby gain.

But the advocates for patent rights hardly dare go as far as this; but, for the sake of upholding what they

consider as a principle, their avowed intention is only protection against the innovations of outsiders. This, however, amounts to no restriction whatever, for the profession only are the legitimate advisers of the sick, and it is presumable that if laymen choose to use our tools they do it at their own risk of damaging the health of those who are foolish enough to employ them. What does it benefit any one who may desire to treat himself, if he has ever such a valuable remedy, or ever such a well-contrived splint or other apparatus, if he is ignorant, as he must be, of the special indications for its use?

By the same class of persons we are informed that the various instrument-makers are really the only ones who benefit by the contrivers of apparatus, and profit by the works of those who may have devoted years to experiment and observation in a particular direction. That this is in a measure true no one can deny; but it is not proved that the said artificers attach any more value to their labors than they are entitled to on the score of mechanical skill; there is no premium upon any particular instrument, extra of the cost of its construction. We are not sure that the physician who may have the liberty given him to manufacture any article for his own uses, might not avail himself of the skill of the instrument-makers to do it for him. These advocates for what are technically called just rights forget that the apothecary who compounds their prescriptions, comparatively speaking, charges a much higher premium for his services, and enjoys an unquestioned monopoly. Very few, if any instrument-makers have a desire to patent any device of theirs, but, on the contrary, are only too glad of an opportunity to publish their invention for the good of all, at the imminent risk of being in a business way injured by the manufacture of the same article by a rival house.

No one denies the right, in the ordinary acceptation of the word, of every originator enjoying the fruits of his labors; but these with the medical man are, as before intimated, not to be paid with the current coin of trade; they should be placed above such a degraded level, and should seek their own reward in the proud consciousness of having contributed something towards mitigating human misery and prolonging human life.

The article referring to this matter in the Code of Ethics is explicit enough in its statement as regards the propriety of holding patents and the like, to satisfy every doubter. We ourselves are convinced of its justice, and are disposed to uphold it, in spirit and in letter, to the extent of excluding every medical man known as a patentee from the privileges of our columns.

We are glad to see that the sick and injured are no longer to be jolted, on their way to Bellevue and the islands, over the broken cobble-stone pavement of Twenty-sixth street, between First avenue and the river. The Belgian pavement is being laid there.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY

STATED MEETING, NOV. 11, 1868.

DR. WM. B. BIBBINS, PRESIDENT, in the Chair.

THE Committee on Microscopy reported that the stricture of the intestine presented by Dr. Mason was due to cancerous degeneration.

AN EXPLANATION OF SUDDEN DEATHS IN INFANTS.

DR. NEFTEL exhibited the brain of an infant, and remarked upon it as follows:—

The specimen I present here, Mr. President, was taken yesterday from an infant, 8 or 10 days old, that suddenly died at Bellevue Hospital with scarcely any symptoms. This is a case that would baffle the medical coroner, if he were called to decide upon the cause of death, especially when there is suspicion of infanticide. There was nothing particular in the external appearance of the child, and all the internal organs were found in a remarkably healthy condition. You are aware, Mr. President, that sometimes, after quite a normal labor, a child can be stillborn, and the post-mortem examination will find no cause for death. The same can happen in the first days or weeks, or even months after birth. The child dies with very obscure symptoms, if any at all, and the autopsy shows no morbid condition of any organ or tissue, and death in such cases is often ascribed to *general debility*. But speaking candidly there is no evidence for such an assertion. We find sometimes a slight anæmia or some hyperæmia of the brain or its membranes, but no changes incompatible with life, and we are, therefore, not justified in ascribing the deaths to any particular cause. In such cases the microscope alone can reveal the real cause of death, and show the enormous changes which have taken place, especially in the white substance of the brain, as can be seen in any microscopical section taken from this specimen. We find accumulations of granule-cells or granule-globules lately described by Virchow, for the explanation of which I must say a few words with regard to the whole pathological process. Formerly the brain and spinal cord were considered as consisting of nothing else but specific nervous elements: ganglionic cells and nerve-fibres. Afterwards Purkinje and Valentin described the epithelium of the ventricles under the name of ependyma, but Virchow in 1853 showed, that besides the nervous elements, there are others belonging to the connective tissue group, which he named *neuroglia*. He showed, moreover, that in the nervous centres, just the same as in every other organ, we must make a distinction between pathological processes affecting the specific elements (parenchymatous processes), and those taking place principally in the interstitial connective tissue (interstitial processes). For instance, what the French call *ramollissement jaune* (yellow softening of the brain), is nothing else but fatty degeneration of the cells of the neuroglia, but not of the ganglionic cells. In cases of stillborn children, or of many of those who died in the early period of life, we find the cellular elements of the neuroglia increased in size (hypertrophy), then increased in number (hyperplasy), and finally undergoing fatty degeneration, so that instead of single cells of the neuroglia, we find in these cases accumulations of granule-cells or granule-globules. In fact, we have interstitial encephalitis and interstitial myelitis,

which explain the cause of death. Virchow found such diffuse interstitial encephalitis and myelitis in the infant, either accompanying constitutional syphilis of the parents or the acute exanthemata, especially small-pox of the mother, puerperal and other constitutional disturbances of the mother. He thinks that in those cases where the infants do not die, this condition of the nervous centres may possibly be the starting point for subsequent idiocy or infantile paralysis. Græfe has lately described a peculiar sloughing of the cornea of both eyes in infants, where at the post-mortem such a diffuse interstitial encephalitis has been found by Colnheim and Hirschberg.

I wish, Mr. President, to call the attention of the profession to this most frequent cause of infantile mortality, so much the more that it cannot be recognized by the naked eye, although it is very easily detected with the microscope, as in the specimen which I present here.

On motion of Dr. Clark, the specimen was referred to the Committee on Microscopy.

ABDOMINAL TUMOR.

Dr. A. Clark exhibited a specimen of abdominal tumor, which was chiefly interesting on account of the difficulty of diagnosis. A gentleman from the interior of the State had been ill for about two years; had lost his color, his strength, and his weight; and his physician had found a very considerable swelling in his left side, and had sent him to New York for an opinion. When Dr. Clark examined the patient it was evident to him that the swelling was due either to disease of the spleen or the kidney. On placing the solid stethoscope in front, and having percussion made behind, he could not get distinctly the sound of the percussion. On placing the instrument in front again and percussing over the spleen, he could get it very distinctly. There seemed to be a continuity of tissue from the region of the spleen down over the mass of the tumor, but it seemed doubtful, by percussion, whether that continuity was from behind forward or not. His first impression, on taking the shape of the tumor into account, was that it might be disease of the kidney, and he so intimated to the friend of the patient. The gentleman was requested to remain in the city for a day or two, to have his urine examined. The examination of the urine gave the following results: *First specimen:* Large uric acid crystals, numerous epithelial scales from the pelvis of the kidney and ureters; blood corpuscles, a few; specific gravity, 1010; and no albumen. *Second specimen:* A few pus and blood corpuscles; hematoidine, uric acid crystals (3 or 4 in a drop); specific gravity 1008; and albumen, a trace. *Third specimen:* A large amount of uric acid; pus in small quantity; epithelium as before; vegetable spores (penicillium glaucum); and specific gravity, 1012.

This examination confirmed his impression of disease of the kidney; but the results of the percussion leaving him in doubt, he dismissed the patient with this statement to his friend, that there was a strong probability that the disease was in the kidney and would be fatal; but as that condition was hopeless with reference to treatment, he thought it advisable to administer quinine in moderately large doses, in case that the spleen might be the seat of the trouble, and that medicine might have some influence.

The patient went home and the specimen was shortly after sent by his physician. Dr. Clark expressed himself as being in doubt, thus far, in regard to the nature of the disease. In the first place, there was a great deal of fatty tissue immediately surrounding the organ, both behind and in front, and he supposed that it was that fatty tissue that formed a cushion, so that percussion could not be sent through the spleen, which was attached firmly to the upper surface of the kidney, and gave the impression of continuity, and also gave a very clear sound when percussion was made over the spleen while the instrument was over the kidney.

He had not made a full microscopical examination So far he had been able to make out nothing but a degeneration of something, which was kept in place by a few fibres. His impression was that it was either tuberculous or cancerous degeneration. He promised, however, a more careful examination.

The other kidney was entirely free from disease, but was somewhat enlarged.

The affected kidney measured ten inches in length, up and down, and five inches and a half in width, from before backward.

FRACTURE OF ODONTOID PROCESS—INFLUENCE OF SYPHILIS IN INDUCING THE LESION.

Dr. Flint exhibited the four upper cervical vertebræ and stomach, accompanied with the following history, prepared for him by Dr. Wm. J. Chandler:

Thomas Gilligan, aged forty-nine, by occupation a bookseller, was admitted to Bellevue Hospital, October 12th, 1868.

The patient was a man of medium size, dark complexion, and moderate strength. His habits of life had been quite irregular; and for the past few years he had made excessive use of alcoholic stimulants. He gave no history of secondary syphilis, but stated that some years ago he had a venereal sore upon his penis. His family history was free from any hereditary taint.

Some time during last summer he first began to suffer from pain in the knee, thigh, and hip of his right side. This pain had been pretty constant, and of late so severe as to keep him from his work.

On admission he was able to sit up, and walk about with the aid of a cane. He preferred, however, to lie in bed upon his back, with his knees drawn up. His countenance was anxious and expressive of suffering. His spirits were depressed and he had a general feeling of illness. He complained very much of pain between the trochanter and crest of the ilium of the right side, also between the trochanter and tuberosity of the ischium of the same side. This pain extended down the thigh and leg in the course of the sciatic and peroneal nerves. There was great tenderness on pressure in the same regions. It gave him considerable pain to walk. Pressure of the articular surfaces of the hip-joint against each other gave him no pain. He was placed upon tonics and anodyne lotions.

October 14th. Patient states that he has a pain in his left thigh and leg, similar to that in the right, but not so severe. *October 20th.* Pain in the left leg disappeared two days ago, and the patient is now up and about the ward. His appetite is pretty good, and his general condition does not indicate any defect of nutrition. There is no point of tenderness along his spine. *Has a hard, immovable tumor over the upper cervical vertebræ, about the size of a walnut.* He says this is *the result of a blow received upon his neck a few months ago.* Urine, acid; contains no albumen or casts. *October 23d.* Patient not as well. Complains of increased amount of pain in the right thigh. Says he cannot sleep at night. Ordered ten grains of the iodide of potassium three times a day. *October 27th.* Complains of severe pain in the back of his neck. This pain is aggravated by motion, and is much more acute than that in his thigh. This evening, while being lifted up in bed, both of his arms suddenly became paralyzed. This paralysis continued for the space of an hour, and then *gradually and entirely disappeared.*

Oct. 28th.—Some time during the night the paralysis returned, for on awaking this morning he found that he had lost the use of his arms. His right arm he cannot move at all, and when directed to make an effort to move the arm, only a very slight motion of the fingers is detected, and of this movement, he says, he is unconscious. The left arm is not entirely paralyzed. He can move the forearm through an arc of 45°, and has strength enough in his fingers to hold the bedclothes with considerable firmness. There is partial anæsthesia over the whole of the trunk and extremities. The surface feels numb, and, if his judgment is correct, this anæsthesia is not equal in different parts of the body, but is greater in the right arm and left leg than in the left arm and right leg. The lower extremities can be drawn up to the body in succession, but not simultaneously, and he is unable to retain them long in the flexed position. He cannot lift his feet from the bed, either when the legs are flexed or when they are at full length. There seems to be a little less power in the right than in the left leg. When lying quiet he complains of pain only in his neck, and says that the pain in his thigh and leg is entirely gone. If he be moved, however, he suffers great pain, not only in the neck, but all over the body and through the extremities. The decubitus is on the back, the head being slightly elevated. The neck is somewhat swollen, and very stiff. The muscles of the neck are apparently in a state of contraction to prevent motion. The mind is clear; there is no facial paralysis or anæsthesia; pupils normal; pulse 102; skin covered with perspiration.

Oct. 29th.—Paralysis of the upper extremities complete. He cannot move a muscle of either arm. If the arms be moved for him he says they give him no pain, unless they be moved so violently as to disturb other parts of the body. He can move the legs as well as he could yesterday, and their motion produces no pain. The mind remains unaffected, and he can talk as well as before. Pulse 130. Sweats profusely. Bladder and rectum not affected.

7 o'clock, P.M.—Very much the same as in the morning except that he has now almost entirely lost the power of motion in his lower extremities. The temperature, which has been elevated to the touch for several days, was taken with the thermometer for the first time to-night, and found to be 104°. Pulse 130. Respiration natural.

Oct. 30th.—Pulse 120, tolerably full, but weak and compressible. Is able to speak, and says he feels very feeble. Some mucous râles in the trachea. No reflex movements excited by tickling the soles of the feet. Death took place at 11.30 A.M. of this date. There was some slight difficulty of respiration observed a short time previous to his death.

Autopsy—twenty-seven hours after death. Brain and its membranes healthy. A hard fibrinous plug in the left anterior cerebral artery.

On seizing the tumor at the back of the neck, and moving it from side to side, a bony crepitus could be obtained. The first, second, third, and fourth cervical vertebræ were removed together, when it was discovered that the first cervical vertebra was dislocated forwards, the odontoid process broken at its point of origin from the axis and carried forward with the atlas. The ligaments between the atlas and axis are much stretched, and there are old ecchymoses in the ligaments and adjacent muscles. The cord was soft, but showed no other marked changes, and the meninges appeared natural.

Heart normal, weight 12 oz.

Lungs.—The upper lobes of both lungs showed fibrous induration and calcareous nodules at the apices. They were also emphysematous. The lower lobes were much congested and contained spots of lobular pneumonia.

The *Stomach* has suffered post-mortem digestion to such an extent that a large part of the cardiac extremity is destroyed, together with the adjacent portion of the diaphragm, so that the contents of the organ were found in the left pleural cavity. These contents were a grumous fluid, with no solid material.

Liver, normal, 3 lbs. 12 oz. *Kidneys*, 12 oz., congested. *Spleen* 7 oz.

The bladder was distended half way to the umbilicus, although a short time before his death he had a desire to urinate, called for a urinal, and passed several ounces of water naturally. There was no dribbling of urine.

It may be added that the attention of the visiting physician was not called to the existence of the tumor on the back of the neck until two days previous to the man's death; at which time the muscles of the neck were too firmly contracted and the pain upon motion too great to allow of a thorough examination.

Dr. Flint remarked that one of the interesting points in the case was the latency of the symptoms referable to the existence of fracture; the patient not even making any complaint of the so-called tumor of the neck until a few days before his death. In answer to a question from Dr. Clark, he stated that death was in all probability caused directly by the accumulation of mucus in the bronchial tubes, which exudation could not be expectorated on account of paralysis of the intercostals.

He believed also, that the temporary paralysis first spoken of in the history of the case, could be explained by supposing the existence of a temporary dislocation of the vertebræ at that time.

POST-MORTEM DIGESTION.

Another interesting feature of the case was the post-mortem digestion of the stomach. He wished to show the specimen as a classical one of its sort, as he was aware that a certain distinguished member had denied the possibility of such a post-mortem change. He had no doubt in his own mind that such cases did occur, and probably with a great deal more frequency than is generally believed. He then referred to John Hunter's cases of post-mortem digestion as being the first on record, but was somewhat surprised that writers upon the subject gave it such a small amount of attention in their works.

Dr. Hamilton believed that there were some cases of fractures of the second vertebræ on record that were due to syphilitic taint. He recollected one in particular, in which a woman suddenly died, and the autopsy disclosed a fracture of the odontoid process, which was clearly proved to be the result of syphilis. In Dr. Flint's case there was no evidence of syphilis beyond the fact that primary chancre existed, and he had the pains of secondary syphilis. The blow was in all probability the provocation of periostitis and osteitis, the predisposition existing in the syphilitic taint. The separation was at the epiphyseal junction of the odontoid process, and did not present the appearance of a fracture from an injury. It looked to him more like the effects of absorption at that point. He did not think it improbable that the malady existed in the body of the bone at the time of the injury.

Dr. Sands referred in that connection to a case reported by Hyrtl of fracture of the odontoid process which occurred quite unexpectedly in a woman while sitting up in bed to receive her allowance of food. Death was instantaneous. It was stated that the bone was found diseased, but no further particulars were given. In regard to the particular case under discussion, he was inclined to differ in opinion from Dr. Hamilton.

The smooth surface of the odontoid could be explained by the length of time that had occurred since the injury; and besides there was a roughness of the transverse process of the axis, which looked very like that produced by a fracture. The articular surface of the third vertebræ was entirely smooth and normal, and looked to him as if there had been a dislocation there as the result of the injury.

Dr. Clark remarked in regard to the other element of the case that he had had some opportunity of seeing cases of post-mortem digestion of the stomach. The case most analogous to the one presented, was one in which the diaphragm was perforated at a point sufficiently high to allow the digestive fluids of the stomach to pass on both sides of the spinal column, so that both pleural cavities were invaded. The pleura on each side, on the lower part of the thoracic cavity, was dissolved, as well as portions of the intercostal muscles. On each lung there was also an erosion, one of these, as he remembered, being about one inch deep. Wherever the fluid came in contact with the tissues, they were dissolved. In another instance one-third of the spleen was dissolved, and the intestines were opened at several places; while in another instance the intestines alone were invaded. These three cases of post-mortem digestion occurred in adults, but in children it was of more frequent occurrence.

Dr. Clark was not aware that any one denied the possibility of the occurrence of this post-mortem change. The effects were so striking that he did not see how it was possible to explain them in any other way than by the action of the digestive fluids upon tissues suddenly deprived of their vitality.

Dr. Rogers remarked that the case referred to by Dr. Flint, as the one concerning which doubts were expressed as to the nature of the change, was one presented by himself, in which a large portion of the stomach was destroyed. The man died forty-eight hours after being seized with convulsions and coma following cerebral apoplexy.

Dr. Hamilton asked if, in Dr. Flint's case, it might not be possible, on account of paralysis of the stomach, that the digestion of the tissues of the organ could have commenced before death.

Dr. Peaslee believed that it was pretty well settled that digestion of the stomach could not take place until after death. All that was necessary in any case, was that there should be at the time of death a sufficient quantity of normal gastric juice in the stomach. The probability was that cases of post-mortem digestion would be more frequently met with if search were made for them.

Dr. Hamilton was fully aware that digestion of the stomach did not strictly occur ante-mortem, but thought that it might be proper to assume that the loss of vitality existing in a paralyzed stomach might prepare it for a more rapid change after death.

MITRAL DISEASE, WITHOUT HYPERTROPHY.

Dr. Finnell exhibited a heart, on behalf of Dr. Knox, taken from a woman twenty-five years of age, who for the last eight years had been suffering from heart symptoms. She was advised to go south and remain there for several years. She returned recently from Savannah, and died on ship-board a few days before reaching port.

The post-mortem examination showed a large amount of calcareous deposit on both curtains of the mitral valve. It was remarkable that such an amount of valvular trouble of the left side of the heart should exist without hypertrophy.

Dr. Rogers presented a specimen for a candidate.

ŒDEMA GLOTTIDIS.

Dr. Sewall exhibited the larynx and part of the trachea of a woman twenty-four years of age, who died of consumption the third day after her confinement, being supposed to be about eight months pregnant. She had been ailing two or three years with phthisis. Dr. Sewall saw her in the last of July for the first time after a year or more. She then had complete aphonia, was very much prostrated, somewhat emaciated, and had extreme difficulty both in breathing and in deglutition. Sometimes the food would find its way into the trachea and induce severe fits of strangulation. Dr. Sewall saw the case when suffocation was quite imminent, and called in Dr. Griswold, who examined the throat with an instrument. He found the epiglottis stumpy, very much thickened, and the parts in the neighborhood extremely œdematous. He proceeded immediately to incise the epiglottis. He tried first Dr. Buck's knife, afterwards the knife of a Parisian inventor, but not succeeding with those he finally accomplished his object with an ordinary thumb lancet. The operation gave great relief, and the patient was able to swallow much better than before, though not enough to nourish her without enemata. The operation had to be performed subsequently, but not with such a good effect as at first. She was enabled, however, to give birth to her child, but sank, and died three days afterwards.

At the post-mortem examination the right vocal cord was found very much eroded. The upper portion of the epiglottis showed clearly the scars of the instrument. The left vocal cord presented two or three small prominences supposed to be due to tuberculous infiltration. The ventricles seemed to be more or less filled with tuberculous material. The lungs were studded with miliary tubercles, and in one organ there was quite a large cavity.

ENCEPHALOID DISEASE OF LIVER.

Dr. C. C. Lee presented a specimen for a candidate, after which he exhibited one of encephaloid disease of the liver removed from the body of a patient who died at the Charity Hospital on the 9th instant. The woman was sixty-two years of age. She had never complained of any hepatic difficulty or abdominal symptoms until four months ago. She then was affected with dull pains in the left side, with a sense of weight and oppression, and in consequence of this was finally obliged to give up her occupation. She had no hereditary history of cancer. When admitted to the hospital (Oct. 15), an examination by the physician then in attendance revealed malignant disease of the liver. She had at that time no emesis or jaundice.

At the autopsy no rigor mortis was present. The body was deeply jaundiced. The abdominal walls were very thin. The lungs were œdematous, otherwise healthy; the heart enlarged and flabby, and contained fibrinous clots in the right ventricle. The spleen was enlarged and softened. The kidneys were the seat of fatty degeneration. Slight effusion in pleural and abdominal cavities. The brain, for want of time, was not examined. The liver was adherent, weighed twelve pounds thirteen and a half ounces, and was studded with cancerous material. Under the microscope these masses presented the characteristic appearance. In conclusion, Dr. Lee remarked that encephaloid disease of the liver seemed to him to be more uniform in its course and duration than any other affection of that organ. He founded this conclusion upon five cases which had come under his notice, in all of which a striking uniformity of symptoms was exhibited.

In answer to a question from Dr. Janeway, he stated that the gall-bladder in the case exhibited was al-

most empty, contained no cancerous deposit, neither was there any in the other organs of the body.

EPIDIDYMITIS.

Dr. Terry exhibited several specimens. The first was the penis and testicles of a man who had had gonorrhœa two months ago, which ran its course in two weeks. All that was left to mark the previous urethral affection was a slight erosion of the glandular portion. This same patient, four days before death, was attacked with double epididymitis. The pain was so intense that he was ordered to take three drops of Magendie's solution every two hours. In the course of ten hours he took two drachms of the medicine, and as a consequence died in a stertorous coma.

The epididymis exhibited the characteristic intense redness of inflammation. No other lesions were found.

ANEURISM.

The second specimen was one of rupture of an aortic aneurism into the pericardium. The patient was 36 years of age, and fell dead while measuring some oysters for a customer. The opening of the artery was in the ascending portion of the arch, just under what was left of the thymus gland. The sac was about an inch in depth. The coats of the artery were very much diseased.

CRANIO-TABES.

The third specimen was a case of cranio-tabes, removed from a female infant found dead in a front yard. The child had evidently been born alive at full time, and all the parts of the skeleton except the cranium were far advanced in ossification. Death had been produced by suffocation.

EFFECTS OF ACUPRESSURE.

Dr. Hutchison presented the carotid artery of a dog that had been closed in its continuity by acupressure. The pressure was discontinued at the end of twenty-four hours, and the artery itself removed twenty-four days after the operation. A quarter of an inch above and below the constriction the vessel was obliterated and converted into a fibrous cord, as proved by microscopical examination by Dr. Stiles of Brooklyn.

He remarked in that connection that during the last twelve months he had acupressed fifty arteries: One in a case of amputation at the knee-joint; two in amputation of the leg; two of forearm; one of the arm, one of the foot; and in several smaller operations. In all these cases, the union was more rapid than when the ligature was applied, and there was never any secondary hæmorrhage. The needles were removed from the radial and ulna in twenty-two hours, from the popliteal in forty-eight hours, while in some smaller vessels thirteen hours sufficed.

Dr. Merritt asked permission to make the following addition to his specimen of enlarged prostate presented at the previous meeting:

After more thorough examination of the bladder and the prostatic region, it is evident that the principal enlargement of the prostate is of the right lobe. There is to the right of the median line, also, a prominence corresponding to the third lobe, which is, however, apparently only a portion of it—the left portion having been obliterated by the causes which produced the extensive false passage to the bladder.

As evidence on this point there is to be seen a band in the median line extending from the posterior terminus of the vera montanum, and attached to the elevated surface of the third lobe, to the right of the median line, which appears as a septum on the urethral passage. To the left of the median line, that is, on the same level and continuous with the left prostatic sinus, will be seen the capacious entrance of a false passage to the cavity of the bladder which burrows beneath the mucous and through the muscular coat along the bas-fond of the bladder to a point opposite the outlets of the ureters, where it enters the cavity of the bladder. This false passage presents the characters of age and use, being lined with membrane corresponding to that of the bladder especially. It is probable that the urine was expelled latterly through this false passage.

The walls of the bladder are greatly hypertrophied and its capacity diminished. The small shot-like bodies found in the cellular sheath of the prostate are undoubtedly phlebolites—one of which was found in the wall of the bladder near the fundus. The left ureter was dilated so as to admit readily the forefinger, and the pelvis infundibula and calyces were so much enlarged as to occupy almost entirely the place of the secretory tissue of the left kidney, which presented a very contracted and lobulated appearance externally. This condition of the left kidney is evidently the result of centric pressure from a protracted retention of urine. The condition of the right kidney was somewhat different, there being much less dilatation of its excretory ducts, but presenting the existence of abscesses and fatty degeneration.

The Society then went into Executive Session.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Adjourned Anniversary Meeting, Nov. 2, 1868.

Dr. E. R. Peaslee, President, in the Chair.

The business left unfinished at the adjourned meeting of 12th October was completed, when Dr. Peaslee addressed the Society as follows:

ADDRESS OF THE RETIRING PRESIDENT.

Gentlemen—Before leaving this chair, which I have had the honor to occupy during the past year—and you will bear me witness that it has always been *occupied*—I should express to you, individually and collectively, my obligations that you have made my official relations to you so agreeable to myself, and my duties so easy of performance.

The present prosperity of the Society is attributable mainly to two agencies, which it may not be improper for me to allude to now:

First. Its *organization* is as admirably adapted to the fulfilment of its objects as I can conceive any similar organization to be. All its ordinary business being transacted by a committee of ten persons, elected specially for that purpose, the attention of your whole body is very seldom diverted, by the discussion of mere business matters, from the legitimate scientific and practical subjects which should occupy us here. I think I may say that not twenty minutes in all have been spent by this Society on business matters, aside from the regular programme for each evening, during the past year. We have all seen, in other similar organizations, how much time is lost in discussing resolutions and parliamentary questions. Some gentlemen seem ever on the alert to find a subject for a resolution, rather than to elucidate a scientific question. I would by no means deprive any one of the privilege all possess in this respect, but it is a privilege every member of a scientific body should be very careful not to abuse. I consider this Society, therefore, a model for all County Societies, so far as its organization is concerned; and in its present condition I think we may regard it as a model also in its working and in its results.

Secondly. The present *spirit* of the Society is such as to insure its success. I say *present* spirit, not because it has changed during the past year, but because I speak from positive knowledge, and an intimate acquaintance with its members during this period. This results in part from the advantage in organization which I have specified; but still more, and mainly, from the character and habits of its members. No one comes here merely to hear himself speak; all come for scientific and practical improvement. And I may say that no reasonable expectations have been disappointed at a single meeting the past year, in respect to the character and quality of the papers here presented. There has been no failure at a single meeting; and some of the papers read have already been highly eulogized in foreign medical journals. During the past year also, about fifty members have been added to this Society; and it has for two or three years past been the largest medical organization in this country, except the American Medical Association.

Under the present influences, therefore, this Society must continue to prosper. But should it get under the control of a clique, or wander from its legitimate objects, from that moment its decadence begins. I trust that personalities may never find their way into discussions here. The provocation may sometimes be very great, but the gentleman and scholar must not yield to it. Science is not a personal matter—not a thing of to-day or to-morrow, or your property or mine—but belongs to all, and for all time to come. Let, therefore, the present spirit remain unchanged, and our exercises from month to month will continue to be worthy of men, the motto of each of whom should be that of this Society—

"Miseris succurrere disco."

A vote of thanks to the retiring officers was passed after which the President declared the Anniversary Meeting adjourned, and introduced Dr. George T. Elliot as President-elect for the coming year.

STATED MEETING.

DR. GEORGE T. ELLIOT, PRESIDENT, in the Chair.

THE PRESIDENT, on taking the Chair, spoke as follows:

ADDRESS OF THE PRESIDENT-ELECT.

GENTLEMEN—In accordance with custom, a short address is expected from the President-elect of this Society, and it is extremely gratifying to me to express my thanks for the honor which has been conferred upon me. It has been spontaneous, unsought, unsolicited, nor had I any knowledge or surmise that such a step was contemplated until I received the official notification of my election.

Such kindness has inspired me with the warmest desire to prove myself worthy of the expectations of my friends, and with the determination that during my year of office, the Society shall not derogate from the high position to which it has been advanced by my predecessors, and by gentlemen well known to you, and within the sound of my voice. For the accomplishment of these aims I ask the cordial cooperation of all, and indulgence for faults which may spring from inexperience in the duties of a presiding officer.

As I understand these duties, they are chiefly—to deal fairly and justly with all; to respect individual rights and susceptibilities, while jealously guarding the time and rights of the Society; to persuade the seniors to lay before you the gathered treasure of their experience; to stimulate the young to condense within the limits of a short paper studies of the same subject published in different languages by observers from different standpoints; to encourage debate, since from its heated atmosphere a flood of light is often thrown on obscure and vexed questions; to develop talent discouraged from lack of appreciation, or clouded by modest doubts; to bring together, in this hospitable and metropolitan city, physicians of education and earnest purpose from all nationalities, as well as those from all the States of our common country, who have cast their lot here with us; to weld together these constituents into a solid, homogeneous mass for the support and pride of our profession; to stimulate by our example our sister County Medical Societies throughout the land—for on the full development of this system of County and State Medical Societies, culminating in the National Medical Association, depends much of the power and influence for good which we can wield for our profession, and for the community in which we live.

Nor can the greatest attainable success in these endeavors conflict with that mutual interest and sympathy which we feel for the other medical societies of our city, working with us for a common purpose. We are linked together for good, and the advance of one must aid and stimulate the rest. It has become essential in this great city for men to test the attainments of their fellows, and study their characters, in these organized meetings. In the village and the town the evils of too great familiarity are often felt. In the great city the tendency is to estrangement. Men engaged in practice, who do not join medical societies, or labor in public positions, or write, or teach, may live without the acquaintance and the sympathy of their brethren. Such professional hermits hide their light under a bushel, though it may occasionally be as well, perhaps, that the amount and character of that light be kept from view.

Nor is the value of these societies limited to the amount of professional knowledge to be derived from their meetings. Prejudices are dissipated, misconceptions vanish, friendships are formed, kindly feelings developed, the hard repelling exterior is often found to mask a strong intellect and generous sympathies, talent is borne to the surface, pretension and sciolism stand exposed.

With such feelings, then, we enter on the sixty-third year since the organization of this society. All but one of its founders have passed away; its archives teem with associations of the past; it is identified with the interests of our profession. God grant that, from the labors of the year, we may reap a harvest of pleasant and profitable memories for the future, that we may do something to encourage and stimulate our successors.

THE PRESIDENT announced the admission to membership of Drs. J. Marion Sims, John G. Perry, Truman Nichols, John H. Griscom, Benj. F. Dawson, Adoniram B. Judson, and Henry Freeman Walker. He reported the death, on the 5th of October, of Dr. John William Shepard, a member of the Society since 1861; and on the 15th, of Dr. Robt. H. Mackay, a member since 1831.

The following standing Committees were announced:

Committee on the Library: Drs. H. Mortimer Brush, Edw. H. Janes, and John Messenger.

Committee on Intelligence: Drs. James Kennedy, Robt. Newman, John Shrady, Wm. B. Lewis, D. B. St. John Roosa, Edw. G. Rawson, Foster Swift, Wm. T. Lusk, and B. S. Thompson.

Committee on Meteorology: Drs. J. P. Loines, Stephen Rogers, Wm. F. Thoms, A. J. Chadsey, and J. C. Barron.

Committee on Diseases: Drs. Henry D. Bulkley, Chas.

C. Lee, Elisha Harris, G. H. Wynkoop, H. P. Farnham, F. N. Otis, Isaac E. Taylor, Fred. Elliot, Wm. M. Chamberlain, Leroy M. Yale.

TREATMENT OF STRICTURE OF THE URETHRA.

Dr. Wm. H. Van Buren read a valuable paper upon this subject, giving the results of his experience with the various modes of treatment in the several forms of stricture. As the paper is to be published, we confine ourselves to a brief abstract.

As organic stricture, when not controlled, often leads to serious and even fatal disease of the whole urinary tract, the ingenuity of surgeons has long been taxed to find means for its prompt and permanent cure. The desideratum is still unattained, though numerous operations have each in turn claimed to meet every case, and won a temporary popularity. Each has its value in certain cases, and these the wise surgeon will carefully discriminate. The *internal incisions* of Reybard are now judiciously confined to strictures near the external orifice, where hæmorrhage is controllable. Syme's *external incision* is an excellent operation, but cramped by mannerism, and damaged by extravagant claims. Holt's *forcible dilatation*, or rather laceration, time has now shown to require periodical repetition. It cannot permanently cure old organic stricture; and this is true of all similar methods. For extreme cases of impermeable stricture, Arnott's *perineal section*, as a last resource, has perhaps too commonly been looked upon as difficult and desperate; with some modifications it should still be regarded favorably.

The absolute cure of stricture, by any method, is exceptional. This it is all-important to remember. A dilating instrument must always be introduced at intervals after the active treatment is ended; the patient must be taught to do it, and must be convinced that it is indispensable. The reports of radical cures have pretty certainly been based upon errors of diagnosis,—errors to which very able surgeons are sometimes liable. For positive diagnosis a series of bulbous bougies is essential.

"For the great majority of (non-traumatic) strictures, especially of those occurring before middle life, the proper treatment is slow and gradual dilatation." This is best effected by conical steel instruments, introduced with the greatest gentleness, every third or fifth day, and left in the canal not more than five minutes. The object is not to dilate the stricture mechanically, but to stimulate absorption, which may go on for a week after the use of the instrument. Too frequent introduction is likely to excite inflammatory action incompatible with this, and may do serious harm. Where a No. 6 sound cannot readily be passed, the French conical gum-elastic bougies are preferable, to avoid the danger of making false passages with smaller steel instruments.

Traumatic strictures—including those produced by caustic—will not commonly yield to this treatment. They are apt to be very irritable, very tight, of cicatricial firmness, and eminently resilient, recontracting rapidly after tedious dilatation. They are not rare; the most common, and at the same time the gravest, cases being those produced by falls upon the perinæum, crushing the urethra against the pubic arch. In these cases, as shown by Dr. Gouley's experiments, the mucous membrane is commonly cut pretty cleanly across; and its cicatrization rapidly occludes the canal.

For traumatic strictures, and for those idiopathic ones which resemble them in induration, we must resort to some of the operations above mentioned.

Reybard's experiments have shown that free longitudinal incision, if kept well open by the sound, will produce permanent enlargement of the canal. Employing Civiale's urethrotome, this is doubtless the best treatment for strictures at or near the orifice.

Holt has proved that the longitudinal lacerations produced by his dilator give results as good, and with less danger, where the stricture is more deeply seated. For such cases, when they resist cure by gradual dilatation and will admit a No. 4 sound, Dr. Van Buren prefers Sir Henry Thompson's dilator, slowly turning the screw to the point of laceration, and enough further to allow the free passage of the largest steel sound which the healthy parts of the canal will admit. To get the full benefit of the operation he sometimes incises the orifice. He sees no advantage in stopping short of laceration, though Sir Henry Thompson lays stress upon this point.

Syme's "external incision," from the perinæum, is best suited to "more aggravated cases, where the stricture, although still permeable, is tighter, or more unyielding, resilient, or irritable; and complicated, perhaps, with irritability of the bladder, false passages, threatened retention, or urinary fistulæ, or with perineal abscess or extravasation of urine, actual or impending." Upon a fine bougie as a guide (those made by Benas, of Paris, and containing whalebone, are the best), a grooved staff is passed down to the stricture. The incision is made in the middle line of the perinæum, and the stricture divided freely, taking care to carry the knife for some distance both before and behind it, which greatly lessens the danger of recontraction. Any further obstacles to the passage of the largest sound are removed, if deep, by laceration, if near the orifice, by Civiale's urethrotome. The scrotum is slung up, to prevent infiltration or abscess. No catheter is left in the bladder, the urine being allowed to escape by the wound; but after the second or third day a large sound is daily passed and immediately withdrawn. The old practice of tying a catheter into the bladder and leaving it indefinitely is very apt to lead to cystitis, perinæal fistula, and consequences even more serious, while "the habitual passage of the urine through the perineal wound does *not* prevent it healing steadily and promptly, by the second intention, provided that there is no recontraction of the stricture," as proved by Dr. Van Buren's experience, by Mr. Syme's, and by the results of lithotomy.

Fortunately the cases are few in which the improved French bougies cannot, with proper skill and patience, be introduced, to serve as a guide to the "external incision." But if an organic stricture is really impermeable, then the operation of perineal section without a guide should be chosen in preference to puncture, whether of the bladder or of the urethra as practised by Mr. Cock. It gives immediate relief, affords the best artificial passage for the urine, and offers the best chance for permanent cure. If disease has destroyed the other landmarks, it is well to seek for the hole in the triangular ligament; and the operator is often greatly aided by the dilatation of the urethra behind the stricture, which may be very considerable. First tap the urethra; then thoroughly divide the stricture or strictures; pass a full-sized sound; and, if possible, avoid tying in a catheter.

Dr. James R. Wood spoke of the serious results of the perturbating treatment of stricture by ignorant manipulators. Every good surgeon in large practice could bear witness to the numerous cases presenting themselves greatly aggravated by this cause.

Strictures were due either to inflammation or to violence; in the majority of cases to the former. Where was the inflammation seated? originally in the mucous membrane; but it soon left this to invade the submucous areolar tissue. In many careful examinations he

had rarely found structural lesion of the mucous membrane. It was simply thrown into folds by the deposit of inflammatory products in the submucous tissue—the real seat of the stricture. The deposit might extend further, often even obliterating the structure of the bulb. His own experience fully sustained the statement in the paper just read, that gradual, progressive dilatation was the proper treatment for most idiopathic strictures; and the above glance at the pathological anatomy showed that this did not stretch the mucous membrane—except when, as rarely, it was itself diseased—but acted simply by stimulating absorption of the newly-formed tissue.

It had lately been his fortune to hear much on the subject of stricture from the lips of some of the men famous in its treatment; and he had come home more than ever impressed with its importance and with the vigor with which it was being worked up. He had found Holt men, Syme men, etc., each advocating an exclusive method. Mr. Syme hardly ever performed anything but external urethrotomy. Mr. Holt, if he could get his dilator inserted, would always stretch or tear the urethra. But his disciples say they do not commonly *tear* it, as shown by the rarity of urinary infiltration,—a fact going strongly to prove the position just taken, that the seat of stricture is commonly outside the mucous membrane.

Referring to some of the operations named, Dr. Wood said he had come into the profession as a pupil of Dr. David L. Wells, who had first in this city, and probably first in this country, performed perinæal section without a guide. He had seen many of his operations, and they were always successful. This was owing largely to two causes. First, he selected his cases; he did not take old, broken-down patients, with the bladder the size of a filbert, the ureters as large as your arm, or the kidneys transformed into huge cysts (for lesions as grave do result from stricture). Secondly, he gave all his patients careful preparatory medical treatment. In this operation, as well as in Syme's "external incision," it was very important to cut in the median line, where the vessels terminate. Following this rule, hæmorrhage would rarely be troublesome. Where the bulb contained much fibrinous deposit, its artery was often partially or completely occluded. After this, as after every operation, the periodical use of the sound must be insisted on. The patient should pass it at least once a week.

He would say a word upon stricture of the prostatic portion. Some denied its occurrence; but the records of Bellevue Hospital would show that, within two years, he had met with three cases, upon all of which he had successfully operated. These strictures were all three traumatic; he had never seen prostatic stricture from gonorrhœa, and it was very rare from any cause.

Internal urethrotomy he had often performed, and would do it again, within three inches of the external orifice; and deeper than this if he could introduce Civiale's instrument beyond the stricture, so as to cut outwards. But to cut in the opposite direction a stricture too deeply seated to be under the control of the thumb and finger he deemed very hazardous.

The "medical surgery" of stricture was too little regarded. A patient would come into hospital passing his urine *guttatim;* he would put him on his back; apply a poultice to the hypogastrium; an ointment of belladonna or stramonium to the perinæum; insert an opiate suppository in the rectum; inject warm oil into the urethra. Presently the oil would flow into the bladder; and, with no surgical manipulation, the man would pass a stream, say as large as a knitting-needle. Of late he had added a little carbolic acid to the sweet oil, having been led to do so by its happy effect on urethritis. Carbolic acid in combination with glycerine he had used in the treatment of clap, with the best results. The medical treatment, then, must not be forgotten. Many a poor fellow had had his bladder punctured, and within forty-eight hours afterwards sent a tolerably good stream through the natural channel.

In conclusion Dr. Wood described an operation which he had for some years been performing, and of which he had seen no mention in the practice of other surgeons. Cutting down, after Syme's plan—a staff being fixed at the distal end of the stricture and a slender bougie being also, if possible, passed into the bladder—he had found that, as he approached the urethra by slow and cautious dissection through the fibrinous deposit, the stricture would gradually yield, until, without entering the canal or wounding the mucous membrane, he could by degrees press the staff on towards the bladder. This mode of relieving the stricture answered to the operation for strangulated hernia without opening the sac. He had repeatedly performed it successfully; he had also repeatedly failed, and been obliged to cut into the urethra, as would always be the case in traumatic stricture, or in idiopathic where the mucous membrane was much diseased. But it was always worth trying, for where applicable it offered the great advantage of rendering urinary infiltration an impossibility. And to such infiltration and the pyæmia consequent upon it were to be ascribed most of the fatal results of perinæal section.

Dr. Gouley, while endorsing Dr. Wood's remarks with reference to constitutional treatment, thought its effects were often overrated. Rest, diluents, opiates, tincture of chloride of iron, were all valuable in their place; but we must rely mainly upon the mechanical treatment proper. This might be summed up in three classes of procedure: 1. Gradual dilatation, for the milder cases. 2. The immediate treatment, for cases more severe. 3. External division, for impassable strictures. Under the "immediate treatment" he included stretching, rupturing, and internal incision. He said *stretching*, because in some cases there was, as Sir Henry Thompson correctly stated, little or no tearing, under the use of his dilator, though actual rupture occurred in the more aggravated cases. He had gained very good results with Sir Henry Thompson's instrument. Internal division he had performed with the urethrotomes of Civiale and Maisonneuve, and with one of his own devising. It was adapted to strictures in the pendent portion of the urethra anterior to the scrotal junction; and Sir Henry Thompson had acknowledged that his own plan of stretching a rupture was not so well suited to strictures here seated. In one case, however, Dr. Gouley had thoroughly stretched a stricture anterior to the scrotal junction, and recontraction had not followed. The doctor gave his experience of Syme's operation and of perinæal section without a guide, agreeing substantially with the previous speakers. Mr. Cock's operation of puncture of the urethra he had also recently performed, and proposed again to try on a patient then under treatment, suffering from a stricture of both gonorrhœal and traumatic origin, and truly impassable. He read, from *Guy's Hospital Reports* for 1866, Mr. Cock's own description of the operation. He regarded it as preferable to puncture of the bladder; as adapted to some cases where perinæal urethrotomy was almost impracticable; and as perfectly safe, if performed with care, deliberation, skill, coolness, and anatomical knowledge.

In conclusion he gave the statistics of forty-seven

cases of severe stricture which he had treated within the last three years; of these 47 cases, 44 recovered and 3 died. In 26 cases the immediate treatment was resorted to, and in 21 cases external division.

All of the 26 cases in which the immediate treatment was employed, were followed by satisfactory results. Of the 26 cases, 13 were treated by stretching and rupturing. Thompson's dilator was used in 6 of these cases. In the 13 remaining cases, internal division was performed with Civiale's, Maisonneuve's, or his own urethrotome. No catheter was tied in, in any of the above cases, and they progressed with scarcely any untoward symptoms.

Of the 21 cases of external division, 18 recovered and 3 died. In 11 of these cases a guide was used; in the other 10 cases the operation was performed without a guide, as none could be passed. There were no deaths among these last 10, the fatal cases being those where the operation seemed least complicated and difficult. In 2 cases a catheter was secured in position for forty-eight hours; urethral fever followed in both of them. In the 19 remaining cases no catheter was tied in, the urine being allowed to flow freely through the perinæal wound; in the majority of these firm union took place within three or four weeks, and in none of them did urethral fever supervene, not even in the fatal cases. The causes of death were, in the first case, erysipelas and pyæmia; in the second, advanced disease of the bladder, ureters, and kidneys; and in the third, thrombosis of the heart. Any other surgical operation might have proved fatal in this last case; the patient died within forty-eight hours after the operation.

In the 21 cases of external division, the following seemed sufficient indications for the performance of the operation: 1. Narrow traumatic stricture in sub-pubic curve. 2. Impassable mixed stricture (traumatic and gonorrhœal). 3. Impassable stricture, with retention. 4. Stricture with retention and extravasation. 5. Narrow stricture, with perineal abscess. 6. Stricture with a perineal fistula, which would not heal after persistent dilatation of the urethra. 7. Stricture which was undilatable, irritable, prone to bleed on the most delicate exploration, and attended with dribbling from overflow. 8. Stricture which, though dilatable to a considerable extent, recontracted very soon after cessation of the use of dilating instruments, notwithstanding that they had been used for a long time ("resilient stricture").

Dr. Gurdon Buck—I see nothing to differ from in the views brought forward by Dr. Van Buren. He has presented the subject in the most judicious and discriminating manner. Regarding perineal section without a guide in the very serious form of impassable stricture, I would mention an expedient which in my more recent experience has proved very useful. It is this:—Pass down to the stricture the largest-sized grooved staff, open at the extremity; then open the urethra anterior to the stricture, and the grooved staff remaining *in situ*, pass your finer instrument into the wound and along the groove, with the aim of striking the narrowed canal through the strictured portion. Approached thus from a different direction, a stricture which may be quite impassable by even the finest instrument introduced by the meatus, will sometimes be found unexpectedly passed. An instrument very useful for this purpose, which we have at St. Luke's and at the New York Hospital, is a staff of flexible silver, as small as can be made with a groove.

Another expedient, not yet noticed, which I have once tried successfully, and intend to try again upon proper occasion—is puncture of the bladder beyond the prostate, through the perinæum. It would be applicable to such cases as Dr. Gouley has spoken of, and my own judgment would prefer it to Mr. Cock's operation, which he described. My case was that of a corpulent gentleman, to whom I was called in haste late at night. He was suffering extremely from retention, and his condition would not admit of delay, even till daylight. He had perineal fistula; irreducible scrotal hernia, concealing the penis and its orifice; phymosis; and impassable stricture. After satisfying myself of the impassable condition of the stricture, and of the impossibility of immediate relief through the urethra, I made a transverse incision, as for the bilateral operation in lithotomy. I carried it on till I could distinctly recognize the prostate in the wound, and define its outlines; and then, carefully noting these, continued my dissection between the prostate and the rectum. This completed, I introduced my finger as far as possible in this corpulent man, and carrying upon it a sharp-pointed knife beyond the prostate and even beyond the reach of my finger, punctured the bladder in the trigone. I was satisfied that this was done, although no urine followed the knife, owing, I suppose, to the falling together of the sides of the cut. A female catheter was inserted, with an ordinary bladder attached to its outer extremity. This relieved the immediate symptoms, and I then took my time to cure the stricture.

Laying open the prepuce, and introducing a sound, I found one or two strictures in advance of the main one. After resorting to every expedient to get through this last, I at length, after five or six months, made perineal section, which proved a very formidable and protracted operation. A catheter was now passed through the whole length of the urethra; and the one which had been in the bladder was withdrawn. The wound healed up with no difficulty; and, finally, the integrity of the urethra was established, and the patient lived for about three years, restored to society, able to retain his urine two or three hours. This case suggests that, by whatever method the integrity of the urethra is restored, we must still look after it during the rest of the man's life. With this patient, the catheter had to be passed every four weeks, or its introduction became difficult. This was kept up until his death, which occurred from some cause having no connection with the urethral troubles.

This operation I consider applicable in cases of impassable stricture accompanied with retention, with great irritability of the bladder, and cystitis. Its great merit is that the bladder and the urethra are put entirely at rest—an immense advantage. We may then take our time to attend to the cystitis and resort to the proper means for curing the stricture.

Dr. Newman dwelt upon the great success which had attended the use of Holt's dilator, in the hands of Mr. McNamara, of Dublin, and his assistants (vide Medical Record, vol. 3, pp. 90—92, Report of N. Y. Pathological Society). But this instrument could be used only for strictures which would admit a No. 3 sound. To dilate closer strictures to this extent we must have other means; and the desideratum had, he believed, been found in the bougies of laminaria digitata. Their great advantage consisted in their effecting the dilatation gradually and yet speedily. These bougies were numbered from 1 to 6. He had used them with success in several cases, even in strictures that had at first seemed impassable. No stricture was really impermeable if there was any dribbling of urine. He would relate a single case. The patient had suffered for several years from stricture. When first seen he was in great agony. A No. 11 sound introduced down to the seat of stricture, established the diagnosis of this as in the prostatic portion of the urethra. The speaker was

aware this was disputed, so would speak definitely. The whole length of the urethra from the meatus to the caput gallinaginis was 7¼ inches. The stricture was 6½ inches from the meatus, 1 inch from the ejaculatory ducts. As the prostatic portion was normally 1½ inches long, he believed this stricture must have been there seated. It might be contended that it was at the junction of the with the membranous portion; but it certainly was not in the spongy portion. A No. 1 sound would not pass through it; but a very slender instrument was passed; then a metallic sound; and, finally, a No. 1 laminaria bougie. In two hours this dilated the stricture from No. 1 to No. 4. The next bougie dilated to No. 5. An intermission of eleven days was allowed, during which the stricture contracted a little; but a No. 3 bougie, left in for three hours, dilated it to No. 8—a better result than he thought possible with any other bougie.

In the use of these bougies two or three points must be attended to. If the lower part of the bougie were allowed to pass into the bladder, this end might be so expanded by the urine as to make its withdrawal impossible. It was essential, therefore, either to varnish the end, or not to let it reach the bladder. The bougie should not be moved, after its insertion, to watch the progress of expansion. This was very irritating to the patient, and when finally taken out, it should be done *at once*. The patient must be kept constantly under your own supervision.

Dr. Howard—One mode of treatment consists not in mechanical dilatation, not in rupture, not in incision—it is not only a different procedure, but it involves a different principle. Sir Henry Thompson calls it "continuous dilatation," but it is not that. Instead of distending the stricture and so producing dilatation that may persist for a shorter or longer period, Mr. Thompson uses a catheter which he insists shall be much smaller than might be readily passed. This he leaves in the canal for two or three days, and then replaces it by a larger one, but still two or three sizes smaller than the stricture would admit. He cures his patient in ten days. The process induced appears to be one of slow ulceration; and if it be so, then it seems to me the cure is likely to be more permanent than by any other method.

Dr. Chadsey related a case of much interest. He had, in 1844, been called a long distance from home to a case of retention from stricture, which was found impermeable. The patient was suffering intensely, and said he could not live till morning. In accordance with the heroic treatment of the time, he was bled a quart; but the stricture continued obstinate. An injection of warm oil into the urethra had no better effect. Having in his carriage a galvanic battery—the Pike's battery then commonly in use—the doctor determined to try its effect. Cutting off the end of a gum catheter, he passed it down to the stricture; and through this as a guide and insulator he introduced a knitting needle, which was made one pole of the battery. In twenty minutes after the current was applied, the stricture gave way; the patient was relieved, and finally made a full recovery. Dr. C. had pursued a similar treatment in some three cases since.

Dr. Gouley remarked that the last speaker might claim priority by several years in the electrolytic treatment.

Medical Items and News.

The Brooklyn Eye and Ear Hospital.—This hospital is situated on the corner of Washington and Johnson streets, Brooklyn, L. I., in a central and healthy locality. It is open daily for patients from 2 to 4 o'clock P. M. The building is well adapted for an institution of this character, and undoubtedly two adjoining houses will soon be brought into requisition, and connected with the main building by covered galleries, on account of the increasing demand for new wards for patients, who are from time to time operated upon and allowed to remain until cured.

In the first quarterly report ending July, 1868, the following facts are noted: Four hundred out-door patients were relieved during three months following its opening, beginning April 15, 1868; of which number two hundred and ninety-five were afflicted with diseases of the eye, and one hundred and five with diseases of the ear.

Patients suffering with catarrhal ophthalmia, granulations (trachoma), keratitis, and ulcer of cornea, amounted to twenty-five per cent. of the whole number of eye cases treated. Nine persons were relieved from blindness by surgical operations done in the wards.

Cases of chronic inflammation of middle ear, with or without perforation, and obstruction of Eustachian tube, comprised about fifty per cent. of the ear cases treated.

The Medical Officers are as follows: *Surgeons*—C. R. Agnew, M.D., D. B. St. John Roosa, M.D., E. G. Loring, M.D. *Assistant Surgeons*—A. Mathewson, M.D., H. G. Newton, M.D., O. M. Pray, M.D.

Long Island College Hospital.—After the recent changes made in the faculty of this institution, it is composed of the following gentlemen: Frank H. Hamilton, M.D., Professor of Surgery; Samuel G. Armor, M.D., Professor of the Principles and Practice of Medicine, Pathology and Clinical Medicine; Corydon L. Ford, M.D., Professor of Anatomy. E. S. Dunster, M.D., Professor of Obstetrics and Diseases of Women and Children; George W. Plympton, Professor of Chemistry and Toxicology; Benjamin Howard, M.D., Professor of Operative and Clinical Surgery; Wm. T. Lusk, M.D., Physiology and Micro-scopic Anatomy; Andrew H. Smith, M.D., Materia Medica and Therapeutics.

Infant Mortality.—In the Vienna Medical Society, says the 10th June number of the *Allg. Med. Central-Zeitung*, Professor Skoda brought forth some really fearful statistics of the foundling hospital in that city. From 1784 to 1866, 434,687 infants were received in that institution, of whom there died before their tenth year 315,323, about 78 per cent. What is more, so far from decreasing in later years, this mortality has been actively on the increase. From 1853 to 1866, the admissions were 127,183, of whom 101,922 have died, therefore *more than* 80 per cent.—*Phila. Med. and Surg. Reporter*.

The International Convention for the Care of the Wounded in Battle.—The following additional clauses are to be added to the code adopted by the International Convention of August 22, 1864, for the care of the wounded in battle. The articles were adopted at Geneva, Switzerland, during the past month.

Article I. The military hospital ships having on board the sick or wounded of the naval force which they accompany are protected by neutrality. This neutrality will cease if the said hospital ships have a military force beyond what is required for carrying out the police regulations of the service, or should such vessels have on board war material or provisions foreign to their equipments.

Pending and after an engagement, the small craft, which at their own risk and peril receive the drowning and the wounded and convey them to a hospital

ship, flying a white ensign with a red cross, shall enjoy, while fulfilling their mission, such neutrality as the circumstance of the combat and the position of the ship engaged will allow them to observe. The humanity of all combatants is appealed to to observe this clause.

Article 2. The staff of the chaplain and hospital department belonging to a captured vessel are to be declared neutral. Members of these respective staffs, on leaving captured vessels, are entitled to take with them any articles or surgical instruments which are their own private property.

Article 3. The medical and other officers named in the preceding article shall continue and fulfil their functions on board the captured vessel, and shall assist in removing the wounded of that vessel, but they are at liberty to return to their own country as soon as the captor sees his or their services superfluous.

The stipulations of the additional clause two of the convention are applicable to the treatment of the said officers.

Article 4. Floating hospitals are not protected by neutrality unless sick or wounded men are on board, independent of the crew.

Article 5. A hospital ship, transporting wounded or sick on board vessels of whatever nation, and also trading vessels appointed for that purpose by either of the belligerents, and having exclusively wounded and sick on board, are protected by neutrality; but the simple fact of having been subject to inspection, which must be notified in the ship's log, by a hostile vessel of war, will render the wounded and sick incapable of serving pending the duration of the war. If such trading vessels had cargoes not contraband of war, the belligerents shall preserve the right of forbidding them to hold any communication with or give any direction to the enemy, which they may consider detrimental to the secrecy of their operations

Article 6. The sick and wounded sailors and marines on board, whether friend or foe, will be tended by their captors. The Commander-in-Chief will take the first favorable opportunity to effect the return to their country of the non-commissioned officers, either sailors or marines, wounded or sick, who have been made prisoners of war. This measure will also be extended to officers, unless the captor considers their retention more advantageous. The wounded or sick thus liberated cannot carry arms again during the war.

Article 7. The distinguishing flag to be hoisted with the national ensign, to indicate a vessel or any small craft claiming the privilege of neutrality, according to the principles laid down in this convention, is to be a red cross on a white ground. Belligerents may test the genuineness of the claim to neutrality by any steps they may deem proper.

Article 8. Hospital ships fitted out by benevolent societies and all persons thereon employed must fulfil the following conditions to be considered as neutral, and respected and protected by the belligerents:—They must be provided with a commission, license, or safe-conduct from their own sovereign, authorizing their employment as hospital ships, and also furnished with a document from the responsible naval authorities of some port, stating that such ships are under their control during their fitting out, departure, and return to that port, and that they have been employed solely in the service for which they were destined. These ships will be recognized by flying, in addition to their national flag, a white ensign with a red cross. These ships will aid and assist the wounded and shipwrecked of both belligerents, without distinction of nationality. They may not impede in any way the movements of the combatants. During and after the battle, they will fulfil their mission at their own risk and peril.

Belligerents will have the right to control and visit these vessels. They can refuse the neutrality, can order them to leave the station or detain them, should the nature of the circumstances require either of these steps to be taken.

Shipwrecked and wounded persons received on board these vessels cannot be claimed by either of the belligerents, and they will have to guarantee not to bear arms again during the war.

THE HEALTH OF EUROPE.—The *Journal de Médecine* of Paris, commenting on the general state of health in Europe, mentions that at the present moment there is not a trace of any epidemic on that continent. The predominant element is that of rheumatic catarrh. The inflammatory and congestive diseases that predominate during the great heats give way to affections less decided in nature and slower in progress, that attack more especially the serous surfaces and mucous tissues. If eruptive fevers are less frequent they will give place to typhoid affections of generally a moderate character, intermitting fevers of a more or less decided nature, and erysipelas.

THE VALLEY OF ZERMATT, SWITZERLAND.—A new place for American invalids has been discovered. It is the Valley of Zermatt, Switzerland. The mountains thereabouts (the Riffleberg, the Corner Grat, Rosa, etc.) can be climbed, it is said, with great benefit to consumptives and dyspeptics.

HIGH HONORS CONFERRED ON DISTINGUISHED MEN.—At the late meeting of the British Medical Association, held at Oxford, the six honorary degrees of D.C.L. were conferred upon the following gentlemen: Sir Charles Locock, Bart., M.D., F.R.S.; the Rev. S. Haughton, M.D., F.R.S.; W. Withy Gull, M.D.; James Paget, T.R.S.; John Simon, F.R.S.; James Syme, F.R.S.

New Publications.

A TREATISE ON PHYSIOLOGY AND HYGIENE, FOR SCHOOLS, FAMILIES, AND COLLEGES. By J. C. DALTON, M.D., Prof. Physiology, College Physicians and Surgeons. New York: Harper & Brothers. 1868.

THE OPIUM HABIT: with Suggestions as to the Remedy. New York: Harper & Brothers. 1868.

THE SCIENCE AND PRACTICE OF MEDICINE. By WILLIAM AITKEN, M.D., Professor of Pathology in the Army Medical School, &c., &c. Second American from the Fifth Enlarged and Carefully Revised London Edition, with Large Additions, by MERIDITH CLYMER, M.D., ex-Professor of the Institutes and Practice of Medicine in the University of New York; formerly Physician to the Philadelphia Hospital, &c. Vol. II.

A TREATISE ON THE DISEASES OF THE EYE, including the Anatomy of the Organ. By CARL STELLWAG VON CARION, M.D., Professor of Ophthalmology in the Imperial Royal University of Vienna. Translated from the third German Edition, and Edited by Charles E. Hackley, M.D., Surgeon to the New York Eye and Ear Infirmary, Physician to the New York Hospital, &c.; and D. B. St. John Roosa, M.D., Clinical Professor of the Diseases of the Eye and Ear in the Medical Department of the University of the City of New York, Member of the American Ophthalmological Society, &c. Second American Edition. New York: W. Wood & Co. 1868.

ANTHRACITE AND HEALTH. Second Edition, enlarged. By GEORGE DERBY, M.D., University Lecturer on Hygiene in Harvard University.

Original Communications.

SINGULAR MALFORMATION AND ANATOMICAL DEFECTS OF LOWER EXTREMITIES.

By LOUIS BAUER, M.D.

BROOKLYN, NEW YORK.

Among the congenital anatomical defects of the body, those of the lower extremities are of comparatively rare occurrence. They are not even mentioned in the respective works of Cruveilhier, Von Ammon and Vrolick. Roberts alverts to one instance, viz., the case of Duval, in which the fibula was wanting. The two cases recorded by Bilroth in the "Archives of Chemical Surgery," Berlin, 1860, are as isolated as they are interesting, from the diversified anatomical defects.

During a long orthopædic practice I have only met with three cases of this description. The first I incidentally saw in Indiana. The parents of this child, as well as the rest of the children, were of unexceptionable form. This child was then eighteen months old, and presented quite a combination of deficiencies. There was congenital hydrocephalus, inducing idiocy; double hare-lip with cleft of the hard and soft palate; both forearms and hands, legs and feet were defective in form and anatomical components.

The second was a little boy of five years. One extremity was deficient in the fibula, malleoli, calcaneus, and astragalus; it moved at random, and was useless for locomotion.

The third case, that of a boy now ten years old, is certainly the most remarkable, and I desire to call the special attention of the reader to its peculiarities.

With the exception of the lower extremities there are very few children who possess a greater perfection in form, development, and robust health than the subject in question, and his intellectual endowments are far above the average. He moves with an astonishing agility and velocity; and accomplishes leaps from which an ordinary child would shrink. Of course all his movements were carried out on hands and knees.

(FIG. 1.)

The adjoining illustration (Fig. 1), taken fifteen months ago, is a very correct representation of his condition.

First it will be noticed that the right foot articulates upon the lower end of the femur; rather more posteriorly, so as to leave the anterior portion of the epiphysis free. At this place the integuments are somewhat wrinkled and thickened from constant use in locomotion. With the exception of the gracilis, which inserts at the internal margin of the foot, the rest of the muscles of the thigh loose their insertion at and in the capsular ligament of the knee. The lower end of the femur is somewhat flattened and its lateral dimensions slightly increased. There is no patella, not even a fragmentary substitute. The foot occupies the femur a rectangular and strongly adducted position, its toes pointing towards the other limb. Its movements are free in every direction except abduction, prevented by the shortening of the gracilis muscle, which can be directly traced to the foot. Volition is consequently limited and seems to be exercised through the capsular ligament. The foot is anatomically very defective; the astragalus, calcaneus, fourth and fifth metatarsal, fourth and fifth toes being absent. The large toe bears no semblance to its type. The ligamentous connections between the remaining bones of the foot are rather loose, hence there is no dorsal nor plantar arch. Standing on his knees the foot glides backwards and the femur comes in contact with the floor.

The left extremity, as will be seen, presents a different anatomical character. The knee-joint is perfect, and so are its movements. There is the ordinary insertion of the quadriceps femoris at the protuberance of the tibia; the patella and its ligament are slightly lessened in size. Equally normal are the insertion of the inner hamstrings at the tibia; but the biceps tendon spreads over the capsular ligament and tibia. The protuberance of the tibia is greatly enlarged from constant kneeling, and the integuments at this place correspondingly thickened. The tibia, as already stated, is fragmentary, being about two-thirds of its normal length. There is no malleolar enlargement at the lower end, but in front it is slightly increased, obviously from contact with the floor. The fibula is absent. The muscles of the leg do not present the ordinary contours, and are evidently imperfectly developed, the circumference of the leg being disproportionate to that of either thigh. The muscles of the leg do not continue down to the foot, and probably terminate in the capsular ligament of the tibia-pedal articulation.

The left foot presents similar anatomical defects to the right; is equally removed from volition, but occupies a diagonal position to the tibia, the heel being in front and inwards, and the toes turned outside and backwards; the large toe is very unlike its prototype, thin and longer than the remaining two, and from its three phalanges has some resemblance to a finger.

This was the anatomical defect of my handsome little patient, when I first saw him, some two years ago.

I need not state that I warmly sympathized with the family, and felt very desirous to render the most appropriate and conservative surgical assistance.

Amputation above the right knee-joint had been suggested as one plan of meeting the difficulty, and the reluctance of the parents may well be imagined to give their consent to so hazardous a procedure. Fortunately the

case admitted a milder treatment, feasible in its ulterior practical result, and with less jeopardy to life.

(FIG. 2.)

At the right extremity I divided first the adductor muscle inserted at the internal margin of the foot; this allowed the vertical position of the latter, all I deemed

(FIG. 3.)

necessary to accomplish a useful stump for the application of an artificial limb.

At the left extremity I resorted to a modification of Syme's method, in disarticulating the foot, which could serve no practical purpose. The flap had to be formed from the anterior integuments. The bone was sawn off above the lower epiphysis; the periosteum, having been spared, was subsequently drawn over the free end of the bone and united by suture.

In the expectation of a speedy union by first intention, and rapid recovery, I was painfully disappointed. The little patient experienced intense pains in the stump for weeks, which did not subside until a small fragment of bone had been thrown off.

I presume that the pain originated in subperiosteal inflammation and suppuration, which might have been averted by not procuring periosteal covering. There was likewise a moderate sloughing of the flap; but sufficient was left to cover the stump. Thus the healing of the wound was rather protracted, eventuating, however, in an excellent bulbous stump. Fig. 2 represents this condition of the patient.

Six months after the operation, artificial limbs were applied, by means of which the little fellow walks most admirably, ascends and descends hills and staircases, without inconvenience or support. In fact few would suppose from the gait that my patient walked by artificial means. (Fig. 3.)

A CASE OF

EXCISION OF THE UMBILICUS, FOR THE RELIEF OF UMBILICAL HERNIA.

By R. G. BOGUE, M.D.,

SURGEON TO COOK COUNTY HOSPITAL, CHICAGO, ILL.

In the MEDICAL RECORD, vol. I, page 73, may be found a paper, entitled "A New Operation for Umbilical Hernia," with report of a case, by Prof. H. R. Storer, of Boston.

From his case it would seem that excision of the umbilicus, or of a pouch of the umbilicus, is feasible for the prevention of strangulation of the intestine, which may occur, and is the only operation that would be warranted in a case of strangulated umbilical hernia, occurring after ascites has existed for a long time, rendering the pouch large, and the opening into the abdominal cavity pretty free.

The following case illustrates, not only the practicability of the operation, but its necessity in certain cases:

Regina Schodder, age 25, German, unmarried, was admitted into the surgical wards of Cook County Hospital, July 31st, 1866, at 4 P.M., giving the following history:—When nine years old she suffered for about a year with pain in the hypogastric region. The pain ceased, and with the exception of transient attacks of rheumatism, affecting the lower extremities, her health was good until she was eighteen years of age. The pain then returned, and continued with more or less severity for about five years, at which time symptoms of ascites commenced. The dropsical effusion has never entirely disappeared, although at times it was nearly removed. Soon after the discovery of ascites a protrusion was noticed at the umbilicus. It gave no particular annoyance, for it was not painful, and was easily pressed back by the fingers, or would disappear when the patient was lying down. She was under treatment about two months for the ascites; and, as the effusion subsided, she noticed a small tumor in the right iliac fossa. She was now able to resume her work, which she continued for about a year. During this time both tumors gradually increased in size, causing her some inconvenience and distress. In September, 1865, the dropsical

accumulation became worse, her general health declined, and the tumor at the umbilicus became quite large, but she continued her work until the morning of the day of her admission to the hospital. Menstruation had been entirely absent for two years, and previous to that had been very irregular for two or three years.

In the morning of July 31st, 1866, she was seized with severe pain in the abdomen, followed by vomiting. Symptoms on admission: Severe pain in the abdomen, referred mostly to the umbilical region, where there is an enormous tumor lying upon the abdomen, frequent retching and vomiting, bowels constipated, urine scanty, with frequent desire to pass it, respiration 30, pulse 96, small and feeble. The tumor lying across the abdomen, at the umbilical region, is nine inches long and five inches thick, attached to the abdomen at its middle by a pedicle which is one and a half inches in diameter and about half an inch long, allowing the tumor to be rolled or slid, and raised up from the abdomen, except at the attachment on pedicle. The tumor is heavy, firm, and looks like a rubber bag filled with fluid laid upon the abdomen, or perhaps more like a huge hydrocele, if it could be placed in that locality. It is dull on percussion. Its pedunele on base is slightly resonant. The abdominal cavity is very much distended with fluid. In the lower part of the abdomen can be felt the outlines of a tumor, which was thought to be ovarian, but the abdomen was distended so much by the fluid that a satisfactory examination could not be made.

The tumor at the umbilicus was evidently filled with fluid from the abdominal cavity, and a knuckle of intestine was caught in the opening, for none of the fluid could be forced out of the sac. This fact, taken in connection with the urgent symptoms of strangulated hernia, rendered it more than probable that the location of the strangulation was at the umbilical opening, for it will be remembered that the sac could heretofore be entirely or partially emptied by pressure, when the patient was lying upon the back.

This view of the case was concurred in by Prof. J. W. Freer, who saw it with me. A small bistoury was introduced into one end of the sac, and finding that it contained fluid, an incision was made sufficiently large to allow the fluid to escape; about twenty-five ounces of clear serous fluid were discharged. A pretty firm mass could now be felt at the neck of the sac, and after a little manipulation a portion of it was felt to recede into the abdominal cavity, leading us to suppose that the gut was liberated. It was nearly midnight, and, the patient seeming relieved, it was decided to postpone any further interference until morning. She was given an anodyne and left for the remainder of the night.

August 1st. Patient has slept but little; vomiting has increased; no discharge from the bowels; complains of tenderness about the umbilicus. An injection was administered, but no fecal matter obtained. The general condition is much the same as yesterday, but the symptoms of intestinal strangulation are more urgent. She was now chloroformed, and the umbilical pouch was laid open freely, and found to contain about six inches of intestine strangulated in the neck of the sac. The gut was somewhat discolored. It could not be replaced by manipulation, by what seemed to be a warrantable amount of force. The strangulating band was divided upward in the median line with a probe-pointed bistoury. The intestine was thus liberated and readily returned into the abdominal cavity. The umbilical opening by which the sac communicated with the abdominal cavity was sufficiently large to admit the index finger quite easily.

The question now arose as to what should be done with this opening and pouch. Here was a large sac, opening freely into the abdominal cavity, lined with thickened peritoneum, with no probability of adhesion of the surfaces at the neck to obliterate the opening; owing to the dropsical effusion it would certainly be kept open, and the patient would be liable to a recurrence of the same accident. The only procedure which seemed feasible was excision of the pouch at its neck, so as to secure early union of the edges of the wound, thereby preventing any further accident in that locality. To effect this, an elliptical incision was made on either side of the neck of the pouch, extending through the abdominal wall, leaving an opening, the edges of which could be evenly applied to each other.

This excised mass weighed four and a half ounces. About seventy ounces of fluid escaped from the abdomen. A hard tumor could then be felt in the hypogastrium, resting upon the brim of the pelvis. Exploration with the finger through the opening proved the tumor to be free posteriorly and laterally, but adherent in front. It was firm and symmetrical, and being held by the abdominal muscles upon the brim of the pelvis, it was not moved by manipulation. The wound through the wall was not large enough to admit the hand for free exploration, and I did not feel warranted in making it any larger simply for that purpose. Yet I now believe it might with propriety have been done, as an additional couple of inches for the length of the incision would not have increased the danger of the patient. I, however, supposed it to be a fibrous tumor attached to the fundus of the uterus, and therefore left it unmolested.

The wound in the abdomen was closed by interrupted sutures, which were introduced through all of the tissues, except the peritoneum; cold-water dressing was laid upon the wound, and a band was applied around the body. The patient reacted well from the chloroform and the operation, and was placed under the moderate influence of opiates; pulse 106 per minute.

August 2d. Patient has rested very comfortably during the night, having taken only two-thirds of a grain of morphia; has vomited twice; pulse 96; respiration 26. She feels very comfortable, but speaks only in a whisper; has drunk a cup of tea, and taken some beef-tea. An injection was administered, which moved the bowels freely, giving her a good deal of relief. In the afternoon she drank some milk with relish, and passed urine freely. In the evening the pulse was 90; tongue a little dry. A little fluid leaks out through the wound.

August 3d. Rested very well through the night; pulse 90; has taken milk for nourishment. In the evening she was thirsty and a little feverish; pulse 104; has some distress in the abdomen; was given an injection, which operated freely; gave one-third grain morphia, to be repeated if necessary.

August 4th. Pulse 80; appetite poor, but has taken some beef-tea and milk; has passed urine, and the bowels have moved naturally. At evening, pulse 96; complains of a little tenderness of the abdomen; has some nausea. Was ordered morphiæ sul. gr. ¼ bis. subnit. gr. vj., every six hours. Up to this time fluid has escaped from the wound, but now the edges are a little swelled and seem to be adherent, so that none escapes.

August 5th. Patient very comfortable; pulse 96; appetite fair; bowels have moved.

August 6th. Rested and slept well all night; appetite good; has no pain; wound united; removed the stitches and applied long adhesive strips across the abdomen. From this time she improved steadily without any unfavorable symptom until August 11th, when

symptoms of pleurisy of the right side supervened, which became fully developed, with a copious effusion, quite filling the right pleural cavity. There was also some increase of the effusion into the abdominal cavity. The wound was perfectly healed.

August 18th. She was transferred to the medical side of the house, where she received the usual treatment for pleurisy; and in the course of two or three weeks she was fairly convalescent. There was quite an accumulation of fluid in the abdomen, and the tumor became quite movable and evidently unconnected with the uterus. It was now supposed to be a fibrous tumor with a long pedicle, attached probably to an ovary or to the broad ligament.

During the latter part of September it was decided to remove the tumor, and a day was appointed for the operation; but during the day and night preceding, there was a renewal of the pleuritic symptoms.

From this time she gradually failed in flesh and strength; her respiration was difficult; there was œdema of the lower extremities, and the abdomen was very much distended. But at no time was there any protrusion at any part of the wound. It was evident that the incision had thoroughly united in its whole depth. About the middle of December an abscess pointed just above the right breast. When opened it was found to communicate with the right pleural cavity, and a large quantity of pus was discharged. Pus continued to flow from this opening. She gradually declined, with an increase of the ascites, œdema, and dyspnœa, until January 20, 1867, when she died.

Sectio cadaveris forty hours after death: Body emaciated and anæmic; face and lower extremities œdematous; abdomen very much distended.

Thorax: Left lung normal; right lung contracted to a mass not larger than the fist, and bound down to the vertebra by a thick layer of fibrin, which also lined the pleural cavity; this cavity contained about a pint of pus, and communicated with the surface by an opening between the second and third ribs. Pericardium normal; heart weighed eight and a half ounces; along the free border of the tricuspid valves were a few vegetations; the mitral valves were thickened and contracted, with the ventricular surfaces covered with vegetations; the aortic valves were thickened and retracted; at each of these openings existed not only obstruction to the blood current, but also regurgitation. The liver on the right side was crowded up as high as the top of the fourth rib. The abdominal cavity contained about five quarts of serum. Liver rather large and congested; spleen congested; kidneys fatty; intestines healthy; bladder normal; uterus small; both ovaries were in the early stage of cystic degeneration.

Attached to the right broad ligament by a slender pedicle, six inches long, was a large hard tumor, very nearly round, measuring five inches in diameter, and weighing two pounds and five ounces. There was an omental attachment upon the anterior and upper surface of the tumor.

This tumor was made up of white fibrous tissue. It looked as if composed of an innumerable number of tumors adhering together in one globular mass, resembling not a little a large "pop-corn ball."

The track of the wound where the operation had been made was perfectly united, the peritoneal surface was even, the edges firmly united, although the sutures were not passed through that membrane. It is probably immaterial whether the sutures include the peritoneum or not, the surfaces will be held in apposition if the other structures are brought together. They probably would cause no harm if they did penetrate it. Yet it is not entirely essential that they include it.

This case shows conclusively that the operation of excision of the umbilicus is appropriate to certain cases, and that the line of incision is just as capable of resisting subsequent pressure from ascites as any other part of the abdominal wall.

224 Ontario Street.

A CASE OF

OVARIAN DROPSY CURED BY TAPPING THROUGH THE VAGINA.

By HIRAM CORLISS, M.D.,

OF GREENWICH, WASHINGTON COUNTY, N. Y.

Mrs. M., of Saratoga, aged 53, first felt in 1863, a disagreeable sensation in her right inguinal region. It continued in that place for about one year. She next discovered a small tumor the size of a nutmeg in the affected region, and this continued, but very slowly, to increase.

In the course of the three years following the tumor increased sufficiently to occupy nearly the whole abdominal cavity. During the whole of this time she experienced no pain in the swelling.

Her catamenia were regular until October, 1866. Her bowels for years had been habitually constipated. I was called to consult in her case with Dr. Preston, the family physician, on the 16th of December, 1867.

I appointed another visit on the 20th, but her suffering was so great they sent for me the next day, the messenger saying she could live but a little time without relief. On the 18th I visited her again with Dr. Preston. At this visit I tapped the swelling through the vagina with a long curved trocar, and drew off five quarts of a dark brown liquid.

After only a few moments she became perfectly comfortable. I then told her that it would probably fill again within a few weeks. On the 9th of January, 1868, I was sent for again. I tapped her the second time, drawing off four quarts. The contents of the cyst were less dark, but extremely fetid.

The patient from the last tapping commenced to improve in her general health, which had previously become very much impaired.

After the second tapping I introduced a good-sized silver canula, to allow a persistent and free drainage. For a number of weeks we continued to inject frequently a weak alkaline solution through this tube.

The opening into the sac in this way of operating being in the most dependent portion of the tumor, allows the freest exit for all of its fluid contents, and the method, for this reason, gives to the operation a decided advantage over all others. With this advantage I believe success in the cure of ovarian dropsies by injections may be as general as in hydrocele.

The discharges for a few days were very fetid, but soon became less so.

The canula accidentally came out after being in eight weeks, but the discharge continued five weeks without it, and then entirely ceased for one week; then about one gill was discharged. The discharge at this time continued about three hours and then ceased entirely, and there has been no filling or bloating since. I saw her on the 22d of September. She said she was as well as she had been for years.

I have not reported this case before, as I have desired to give it a chance to return, but now, after so long a time has elapsed, I think it may be considered both a perfect and a permanent cure.

Original Lectures.

REMARKS ON ACUPRESSURE:

A RESUME READ BEFORE THE NEW YORK MEDICAL JOURNAL ASSOCIATION, DECEMBER 11, 1868.

By L. WEBER, M.D.,

NEW YORK.

We are indebted to Sir James Y. Simpson of Edinburgh for the introduction of "acupressure" as a means of arresting surgical hæmorrhage, although the credit of its bold and extensive application pre-eminently belongs to the surgeons of Aberdeen. The latter have published accurate descriptions of the different modes of acupressure which they have heretofore employed, and have also given us valuable statistics of the results of their experiments.

Primary union of wounds has always been one of the chief objects in operative proceedings, and any new mode of treatment, brought forward on the strength of sound and successful trials and likely to help in gaining that much-coveted result, will be gladly welcomed by every progressive surgeon. For instance, we all recollect how rapidly the metallic sutures have come into universal favor. When we consider the impediments to the primary union of wounds, it appears that the use of ligatures to the vessels is very prominent amongst them. There being no necessity for their employment in plastic operations, we have in these, as a rule, union by the first intention.

Arterial ligatures prevent the primary union of the lips of wounds in two ways:

1. Each ligature acts, itself, as a foreign body placed between the opposed sides of the wound; and, when composed of silk or other organic material, it rapidly imbibes animal fluids into its substance, which speedily decompose and render the threads poisonous and irritant agents to the contiguous tissues. In other words, each arterial ligature produces, like a seton, suppuration along its track. Suppuration, however, and all the higher grades of inflammation, are locally antagouistic to adhesive inflammation or primary union; and tend to impede and subvert those processes of cohesion which constitute union by the first intention.

2. Ligatures inevitably set up, at all the ligatured points and ends of the tied arteries themselves, more than adhesive inflammation—namely, ulceration, suppuration, and mortification. For at the point of deligation every ligatured artery has its two inner coats mechanically torn through by the thread, and its outer coat strangulated by it; and before the separation of the ligature can be effected, it requires to cut through the strangulated tube by a process of ulceration and gangrene. As a consequence, there are set up, in the immediate vicinity, the processes of inflammation and suppuration; and the part of the arterial tube embraced in the noose of the ligature constitutes a small slough, as well as the strangled end of the artery below the ligature, except in instances in which this isolated end is preserved from death by adhesion to the contiguous surfaces. If two, four, or six arteries, therefore, are tied in a surgical wound, then, in consequence of this deligation, there exist two, four, or six points of destructive ulceration and sloughing in the depths and walls of that wound. And, of course, complete primary adhesion of its sides becomes an improbability, or rather an impossibility.

All the best surgical pathologists acknowledge this ulceration and sloughing as the inevitable result of the ligature of arteries. The dead tissue is thrown off in small slough-masses; to a considerable extent, also, it seems to be melted down and discharged in the form of disintegrated ulceration molecules. Mr. John Bell already, when treating of the effects of the ligature of the artery, says: "The part of the artery below the ligature is destroyed like a polypus, fades and dies; and it is the fading of the lower part thus *mortified* that allows the noose of the ligature to slip off." "Every surgeon knows," observes Mr. Spencer Wells, "that the part of the artery beyond the ligature *must be killed* by it, and that a piece of sloughy tissue cannot do any good when confined among the living tissues of the body." Guthrie, Brodie, Erichsen, Velpeau, Nélaton, and others also describe the portion of every artery isolated by the ligature as killed, and requiring to slough off. The authors of three of the latest and best works on Systematic Surgery—Professor Gross, in America, Chassaignac, in France, Miller, in England—concur in the statement that the portion of the artery embraced by the ligature *mortifies* and comes away in the form of *a slough*. We cannot hope for any decided improvement in the treatment of wounds, and we cannot expect primary union to be frequent in them, till we have attained some means of arresting hæmorrhage without strangulating or sloughing the ends of the bleeding arteries. For the accomplishment of this object other simpler and safer means than acupressure may, and probably will, be discovered; but in the mean time it has been found capable of occluding wounded and cut arteries without lacerating them, as the ligature does, without sloughing their extremities, and without leaving any foreign bodies in the wound after the vessels are occluded.

Acupressure is founded upon the general pathological principle that, whilst silk and other organic ligatures excite irritation and suppuration when they are buried in the living structures of the body, there is, on the contrary, *a tolerance of metallic bodies by the living tissues*. To occlude a vessel, needles require, as experience has amply shown, to be retained for a few hours, or a few days at most; and further, when passed with this view across the mouth or tube of an artery, they merely place the internal surfaces of the vessel in close contact, without lacerating its two internal coats, without isolating the vessel from its attachments, and without strangulating, ulcerating, and mortifying the constricted portion of the vessel, all of which injuries are produced by the ligature. The needles are withdrawn as soon as it can safely be done, so as to leave ultimately no foreign body whatever in the wound. Ligatures cannot be withdrawn, till, after days or even weeks, they have ulcerated and sloughed through the tied vessel.

The instruments required for the employment of acupressure are of the simplest kind. Long needles, headed with glass or sealing-wax, to allow of sufficient pressure in introducing them; short common sewing-needles, threaded with iron wire or with silk, and loops of very slender wire-thread of four or five inches in length. The pins and needles employed should be soft-tempered, so as to bend rather than break, should be flat, sharp, spear-pointed, round in the stem, and of various lengths. Gold-plated needles will hinder any gumming between the wire and needle, and so facilitate the withdrawal of both. They are, therefore, preferable to others. The surgical instrument-makers, Tiemann & Co., of this city, make very good acupressure needles.

Up to the present time we have seven methods of applying acupressure:

The First Method (Simpson's) may be quickly and easily performed by placing the left forefinger or thumb against the mouth of the bleeding artery, sending the needle from the cutaneous surface through the whole thickness

of the flap, and causing it to emerge a little to the right side of the tube of the vessel; the projecting end is then pressed firmly against the walls of the artery, made to re-enter the flap close to the left side of the vessel, and pressed on till it emerges on the surface of the skin. In this method the artery is compressed against the component parts of the flap, or in some cases it may be conveniently pressed against a neighboring bone. The portion of the needle within the wound is very small; and in many cases the needle may be passed higher up, so as to compress the artery without emerging on the wound-surface. Prof. Wm. Pirrie, of Aberdeen, has adopted this modification in many of his most successful cases, and by so doing has not left any foreign body, even for the shortest time, within the wound.

The Second Method (Simpson's) is performed with a needle threaded with twisted iron wire. Here the skin is not interfered with, and the needle is passed above instead of below the artery. The needle is pushed twice into the soft tissue of the wound. The first point of entrance is at a little distance from the artery to be acupressed, and the first point of exit close to it The second point of entrance is close to the vessel on its opposite side, and the second point of exit at a little distance. Between the first point of exit and the second point of entrance the needle is made to bridge over the artery; and care must be taken before making the needle re-enter the wound, to press it down sufficiently to close the vessel. The needle can be removed at pleasure by pulling the twisted wire. Pirrie has often used this method in acupressing vessels of moderate size, but never for an artery in a major operation.

The Third Method (Simpson's) requires for its performance a threaded needle and a loop of inelastic iron wire; and consists in effecting compression between the needle below and the loop above the vessel. The needle is entered a few lines to one side of the vessel and pushed behind it, and caused to emerge a few lines beyond the vessel; the loop of wire is thrown over the point of the needle, brought over the track of the artery and behind the stem of the eye-end of the needle, drawn sufficiently to shut the vessel, and fixed by half a twist around the needle. It is important, in the performance of this method, to avoid including an unnecessary amount of tissue; not to draw the wire tighter than is absolutely necessary to close the artery, lest its coats should be lacerated; to arrange the wires so as to prevent wriggling or entanglement; and to relieve the vessels from acupressure at the earliest moment deemed advisable. This is done without the slightest difficulty: by pulling the twisted wire the needle is removed; and the loop, being liberated, is easily withdrawn.

The Fourth Method (Simpson's) differs from the third inasmuch as a long pin is substituted for the threaded needle, and should be preferred in all cases where the form of the wound and the position of the artery admit of the head of the pin being conveniently kept without the wound. For the pin is inserted with greater facility; it is more easily withdrawn; and all entanglement of different wires is avoided. According to Pirrie's experience the third and fourth methods are as efficient means of arresting surgical hæmorrhage as could possibly be desired. The principle of both is precisely the same.

The Fifth, or Aberdeen, Method, or Method by the Twist.—As to the priority-claim to the invention of this method, it is conceded by the Aberdeen surgeons that Prof. Simpson used this method early in the history of acupressure in cases operated upon by Dr. Handyside and Mr. Edwards; but he had published no account of it when the same method occurred as a perfectly original idea to the mind of Dr. Knowles, formerly House-Surgeon to the Aberdeen Hospital, who suggested it without the knowledge that it had been devised by Simpson. Prof. Pirrie tried it, for the first time in the Aberdeen Hospital, on June 29, 1864, in an amputation of the thigh, where the femoral artery was secured by this method, and successfully.

The Aberdeen twist—the favorite practice with the surgeons there—may be performed with a long pin or a threaded needle; but the former, when admissible, is greatly to be preferred. It consists of three steps. In the first step, the pin is inserted on one side of the bleeding artery, then pressed onwards a few lines in the same direction as the length of the vessel, and its point caused to emerge on the surface of the wound. In the second step a quarter rotation is given to the instrument so as to place it above the artery and press it well down against the small portion of tissue between the instrument and the vessel. In the third step, the pin is secured, and the twist retained, by sending the point into the tissues beyond the artery. Pirrie says that a quarter rotation is invariably sufficient to arrest the bleeding; and considers, of all methods of acupressure, the fifth the simplest, the easiest, the quickest, and, so far as experience in the Aberdeen Hospital warrants an opinion, perfectly efficient. Besides its simplicity and efficiency, this method promises two other advantages—in Pirrie's opinion of the greatest importance for obtaining immediate union—the one, that there can be but little molecular injury or straining of tissues; the other, that by the gentlest twirl and traction, the pin can be easily withdrawn, with extremely little, if any, discomfort to the patient. The latter advantage is of very great importance, when we know how slight a degree of pain is apt to cause involuntary contractions of muscles in an amputation-wound, and how certain such contractions are to separate parts of the internal surfaces of the wound, thereby rendering union by the first intention impossible. In this method the artery is to a certain extent twisted as well as steadily compressed. *It is no part of the fifth, or Aberdeen method by the twist, to transfix the artery;* on the contrary, great care is taken to avoid doing so. It is important to be aware of this circumstance, that there may be no confusion between this method and the sixth, in which the artery is transfixed.

The Sixth Method, or that by the ring, was suggested by Dr. Keith, of Aberdeen, and requires for its performance a long pin and a loop of passive iron wire. This method seems to me a repetition of Simpson's fourth method, with this difference, that the pin is inserted in the same manner as in the fifth method, on one side of the mouth of the artery, and, with or without transfixing it, caused to emerge about two lines or so beyond the mouth of the vessel. No rotation is made, but the vessel is secured with the wire-loop, according to the fourth method. It has been found extremely serviceable in perpendicular wounds, where the artery has been cut short, and also in wounds containing a bleeding vessel not sufficiently accessible to be acupressed by the third or the fourth method.

The Seventh Method requires for its performance a long pin, which is inserted twice on the surface of the body, precisely in the same way as the needle is inserted on the surface of the wound in the second method. It consists in passing a long pin through the cutaneous surface pretty deep into the soft parts, at a little distance from the vessel; pushing it on, causing its point to rise up as near to the artery as possible, bridging over and compressing it; dipping the needle into the cutaneous surface on the other side of the vessel; forcing it on, and causing the pin to emerge a second time on the skin. The artery is compressed between the bone

and the middle portion of the pin in front of the integument. Pirrie has published one case, in which he acupressed the brachial artery by this method with the most gratifying results, on account of a wound in the upper part of the forearm, attended with great hæmorrhage.

How is an acupressed artery plugged and occluded? This question has been satisfactorily answered by Dr. Keith, of Aberdeen, in the report of the inspection of the body in a case of amputation that terminated fatally. G. Lauchlan, a railway porter, 18 years of age, had his left foot crushed to pulp by the wheel of a loaded wagon having passed over it while lying on the iron rail. The leg was amputated a little below the middle, and four arteries were stopped by the fourth method. The pins were removed 48 hours after the operation, and not a drop of blood followed. On the third day he had a severe rigor, followed by great prostration, and on the sixth day he died. The autopsy, 24 hours after death, revealed the evidence of acute phlebitis in the saphena major vein of the injured limb. The kidneys were greatly injected and friable. The flaps of the stump were easily separated; no coagulum was in the wound. The mouths of the anterior tibial, the peroneal, and the posterior tibial arteries lay open to view. Their ends were abrupt, solid-looking, not much retracted, nor in any degree contracted, but filled up by organized fibrine or lymph, as solid to the look, and almost as much so to the feel, as the coats of the vessels. The vessels were dissected out together, and showed, on trial, perfect occlusion at the cut ends. On slitting the vessels from above downwards, the following observations were made: The peroneal artery was firmly plugged at its cut end, for a quarter of an inch, by a colorless fibrin-like tissue, indissolubly united to the lining arterial coat. No conical continuation of the plug extended further up that vessel. The anterior tibial was, in like manner, completely occluded; the vessel, when slit up, revealed a short conical continuation of fibrin, pointing upwards, its further progress having, no doubt, been hindered by two small branches, in close proximity, passing off from the main vessel just above the tip of the clot. The posterior tibial was very effectually closed by a well-plugged mouth, and inside by a conical extension of the plug upwards for fully half an inch; the tissue composing it was slightly tinged with blood, the plug and the cone being one and the same mass. The vasa vasorum had evidently maintained the vitality of the arterial coats, so as at once to commence the vital and healing process of exudation of lymph at the cut ends, all the more readily that the cellular attachments around had never been disturbed.

As to the time required for the needles to remain before they may be withdrawn without any risk of secondary hæmorrhage, much more investigation and practice are necessary before this question can be answered with absolute certainty. The different surgeons who have tried acupressure, have been guided in this respect by their own judgment, by the special conditions of the cases they had to deal with, and by the previous experience of others. A period of twenty-four hours seems to be sufficient to occlude any smaller-sized vessel, although in almost all the capital operations in which acupressure was employed, the needles were not withdrawn before forty-eight hours or more had elapsed.

Let us now turn to a brief review of cases where acupressure alone was used to control the bleeding vessels.

Dr. Greig, of Dundee, was the first surgeon who trusted entirely to acupressure in a case of amputation of thigh, and with perfect success (1863). The Aberdeen surgeons followed in the year 1864, and have practised it ever since. Of the earlier cases on record, I will mention the following:

1864 AND 1865.

1. Amputation, of thigh, by Mr. Brown, of Carlisle, in an emaciated subject, 50 years of age. All the needles removed 48 hours after operation. Primary union.

2. Amputation of upper third of thigh for traumatic and spreading gangrene, by Dr. Handyside. Two needles removed after 24, two after 49 hours. No hæmorrhage.

3. Amputation of thigh, by Mr. Crompton. Subject, a phthisical young man, aged 20 years, upon whom circular amputation in the lower third of the thigh was performed, on account of compound comminuted fracture of both tibia and fibula. The femoral artery was acupressed, and two muscular branches were twisted. Needle removed after 70 hours; no hæmorrhage at the time, but it occurred two days afterwards. The needle was at once reintroduced, a little higher up, and the bleeding thus completely arrested. That same day slight symptoms of phlebitis had been noticed. Shivering and vomiting soon followed, and the patient died of pyæmia on the tenth day after the operation. Mr. Crompton expressly states that distinct pulsation could be felt going on along the artery, down to the very point of compression by the needle, at the time of its removal. The lesson taught, therefore, by this interesting case would be, that so long as the arterial pulsation may be felt close to the needle, as can always be done immediately after its insertion, we may regard it, in any doubtful case, as an indication that perfect consolidation and permanent occlusion have not yet taken place, and that the time for the withdrawal of the needle has not yet arrived.

4. Amputation of thigh, by Mr. Page, in a boy 5½ years of age. Needles withdrawn 24 hours after operation; hæmorrhage. The flaps were reopened, and the femoral again secured by the third method. 69 hours after the introduction of the needle, it was withdrawn without any bleeding whatever; and within five weeks after amputation the wound was quite closed and healed. In this instance the needles appear to have been withdrawn too early, although there are other cases on record in which the needles were withdrawn within 24 hours, and no hæmorrhage followed.

1866.

The following cases were operated upon by Dr. Keith of Aberdeen:

1. Amputation of leg, flap-operation, in a boy 14 years of age. Three needles were used, and removed after 48 hours. Union by the first intention.

2. Amputation of thigh, flap-operation. Mrs. D., aged 29. Four pins with wire loops were used. The pin compressing femoral artery was removed 124 hours after operation; no hæmorrhage. Wound healed in 18 days.

3. Fore-arm, flap operation. Peter I., 54 years of age. Two pins were inserted without wires. Union by the first intention.

4. Amputation of leg, flap-operation. G. Lauchlan, 18 years. Four pins with wire loops were used. No hæmorrhage. Pyæmia. Death.

5. Amputation of thigh, flap-operation. George R., 12 years. Five pins with wire loops were applied. The patient removed the pin securing femoral artery himself, 4 hours after operation; no hæmorrhage. Wound healed in 19 days.

6. Amputation of arm, circular operation. Man 45 years of age. Five pins were used No hæmorrhage after their withdrawal.

7. Amputation of arm, flap-operation. J. G., 27 years, laborer. Four arteries were acupressed. Pin compressing brachial artery removed on the fifth day. Successful.

Dr. P. H. Watson, of Edinburgh, relates nine cases of acupressure, three of which died, one in consequence of peritonitis, another of shock, and the third of pyæmia.

Dr. R. Macnamara mentions four cases of successful canpressure, in a paper read before the Surgical Society of Ireland.

Dr. McGregor reports a case of amputation below the knee, necessitated by phagedenic sloughing of the leg in typhoid fever. The tissues were so soft and friable that it was found impossible to get hold of the posterior tibial; it gave way under the forceps, or after applying the ligature. A common darning needle was passed over it, and at once arrested the hæmorrhage successfully.

Aneurisms, too, have of late been successfully treated by acupressure instead of ligature; but I must confine myself to simply mentioning the fact, time not permitting me to go into the details of this operation.

Aside from its use in capital operations, acupressure is very valuable, because perfectly efficient and easily applied in all minor operations, especially in cases of wounds and other injuries. Every one knows how annoying it is to be obliged to dress wounds over again, owing to secondary hæmorrhage. For the last two or three years Dr. J Dunlop, police-surgeon in Glasgow, has been using acupressure in all kinds of wounds, and has not had a single instance of secondary hæmorrhage. Simpson's first method is generally sufficient to control all bleeding in such cases. I can myself testify to the complete safety of treating wounds in this manner. Ever since I have been acquainted with Simpson's invention I have employed acupressure in all wounds where smaller vessels required to be stopped. I have used it both in private and in hospital practice, and have completely arrested the bleeding from such vessels as the occipital, temporal, frontal, external maxillary, radial, and some of the branches of the radial and ulnar arteries in the tissues of the hand and fingers, and also the anterior tibial in its lower portion. These vessels I acupressed by Simpson's first method, or by the fifth method (Aberdeen twist). The other methods I have not had any occasion to try. I feel assured that, in the treatment of all superficial wounds, acupressure is not only the most simple and expeditious, but the most effectual method of arresting bleeding, and of putting the wounds into the best condition possible for healing by the first intention. I fully agree with Dr. Dunlop, that for wounds of the scalp or where the skin is tough, a spear-pointed glover's needle is better than the pin with the glass head; for unless the pin is retained for twenty-four or thirty hours, the forceps will be required to withdraw it; and the glass head, instead of an improvement, would be found a disadvantage. On the removal of the needle the thread is to be left to form a scab, and support the adherent edges of the wound.

Prof. Pirrie, of Aberdeen, appears to have practised acupressure more extensively, and in a greater number of important cases, than any other surgeon. In a paper which he read last year before the British Medical Association, in Dublin, he states that he has had 51 important cases, in which alone he has acupressed 185 vessels. His cases are of a highly diversified character—many of them among the most important in the practice of surgery—and are admirably fitted to test the efficiency of acupressure. He invariably employs it, and so also do Mr. Fiddes and Dr. Keith.

Now, two final questions:

1. Is acupressure a perfectly reliable means of arresting surgical hæmorrhage? Pirrie maintains that in his 51 recorded cases, in numerous minor operations, and in all accidents where he employed acupressure, there was not a single instance of failure to arrest the hæmorrhage. Dr. Keith and Mr. Fiddes have met with the same experience. Out of upwards of 800 vessels acupressed by these three surgeons, in 2 only has hæmorrhage occurred on the discontinuance of pressure. Even without the valuable experience of surgeons elsewhere, the evidence furnished by the surgeons of Aberdeen appears to prove that acupressure is a means which can be entirely relied upon for the arrest of surgical hæmorrhage.

2. Does acupressure accelerate the healing of wounds? In other words, are perfect examples of healing by the first intention, that is, examples where not a single drop of pus is seen, more readily attainable under acupressure than under deligation? This appears to be the great question to be determined, because, although acupressure, like deligation, is a perfectly reliable hæmostatic, and has some other advantages which make it preferable, yet its final general adoption or rejection will no doubt depend, in the main, on the decision arrived at by surgeons on this important question. The use of the ligature, as we have stated above, is attended with an insuperable obstacle to obtaining perfect examples of union by the first intention, or by primary adhesion without the formation of some pus. The suppuration excited at the point of ligation and in the track of the ligature will surely prevent primary union, so that no perfect example of it can be obtained in any case where the ligature is used.

Pirrie is convinced that acupressure accelerates the healing of wounds; and that under its use, aided by metallic sutures, by the avoidance of all dressing, and by perfect rest of the wounded part, the largest surgical wounds, after major operations heal up directly, without a drop of pus, in many instances. Out of his 32 cases of acupressure in major operations, including 7 amputations of the thigh, 15 cases healed at least by the first intention, or more than 1 in 3. Of his first 8 cases, 1 completely united by the first intention, and without a drop of pus. Among his last 24 cases, 14 completely united—above 1 in 2. It is certain that no surgeon, employing deligation, has ever met with such marvellous success as Pirrie has attained by the use of acupressure.

There are, finally, some other advantges which acupressure has over the ligature: 1. A briefer sojourn of a foreign body in the wound. 2. The foreign body, being metallic, is of a less irritating character. 3. Acupressure is the easiest of performance, and the quickest, of all methods of arresting hæmorrhage. 4. The needle is removable at pleasure, instead of after a tedious process of ulcerative destruction and more or less suppuration. 5. The comfort which the patient enjoys from knowing that, so far as vessels are concerned, all further interference and suffering are at an end. 6. The diminished risk of the occurrence of pyæmia, owing to suppuration not being an inevitable consequence of this mode of arresting hæmorrhage. It is a remarkable fact, that as yet there has not been a single instance of pyæmia in any case where acupressure has been employed by Pirrie or the other hospital surgeons of Aberdeen.

After a certainly fair and unprejudiced trial of acupressure, Prof. Pirrie has no hesitation in stating that he is a decided believer in its advantages; indeed he

regards it as the greatest improvement of modern times in the treatment of incised wounds.

It is not seven years since Sir J. Y. Simpson offered the suggestion of acupressure publicly; and this practice, instead of expiring early, as so many said it would, has already extended very widely. There is no doubt that the Aberdeen surgeons have done most of all towards awaking confidence in this new operation. They have, as their reports show, carefully thought over it, fairly tried it, and given it their unqualified approval as being quite safe and quite sufficient for arresting arterial hæmorrhage, and having fewer drawbacks than the silk ligature.

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OBSTETRIC CLINIC OF GEO. T. ELLIOT, M.D., PROF. BELLEVUE HOSPITAL MEDICAL COLLEGE.

Among the cases presented by Dr. Elliot were those of two infants, upon which he remarked as follows:—

Case I. *Delayed Ossification of Cranial Bones.*—Here is a baby born four hours ago. You see the same characteristic expression of the head as in the last case: the elongated occipito-mental diameter which marks an occipito-anterior presentation; and again, the situation of the caput succedaneum, a little to the right of the posterior fontanelle, shows this head to have been presented in the left occipito-anterior position. Feel the head. You find an interesting condition of things, one very liable to mislead you in your early vaginal examinations. There is a crackling sensation as you touch the upper part of the occipital bone, as if you were handling thin parchment. You observe, too, that the posterior fontanelle is widely open. This condition is by no means rare; it evidences simply the fact that ossification is less advanced than usual. But the point of clinical importance is, that, touching such a soft bag as this, the young practitioner might not recognize the fontanelle. He might say: The occipital bones are not properly shaped; I am dealing with a head that I can crush about; perhaps the child is dead. Or he might think: These bones are widely separated by effusion; it is a case of hydrocephalus, and I am told that in such cases it is best to diminish the volume of the head. He thrusts in his trocar, and gets — not water, but blood and brains. Be not too hasty, then, in your diagnosis when you find the sutures more or less open, large fontanelles, and the edges of the bones feeling like parchment.

This condition suggests a rachitic constitution, but upon that point you must not pronounce at once. This baby weighs eight pounds, though you would hardly suppose so from looking at it; it is well formed in every way, and appears to be a good, strong child. It may grow up well, its bones may promptly begin to get firmer,—you have a case of simple delayed ossification. Or it may prove a puny infant; its arms and legs may refuse to grow, their bones become distorted —you have an unmistakable case of rickets.

Case II. *False Nævus.—Aphthæ.*—This child is eight days old. What do you think of that mark upon its forehead, just above the root of the nose? You see that, when I press it, it becomes pale, and on raising the pressure the redness returns. So there is no extravasation; the color depends upon blood within the capillaries. You say, then it is a mother's mark. But the chances are that it will disappear in a few days or weeks. In ninety-five cases out of a hundred, where these marks are no worse than this at birth, in this situation, they do not persist. I cannot give you the reason, but I have very often observed it, though I do not recall any mention of the fact in the books. In many a case, years ago, where I thought at first I had a well-marked example of nævus maternus, I have been gratified to find my expectations groundless, and the child grow up unblemished.

Notice now this whitish curd upon the child's tongue, inside its lips, covering the lining of the cheeks. You rub it with your finger, and it does not yield. It is what the mother would call "sprue." It is a very common affection, depending upon a cryptogam, which may, as the nurses say, "go through the child," and give it diarrhœa and a sore anus. It is liable also to attack and irritate the mother's nipple. As good a local application as any is a solution of borax in glycerin, a drachm or more to the ounce. Wash the nipple thoroughly with water directly after nursing, and frequently wash out the child's mouth. But above all things, secure good hygiene, plenty of good breast milk, fresh air, and cleanliness.

SURGICAL CLINIC OF FRANK H. HAMILTON, M.D., PROFESSOR. BELLEVUE HOSPITAL MEDICAL COLLEGE.

Rhinoplasty.—This poor girl, æt. 21, had lost her nose from no fault of her own, but in consequence of some hereditary or original constitutional fault. The ulceration began when she was only seven years old. Her face, otherwise handsome, was, by this misfortune, greatly disfigured.

The several steps of the operation, by Dr. Hamilton, were as follows: 1st. A piece of paper was cut, of the size and shape of the nose, which it was intended to restore. As the face was rather small and round, this pattern was made rather small to correspond. 2d. The pattern was placed upon the skin of the middle of the forehead, perpendicularly, with its base upwards; and the line of incision was marked out with a camel's-hair pencil dipped in tinct. of iodine. 3d. The integument was carefully removed from the margin of the fallen nose, to secure adhesion of the flap, the outer limits of this abraded surface being deeper, and carefully drawn around the alæ, so as to insure a round and comely form in this part of the nose. 4th. An incision was made along the *outer* margin of the lines drawn upon the forehead—making a flap larger apparently than the projected nose, to allow for the contraction of the tissues, which immediately reduced it to the proper size. This incision reached upwards, in order to form the columna nasi, to the margin of the hair; downwards, it extended, on the right side, to a point corresponding to the base of the ossa nasi, and on the left about one inch lower. The pedicle thus formed was a little more than half an inch in width. In depth, the incisions everywhere reached and exposed the periosteum. Only two vessels required ligatures. 5th. The frontal flap was dissected up, twisted upon itself to the left side, and brought down, exposing its raw surface to the abraded surface upon the vestige of the nose. Here it was secured by five or six small silk sutures. It was found to fit with perfect accuracy to the surfaces and lines of incision, prepared for its reception. Its circulation, also, remained unimpaired. 6th. The chasm in the forehead, two and three-

quarters inches in length, by more than two inches in breadth, was nearly closed by adhesive plasters—Dr. Hamilton predicting that the scar finally left would not be larger than a ten-cent piece. 7th. The forehead and nose were lightly covered with patent lint, spread with simple cerate; and, in order to preserve a proper temperature, a loose and pretty large pledget of cotton batting was laid over the nose, and secured in place by a few small strips of adhesive plaster.

This completed the operation and dressings for the present. What further steps might hereafter be necessary, it was impossible then to state.

The columna nasi was not made fast below at this time, because it would be likely, in the process of cicatrization, to pull down the end of the nose, which was already rather flat. Experience had taught the Doctor, however, that, as the flap healed and contracted, the end was apt to become bulbous and excessive, and this natural tendency, he thought, would relieve all of its present flatness. If it did not, a very simple remedy was at command. It would only be necessary to remove a V-shaped piece from the upper margin of the lip, and draw the alæ towards each other, as we do in the operation for hare-lip.

Progress of Medical Science.

Sympathetic Ophthalmia.—In regard to the treatment of sympathetic ophthalmia, Dr. Haynes Walton writes as follows to the *Lancet:*

No general or local treatment, no local application, no dietary system, is of any avail in checking unequivocal sympathetic ophthalmia. Nothing of the kind can be depended on. The affection can be stopped or subdued only by practical surgical treatment applied to the eye originally hurt. It was in consequence of reading of the principles of such practice by Mr. Barton, of Manchester, published by Mr. Crompton in the *Medical Times*, that I adopted the plan and made the results known. I believe that Mr. Taylor and myself were for years the only surgeons who resorted to it.

Mr. Crompton's report states that the sympathetic disease was produced by injury from extraneous bodies in the eye. In seven cases a portion of copper had settled in the anterior chamber. Inflammation and disorganization of the eyeball were soon followed by failure of the functions of the other eye, together with structural changes. Mr. Barton excised the cornea and applied a poultice, in the hope that the copper-cap would escape: this did happen, and produced great relief; but it had a more valuable effect, for it saved the sight of the other eye in every instance, although some of them seemed past all hope.

Mentioning these facts induces me to state that at an early period of my connection with ophthalmic medicine my attention was arrested by sympathetic ophthalmia, and I lost no opportunity of examining the subject. I was joined in the work by Mr. Taylor. We both published many of our observations, with cases, in the medical journals during the years 1852, '53, and '54. It is satisfactory to find that our facts and deductions remain as such still, and that nothing then advanced has been rendered obsolete by other observers.

This surgical treatment, then, of the exciting eye, should vary in application and in detail according to the nature of the disease. Any body, extraneous or otherwise, within the eye that irritates should, if possible, be extracted. When, as in the case of a wound or any other occasion the centre of irritation is limited to the front of the eye, the rest being healthy, the front only should be removed by amputation: abscission is the term often used for this operation. When there is complete internal disorganization of the eyeball, or general enlargement or atrophy, extirpation is necessary.

Each operation, properly selected, will confer advantages equally lasting. In no instance have I been disappointed. The sympathizing eye must not be left to take its chance. Even when no objective symptom is present, it will recover all the sooner for rest for some weeks or months, and for protection, if requisite, from daylight; there should always be long rest from use by artificial light.

When inflammatory changes are present, I treat generally and locally, just as if I had before me an instance of rheumatic or other inflammation from a constitutional cause. I consider that there is acute ophthalmitis.

Erichsen on Aneurism.—In a clinical lecture, delivered recently at the University College Hospital, London, Mr. John E. Erichsen said, on the point of diagnosis between aneurism and abscess:

In the majority of cases of aneurism nothing is easier than to make the diagnosis. When an aneurism is thoroughly formed, is pulsating eccentrically, and has a distinct bruit; when the pulsation and the bruit are arrested by compression of the artery leading to the tumor; when the size of the tumor diminishes when the vessel leading to it is compressed; when the pulsation and bruit both return on the pressure being removed; when the tumor increases in size on the pressure being removed; when that increase in size is evidently eccentric, and the pulsation eccentric from the interior of the tumor—a dilatation as well as a pulsation—there can never be any serious difficulty in distinguishing aneurism from everything else. But when an aneurism has become diffused; when the pulsation in it is becoming very feeble; when the bruit in it has become obscure; when the tissues that are infiltrated with the blood that has been effused feel somewhat sodden and brawny; when there is, perhaps, here and there, an indistinct feeling of fluctuation—one can understand that, unless care is taken in investigating the early history of the case, and unless care is taken in making a minute, prolonged, and what may be called a skilled manual examination of the tumor, it may possibly, in an off-hand manner, be supposed to be abscess, a chronic abscess, in the region in which it occurs. But when you find a tumor presenting more or less of the characters that I have just described occurring in a situation in which aneurisms are likely to occur—as the groin, the ham, or the axilla—it is only proper to institute a very careful examination; and if you make such an examination, with the hand to the tumor, with the ear to the tumor, and with the finger applied to the artery above the tumor, so as to control the flow of blood through it, there is very little danger indeed of your falling into the most serious and probably fatal error of mistaking an aneurism for an abscess.

The Influence of Petroleum on Malaria.—We have received some information, says the *Lancet*, as to the unusual good health and immunity from malarious disease of the imported laborers at the petroleum works at Makoom near Jeypoore, in Upper Assam. It appears that Assistant-Surgeon White, of the 44th regiment Bengal Native Infantry, in medical charge of troops, and Civil Surgeon Dihooghur, have officially directed attention to this subject. They made it an especial point of inquiry in consequence of the extreme unhealthiness for which Makoom has always been notorious. The Sepoy regiments lost so many men from malaria that the post was taken over by the police about four years

ago; and it has since been found no less deadly to the Bengalese and Hindustanees of that force, so that only men who were either Dooaniers or Cacharries—both races who are known to thrive rather than otherwise in malarious localities—were sent to the place. As these Bengalee laborers could not be so well cared for as the Sepoys, it was expected that the mortality among them would have been something appalling. Assistant-Surgeon White was surprised, however, to find that only one death had occurred in two years out of a population of over sixty persons. The infants born in the place all looked strong and healthy. This immunity from malarious diseases he attributes to the protective influence exerted by the gases given out by the petroleum against the effects of jungle miasma. Ulcers or sores on the extremities, which are among the greatest afflictions of the imported laborer in Assam, have likewise invariably healed rapidly in the laborers employed at the petroleum works.

A Victim to Amputations.—Dr. Hammer reports in the *Humboldt Med. Archiv.* a case of great interest. A captain of the 12th Missouri Vols., who had already lost an arm in the Schleswig-Holstein war, was wounded in the thigh and suffered immediate amputation. Six or seven weeks after, a re-amputation was performed, but two years subsequently, the stump was enormously swollen and pierced by a number of fistulous openings, all leading to dead bone. A third amputation was then performed, but the bone being found still diseased, an additional inch was removed, leaving nothing but the trochanter and the parts above it. Although the remaining portion was not entirely healthy, the wound healed rapidly by first intention, and five years subsequently the stump remained sound. After the last operation, it was ascertained that repeated amputations had been necessitated after the injury to the arm, and also that some crippled fingers had required frequent amputation, so that the saw had passed through the patient's bones *eleven times*.

Ice to the Spine in Delirium Tremens.—A case of delirium tremens successfully treated by the spinal ice-bag is reported in the *Dublin Med. Press and Circular*. The ice was applied from the fourth cervical down to the first lumbar vertebra. In a short time the following phenomena were observed: 1. The induction of sleep. 2. The diminution, and finally the disappearance of the tremors. 3. The regulation of the heart's action. 4. The cessation of sweating. 5. The production of a rise of temperature all over the body, with a return of a natural color of the face. The patient fell asleep soon after the application, and slept the greater part of three days, during which time the ice-bag was applied three times daily. He always found it to strengthen him, and said it made him feel as fresh as ever. Recovery was rapid without the use of stimulants.—*Pacific Med. and Surg. Journal.*

Lumbar Hernia.—Q. C. Smith, M.D., reports (*Nashville Journal of Medicine and Surgery*) a case of this kind which had existed in a patient from her birth. It was situated in the left lumbar region, and continued to increase in volume until she was 15 years old. The tumor gave considerable pain during childhood, and prevented her from performing any labor or making great exertion. From the period of puberty until she was about 30 years old it was stationary, or it gave no particular pain or uneasiness. Nov. 11th, 1867, she fell from a wagon, dislocating her right ankle and receiving severe injuries upon different parts of the body, by which she was confined to her room for three months. She was disabled or the medical attendant failed to reduce the dislocation. At puberty the tumor was about half as large as a goose egg, which size it retained until the receipt of the injury, when it steadily increased in size and caused considerable pain. It now became about half the size of a new-born infant's head, and had the soft doughy feel common to omental hernia. The patient had suffered greatly from the effects of malaria, in consequence of which she had enlarged spleen and liver. The pressure of the enlarged organs and of the hernia upon the veins leading from the lower extremities caused œdema of the feet and ankles. Antiperiodic medicines were administered, and a supporter was applied to the hernial tumor. Under this treatment she rapidly recovered in health and strength.

Solvent for Gallstone and Cholesterine.—Dr. Buckler (*Am. Jour. of Med. Science*) recommends the following prescription in the cholesterine diathesis: ℞ Hydrat. sucein. of iron ʒ iss, water ʒ iss. Dose, a teaspoonful after each meal, to be taken six months, if necessary.

Colliquative Sweats.—Dr. J. D. Upshur reports the following: A stout, healthy mulatto woman aborted at the 6th month. The labor was an easy one, and she had a good getting-up. There was no discharge of any kind until the third day; when she began to sweat profusely. This continued some days, when the aromatic sulphuric acid was prescribed. In 36 hours the sweating ceased and the lochia appeared. The acid was then stopped, the lochial discharge was suspended, and the sweating reappeared. The acid was again given with the same result. At the end of the third week the sweating ceased entirely, the lochia having never returned. The sweat was quite offensive, and had somewhat the odor of lochial discharge, and did not seem to exhaust the patient at all. There was a large secretion of milk, and at the end of three weeks she was well and able to work.—*Richmond and Louisville Med. Journal.*

Two Extraordinary Forms of Rectal Fistula.—E. Andrews, M.D., contributes to the *Chicago Med. Examiner* two unusual forms of this disease. The first, a female child of 12 years, was in the third stage of hip disease. The head of the femur was exsected, which improved her condition. Shortly after air was passed from the intestines through the wound. By injecting the rectum with tepid water, it flowed in a continuous stream from the incision by the trochanter. Pressure revealed the point where the fistulous tract crossed the tuberosity of the ischium, and where the finger stopped the flow of water. A scalpel was passed down upon this point, the fistula was opened, and the water flowed freely out. A probe was passed along the tract towards the anus, another incision made upon it into the rectum, and the sphincter divided in the usual manner.

The other patient had old femoral hernia, which had terminated in an artificial anus in the groin, but had subsequently healed. Some years after the whole surface of the hip almost became chronically swollen and very tender, attended with great pain, erosion of its body, and exhaustion. On examination, the inflammation did not appear to be connected with the joint. The swelling fluctuated, and gave distinct sucussion upon coughing. The entire circumference was resonant upon percussion, and pressure caused a gurgling noise, proving the existence of air in the whole gluteal region. The patient passed a considerable quantity of pus every day at stool, with some blood. By injecting the rectum full of air, the tumor was easily distended. An incision was made half way between the trochanter and the border of the sacrum, down to the gluteus maximus muscle. Carefully dividing the muscular tissue,

the cavity was opened. The cavity proved to be a large one, from which rushed a quantity of fetid gas, followed by pus mixed with decayed fæcal matter. Water injected into the rectum passed freely from the wound. By passing a probe into the cavity, the fistula was found to run through the sciatic notch, above the greater ligament, and the opening, as large as the finger, could be felt on the side of the rectum. The external incision was then enlarged, the index finger introduced into the rectum, and the sphincter divided at one stroke. For a few days the sac discharged its accumulation of fæces, but soon it sent forth clean pus, with occasionally a little flatus. The sac collapsed, granulated rapidly, and was obliterated, and the patient is now rapidly recovering.

Physiological Action of Bromide of Potassium.—In a paper on "Bromide of Potassium," by H. P. Bowditch, M.D., published in the *Boston Medical and Surgical Journal*, the following conclusions are drawn: 1st. Bromide of potassium is quickly absorbed. 2d. Although it appears very soon in the urine, it is upon the whole not very rapidly eliminated. 3d. It is eliminated unchanged by the kidneys, the skin, and, perhaps, by the intestines. 4th. It is sometimes decomposed in the system, and free bromine eliminated by the breath. 5th. While passing into the system it acts as a local irritant on the surfaces through which it passes. 6th. While in the system it acts as a nervous and vascular sedative. 7th. Its primary effect is to diminish all the secretions while passing out of the system, except perhaps the urine; but secondarily, hyper-secretion may be induced.

Unguent for Acne.—The following ointment is useful in all the forms of acne: Washed lard, fifty parts; sublimed sulphur, tannin, of each four parts; laurel water, five parts. The proportions of sulphur and tannin may be increased, according to circumstances, to six or eight parts.—*Braithwaite's Retrospect.*

Masturbation Treated by Tying the Spermatic Arteries.—Dr. S. F. Pomeroy (*Boston Med. and Surg. Journal*) reported a case of *masturbation* successfully treated by tying the spermatic arteries.

The patient, unmarried, aged 35, had been addicted to the vice from boyhood; he was very melancholy, and had nocturnal emissions. Little medicine was given, but marriage advised. For six months he was better, but afterwards premeditated suicide. Tying the spermatic arteries was decided on, and one was tied first; after which, for one month, he had no emissions. The other artery was tied a month afterwards, and for six months after he had no emission nor carnal desire. This desire gradually returned, and entire recovery was the result.

Arrest of Hæmorrhage Following Extraction of Teeth.—S. Lawrence, of Lowell, Mass. (*Dental Cosmos*), usually applies persulphate of iron in excessive bleeding, and if that does not prove successful, a piece of lint or cotton is spread out, and as much of dry plaster of Paris as will go into the cavity is placed on the cotton so as to make a ball or pellet, which is forced into the alveolus with a blunt instrument; the finger or thumb is then placed upon it until the plaster sets and the cavity is hermetically sealed.

Emesis Produced by Small Quantities of Ipecacuanha.—In cases of irritable stomach and gastritis, Dr. Weigersheim, of Berlin, administers the drug as follows:

℞. Rad. ipecac.....gr. iij.
Saech. alb..... ʒj.
M. Ft. chart. No. xij.
S. One every five minutes in a spoonful of water, till emesis follows. Nothing whatever is to be taken in the stomach, and after the third or fourth powder free vomiting takes place.—*Med. and Surg. Reporter.*

Maternal Impressions.—Herr Dupré (*Deutsche Klinik*), at a meeting of the Society of Physicians, at Berlin, reported several instances of maternal impressions. In one, a sheep wounded and with its bowels protruding, was seen by a woman in the fifth week of pregnancy. Her agitation was great, and her composure was not restored until several days had elapsed. At term, she was delivered of a child, in other respects well developed, but the abdominal parietes were wanting. Another one noticed, in the first week of her third pregnancy, a boy with a hare-lip, and not only was the child she then carried born with an ugly hare-lip, but also three children subsequently.

Ergot in Obstinate Hæmoptysis.—Dr. Dobell, of England (*Med. and Surg. Reporter*), uses ergot in obstinate hæmoptysis in tuberculous patients. His prescription is complicated, but he claims to have had from it most satisfactory results. It is as follows:

℞. Ext. ergot liq.....f ʒ ij.
Tinct. digit.....f ʒ ij.
Acid. gallici..... f ʒ j.
Magnes. sulph..... ʒ vj.
Acid sulph. dil..... f ʒ j.
Infus. ros. acid.....f ʒ viij
M. One-sixth of this is to be taken every hour until the bleeding ceases.

Antiseptic Surgery.—M. Maisonneuve, of Paris, contends that it is our own fault if the results of the great operations of surgery are not favorable. He summarizes his method as follows:—"Lifeless organic liquids are the only cause of the untoward state of wounds. The indications, therefore, are to prevent the death of the organic liquids, and to eliminate them when deprived of life. To fulfil the first indication we must prevent the prolonged contact of living fluids with dead organisms, be the latter solid, liquid, or gaseous. To fulfil the second, we should eliminate dead fluids by counter openings, irrigations, or drainage, but especially by continuous aspiration or sucking up, which last measure may advantageously replace all those above mentioned." This aspiration is carried out by means of a bag connected with a tube.

M. Jules Guérin contends that he is the author of this method, having all his life advocated subcutaneous surgery. He, however, does not, like M. Maisonneuve, pay attention to dead liquids; his object is to prevent complications by an apparatus either before or after the introduction of air, which he calls pneumatic occlusion.

Such is the difference of views and practice between these two ingenious men, who, after having worked together in this field of inquiry in a friendly manner, are now engaged in rather bitter polemics.

M. Maisonneuve states now that his method is carried out among the patients at the Hôtel Dieu, he does not see any fatal cases after amputations, compound fractures, etc. These favorable results naturally bring to mind the success which is nowadays attending Lester's method. The latter surgeon endeavors to prevent the admission of germs into wounds, and thus considers that no decomposition takes place. M. Maisonneuve prevents the death or decomposition of fluids by a sucking or aspiring apparatus; and M. Jules Guérin by pneumatic occlusion, as he calls it—*i. e.*, atmospheric compression and exclusion of air. Maisonneuve and Guérin are not so generally imitated in France as Lister is in Britain. Let the three methods abide the best of trials—viz.: the trial of time.—*Lancet.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—R. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, January 1, 1869.

THE LAST REPORT ON MEDICAL EDUCATION.

Two years have elapsed since the question concerning the importance of changes in the plan of instruction to be adopted in our medical institutions has been agitated by the Convention of medical teachers—the so-to-speak advisory body of the American Medical Association, and it may be worth our while to record the progress which has been made towards initiating several very needful reforms. This task can be easily performed, and the results of the labors of the Committee on Medical Education can be summed up in the simple statement that all their efforts have practically failed. Our readers, at least those of them who are particularly interested in the cause of medical education, may recollect that at the meeting of the American Medical Association, held in Cincinnati, the resolutions of the Teachers' Convention, contemplating very radical changes in the plan of study, were almost unanimously endorsed, but it seems from events that have since occurred, that this was more an acknowledgment on the part of that body of what ought to be than of what could be.

Not only the Association itself, but the profession outside, was ready to endorse the measures proposed, but the colleges have practically refused, except on a few minor points, to second the wish for a change thus emphatically expressed.

It is painfully apparent that the reason for this rests upon the pecuniary self-interest of the schools; they, while virtually acknowledging the benefits to the pupils that may grow out of such a change, shamelessly declare that its adoption would injure their patronage. Of course, so long as such motives actuate the majority of our professors there is but little hope of rapidly ascending to the true ambition of elevating our standard of requirements. Experience must teach us in future to work patiently towards the accomplishment of such gradual reforms as shall invade as little as possible the pockets of our teachers, and hope that time may ultimately accomplish the full fruition of the perfected plan. The Committee on Medical Education have already become impressed with this idea, and in the lately published Transactions of the Association have seen fit to offer a modification of their plan which may be considered in the light of an entering wedge in the right direction.

They recommend a formal preliminary examination, which, considering the low degree of requirements on the part of the students, will not seriously interfere with the obtaining of a goodly number of matriculants; the time of study is but slightly extended, being only three years and a half, at the same time the Committee very properly offering a premium of a deduction of six months for those who have already enjoyed the advantages of a full collegiate course. The minimum length of lecture term is fixed at eight months, in which it is to be presumed the summer courses will be counted.

Concerning the subjects of curriculum and order of clinic arrangement we quote the following: "Every medical college shall embrace in its curriculum the following branches, viz.: Descriptive and Practical Anatomy, Physiology and Histology, Chemistry, Inorganic and Organic, Urinology and Toxicology, Materia Medica, General Therapeutics, General Pathology, Pathological Anatomy, Surgical Anatomy and Operations of Surgery, Hygiene, Medical Jurisprudence, Psychological Medicine, Medical Ethics, Practice of Medicine, Practice of Surgery, Obstetrics, Diseases of Women, Diseases of Children, Clinical Medicine and Clinical Surgery; and these several branches shall be divided into two groups or series: the more elementary subjects, viz.: Descriptive and Practical Anatomy, Pathological Anatomy, Chemistry, Physiology and Histology, General Pathology, General Therapeutics, Materia Medica and Hygiene, being chiefly taught during the first four months of the course; while the more advanced and practical branches, viz.: Practice of Medicine, Practice of Surgery, Obstetrics, Diseases of Women, Diseases of Children, Clinical Medicine and Surgery, Urinalysis, Toxicology, Medical Jurisprudence, Psychological Medicine, and Medical Ethics, shall be chiefly taught during the last four of the course."

It will be seen from the foregoing, that ample provision is made for a repetition of lectures upon the most important subjects, thus removing a heretofore strongly-urged objection against the formerly proposed division of the medical class into grades.

The report further recommends the adoption on the part of every medical college of some effectual mode of ascertaining the actual attendance of students upon its lectures and other regular exercises, and very wisely advises that at the close of each college session or of the attendance of the student, a certificate of such attendance be given to the student, and that *only* such certificate shall be received by other institutions as evidence of such attendance. This is another one of the plans that can be adopted without seriously interfering with the size of the classes of respective schools, provided, however, that all shall agree to accede to it. We

have, however, doubts as to this latter point, as the temptation of some faculties to receive any and every student that may present himself for matriculation will be too strong to resist, and if the tickets of lectures from other colleges are shown, very few questions will be asked as to actual attendance.

The actual time of attendance can be definitely ascertained by those faculties disposed to take the trouble in one of two ways; either by the calling of the roll, and by giving such certificates only to such as regularly attend the recitations of the professor, or having it understood that the tickets of the professor shall not be issued (although duly paid for previously), until the close of the term, and only to such as have actually earned them.

This then is the sum-total of the proposed modifications, and as we have before intimated they are practically feasible, in that the pecuniary elements of the question are not seriously interfered with.

We have from time to time had considerable to say upon the subject of medical education, and shall continue to pursue our course so long as the crying necessity for reform exists, taking every opportunity to inform our readers of such progress as has been made, and of such failures of good intentions as from the circumstances of the case have been inevitable. In this view we have given somewhat in detail the modifications of the more perfect plan of study previously presented, and patiently await the result, confident that the time is yet to come when every change now acknowledged to be necessary shall by judicious management and gradual working be at length brought about. It is needless for us to look to legislative enactment for any help in the establishment of a uniform system; the change must be brought about through the faculties of our colleges, who, if they choose to act in concert, can become the controlling power.

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 some 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 cannot fail to call forth a liberal pecuniary support.

There are so many quacks in London who assume the title of M.D., that the publishers of the London Directory have determined to expunge in future editions of that work, from the list comprising the names of physicians and surgeons, those not registered under the Medical Act of 1858. If our publishers of directories would dare to follow such an example, what a small list of real doctors there would be.

Reviews and Notices of Books.

Clinical Lectures on Diseases of the Liver, Jaundice, and Abdominal Dropsy. By Charles Murchison, M.D., F.R.S., Fellow of the Royal College of Physicians; Physician to the Middlesex Hospital; Lecturer on the Practice of Medicine at the Middlesex Hospital Medical College, etc., etc. New York: William Wood & Co., Publishers, 61 Walker street. 1868. 12mo., pp. 515.

The purpose of the author of this volume has been not so much to set forth a complete account of the various diseases of the liver, as "to put prominently forward the leading characters on which the diagnosis of these diseases mainly depends, and, in particular, to determine the diagnostic import of those signs and symptoms—such as enlargement of the liver, dropsy, and pain—which are common to many different hepatic disorders, but the precise cause of which is too often unrecognized."

The work is based upon lectures originally delivered at the Middlesex Hospital, some two or three of which have been published in the *Lancet*. These lectures were so well appreciated for the practical good sense contained in them, that the author has been induced to elaborate them in a systematic form, and, as the result of his labors, he has given us a very useful, nay valuable little work upon the diagnostic history of a set of affections that, notwithstanding their comparative frequency, are not sufficiently and carefully studied. There is nothing positively original in the subject-matter of the book, but old facts are presented from a new stand-point, by a rational and systematic arrangement of its different parts. The significance of each of the objective and subjective symptoms is specially studied in their relations to differential diagnosis, opening at once to the student and practitioner an easy and inviting path through the intricate and unsatisfactory field of conjecture.

The first six chapters, or, as our author chooses to call them, lectures, are taken up with the discussion of the different characters, symptoms, causes, etc., of enlargements of the liver. No pains are spared to make the subject plain to the merest beginner. The dimensions of the organ in health are carefully presented, with all the modifying influences which external physical causes may exert upon them, and with this introduction the characters of the increase in size, dependent upon organic causes, are regularly taken up. Next comes the consideration of the opposite condition of the organ, atrophy, which covers two chapters; then the clinical significance of jaundice, occupying three more; next in order we have dropsy of the peritoneum treated of as a symptom; then an exceedingly practical and valuable chapter on hepatic pain, which is really the feature of the work; and lastly, a cursory glance into the history of gall-stones.

The plan of the work is to enunciate the general principles upon which a diagnosis of the different forms of liver trouble is to be formed, and then to illustrate them with typical cases, which by themselves are models of terseness, accuracy, and necessary detail. Although the book is of comparatively small dimensions, there are nearly a hundred of these cases carefully related from notes taken at the bedside of each patient. It is also illustrated with twenty-five well-executed wood engravings.

It is, as a whole, a work that every medical man can peruse with profit, while to the beginner it is invaluable in schooling the mind to appreciate the really salient points in the clinical history of a set of affections which

it is of the utmost importance to master, and to properly prepare the way for a more careful study of the more comprehensive and elaborate treatises.

A Treatise on Physiology and Hygiene for Schools, Families, and Colleges. By J. C. Dalton, M.D., Professor of Physiology in the College of Physicians and Surgeons, N. Y., with Illustrations. New York: Harper & Brothers. London: Sampson Low, Son, & Marston. 1868. 12mo, pp. 386.

This work is designed as a text-book for schools and academies, and is well fitted in its general arrangement to popularize the subjects of which it treats. The fundamental principles of the science of life are presented in an exceedingly simple and comprehensive manner, and are well calculated, not only to interest, but instruct those for whom it is intended. At the end of each chapter is a series of well-arranged questions as a guide for the teacher and as a help for the pupil. By a writer who is widely and favorably known as one of the highest authorities in his particular branch, nothing is left to be desired by any teacher or advanced pupil who desires to become acquainted in outline with one of the most instructive, useful, and fascinating studies. There are scattered throughout the work numerous excellent original drawings from the gifted pencil of the distinguished Professor.

Reports of Societies.

N. Y. PATHOLOGICAL SOCIETY.

Stated Meeting, Dec. 9, 1868.

Dr. Wm. B. Bibbins, President, in the Chair.

THE DISTINCTIVE APPEARANCES OF STAB OF THE HEART, CAUSING INSTANT DEATH.

Dr. Finnell wished to call the attention of the Society to a peculiar conformation of stab wounds of the heart, which he had noticed in a number of instances, and took occasion in that connection to refer to the case of Felix Larkin, presented at the previous meeting. The wound in that instance, as in others of a similar character, was more or less irregular in shape, and seemed to be formed of two distinct cuts, that met each other at an acute angle. As there was only one external wound to correspond with the one of the viscus, it was clear to him that the appearance of a double stab of the heart could only be explained in one of two ways: either upon the supposition of a twisting of the weapon at the time of its withdrawal, or by the contraction of the wall of the organ at the moment it was pierced. The latter was the most probable reason, and assuming it to be the true one, an important question in medical jurisprudence could be settled by it, namely, that the heart-wound was, if not the very first one inflicted, the one that caused death.

ANEURISM OF ABDOMINAL AORTA FROM EXTERNAL INJURY.

Dr. Finnell then presented a specimen of aneurism of the abdominal aorta, removed from a negro, who had been severely beaten about the abdomen during the draft riots in this city. He complained, immediately after his punishment, of a good deal of pain in the part, and a swelling appeared near the umbilicus. He lingered for a period of eighteen months, and at the autopsy it was found that the posterior part of an aneurismal sac of the aorta had given way, eroding the bodies of the lumbar vertebræ, with which it was in contact, and discharging its contents into the peritoneal cavity. The deceased was forty years of age, and healthy up to the time of the accident.

FIBRINOUS INFILTRATION OF WALLS OF HEART AND SUDDEN DEATH.

The second specimen exhibited by Dr. Finnell was the heart of a woman, aged thirty-six years, for which he was indebted to Dr. Wooster Beach. She had been suffering from a cough during the last months of her life, supposed by her friends to be due to tuberculous disease of the lungs, and was found dead in her bed. The autopsy failed to recognize any cause for the occurrence, except an infiltration of fibrinous material in the substance of the walls of the left side of the organ. This was the fourth specimen of the kind that he had met with, one of which had recently been examined by the Committee on Microscopy, which had reported the deposit to be of the character indicated.

Dr. Krackowizer stated that his recollection of the specimen referred to by Dr. Finnell was, that it was found by the Committee to be one of subacute myitis.

The specimen in question was accordingly referred to the Committee on Microscopy for a more definite report.

THICKENING OF PYLORUS FROM A MIXED DEPOSIT.

Dr. Clark presented a specimen of thickening and stricture of the pylorus. The opening was found at the autopsy to be so much reduced as scarcely to admit the end of the little finger. The material that produced this narrowing was in the whole circumference of the outlet, equally firm to the feel, like fibrous tissue. There was some lesion of the mucous membrane, which extended an inch and a half over the membrane of the stomach proper. There was no deep ulceration anywhere. The man died of inanition. The material of the deposit was found to be made up partly of an hypertrophy of the fibrous tissue, and partly a collection of cells, considerably flattened, and of the epithelial variety. These cells were packed promiscuously together, constituting what may be styled an epithelioma; but, instead of being a modification of those of the mucous membrane of the stomach, they were more of a kind of pavement epithelium of the bladder, and were about the size of that variety.

The history of the case was a short one. A gentleman, whose occupation required him to stand a great deal, and who was pretty full of business, had dyspeptic symptoms three years ago. These gradually increased, losing flesh a little, until last year, when he became considerably emaciated. His dyspeptic symptoms also increased very much, and he also commenced to be troubled with vomiting. During the last three or four months of his life he vomited almost everything that was taken upon his stomach. He had a good deal of what he called distress of the stomach, but complained of no acute sharp pain. When Dr. Clark first saw him, Sunday, November 29th, he was so feeble that he could not rise from his bed; his pulse was very small, rather frequent, and had almost entirely lost its force. He followed his business until three weeks before his death.

The vomited matters were at times different from those which contained nothing beside food. Some specimens sent the doctor were of a chocolate color; and although they contained no blood-corpuscles, there were found considerable quantities of hematoidine, and of the square cells of the sarcina ventriculi.

It was noticeable in this case that no tumor or thickening could be felt during life. The pylorus, which commonly can be recognized, when thickened, could not be felt at all. The post-mortem examination revealed the reason of this: it was surrounded by a firm fibrous tissue, which seemed to be of the variety of

connective tissue, and this had drawn it up and attached it to the under surface of the liver, so that the free edge of that organ was a perfect shield to it from an external approach. The diagnosis had accordingly to be made on the general symptoms. There was no hereditary predispo-ition discoverable in this case.

Dr. Cutter stated, in regard to the case of ovariotomy presented at the last meeting, that the pouch formed by the dissection of the abdominal wall from the transversalis had closed after a counter-opening had been made in its most dependent portion, and a weak injection of carbolic acid had been daily employed for a week.

HYDATID CYSTS OF THE LIVER.—THE IMPORTANCE OF THE VIBRATION AND MUSICAL NOTE IN DIAGNOSIS.

Dr. Keyes presented, on behalf of Dr. Van Buren, a quantity of hydatid cysts of the liver, discharged per rectum. The patient was an English miner, who had been in good health until a year ago last November, when, while working at night in a mine in Peekskill, he was suddenly seized with a pain in the epiga-trium, which s on became severe enough to compel him to go home and take to his bed. Two days after this, while his son was applying a mustard plaster, it was noticed, for the first time, that a tumor existed over the region of the liver. The patient, for the space of the next two months, vomited considerably, and progressively emaciated, and at the end of that time presented himself to Dr. Van Buren. There were there at the time several medical gentlemen—Dr. Keyes among the number—who, after a very careful examination, were unable to make a diagnosis. There was a tumor in the situation before alluded to. Hydatids were thought of, and also malignant disease, but no hydatid vibration could be detected; and there were none of the prominent characteristic physical signs of carcinoma present.

The patient was placed upon a tonic course of treatment, and lime-water was also given him. He went to his home in Peekskill, and, reporting about once in six weeks, during the winter, declared himself getting constantly better. His tendency to vomiting decreased, the tumor was much reduced in size, his appetite improved, and he grew in flesh. On the 18th of last July, considering himself well, he resumed his work; but three weeks after, he says, he caught cold, had to confine himself to bed in consequence, and the tumor increased so rapidly in size, that the whole of the right hypochondriac region bulged out very decidedly, the end of the ensiform cartilage being very markedly forced upward and forward. By the latter part of September, being during most of the mean time confined to his bed, he was much emaciated, and was gradually getting to be deeply jaundiced. On the night of 10th October, having taken nothing for seven or eight days previously but a little cold water, he became rather suddenly delirious. Dr. Snowden, his family physician, being absent, Dr. Lente, of Cold Spring, was called in, who, from the appearance of the patient, considered him moribund, and prescribed an injection of a small quantity of beef-tea. Two teaspoonfuls were only used when the patient was seized with a strong desire to go to stool; stating, at the same time, that something had given away inside of him. While at stool, the son states that his father passed four quarts of what afterwards proved to be mostly solid hydatid cysts, and that this discharge continued, more or less, during the succeeding five or six days. The son also stated that some of the "blubbers," as he styled them, were vomited, a fact which was not substantiated by the attending physician.

The patient never fairly rallied, and died on the 25th of last October. Dr. Snowden, who was immediately written to when news of the patient's death was received, stated that death was the direct effect of exhaustion.

The points of interest in the specimen were:—1st, The apparent diminution in the size of the tumor during its course; 2d, the amount of constitutional disturbance which he suffered; 3d, the jaundice during the latter stages of the disease; and, 4th, the fact that the patient did not, as is usual with such cases, rally after the tumor had burst.

In regard to the question of diagnosis, an important point came up for consideration, having reference to the existence of the hydatid vibration, and of the musical note described by Rayer and Briançon. None of the gentlemen present at the first examination, after the most repeated and careful trials, were able to make out the existence of either.

In this connection Dr. Keyes stated that Briançon, who refers to the existence of the vibration and musical note as important, if not pathognomonic symptoms, had made a number of experiments with bladders partially filled with fluid and hydatid cysts, and had found that when the hydatids were slightly in excess of the fluid, the vibration and musical note were most distinct, but that they decreased in intensity to absolute disappearance, in proportion to the relative excess of the fluid. The examination of the contents of the cysts by the microscope disclosed nothing but the presence of the hooks of the echinococcus. The fluid contained no albumen.

Dr. Clark thought that the sudden increase of the tumor was due to a rapid secretion of serous or other fluid, the accumulation of which finally caused the bursting.

Dr. Keyes asked if any of the gentlemen had become practically acquainted with the physical signs pointed out by Briançon.

Drs. Clark and Flint replied in the negative; but Dr. C. C. Lee said that at the examination of a similar case in Philadelphia, Dr. Garrod had stated that he had made them out, but all the other gentlemen present at the time had failed.

MEDICAL SOCIETY OF THE COUNTY OF KINGS.

Stated Meeting, Dec. 15, 1868.

Dr. R. Cresson Stiles, President, in the Chair.

THE DEATH OF DR. DEWITT C. ENOS.

Dr. E. R. Squibb, after the approval of the minutes of the previous meeting, arose and said:

Mr. President and Gentlemen:—I beg your permission to forestall the allotted business of this meeting in deference to an important and sad event, which I have been requested to announce to you, the sudden occurrence of which shocked many of us, and brought the deepest grief upon a household where some of us are received as friends.

A familiar associate, fellow-member, and late presiding officer, has been removed by death. Dr. De Witt Clinton Enos died very suddenly in his office yesterday. His accustomed face is missing here to-night, and will be seen no more. His hitherto rarely-vacant place among us, during many years past, is now to be filled no more by him. His kindly smile of recognition, as he took his seat with us, will recur only in memory; and his labors, his counsels, and his slow, but generally sound judgment are lost for evermore. But, whilst our

loss comes upon us here with so rude a shock, how insignificant is the blow when we think of his desolate home. Let those among you who knew him there, recall the scenes you have witnessed in his domestic life, and you will then more fully realize this terrible calamity, and may share and respect that greatest grief of all that can befall the living. That sudden blow, which strikes those of us nearest around him with almost terror, falls on his family with such overwhelming force, that our losses seem inconsiderable, and our sympathies feeble and unavailing. Let us, therefore, not further intrude upon the sanctity of private grief and suffering, when our sympathies can avail so little, but bow with the bereaved in the hope of mercy for ourselves, and in reverent submission before the example of that mighty Power and Wisdom which never errs.

Dr. Enos was the fourth son of the six children of David and Polly Enos, and he was born in the village of De Ruyter, Madison County, New York, on the 17th of March, 1820. He received his preliminary education at the De Ruyter Institute, of his native village, and commenced the study of medicine in De Ruyter, as a pupil, I believe, of Dr. Ira Spencer. When duly prepared he entered the College of Physicians and Surgeons of New York city, and graduated from that school with the class of 1845. He first practised medicine in New York city for about two years, and came thence to Brooklyn in 1849, or thereabort. In October of 1852, he married Anna, daughter of Alanson Trask, of Brooklyn, whom he now leaves with three children, the eldest a boy of twelve, the youngest, a boy of three years old. Dr. Enos was an old and prominent member of this Society, and of the surgical staff of the Brooklyn City Hospital. He was also a member of the New York Academy of Medicine, and of the New York Pathological Society. During some three years or more he occupied the chair of Anatomy in the Long Island College Hospital, and was a lecturer on surgery in this Institution during its session of this year. His professional inclination was always toward surgery rather than medicine, and all the numerous monographs, published by him of late years, so far as I know, were upon surgical subjects. He had an active, though not a large practice of both medicine and surgery, which he followed up with industry and success, and was an unusually close and careful student of whatever appertained to the progress of his profession. His writings were characterized by care and accuracy in their preparation, and often gave evidence of much originality of thought, and patient application in practice.

He had engaged himself to deliver a lecture on Physiology at the Packer Institute, yesterday, at one o'clock, and went home from his morning's work before twelve o'clock, to lunch, and prepare some illustrations for his lecture. He left his family up-stairs, and proceeded to his office in the basement, with a request that luncheon might be ready in time for his lecture. His family went to luncheon after twelve, and when he had not answered the summons of the bell within a reasonable time, a servant was sent to bring him. The servant found him lying upon the office floor, in front of the place where his preparations for illustration were kept. His wife, supposing he had fainted, sent for the nearest physicians, and Dr. Conkling first, and others afterwards, were promptly in attendance. Dr. Conkling, however, found no evidences of life, nor had any been noticed after he was found. Blueness around the mouth and of the ends of the fingers was noticed, but passed off in a few minutes. A post-mortem was had to-day at twelve o clock, when the cause of death was found in the ossification and obstruction of both coronary arteries of the heart, and an atheromatous condition of the coats of the adjacent arteries and air-passages. Within the walls of the apex of the left ventricle was a small dissecting aneurism of old date, the walls of which were undergoing fatty and ossific degeneration in the different strata. It appears probable that the ossific and contracted arteries of the heart had been, one or both, suddenly obstructed by an atheromatous particle, wholly or partly detached from the adjoining sides of the vessel or vessels, causing *paralysis of the heart*, or *cardiac syncope*, or *angina pectoris*. The lungs were found in an œdematous condition, a circumstance which renders it probable that death was not instantaneous, though the interval between the time when he was seen in health and when found dead was probably not more than twenty minutes.

Dr. Enos was my personal friend, and it is neither my province nor my desire to eulogize him. His virtues, his amiable disposition, and his kindness of heart, will, in their influences, outlive us all, and need no man's praise. His faults and foibles should be criticised by some one who has fewer such than I have.

To avoid the formality of a committee and a report, I venture to offer the following resolutions for the consideration of the Society:—

Resolved, That the announcement of the sudden death of Dr. De Witt C. Enos is heard by this Society with profound regret, since we acknowledge in him, through many years, a faithful and competent servant in almost all the offices of the Society, including the office of President, and an active, energetic, working associate.

Resolved, That we offer our sympathy to his bereaved family, whose loss we share, and whose grief we would gladly mitigate.

Resolved, That we attend the funeral in a body; and for that purpose will meet at the house of Dr. Landon, No. 95 Clark street, on Thursday morning, the 17th inst., at ten o'clock, to proceed, at half-past ten, to the late residence of Dr. Enos, No. 28 Monroe Place, to pay our respects to his remains, and thence to the church in Pierrepont street, below Monroe Place, to join in the funeral services there at eleven o'clock.

Resolved, That, for the notification of absent members of the Society, the Secretary be directed to publish these resolutions in the Brooklyn newspapers, *Eagle* and *Union*, of Wednesday, the 16th inst.

After the unanimous adoption of the resolutions, the Society, as a fitting tribute to the memory of the departed, immediately adjourned.

EAST RIVER MEDICAL ASSOCIATION.

STATED MEETING, NOV. 3, 1868.

DR. JOHN SHRADY, President, in the Chair.

ON motion of Dr. Wm. Newman, Dr. John Shrady, the President-elect, was conducted to the chair, and after an appropriate address by the President, was duly installed. Dr. Shrady, after a brief address, entered upon the duties of his office, appointed the various committees, etc. The official reports were then read.

UNAUTHORIZED REPETITION OF PRESCRIPTIONS.

The subject of the communication from the American Pharmaceutical Association, relating to the repetition of prescriptions, was then taken up for discussion.

DR. MORSE presented the following resolution:

Whereas, The American Pharmaceutical Association acknowledges that the indiscriminate renewal of prescriptions is an abuse which should be discouraged, and

Whereas, All renewals by the apothecary without the

authority of the physician must necessarily be indiscriminate, since he neither sees the patient nor knows the character of the disease, and

Whereas, The American Pharmaceutical Association, after acknowledging that the renewal of prescriptions is unjust both to the physician and patient, declares that it is not within its province to prevent such renewals, therefore

Resolved, That the State Medical Society be requested to ask the next Legislature to pass an act making it a misdemeanor to renew or use a prescription without the authority of the prescribing physician.

DR. ABBOTT thought the claims of the Pharmaceutical Association preposterous; had never before heard of such a claim, and hoped that the Association would learn that this very important question would not remain a dead letter, but that the resolution would be strictly enforced.

DR. THOMS approved very highly of the resolution of Dr. Morse, and came to the conclusion that as the principal Medical Societies had endorsed the action of the East River Medical Association on this subject, and had recommended the original resolution to the State Medical Society for its action, he hoped the resolution of Dr. Morse would receive the same attention.

DR. O'SULLIVAN remarked that any claims the druggists may assume to have in the matter, were most effectually disposed of by themselves, for according to their own resolutions, they have not met or refuted a single point advanced by the East River Medical Association; instead of which it would seem as if the Pharmaceutical Association arrogated to themselves the power of deciding important points in a manner that seemed to him partial and unsatisfactory. Their assertion that they possess the right of property in a prescription once dispensed is contrary to common sense, they being simply the compounders of medicine ordered by the physician, and are the *custodiums* only of the prescription for the time being, subject of course to the order of the physician according to the terms of the contract between him and his patient; the rights of the druggist, so far as can be ascertained by legal investigation, extend no further than the compounding of the medicine, and the temporary custody of the prescription.

The doctor denounced as illogical the claims of the pharmaceutists to the right of property in the prescription and to its renewal, and asked, "Who are the judges of the indications as to the propriety of the repetition of the prescriptions? Certainly it is not the patient or his non-medical friends; neither is it the druggist, who perhaps does not even know for what purpose the medicine is intended. Yet he claims to be the judge in the matter, else, why should he renew the prescription without the authority of the prescribing physician? If in him lies the right to decide this important question, it would hardly be necessary for the physician to call in a brother practitioner in consultation, should he deem a change of remedies necessary, since he has only to send to any neighboring druggist and ask his opinion."

The resolution was then adopted unanimously and referred to a special committee.

A CASE OF CERVICAL ABSCESS.

DR. O'SULLIVAN related a case of cervical abscess, which came under his notice at his clinic for diseases of the chest in the Eastern Dispensary. An Englishman, æt. 50, presented himself for treatment. He had a swelling in the upper third of the sternum, directly in the track of the thoracic branch of the aorta. This tumor was first noticed several months before, causing a great deal of pain at the start, and alarming the patient somewhat by its violent throbbing. After a few weeks this symptom was not so troublesome, and he daily expected that (to use his own expression) it would burst and be all over with him. In this, however, he was mistaken. It was further stated by him that he applied at several of the dispensaries of this city for relief, and contrary to the habit of this class of patients, committed to writing the opinions given.

The situation of the swelling was in that portion of the cervical region where aneurism of the aorta most commonly occurs. The query naturally suggested itself, was it a *chronic abscess* or an *aneurism?* In placing the hand over the tumor, the impression of elasticity and impulse was readily perceived, the latter strikingly so. Percussion elicited slight dulness for some distance beyond the margin of the swelling. These physical signs, in connection with its position, gave some plausibility to the probability of its being an aneurism. Other, but not very positive signs, which need not be detailed, strengthened this supposition. He might also mention that the pulsation of an underlying artery was communicated to the tumor, contrary to what is usually met with in an abscess. On manipulation it appeared more movable than is the case in aneurism, and its size was not then very large. The pulsation, though strong, was circumscribed; and its irregularity more marked. For these and other reasons, which would be too numerous to mention, he inclined to the belief that it was an abscess; and so stated his opinion to Drs. Loomis, Blume, and Crampton, who were present and assisted at the examination. The patient continued to come regularly for several weeks, which afforded us an opportunity of repeated examinations.

The patient, however, disappeared rather suddenly from the clinic; and for some months was not heard from, until he called at the doctor's office in the early part of last June, and gave the following history: The swelling troubled him so much that he was unable to attend to business of any kind, and by the advice of his friends he entered one of the hospitals in this city, where he was unhesitatingly and very quickly informed that it was an aneurism. Weeks of mental depression and domestic solicitude followed the announcement that his death might occur at any time from rupture of the vessel. The patient had recorded the opinions of the several consultations, as gleaned from the discussions which ensued, and from information afterwards elicited There was indeed a rupture, but only of an abscess. He might also allude *en passant* to the diagnostic difficulties which too often attend upon tumors, and the careful study needed for the correctness of our judgment. Two cases in point might be mentioned, one of which baffled the skill and experience of a late distinguished surgeon of this city. It was a carcinomatous growth from the left lobe of the liver, which was found lying in the abdominal aorta, and was pronounced to be aneurism. The other case was that of popliteal aneurism, which was mistaken for an abscess. These mistakes were made by acknowledged experts, some of whom have grown old in hospital practice. These he brought to the notice of the Association in no captious spirit, but with the object of warning against an overweening confidence in our own judgment, and to inculcate that modesty which has always been held as not incompatible with true merit.

POINTS IN THE TREATMENT OF FRACTURES OF THE FOREARM.

DR. WEISSE directed attention to a case of fracture of the fore-arm in the lower third, involving both bones, which he had treated by short splints and an interosseous pad, substituting adhesive straps for the ordinary roller bandage. He held that fractures should be immediately put up, and referred to the injury conse-

quent upon the use of initial bandages. Notwithstanding the teachings of the present day, he had seen many fractures where narrow splints were used to the detriment of the patient and the surgeon's reputation. He likewise referred to the very common idea that pronation and supination were perfectly performed when they were not. The test he proposed was to firmly secure the humerus by the condyles with the thumbs of the surgeon, and then bid the patient to rotate his hand. The freedom of movement would be proportional to the integrity of this power.

Dr. Burke objected to the use of compresses as exciting too much irritation. He usually so padded his splint as to have it raised in the centre, and thereby gained one of the objects sought, which was equable pressure.

Dr. J. Shrady had employed in a recent case of fracture of the radius, india-rubber bands of considerable strength and width, instead of adhesive straps. These bands being used to secure large rolls of manuscript, may be very readily obtained at most of the book-stores.

After some debate upon an ethical point, which was referred to the appropriate committee, the Association adjourned.

Correspondence.

CONCERNING THE NEGLECTED CAUSES OF INFANT MORTALITY IN THE CITY OF NEW YORK.

BEING A REPLY TO DR. ROGERS,

By A. JACOBI, M.D.,

PROFESSOR OF DISEASES OF CHILDREN, UNIVERSITY MEDICAL COLLEGE.

[Continued from page 464.]

Thus, I do not deserve any credit for the second "rule," as appearing in Dr. Rogers' paper. It is evidently added by some thoughtful mind, and reads as follows: "Use light flannel covering of chest and bowels at all times, and other clothing to suit the change of weather." Dr. Rogers is indignant at such an advice and flings at it the following "neglected" physiology:

1st. Nature's means of preventing the overheating of the blood and structures of the body is the evaporation of perspiration from the surface.

2d. Woollen fabrics directly oppose the process of cooling; therefore they oppose nature, are unscientific, and inhuntane.

3d. The true condition of an infant in very hot weather is perfect nudity.

4th. As a compromise it may endure a covering of the lightest *linen* or well-worn *cotton* fabric, which readily becomes moistened by the perspiration, *and thus* by evaporation acts as a cooling wet sheet.

I state at once that his further advice of sponging the children from head to foot in tepid water, during the hot season, cannot be objected to; it is a fact that such advice has not been given in the "rules," which however were not meant to contain *all* the rules necessary or available in the management of infants. Nor are the doctor's rules all-comprehending and thoroughly satisfactory. For I must confess that I should not feel capable of sustaining his order that the child, at all ages, "were allowed an unrestrained run to iced Croton water" as a drink. My criticism would be as long as Dr. R.'s paper if I should attempt at here ventilating this question, but I may be permitted to ask, why the surface, which needs cooling by all means, should be sponged with tepid, and the stomach be drowned in ice-cold water.

But we have to deal with "Rule No. 2" and its criticiser. To the doctor's first sentence I take no exception; those objections, however, which I entertain to the rest, will become apparent by the following considerations, and their comparison with Dr. Rogers' autodidactic ideas on perspiration, evaporation, flannel, and linen "or" cotton:

The purpose to be obtained by dressing, consists in *the regulation of the normal cooling process*, the radiation of heat. This purpose is obtained in cold weather, by moderating and equalizing the motion of the atmosphere near the surface of the body, and further by the low conducting property of many of the materials used as wearing apparel. But these are not the only physical conditions which determine the differences of the action and value of our clothing. I allude to the hygroscopic qualities of different articles.

Equal weights of wool, cotton, and linen harbor different quantities of water; wool more than cotton, and twice as much as linen. Moreover, linen allows the water it contains to evaporate much sooner than wool.

Thus, the perspiration of the surface is slowly soaked up by flannel, is slowly and uniformly evaporated on the outside of the flannel, and leaves the skin nearly dry. No perspiration collects on the skin, but little evaporation takes place on the skin itself; no sudden change in its temperature is observed. Nothing is more dangerous than these sudden changes of the temperature of the surface: and my professional readers will admit that cases of bronchitis and pneumonia, not to speak of intestinal catarrh, are never more frequent than during the very hottest season. It is not the perspiration which results in sickness, but the rapid refrigeration taking place on the very surface of the skin in consequence of rapid evaporation. Flannel covering the human surface acts like another cutaneous integument, for the protection of the original one.

Linen is not so hygroscopic as flannel: it does not soak up and retain, for a slow and uniform evaporation on its own surface, the perspiration of the skin; moreover, evaporation takes place more rapidly from linen, and therefore it cools more suddenly than flannel, or cotton also. For this reason it is worn in summer. It is agreeable and comfortable for the moment, and when you have a good reason for believing in the constancy of the weather and the high temperature, and the absence of wind or draught. As soon as, by a sudden change of temperature, or by a draught, evaporation will take place on the skin as well as on the linen, the cooling process is too rapid, and results in disease. Therefore, many people with common sense will compromise between flannel and linen, and select cotton in the hot season, as it modifies the extreme qualities of either. Whoever is subject to copious perspiration, will not be satisfied with cotton, but select flannel to cover his surface.

Much of the comfort and advantage obtained by our articles of dressing depends on their permeability by the atmosphere. Flannel is nearly twice as permeable as linen; now, add to this, that this permeability by air is interrupted by soaking the articles in water, and remember the fact that linen is so easily soaked. If you do, you find an explanation for the uncomfortable sensation and the unwholesome consequences of a wet linen sheet on your body. It is the same sensation which is felt on rendering the skin impermeable by shellac or india-rubber, or noticed even by expert swimmers, after they have been in water for hours. Perspiration is checked, and congestion to internal organs, lungs, liver, and intestines, commences. The use of the oil-silk

jacket, too, in internal diseases, appears injudicious; for the moistness of the skin is not the result of increased cutaneous action, but it is due to local condensation and consecutive suppression of perspiration, from the impermeability of the covering.

The sudden refrigeration of the wet skin and the wet linen is dangerous, because of the sudden diminution of the body's temperature. Pettenkofer has studied the effects of wet feet with the following result: If you get your woollen stockings wet to the amount of only 1½ ounces of wool, the amount of heat necessary to dry this small quantity, which must be supplied by the system unless you change your stockings at once, would be sufficient to melt half a pound of ice, or to heat half a pound of water, from 32° to 212°.

I hope, Mr. Editor, Dr. Rogers will look at his linen *or* cotton theory with a little less satisfaction than before; at all events, even they differ greatly in their qualities; and further, a fabric, which "becomes readily moistened by the perspiration," will no longer, "thus by evaporation," act as a cooling sheet, nor will flannel, henceforth, "check perspiration and directly oppose nature."

I have tested Dr. R.'s physiology in some important points, and it has appeared that there was something "neglected" in his solar heat and flannel theories. I have now to turn my attention to some other "rules," three of which have attracted the good or ill will of the critic. Now, No. 9 is approved of; the advice given to a mother, to send for a doctor in case of necessity, evidently strikes him as good and practical, "as it is just what the parents would do in any case," I hope the parents will ring the bell of a practitioner with a tolerable stock of physiology.

Rule No. 3 is an abomination in itself. No matter whether that printed on page 339 or the one proposed by me is in question, the doctor is disinclined to obey it, because "a model mother and estimable lady," who not having breast-milk enough for the baby, fed her child on Winslow's soothing syrup instead of additional nourishment, had "the absurd impression" that infants ought to wait two hours before taking another meal, and kept the infant hungry until the doctor, who was sent for as rule No. 9 ordains, told her that the fact of the baby having taken food an hour and a half before had nothing to do with the child's desires. And thus the child's "colic" was cured at once.

An infant is entitled to a sufficient supply of food. Therefore, if breast-milk is secreted in insufficient quantity, artificial food has to be given. If the baby is hungry it will cry, surely. But when the baby does cry, it is not always from hunger. To the contrary, the causes for a baby's crying are very numerous; so numerous, indeed, that many an author has thought it worth his while to write elaborate articles on that subject. Nothing is more customary than to mistake every crying-spell of an infant for the expression of hunger, and nothing more common than that the mouth of an uneasy, frightened, annoyed, pinched, pin-stuck, rhachitical, wet, dirty, sore, or feverish baby is closed with the nipple. Nothing more common than that the thirst of an infant is made the pretext for feeding it, as if an adult who requires water, and asks for it, was satisfied with corned beef or beef tea.

The cases where babies have to wait for their meals too long are certainly the exception; those where they are fed too frequently, the rule. If a mother has not got enough for her baby, if the baby has to go to sleep half satisfied, it will awake and cry and require the breast, and certainly is entitled to it. But this is altogether wrong, as the supply itself ought to be made satisfactory. It is the more wrong, as direct injury will follow the too frequent sucking. Mr. Thomas Ballard has written a book,* to present his theory of the cause of the diseases of infants and puerperal women, in which he states that in his opinion a large portion of the diseases of young infants, viz.: affections of the skin (erythema and urticaria from gastro-intestinal disturbance), thrush, nervous disorders of all kinds, and intussusception of the bowels are due to "fruitless sucking." One mode of fruitless sucking is the nursing from empty or incompetent mammary glands. And whoever knows that "the excitation of the nerves of taste produces an abundant reflex secretion of gastric juice, and also a flow of bile and pancreatic juice in the bowels" (Brown-Séquard), will admit that Dr. Ballard is right in many respects. And moreover it is a well-known fact that, the whole alimentary canal being a single and coherent tract, motory efforts of the upper portion give rise to peristaltic action in the lower. Thus the alimentary organs of a baby, who, no matter whether to its satisfaction or dissatisfaction, is fed too frequently, will never be at rest, and no matter whether the consistency and constituents of the food are correct or not, the very existence of increased peristaltic motions gives rise to diarrhœa and consecutive disorders. Thus, if there is a child that claims more food than the mother's breast can afford to give, it will not suffice to give it the possession of the nipple to drink from it thin milk and muscular exhaustion, but the indication is to so add artificial nourishment to the natural one that the baby will have enough each time, and after each meal will require a normal time for rest and digestion.

The normal time for rest between meals, and for the digestion of a satisfactory meal in a young infant, experience shows to be from two to three hours. Habit may change this to a certain extent; you may prolong the intervals, for instance in the night, or you may shorten them by compelling the infant to take food whenever it shows any sign of uneasiness. A child may have "colic," not from hunger as in Dr. Rogers' case, but from flatulency depending upon the incomplete digestion of the too copious food, and scream; it will be fed to stop its crying, and oil is thrown into the fire. Such things are so thoroughly known as, unfortunately, the common rule, that I save my readers further remarks on my part. But I insist upon the fact, that the "desires" of the infants are generally either no desires, or their character is misunderstood; that more than heat and hunger and changes of temperature together, over-feeding, too frequent feeding, is the cause of the large majority of the digestive and consecutive disorders of infants. I have to stop here, because the further elucidation might fill a volume. Therefore, a rule *is* necessary, and ought to exist, for timing the intervals in which infants are to be fed, provided the food is normal and in sufficient quantity. A rule may have its exceptions, but it is given for the most possible good of the largest possible number.

It will hardly be denied that irregular feeding is mostly over-feeding. That it may, and will, result in vomiting, catarrh of stomach and intestines, subsequent congestion and swelling of the mesenteric glands, flatulency, enlargement and hypertrophy of stomach, with all the consequences of impaired digestion; for the rest of the physical and mental functions needs no particular illustration. But this is not all. If there is danger in irregular feeding, and over-feeding (simply because a child has, or appears to have, the desire), for its physical welfare, there is just as great a danger for its moral

*A New and Rational Explanation of the Diseases Peculiar to Infants and Mothers; with obvious suggestions for their prevention or cure. By Thomas Ballard, London, 1860, pp. 128.

development. The time and mode of feeding infants is the first means of their training, their education. In fact, education has to begin with the first day of life. It is not true that there is plenty of time in later life to commence education, for the groundwork of all our education, all our morals, is habit. The attentive observer, professional or unprofessional, is aware of the facility and rapidity with which bad habits are contracted, and how soon infants will learn how much they can gain by screaming and naughtiness, or whether they can influence their attendants by the expression of their desires or caprices. The preparatory stage of mental actions, the function of the senses, is to a considerable degree developed with the moment of birth; and the old "nihil est in intellectu quod non antea fuerit in sensu" requires early attention to the first simple rule, regularity and punctuality in the management of the new-born or young infant, in order to develop their "intellect" and morals on a sound basis. I hope, however, to discuss at some other time, the question of the necessity of early training and of the beginning of infant education, on the very first day of life, in connection with the peculiarly rapid and interesting development of the concourse and centre of the sensory and all other nerves—the brain. My readers will pardon me, therefore, for dropping this subject here, and directing their attention to the "delectable" (cf. *Medical Record*, p. 341) physiology displayed in Dr. Rogers' criticism on "Rule No. 4."

A number of questions, commencing with "we wish to know," and followed by "let us see" (p. 340), I shall answer after having examined, in a few words, Dr. Rogers' fitness for the place of criticizing apostle of infant diet. "Let us see." Dr. Rogers, who, by-the-by, is still clinging to the antiquated theory, of Liebig's, of exclusively heat-making and exclusively tissue-building materials, proteinous substances being the first, and amylum amongst the latter—declares "barley to be a vegetable substance very poor in plastic or building material." This is ludicrously wrong, as the Doctor might have learned from any text-book on organic chemistry or physiology in the hands of a first-course student of medicine. I quote from one: There are (in 1000 parts)

Albuminous substances: in wheat 135, barley 123, rye 107, oatmeal 90, Ind. corn 79, rice 51.
Amylum: in rice 823, Ind. corn 637, wheat 569, rye 555, oatmeal 503, barley 483.
Fat: Ind. corn 48, oatmeal 40, barley, rye, wheat, rice, but little.
Salts (principally phosphates): barley 27, oatmeal 26, wheat 20, rye 15, Ind. corn 13, rice 5.

Potassa is mostly found in wheat, magnesia in wheat and Indian corn, lime in oatmeal and barley, iron in barley, phosphoric acid in barley and wheat. From these figures Prof. Moleschott (of Zurich, Switzerland, Turin and Florence, Italy) concludes, that amongst all the vegetable substances fit for digestion and assimilation, and the support of the human organism, none is more so than barley. It is true he had not read Dr. Rogers' assertion, based upon "experience, physiology, and common sense" (p. 340), that "barley is a vegetable substance poor in plastic or building material." From his investigations Prof. Moleschott arrives at the conclusion, that 1100 grammes of barley (36 ounces) are sufficient to sustain a hard working adult man. I will add at once a very important advantage of barley over the rest of the above mentioned vegetables, which is this—that it bears the removal of the husk after grinding, better than any other. The large proportion of the proteinous substances in wheat and rye is deposited in the inner layer of the husk, which generally is not used. (Payen.) It is different in barley, where the protein is spread in equal proportion through the whole grain. Thus the husk can be removed, the consistency finer, without diminishing the nutritive value of the constituents. Evidently the results of modern chemistry and "physiology" have now and then confirmed the "experience and common sense" of olden times, for even old Van Swieten (IV., p. 644) speaks of "potus nutriens dilutus, ut *hordei* vel *avenæ* decoctum, tertia parte lactis recentis admixti."

"Let us see," further. Dr. Rogers says, that "barley contains *dextrine*, a substance which even in the adult is difficult of digestion, and, *a fortiori*, must be so in an infant" (p. 340). And again, he emphasizes dextrine as "indigestible." Physiology says, to the contrary, that fresh saliva has the faculty of transforming starch and dextrine into sugar. The transformation of dextrine into sugar is so rapid indeed, that hardly any dextrine is ever found unchanged below the duodenum. Moreover the existence of dextrine, not only of such as is preformed in the food, but also that which is transformed from starch, is both so important and so easily influenced that the facility of stomach-digestion greatly depends on it. The experiments of Maurice Schiff, of Florence,* prove that the formation of gastric acid, especially lactic acid, principally devolves on dextrine.

Again, Dr. Rogers assures us that the casein of barley is "insoluble." What this means, we are at a loss to understand. For physiology teaches, that the cellulose of the casein of the leguminosæ, and of the albuminate of the cerealiæ, is rendered soluble by fine grinding, and dissolved by cooking, and that both the casein and the albuminate are digested in the gastric juice. In fact, the casein is probably nothing else, according to the investigations of F. Hoppe, but an albuminate of potassa.

Farther, Dr. Rogers, speaking of some observations of Guillot's concerning artificial feeding, alludes to substituting "for the milk some farinaceous substance, made fluid by boiling arrow-root, gum-arabic, rice, or some similar substance in water." Where the similarity is to be found between arrow-root (amylum, mostly) and gum-arabic, Dr. Rogers is surely unable to determine. Physiologists knew that gum is not absorbed, or to a very small quantity only, and that the lining membrane of the intestine is simply covered and smoothed by it. But still Dr. Rogers has the naiveté to assure us, that Dr. Guillot "was struck with the uniform presence in the bowels of a jelly-like substance. Upon analysis this substance was found to be nearly pure starch." I confess that I also am "struck" with the novelty of the fact, that gum, when introduced into the intestine, and analyzed, is recognized as pure starch. It requires an innocent mind, and one not spoiled by chemistry, to believe it.

From the supposed results of Dr. Guillot's experiments, made on sick children, while Dr. Rogers speaks of the diet of the healthy, he concludes that "it would therefore appear that the infant, whose salivary apparatus and whose teeth are not developed, has neither his gastric, nor duodenal, nor other intestinal glands ready to digest the starchy substances of a farinaceous diet." From this remark, it is evident that Dr. Rogers believes that the reason why amylum is not digested by the gastric, or duodenal, or intestinal glands—they being not "ready" yet—must be sought for in the tender age. But as far as I know, these glands have neither in the infant nor in the adult anything to do with the digestion of starch. Physiology sustains me in this opinion;

* Leçons sur la Physiologie de la Digestion, faites au Muséum d'Histoire Naturelle de Florence. 2 vols., 1868.

and here again it is the doctor who makes a serious mistake; for it is more than doubtful, that anywhere the intestine contributes to the digestion of starchy material. To the contrary, whatever amylum has not been transformed into sugar by saliva, either in the mouth or in the stomach, is thus changed by the pancreatic juice.

The secretion of the pancreas has three distinct functions:

1. Transmutation of albuminous substances into pepsine.
2. Changing fat into an emulsion fit for absorption.
3. Transformation of starch into sugar.

The fact that a writer of Dr. Rogers' experience and knowledge is not acquainted with this fact, does not disprove the results of Claude Bernard's and others' experiments. The pancreatic juice is, in fact, much more efficient than saliva; it digests amylum as well raw as cooked; and while for an immediate action it requires a temperature of 95°, a lower temperature will not be an impediment to its efficacy. Even the presence of bile and acid gastric juice cannot stop its action.

"The salivary secretion of the child is little or nothing." Which of the two it is—"little" or "nothing," Dr. Rogers does not say; but in order to carry his point, he appears to believe "nothing," and reasons accordingly. But the fact is, that it is "none" in very young infants under four months; the youngest infants in whom saliva has been found being 41 days old. After that period there is plenty. Thus the pancreas in very young infants, pancreas and salivary glands in infants over four months, perform the function of transforming into dextrine and sugar such amylum as will be introduced, in limited quantities, into the system of an infant. The physiological effect of the saliva, as it is shown in the transmutation of amylum into sugar, is due to a substance, first, I believe, isolated by Cohnheim, called *ptyaline*. It acts rapidly and on proportionately large masses, like a fermenting agent, not only as long as the mixture is alkaline, but also when it gets slightly acid. Thus its action is not interrupted by the normally acid secretion of the stomach. Ptyaline is found in all the salivary glands of man (not in the parotis of the dog), and it is not decomposed by acting on the substances undergoing digestion, exactly like the rest of fermenting agents.

Thus, there can be no doubt in any unprejudiced mind that a reasonable amount of amylum will be digested in the salivary and pancreatic secretions of the infant. It requires an unusual straining of logic to deny it, just as it manifests a singular desire for levelling nature, who is so much in the habit to diversify and multiply, to look upon barley, arrow-root, rice, gum-arabic, and other "farinaceous" substances, as similar or equivalent.

In consequence of such a "deep-rooted delusion" (p. 341) Dr. Rogers, in order to present the most forcible aspect of his pleading, relates the case reported by Routh, of a woman who succeeded in systematically killing her sixth child by feeding it on nothing but "the best arrow-root that could be procured." Neither the physiology of infant digestion, nor the "rules for the management of infants" claim any blessings or advantages for unmitigated amylum-poisoning; and the somewhat malicious unction with which the case has been reproduced, speaks for (or against) the reasoning of a man in whose good-will I have the courage to believe, and "whose heart is in the case" (p. 344)—unpolluted by physiology and chemistry.

Now, Mr. Editor, I believe I have tried your patience long enough; but for a consolation, I think I have done, at last, with the author of "neglected causes of infant mortality." I "exonerate our respected friend, however, for his utterances of manifest falsehoods, for he undoubtedly supposed that the sources for his data were reliable" (*v.* Dr. Rogers on p. 343, 1st column). But I do not exonerate him for contradicting himself on his own ground, and, moreover, committing the same sins for which he blames the Board of Health, and the "rules." For instance, he protests against such "loose directions" as "a little salt" and "a lump of sugar," and complains at not receiving any instructions, how much a little salt to a pint of food would be, or how big "a lump of sugar" must be added. This is all very well But then a man who has nothing but blame to express, and nothing but fault to find, must not, "of course, recognize the appropriate addition of water to the milk of the cow, and the addition of a proper amount of sugar, especially the sugar of milk, and of common salt, and of lime or other alkalies." For he exposes himself to retaliation by being questioned about what is the "appropriate addition of water," or the "proper amount of sugar," of "common salt," of "lime," and of "other alkalies," and which alkalies he means. Moreover, the very same writer, who first protests against "loose instructions," and secondly, has nothing but loose instructions to give, has the ingenuity, or the weakness, to insist upon the "freshest and most natural milk," without any addition or admixture. Nor do I see more consistency in the fact that one and the same writer should absolutely insist upon the infant hospital to have milk, which not even should be transported, and on the other hand assures us that "no thinking being need be told that the very mixing of the milk is the only true way to secure an average good milk," and that "there certainly never was any material transported into a city, of a more desirable character for the food of infants than the Orange County milk and cream supplied by . . . and . . . and . . . and several smaller parties." You will permit me, Mr. Editor, not to copy the names and firms of those business men; they might feel like sending me a Christmas present, if I, though involuntarily, gave them "a lift."

If I meant to go on, there would hardly be an end to the list of mistakes, incongruities and "fallacies" which have slipped into Dr. Rogers' paper. There may be a good many good points in the essay, but Dr. Harris says its *animus* is mischievous. Dr. Castle asserts its facts are misrepresented, and I say its physiology is rather imaginary, its chemistry tolerably antediluvian, and the whole effort "a lamentable failure" (*vide* Rogers, "neglected," etc., Medical Record, p. 343).

Finally, Mr. Editor, I beg your pardon for once more addressing you for a special purpose. A criticism is naturally mostly of a negative character. I have tried, though, to alternate my negative expositions and some positive facts, not believing myself justified in trespassing too much, and to no use, upon your space and your readers' time. As I have repeatedly blamed Dr. Rogers' paper for its absolute barrenness, as far as its scientific value is concerned, I request the privilege of being permitted to lay before your readers, in your next number, such facts and opinions concerning the diet of infants and children as have given rise to part of the "rules for the management of infants."

Yours truly,

AB. JACOBI.

A REBELLIOUS CASE OF APHONIA, instantly cured by electrical excitation of the inferior laryngeal nerve, has been communicated by Dr. R. Philipeaux to the *Gazette Médicale de Lyon*, 1868, No. 30.

A URETHRAL APPLICATOR AND UNIVERSAL SHOWERING SYRINGE.

By A. G. FIELD, M.D.,

DES MOINES, IOWA.

The following described instrument was devised for the purpose of bringing topical applications more fully and uniformly upon the urethral mucous membrane, than the usual methods employed admit of, when indicated in the treatment of diseases.

In an effort to study some of the pathological conditions of that canal during the past year by ocular inspection with the endoscope, my attention has been attracted by the maculose appearances of the membrane, tumefied blotches, circumscribed patches of abrasion, induration, stricture, &c., upon which so many cases of blennorrhœa and other obstinate maladies of the part seem to depend. As the history of these conditions shows that they are usually the extension, consequence or sequela of more wide-spread or general disease, but invading at first only the mucous membrane, they very naturally suggest some defect in that plan of treatment which has simply modified the preceding form of it, or eradicated the disease only from a portion of the surface involved.

Without now considering the various kinds of urethral injections, the indications for their use or their comparative value as an adjunct to other treatment, our object at present is simply to invite attention to the manner of using them.

An examination of the prominences and fossæ, sinuses and longitudinal folds of the urethral mucous membrane in its quiescent condition, together with the usual mode of employing injections, seems to afford a starting-point for the solution of the difficulty, and the inferences which follow suggest the importance of overcoming these irregularities by sufficiently distending the passage, so as to constitute its walls as nearly as possible, smooth and even surfaces during the use of local applications. For this purpose, Dr. M. S. Buttles invented and has used with success a syringe, the nozzle of which is provided with prongs on either side, which being introduced with the nozzle dilate the canal while the injection is thrown into it. See MEDICAL RECORD, Vol. II., page 575.

With the instrument hereafter described all parts of the urethra can be reached with equal facility. It is operated with one hand, and is under perfect control under all circumstances. The point most suitable having been attached, and the syringe sufficiently filled with the fluid to be used, a bulb of proper size for the urethra is attached to the point, and the fluid forced into it. The urethra having been previously cleared by micturition, the bulb point is to be introduced into it as far back as the disease extends, and the syringe gradually discharged as the point is slowly withdrawn.

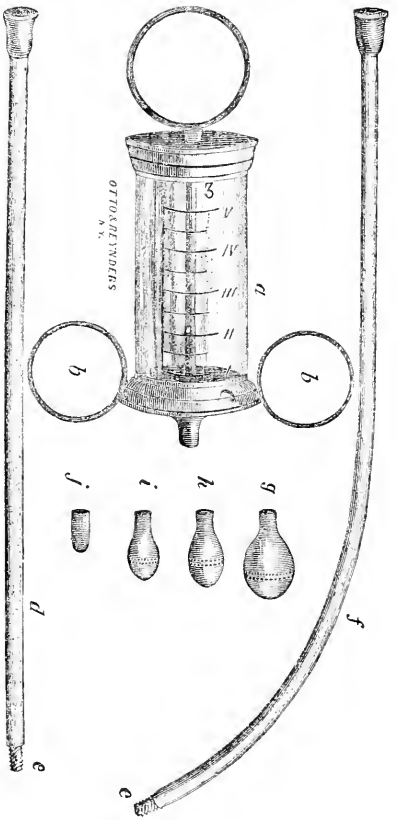
This instrument has so far been used with very satisfactory results. But as its real value can be determined only by a more general and extended use of it, others interested and having larger opportunities may feel disposed to give it a trial, as a help not only in obviating some protracted diseases of the urethra, but in facilitating the cure of them in stages more amenable to treatment.

The value of the instrument, however, is not entirely confined to the use for which it was originally designed, as a universal Showering Syringe it has in my hands superseded, to some extent, the use of probangs, caustic-holders, spray tubes, &c., in the treatment of diseases of other canals and cavities of the human body.

The figure marked (a) is designed to represent a strong glass v ℥ f syringe, two and one half inches in length and graduated.

The rings (b) (b) are attached to the metallic cap (c) for support, as represented.

The point or tube (d) is straight, six inches in length, and the point (f) is curved in its terminal two-thirds, and is seven and one-half inches in length. Both are



the size of No. 4 bougie, and are terminated at (e) (e) by screws for the attachment of the oblong globular bulbs (g) (h) (i) and (j), which are perforated in their lesser circumferences by numerous minute holes, $\frac{1}{64}$ inch or less in diameter, as represented, except (g), which is perforated only at the distal extremity. They correspond in size to Nos. 4, 6, 8, and 10 bougies, and are all adapted to either point or tube (d) or (f).

The metallic part of the instrument is of pure silver, but its range of usefulness would be somewhat extended by using a still less corrosive metal.

Dr. Moore, late Surgeon-General of the Confederate Army, has been elected Superintendent of the Eastern Lunatic Asylum of Virginia.

Medical Items and News.

A Successful Operation for the Transfusion of Blood was recently performed by Dr. Enrico Albanese at the hospital of Palermo, Sicily. A youth aged seventeen, named Giuseppe Ginazzo, of Cinisi, was received at that establishment on the 29th of September last, with an extensive ulceration of the leg, which in the end rendered amputation necessary, the patient being very much emaciated and laboring under fever. The operation reduced him to a worse state than ever, and it became apparent that he was fast sinking, the pulse being imperceptible, the eyes dull and the body cold. In this emergency Dr. Albanese had recourse to the transfusion of blood as the only remedy that had not yet been tried. Two assistants of the hospital offered to have their veins opened for the purpose, and thus at two different intervals 220 grammes of blood were introduced into the patient's system. After the first time he recovered the faculty of speech, and stated that before he could neither see nor hear, but felt as if he were flying in the air. He is now in a fair state of recovery.

Personal.—The following assignments of medical officers have been made:—Brevet Brigadier-General J. B. Brown, Surgeon United States Army, ordered to report to General Sloan, Chief Medical Officer at New York, for temporary duty. Brevet Lieutenant-Colonel H. R. Wirtz, Surgeon, ordered to resume his duties at Fort Hamilton.

The Chair of Obstetrics and Med. Jurisprudence in the Mass. Med. College Filled.—Dr. Chas. E. Buckingham, formerly Adjunct Professor of Theory and Practice, has been appointed by the Corporation to the vacant chair of Obstetrics and Med. Jurisprudence in the Massachusetts Medical College.

A New Diagnostic Sign in Pregnancy.—Dr. Barnes, at the last meeting of the British Med. Association, gave the following new diagnostic sign of pregnancy: The connective tissue uniting the neck of the uterus with the base of the bladder is peculiarly relaxed, giving to the touch a soft elastic feeling on the upper and anterior wall of the vagina.

An Aged Primipara.—Dr. Cachot, of St. Mary's Hospital, London, recently delivered in that institution a female of her first child, at the age of 55 years, and again in sixteen months. In both confinements the labor was tedious, from inertia of the uterus, and forceps were required. The mammary glands produced no milk, but were enlarged. The children lived in both cases.

Dr. J. Marion Sims has been elected a corresponding member of the Obstetrical Society of Berlin.

A Case of Abnormal Gestation.—Dr. W. H. Houston (*Richmond and Louisville Med. Journal*) publishes a case of abnormal gestation, where the fœtal bones were discharged through the rectum four years after conception. The patient, at last accounts, was in fair prospect of recovery.

Dr. John P. Garrish is giving a course of lectures on Ophthalmology, free to physicians and medical students, on the first Saturday, and the second, third and fourth Tuesdays of each month, at eight o'clock P. M., at his Eye and Ear Infirmary, 65 West 34th St., cor. Broadway. He also holds daily clinics at 2 P. M.

A New Urethroscope, and we like the name better than *endoscope*, has been devised by Dr. Langlebert of Vichy, which can be readily used by daylight, or by the illumination of an ordinary lamp or candle. It is very simple in construction. A full description, with wood-cut, appears in *La France Médicale*, 1868, No. 77.

The Caustic Ligature.—M. Vallette, of Lyons, advocates in the treatment of erectile tumors by the multiple ligature, the use of a seton impregnated with chloride of zinc, and passed through the strangulated mass. He cuts down on to the subcutaneous caustic seton fifteen or twenty hours afterward, and takes it away, and if necessary introduces a further quantity of caustic.

Dr. Lebrun, Prof. of Clinical Surgery in the University of Warsaw, died in June.

Deaths from Infantile Syphilis.—It appears from the official statistical reports of London that, during the last week in Nov., eight children died from syphilis.

Prof. Wurtz, Member of the Academy of Medicine and Dean of the Medical Faculty of Paris, has been directed by the Minister of Education to make a journey through Germany for the purpose of studying the organization of the practical courses of instruction in that country.

A Foreign Body in the Œsophagus of a Child three years of age, was recently removed with the double-hooked œsophageal sound of Graefe by Dr. Krishaber, of Paris, who records the case in detail in the *Gazette Médicale de Paris*, 1868, No. 38.

Military Hygiene, in its Physiological Application to the Equipments of the Soldier, forms the subject of an interesting article from the pen of Dr. Judee, illustrated by wood-cuts, in *La France Médicale*, 1868, No. 73.

Variations in Pitch and their value in physical exploration of the chest, forms the subject of an interesting paper from Dr. Noel Guéneau de Mussy in the *Gazette des Hôpitaux*, and reprinted in *La France Médicale*, 1868, No. 74, in which due credit is given to our distinguished countryman, Prof. Austin Flint, for having first attracted the attention of the profession to the diagnostic value of difference in pitch.

The Death of Dr. Isaac Cummings.—At a meeting of the Physicians attached to the Demilt Dispensary, held on the 16th December, 1868, with the object of uniting in an expression of their sentiments regarding the death of the late House Physician of that Institution, Dr. Isaac Cummings, the following preamble and resolutions were adopted:

Whereas, It has pleased Almighty God to remove from us by death, our late colleague, Isaac Cummings, M.D., while yet in the prime of life, and at a period of greatest usefulness, we therefore,

Resolve, That we recognize in this dispensation of Providence the loss of a highly-esteemed friend and valued counsellor; that the Demilt Dispensary has in him lost one of its oldest and ablest officers; that the poor who seek its benefits have lost a good and skilful physician; and that the Profession has lost an eminent member.

Resolved, That we sympathize with his family in their bereavement; as well as in the affliction of those who will miss his uniform kindness and honest advice.

Resolved, That these resolutions be published in the medical journals and in the daily papers of this city; that a copy of the same be sent to the family of the deceased, and to the Board of Managers of the Demilt Dispensary.

Original Communications.

SUCCESSFUL CASE OF VAGINAL CÆSAREAN SECTION.

By HENRY RISTINE, M.D.,

MARION, IOWA.

I was called on Tuesday, February 2d, 1868, to see Mrs. B, the mother of four children, the youngest of which was eight years old, whom I found in an apparently advanced stage of labor.

From the character of the pains when I first entered the room, I supposed that the labor would be of short duration, but upon making a vaginal examination, was surprised to find a plain smooth surface about the size of a ten-cent piece, occupying the place of the os uteri, no trace of which could be discovered. I at first considered this to be a membrane thrown over the os, from obliquity of the cervix or from some other cause, which would yield to the pressure of the child's head, and after remaining with her a number of hours, and making several examinations, without any progress being made, I gave her a dose of morphine, for the purpose of giving her a little rest, which had the desired effect.

I watched the case, which now gave promise of being a tedious one, and made examinations from time to time until the succeeding Thursday, when I called in Dr. J. S. Love, of Springville, who agreed with me in the conclusion that delivery could only be accomplished by mechanical means. As she had been resting under the influence of morphine for some hours, it was decided to give nature another trial before making this resort. During the night the pains returned with increased intensity, and continued until morning, when, no progress having been made, she was again brought under the influence of morphine to prepare her for the operation.

This was delayed, from various reasons, until evening, when Dr. Holmes was called in, who administered an anæsthetic of equal parts chloroform and ether. The patient readily came under its influence, and an incision was made, through an ordinary glass speculum, which had been cut off for the purpose, at the point where the os uteri was supposed to have originally existed, and carried obliquely upward about two inches on either side. Upon making an examination through the opening I observed the placenta detached, and lying near the orifice, the uterus being filled with coagula.

After removing a large quantity of this, with the placenta, I discovered that in addition to the other complications, we had a transverse presentation to contend with. With some difficulty I passed my hand through the mass of coagula, and succeeded in finding the feet, turning and delivering an eight-pound child, which had arrived nearly at full term. Having inserted a tent within the newly formed os, to prevent adhesion of its lips during cicatrization, the anæsthetic was withdrawn, and she soon recovered from its effects. I subjoin notes of the case for a few days subsequent to the operation.

Saturday, 10 A.M.—Complains of some pain with soreness over bowels; considerable thirst; mind slightly wandering; pulse 120; gave morphine gr ss. 9 P.M.—Patient quiet and free from pain; pulse 110; mind clear; less thirst; soreness continues.

Sunday, 8 A.M.—Rested well during night; pulse 100; bowels slightly disturbed, but soft; soreness remains. Lochia made their appearance and look natural.

Monday, 7 P.M.—Slight exacerbation of fever; pulse 115, which I attribute to secretion of milk.

Tuesday. More comfortable; fever considerably abated; pulse 100; continued soreness of bowels; exhibit morphine; bowels moved by injection.

Wednesday and Thursday, quite comfortable.

Friday, had a slight chill, followed by considerable reaction, caused by neglect of attendant in allowing secretion of milk to accumulate.

Saturday, no fever; pulse 95; less tenderness; appetite quite good; bowels movable.

Her convalescence was retarded by the supervention of mammary abscess, which proved quite troublesome, but was finally overcome, and recovery become complete; the catamenia making their appearance in due time, and continuing regular to the present date.

MUTISM WITHOUT DEAFNESS.

TRANSLATED FROM THE FRENCH OF DR. MAURICE KRISHABER,*

By J. SOLIS COHEN, M.D.,

PHILADELPHIA.

In the early part of the year 1866, a woman about thirty-five years of age presented herself before Prof. Trousseau, and without uttering a word, handed him a manuscript in her own handwriting, detailing the history of her disease. To the questions which were addressed to her in the ordinary voice, and which she heard perfectly, she replied by inscribing her responses upon her tablet. These responses, read by the husband of the patient as fast as she wrote them, established a sort of conjoined graphic and phonetic conversation, nearly equalling in promptness that of ordinary language.

In this manner she related that she had been perfectly well until within a period of about two years and some months, at which time she began, without any assignable cause, to experience a difficulty in pronouncing her words. Without any other trouble manifesting itself in her general health, this difficulty augmented progressively, and soon the patient found it absolutely impossible to speak. For two entire years the patient had not uttered a single word. Every attempt to do so since this period produced acute pain in the larynx, but without the accomplishment of phonation.

The husband of the patient confirmed these facts in every particular.

Our lamented master did me the honor to send me the patient for a laryngoscopic examination.

After having become satisfied that there existed no functional lesion in the general movements of the limbs and trunk, nor in the movements of the tongue and the lips; after having equally satisfied myself, by means of this peculiar mode of conversation already described, that the mental faculties of the patient and her sense of hearing were normal, I applied the laryngoscope.

I found complete integrity of the vocal cords and all the other structures of the larynx. I then requested the patient to make the movement of a strain during the application of the mirror, and I saw that the vocal cords, and the thyro-arytenoidian folds, moved normally in response to the complex movements which produced closure of the glottis during the straining.

I then requested her to utter the peculiar and unharmonious sound which we had heard during the strain, and which I made myself in order that she might more easily imitate it.

The patient again obeyed my instruction, and I saw this particular sound, which was perfectly heard, pro-

*Gazette Hebdomadaire, 1868, No. 39.

duced in the mirror. Finally, when I requested the patient, conducting her towards it, as it were, step by step, to utter a cry, which I also succeeded in obtaining, I was convinced that the vocal cords could perform their normal function, having seen them approach and vibrate in the mirror during the emission of the sound.

I then requested the patient to read some passages from a newspaper, even at the risk of suffering pain during the reading. She accomplished this after long hesitation, but she seemed agitated and astonished to hear herself speak, and complained of acute pain during phonation.

All the exercises above enumerated had provoked, among other things, signs of pain.

To the questions which I then addressed her, she responded, briefly it is true, and, as it were, in spite of herself, but articulating very distinctly.

REMARKS.

In view of this strange fact, there was naturally presented to my mind the idea of a particular form of hypochondria, or perhaps even simulation. This was, in fact, the diagnosis to which I arrived at the time.

Not having seen the patient again, as she returned to her home the next day, I do not know what became of her; but I do not hesitate to acknowledge that my interpretation of the case has become modified since; having had occasion to observe analogous cases, much less marked it is true, but possessing absolutely the same character, and in which it has been possible to convince myself, by prolonged observations, of the reality of the symptoms complained of.

We encounter sometimes—thus far my observations have been confined to females—persons who experience, without any vocal fatigue having preceded it, an annoyance in the functions of the larynx, accompanied with great sensitiveness, and even pain more or less intense. Not only does phonation become difficult, but the closure of the glottis in the act of expectoration and in the movement of straining, is equally painful.

There is neither cough, nor any particular general trouble. The laryngoscope does not portray any material lesion. The reflex sensibility of the laryngeal mucous membrane is not at all exaggerated, for I have many times carried into the interior of the larynx in these cases, a sponge moistened with a weak solution of nitrate of silver, without provoking any greater reflex movements than are produced in ordinary cases.

To analyze the nature of the class of affection to which this belongs, I am obliged, at the risk of making a rather long digression, to enter here into some other considerations, for it becomes necessary, in the first instance, to define the different varieties of sensibility of the laryngeal mucous membrane.

When we cauterize the mucous membrane of the larynx with a liquid corrosive substance, or still more, when we touch it with a solid substance which instantly modifies the surface, as for example, nitrate of silver in crystals, we provoke a convulsive closure of the glottis, manifesting itself by several successive movements of *inspiration* stridulous and painful; the movements of *expiration* remain calm and quiet. The mucous membrane of the larynx remains painful for several hours or several minutes, according to the strength of the substance employed, *but it does not provoke cough.*

It, instead of corroding the mucous membrane of the larynx, we drop upon it (with the little laryngeal sponge-holder) a simple drop of water, imitating in this manner what happens so often when we "swallow the wrong way," there still follows a convulsive movement of the muscles of the glottis as in the case already cited, but the phenomena are very different. Among these phenomena, the one which predominates is *a violent cough*, tearful, stridulous, to produce which, all the *expiratory* muscles contribute by reflex action; while as to the inspirations, they are difficult at the commencement, but soon become calm and normal. The cough, on the contrary, continues as long as the slightest sensibility of the laryngeal mucous membrane remains. It seems that trifling foreign contact with this laryngeal mucous membrane provokes a sensibility intended to preside over the work of expelling foreign bodies engaged in the air passages, and it is this sensibility to which the name of reflex sensibility belongs. It is hyperæsthesia from a special cause, such as occurs in various affections; it then provokes cough even at the simple solicitation of atmospheric air passing through the glottis.

But we have just seen that corrosive and painful applications provoke phenomena of an entire different order. They give rise to closure of the glottis *without cough.* There occurs then in the muscles situated beneath the laryngeal mucous membrane just what takes place in any other organ provided with a mucous membrane, covering a muscular surface; that is to say, the local spasm corresponds to a local excitation. In this case, then, it is the *general* or *common sensibility* of the larynx which has been excited.

It is evident that the two modes of sensibility are not distinguished only by degrees of intensity, and what I have in view is to show that this distinction is real, and that it depends upon pathological facts, thoroughly determined.

After having shown that the cough, a convulsive movement of all the expiratory muscles, corresponds to the non-painful excitation of the *reflex sensibility* of the larynx, it yet remains to determine the rôle which pathology prescribes for the excitation of the *common sensibility* of the larynx.

I thus find myself conducted to the interpretation of the case of which I have given the history. This case which I have chosen from among several like it, but less pronounced, is, in fact, a marked example of the cessation of the functions of an organ from exaggeration of its *common sensibility.* There is the same condition which occurs in a painful limb, inaction. Suffering during phonation, the patient is condemned to an absolute silence, as an individual with a severe sciatica is condemned to absolute repose.

Have we here a neuralgia of the superior laryngeal nerve; or is there only a well-marked hyperæsthesia of the terminal filaments of this nerve? I am not prepared to decide with certainty, but I am inclined towards the latter opinion, that is to say, a simple *local hyperæsthesia;* the pain never occurring spontaneously, and not manifesting itself except during the various functions of the organ.

The subject is too new not to admit of other interpretations; I have explained it as I have comprehended it; and what I desire above all, is to call to it the attention of other observers.

NOTE BY THE TRANSLATOR.

I have never met a case like the above. I have seen several where the voice had been lost for a continuous series of months, in some instances more than a year, and which was restored at the first interview with the patient, by means of galvanic and other stimulus. A case of the kind was recorded by me in the first volume of THE MEDICAL RECORD, page 178, and I have since met many others, notes of which are at present being preserved in a permanent form. I have never met

a case where the patient could not whisper; cases I have seen where pain was complained of in attempting phonation with the larynx, but whispering with the lips could be accomplished.

I have met three or four cases of acute pain in the larynx, but the voices were good, in which no cause for the trouble could be discovered by the laryngoscope or otherwise. One case was a little girl brought to me by Dr. Wm. H. Pancoast, after he had failed to discover any lesion; two others were males, one of them a practitioner in the western part of Pennsylvania. These patients declined local interference with a view of altering the sensibility of the laryngeal mucous membr and I have never heard further from them.

INJURY OF THE HEAD—PROFUSE WATERY DISCHARGE FROM THE EAR—RECOVERY OF PATIENT.

By D. McLEAN FORMAN, M.D.,

FELLHOLD, N. J.

Mary Fulham, aged 50 years, healthy. Admitted to St. Luke's Hospital, February 29th, 1868. About an hour before admission to the institution the patient fell from a height of seven feet, striking on her right side, and receiving the injuries for which she was brought for treatment. At the time of admission she presented the following symptoms:—She was semi-comatose, and when aroused talked very incoherently, and with an impediment of speech like a person deeply intoxicated; surface cold; pulse irregular, slow and weak; respiration normal; no change in the pupils; no vomiting nor paralysis. She was bleeding freely from the right ear, but presented no external marks of injury about the head. There was a fracture of the right clavicle at junction of outer and middle thirds, presenting the usual symptoms of this injury, also several contusions on various parts of her body. The policeman who brought her to the hospital stated that she had been drinking a little, but was not intoxicated at the time she fell; that she was rendered insensible by the fall; that she was bleeding freely from the ear when raised up, and that her comatose condition had passed off gradually while on the way to the hospital. After admission she was placed flat on her back in bed (which position, I may remark, kept the fractured clavicle in good position), and warmth was applied to her body. Reaction was soon established. The surface became warm, the pulse stronger and quite regular, and in the course of two or three hours her mind became perfectly clear. About an hour after admission the discharge of blood from the ear ceased, being succeeded by a discharge of serum (slightly tinged with blood) in such a quantity as to saturate, in a few hours, four or five towels placed to receive it, besides wetting the pillow considerably.

March 1st.—The patient rested well last night, and feels comfortable this morning, with the exception of occasional pains in the contused parts. The discharge from the ear is still abundant, and has the appearance of pure serum. She states that she has "lost her hearing" in the injured ear. Her mental faculties are unimpaired; no headache; pulse, respiration, and pupils normal. Ordered ol. ricini ℥j.

March 2*nd*.—The discharge from the ear still continues free and unchanged in appearance. No change in other symptoms.

March 3*d*.—The discharge from the ear ceased entirely during the night, and with its cessation the sense of hearing returned. From this time until her clavicle united she was kept quiet on her back, and had no return of head symptoms, the only treatment pursued being such as to insure a daily evacuation of the bowels. She was discharged from the hospital well on March 30th.

A profuse watery discharge from the ear, after an injury of the head, has always been considered one of the most unfavorable symptoms. At one time it was said that no patient ever recovered after having this symptom, but now a sufficient number of cases are on record proving that this is not the fact.

Various opinions as to the source of this watery discharge from the ear have been held by different observers, but they may be reduced to two classes; one, in which the fluid is said to be nothing but the serum of the blood exuding from a clot or lacerated vessel lying along the fractured bone or in the neighboring soft parts; the other, in which it is said to be the secretion from some membrane. The first of these opinions has not been borne out by subsequent investigations, and with regard to the second, the discharge in different instances has been proved to be the "cerebro-spinal fluid," and the "liquor cotunnii;" while in a case reported by Mr. Henry Gray, in the *Transactions of the Pathological Society of London*, it was proved to have proceeded from the inflamed membrane of the middle ear, there being no fracture of the temporal bone. A case is also reported by Mr. Holmes, where, in a patient in St. George's Hospital, the discharge was due to a fracture of the lower jaw, the lower fragment having perforated the wall of the meatus auditorius. These two cases prove that we may have a copious watery discharge from the ear, without any fracture or injury about the petrous portion of the temporal bone, or any communication between the internal and middle ear.

With reference to diagnosis and prognosis, it is necessary to consider the nature of the discharge, and the time at which it makes its appearance. For the sake of convenience the cases may be classified under three heads:

1*st*.—Those cases in which no discharge of blood, or only a small quantity, precedes that of the watery fluid; the discharge being unmistakably watery immediately after the accident. In these cases the discharge is due to an escape of the cerebro-spinal fluid, which can only take place through a fracture of the petrous bone, implicating the internal auditory canal and its membranes.

2*nd*.—Those cases in which there is a copious and prolonged bleeding from the ear, followed by a watery discharge. In these cases we may safely diagnosticate a fracture of the petrous bone, but we cannot say that the fracture follows any particular course, and we trust more for our diagnosis to the prolonged and copious bleeding than to the watery discharge.

3*rd*.—Those cases in which there is at first a discharge of blood only, neither copious nor prolonged, which is followed by a watery discharge, varying as to the time of its appearance, and as to its quantity. In this class of cases we cannot be sure of our diagnosis. The discharge of blood is not of a character to warrant a diagnosis of fracture of the petrous bone; and as to the watery discharge, the two cases above referred to prove that it may occur within a few hours after the accident, and that its quantity may be profuse, and yet there may be no fracture.

Hypodermic Injection of Atropia in Threatening Glaucoma.—Dr. Anstie (*The Practitioner*) believes that, in two cases, he has succeeded in preventing threatening glaucoma from developing itself by a hypodermic application of atropia; at least, the most threatening symptoms were present, and rapidly subsided under the use of 1-60th grain injections of atropia.

ACUTE OCULAR ŒDEMA. CAUSE UNKNOWN.

By E. C. SEGUIN, M.D.,

ACTING ASSISTANT SURGEON, U.S.A.

B., a private in Co. B., 3d U. S. Cavalry, aged 18 years, a native of Pennsylvania, has never enjoyed good health. From the age of 15 to date of enlistment, last March, he worked in an iron mill, and was exposed to great heat and vivid light. A few years ago he had intermittent fever. Has always had a tendency to diarrhœa, and is now under treatment for an attack that threatens to become chronic. He is pale, flabby, looks old, face and forehead are much wrinkled. When a child he suffered from night-blindness. Sept 24th, he presented himself with his *left* eye much swollen; says that ten minutes before his eye was well. He was reading, when suddenly a severe smarting pain was felt in the inner canthus, and was at once followed by swelling. He is certain that no foreign body entered the eye. The lids are externally œdematous and nearly closed. On opening them, an almost complete chemosis is seen, the ring being imperfect at its upper outer part. There is no injection of blood-vessels and no lachrymation; pupil normal. I applied a solut on of nitrate of silver(℈ ij to ℥j aq) freely over the chemosis, and directed a light wet compress to be applied during the evening and night. The next day the eye was about normal.

Second attack, Oct. 3d, at 1 P. M. I had occasion to see a wounded man in my hospital, and asked several questions of B., who was watching him. His eyes were then in a normal state. Hardly had I returned to my room — certainly not more than five minutes later — than B. came to me hurriedly with his *right* eye much swollen. He had experienced the same smarting, and the appearance of the eye was precisely similar to that of the *left* eye ten days previously. There was no sign of inflammation. At 2 P. M., a complete and heavy ring of swelling surrounded and nearly buried the cornea. I pursued the same plan of treatment as before, and in twenty-four hours all was well.

Patient states that he had his first attack of this curious affection in 1860, while at work in a field. Since, he has had from two to six attacks each year. This year he was affected once in April and once in July, besides the two attacks detailed above. He feels certain that in all instances the symptoms and appearances have been the same; and often the disease subsided spontaneously. Once, in 1860, both eyes were affected at one time.

His mother and sister "have always had weak eyes," and have suffered from repeated similar attacks of œdema of the eyes. His father has excellent sight, though he has worked for many years in the iron mill.

Oct. 14th. Vision tested with Sneller's type*:

		Inches.	
With No. 3.....	V....	43/36	=1 1-6
		Slight myopia.	
With No. 12.....	V....	136/144	=17-18

Irides are pale gray; pupils habitually a trifle dilated; urine contains no albumen; heart healthy. Patient suffers much from epistaxis, in summer mostly.

There are three main points of interest in this case. *First*, the extremely sudden formation of the œdema and the absence of the usual symptoms attending inflammatory processes.

Second, the apparent hereditary character.

Third, the coincidence of the disease with a semi-cachectic state.

FORT CRAIG, N. Y., October 15, 1868.

* I this calculation is made upon the rough basis of 13 in English to

ON CONSTIPATION.

BEING THE ABSTRACT OF A PAPER READ BEFORE THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

By R. J. O'SULLIVAN., M.D.

DR. O'SULLIVAN introduced the subject by a reference to the classes among which constipation is most generally prevalent. "I would," he remarked, "in the first place consider the subject, where constipation is due to simple inaction, unconnected with obstruction; and also where it is unattended by the constitutional symptoms which exist in a more advanced stage, that is, where the secretions are diseased, or where it assumes the form of dyspepsia. Secondly, I should consider the subject of constipation arising from spasmodic contractions of the abdominal muscles, among which may be classed those forms dependent respectively on so-called lead-colic and hysterical spasm. These two divisions I will endeavor to illustrate by cases occurring within the past few months in my own practice. Before doing so, however, I will allude to another class of cases, of which constipation, colic, and spasm of the abdominal muscles are prominent symptoms. The disease in question, according to Dr. Claiborne's nomenclature, is Colica Bacchanahana, or drunkard's colic (vide *American Medical Monthly*, Sept., 1858).

The term colic may, without any undue philological violence, be made to refer to the colon as its probable seat, and I desire to caution my hearers that I have used the word symptom, as being antagonistic to cause, since no physician is expected to limit his investigations to the mere symptomatology of any disease. To determine the true seat of the malady, a brief allusion to general principles is necessary. There are certain local circumstances which, when carefully considered, may present sufficient evidence of what should constitute a disease. These symptoms may point to a morbus or a morbiculus; hence the drunkard's colic, *the morbiculus*, may be the indicator of the *morbus*, or primary disease, located in the liver. A patient affected with this colic, usually has a weak pulse, a skin cold and clammy, and an excited brain, with the well-marked evidence of long-continued irritation. A cursory examination, or perhaps the voluntary statement of friends, will inform you that the bowels are constipated; you may be told that they are very bad, a phrase intended to convey the meaning that a diarrhœa is present, which in many cases is unfounded in fact. Percussion of the abdomen will discover well-marked tympanitic resonance on one side, and dulness on the other; both of which conditions are rather positive evidence of a loaded colon.

In the treatment, a prominent indication is, to remove the spasm; which is best accomplished by the relief of the pain and the removal of the constipation. Opium in some form is demanded. The patient, having taken it on former occasions, is aware that it will relieve, or at least mitigate, his sufferings, and will therefore insist upon getting it. If he be "*an old toper*" (as he is apt to be) he will whisper to you in a confidential way (implying much more by the spasmodic contractions of the facial muscles than mere words could do) for the *bottle, you know*—referring to some former prescription which you may have given him, containing opium

and which doubtless he has had often "renewed" from the *label* on the *bottle*, by the accommodating apothecary, without your authority or written order. Such a patient will sometimes require large, repeated doses to give him the desired relief, and not unfrequently it will be pushed almost to narcotism without producing the desired effect. How frequently does it happen during the hot sweltering days of summer, when we are called to these cases, to find that doctor succeeds doctor, each giving his dose of opium, without at all subduing the spasm. The patient consequently loses faith in the doctors, as well as in medicine, and at last falls a ready prey to despondency. Why should this be the case? I answer that it is in some measure due to the unphilosophical mode of prescribing—too common, I regret to say, amongst many of our brethren, whose usual practice it is, not to overtask their brain by reflecting too deeply on the indications which may be present in such a case, preferring to use a routine prescription, and let it hit the mark or not, kill the patient or cure him, as the case may be.

Now, what are the broad, palpable indications in such a case as I am relating? Why, use that remedy which will soonest reach and relieve the engorged capillaries of the portal system; and I know of no remedy under the circumstances that will fulfil this indication equal to calomel, of course in cathartic doses, since the susceptibility of these old stagers to the action of mercury in small, repeated doses, is always to be considered. But where there did exist a decided susceptibility to the effects of mercury, even in cathartic doses, podophyllin, with the extract of conium (the latter as a corrigent), may be conveniently substituted. Should the alternative present itself of prescribing calomel, or dosing the patient with opium to any extent, regardless of the probabilities of its proper absorption or the existence of a local impediment, I would deem it more practical to prescribe the former remedy than the latter, especially in the commencement of the disease. After giving a dose of calomel, should it not have the desired effect as soon as expected, I would use injections, and externally chloroform. The portal circulation being relieved of its engorgement, and the loaded colon of its impaction, the patient will generally rest comfortably—the better, perhaps, on account of a hop pillow, which I generally suggest in these cases. All these means failing to compass sleep, I would then resort to an opiate, with a reasonable expectation of success, since the purgative has prepared the way for its more ready absorption.

Desiring to be as practical as possible, I shall call your attention to only two cases, which I have selected as typical of their class. The first was a case of lead-colic. The patient, my immediate neighbor, a house-painter, twenty-eight years of age, informed me that he was attacked with pain and uneasiness of the bowels shortly after engaging in his daily labor early in the day. Referring all his trouble to an habitual constipation, he determined "to fight it out, without *knocking off*," as he had done on many previous occasions. The pain and uneasiness of the bowels increased, however, to such an extent that necessity conquered his will, and compelled him to call in medical aid soon after reaching his home. When I saw him at 4 P.M., which was on the 12th of last July, he was suffering from a violent pain in the bowels, accompanied with a spasm of the abdominal muscles, so terrible that they were twisted up in knots "as large as your fist," if I may be pardoned the use of an expressive, though not classical phrase. The contortions, in fact, resembled to the eye hour-glass contractions. He also had vomiting and a very slow pulse. Before my visit he had taken a warm bath, and had recourse to repeated injections, without relieving the obstinate constipation; he had also been pretty freely dosed with opium, without any appreciable effect. The condition of the poor fellow at the time was truly pitiable—tossing about the bed, screaming at a furious rate. In a word, every feature of the case was serious, and a fatal result seemed inevitable. The mother, a French woman, with all the demonstrativeness of her race, ran around the room wringing her hands and begging me to save her son. The young wife, with a babe a few months old, quietly, but none the less earnestly, joined in the appeal to my sympathy. I at once resorted to the external application of chloroform, a remedy which had served me most happily on former occasions. This afforded a little relief. I could, I fancied, feel the hardened muscles relax. The immediate effects, however, having passed away, the contractions of the muscles were apparently as hard as ever. I then exhibited it internally, combined with ammonia, tincture of opium, etc., when the hardened muscles relaxed, and the spasm departed. The irritation of the stomach was subdued to such an extent that a little nourishment was ordered. The injections then being repeated, a copious action immediately followed. Suffice to say, that the patient's recovery was very rapid—a slight aperient and tonic for a few days, comprising all the treatment before he was able to resume his work. The point of special interest in this case is, the effect of chloroform in gastric irritability, which in this instance was extreme, and extended over a period of several hours. Its efficacy in lead-colic is a well-established clinical fact, and on this account I relied confidently on the relief which followed its administration. But I deem it worthy of record that here it also promptly relieved the irritation of the stomach.

The second case was that of a young lady, who consulted me, last August, regarding a constipation which had extended over a period of two years. Drastic medicines had been used in almost every possible combination, with but temporary relief, and the usual sequel of impaired intestinal tonicity. Before the interview, however, her guardian and relative, a distinguished gentleman in one of the Eastern States, consulted me relative to her general health, stating that she had had no motion of the bowels for a fortnight, while irritability of the stomach had existed to such a degree that for several days previous she had been unable to retain even a mouthful of food. He also stated that several of the most distinguished physicians in the Eastern States, after a fair trial, had utterly failed to master her case. This consultation with myself took place about a week after her return from Europe, whither she had been sent for the combined benefits of a sea-voyage and change of air, but only to be disappointed. Whilst abroad our patient consulted an eminent *Baronet*, who gravely gave out that the pain, debility, etc., were due to "weakness of the spine, consequent upon the out-growing of her strength," and contented himself with the local application of tincture of iodine. I named the following afternoon for a personal interview. I was then not a little surprised at her appearance. Her countenance was full and of a ruddy hue, showing no deficiency in the red globules of the blood; nor any marked deficiency of adipose tissue. Her figure was large for her age—which was but seventeen. She was in brief a girl in years—a full-grown woman in development. In addition to all this, she possessed a rare intelligence, and exhibited a rare candor in her answers, admirable in one so young. In reply to my queries regarding the menstrual function, she stated that she suffered

considerable pain at each period; that the catamenial discharge itself recurred regularly, but that it was deficient in quantity—lasting, as it did, but a single day. On questioning her further, she stated that she had a good deal of pain locally during the intervals. I then asked if any of the physicians whom she had consulted suggested to her the probability of disease of the womb. She said they had not; that I was the first to ask her any questions on the subject; that the symptoms I described were the same that she experienced for some time. The consultation over, I mentioned my suspicion to her relative, that there were serious local complications, and proposed an examination, assuring him that without it but little progress could be made in curative measures. After some general directions, she returned home the next day; and for some weeks I corresponded with her relative, who acquainted me with her condition, from time to time. I was informed in one of these epistles that she had been very ill for some days, and that the bowels were much swollen; that the pain—to use her own expression—was unbearable; the gastric irritation extreme—so much so that even fluid nutriment in small quantities was not retained. In this emergency, one of the local physicians, having been summoned, gave a very gloomy prognosis. Fortunately he was mistaken, since the energies of her system carried her safely out of immediate danger. Some weeks having elapsed without any tidings from the patient, I naturally concluded that my connection with the case had ceased; and so dismissed it from my mind. In the latter part of October, however, I received a letter from her uncle, to the effect that shortly after her last attack there was an improvement which they were in hopes would end in a recovery; but that for the two weeks previous a relapse had occurred, and that the case at the moment of writing was worse in every respect than it had ever been. As a dernier ressort, provided she rallied sufficiently, he proposed to bring her to New York, and place her under my care. Accordingly, on the following Monday, she left Boston for this city; and on the next afternoon I was summoned to attend her. Her uncle informed me that she was sustained during the journey by a little jelly—all other nutriments being immediately rejected. He further stated that from the time of her arrival until I saw her, the patient had swallowed a raw oyster, which was soon vomited up, none the worse for its temporary lodgment. Still her expression of countenance was not at all indicative of debility or grave disease, although close observation could detect a quiet resolve to bear with fortitude that condition of things which *would seem* to have baffled all diagnostic skill.

Nor under the circumstances was it wonderful that she should have concluded that her case was an enigma, an "*opprobrium medicorum*." There was an ample development of chest; and an examination elicited no abnormal symptoms of any kind. Crossing over (figuratively speaking) to the other side of the diaphragm to the regions of the abdomen, there was apparently considerable distension of the bowels, as was evident from their swollen condition, with tympanitic resonance on one side and decided dulness on the other. The distension of the transverse colon might explain the uneasiness in the epigastric region, and its pressure on the stomach and diaphragm, might also account for the pain and irritation, so troublesome to the patient.

An extensive vaginitis was likewise detected; indeed, so extremely sensitive were the parts that the slightest pressure was scarcely tolerable. There was also that swollen, sensitive, velvety feel of the membrane, so characteristic of chronic congestion. The *os tincæ* was doubled over upon itself, as is usually the case in retroversion of the uterus. This latter organ was also extremely sensitive; and the rectum literally loaded, along with the pressure of the loaded bowel above, sufficiently indicated the probable cause of the retroversion. It is not surprising that under these circumstances these serious complications should exist; and, as a consequence, a certain degree of morbid feeling, giving some slight evidence of the possible existence of hysteria. In this case, however, it was masked by an earnestness of manner, and apparently evident intention to comply cheerfully with directions. Indeed, so little suspicion was there of the existence of this complication, that it escaped the notice of the physicians who had previously treated her, some of whom were gentlemen of large experience, and were not deficient in either tact or observation. My first step in the treatment was to engage an experienced nurse, one on whose judgment and fidelity I could rely. She was ordered to give her large and repeated injections, in order to soften the impacted feces; copious discharges, bringing away large lumps of hardened feces, followed each injection. The distended bowels being relieved of the flatus, the pressure of the transverse colon gone, and the gastric irritability abated, proved the accuracy of my deductions. The stomach required time to recover from its previous debility, but not as much as I expected, since a little perseverance in the administration of small repeated quantities of fluid nutriment, along with counter-irritation to the epigastrium and warm fomentations to the bowels, overcame the vomiting. Fluid nutriment was given her in small quantities, as well as aperients with occasional injections, to keep the bowels free.

As she kept complaining of insomnia, I directed the nurse to watch her closely for my own satisfaction, and was assured that the patient slept more than she was herself aware; that during a portion of the night she slept well and soundly. These statements the patient, much to my surprise, persisted in denying; but a few nights watching by myself, together with the nurse, satisfied me that her sleep was prolonged, and sound enough for recuperative purposes.

Her persistent statement that such food as beef-steak, etc., would be immediately rejected, was apparently corroborated on several occasions; but it was noticed that this almost invariably happened when she was *alone*. The presence of the nurse and others checking her old habit of bolting her food without proper mastication, exerted a salutary influence, at least so far as the vomiting was concerned.

Possessed of this knowledge regarding the tone of the stomach, I ordered gentle treatment and pleasant society, and in consequence the organ rapidly regained a sufficient tone for all practical purposes. At this time the bowels were beginning to act normally, and the condition of the patient in this respect was necessarily favorable. The vaginitis yielded happily to local injections, and the womb could on the slightest manipulation be made to slide into its normal position.

About this time the patient's friends expressed a wish that she might return home for a short time, adding that after a brief sojourn there she would return to New York, to remain long enough for a complete re-establishment of her health. My answer to the proposition was, that they must not be too elated with the progress of the case; that the first steps merely were taken, and that in a great measure the final result depended on the great care to be exercised in the matter of diet, action of the bowels, etc. This care, I thought, just then would probably not be given to the patient unless she was under the proper supervision of those who understood the peculiarities of the case. At all

events, it would require some time to meet the indications here required.

After her return home a letter from her guardian acquainted me with the following facts: that she was troubled somewhat with swelling of the bowels; but that the tone of the stomach and the digestion were perfect. I answered by giving some general directions, repeating my warning, that indiscretion in diet, etc., would be sure to bring on a return of her difficulties; and that I dreaded from these early symptoms, if left to herself, a relapse would be inevitable. Thus did I endeavor to impress on the patient that the restoration of her health would depend, in a great measure, on her attention to the directions given for her guidance.

The case, the history of which I have just concluded, presents some points of interest worthy of the most serious consideration. The age and sex of the patient, as well as certain symptoms stated in the history, might leave the impression that the deduction as to the diagnosis ought not to be very difficult, as hysteria probably entered largely into its history. The reverse of this was the fact, as proved by the incidental complications; and thus it happens, not unfrequently, that our hastily formed impressions betray us into inaccuracies of diagnosis.

Amongst the various masses of our population with whom constipation is habitual, it is a noticeable fact, that the American and the Irish element suffer most in this respect—the German and other classes of foreigners being comparatively exempt. Whether this is owing to the *fluid nutriment* of which they partake so largely, or to the vegetable diet to which they are so partial, I cannot now determine; I, however, incline to the latter as the more probable cause of the strange national difference in the normal action of this function. I merely allude to it here, in passing, as it presents important therapeutical indications in the management of these cases.

The dietetic tastes and habits of the Americans and the Irish strongly incline them to partake largely of highly seasoned animal food, and not sufficiently of the residual elements; thus necessarily retarding its proper assimilation and transmission through the alimentary canal. The daily habit at a certain hour of an action from the bowels cannot be too strongly inculcated; and after that, the next point of importance is the use of cold water injections, to induce the normal peristaltic action of the bowels, as a substitute for drastic purgatives. In cases of long standing, however, belladonna has not disappointed us.

It is of the utmost importance that the heads of large educational establishments should gravely reflect on the hints which, on this subject, I have here briefly given. Especially would I call their attention to the necessity of less brain work and more physical recreation, and, in their bill of fare, of adding largely to the vegetable and residual elements of diet, and of relying less than is their wont on mere animal food, which should be given in about the proportion of one part to six, with perhaps a slight increase of the nitrogenized element among minors.

In this connection I will allude to the custom existing in many of our seminaries, of the observance of the rule of silence during meals, and I may say that in certain religious communities this is the invariable rule. It is a well-established clinical fact, that cheerful society at meals greatly aids digestion. The sympathetic influence which exists between the stomach and brain attests the truth of the assertion. Why, then, should so irrational and justly censurable a custom be observed in these institutions, knowing as we do that it is contrary to the development and acquirements of those intrusted to their care? I must, however, candidly confess that the fault is not altogether attributable to the neglect of those who govern these establishments, but may be more properly laid at our own door, in not earnestly calling their attention to its importance.

In conclusion, I would remark—what must already have been seen—that I have not attempted to enter into the details of the treatment to any extent, for the following reasons: In the first place, the object of this paper, as well as the limited time at my disposal, both in its preparation and in its delivery, would not permit of my making any lengthened remarks. And secondly, my attempting to do so might defeat the object I have chiefly in view, viz., to elicit the experience of the members on this important subject. Moreover, in addressing so learned a body as the one before whom I have the honor to speak this evening, I deem it sufficient to direct their attention to a few practical points, leaving it to the personal experience of each member to supply the deficiency to which I allude; for in the majority of cases which we are called on to treat, individual peculiarities will serve mainly as the guide to the indications for treatment.

Progress of Medical Science.

Phosphoric Poisoning.—Drs. Fournier and Ollivier lately brought before the Medical Society of the Hospitals of Paris the case of a girl aged fourteen, who for the last four years had been employed in a lucifer match manufactory. She was admitted into the Hôtel Dieu on the 3d of March, 1867, with considerable swelling of half the face, and fetid and sanguineous salivation, and died three days afterwards. She had been ill only for about four days, first complaining of pain in the jaw, and inability to open her mouth. The symptoms had rapidly increased, and when she entered the hospital the prostration was already alarming. This typhoid state increased in spite of active remedies, and she died as just stated. Of course this was only the first stage of necrosis, which proved fatal. The lower maxilla could not be examined.—*Lancet.*

Operation in Complicated Hare-lip.—Dr. G. Mirault communicates to the *Gazette Hebdomadaire* (No. 38) that in hare-lip, complicated with projection of an intermaxillary tubercle, he has succeeded in producing osseous union by the *subperiosteal resection* of the vomer.

The Respiration of Plants, according to M. Barthélemy, based upon the rôle played by the cuticle, leads him to conclude that the pores are principally concerned in the rejection and introduction of azote.—*Gaz. Hebdom., No.* 37.

A New Tonsillotome has been devised by Broca, consisting of a pair of forceps, over the blades of which is run the Fahnestock guillotine. The tonsil being drawn out by the forceps, the guillotine is run down the blades upon it, and the incision is then made.—*Gaz. Hebdom., No.* 34.

A New Sphygmograph, said to present some advantages over that of Marey, has been presented at the Parisian Academy of Medicine by M. Behier. Those interested will find a wood-cut and description in the *Gazette Hebdomadaire* for Aug. 14, 1868.

Trismus Neonatorum.—Hot baths cause trismus neonatorum; consequently, the physicians of Germany

A Blow to the Fungus Theory.—In a short communication to the *Centralblatt*, Drs. Bergmann and Schmiedeberg describe a crystalline substance, to which they have applied the name "sulphate of sepsin," obtained from putrefying materials, and which they believe represents the proper poison of organic substances undergoing this kind of fermentation. It is obtained by diffusion through parchment paper, precipitation with corrosive sublimate from an alkaline solution, removal of the mercury by silver, of silver by sulphuretted hydrogen, evaporation, and purification of the residue. Large, well-defined, acicular needles are thus obtained, which are deliquescent in the air, and, exposed to heat, melt and carbonize. They possess a powerfully poisonous action. A solution containing scarcely more than one-hundredth of a gramme was injected into the veins of two dogs. Vomiting was immediately induced, and after a short time diarrhœa, which in the course of an hour became bloody. After nine hours the animals were killed, and on examination, their stomachs and large intestines were found ecchymosed and the small intestine congested. Frogs could be killed in the same manner.—*Lancet.*

Peroxide of Hydrogen in Diabetes.—Dr. Bayfield writes to the *Lancet* as follows:

A gentleman, aged forty-six, engaged in commerce, of steady habits, and a moderate liver, suffered from diabetes for a year and a half, and had been the whole time under the treatment of some of the best practitioners in London, and having received no benefit, lost faith and patience, and applied to me. After hearing his statement, and examining his prescriptions, I felt I could not give even feeble hopes of benefit. But it occurred to me that Dr. Day, of Geelong, published in your journal some time since the successful treatment of a case under unfavorable circumstances, by the use of the ethereal essence of the peroxide of hydrogen in drachm doses, three times a day. I was determined to try the remedy upon my patient. I began with half-drachm doses, and gradually increased to the drachm, in distilled water. I also materially relaxed the rigidness of his diet, and discontinued much that was disagreeable and objectionable, to one more consonant with his taste and appetite. I have much pleasure in announcing that after about ten weeks' steady perseverance, with occasional fluctuations, he quite recovered, and has kept well for several weeks. He is now in the country for the benefit of change of air, and is gaining both strength and flesh.

Case of Co-Existent Tænia Solium and Tænia Lata.—F. Hinkle, M. D., of Columbia, Pa. (*The Humboldt Med. Archives*), reports a case of co-existent *tænia solium* and *tænia lata*, which was relieved by an aqueous extract of the bark of the pomegranate root.

Double Fracture of the Patella.—A. Hammer, M. D. (*The Humboldt Med. Archives*), publishes a case of double fracture of the patella, terminating in osseous union.

The patient, a baker by trade, fell from his wagon and struck his left knee against the curb-stone. The lines of fracture were easily distinguished, the chief one was transverse and situated in the upper half; another passed from its lower border obliquely upwards and inwards, meeting with the first one just at the inner edge of the patella, and included a triangular piece situated between the upper and lower fragment. Fomentations of aromatic spirit were applied, and at the end of four days, *Gibson's ring* was applied and firmly secured to an easy-fitting, well-padded splint, placed on the [illegible] part of the limb. Additionally, a compress, consisting of a thin piece of wood, well covered, was bound on the front or anterior surface of the patella, and correct adaptation was thus obtained and the treatment closely followed out. In less than a month from the date of fracture, firm osseous union had taken place. This appeared evident not only from the firmness and unimpaired function of the patella, but also from the presence of two linear projections—ridges—formed of callus, corresponding to the lines of fracture.

It has been thought that fractures of the patella seldom, if ever, terminate in osseous union. This he believes to be erroneous, and attributes the unfavorable results to the imperfect means employed of securing adaptation.

An Apparatus for Registering the Respiratory Movements on the principle of the sphygmograph, has been devised by Drs. L. Bergeon and M. Kastus, which they term an *anapmograph*. An illustration of this instrument, with a detailed description, can be consulted in the *Gazette Médicale de Paris* for Sept. 19th, 1868.

Veratrum Viride.—Dr. Oulmont of Paris, in a paper read at a recent session of the French Academy of Medicine, advocates the use of veratrum viride, particularly in pneumonia, which he claims may be cured (?) on an average in about five days and a half. He uses the extract reduced to grains each containing a centigramme of extract: the patient takes one grain every hour, until vomiting is produced, which usually begins after the third, but sometimes only after the seventh or eighth dose. Care should be taken not to administer the latter either at too small or too large intervals of time. One hour seems to be the proper measure.

Influence of Tobacco upon the Circulatory System.—Dr. Decaisne, in the course of investigation on the influence of tobacco on the circulation, has been struck with the large number of boys, aged from nine to fifteen years, who smoke, and has been led to inquire into the connection of this habit with impairment of the general health. He has observed 33 boys, aged from nine to fifteen, who smoked more or less. Of these, distinct symptoms were present in 27. In 22 there were various disorders of the circulation—*bruit de souffle* in the neck, palpitation, disorders of digestion, slowness of intellect, and a more or less marked taste for strong drinks. In three the pulse was intermittent. In eight there was found on examination more or less diminution of the red corpuscles; in twelve there was rather frequent epistaxis; ten had disturbed sleep, and four had slight ulcerations of the mucous membrane of the mouth, which disappeared on ceasing the use of tobacco for some days. In children who were well nourished the disorder was, in general, less marked. As to the ages, eight of the boys were from 9 to 12 years old; 19, 12 to 15. The duration of the habit of smoking was, in 11, from six months to a year, and in 15 more than two years. Ordinary treatment of anæmia in general produced no effect as long as the smoking was continued; but when this was desisted from health was soon perfectly restored, if there was no organic disease.

Poisoning by Carbolic Acid.—Three cases of poisoning by absorption of carbolic acid are referred to by E. S. Machin in the *British Med. Journal*. The particulars are as follows: Three cases of itch were dressed with carbolic acid, and soon symptoms of poisoning were manifested, consisting of smarting pain at the point of application, headache, and coma. Two of these patients died, and the other was rallied with great difficulty. About six ounces of Calvert's acid was used in these cases.

Aneurism: Operation for Opening Sac.—In regard to the operation of laying open the sac and ligating the artery on either side of it, Mr. Erichsen, in a recent lecture, said: This, gentlemen, is a very easy thing to advise to be done, and it sounds a very easy thing to do; but I can assure you that there are very few operations in surgery that are more difficult than, in many cases, is this operation of laying open the aneurismal sac, sponging out its contents, and ligaturing the artery on either side of the opening communicating with the sac. Any surgeon who has had occasion, as I have had, to perform the operation which Mr. Heath performed in this case, will agree with me that it is by no means an easy one in a very great number of cases, where you have to do with a large aneurism full of coagulum, connected with an important vessel, and deeply seated.

Now in this operation there is one great danger, and there are several difficulties. I will mention this danger and these difficulties, and I will tell you, so far as I can, from my own experience, the best mode of overcoming them. The great danger in this operation is that the patient may die of hæmorrhage before you can get the ligature round the artery. You lay open the sac, and, unless you are very careful, you may get a rush of arterial blood that you cannot arrest, and that may give rise to sudden syncope and death in the course of a very few seconds or minutes, if you have to deal with a large artery. The first thing, therefore, in all these cases is to compress the artery above the aneurismal tumor. That, fortunately, you can now do in all cases of aneurism in the lower extremity. If the aneurism is anywhere low in the thigh, you can compress the femoral artery as it passes over the pubes; while if you have to do with an aneurism in the upper part of the thigh, by means of Lister's abdominal tourniquet, which we employed in this case, you can compress the abdominal aorta, and control the bleeding. Indeed, if I mistake not, Lister's abdominal tourniquet was invented in order to control the circulation through the abdominal aorta in a case of this kind which was operated on by Mr. Syme, of Edinburgh. But when you have to do with aneurisms of this description—diffused aneurisms that have been opened, or in which it becomes necessary to perform the old operation of laying open the aneurismal sac—in the upper part of the body, at the root of the neck, or in the axilla, you cannot compress the artery leading to the tumor, and therefore you have a condition of very great difficulty, and of very great danger. In these cases the proper plan undoubtedly is to adopt the very practical recommendation that has been made by Mr. Syme, and put in practice by him—namely, to make a small opening into the tumor, an opening just sufficient to enable you to insinuate your fingers, and so to work your whole hand gradually into the tumor in that way, so that the entrance of the hand may plug up the opening in the sac; to feel with your fingers for the opening into the artery, and to get your fingers against that, so as to restrain the flow of blood from it, before the rest of the sac is laid open, and not to lay open the sac until the fingers are fairly pressed upon and into the opening in the artery, and so to restrain the flow of blood from that opening whilst the rest of the sac is being freely laid open. In that way, then, you overcome the great danger in these cases, the danger of death from hæmorrhage during the operation, which would infallibly occur if you were to lay open the sac freely without adopting one or both of these precautions.

Now for the *difficulties* of the operation. The hæmorrhage having been completely arrested, either by compression of the artery above the tumor, or by pressure of the fingers at the opening leading into the tumor, you lay it open freely and completely, turn out the coagula, and sponge away any dark or fluid blood that may be there. You then open the interior of the aneurism. But what is that interior? It is not the interior of a smooth sac, but it is a large ragged cavity, with masses of coagulum or solid fibrin sticking to it in different directions, with the remains, perhaps, of an old sacculated aneurism at the bottom, with a quantity of plastic matter infiltrating the tissues around it, with the anatomical relation of the parts utterly and completely disturbed and destroyed by the pressure of the tumor and the infiltration with coagulated blood, with great thickening and solidification of parts around from the pressure to which they have been subjected in consequence of the effusion of plastic matter. So you have a large cavity with an opening at the bottom of it, the opening leading to the artery somewhere or other, but the position of that artery more or less disturbed, more or less masked and obscured by these masses of coagulum, by this plastic infiltration, by this thickening and cohesion of the tissues to one another around it.

The next thing is to pass the ligature around the artery. Now the artery does not lie exposed in this sac; quite the contrary. You have to scrape or to dissect or to cut through the posterior wall of this sac, which always overlies the artery. That constitutes the great difficulty of the operation—to open up this posterior wall in a proper direction, and to get the aneurism-needle round the part without wounding the contiguous vein, or transfixing the artery, or doing damage to the neighboring parts. The best way of doing that undoubtedly is the plan we adopted eventually in this case, and which has been adopted with advantage in similar cases by other surgeons—viz., to introduce a large steel probe or a metallic bougie into the opening into the artery, and to use that as a guide to the situation of the vessel. You may use a large one, so as to plug up the opening. In one case of this kind on which Mr. Birkett, of Guy's Hospital, I believe, operated, he introduced a large bougie, and used that as a guide for the application of the ligature round the vessel. By this method you undoubtedly overcome, to a great extent, this difficulty, which is really very considerable. You then clear the vessel as well as you can—the coats are generally thickened and diseased in the vicinity of the aneurismal tumor,—and you pass a good double ligature round it. You pass a ligature round it on each side of the opening in this vessel, because you are very apt to get regurgitant blood, which will cause secondary hæmorrhage from the lower end of the vessel, if you only ligature the vessel above the opening. In these cases, indeed, you must treat the condition of things exactly as if you were dealing with traumatic aneurism with a wounded artery. You must apply the ligature both above and below the opening in the vessel.

Heavy Infants.—Dr. M. J. Roeschlamb, of Quincy, Ill., recently reported the births of six male children, in different families, whose average weight was 13¾ lbs., the largest one 17½ lbs, and the smallest one 12 lbs. Dr. Ballard, of Bloomington, Ill., reports one male child of 14 lbs.

Carbolate of Lime in Pertussis.—Dr. Snow, of Providence, R. I., has suggested the use of *carbolate of lime* in hooping-cough, and in all cases it has apparently produced a marked effect in diminishing the frequency and severity of the paroxysms. Small quantities of the carbolate of lime are placed in saucers in the room where the child sleeps; merely sufficient to make the odor perceptible.

Malignant Pustule.—Z. S. Booth, M.D. of Jersey City (*Boston Medical and Surg. Journal*), has tried the common modes of cure in malignant pustule, and is fully satisfied that the only beneficial treatment is that which withdraws the poison from the system, and arrests its progress in the early stage. He applies leeches directly to the pustule, and if applied early they will effectually arrest the disease; if one is not sufficient, a second one is applied. The bleeding should be allowed to continue for some hours, although the pain and swelling will almost immediately cease. If the disease has been allowed progress to an advanced stage, no local applications are of any benefit; cutting is out of the question. The treatment should consist in the administration of tonics and stimulants.

Turpentine an Antidote to Phosphorus.—It is stated in the *Archives Gén. de Médecine* that it is the custom of the workmen in the Stafford match factory who apply phosphorus to the matches, to carry a tin cup on their breast, filled with essence of turpentine. The ill effects from the action of phosphorus are thus prevented. It is extensively known that the vapor of turpentine prevents the ignition and phosphorescence of phosphorus.

Treatment of Deafness Resulting from Diphtheria.—A. Metz, M.D., of Massillon, Ohio, in his report on *Aural Surgery*, before the Ohio State Medical Society, stated that diphtheria has been a somewhat prolific cause of impaired hearing of late years. As far as his experience extended, the prognosis was rather favorable. He alluded to the case of a little boy, who was under his care for about a year, on account of deafness, resulting from a severe attack of diphtheria. He also had partial paralysis of the muscles generally. After a treatment of about six months he was able to hear sound, but the power of accommodation or adaptation was entirely lost. This patient is gradually regaining the adaptative capacity, so as to be able, to some extent, to comprehend what is said to him. This loss of adaptation was most likely caused by perfect relaxation of the intra-tympanic muscles and membrane. He advocated the following plan of treatment for this form of disease: The long-continued use of the bichloride of mercury, combined with the arsenious acid, in small doses. Iron, quinine, and a nourishing diet are also indicated. Daily gargling, with stimulating medicines, with the cautious injection of a weak solution of the permanganate of potash into the tympanic cavity, may also, with much benefit, be put in practice.

Impurities of Commercial Chloroform.—A treatise on the impurities of commercial chloroform has been presented to the Academy of Medicine (Paris) by M. Personne, pharmaceutist to the Hospital la Pitié, in which he asserts that chloroform containing water will, when exposed to the rays of the sun, become acid and evolve very irritating white vapors. Among the products of this decomposition, may be found the following substances: Alcohol, chlorohydric acid, chlorohydric ether, alcohol, and a large quantity of chloroxy-carbonic acid gas. These observations have been verified by M. Personne, and do not result from the decomposition of pure chloroform; they are due to the presence of chloroxy-carbonic ether, a foreign substance accidentally present.

An Antiseptic Sponge Tent.—Dr. Geo. Syng Bryant, of Louisville, Ky. (*The Humboldt Med. Archives*), has prepared an *antiseptic* sponge tent as follows: He selects moderately coarse, elastic sponge, which being well cleansed, and, while wet, cut into the shape and size required, is then saturated with thick gum mucilage prepared by using ten or twelve grains of crystallized carbolic acid to the ounce, and wrapped on an awl, with a strong well-twisted cord. The tents should be fusiform, and wrapped from the small end, taking care that the layers of the cord are carried around in close proximity and with perfect regularity; and by retaining the "screw threads" thus formed, and turning it as an ordinary screw during insertion, the tent can be more easily introduced, and will not slip out as a smooth one is apt to do. Granular erosions of the os and cervix uteri disappear in a short time by the use of this tent.

Trismus Nascentium Successfully Treated by the Application of Chloroform to the Spine.—T. L. Papin, M.D., of St. Louis, Mo. (*The Humboldt Med. Archives*) delivered a married lady, of a healthy, well-developed male child of full term. Both mother and child progressed as usual until the eighth day, when symptoms of lock-jaw were manifested in the child, for the relief of which he ordered the following:—℞. Chloroform, m. xij, spt. eth. sulph., m. xv, bicarb. sodæ, gr. xij, syp. zinziber, aquæ flor. aurant. ää ʒ iv. Misce. A teaspoonful as required to allay spasmodic action, and secure rest and quiet. The child slept three hours after the first dose, and after the second dose about two hours, after which the resulting period of rest gradually diminished, until at the expiration of twenty-four hours, the chloroform by internal administration seemed to have lost its controlling and beneficial effect. He then determined to try the local application of chloroform to the spine.

A small strip of soft cotton cloth was moistened with the chloroform and applied to the entire length of the spine, with the effect of promptly arresting the spasms. Upon the subsidence of the burning pain immediately incident to the application of the chloroform, the child would fall into a quiet sleep. At the expiration of three days, he was compelled to discontinue it for a time, and apply emollients, on account of the vesication produced. The chloroform to the spine was re-applied at the expiration of forty-eight hours, and alternated with inhalation and the emollient applications during fifteen days, when the case was dismissed cured. The use of mild purgatives, at intervals of from two to three days, during the progress of the case, seemed to exert a decidedly favorable influence.

Amaurosis Caused by Crowding of Teeth.—Mr. Hancock (*Lancet*) reports the following peculiar case; A boy, aged eleven, whose sight had been previously unimpaired, found upon waking one morning that his sight was entirely lost. He was admitted to the Charing-Cross Hospital about a month afterwards, when it was found that his teeth were much crowded and wedged together; the jaws, in fact, not being large enough for them. Two permanent and four milk molar teeth were extracted, and the boy could distinguish light from darkness on the same evening; on the following morning he could make out objects. Eleven days after he was discharged cured, the only treatment beyond the removal of the teeth being two doses of aperient medicine.

Epilepsy from Carious Teeth.—Dr. Rumskill (*Dental Cosmos*) mentions the following interesting case: A boy, 13 years of age, had frequent attacks of epilepsy, occurring about seven or eight o'clock in the evening. On examination a molar tooth was found considerably decayed, with a swollen gum around it, and partly growing over into the cavity. It was not very tender to the touch, nor did the examination give rise to tooth-ache. The extraction of this tooth was followed by cessation of the fits.

THE EARLY HISTORY OF SYPHILIS IN CHINA.—Dr George Thin, of Shanghai, China, contributes to the *Edinburgh Medical Journal* some interesting historical notes on this subject. He was assured by many Chinese scholars that syphilis has been known to exist in China for many centuries, and he therefore undertook, with the assistance of a learned native antiquary, to hunt up the records. He finds that in the seventh century the venereal chancre was described under a specific name, which places its nature beyond a doubt, and that from this time onward there are various allusions to it, although in modern times the more ancient notices have been in a great measure overlooked, partly from change of nomenclature, and partly from the fact that the works in which the notices occur are not likely to come before the general practitioner. Even anterior to the Christian era, there are many traditions and vague references, which are generally accepted as indicating syphilitic diseases. The earliest of these is to be found in a collection of odes made by Confucius, five hundred years before Christ.—*Lond. Med. Mirror.*

THE NUTRIMENT OF BEER.—Prof. Liebig assures us that 1,460 quarts of the best Bavarian beer contain exactly the nourishment of a two-and-a-half pound loaf of bread. This beer is similar to the famous English Allsop's, and our more popular American beer.

A NEW LARYNGOSCOPIC LANTERN.—In common with several other gentlemen interested in laryngoscopy, Dr. Henry K. Oliver, of Boston, Mass. (*Boston Medical & Surgical Journal*), has felt the need of a *light concentrator*, which was portable and readily adapted to any of the lamps or gas-fixtures in general use; and he describes in that journal, a laryngoscopic lantern, or light-concentrator of his own contrivance, which promises to fulfil the indications first mentioned, and which can be obtained at a moderate cost.

The lantern is attached to the lamp by passing a bit of cord back and forth between the instrument itself and hooks, which are strung upon a cord tied around the lamp.

The employment of the laryngeal mirror, in one's own person, is a great aid in the study of laryngoscopy, and he has attached to the lantern a second mirror, necessary for auto-laryngoscopy, which has all the movements afforded by a ball-and-socket joint.

This light-concentrator is useful, not only in laryngoscopy and rhinoscopy, but in the examination of the external ear.

The instrument is made by Messrs. Colman & Shurtleff, of Boston, who also furnish laryngeal mirrors equal to the best imported mirrors.

TRANSMISSION OF SIGHT THROUGH ANIMAL BODIES.—The meeting of the British Association for the Advancement of Science was this year held in Norwich, England, and Dr. B. W. Richardson, who is a prolific contributor to science, alluded to the *transmission of sight through animal bodies*. By means of a powerful lamp he has been enabled to distinguish in thin and young subjects the motion of the heart and lungs, whilst those organs were under the influence of some of the bodies belonging to the ethyl and methyl series. In the child he has observed the bones of the arm and of the wrist, the outline of the heart, and some other parts.

EFFECTS OF EXTREME COLD ON THE BRAIN AND SPINAL CORD.—Dr. B. W. Richardson read a paper before the British Association recently, *on some effects of extreme cold on the brain and spinal cord*, in which he showed, that under the influence of extreme cold on the brain and spinal cord, the extreme effect of such poisons as strychnine could be suspended entirely for a time. He thought that this raised a hope that, in such diseases as tetanus, a new and successful mode of treatment might be gradually evolved.—*Canada Med. Journal.*

HYPERTROPHY OF NAILS AND BONE.—In *Virchow's Archiv* is recorded by Professor Friedrich, of Heidelberg, the case of a shoemaker, 26 years of age, in whom the nails had grown to a prodigious size, those of the middle finger measuring nearly an inch, while that of the thumb was a little less, and the nail of the great toe somewhat more than an inch and a half in length. Eight years back he observed an increase of size of one foot; the enlargement extended to the leg, and two years later the same remarkable growth appeared in his hands. On examination, the enlargement was seen to be referable to the bones, and by degrees every bone in the body became similarly affected. The teeth escaped change, as did the trachea, but the cartilages of the pinna and the epiglottis were greatly enlarged. His skin was somewhat indurated, and the muscles soft and flabby. A brother, aged 22, exhibited a similar tendency to hyperostosis, which had commenced four years previously. Reference is also made to a case mentioned by *Sancerette* of a man who had increased in weight fifty-nine pounds from the mere growth of his bones in bulk, the soft parts, in the meantime, having become considerably wasted.

A NEW LIGAMENT.—O. Lannelong and A. Le Dentu (*Arch. de Physiol.*) describe a new ligament, which arises from the posterior layer of the sheath of the sterno-thyroid muscle, inserts itself at the inner surface of the first rib, behind the sterno-clavicular articulation, and is thence continued to the anterior surface of the pericardium. This band includes the remains of the thymus gland. It serves to fix the pericardium at its anterior portion, and is the counterpart of the "ligamentum vertebro-pericardium," described by Béraud, which attaches the posterior surface of the pericardium to the spinal column.

POISONING FROM EATING BREAD CONTAINING ERGOT.—Dr. Flinzer (Von Horn's Vjschr. f. Gess. Med. viii. 1868) relates that a whole family, consisting of ten persons, after partaking of bread containing a large portion, say one-tenth, of ergoted rye, were taken seriously ill. Debility, giddiness, and loss of appetite were the first symptoms; subsequently, tonic contraction of the extremities, a creeping sensation in the hands and feet, profuse perspiration, great thirst, and diarrhœa were added. A pregnant female was brought to bed five weeks before her proper time. Two of the patients died; but the fact became known too late to allow of an autopsy being made.

TREATMENT OF BOILS, WHITLOWS, AND ABSCESSES BY CARBOLIC ACID.—C. J. Cleborne, M.D., Surgeon, U.S.N. (*Am. Journal Med. Sciences*), records his experience in the treatment of whitlows, boils, and abscesses with this article. Being dissatisfied with the usual mode of treatment, he determined to try the effect of carbolic acid. This he did by making a free opening so soon as fluctuation could be detected, and when all the pus had been discharged by gentle pressure, the cavity was injected or swabbed out with the ordinary liquid carbolic acid of the shops, after which a cold-water dressing was applied. In this way further suppuration was prevented, and the wound healed so rapidly that the patient returned to duty in two or three days. In some cases, after evacuating the pus, and using the acid, the edges of the wound were brought together with isinglass-plaster, and in twenty-four hours it entirely healed.

THE NERVES OF THE HEART.—Dr. Cyon has been just awarded, by the Imperial Academy of Sciences, the annual premium for discoveries in experimental physiology, for the discovery of two nerves going from the spinal marrow to the heart, and belonging properly to that organ. His paper is entitled "Researches on the Innervation of the Heart by the Spinal Marrow," and, besides a description of the newly-discovered nerves, relates demonstrations of new phenomena, produced by these nerves in the functions of the important organ to which they belong. The first nerve, which he calls the special cardiac accelerator nerve, emerges from the spinal column with the third branch of the cervical ganglion, and, when excited on the living animal, the heart's pulsations are increased. The same effect is produced whether the excitation is made on the root of the nerve, or on the spinal marrow near the nerve. The other nerve discovered by M. Cyon, uniting the heart to the spinal marrow, is not a motor but a sensitive nerve. By the medium of this nerve a reflex action is produced, starting from the heart, and influencing the capillary circulation in all the organs of the body. The most important facts in the physiology and pathology of the heart may flow from this discovery. M. Claude Bernard is now at work at the new nerves, and some prominent indications have been established, or nearly so, relative to disease of the heart.—*Paris Correspondent of the Times.*

A CASE OF BUBON D'EMBLEE.—J. C. McMechan, of Cincinnati (Cin. Med. Repertory), reports a case of *Bubon d'Emblée*, a form of bubo, which is found in certain patients, without a chancre or even an abrasion of the penis. It occurs from the direct absorption of the syphilitic virus. The French surgeons were the first to discover and describe this form of bubo, and it was doubted for a long time by other surgeons that it really existed. So rare is the disease that Erichsen says: "Bubon d'Emblee has only fallen under my observation in *one case*, and until that occurred I doubted its existence." The patient alluded to applied with a painful enlargement in the groin. The penis was carefully examined, but no chancre nor even an abrasion of its surface could be found. He acknowledged having had intercourse with a woman of the town some ten days previously, but had neither felt pain in the penis, nor observed a sore on its surface.

He was aged 18 years, and denied ever having had syphilis up to this time. The story was believed, and this was considered a case of primary bubo or bubon d'emblee. The glands were very much enlarged, and did not yield to the antiphlogistic treatment prescribed. Suppuration took place, and to convince himself that it was really a bubo he inoculated some of the virus into the patient's thigh. Two well marked syphilitic pustules were the result. The patient was put upon the usual treatment, and was well in due time.

THE TERMINATION OF THE NERVES OF TASTE IN THE TONGUE OF THE FROG.—Dr. Th. W. Engelmann, assistant in the physiological laboratory of Utrecht, contributes an elaborate and illustrated article to the *Nederlandsch Archief, voor Genees-en Naturkunde*, 1868, vol. 3, p. 387, upon his dissection and study of the termination of the nerves of special sense in the tongue of the frog. He details and pictures a special formation of cells in which the nerves of taste terminate, differing from the other methods of the peripheric terminations of nerves, which he considers a new proof that special function is dependent upon special formation.

EFFECTS OF CLOSING AND BREAKING THE CONSTANT GALVANIC CURRENT ON THE CONTRACTION OF MUSCULAR FIBRE.—Engelmann, following up the investigations of Pflüger, v. Bezold and Dehy, made some experiments upon the sartorius muscle of the frog. Isolating some fibres, he passed a current through the muscle. The contraction ensuing on closure of the current was towards the negative pole, that following breaking of the current, was towards the positive pole. A weak stream from a Daniell cell was used in the experiment. The experiment succeeds as well in fibres which have been poisoned by curare, as in those of the healthy muscles. —*Nederlandsch Archief, voor Genees-en Naturkunde*, 1868, Vol. iii., p. 493, and Vol. iv., p. 153.

DIABETES MELLITUS AND PARALYSIS OF THE RIGHT SIDE, FROM A TUMOR OF THE MEDULLA OBLONGATA.—*Dr. J. B. Dompeling* communicates to the *Nederlandsch Archief, voor Geneeskunde*, &c, 1868, vol. iv., p. 179, a detailed account of a case of diabetes mellitus with paralysis of the right side, which on autopsy revealed a tumor in the medulla oblongata. The tumor proved, on microscopical examination by Prof. *Koster*, to be a sarcoma; there were no evidences of carcinoma in it. It occupied the entire right half of the medulla oblongata; above it and beneath it were two cysts, which, however, contained no cysticerci. The post-mortem and microscopical appearances are illustrated by half-a-dozen very fine lithographs.

NEW SPHYGMOGRAPHS.—A new sphygmograph invented by M. Longuet has been lately exhibited to the Parisian Academy of Medicine. It is described and illustrated in the columns of *La France Médicale*, 1868, No. 87, and has apparently several advantages of construction and facility of manipulation over that of Marey.

Another sphygmograph, previously submitted to the profession by M. Béhier, is described and illustrated in the *Gazette Hebdomadaire*, 1868, p. 520. This is also said to be superior to that of Marey, to which it bears a much closer resemblance than the instrument of Longuet.

PURIFICATION OF TANNIN.—M. Heintz (*Zeitschrift für Chemie*), purifies commercial tannic acid by dissolving it in water, and agitating it rapidly with ether that has been well purified. The decanted solution is then filtered, the ether evaporated, and the tannin obtained free from odor or evaporation.

GREEN PIGMENTS.—Green pigments have been in such bad odor for years, on account of their real or imagined poisonous influence, that chemists have labored hard to find a form of the favorite color that shall be above suspicion. Success seems to have crowned their experiments at last; for we are told that a new preparation of a salt of chromium yields a green coloring powder that leaves little to be desired. It is brilliant in tone, perfectly harmless, and possesses other requirements of technical character. It will be known, when it is known, as "imperial green."

NEW TREATMENT OF RETENTION OF URINE.—G. W. Simpson, M.D., of Morning Sun, Ohio (*Med. and Surg. Reporter*) mentions a case of retention of urine in which *ergot* was used. Fifteen grains in powder were administered three times daily. On the second day from the commencement of this treatment the retention disappeared. There has been no return of the trouble since.

PHYSICAL AND INTELLECTUAL DEVELOPMENT OF YOUTH BY ELECTRICITY.—Dr. Poggioli recently read a paper before the French Academy of Medicine with the above title, in which he claims great results from electricity, and proposes to experiment upon six pupils from each class in certain institutions of learning.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, January 15, 1869.

THE RENEWAL OF PRESCRIPTIONS.

THE interest which has been awakened in reference to the right of renewal of prescriptions by apothecaries without the written consent of the prescriber seems to be on the increase. Any one who has taken the pains to follow the discussion of the subject, started over a year ago in these columns, will not only be ready to admit this, but will have a right to assume that the profession are, by a more or less free ventilation of opinions, likely to be the gainers in the contest. In the present number, we have the pleasure of presenting the views of a well-known medical jurist upon the question, and of commending the suggestions therein contained, as coming nearer to our ideas of what is feasible than anything which we have as yet seen. As will be noticed, the writer treats the subject very properly from a strictly legal point of view, and bases his arguments upon the solid foundations of such judicial decisions as bear directly upon the point at issue. The opinions, which it is needless for us to say are eminently sound, are just such as the profession want at this particular stage of the discussion.

No one at all interested in guarding the rights of legitimate medicine can take any exception against the purely professional aspects of the question. None can deny that the indiscriminate renewal of prescriptions is fraught, in the great majority of cases, with evil not only to the physician but to the patient. By the following of the practice now so frightfully prevalent, the prescriber suffers not only pecuniarily, but in a professional sense, by the lack of an opportunity to do that good for his patient to which an absolute control over the medicine to be used should entitle him. The patient, on the other hand, suffers most seriously by becoming his own physician and presuming, despite any changed conditions in his disease, to continue remedies which may be, at the time, positively detrimental. As such patients, from the very circumstances of their case, may be presumed to be beyond the control of a medical adviser, the profession, as legitimate custodians of the health of the community, are compelled to appeal to the compounders of such prescriptions to mitigate the evil.

The Pharmaceutical Association, at its recent meeting when this subject was brought up for an expression of opinion, declared that the general practice was to renew prescriptions on the application of the individual, direct or indirect, for whom they were originally intended, and that it was impracticable to attempt any change. This assertion was made, coupled with an acknowledgment that the practice was a bad one, for the patient at least, and that the only way to lessen the evil rested in the pharmacist, who should exercise a supervision of the renewals with a view of warning such as, in his opinion, were going too far with a remedy. As this learned body may be considered as the representative pharmaceutical association of the country, they may be considered as giving expression to the views of the large majority of pharmacists, apothecaries, and druggists throughout the country. The right of the physician to restrict the renewal of his prescriptions is, then, practically denied by a body of men to whom only we can appeal on strictly professional grounds. They acknowledge all that we ask them to do in regard to the evils of the procedure; but, because of a well-established practice, they declare themselves not only unable but unwilling to apply the only true remedy. It may be very well for the dispenser to warn his customers against the too long-continued use of medicine, but how often will he be persuaded to plead so directly against his pecuniary interests as to allow his customers to go away unserved! We are actually forced to bring in the pecuniary element of the question, as the all-powerful one with our apothecaries, for the reason that they have failed to give any other ostensible reason for a non-compliance with a very reasonable request.

Believing that the physician should have the right to control the repetition of medicines as well as the quantities of the medicines themselves, we must, under the circumstances of a refusal on the part of the pharmacists to accede to our wishes, look for the protection of our rights by some suitable legal enactments. This is the end now aimed at by Prof. Ordronaux in his letter in the present issue. We doubt not that every practitioner will acknowledge that the law, as given in that communication, settles in a very explicit and satisfactory manner, every parcular. The case against our opponents is as strong as we could wish it to be; and the suggestions made by the writer, not only in the present article, but in one in a previous number, bearing upon the same subject, are eminently judicious and practicable.

We presume that we have said enough concerning the matter under consideration to recommend it to the serious attention of the different medical bodies throughout the different States who, by their size and influence, are calculated to move in the right direction. Our State medical associations are the only true channels

through which the profession can approach the legislators, and it is to be hoped the society of our own State will, at its coming session, take the lead in framing a suitable law. The incorporation of a recommendation so to do in the annual address of Prof. Quackenbush will, we doubt not, meet with as much favor as any of the many other suggestions which that distinguished gentleman may make. By such a course, the most direct method would be taken to secure for it a speedy settlement, and to show a good example to other State organizations.

The profession throughout the country will be glad to learn that the work of transcribing and arranging the medical history of the late war for the printer is being pushed forward by the Surgeon-General of the army with an amount of zeal worthy of the grand end to be attained. We learn from the last report of the General, that during the fiscal year ending July, 1868, not less than seventy-four thousand nine hundred and fifty-four cases of wounds and injuries have been transcribed; and that thirty-seven thousand seven hundred and seventy cases, heretofore incomplete, have been made so, chiefly by returns from the Pension Bureau and Adjutant-General's office.

We are informed that the records in regard to injuries of the head, face, neck, thorax, abdomen, spine, and pelvis have been duly classified and studied; and that illustrative cases have been collected and prepared, exhibiting the progress and results of the different classes of injuries to which these individual examples belong. To illustrate these injuries for future publication, there have been completed during the year, eight beautifully executed chromo-lithographs, eight lithographs, and three diagrams, besides one hundred and twenty-two woodcuts. No pains have seemingly been spared to make the records as complete as possible, by carefully tracing the ultimate history of all such cases accessible to the office.

The efforts of Surgeon-General Barnes deserve not only the countenance but the material support of the profession at large, who should, in the cause of science, do their best to report the ultimate result of such wounds and operations as might otherwise be lost sight of by the department.

The profession of this city will be pleased to learn that the City Comptroller has been authorized by the Common Council to draw a warrant in favor of the Treasurer of the New York City Dispensary to the amount of fifteen thousand dollars. This is to be a donation towards the erection of their new building, which is now rapidly progressing towards completion, and no one who is at all acquainted with the previous management of this excellent and time-honored charity need be assured that it will be appropriately used.

Reviews and Notices of Books.

Transactions of the Twenty-third Annual Meeting of the Ohio State Medical Society, held at Delaware, June 2d, 3d, and 4th, 1868. Paper, pp. 201.

These transactions are worthy of a better cover. The annual address of Edward B. Stevens, M.D., of Cincinnati, is replete with good advice, not only to the members of the Society, but to the profession at large. From Dr. Alexander Dunlap's paper on "Ovariotomy," we learn that during the last twenty-five years he has performed this operation on 38 patients. Of these, 13 were unmarried. The operations were all by the long incision, and only two of them were without anæsthetics. Only 9 deaths are recorded, showing a remarkably small mortality. In one of the patients classed among the married, the disease had shown itself before marriage. The operation was performed six months after marriage. She has since borne three children, one male and two females—the females were twins.

Dr. W. H. Mussey, in his report on Surgery, alludes to the operation of *Staphyloraphy*, and advocates the plan of applying sutures the whole length of the fissure, and then relieving the tension by incisions, which is an intelligent procedure. In one case which has been under his observation for sixteen years, the articulation of sounds is perfect, so that no defect of speech is observable.

During the last four or five years epidemics of "cerebro-spinal meningitis" have prevailed very extensively in some portions of Ohio, and Drs. Isaac Kay, of Springfield, and S. S. Scoville, of Lebanon, of that State, contribute their knowledge in the treatment of this disease. The former thinks that the patient should go for three or even five days without an evacuation from the bowels, rather than resort to cathartics, which cannot be tolerated by the stomach. The latter believes in the administration of emetics in the early stage of the disease, to prevent a fatal determination to the cerebro-spinal axis. Both claim favorable results from their treatment.

The report on "Aural Surgery," by A. Metz, M.D., is a very good *résumé* of what is known on this subject, and his suggestions are well worth perusing.

Bullettino delle Scienze Mediche delle Società Medico-Chirurgica di Bologna, etc., Anno XXXVII. Ser. V. Vol. VI. Agosto, 1868. Bologna.

This is one of the best known and widely circulated of the Italian medical journals. Such has been the jealousy of the Papal Government for many years past, that medical literature can scarcely be said to have had an existence in Italy; even medical societies were not permitted in the principal cities, like Rome, Florence, and Naples. The present periodical has, however, constituted one noted exception to this rule; for the present is the thirty-ninth year of its publication. It is the Bulletin of the Medico-Chirurgical Society of Bologna, compiled by eight of its members, under the direction of Prof. Giovanni, and is issued at irregular periods. The present number consists of about 80 pages, seems modelled after the Bulletin of the Paris "Academy of Medicine," and besides containing a full report of the proceedings of the Society at each meeting, is filled with learned original articles on many medical and scientific subjects. To those who read the Italian language, we can commend the work as highly worthy of their patronage.

TRANSACTIONS OF THE EIGHTEENTH ANNIVERSARY OF THE ILLINOIS STATE MEDICAL SOCIETY, held in Quincy, May 19 and 20, 1868. 8vo. pp. 109.

THIS goodly-sized pamphlet contains much valuable original material, alike creditable to the writers, and the Society of which they are active members.

The most noteworthy are the "Report on Chronic Inflammation of the Hip-Joint," by R. G. Bogue, M.D.; "Report on Spinal Curvatures," by F. O. Earle, M.D.; on the "Pathology and Treatment of Epidemic Cholera," by N. S. Davis, M.D.; "Report of Committee on Ophthalmology," by H. H. Roman, M.D.; "Position in the Treatment of Chloroform Poisoning, etc." by E. L. Holmes, M. D.; "Report on Obstetrics," by E. W. Moore, M.D.; "Obstetrical Bandage," by J. O. Hamilton, M. D.; "Supplementary Report on Practical Medicine," by E. P. Cook, M.D.; and "A Volunteer Communication on Lithotomy," by D. Prince, M.D.

Our space will not allow any comments on these papers, all of which bear the marks of talent and careful observation, and do great credit to the Society under whose auspices they are published.

TRANSACTIONS OF THE EIGHTEENTH ANNIVERSARY MEETING OF THE ILLINOIS STATE MEDICAL SOCIETY, held in Quincy, May 19 and 20, 1868. Chicago, 1868. 8vo. pp. 10.

THIS volume will not suffer in comparison with any of the preceding, issued by this young but enterprising Society. Most of the articles are characterized by that kind of originality which ought to characterize all our medical societies. No physician should ever think of making any communication to his fellows unless he has something new to offer—otherwise he is a nuisance that should be abated. Publishing committees should consist of the ablest members of our societies, and they should have plenary power to accept or reject any communication sent in for publication; and what renders this the more necessary, is the fact, that no practitioners are so fond of thrusting their pages before the profession, as those who have had little or no experience. We are glad to see the present pamphlet so free from this fault. We would suggest, however, still greater care in some of the selections.

MEDICAL COMMUNICATIONS, WITH THE PROCEEDINGS OF THE 76TH ANNUAL CONVENTION OF THE CONNECTICUT MEDICAL SOCIETY, held at New Haven, May 27 and 28, 1868.

THIS is a very respectable pamphlet of 172 pages, with an appendix of 36 additional pages. The contents are chiefly made up of the Address of the President, Charles Woodward, M.D.; an Essay on the "Relation of Theory and Practice," by H. A. Carrington, M.D; two Prize Essays, by R. Bartholow, M.D., of Cincinnati; one on "Quinine and its Salts," the other on "Army Hygiene;" on the Treatment of Paralysis by Hypodermic Injection of Strychnine, by Dr. Echeverria, of N. Y.; case of the late President Day, by S. G. Hubbard, M.D.; "Relation of Albuminuria and Puerperal Convulsions," by P. M. Hastings, M.D; "Ichthyosis," by H. Pierpont, M.D.; Traumatic Lesion of the Knee-Joint," by E. F. Coates, M.D.; "Biographical Sketches," of Dr. Datus Williams, by E. B. Nye, M.D.; of Frank N. H. Young, M.D., and S. P. V. R. Ten Broeck, M.D., by Geo. L. Beers, M.D., besides the matters contained in the Appendix.

What seems somewhat noteworthy, is the fact that 77 pages of the pamphlet come from authors outside of the State—64 alone having been written by Dr. Bartholow of Ohio. When we consider that the Connecticut Medical Society is one of the oldest in the United States, and has always embraced the chief medical talent of the State, it can hardly be said that it has particularly distinguished itself, either by the bulk or value of its Annual Transactions,—and that there is some room for improvement in these respects. We are glad, therefore, to notice signs of progress in the present volume, for the articles contained in it bear internal evidence of talent and acquirements of no mean order. We could wish, however, that they had been all written by members of the Society, who are abundantly able to do ample justice to any medical subjects which they may choose to discuss. We fear there is some truth in President Woodward's remark, that "it is evident something must be done or we lose caste. The reports carried back by delegates who visit us as representatives from other societies, we regret to learn, are not, in all cases, very creditable to us. In comparison with other cities, we are considered as behind the age. This is looked upon as an age of progress, but we fail to discover in our organization any change, much less any improvement, since its first formation, 70 years ago; but we rather stand as a monument to point out to the traveller what improvements have been made in medical associations elsewhere."

We think the suggestion of the President a very good one, viz, to abandon the County Medical Societies, which have never accomplished much in any way, and concentrate upon the State Society, as is done to a great extent in the other States, which are doing most for Medical Science. The experience of the past proves, we think, that in the smaller States, like those of New England, there is a degree of incompatibility between the County and State organizations, and that it would be vastly better for the profession to build up the latter than give a weak and languid support to the former. These remarks will not, of course, apply to the larger States, such as New York, Pennsylvania, and Ohio, with their millions of population.

TRANSACTIONS OF THE FIFTEENTH ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA, held at Warrenton, N. C., 20th May, 1868.

THIS pamphlet of seventy pages opens with the annual address to the Medical Society of the State of North Carolina, by Wm. A. B. Norcom, M.D., of Edenton, N. C., one of the Vice-Presidents, on the "Modern Treatment of Acute Internal Inflammations." He gives a very good resumé of this subject, and wishes the members of the Society to understand that the old treatment for inflammation by blood-letting, mercury, and tartar emetic, is condemned by the great majority of the profession, and the restorative or eliminative plan of the modern writers is substituted for it.

The main address is by the President, S. S. Satchwell, M.D., and in it he states that although some are dispirited and cast down by reason of political troubles and pecuniary disaster, all are counselled "to cling to the good old ship of state." The medical journal published before the war, he wishes revived again, and if so, it would be proper for it to take high grounds for the advancement of the profession in that State.

Quite an interesting paper on "Gun-shot and Bayonet Wounds healed by the First Intention," by E. Porter, M.D., and a record of "Surgical Cases," by J. F. Schaffner, M.D., are added, and are interesting contributions to surgical literature.

It is always gratifying to read the transactions of the medical societies of the several States, and we heartily wish that our Southern medical brethren would continue to give us their past and future experiences in medicine and surgery, especially in reference to the past war.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Dec. 23, 1868.

UNTIL the arrival of the President, Dr. Wm. B. Bibbins, Dr. T. C. Finnell occupied the chair *pro tem.*

The Committee on Microscopy reported that the tumor presented by Dr. Elsberg at the previous meeting was of the nature of papilloma, and that the specimen of abnormal tissue from the walls of the heart was the result of myocarditis, either rheumatic or syphilitic.

DR. JACOBI exhibited a living specimen of partial intra-uterine amputation of the leg, which will be published in a future number.

ANEURISM IN ARCH OF AORTA—CHRONIC PNEUMONIA, ETC.

DR. CLARK presented a specimen of aneurism of the arch of the aorta, and of chronic pneumonia removed from a patient, of whose history he, however, knew but little. It was merely sent to him from Charity Hospital for exhibition to his class.

The aneurism was situated in the lower portion of the arch of the aorta, and opened forward, or rather inward, into the trachea, the man bleeding to death in a very few minutes. It seemed also probable that it opened into the œsophagus at the same time, as a considerable quantity of partially coagulated blood was found in the stomach. A considerable quantity of blood must, at the time of death, have been raised, rather by welling up than coughing, as it could not have flowed so rapidly as it sometimes does, else some pulmonary apoplexy would have been present.

The lungs were considerably consolidated, not so complete as in pneumonia, but sufficiently so to make the tissue quite firm. The specimen was brought to him under the suspicion that a cancerous infiltration had taken place. This suspicion, however, was not substantiated. The tissue of the lung was of a grayish color, slightly translucent, and seemed to be evenly consolidated all the way through, without being perfectly consolidated anywhere. A hurried microscopical examination revealed a marked increase of the fibrous stroma of the lung, a considerable number of the air cells were obliterated, and there was an infiltration of a cellular structure, the cells being large and rounded (and some of them slightly granular), about the size of those that used to be called exudation corpuscles. Besides these there were a few small cells and a large quantity of fatty matter, which he supposed was the result of a fatty degeneration of the infiltrating material. From the examination made, Dr. Clark was led to suppose that the specimen was one of chronic pneumonia.

The specimen was, on motion, referred to the microscopical committee.

CANCER OF BREAST—SHOULD WE OPERATE WHEN AXILLARY GLANDS ARE ENLARGED?

DR. CUTTER presented a specimen of scirrhus of the left breast, removed by amputation from a lady forty-five years of age, for the purpose more particularly of getting the views of the members upon the propriety of operating in such cases, when the axillary glands are involved. In the case presented, several of these glands were enlarged and diseased. He had noticed that Prof. Hamilton, in a recent number of the MEDICAL RECORD (vol. iii. p. 418), had remarked that the operation should never be undertaken when the axillary glands were implicated. In connection with the present specimen Dr. C. alluded to a case of a similar sort that he had operated upon a year ago, that was still in perfect health.

DR. SANDS did not believe that axillary glands became enlarged, when there was cancer of the breast, from any other cause than a deposit of true cancerous material, and looked upon an operation under such circumstances only in the light of a palliative, the patient being almost sure to die of the return of the disease within the succeeding two years. His own reason for operating in cases of cancer was one of simple expediency. He did not believe that in the majority of cases where attempts to remove all the axillary glands had been made, that the operators had thoroughly succeeded. It was simply impossible to remove some of them.

DR. CUTTER stated that some time ago he was speaking with Dr. James R. Wood upon this subject, and that that gentleman, whose experience was probably more extensive in such operations than any other surgeon of the city, had stated to him that with one exception he had never seen any patient survive the operation longer than two years.

DR. BIBBINS remarked that Prof. Gross, in a lecture published in one of the July numbers of the MEDICAL RECORD (vol. iii. p. 197), states that operations for cancer are only performed for temporary relief and not for cure, and that the knife must not be used when there is a cancerous deposit in more than one part of the body.

DR. JACOBI referred to the case of a lady upon whom he had operated for cancer of the breast five years ago. Since that time he had used the knife twice, respectively three and four years ago. The disease reappeared, however, a fourth time in the shape of an invasion of a string of glands in the neighborhood, and across the chest, as well as the lines of the cicatrices of the previous operations. That lady was still under his treatment, and he would be happy to turn her over to a committee appointed by the society for a thorough study of all the peculiarities of her case.

On motion such a committee was appointed, consisting of the Committee on Microscopy, to which were added Drs. Jacobi and Sands.

DR. SAYRE stated that he had one case still living in good health, upon whom he had operated for cancer of the breast eight years ago, and another seven years ago, and another who died last fall, after living nearly seven years. He wished to call the attention of the members to some statements made by Dr. W. L. Atlee, of Lancaster, Pa., made before the surgical section of the last meeting of the American Medical Association, concerning the treatment of cancer. Dr. Atlee at that time related a case of epithelioma (*vide* MEDICAL RECORD, vol. iii. p. 130), upon which he had operated at intervals several times, in consequence of the return of the disease in the cicatrix. So long as the patient took three-drop doses of Fowler's solution of arsenic three times in the day the disease appeared to be under control, but a reasonable time after the suspension of the remedy it would return. Finally the patient came for another operation, which was necessitated by a greatly increased development of the disease. The wound healed kindly, the patient was put upon the constant use of arsenic, which treatment had been continued for a number of years without a return of the disease. The patient at the time of reporting the case was nearly eighty years of age, and was in robust health. Dr. Sayre also remarked that the physicians in the neighborhood of Lancaster were constantly in the habit of prescribing arsenic for cancer, with perfect confidence in its curative agency.

DR. POST stated that a lady upon whom he had operated seven years ago for cancer lately presented her-

self at his office to consult him about an eruption in the neighborhood of the cicatrix, supposed by her to be of a cancerous nature. There was, however, no evidence of malignant disease present in any organ of her body.

COMPRESSION OF BRAIN WITHOUT FRACTURE.

Dr. Finnell exhibited the brain taken from a man fifty years of age, who fell from a stoop while intoxicated, and struck his head against the stone pavement. When taken up he was insensible, and was first brought to a Station-house, and sent thence to Bellevue Hospital, at which latter place he shortly after died.

At the autopsy a considerable amount of extravasation of the scalp was noticed over the right parietal bone the seat of a fracture, and on the removal of the calvarium, a large clot of blood was found covering nearly the whole external surface of the hemisphere of the opposite side.

Dr. Rogers remarked that at a certain society the question had been asked if fatal traumatic cerebral hæmorrhage ever occurred, without the coexistence of fracture, and could not be answered.

Dr. Post did not see why it should not, although he could not, at short notice, draw upon his experience on that point.

Dr. Jacobi stated that in the large majority of cases of fatal concussion there was always effusion of blood in greater or less quantity upon the surface of the brain, the result of rupture of the cerebral vessels. In the greater number of such cases there were noticed numerous points of extravasation. Many of such cases doubtless recovered by the subsequent absorption of the effusions. He believed it was a fact that when patients die a long time after an injury of the head without fracture, when they die of abscess of the brain, that the lesions were very frequently found on the side opposite to the original injury.

Dr. H. Knapp remarked that the same fact in regard to blows upon the head was true in reference to those upon the eye; it being found that rupture of the vessels of the choroid always occurs opposite to the spot where the blow is inflicted.

ELEPHANTIASIS ARABICUM—AMPUTATION.

Dr. Sayre presented a lower extremity, which had been removed by amputation from a Frenchman, æt. 62 years, a patient of Bellevue Hospital, who had suffered from elephantiasis Arabicum since fifteen years of age. On admission he was much emaciated; the foot of the affected extremity was twisted like talipes varus; and its more solid parts were very considerably disorganized, and the portion that came in contact with the ground was the seat of an unhealthy ulcer. At the consultation the question of amputation at the ankle-joint was thought of, but as these parts had lost all sensation as far as to a point a little below the knee, amputation through that joint had to be performed after the plan proposed by Dr. Smith. The limb was found to be the seat of complete fatty degeneration, pure adipose tissue having taken the place of the muscular structures, leaving only their fibrous sheaths. The bones were quite brittle, and their substance was occupied with large cells like alveoli, which were filled with an apparently hyaline glutinous material.

Dr. Sands alluded, in passing, to a patient now in Bellevue suffering from the same disease, upon whom he had performed Syme's amputation a year ago. This, with Dr. Sayre's case, were the only two he had ever seen. Dr. Sands' patient was over thirty years of age, and had suffered from the disease since boyhood; there was no infiltration of the tissues, as in Dr. Sayre's case, but the anæsthesia, which he regarded as one of the marked symptoms of the disease, was noticed over the lower two-thirds of the limb. The patient had a very useful stump for a year, but now an ulcer has made its appearance in the cicatrix, which will possibly necessitate further operative procedure.

Dr. Noyes also alluded to a case of the same disease, reported by Dr. Chisholm, of Charleston, S. C., in the Ophthalmic Hospital Reports, the patient being likewise afflicted with impairment of nutrition of the cornea, etc.

MORBUS COXARIUS—EXSECTION.

Dr. Sayre next presented the head, neck and femur, with several parts of the acetabulum, removed by operation from a child seven years old. The disease commenced three years before, as the result of an injury to the hip, and passed through the usual stages, except during an interval of one year, when there was a cessation of the symptoms. Dr. Sayre was consulted in July last, when the third stage of the disease was in full progress, several abscesses existing in the neighborhood of the joint, communicating with dead bone. Exsection was advised, but the parents refused to have the operat on performed. He did not see the patient again until last month, when the parents, finding that death was inevitable, concluded to have the operation performed on the third of December. The child was much emaciated, had diarrhœa, and the limb was strongly adducted and flexed upon the pelvis. The bones were removed by simple incision, without any hæmorrhage, the loose pieces being picked out with the forceps. He was placed in wire breeches, and did well, and was allowed to get about for about three weeks. At the end of that time a large bed-sore over the sacrum, which, by all accounts, had been in existence before the operation, and to which the patient had never referred, was accidentally discovered while dressing the wounds. This necessitated his removal to a water-bed. At the time of the report he was doing well.*

CALCIFICATION OF SEMI-LUNAR AND MITRAL VALVES.

Dr. Newman presented the heart removed from a man eighty-four years of age, who had enjoyed an unusual amount of health, and had always been capable of severe bodily labor. Shortly after having split some wood, he complained of a slight headache, went to his room, and was soon after found dead. At the autopsy the only cause for death that could be found was a calcification of the mitral and semi-lunar valves.

DISEASE OF TESTIS, ETC.

He exhibited another specimen, consisting of the left testicle, removed by Dr. Hutchison from a coachman. Fifteen years ago the patient stated that he had syphilis, but it was not ascertained whether he had not suffered from chancroid. Twelve years ago his testicle commenced to swell, and soon attained an enormous size. He had gonorrhœa and epididymitis a short time before he came under the observation of Dr. Hutchison. The doctor believing the disease of the testicle to be due to syphilis, treated the case with the usual doses of iodide of potassium, but without any good result. The patient was very anxious to have the organ removed, as he was constantly subjected to severe agonizing pains. At last Dr. H. consented. He made a careful examination, but found no translucency, and explored the part with a trocar with nothing but a negative result. After the removal of the organ, the cavity of the tunica vaginalis was found filled with a jelly-like substance, while the testicle itself was crowded into the upper and posterior portion of the scrotum. Dr. Newman was unable to

* The patient has since died of anæmia.—Ed.

make out the nature of the deposit, and at his request the specimen was referred to the microscopical committee.

ACUPRESSURE.

Dr. Newman, in conclusion, remarked that Dr. H. made use of acupressure in this case, and that not a drop of blood was lost when the cord was divided. He also remarked that the Dr. had employed acupressure again last week in a case of amputation of the thigh.

OSSIFICATION OF CHOROID, ETC.

Dr. H. Knapp exhibited a specimen of ossification of the choroid. The history of the case, with remarks thereon, he gave as follows:

The *eye* is taken (in July of this year) from a girl, seventeen years of age, who suffered iridochoroiditis since her childhood. The right eye was yet tolerably good, its acuteness of vision one-fourth of the normal; the left had been entirely blind since several years. The globe was reduced in size, soft in its anterior part, but hard as wood in the posterior two-thirds, and somewhat quadrangular, from pressure of the recti muscles. This eye was painful when touched at the ciliary region, occasionally became red, and caused lachrymation and distress in the other one.

I therefore extirpated it. Operation and healing process without accident. Patient got entirely rid of all troubles in the right eye. The eyeball was opened by an antero-posterior section. Iris and ciliary body showed nothing particular. *Lens* was white, diminished in size, and flattened. Anterior capsule coated with deposits on both sides, of connective tissue in front, of decaying cells and fibres behind. No degeneration of lens substance. The *inner surface of the sclerotic* was lined by a threefold coat: 1, a black, thin membrane, being the partly well-preserved, partly degenerated outer layers of the choroid; 2, *a hard capsule*, extending from the optic disc to the pars plana of the ciliary body, and consisting of *true bone*, showing under the microscope not only perfect bone-corpuscles, but also in some places the concentric arrangement of the latter around nutritive canals; 3, *a fibrous white layer*, consisting of mostly small cells, inclosed by a network of tender fibres.

Through the middle of the vitreous chamber ran a funnel-shaped wrinkled band, the *detached and degenerated retina*. A small lump, upon which the knife grated, was enclosed in its posterior part. It proved to be *calcareous* deposit, while all the remainder of the retina was metamorphosed into connective tissue. This case admits of some valuable practical applications. The *origin of the ossification was found to be in the capillary layer of the choroid, and extended no further.* Of this fact we may in future avail ourselves as a means of diagnosis. When we find that the hardness is limited to the two posterior thirds of the globe, we may infer that the disease was generated by the choriocapillaris, since this layer does not reach any further.

The suprachoroid layer, through which the ciliary nerves pass, and the ciliary muscle in which they ramify, were not degenerated, but in close neighborhood to the osseous deposits. The latter may irritate those nerves by pressure or in some other way, and thus be the remote or proximate cause of the sensibility and inflammatory exacerbations of this eye and the sympathetic troubles of the other. The practitioner, therefore, should consider such cases of limited ossification as more serious diseases, as those in which disorganization of the whole uveal tract has destroyed at the same time the ciliary nerves, the conductors of sympathetic ophthalmia.

Dr. Noyes remarked that it was rare to find so extensive a deposit of ossific matter in the eye, but the condition was one of the well-recognized causes of sympathetic ophthalmia. He had occasion to remove an eye a couple of weeks before for sympathetic trouble in its fellow, which he had no doubt was due to the same condition of things. The organ had been given to Dr. Delafield for minute examination, but he had not learned the result.

ANEURISM OF ARCH OF AORTA—DEATH FROM CEREBRAL ANÆMIA.

Dr. Rogers presented a specimen of aneurism of the arch of the aorta, whose history had been in part brought to the notice of the society at the time that the importance of aphonia as a symptom of the disease was discussed. (*Vide* Medical Record, vol. iii., p. 356.)

The peculiarity of the case was that the patient died, not of rupture of the sac, but of cerebral anæmia.

Two years before death asthmatic symptoms were experienced; six months later impairment of the voice appeared. The existence of aneurism was not discovered, however, till about six months before death, the date that he came again under observation.

At that time the left radial pulse was feeble, the corresponding pupil dilated, and the aneurismal pulsation in the left subclavian region very distinct, though the chest was at this time examined, by a physician attached to a life insurance company, without discovering the condition. Much pain was suffered from this time onward by the patient, it being mostly referred to the left shoulder, arm, and left subclavian region. At three months before death, dysphagia and fits of bronchial cough, with bloody-streaked expectoration, were added to the symptoms. Soon after this it was also discovered that the radial pulse of both sides was entirely absent, and that the right carotid artery had almost ceased to pulsate, and both pupils were alike dilated, though vision was good. About four weeks previous to death, the patient suffered an attack of mania of mild character, following syncope. This lasted a few hours, leaving him feeble and disposed to syncope upon the slightest exertion. It was now discovered that there was no perceptible pulsation in either carotid artery, though the temperature of the head and upper extremities was little, if any, depressed. Death finally supervened in a gradual manner, the immediate fatal train of symptoms having been started by a fit of syncope, which terminated fatally in about ten hours. The specimen, as presented, explained the phenomena from time to time witnessed.

The aneurismal tumor was seen to project upward and backward from the arch of the aorta; the vestiges of the *arteria innominata* completely obliterated, were seen on the right anterior portion of the tumor; the left carotid was found perfectly obliterated on the left portion of the tumor; and that portion of the left subclavian, between its origin and the point at which the left vertebral was given off, was still open and of quite normal size, except at the opening into the sac which was valvular and flattened.

At what point the tumor pressed upon the left subclavian so as to abolish the left radial pulse, the circumstances of the autopsy prevented the necessary dissection to discover. But it was apparent from the specimen, that this patient's brain and upper extremities were supplied with blood through the *left vertebral artery exclusively*, for an indefinite time before death, probably about four weeks; some additional pressure upon the remaining left subclavian artery finally reducing the brain-supply too low to sustain life. This was probably effected by the pressure of the fibrinous concretion, which formed the mass of the tumor, upon the valvular opening of the artery already described.

Neither the difficulty of swallowing, nor pain, nor respiratory affection, nor all together would account for the death. He has not been able to find a record of death from this cause, *cerebral anæmia*, in the histories of aneurism of the arch of the aorta which he has thus far consulted. Dr. Walshe did not mention it in his work on 'diseases of the heart and great vessels,' and regarded death by hæmorrhage as by far the most common form, and that by gradual exhaustion as rare. He, Dr. Rogers, knew of no such a history in the New York Pathological Society records. He therefore regarded it as a rare case, and asked if such deaths were common where aneurisms existed.

Dr. Loomis replied that deaths from such causes were very common, and that the post-mortem examination generally revealed an embolus in one of the cerebral arteries.

Dr. Noyes asked if the brain had been examined with reference to the probable existence of such an embolus, and was answered in the negative, the reason being stated that there were family reasons why the head was not opened.

The Society then went into Executive Session.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, January 4, 1869.

Dr. Geo. T. Elliot, President, in the Chair.

The President announced the admission to membership of Drs. Josiah C. Nott, Andrew H. Smith, and Joseph Kammerer.

FUNCTIONS OF THE CEREBELLUM.

Dr. Wm. A. Hammond read an exhaustive paper upon *the Physiology and Pathology of the Cerebellum*, of which we present an abstract. It will appear in full in the Quarterly Journal of Psychological Medicine.

The following points Dr. Hammond thought were established in relation to the functions of the cerebellum:

1st. The cerebellum, contrary to Gall's theory, exercises no special or exclusive influence over the generative organs. For although it sometimes happens that injury or disease of this organ produces aberration of the sexual impulse, yet the same holds true of other parts of the brain and of the spinal cord.

2d. It has no special or exclusive power to co-ordinate muscular actions; and this proposition is supported by the following facts: *a*. The consequences of removal of the cerebellum, if the animal survives the immediate effects of the operation, are not enduring. *b*. The entire removal of the organ from some animals does not apparently interfere in the slightest degree, even for a moment, with the regularity and order of their movements. *c*. The disorder of movement which results in birds and mammals, immediately after injury to the cerebellum, is not due to any loss of co-ordinating power, but to vertigo. *d*. The phenomena of cerebellar disease or injury, as exhibited in man, are not such as show any derangement of the co-ordinating power. *e*. In those diseases, such as locomotor ataxia and the ataxic form of aphasia, of which the chief phenomena relate to derangement of the co-ordinating power, the lesion is not in the cerebellum; and the symptoms are altogether different from those which are due to cerebellar disease or injury.

These several propositions were supported at length by arguments drawn from experiments and pathology. In conclusion, Dr. H. gave it as his own opinion that the cerebellum has no special function of any kind, but is simply an added ganglion of general nervous power.

Dr. J. C. Dalton wished to express the great pleasure and profit he had derived from listening to the paper. It had brought forward many very important facts connected with the functions of the cerebellum, which had been left too much out of sight in the researches of most investigators. The cerebellum had been a very hard nut to crack for physiologists, and for comparative anatomists as well. One reason for this had been indicated. It was easy to bring to the attention a great many facts in support of almost any theory that might chance to be in the ascendant; and for a time the contradictory facts would be comparatively unnoticed. But presently some keener observer, perhaps with a theory of his own to propound, would bring these into stronger light, and expose the insufficiency of the older view; and, at once, facts would spring up on every side and array themselves against it.

From comparative anatomy more than from any other source we should expect to gain definite knowledge upon a question of this kind. With such a great variety of animals, whose habits and whose nervous organizations are accurately known and clearly demonstrated, it might seem an easy thing to pick out, one by one, the seat of the various nervous endowments. But that such a task is by no means easy was well shown by the case in question. Two things we should always bear in mind in our investigations: one, that the cerebellum of a given animal may be large with reference to the size of the animal, and yet small with reference to the size of its brain; the other, that it is often unsafe to compare corresponding organs in animals of quite different classes. To illustrate the last point, suppose we are considering the theory that the cerebellum is a co-ordinator of muscular action. Take the cod-fish and the porpoise; they are about equal in size; have the same habitat, and very similar habits; their motions are equally complicated, the chief difference being that the one progresses by lateral undulations of the spine, the other by vertical. The cod has a large cerebellum, for a fish—it appears larger from the smallness of the cerebrum; but the porpoise, a mammal, has a cerebellum much larger than that of the cod or of any fish; but its cerebrum is also much larger—it is an animal of a far superior class. We shall do much better if we confine our comparisons to animals of the same class. Take two reptiles. In the frog the cerebellum is almost nil, it is but a thin, ribbon-like strip; and this animal's movements are very simple, generally mere alternate flexion and extension of the limbs. In the alligator we have a cerebellum much larger, not only absolutely, but also relatively to the cerebrum; and the alligator's movements are more complex; it does not simply flex and extend its limbs, but it uses them in walking. Or take two animals more closely similar, the dog and the cat. Both are by nature rapacious carnivora; it would be hard to say which is the more intelligent. But the cat has a cerebellum relatively much the larger of the two, and has also much greater power of muscular co-ordination. Tie a dog to the table-leg with a long string, and he will soon entangle himself inextricably; a cat would keep herself clear. We all know that a cat thrown into the air is sure to come down on her feet, and how extremely delicate and fastidious she is in all her motions.

These cases seemed to Dr. Dalton to favor the co-ordination theory; and he inclined to think that, on the whole, the inductions from comparative anatomy pointed in this direction; that the development of the cerebellum was in some way conducive to the power of

using and co-ordinating muscular force. The objections to this view had been forcibly stated by Dr. Hammond, and chief among them that the effects of injury to, or ablation of, the cerebellum, were not permanent. If you remove one-half or two-thirds of the cerebellum, the animal, if it lives, shows little or nothing of its effects after the lapse of a week or two. This compels us, if we suppose that the power of co-ordination resides wholly in the gray matter of the cerebellum, to resort to the theory that the suspension of this power, in these cases, is due less to the actual loss of nervous tissue than to the shock given by the operation to the cerebellum as a whole. The speaker was not sure that this was so far from the truth. A man shot through the lung has at first great dyspnœa; he never recovers the lost pulmonary tissue, but the dyspnœa disappears. The man who had the tamping-iron blown through the front of his brain, though at first senseless and then delirious, recovered his cerebral functions in spite of the loss of considerable brain-matter. The cases where the cerebellum is completely removed (as in frogs) present much more serious difficulty, and it is unfortunate that the only animals upon which the total ablation can be safely performed are so low in the scale that their co-ordinating power is very simple at best. Still the observations are of great value.

That part of the paper which had seemed to the speaker the most strikingly interesting was its very accurate discrimination between vertigo and the loss of the co-ordinating power. It afforded another instance of the way in which we often misinterpret phenomena in favor of a popular theory. Including under vertigo, as Dr. Hammond would probably define it, not alone the sensation of giddiness and whirling motion, but also the loss of the power of estimating the distances and positions of external objects—so that a man suffering from it would lose not the power of moving his muscles to a given place, if he only knew just where that place was, but that of judging where it was—it would probably be found the real condition in many of the cases of supposed loss of co-ordinating power. But the function of the cerebellum might possibly include the power of judging of distances, and that of muscular co-ordination as dependent upon this. The fact was, that the animal, directly after lesion of the cerebellum, cannot guide his movements, whether because he cannot make the muscles contract coincidently, or because he no longer knows how he should move them.

Dr. Austin Flint, Jr.—I wish to express, in my own behalf, the great pleasure I have received from hearing the paper of my friend, Dr. Hammond. I regard it as one of the most valuable contributions to the literature of this subject which has been made in several years; and I know of no paper which contains such a full and fair exposition and discussion of the facts in the case. It may, however, be interesting to have these facts regarded from a different point of view. There are two or three points only which I wish to take up.

The first is the method of experimentation upon the cerebellum, and the difficulties which are experienced in performing the experiments and in correctly observing their effects. In birds—the class of animals upon which these experiments have generally been made—the operation of removing the cerebellum presents very great difficulty, chiefly from the hæmorrhage, which is much more serious than in removing the cerebrum. There is an immense sinus in the median line, causing great loss of blood, which can only be arrested by spontaneous coagulation. It is because this coagulation is so rapid in birds that they are commonly chosen for the experiment. A second difficulty lies in the danger of touching the medulla oblongata. This is very grave when the attempt is made to remove a large part of the cerebellum, and I have often found it fatal. With this immense flow of blood, and this dread of touching the medulla, it is almost impossible to estimate, save in the most general way, how much of the cerebellum is removed, except by examination after death. These facts would lead me to accept with considerable hesitation the statements that any definite portion of the cerebellum had been removed. For the removal of the entire cerebellum, as my friend, Professor Dalton, has said, we must resort to animals of a lower grade. In birds I think it nearly impossible. Again, in all these experiments upon the nervous system, it is indispensable to operate without ether. You cannot disturb the nervous functions by ether and then expect trustworthy results. And as these operations are very slightly painful—the ganglia being almost destitute of sensibility—I think it justifiable to dispense with the anæsthetic.

Attention has been called to the important fact of the return of the co-ordinating power after a portion of the cerebellum has been removed. I have in my possession the encephalon of a pigeon, from which I removed one-third to one-half of the cerebellum. This animal entirely recovered; and such a fact is exceedingly interesting. It has been thought by some that this is opposed to the co-ordination theory. On the contrary, when taken in connection with the facts of pathology, I think it favors that view. For we find that, in these important functions, nature makes provision for more apparatus than is required under ordinary circumstances. I need cite but a single example—that of the kidneys. A patient may live for a long time with half his kidney-substance useless, and yet excrete as much urine as necessary. I have had dogs live for years, have repeatedly had them live for months, with one kidney removed. They have generally presented nothing abnormal in their appearance; but sometimes they would get sick; and, if anything happened to derange the remaining kidney, they would die in convulsions, with all the symptoms of uræmia. It is said in the books that the remaining kidney enlarges and takes on the functions of the lost one. This I do not believe. Theoretically it is impossible that an organ like the kidney should form new secreting elements after it has once attained its normal full development; and I have found it so experimentally. Now to bring this to bear upon the cerebellum. Nature has provided more of this organ than is necessary for the function of co-ordination. A part can be spared and the organ still preserve its functional sufficiency. But if violently injured, the whole ganglion, as just stated by Professor Dalton, receives a shock such as temporarily to impair or even abolish its functions. Why have we not these results in all cases of cerebellar disease? Because the disease is gradual in its advance, produces no shock, disturbs nothing, until it has destroyed so much of the substance of the ganglion that this is no longer equal to its work.

Another point. In the lower orders of animals it is very important to discriminate between voluntary movements and those purely reflex. Marshall Hall has shown that if you decapitate a chicken and allow it to fall into a soft bed of cotton, carefully removing it from all sources of irritation, no reflex movements are made. But send a single impression to the irritable cord, and the fowl goes flying around, striking the ground or the walls of the room, each blow exciting fresh reflex action, until the irritability is exhausted. Now the movements of a frog, after removal of the cerebel-

hum, are less complicated than those of the headless chicken, and may as properly be considered the result of reflex action.

One point more. It is pretty difficult to get over the case, mentioned by Dr. Hammond, of the child that lived to the age of eleven years with total, and apparently congenital, absence of the cerebellum and other important parts of the brain, according to the testimony of such high authorities as conducted the post-mortem examination. But, supposing the cerebellum to be really the co-ordinator, and to have been wholly absent in this case, might not its function have been partially supplied by other functions, as in cases of congenital blindness? We have nothing else that can completely take the place of sight; but in those cases where it is congenitally wanting, we know what a very high development the other senses attain, what almost miraculous acuteness of hearing, smell and touch comes in to supply the loss. The power of voluntary movement is retained, as shown by Flourens, after the removal of the cerebellum. Might not this be supplemented by other functions, though it found no special co-ordinator?

In the cases of locomotor ataxia we should consider the effect of the patient's loss of sensibility, so that he cannot feel the ground, in producing the uncertainty of his movements.

Dr. Hammond's paper shows, I think, that if the cerebellum is not the seat of the co-ordinating power, it has at least something to do with muscular movement. To suppose that it is simply an addendum to the rest of the brain, or that it has functions identical with those of other parts, seems to me unphilosophical and untenable. From the removal of no other part, of no combination of parts, do we get the peculiar disorder of movement characteristic of cerebellar lesion, whether we deem this due to vertigo or to loss of the co-ordinating power.

Correspondence.

RENEWAL OF PRESCRIPTIONS.

To the Editor of The Medical Record.

Dear Sir—Several recent cases of misadventure, to use the mildest possible expression, springing out of the renewal of prescriptions without previous approval, and therefore authority of the physician issuing them, have revived discussion upon this mooted subject, and I avail myself accordingly of the invitation tendered me both by yourself, and the occasion, to ventilate some further views upon it. In the article which appeared in the columns of the Record on the 15th of August last, the subject was treated in a general way, and as a matter not sufficiently matured by the medical profession to sustain either very definite or combined action upon it. Nor, perhaps, has the time yet arrived, so far as that action is concerned, for obtaining any legislation upon a topic so exclusively professional, and lying midway of absolute and legal rights in literary property, and qualified rights of use and sale as an incident to all property. It is important, however, to bear in mind that in asking for legal intervention and protection at the hands of State Legislatures, which are purely popular and not professional assemblies, the first point to be gained is that of instructing the public mind and conscience touching the fact that there is ground for complaint *somewhere;* and although the petition for redress emanates from a professional body as a party in interest, the benefit sought to be obtained by them is calculated to enure ultimately to the advantage of the public. In this view of the question, it becomes a general and not a professional matter alone, and as such, rises above the suspicion of being an appeal in behalf of class legislation.

As it is a purely legal question, also, in its extrinsic bearings, involving doctrines of civil right and obligation, I shall be compelled, although speaking through the columns of a medical journal, to discuss it in the language, under the light, and by the principles of that science whose aid is now invoked in its behalf. And if any apology were needed here, it would be found in the facts stated above, proving as they do how essentially impossible it is to deal justly with questions of right, duty, and responsibility outside the pale of instituted law.

Relations of Physicians to Patients.—Assuming the relation of patient and physician to exist in any given case, and a prescription to have been written and paid for, let us now consider what is the nature of the transaction, and what the rights flowing out of it.

1st. A prescription, as a labor of skill, is a mental product like any kind of literary work, and consists of two parts, viz.:—*the paper and the formula.*

Being written for the special use and benefit of the party who pays for it, the patient acquires a right of property at least in the paper, and may bring an action of detinue for it, against any party who withholds it from him. In this respect it differs in nothing from a letter, which the receiver has an undoubted property in, even as against the sender. (*Oliver* v. *Oliver*, XI. Comm. Bench, R. N. S., p. 139; *Eyre* v. *Hughes*, 35 Barb. 509.) But it is not so clear how far that right extends to the formula. That he may use it as often as he pleases cannot be doubted, for the usufruct is precisely what he has purchased and paid for. It does not follow, however, from this that he has the right to use it in any essentially different way, as by printing, or publishing it for example, any more than he could private letters, without first obtaining permission of the sender, if a letter, and by parity of reason, of the physician, if a prescription. This was the doctrine laid down in the case of the celebrated Chesterfield Letters, and it has been frequently re-affirmed since (*Thompson* v. *Stanhope*, Ambler's Rep. p. 737). The law has always entertained a tender regard for literary property as such, esteeming it, though an immaterial product, something having a definite, tangible existence, with absolute rights attaching to it, and carrying with it all the incidents belonging to such rights. In this respect all literary property may be considered as standing upon an equal footing. Its ownership is as indefeasible a right as any other known to the law, and whoever invades it, does so at his peril. This ownership may be disposed of by sale and assignment, or it may be bequeathed, as any other interest in real or personal property.

Considered then as literary property, the formula of the prescription still belongs to the physician, though he has sold its usufruct to one or many patients. For as a formula it is a mental product, belonging, as in the case of letters, and until specially disposed of, exclusively to the composer. This was the doctrine laid down years ago by Chancellor Walworth (in *Hoyt* v. *Mackenzie*, 3 Barb. ch. 323). It is somewhat modified in relation to the right of publication, whenever this is necessary to the vindication of the receiver's own rights or conduct, by a subsequent decision of Judge Duer (*Woolsey* v. *Judd*, 4 Duer, 379), but the general principle remains undisturbed. Following the analogy furnished

us by these decisions relating to letters, we can apply it, with slight modification, to the case of prescriptions, and although without any special adjudications in kind to sustain us, there can be little doubt of the parallelism of the two problems.

Relations of Apothecaries to Physicians.—But the chief point of all to consider in relation to this question is whether an apothecary can, without permission of the physician, recompound a prescription, originally issued by him. As a vendor of drugs he can, undoubtedly, in the absence of statutory restrictions, sell any of his wares to any one, in any quantity, and at any time that may suit him. This is a common-law right inherent in property, or its holder, as incidental to its use. It cannot prevent him from selling absolutely, unless the public safety is so liable to be compromised by any and every sale that it is against general policy to allow it. Aside from this, he may sell at discretion. But on the other hand, and as part of the internal police of a State, he may be restrained from selling under particular circumstances (as in the case of poisons), and limitations may be put upon him precisely as upon others dealing in articles relating to food or health. Where those limitations do not exist, he may sell or compound drugs as he pleases, subject always to responsibility, as any other seller of similar wares. From this it follows that he contravenes no law in filling an order however often it may be presented by the patient owning the usufruct of the prescription, since no statute forbids him. And, inasmuch, as I have heretofore pointed out, prescriptions are often without signature, or date, or name of patient—without paternity in fact—in recompounding such a prescription, he becomes simply the agent of the patient for supplying him, since, as is very generally the case, the patient deposits the prescription with him. Undoubtedly, were the prescription *copy-righted*, the apothecary could not recompound it without authority, any more than he could manufacture for another person's use any patented article. In the formula there is, as a mental product, a literary property belonging to its author, the use of which is sold, and consequently surrendered to the patient alone. It does not belong to the public any more than a letter, which, as has been pointed out, cannot be published without authority of the composer.

But, and in order to make the prescription the property of the patient, and the right to use it exclusively his own, it should bear the semblance of a legal instrument; in other words, it should state *for whom* it is issued, and *by whom*. Initials are not, ordinarily speaking, a signature. The name must be written in full in order to fix authorship in a prescription. When that is done, and the prescription becomes, by analogy, a letter addressed by the physician to an apothecary, then, although the latter may keep a copy of the same in vindication of his conduct in compounding it, he cannot, nevertheless, recompound it at will for any stranger, or third party, since that would be equivalent to a publication of it, without first obtaining authority from its composer. All the authorities are agreed upon this one point of vested ownership in a mental product, and the necessity of obtaining permission from the composer before such product can be made public. Within the purview of this well-established principle, the relations of apothecaries to physicians are patent and well-defined, and the interests of both professions, instead of being antagonistic in this particular, are, on the contrary, entirely parallel. Let the patient, then, who has paid for and obtained a prescription use it once, or many times, it is, at common law, still his right and privilege, nor does the apothecary violate any one else's rights in recompounding it for *him*. But on the other hand, if the apothecary puts it up indiscriminately for the public, he invades the physician's vested and proprietary right in the formula, unless, as in the case of Dover Powders, or any articles or formulæ that have now passed into common use, they are become *res communes*.

The proper legal remedy to be sought for is one that shall limit the right of sale by apothecaries of certain articles of the Materia Medica, such as *poisons, mercurials, antimonials, narcotics, and drastics*, by requiring a fresh order for each sale, of any prescription containing either of such articles, to be signed with the full name and residence, both of the physician issuing it and the patient for whom it is intended, as also the date of its composition.

By incorporating this provision into the draft of the act suggested by me in the Record of August 15 last, I think we might arrive at as satisfactory a solution of this perplexing question of innominate obligation as the nature of the various interests involved in it would permit.

I am, very respectfully yours,

John Ordronaux.

Washington, D. C., Dec. 21, 1868.

IS THERE ANY SYMPATHETIC CONNECTION BETWEEN BREASTS AND NAVEL?

To the Editor of the Medical Record.

Sir—Three weeks ago I attended a lady, aged 35, in the first confinement. Labor was natural and sufficiently speedy. A female child weighing seven pounds was born.

On the seventh day after the birth, I was requested by the mother to do something for the navel—that she distrusted the capability of her nurse. On examining the navel I found its surface abraded—raw, in fact—hot, throbbing, and showing around it a circumscribed inflammation.

I ordered the bandage to be loosened and a light dressing of glycerine and infant powder to be applied. Then the mother called my attention to the breasts of the child, stating that they were inordinately large, and had attained a great size in a very short time—one day I found the breasts half as large each, as a man's fist, covering the entire breast in their rotundity, and extending around, under and below the axillæ. The breasts were soft, showed no lumps, were not tender to the touch, gave the child not the slightest pain on pressure, and were not inflamed. The little, tiny nipple was retracted, but from them there oozed a considerable quantity of milk. To quiet the mother I directed an unguent of simple cerate with a very small quantity of camphor to be applied to the breasts. On returning next day, I found the navel improving. I dusted over it some powdered impure carbonate of zinc (calamine). The breasts were unchanged. When I saw the infant again, the navel was still improving, and the breasts were decreasing.

In a word, the breasts seemed to follow the improving condition of the navel, *pari passu*, and on the very day the latter was well, the swelling of the former had entirely disappeared.

Was this coincidence, or was there any connection, sympathetic or otherwise, between the inflamed navel and the enlarged breasts?

Truly yours,

Wm. Mason Turner, M. D.

1428 N. 7th St, Phila., Nov. 27, 1868.

CONCERNING SULPHITES IN THE URINE.

To the Editor of the Medical Record.

Sir—In a recent number of your journal you published a communication from Dr. Howard Pinckney, in which it is stated that the urine of a patient taking sulphite of soda, for malarial neuralgia, presented reactions with heat and nitric acid, very similar to those ordinarily due to the presence of albumen. From what Dr. Pinckney considered the peculiar action of the nitric acid test, he was led to doubt the presence of albumen, and in testing for the sulphite of soda, he was gratified to find that the simulation of albumen was caused by the presence of that salt. As the discovery of a fallacy in the ordinary tests for albumen is one of considerable practical importance, we deem it proper for the information of those who have an imperfect knowledge of the chemistry of the urine, to show that Dr. Pinckney has drawn false conclusions from his experiments.

The acetate of lead solution may have decomposed the sulphite of soda, and precipitated sulphite of lead, but it must have decomposed the sulphates of the urine at the same time, and precipitated the sulphate of lead. How did the Doctor distinguish the sulphite from the sulphate?

The nitrate of silver solution, we are informed, immediately threw down a white deposit of sulphite of silver. Possibly it did, but how was it distinguished from the precipitate of the chloride of silver which always results, in the application of this test, from the decomposition of the chlorides of the urine?

Supposing, however, that the presence of the sulphite of soda in the urine had been satisfactorily proved, we are not informed how heat and nitric acid produce an opacity in urine containing sulphite of soda, simulating the opacity produced in albuminous urine by these tests. So far as the elucidation of this point is concerned, the experiment might as well have been omitted. The truth is, the heat and nitric acid proved in this case, as they will in all cases, when combined, a perfect and sufficient test for the presence of albumen in the urine.

X.

New York, Dec. 23, 1868.

PRURITUS VULVÆ AS A SIGN OF DIABETES.

To the Editor of the Medical Record.

Sir—In the section of your Journal of December 1st devoted to the Progress of Medical Science, I read, under the above heading, that Dr. T. Gaillard Thomas called the attention of the New York Obstetrical Society, to the coincidence of diabetes mellitus and pruritus vulvæ, which he regarded as a sign of the former disease, being not aware that such coincidence has been mentioned in any publication. For the information of Dr. Thomas, and your many readers, I beg to transcribe the following extracts:

West (*On the Diseases of Women*—2d Amer. edit. Phila. 1861, p. 19) after detailing a case of pruritus of the vulva and diabetes, remarks:—"The pruritus, like the itching of the urethra in the male subject, was the consequence and the symptom of the diabetes of which the poor girl eventually died." Equally explicit quotations might be borrowed, I know, from other English writers or periodicals, not now at my command; but for the sake of evidence I will briefly scan some of the leading recent works on diabetes, to show that the value of the sign now attracting Dr. Thomas's attention has been long since established by those who have paid particular attention to the subject of diabetes. Thus, Abeille (*Maladies d Urines albumineuses et sucrées*. Paris, 1863, p. 676) says:—"Next in frequency to anthrax appear lichen, psoriasis, porrigo, though these eruptions are by no means confined to the skin, for some of them may be specially seated in the vaginal and urethral mucous membrane. Pruritus of the vulva, or of the urethra, is of such a common occurrence in diabetes that several authors look upon it as a diagnostic sign of the latter. Hervez de Chégoin states to have met with it in every diabetic female under his care (Comptes Rendus de la Société de Médecine Pratique, Sept. 1861.) Landouzy asserts to have observed it in the greatest number of his cases. (Gazette des Hôpitaux, 8 mai, 1862). Nevertheless, it is a fact which has been at all times acknowledged. Marchal de Calvi, in his interesting work, "Des Accidents Diabétiques," Paris, 1864, p. 250, writes:—"The erythema of the genitals, and more particularly the erythema of the vulva, are probably the commonest herpetic accidents of diabetes." In the second paragraph of his note on the subject, dated Oct. 16, 1858, Fauconneau Dufresne said:—"We are well aware that Hervez de Chégoin at the meeting of the Société Médicale des Hôpitaux de Paris, April 8, 1857, cited several instances of women exhibiting an unbearable itching of the vulva, which nothing could assuage. One of them was directed by the above distinguished physician to go to Bagnères de Luchon, and recommended to Dr. Lambron, who, having the idea of examining the urine, detected sugar in it. The discovery did not fail to excite research on the part of Hervez, who likewise met with sugar in the urine of his other patients. Dr. Lambron has besides observed a male diabetic with great itching of the prepuce. Similar observation has been made by Hervez and Jordas. It was further stated that Valleix had found tumefaction of the urethra and œdema of the prepuce in another male diabetic. At the same meeting of the Hospitals Society, Gubler reported to have met with erythema of the prepuce in a diabetic who had considerable elongation of this membrane." Fauconneau Dufresne, after mentioning the treatment followed in a case of Hervez, gives the history of a diabetic lady, who among other symptoms exhibited "intense redness with tumefaction, similar to a cutaneous hypertrophy of the labia majora, the pubes, and surrounding portions of the abdomen and thighs," and in whom these obstinate symptoms yielded to a general treatment for the diabetes." Finally, Trousseau, in a lecture on diabetes mellitus (Clinique Médicale, Paris, 1862. Tome II. p. 583) very pointedly remarks:—"In addition to the derangement of the cutaneous function, there is another accident, seldom observed with males, though frequently with females, namely, an eczematous eruption of the genitals; at times accompanied with painful pruritus. Whenever you will be consulted on the case of a woman, especially if she is advanced in years, who complains of itching of the vulva and its surroundings, and upon examination of this region you discover eczema, which has appeared independently of menstruation, or of any leucorrhœal discharge, occasioning such a distress as to disturb the patient's sleep, let your mind be directed to the idea of glycosuria. Frequently, you will further learn that this apparently local cutaneous affection is attended by unquenchable thirst, and an inordinate flow of urine, in which potash will detect sugar."

I am, Sir, yours truly,

Medicus.

Durham, December 4, 1868.

Sichel.—The death of M. Sichel, the distinguished ophthalmologist of Paris, is announced.

Medical Items and News.

Obituary.—Surgeon William S. Bishop, U. S. N.—A dispatch from Philadelphia announces the death, on December 28th, ult., in that city, of Surgeon William S. Bishop, of the United States Navy. The deceased was a native of Pennsylvania, from which State he was appointed an assistant-surgeon in the naval service, on the 11th of April, 1843. After serving with ability and credit, and passing through the various grades of rank until he became a full surgeon, he was placed on the retired list some time during the year 1855. On the 23d of May, 1857, he was further promoted as surgeon, ranking with commanders, and for some time past has been on special duty at the United States Naval Asylum, located at Philadelphia. His total term of service was twenty-five years, eight months and eighteen days, of which seven years and three months were spent at sea. For several years the residence of Surgeon Bishop had been in New Jersey, where, we believe, his family reside.

The German Hospital Association of Newark, N. J.—This association, which now has a capital of about $9,000, has elected the following officers for the ensuing year: President, Christian Muller; Vice-President, Jean Nehb; Treasurer, Johann Reitz; Secretary, John Otto.

Rhode Island Medical Society.—The regular semi-annual meeting of the society was held at Providence, Dec. 14. Dr. Ely is the President.

University Medical College.—The trustees of this institution have purchased a lot opposite Bellevue Hospital, upon which they intend to erect a building to be ready for occupation by the coming Fall.

Missouri Medical College.—Prof. Paul F. Eve, of Nashville, Tenn., and formerly Professor of Surgery in the University of Nashville, has accepted the chair of surgery in the Missouri Medical College, made vacant by the death of Prof. Jos. N. McDowell.

A Description of an Army Surgeon in 1689.—The *London Gazette* for 1689, not only gives a description of the personal appearance of the Surgeon of what is now the 22d regiment, but a statement of the money-value attached to him. The *Gazette* contains an advertisement to this effect:—"Run away, out of Captain Soames' company, in his Grace the Duke of Norfolk's Regiment of Infantry, Roger Curtis, a barber-surgeon; a little man, with short, black hair, a little curled; round visage, fresh-coloured; in light-coloured cloth coat, with gold and silver buttons, and the loops stitched up with gold and silver; red plush breeches, and white hat. Whoever will give notice to Francis Baker, the agent of the regiment, in Hatton Gardens, so that he may be secured, shall have *two guineas* reward."

The First Inoculator for Measles.—Dr. Francis Home, who served with the English forces in Germany and the Low Countries in 1742, like Wiseman and Ranby, was in favor of primary amputation in gunshot wounds, and is considered to be the first medical man to practise *inoculation for measles*

Hospitals in Connection with Army Barracks.—About the year 1750, hospitals were provided in connection with the soldiers' barracks, by the British Government, through the influence of Dr. Brocklesby, the author of "Economical and Medical Observation."

Food in the Reign of Henry the Seventh.—From Midsummer to Michaelmas was the only time they indulged in fresh meat, and the instructions say:—"My lord has on his table, for breakfast, at seven in the morning, a quart of beer and wine, two pieces of salt fish, six red herrings, four white ones, and on flesh days, half a chine of beef or mutton boiled." At dinner, men ranking as knights had a table cloth, which was washed once a month; they had no napkins, and the fingers were extensively used in feeding.

Death of Dr. Isaac Cummings.—At a meeting of the Board of Managers of the Demilt Dispensary, held Monday evening Dec. 21, 1868, the following resolutions were adopted:

Resolved, That this Dispensary having suffered a severe loss in the death of Dr. Isaac Cummings, House Physician, since our last meeting, this board desires to record its sense of the merits of Dr. Cummings as a well-qualified physician, a zealous, discriminating, and active officer of this institution, a faithful friend of the poor, and an upright, conscientious, estimable man. We deplore his death and honor his memory.

Resolved, That the foregoing resolution be published in the Medical Journals, and communicated to the relatives of the deceased.

Joseph Gillet, Secretary.

New Publications.

BOOKS RECEIVED.

Practical Observations on the Ætiology, Pathology, Diagnosis and Treatment of Anal Fissure. By William Bodenhamer, A.M., M.D. New York: William Wood & Co. 1868.

Physician's Medical Compend and Pharmaceutical Formulæ, compiled by Edward H. Hance. Philadelphia: Hance, Griffith & Co. 1868.

Clinical Lectures on Diseases of the Urinary Organs, Delivered at the University College Hospital, by Sir Henry Thompson, Surgeon Extraordinary to H. M. the King of the Belgians, etc. Philadelphia: H. C. Lea. 1869.

The Physician's Daily Pocket Record, comprising a Visiting List, many useful Memoranda, Tables, etc. By S. W. Butler, M.D. Philadelphia: Office Med. & Surgical Reporter. 1869.

A Treatise on the Diseases of the Eye. By J. Soelberg Wells, Prof. Ophthalmology, in King's College, London, etc. Philadelphia: Lindsay & Blakiston. 1869.

Pronouncing Medical Lexicon. 11th Edition. By C. H. Cleaveland, M.D. Philadelphia: Lindsay & Blakiston. 1869.

On Chronic Bronchitis, especially as connected with Gout, Emphysema, and Diseases of the Heart, etc. By E. Headlam Greenhow, M.D., Fellow Royal College of Physicians, etc. Philadelphia: Lindsay & Blakiston. 1869.

The Physicians' Dose and Symptom Book, etc. By Joseph H. Wythes, A.M., M.D. Philadelphia: Lindsay & Blakiston. 1868. 8th Edition.

The Use of the Laryngoscope in Diseases of the Throat, etc. By Morel Mackenzie, M.D., London, M.R.C.P. 2d Edition, with additions, etc., by J. Solis Cohen, M.D. Philadelphia: Lindsay & Blakiston. 1869.

Original Communications.

ON THE PREPARATION OF OXYGEN FOR PURPOSES OF INHALATION.

By ANDREW H. SMITH, M.D.,
OF NEW YORK.

THE interest in the remedial use of inhalations of oxygen is at last beginning to recover from the reaction resulting from the excessive laudation of Dr. Beddoes and others, towards the close of the last century; and the indications are that the subject is now to receive a dispassionate examination; free on the one hand from the enthusiasm which over-zealous partisans of a new idea are apt to give way to, and on the other from the impatience, if not disgust, with which a subject is treated after it has been shown that its importance has been overrated—a feeling which may, as it has done in this instance, prevent for a long time the recognition of the merit which the case really possesses.

To those who have not heretofore given their attention to the subject, a few words as to the means by which oxygen gas may be readily presented for use at the bedside may be of interest. Although the problem seems at first sight to be exceedingly simple, yet any person attempting to work it out for himself, unless practically familiar with chemical manipulations, will meet with unexpected difficulties; enough to discourage any but the most persevering.

In selecting a mode of generating oxygen for use in the sick-room, the required conditions are *purity of the gas*, rapidity of disengagement in considerable quantities, and portability of the apparatus employed.

These conditions exclude at once all but two of the processes now in use. These are the displacement of the oxygen in lime by chlorine, and the decomposition of chlorate of potash by heat.

The first method depends upon the power of the peroxides of several metals, and especially of cobalt, when present in small quantity in a heated mixture of lime and water through which a stream of chlorine is passing, to determine a combination of the chlorine with the calcium, to the exclusion of the oxygen with which the latter was associated, and which is thus set at liberty. A convenient modification of this method is to employ the chloride of lime, which presents in one substance both the chlorine and the lime required.

When this mode is adopted the chloride of lime and the cobalt are placed in a flask and boiling water added, when the evolution of the gas at once begins. It is necessary to maintain the temperature as high as 75° or 80° F., and at the same time not to allow the water actually to boil after it is introduced into the flask, as in that case chlorine will be given off and mix with the oxygen.

This is substantially the composition prepared by Messrs. Robbins & Co., Oxford St., London, and sold by the name of "*Patent Oxygenerator.*" The formula for this they refuse to make public, an unnecessary discourtesy, since the chloride of lime reveals itself at once to the nose, and the purple color which shows the presence of cobalt is developed in the water, every time the preparation is used.

This powder (Robbins') has been employed and highly recommended by Dr. Beigel of London, who has invented an inhaler in which oxygen is to be generated by its use.

The objection to the chloride of lime and cobalt process is that the gas comes off very slowly, and that the quantity obtained is small in proportion to the amount of material employed. I have recently experimented with Robbins' preparation, and found that 4 ounces of the powder yielded 152 cubic inches of gas in 30 minutes.

In forty-five minutes the disengagement of oxygen ceased entirely, the total amount yielded being 160 c. inches, or 40 c. inches (about 1¼ pints) to the ounce. During the first half hour the evolution was very regular, amounting to 5 c. inches per minute, which for an adult would be an addition of about one and two-tenths per cent. to the air inhaled, an amount certainly not sufficient to compensate for any appreciable deficiency in the respiration. Yet the quantity of the preparation used in the experiment was about four times the amount ("a wine-glassful") recommended by the proprietors, who at the same time give the proper duration of each inhalation as only ten or fifteen minutes. It can scarcely be possible that the very satisfactory results reported by Dr. Beigel could have been obtained with so small a quantity. Indeed in two cases (both children), in which the quantity is mentioned, a gallon was used for each inhalation, which shows that this method could not have been the one employed unless the gas was prepared beforehand.*

Another serious objection to the use of this composition in Dr. Beigel's inhaler is, that all the air inspired is drawn into the apparatus through a tube, the lower end of which is immersed in the solution of chloride of lime. The effect of passing a current of air through such a solution is, that a considerable amount of chlorine is carried with it. That this actually takes place in the case in question is proved by passing the air drawn through the apparatus into a solution of starch containing a little iodide of potassium. A deep blue color immediately announces the liberation of iodine by the chlorine. But in reality no chemical test is necessary, the odor of the chlorine and its peculiar, irritating effect upon the throat being perceptible at the first inhalation.

This difficulty could be easily remedied by having the air enter the apparatus, above the fluid, through an aperture guarded by a valve opening inward. Still the slowness with which the gas is evolved by this process is a fatal objection to its use, unless perhaps in cases in which a gradual tonic or alterative effect is desired. It certainly cannot meet the indications in cases of dyspnœa, asphyxia, chloroform narcosis, etc.

The other process named, that by the decomposition of chlorate of potash, is free from the objections cited above. With proper precautions a pure gas can be obtained, and with even a small apparatus from 3000 to 4000 cubic inches per hour may be easily generated at the bedside. The apparatus which I use consists of a copper flask holding about a pint, a Bunsen's burner, a small wash-bottle, and a four gallon india-rubber bag provided with two tubes, one for connecting it with the wash-bottle, and the other for inhaling. This arrangement admits of the generation of the gas at the same time that it is inhaled. The whole apparatus can be packed in a box a foot square and six inches deep.

The chlorate of potash should first be fused, in order to expel the water of crystallization. With care this can be done without any considerable loss of oxygen, and it facilitates greatly the subsequent liberation of

* Dr. Birch, in the second edition of his very interesting work on oxygen as a remedy, recently published in London, makes the singular statement, that by this process four hundred pints of oxygen are obtained for each pound of the chloride of lime used. Now 400 pints of oxygen would weigh 9.80 ounces troy, which if the pound taken were as chirdpois would give 6¼ per cent., or if troy 8 per cent. of oxygen as the amount contained in chloride of lime. It is probable that 400 *cubic inches* were meant, which would be more nearly correct.

the gas. For this purpose I use an iron vessel heated by a gas furnace.

The potash should be exposed to the heat until the whole quantity is melted, when it should be poured into a large shallow iron or tin vessel to cool. While in this fused state it should be handled with extreme care, as it unites with fearful energy with any combustible with which it may come in contact. An accident by which the vessel containing a considerable quantity should be overturned upon the floor would almost inevitably result in a conflagration, while a drop of it falling upon the hand would cause actual ignition of the tissues.

By mixing with the fused and pulverized chlorate of potash about one-fourth its weight of peroxide of manganese, the oxygen will be given off much more evenly and at a much lower temperature than when the chlorate is used alone. The office of the manganese is merely to diffuse the heat through the chlorate of potash, so that the whole mass may be acted upon at once. It undergoes no chemical change, unless to lose a portion of its oxygen if the temperature be sufficiently high. Any other good conductor of heat which will not further oxydize and will not be sublimed, will answer as well. These conditions are united in the black oxyde of copper, but its expensiveness is a serious obstacle to its use. It has this advantage, however, that when it is employed the wash-bottle, to be mentioned in the next paragraph, may be dispensed with, any free chlorine being taken up by a few bits of caustic potash dropped into the copper flask, or, still better, fused originally with the chlorate of potash. This cannot be done when manganese is used, as a manganate of potash results, which defeats the object.

When the evolution of the oxygen is very rapid, a small amount of chlorine is given off and mixes with it. This is removed by passing the gas through a strong solution of caustic potash contained in a wash-bottle. The lower end of the delivery tube is pierced with numerous small holes, through which the gas escapes into the solution in fine bubbles, thus insuring intimate contact with the fluid and the complete removal of all that is absorbable. If crystallized chlorate is used, there is apt to be a certain amount of carbonic acid given off, owing to an admixture of carbonate of potash with the chlorate. This will also be taken up by the caustic solution in the wash-bottle. If fused chlorate is used, the carbonic acid will have been already expelled.

By this process rather more than one cubic inch of oxygen is obtained for each grain of crystallized chlorate of potash employed. After a little experience in its use, the practitioner will find no difficulty in supplying at the bedside all the gas which his patient may require.

405 Lexington Avenue, Dec. 13, 1868.

CASE OF

INOCULATION OF SYPHILIS FROM A BITE ON THE CHEEK.

By F. R. STURGIS, M.D.,

NEW YORK.

The following case, which entered Dr. Bumstead's service, in the Charity Hospital, B. I., and through whose kindness I report it, is of great interest, showing, as it does, an unusual manner for the entrance of the poison into the system.

John Fagan, an Irishman, aged 38 years, entered the Hospital, Nov. 9th, 1868, with the following history: In July, 1865, he had two ulcers upon the penis, which were followed by *no eruption*. He had, also, at that time, a swelling in one groin, but this was unattended with any suppuration.

In April, 1868, he had some difficulty with a man, and was bitten by him on the left cheek. This man he knew had an ulcer upon his penis, and an eruption over the body. The wound caused by the bite healed up in two weeks, but two weeks after its cicatrization a "scab" appeared upon its site, which was painless and indolent. At that time, a submaxillary ganglion of the left side became indurated.

One month after the appearance of this scab, a papular eruption came out over the arms and legs, and upon the scalp. At the same time, or a little later, he reports having had a sore throat.

On examination, a cicatrix is apparent over the malar bone of the left side of the face, unaccompanied with any induration. The submaxillary ganglion is still indurated and enlarged. On the penis, no cicatrix could be seen. Neither were there any indurated glands in the groins.

Scattered upon the legs and buttocks were the remains of a recent pustular eruption, some of which had been covered with crusts.

In his remarks upon the case the Professor said that all such stories should be taken *cum grano salis*, but that here the patient, an intelligent fellow, had told a straightforward story, and, moreover, had furnished the dates of the incubation of the primary ulcer, and the time elapsing between the primary and secondary symptoms, in accordance with our knowledge of the disease; and when we reflect that he was very likely ignorant of the semeiology of syphilis, these facts add strongly to the truth of his story. Besides, the physical signs accorded with his statements.

That his previous ulcers, contracted in 1865, had anything to do with his present disease is impossible. These ulcers were not followed by any eruption upon his body, which would certainly have occurred within the thirty-three months that had elapsed, had they been true chancres. Again, had they been such, the present eruption would be different in its character, corresponding to an older stage of the disease, and not, as it is, indicative of the early secondary stage. It is, therefore, fair to consider them as chancroids.

A case similar to the present one was reported by Rollet,* and as it is an interesting one, I shall quote it in full:

"Jules C., a weaver, entered the Antiquaille Hospital, Lyons, June 26th, 1858. He had never had any venereal disease until April 11th preceding, when he was bitten upon the upper lip by Louis B., and the wounds produced by the aggressor's teeth remained open for two months.

"At his entrance into the hospital, two masses of induration were found in the upper lip, each of which nearly equalled in size a twenty-five cent piece, and was slightly excoriated upon the surface. The submaxillary glands on each side were enlarged and indolent.

"He had had for several days scabs upon the head, alopecia, erythema upon the body, and mucous patches upon the scrotum; nothing upon the penis.

"His wife presented no trace of syphilis, and was nursing at the time a healthy infant.

"Louis B——, who bit him, and who was condemned for the act to six months' imprisonment, had been treated for general syphilitic symptoms at the hospital, which he entered April 10th, 1857, when, as shown by the

* Arch. Gén. de Med., June, 1859, quoted in Bumstead on Venereal, p. 451

records, he had an indurated chancre of the corona glandis, which healed up at the end of three weeks. He had afterwards mucous patches upon the scrotum, engorgement of the posterior cervical glands and alopecia, for which he remained under treatment until May 8th, when he left the hospital.

"At the time he seized Jules C—— between the teeth, he had syphilitic lesions in the mouth, and told the latter, as he bit him, that he would give him the pox."

The following case is reported in the *Lancet* for April 25th, 1868, by Mr. Bryant, Assistant-Surgeon at Guy's Hospital:

"William H——, æt. 22, came to me at Guy's Hospital, Nov. 17th, 1866, with a large chancre on his left cheek, with an indurated base, of nine weeks' duration.

"It appeared after a scratch he had received from a fellow-laborer who had syphilis. The cervical glands on the left side were much indurated.

"On December 15th, maculæ appeared over his face and body, and sore throat manifested itself.

"With quinine and iodide of potash all the symptoms subsided. On February 4th, the chancre had healed; and on the 18th of March every other symptom had disappeared."

Now, it is not capable of demonstration that the man who bit our patient had secondary lesions in the mouth, but the fact of his having an eruption upon the body renders it highly probable that he was affected with mucous patches in the buccal cavity, and that from them the patient was infected.

One other point is worthy of note; although the cicatrix was unattended with any induration, and that might well be, considering the time which had elapsed before he came under observation, the indurated submaxillary gland was still appreciable to the touch, and this gains additional importance when it is borne in mind that the inguinal ganglia were unaffected, since it shows that the virus entered the system in its neighborhood.

Present Mode of Identification of Corpses at the Bellevue Hospital Morgue.—The Warden of Bellevue Hospital has adopted the plan of taking photographs of corpses brought into the Morgue, which allows of a more speedy interment. The number of the grave, with other necessary particulars, is entered in a register, and the photograph preserved for the convenience of inquiring friends and relatives.

A Young Mother.—Our correspondent, Dr. King, of Rochford, Essex, has forwarded us a communication in which he states that he had recently attended the confinement of a girl under eleven years of age. The mother and infant were both well. Dr. King verified the fact by an inspection of the girl's register of birth. This is probably the youngest example on record, and we earnestly hope that it may continue to be so, for it manifests a depraved precocity which is truly lamentable in a Christian country.—*Lancet.*

Death of Professor Griesinger.—The Faculty of Medicine of Berlin has lost one of its most distinguished members, Dr. Griesinger, whose works on forensic medicine, and several other subjects, had placed him in the first rank among the physicians of the day. The deceased is much regretted.

Poisoning by Mushrooms.—Dr Poulet, of Ploacher-les Mines (Haute-Saône), has sent in a paper to the French Academy of Sciences to show that alcohol, taken in large doses, is a sure specific in cases of poisoning by mushrooms, especially by those of the *Amanite* genus.

Original Lectures.

ON THE DISTAL OPERATION FOR THE CURE OF ANEURISM OF THE INNOMINATA;

WITH THE REPORT OF A CASE TREATED BY THE SUCCESSFUL LIGATURE OF THE CAROTID AND SUBCLAVIAN ARTERIES.*

By HENRY B. SANDS, M.D.,

PROFESSOR OF ANATOMY IN THE COLLEGE OF PHYSICIANS AND SURGEONS, AND ATTENDING SURGEON TO THE NEW YORK AND BELLEVUE HOSPITALS.

The woman who is exhibited this evening to the members of the Association, first came under my observation in June last, in the wards of Bellevue Hospital. She gave the following history. She was a widow, 43 years of age, and had enjoyed good health till the winter of 1866–7, when she began to suffer from a sharp pain in the right side of the head and neck. It came on quite suddenly, and was at first thought to be rheumatic. The pain recurred at intervals, and extended to the right arm and shoulder, and early in January, 1867, the patient noticed a slight pulsating swelling at the root of the neck, just above the sternum. Cough of a paroxysmal character, and dyspnœa, soon followed, and were aggravated by every active exertion. Dysphagia was also an occasional symptom. After making several unsuccessful attempts to do housework, she entered Bellevue Hospital, June 22, 1868, under the care of my colleague, Dr. Thomas, who recognized the disease as innominate aneurism, and transferred the patient to my service for surgical treatment. At this time she was carefully examined; and the account here given is abridged from the record made by the House Surgeon, Dr. Tracy. A soft, pulsating tumor existed at the root of the neck and behind the right sterno-clavicular joint, the bones composing which had evidently undergone partial absorption. The external swelling rose about two inches above the clavicle, and extended from a point a little to the left of the median line, to the clavicular portion of the right sterno-mastoid muscle, the sternal portion of the latter being stretched over its anterior surface. It could be most distinctly felt where it lay in contact with the front and right side of the trachea; and in these situations, as well as opposite to the sterno-clavicular articulation, the pulsation could be both seen and felt. On auscultation, a double murmur was heard not only over the tumor, but also over the præcordial region; and it was difficult to decide whether this depended on the aneurismal disease, or on coincident disease of the valves of the heart. The diastolic murmur, however, was heard with greatest intensity at the junction of the fourth costal cartilage with the left side of the sternum; and the observations made with the sphygmograph by my friend Dr. Draper, are thought by him to indicate the presence of aortic regurgitation. In consultation, all agreed that the disease was aneurism of the innominata, but there was some diversity of opinion in regard to the extent of the disease. Dr. Van Buren thought it confined to the innominata and the root of the right carotid; and the same view of the case was held, I believe, by Dr. Parker. Dr. Austin Flint could find no evidence of aortic aneurism; while Dr. Draper, who kindly examined the patient at my request, was inclined to suspect the existence of the latter complication, his opinion being founded mainly on the discovery of a circumscribed spot in the right supra-scapular space, which was dull on percussion, and which transmitted very distinctly the aneurismal murmur.

* Being remarks made before the New York Medical Journal Association, January 8, 1868.

An examination of the carotid, subclavian, and radial arteries of the two sides of the body detected no marked difference in the force of their pulsation. The superficial veins in the neighborhood of the tumor, especially those on its left side, were moderately enlarged.

After reflecting upon the best course to pursue, I decided to tie the common carotid artery above the tumor, and at the same time, also, the subclavian artery, in the third part of its course. I performed this operation, with the consent and assistance of my colleagues, on the 16th of July last. Ether was administered, and the carotid artery secured at the point of election, just above the omo-hyoid muscle. The subclavian was reached by a single straight incision, made a little above the clavicle. The vessel was easily found and secured. I passed the aneurism needle from above downward, to avoid including one of the cords of the brachial plexus, which overlay the artery. Both the carotid and subclavian arteries appeared healthy at the points where the ligatures were applied. When the latter were tightened, no sensible change was observed, either in the size or pulsation of the tumor. The wounds were closed by silver sutures, and covered by small compresses of lint retained in place by strips of adhesive plaster.

After the operation, the progress of the case was, in many respects, entirely satisfactory. The pupils, which had been contracted previously, now regained their normal size. The radial pulse soon returned on the right side, and I could feel it distinctly, though very faintly, on the day after the operation. The superficial wounds both healed by adhesion, and I was obliged on the third day to open that over the subclavian, in order to allow the escape of a small quantity of accumulated pus. Very decided relief from dyspnœa was at once observed, and this improvement still continues. The ligature on the subclavian came away on the 19th, and that on the carotid on the 23d, day. On the 42d day, bleeding, to the extent of about ten ounces, took place from the carotid. It seemed to have been brought on by a fit of excitement, the patient having been allowed to get intoxicated. The bleeding recurred once only, on the 48th day, and was trifling in amount. Digital compression was kept up steadily from August 27th, the date of the first hæmorrhage, until September 10th, at which time it was discontinued. The patient then progressed favorably, and the wounds were healed about the middle of September.

The tumor diminished in size after the operation, and visible pulsation ceased. Its contents also became somewhat firmer, although there has never been any very great change in this respect. In consequence of the delay in the process of consolidation, attempts have been made to hasten it, by the internal administration of veratrum viride, acetate of lead, and digitalis, and by the external application of ice to the tumor. These remedies have all been tried, at various times, since the operation, but have produced no material change in the size or pulsation of the tumor. In short, the disease evidently remains, although the signs of improvement are unmistakable.

Remarks.—Aneurism of the innominata is a disease which is almost invariably, and often rapidly, fatal. It is not surprising, therefore, that surgeons should be willing to attempt its cure by almost any operation which offers the slightest prospect of success. In reference to treatment, the point most worthy of notice is the impracticability of applying a ligature on the cardiac side of the aneurismal sac. The shortness of the trunk, and its proximity to the aorta, to say nothing of its other complicated relations, may be said to preclude the possibility of safely surrounding the innominata by a ligature, when that vessel is the seat of aneurismal dilatation. The attempt has been made, however, by Key, of London, Porter, of Dublin, and Hoffman, of New York. In all these cases the effort to pass the ligature was unsuccessful, and the operation was abandoned. The Hunterian operation, then, in such cases being impracticable, the alternative of placing a ligature on the distal side of the aneurismal sac deserves a careful consideration. And as the record of operations performed on this principle for the cure of innominate aneurism is so nearly identified with the history of the distal operation itself, it may be instructive to refer briefly to the origin of the latter, and to trace its progress in the annals of surgery.

The idea of treating an aneurism by the application of a ligature beyond the sac, appears to have been conceived by both Brasdor and Dessault, although the merit of the suggestion is generally awarded to the former. Brasdor, however, never had occasion to perform the operation which bears his name, and the distal ligature was applied for the first time by Deschamps, who, in 1798, tied the femoral artery in the middle of the thigh, for an aneurism situated in its upper third. The operation was long and difficult, and the operator accidentally ligated, not only the artery, but also the femoral vein, and a portion of the adductor magnus muscle. In consequence, probably, of this accident, the limb became greatly swollen, so that four days subsequently, Deschamps was induced to resort to the ancient method of treatment by laying open the sac. This procedure was attended by very copious hæmorrhage, and the patient died at the end of eight hours.

This case, though unfortunate in its results, proved nothing against the operation, the failure of which might have depended solely on the faulty manner of performing it. Accordingly, some years later, Sir Astley Cooper was induced to test the principle of the distal operation in a case of aneurism of the external iliac, so situated as to render inadmissible the application of a ligature on the cardiac side of the sac. In this instance the common femoral was secured below the origin of the epigastric, and above the origin of the profunda. The tumor continued to pulsate as before, but its size gradually diminished, so that, for a time, some hopes were entertained of a favorable result. The ligature came away without accident, and the wound having healed, the patient insisted upon leaving the hospital, and went to his home in the country, where, after a short time, the aneurism burst into the abdominal cavity, and the patient died. No post-mortem examination could be obtained.

From this period up to the year 1825, the distal operation attracted hardly any attention, and was regarded with little favor by surgical writers, some of whom went so far as to condemn it, and even to hold it up to ridicule. At the date mentioned, however, Mr. Wardrop tied the right common carotid for a somewhat formidable aneurism affecting the lower portion of the same vessel, and the operation was rewarded with signal success. The progress of the cure was complicated by the occurrence of suppuration of the aneurismal sac, and the discharge of its contents; but this was unattended by hæmorrhage, and the patient was permanently cured.

It may be observed, that in reality this was the first operation which had been performed strictly in accordance with the principle advocated by Brasdor, who proposed to apply the ligature in such a manner, that no collateral branch should intervene between the ligature and the sac. In Sir Astley Cooper's case, the epigastric and circumflex were known to be situated above the ligature, and in the case treated by Deschamps, there is no doubt that one or more branches intervened be-

tween the ligature and the sac. We shall presently endeavor to ascertain to what extent the effect of the distal operation is likely to be modified by the existence of such branches. Suffice it to say, that the success which attended Wardrop's case induced others to imitate his example, and the operation has been performed for carotid aneurism by Lambert, Bush, Montgomery, and Colson. Thus of five cases, including Wardrop's, four were successful, while one terminated fatally, in consequence of hæmorrhage from the distal side of the ligature.

Although these cases are too few to enable us to arrive at a definite conclusion respecting the merits of Brasdor's operation, they certainly show that his method *may* be followed with success. It may be useful to ascertain, if possible, what is the process of cure in the cases successfully treated by this method. When a ligature is applied on the distal side of an aneurism, and when no branch is given off between the ligature and the sac, the blood is prevented from circulating through the latter, and, as has been observed, its condition is very similar to that of an artery which has been tied on the face of a stump. In the latter case, the blood generally coagulates very speedily in the ligated artery, and causes its obliteration as high as the origin of the first collateral branch. After the operation for aneurism, the same thing may take place, and the blood circulating in the arteries being thus prevented from gaining access to the sac, that which it already contains is apt to form what is called a passive clot, which will probably act as a foreign body, and set up suppurative inflammation within. That an occlusion of the artery on the cardiac side of the aneurism is possible, is proved by Mr. Wardrop's case, in which all pulsation in the tumor ceased on the fourteenth day. On the twentieth day after the operation it broke and discharged a large number of old coagula, but there was no escape of fresh arterial blood. The artery must have been impervious, therefore, at the time of rupture of the sac.

But the course of events may be different. If the aneurism be fusiform, rather than sacculated, or if it be situated close to the origin of the affected trunk, the blood, although it will not be able to pass *through* the sac after the ligature has been applied, will still be propelled into it with greater or less force, and will continue, for a time, to distend it as before. With every systole of the heart, blood will be forced into the sac, which, afterward contracting, will send back the blood into the artery from which it has proceeded. This to and fro movement is most active near the centre of the sac; at its periphery, where the blood is comparatively stagnant, coagulation goes on, and an opportunity is offered for the deposition of fibrin in layers, which, as they increase in number, gradually diminish the capacity of the sac, and finally bring about its obliteration. This process resembles closely that which is observed after the performance of the Hunterian operation, and when it is perfect, leaves nothing to be desired.

But the method of Brasdor is one of very limited application, and is almost confined to aneurism involving the common carotid artery. In aneurism of the innominata an operation on this principle may be said to be inadmissible, since it necessitates the application of a ligature to the first part of the subclavian trunk, a procedure which has, so far, been invariably fatal. It has, however, been once performed, namely, by Rossi, who, in 1844, treated an aneurism of the innominata by the simultaneous ligature of the carotid and the first part of the subclavian. In this case death occurred on the sixth day, and was owing to the insufficient supply of blood to the brain. At the post-mortem examination, it was ascertained that the left carotid was obliterated, so that, after the operation, the brain was left dependent for its vascular supply solely upon the blood transmitted through the left vertebral. There is every reason to believe, however, that if death had not resulted from this cause, it would have taken place from hæmorrhage at the time of the separation of the ligature from the subclavian. Moreover, the situation of the aneurismal sac is generally such as to preclude the possibility of applying the ligature to the subclavian on the tracheal side of the scaleni.

Mr. Wardrop, whose successful application of the Brasdorian method to the cure of carotid aneurism has just been mentioned, proposed and carried into execution, in a case of aneurism of the innominata, an important modification of the method of Brasdor. Reasoning upon the fact, that in the Hunterian operation it is only necessary to diminish the quantity of blood circulating through the aneurismal sac, in order to permit the deposition of laminated fibrin, he thought the distal operation might prove successful, if it were so conducted as to leave one or more collateral branches between the ligature and the aneurismal sac. He believed that the retardation of the current thus produced might be sufficient to allow of the deposition of laminated fibrin, and that the sac might thus be placed in nearly the same condition as that of a popliteal aneurism after ligature of the superficial femoral in Scarpa's space.

The idea was certainly ingenious, and deserved to be brought to the test of experience. It is a well-known fact, that it is not necessary, nor even desirable, completely to arrest the flow of blood through an aneurism, in order to effect a cure; and the case quoted by Mr. Erichsen is interesting, as proving that a considerable amount of blood may continue to pass through an aneurism without interfering with the deposition of fibrin. Sir Charles Bell once tied the femoral artery for popliteal aneurism. The patient dying from erysipelas a week after the operation, it was discovered at the post-mortem examination, that the femoral artery was double, and that only one of its divisions had been secured by the ligature. Nevertheless, the tumor, which had continued to be supplied by the other, was completely consolidated.

The case which Mr. Wardrop selected for testing his method, that of Mrs. Denmark, is one probably well known to most of the surgeons present. A ligature was applied to the subclavian artery, beyond the scaleni, and the operation was followed by a marked improvement, which continued for more than a year. Another pulsating tumor then appeared just above the sternum; anasarca supervened, and the patient died a little more than two years after the operation. At the autopsy it was ascertained that the portion of the aneurism nearest to the subclavian had undergone consolidation, while its inner portion was pervious, and communicated with the carotid.

The operation practised by Mr. Wardrop has been performed in only one other instance, and I have put both cases together in the following table (*Tab. I.*), from which I have excluded two cases which appear in the table given by Mr. Erichsen, namely, those of Laugier and Dupuytren. In both these cases the vessel tied was not the subclavian, but the axillary, and the case treated by Dupuytren was an aneurism of the subclavian, and not of the innominate artery.

In both the cases here tabulated the patients recovered from the operation, and were evidently benefited by its performance. There can be no doubt that in Mr. Wardrop's case, the disease was, for a time, arrested, and the life of the patient prolonged. One circumstance deserves notice, namely, that in both cases

TABLE I.

CASES TREATED BY LIGATURE OF THE SUBCLAVIAN.

No.	Name of Operator and where reported.	Date.	Sex and Age.	Result.	Cause of Death and Post-mortem Appearances.	Remarks.
1	Wardrop: Treatise on Aneurism, p. 66.	1827	F 45	Died twenty-six months after operation.	Exhaustion; and asphyxia, due to the pressure of a recent dilatation of the innominate, which appeared seventeen months after operation. Post-mortem showed consolidation of that part of the aneurism nearest the subclavian, while the rest was pervious, and communicated with the carotid. The latter was normal.	Tumor diminished after operation, and patient remained in good health till the aneurism again began to increase. Pulsation in the right carotid was not perceptible until the ninth day after the operation.
2	Broca: Mémoires de la Société de Chirurgie, Tome 6, f. 4, p. 538.	1862	M 48	Died six months after operation.	Gangrene of left lung. Aneurism of innominate, size of the fist, nearly filled with laminated fibrin, but having central canal four-fifths of an inch in diameter. Right carotid permeable, but contracted to half its normal calibre.	No pulsation could be felt in right carotid, either before the operation or subsequently, and the artery was thought to be obliterated.

the circulation through the right carotid was absent at the time of the operation, and afterward. In Mr. Wardrop's case, pulsation appeared in the right carotid on the ninth day after operation, and at the autopsy, made two years subsequently, this vessel was found to be pervious. In Broca's case, also, though the artery gave no pulsation during life, it was found pervious at the post-mortem examination, yet contracted to half its normal size. The absence of pulsation in the carotid, at the time of operation, was doubtless owing to the compression exerted by the distended aneurismal sac, and this compression must have contributed materially to the success which followed the operation.

Very soon after Mr. Wardrop had tied the subclavian, Mr. Evans, of Belper, operated on the same principle, but in a different manner, namely, by tying the carotid instead of the subclavian. This operation, like Mr. Wardrop's, was attended by remarkable success, and has been many times repeated. I have arranged all the cases which I have been able to collect in the 2d table, as follows:

TABLE II.

CASES TREATED BY LIGATURE OF THE CAROTID.

No.	Name of Operator and where reported	Date.	Sex and Age.	Result.	Cause of Death and Post-mortem Appearances.	Remarks.
1	Evans: Wardrop on Aneurism, p. 93.	1828	M 30	Recovered.		After operation, the pulsation in tumor at first increased, but began to diminish rapidly on twenty-fifth day, and on thirty-third day was nearly absent; subsequently, the tumor became hard and firm. Inflammation of sac occurred seven days after operation, and caused obliteration of arteries of right arm and forearm. In 1829 the sac suppurated, and in 1830 ruptured spontaneously, discharging twenty-four ounces of pus. After this, the cure seemed complete, and patient was known to be alive nine years later.
2	Valentine Mott: Amer. Med. Journ. Vol. 5.	1829	M 51	Died seven months after operation.	Suffocation. Aneurism, size of double fist, affecting innominate, subclavian, and root of carotid. Parietes of aneurism firmly consolidated; but whether obliterated is not stated. Right subclavian, beyond the tumor, healthy and pervious.	Before operation, no pulsation could be detected in right radial; the day after the operation the tumor diminished in size, and the radial pulse could be distinctly felt. For some time after recovery patient was much improved.

TABLE II.—*Continued.*

No.	Name of Operator and where reported.	Date.	Sex and Age.	Result.	Cause of Death and Post-mortem Appearances.	Remarks.
3	Aston Key: London Med. Gazette. July, 1830.	1830	F 61	Died four hours after operation.	Insufficient supply of blood to the brain; after death, left carotid found obliterated, and both vertebral arteries very narrow; aneurism involved right wall of innominate, and adjoining part of the arch, which was much dilated; right carotid and subclavian normal; brain healthy.	On tying the artery, tumor became smaller and ceased to pulsate; coma set in one and a half hours after operation.
4	Name of operator not given. Case reported by Neumeister, Dublin Med. Journal, 1852.	1830	M 51	Died on fifth day.	Hemiplegia of left side; aneurism the size of a man's fist, confined to the innominate.	Immediately after the operation, patient complained of intense headache; other head-symptoms with paraiysis appeared on the third day.
5	Morrison: Am Journ. Med. Sci., Vol. 19, p. 329.	1832	M 42	Died twenty months after operation.	Probably pressure; at post-mortem, aneurism was found to involve arch of aorta, innominate, subclavian, and carotid. The sac formed by the latter was filled with a dense fibrinous deposit, which was absent in the innominate and subclavian. The innominate was double its usual size.	The day after the operation the pulsation of the tumor increased; subsequently the tumor diminished in size, and its pulsations became weaker. Patient improved after operation, and was able to do hard work; complained of cough and dyspnœa about a month before his death.
6	Dohlhoff: Rust's Magazine, 1838.	1837	F 51	Died on the fifth day.	Hemiplegia and asphyxia; post-mortem showed aneurism of innominate and root of carotid filled with firm coagula; brain hyperæmic, but alike on the two sides.	Cerebral symptoms followed the operation almost immediately, and on the third day patient became unconscious, and hemiplegic on left side. Symptoms of asphyxia also preceded death.
7	Fergusson: Monthly Journal, 1841.	1841	M 56	Died on eighth day.	Pneumonia; post-mortem showed clot of recent date in aneurismal sac, but none in carotid; right subclavian pervious and healthy; aorta slightly dilated.	Tumor diminished in size after operation.
8	Porta: Della alterat. Pathol., etc., 1845.	1842	F 60	Died forty hours after operation.	Diffuse cellulitis; aneurism involved innominate and root of right carotid and subclavian; arch of aorta dilated.	At the operation, the carotid was found to be very large, though its pulsations were feeble. Catgut was employed as the ligature.
9	Hutton: Dublin Quarterly Journal, Vols. 13 and 25.	1842	M 47	Died on seventy-sixth day.	Suppuration of sac, and ulceration into trachea; right carotid and subclavian obliterated to the extent of an inch; no attempt at union of arterial coats where ligature had been applied.	Size of tumor and force of pulsation diminished after ligature; hæmorrhage from wound on twenty-second day, and subsequently. Previous to death tumor again increased in size, and sputa were tinged with blood; pulsation of right radial more feeble than left.
10	Rompani: Schmidt's Jahrbüch, Bd. 77, S. 236.	1844	M 70	Died on twenty-first day.	Hæmorrhage from wound; post-mortem examination showed aneurism of innominate, and right carotid nearly filled with fibrin.	Tumor diminished after operation; hæmorrhage began on the sixteenth day, and recurred on the nineteenth.
11	Viladerbo: Arch. Général. 4. ser. V. 15, p. 547.	1847	M 70	Died on twenty-first day.	Not mentioned; post-mortem examination showed an aneurism involving the innominate and carotid; sac filled with laminated fibrin, except in centre.	Valsalva's method had been tried without success.
12	Lane: Cooper's Surg. Dictionary, 2d Edit., Vol. 1. p. 215.	1852	M 36	Died two months after the operation.	Hæmorrhage from wound, and broncho-pneumonia; aneurismal sac filled with firm coagula, except at its commencement from aorta.	After operation the tumor became harder and less prominent, and its pulsation nearly disappeared.

TABLE II.—*Continued.*

No.	Name of Operator and where reported.	Date.	Sex and Age.	Result.	Cause of Death and Post-mortem Appearances.	Remarks.
13	Wright: Lancet 1856, Vol. 1, p 711.	1855	M 70	Died on eighty-eighth day.	Abscess in the right hemisphere; at post-mortem, the sac was found nearly filled with fibrin, but its centre communicated with the subclavian.	Cerebral lesion caused coma, and hemiplegia of the left side.
14	Broadbent: Lancet, 1861.	1860	M 50	Died fifteen weeks after operation.	Hæmorrhage from wound, and dyspnœa; sac filled with old coagula, some firm, others soft; right subclavian pervious; aortic arch much dilated; right carotid obliterated for an inch above point of ligature.	Pulsation in right radial hardly perceptible; no improvement followed the operation; hæmorrhage occurred on the twelfth day, and recurred at intervals up to the day of death.
15	Hutchinson: Med Record, Vol. 2, p. 265.	1867	M 48	Died forty-one days after operation.	Asphyxia; aneurism involved arch of aorta, innominate, and origins of right subclavian and carotid; sac nearly filled with concentric layers of fibrin; orifices of right subclavian, right and left carotids firmly closed by clots, that in the subclavian reaching to the distal side of the vertebral artery; beyond this point, the subclavian was pervious, and no trace of the ligature could be found.	No pulsation in right radial either before or after the operation, which was undertaken with the intention of tying both carotid and subclavian. During the operation, the pulsation of the latter could not be felt; the operator tied what he supposed to be the artery, but what was probably the sheath of the vessel. After the operation, patient was more comfortable, and his breathing was easier, till a few days before his death, when dyspnœa recurred, and finally proved fatal.
16	Hewson: Penn. Hosp. Report, 1868, p. 219.	1867	M 51	Died on eleventh day.	Asphyxia; aneurism involved the whole of innominate and upper wall of arch of aorta; aortic orifice of sac five and a quarter inches in circumference; sac filled with coagula, soft in centre.	Seven hours after operation, tumor increased in size, and patient suffered greatly from dyspnœa; it then diminished in size and became firmer, but on the tenth day it again became distended, and remained so up to the time of death. During the operation, traction was made on the internal jugular vein by a ligature which was tightened before closing the wound.
17	Nussbaum: Archiv. für Clin Chirurg., B. 6, 9. Heft 2, 286.	Not given.	Not given.	Died.	Increasing growth of aneurism; no account of autopsy.	
18	do.	do.	do.	do.	No account of autopsy.	
19	Pirogoff: Krieg-Chirurgie, S. 457.		M Middle age.	Recovered from operation.		Wound healed and patient was discharged from the hospital two and a half months after operation; at that time the tumor was smaller, and its pulsation less marked; the improvement was evident. Subsequent history not known.

Thus we find that of the 19 cases in the table,

In 1 the disease was permanently cured.

In 1 the patient recovered from the operation, but the history extends only to two and a half months from the date of its performance.

In 5 the disease was only arrested for the time, and finally proved fatal.

In 12 death occurred as the evident consequence of the operation.

These figures are certainly discouraging; and they become more so when the analysis is carried a little further. For example, in the one successful case reported by Mr. Evans, inflammation of the sac occurred on the 7th day after the operation, and caused an obliteration of the arteries of the right upper extremity; and I think Mr. Erichsen is correct in attributing the cure partly to this circumstance. Moreover, although the case is always quoted by surgical writers as one of innominate aneurism, a careful perusal of Mr. Evans' paper has satisfied me that the disease was limited, almost, if not

entirely, to the carotid; in fact, it is reported by Mr. Evans himself as a case of aneurism of the root of the carotid. Considering, therefore, the doubtful situation of the disease, and the events which followed the operation, this example cannot fairly be adduced as one illustrating the value of Mr. Wardrop's method.

In two of the cases recorded, a manifest improvement followed the operation, and the fatal event was doubtless delayed. Mott's patient lived 7 months, and Morrison's patient 20 months, after the operation. Both ultimately died, however, from the increasing growth of the aneurism. The results of the post-mortem examination in Morrison's case are interesting, and help us to understand why the operation failed of success. The aneurism involved the arch of the aorta, the innominata, and the right subclavian and carotid. The sac formed by the last-named vessel was filled with a dense fibrinous deposit, which was *not* present in the other divisions of the aneurism. It is impossible to avoid the conclusion, that the free and rapid circulation of the blood through the innominata and subclavian prevented the consolidation from taking place in them, which was observed in that portion of the aneurism connected with the carotid.

When the aneurism reappeared in Mr. Wardrop's case, that surgeon proposed to tie the carotid, but the patient declined.

The plan of tying both the carotid and the subclavian, with a greater or less interval of time, has, however, been adopted in three cases, as follows:

TABLE III.

CASES TREATED BY SUCCESSIVE LIGATURE OF CAROTID AND SUBCLAVIAN.

No.	Name of Operator and where reported.	Sex and Age.	Carotid tied.	Subclavian tied.	Result.	Cause of Death and Post-mortem Appearances.	Remarks.
1	Fearn: Lancet, 1836 and 1838.	F 28	Aug. 30, 1836	Aug. 2, 1838	Died four months after last operation.	Pleurisy; post-mortem showed aneurism of innominate, nearly filled with laminated fibrin, but having a central canal for the passage of the blood; arch of aorta also diseased, and branches of right subclavian pervious.	Considerable improvement followed the first operation, but two years afterward, patient returning to the hospital on account of bronchitis and dyspnœa.
2	Wickham: Med Chir. Trans., Vol. 23, p. 445.	M 55	Sept. 25, 1839	Dec. 3, 1839	Died four and a half months after first operation.	Hæmorrhage from external rupture of sac; aneurism confined to upper half of innominate; arch of aorta dilated.	After each operation patient experienced decided relief, which lasted, however, for a short time only.
3	Bickerstith: British Med. Journal, 1864.	M 35	1864	Seven weeks after ligature of carotid.	Not known Case reported four days after second operation.		Marked improvement of the voice and of the breathing took place after first operation. The ligature of the subclavian was accomplished with unusual difficulty, in consequence of the proximity of the aneurismal sac.

In Mr. Fearn's case considerable improvement followed the first operation, and the post-mortem appearances show that after the second operation changes were going on in the interior of the sac, which might have resulted in a cure. In Mr. Wickham's case, neither operation had any effect in checking the disease, which was ascertained, after death, largely to involve the arch of the aorta.

The result of Mr. Bickerstith's case is not given, as the report ends four days after the second operation. There is little doubt, however, that if it had been successful, the fact would have been published.

Finally, innominate aneurism has been treated by the simultaneous ligature of the carotid and subclavian. I have collected four cases (*Tab. IV.*).

Rossi's case has already been referred to. It is the only one in which the ligature was applied to the first part of the subclavian; and the fatal result seemed due to the sudden cutting off of the supply of blood to the brain, the left carotid being found obliterated at the post-mortem examination. It is interesting to note, in this connection, that in Dr. Hutchinson's patient, the left vertebral alone was found pervious at the autopsy; yet the nutrition of the brain was unimpaired, the patient living 41 days after the operation, and dying from the pressure of the aneurismal tumor. In Hutchinson's case, however, the right carotid was the only vessel tied, and the right vertebral may have been previously occluded from disease; while in Rossi's case, the ligatures were applied so as to cut off, at the same moment, the supply through the right carotid and vertebral.

As I have before mentioned, the operation performed by Rossi cannot be sanctioned by any prudent surgeon. Though correct in principle, the difficulties of its execution are so great, and its fatal consequences so nearly inevitable, that no one, in my judgment, would be justified in repeating it.

In the three other cases, the ligature to the subclavian was applied externally to the scaleni. In one case, Mr. Maunder's, the operation was performed under circumstances of unusual difficulty, and the patient died on the sixth day.

In the two remaining cases, Mr. Heath's and my own, a decided improvement has followed the operation, the symptoms depending on pressure have nearly disappeared, and the tumor has diminished in size and force of pulsation.

But, it will naturally be asked, is the operation likely to result in a permanent cure, or will it even prevent the ultimate increase of the aneurism, in either case? So far as my own patient is concerned, candor compels me to answer in the negative; and although the evidences of improvement are now very plain, and the dis-

TABLE IV.

CASES TREATED BY SIMULTANEOUS LIGATURE OF CAROTID AND SUBCLAVIAN.

No.	Name of Operator and where reported.	Sex and Age.	Date of Operation.	Result.	Cause of Death and Post-mortem Appearances.	Remarks.
1	Rossi: Lancet, 1844, Vol. 1, p. 310.		1844	Died six days after operation.	Insufficient supply of blood to the brain; left carotid found occluded.	The ligature to the subclavian was applied to the inner side of the origin of the vertebral, and the left carotid being obliterated by disease, the brain was left dependent on the left vertebral alone for its vascular supply.
2	Heath: Medical Times and Gazette, Jan. 5, 1867.	F 30	Nov. 21, 1865	Recovered and was known to be alive a year after the operation.		No bad symptoms followed the operation; pulsation returned in right temporal the same day, and in radial on the fourth day. The pulsation of the tumor gradually diminished, though it was still present at the date of the last report, and the patient was liable to occasional attacks of dyspnœa.
3	Maunder: Med. Times and Gazette, Oct. 26, 1867.	M	Sept. 18, 1867.	Died on the sixth day.	Cause of death not mentioned. At the autopsy an aneurism was found involving the root of the innominate, and the ascending portion of the arch of the aorta.	The aneurism of the aorta escaped observation during life, although repeated attempts were made to detect it.
4	Sands: case herewith reported.	F 43	July 16, 1868.	Recovered from operation.		At the present date, six months after operation, the tumor is somewhat reduced in size, and its pulsation is diminished. The aneurism is evidently not cured, though its progress has been temporarily arrested.

ease has certainly received a temporary check from the operation, it is my belief that the aneurism will sooner or later proceed to its fatal termination. Nor do I think that a better result than this can reasonably be claimed for the other successful case of double ligature, applied by Mr. Heath. When examined a year after the operation, though the tumor was greatly reduced in size, it still pulsated behind the sternum, and the patient was subject to occasional attacks of dyspnœa, thus proving conclusively to my mind that the disease has been palliated, rather than cured, by the operation.

I have omitted from the table several cases which deserve a brief notice, as they were treated in accordance with the principle above stated by Mr. Wardrop.

Laugier, in 1834, treated an innominate aneurism by ligating the axillary artery just below the clavicle. The external tumor diminished in size, yet it caused death by suffocation on the 19th day.

In 1841, Malgaigne applied a ligature to the right carotid, in a patient forty-six years of age. The tumor decreased for a time, and then began to grow again, when the axillary was tied, seven months after the operation on the carotid. The patient died of erysipelas on the twentieth day; and, at the autopsy, the carotid was found obliterated, the subclavian pervious, and communicating with the aneurismal sac, which was filled with recent coagula.

At the meeting of the British Medical Association held during the present year, Mr. May reported that in August, 1867, he treated an innominate aneurism by passing an aneurism needle under the carotid, and a probe under the brachial artery, close to the axilla. The needle was removed in seventy-two hours, but the pulse reappearing in the right temporal, the carotid was tied. The probe was removed from the brachial at the end of ninety-six hours. Visible pulsation returned in the tumor on the twelfth day, and the disease seemed to have been only temporarily arrested.

Compression on the distal side of the aneurism has been tried either upon the carotid or upon both carotid and subclavian by Syme, Vernet, and Edwards. In no case was a cure obtained, though in one, that of Mr. Edwards, the subclavian artery was found to be obliterated at the post-mortem examination.

It appears, then, that excluding Rossi's case, the principle of Wardrop's operation has been carried out in thirty-four cases, only one of which is alleged to have been permanently cured. But this one, reported by Mr. Evans, is, as I have already stated, hardly to be accepted as a case of innominate aneurism, and I am constrained to doubt, therefore, whether a radical cure has ever been effected by any one of the operations in question.

It is not difficult, I think, to explain the failure of the various operations detailed. In all of them, the branches of the subclavian, namely, the vertebral, internal mammary, thyroid axis, and superior intercostal, are left open, and the current of blood passes into them through the aneurism, with sufficient force to prevent the deposition of laminated fibrin, and the consequent obliteration of the sac. Fibrin is deposited it is true in

some cases; but in no case does the cavity of the aneurism seem to have been obliterated, and so long as a channel remains in its interior for the passage of the circulating blood, so long is there a liability to a return of the aneurismal swelling. Another circumstance which contributes to prevent success, is the unhealthy state in which the arteries are usually found in the neighborhood of, and especially on the cardiac side of, the aneurism. In several cases it has been noticed, that although the original aneurism seemed to be progressing gradually toward a favorable termination, a new aneurismal expansion took place from the same artery on the cardiac aspect of the first formed sac.

Is it possible to carry out the principle of Brasdor's operation, which, as shown both by theory and facts, is so much superior to Mr. Wardrop's modification? It is possible that this might be done, by tying simultaneously, the carotid, the subclavian, and the several branches of the latter, close to their origin from the parent trunk. Yet I can hardly imagine a case in which such an operation could be safely undertaken. In my own case it would have been quite impossible to secure the vertebral without fatal interference with the aneurismal sac, and even the other branches of the subclavian could only have been secured by so far enlarging the sphere of the operation as greatly to increase its risk. Moreover, it is by no means certain, that if the Brasdorean method could safely be carried out, it would suffice for the cure of an aneurism of the innominata. A curious autopsy was made in 1843, by Deville and Bérard, on the body of a man who had died of aneurism of the subclavian. The post-mortem showed that the subclavian of the affected side was obliterated external to the scaleni; that all its branches, together with the right and left carotids, were impermeable, and yet that the aneurismal sac was not obliterated. The force with which the sac was distended by the incoming blood, and a want of coagulability on the part of the latter, were invoked to explain the facts observed.

On the other hand, a case is reported by Wishart of spontaneous cure, and one by Mr. Luke, in which a cure was effected by the Valsalvian method of treatment, which, I have omitted to state, was resorted to without avail in many of the cases that were subsequently treated by surgical operation.

Finally, ought the operation which I have performed to be repeated? I am not prepared to give a definite answer. The chances of success, however, are so slight, and the danger of the operation so great, that unless the tumor were very small, and the immediate symptoms very urgent, I should hesitate to recommend it.

Volunteer Soldiers' Asylums.—General B. F. Butler, President of the Board of Managers of the Volunteer Soldiers' Asylums, drew from the Treasury in the latter part of December, 1868, $167,000, being the balance of the fund for the support of those institutions left deposited in the Treasury.

Institute of Letters, Arts and Sciences.—At a recent meeting of the above-named association, the following gentlemen were declared elected: Joseph Leidy, M.D., President; John S. Newberry, Vice-President; Professor C. A. Joy, Secretary, and J. Carson Brevoort, Treasurer. Jeffries Wyman, M.D., and Spencer F. Baird were appointed members of the Council of the Institute. The following gentlemen were chosen for the Academy of the Mathematical, Physical and Mechanical Sciences: Professor Joseph Henry, President; Mr. Horatio Allen, Vice-President; A. L. Holley, Secretary; Edward Cooper, Treasurer; Professor W. H. C. Bartlett, and Mr. W. P. Trowbridge, for members of Council.

Report of the Ohio State Commissioners Regarding the Texan Rinderpest.—The commissioners appointed by the Governor of Ohio to investigate the causes, &c., of the cattle-plague in Texas have made their report, which, as may be seen, is rather negative in character. We present the subjoined as a summary:

Concerning the essential nature of the disease it may be stated that the blood seems always to be prominently involved, microscopic investigations having revealed the presence (in the blood) of a minute fungus, or more properly the spores of such plants. The spores have also been found in the blood (to a less extent) of healthy Texas cattle; but they have not been found in the blood of our native cattle. Whether these spores are the cause or the result of the disease, or are merely a concomitant, remains to be demonstrated.

The period of incubation of the disease, or the first appearance of its earliest symptoms, varies from fifteen to thirty or even forty days, dating from the time the native cattle have been first put upon the grounds or yards previously occupied by Southern cattle.

Of native cattle, milch cows are the most susceptible to the disease; steers and oxen are somewhat less so, and calves still less. Horses, mules, and also deer, have died of symptoms of the Texan cattle-disease in Arkansas, Missouri, and also in Illinois. Though the disease under consideration is everywhere believed to originate from Texas cattle, yet no one seemed to know positively whether the disease does really exist among Texas cattle while they are allowed to remain undisturbed upon their native pasture; nor is anything definitely known as to its causes, or the circumstances under which it has its origin and development.

No remedy for this disease upon which reliance can be placed has yet been found. Very nearly all the cases which have occurred among native cattle have proved fatal in a few days. Texas and Cherokee cattle are more likely to recover. A small number of sick animals recover in Ohio, under the use of calomel given internally, in sixty-grain doses, twice daily, until free purgation was produced. Quinine, with diluted sulphuric acid and water, was given, in Illinois, with success in a few cases. The internal use of carbolic acid has been confidently recommended, the recommendation being based upon the theory that the diseased condition of the blood is caused by the fungus plants or spores above referred to. Proper care during transportation would prevent the spread of the disease, and render it less dangerous and more amenable to treatment.

Statistics of Spain.—The distinguished statistician, Don Ramon de la Sagra, furnishes the following statistics of Spain, during the year 1866:—Total population, 15,800,000; rate of births, 1 to 26; proportion of sexes, 51·65 boys to 48·35 girls. In every 19 births, one was illegitimate; proportion of marriages, 1 to 112 inhabitants. The average number of children to each marriage, as near as can be estimated, is 4·6. Deaths were 1 to 34 of the whole population, 1 to 28 in the cities; 503 of the deaths out of 1,000 were under 6 years of age.—*Med. and Surg. Reporter.*

Sulphur Pastilles in Scarlet Fever.—Dr. Pairman (*Med. Press and Circ.*) advocates the burning of sulphur pastilles in rooms where scarlet fever abounds. It is good both as a preventive and a curative measure.

The Introduction of Wine in Fevers.—Dr. Brocklesby, appointed physician in the British army in 1758, was, it is said, the first to introduce wine in liberal quantities in the treatment of fevers. This he prescribed in quantities of "a spoonful or more every half hour, or three pints in twenty-four hours."

A Proposed Hospital.—The city authorities of Paterson, N. J., are discussing the cost of a hospital, which is proposed to be established in their midst.

The Skeletons of Whales.—The Museum of the College of Surgeons in London contains two fine large skeletons, suspended from the ceiling; one of them is a sperm whale upwards of thirty feet long.

The "Golden Yellow" Hair Dye.—This color, so much in fashion of late, is produced by a solution of arsenic with a mordant of the hydrosulphate of ammonia. And cadmium would probably give rise to a like result. In the case of dyeing the *lighter tints*, however, it becomes necessary to submit the hair to a process of bleaching, which is commonly effected by a solution of one or other of the alkalies, by chlorine, by the chloride of soda or lime, or by sulphurous acid, bisulphate of magnesia or lime, or peroxide of hydrogen.

In general the dyes requiring mordants do not stain the epidermis.—*Journal of Cutaneous Medicine.*

Vital Statistics of London, Berlin, Paris, and Vienna.—A reliable statistician gives the following comparisons between the four principal cities of the Continent—London, Paris, Berlin and Vienna:—The greatest number of legitimate children are born in London; the smallest in Paris. Vienna ranks foremost in illegitimate births; London has the least. Most marriages take place in Berlin; the fewest in Vienna. Still-born children are most numerous in Paris; least numerous in Vienna. Paris has the greatest density of population; London the least. Berlin consumes the least quantity of meat; London by far the greatest.

Consumption of Alcohol in the United States.—The value of the liquor drunk by the people in one year in the United States is nearly fifteen hundred millions of dollars, or three-fifths of the national debt. The amount is ascertained from the official and sworn returns of Revenue Commissioner Wells.

Longevity in Mexico.—It appears that aside from the many casualties which shorten human life in Mexico, other influences are favorable to a good old age. A woman recently died in the City of Mexico aged 118, and a widow is still living there aged 120, and able to go out. And seven Indian chiefs recently brought as prisoners to Vera Cruz were aged respectively 64, 68, 80, 92, 93 and 104.

The State of the Medical Profession, in 1363.—*Guy de Chauliac* published a work in 1363, probably the first of its kind, on the healing of wounds, and advocated the employment of *exorcism*, oil, wool, and cabbage-leaves. Then the surgeons were divided into five sects: The first applied cataplasms indiscriminately in every description of ulcer or wound; the second in similar cases applied wine only; the third used emollient ointments or plasters; the fourth, *chiefly military surgeons*, promiscuously employed oils, wool, potions and *charms;* the fifth consisted of ignorant practitioners and silly women, who had recourse on all occasions to the saints, praised each other's writing perpetually, and followed each other in one undeviating track like cranes.—*London Medical Mirror.*

The Introduction of Yellow Fever into Louisiana in 1867.—From the last annual report made by the Board of Health of New Orleans, La., to the Legislature of that State, it is found that the yellow fever did not come from abroad in the first six instances, but afterwards was imported by a vessel from Havana. The fever was carried to Indianola by second-hand blankets from Vera Cruz, and by two cases in Galveston, brought from Key West and elsewhere.

Destruction of Nasal Polypus by Persulphate of Iron.—Dr. Gardner (*Boston Med. and Surg. Jour.*) reports a case of *nasal polypus*, destroyed by the injection of persulphate of iron into its tissues.

Restoration of Sight to a Well-known Preacher.—Von Graefe, the Prussian oculist, promises restoration of sight to the Rev. Mr. Milburn, the celebrated blind preacher.

Trismus Neonatorum.—Hot baths cause trismus neonatorum; consequently the physicians of Germany warn midwives not to make free use of them.

Wesleyan University, Middletown, Conn.—There have been added to the faculty this year Rev. Moses Clarke White, M.D., lecturer on histology and the use of the microscope, Rev. H. N. Hudson, lecturer on Shakspeare, and M. Cressy, M.D., lecturer on comparative osteology. Dr. Cressy's cabinet of osteology has recently been deposited in Observatory Hall.

Investigations into the Death of Julius Cæsar.—At a late meeting of the Paris Academy of Medicine, a curious paper was read, on behalf of M. Dubois, of Amiens, entitled "Investigation into the Death of Julius Cæsar." M. Dubois having looked up the various passages referring to this famous historic incident to be found in Dion Cassius, Plutarch, Suetonius, Appian, &c., and comparing them with one another, has fixed the spots where the four first wounds were inflicted, and the names of the conspirators who inflicted them. The first blow, struck by one of the brothers Casca, produced a slight wound underneath the left clavicle; the second, struck by the other Casca, penetrated the walls of the thorax toward the right; Cassius inflicted the third wound in the face. Decimus Brutus gave the fourth stab in the region of the groin. Contrary to the general opinion, Marcus Brutus, though one of the conspirators, did not strike the dictator. After the first blows Cæsar fainted, and then all the conspirators hacked the body. He was carried by three slaves in a litter to his house. Anstistius, the physician, was called in and found thirty-five wounds, only one of which was in his opinion fatal, that of the second Casca.

Woman's Brains.—The *Lancet* says, in an article on women: We will not say anything about the smaller size of woman's brain, because we might be met with the objection that the size of this organ is related to that of the body, and by this standard the woman might fairly urge that her sex has an amount of brain relatively equal to that of man; although we think that men possess bigger and stronger heads for the same reason that they have stronger limbs—viz., that Nature has fitted them to do stronger work. But when we pass to the domestic and social relations of woman, to the emotional part of her nature, to her affections and instincts, and to the powerful influence which these exert on her, and through her on her husband and her children, no physiologist can doubt, we think, that there is a corresponding relation between the delicacy of the organization and character of woman's structures and that of her duties in life. If women are to marry and be given in marriage, and to bear children, we fear that these duties of life must form an insuperable obstacle to their becoming bread-winners and brain-workers in the same sense that men are; and, what is more, we conceive that it would be a very grievous thing for our children and ourselves if it were otherwise.

Faraday.—The name of Faraday has recently been given to one of the streets of Paris.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

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Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, February 1, 1869.

THE NEXT MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE coming meeting of the Medical Society of the State of New York naturally suggests to all concerned some reflections upon the best means to render it most effective. Every one who has become acquainted with the doings of this body, knows full well that in reference to the carrying on of the meetings, much improvement can be made. We took occasion last year to allude to some of the means that might be adopted to render its sessions more interesting and profitable, the foremost among which was care on the part of the different county societies in the selection of their delegates. We can hardly hope that a great deal of alteration has been made in this respect since last year, as some of those who have been appointed to serve a definite period have not as yet worn out their time, but the case may be different with those bodies who send a fresh supply. We have, at least, a right to expect, in the interest of the Society at large, that it will prove to be so in the latter instance; but if our expectations are not to be realized, the meeting is sure to be more or less of a failure.

The State Society is one of sufficient importance, as regards the number of its members, its influence and power, to demand of its supporters a most careful selection of delegates to attend its meetings. It would be naturally presumed that the societies of the metropolis would show an example to the others throughout the State; but far from doing so, the country members have of late had just reason to complain of a very poor selection on our part. Very few representative men from our city attend the annual sessions of the Society, and the consequence has been that their places have been taken by those who, for the credit of the bodies from which they come, might better stay at home.

The profession of New York have a reputation for learning and experience, which has not only reached every part of our State, but every corner of our country; and it is natural for such of the delegates who travel hundreds of miles to attend the meeting at Albany, to expect that, when a member from this city occupies the floor, something to the purpose be said; but that there is more or less of disappointment in this respect, every one who has attended the meetings of the past few years can readily affirm. At the last session more particularly, New York, far from shining as it should in the discussions, was totally eclipsed by the country districts; and the members from the latter felt that they had a right to complain that a delegate from the most respectable scientific body here, should so far insult their common sense as to occupy nearly three-quarters of an hour in lauding the virtues of a cure-all. It may be possible that the pertinacity of the member at the coming meeting may triumph over his charity, and cause him to give to the assembly another dose of the same article; but for the sake of the remedy, which may after all be a good one, it is to be hoped that a reasonable time only be occupied.

Delegates from the country districts, as well as those from our city, should remember that the sessions of the Society are limited, and that the shortest possible time should be consumed in presenting their points; that no one should presume to occupy the attention of the Association, unless he has something to say; and that if there is a determination so to do, despite the wishes of his hearers, the communication should be at once tabled.

If this principle were carried out the best interests of the Association would be fostered, and it would be enabled to take the high rank which it was entitled to of old. Time could be then obtained for attention to those subjects that come more within its legitimate province than that of any other similar body throughout the country, for instance such as refer to recommendations for legislative interference in the protection of the truest interests of medicine. In the forthcoming session there will be enough for it to accomplish if it does no more than use its influence for the passage of a law to advance the cause of medical education, as suggested in the address of Dr. John P. Gray, of Utica, its former presiding officer. We have not been informed as to the action of the committee appointed at the last meeting to wait upon the Legislature; but in case it has not been successful a renewed effort should be made to accomplish the desirable object.

Another matter which will doubtless interest the attention of the Society refers to the passage of some law defining the rights of physicians in the proprietorship of prescriptions. We have taken occasion in the previous number to present the views of a distinguished medical jurist on this point, and to commend them to the impartial consideration of all interested parties.

The indiscriminate sale of poisons, and the want of any sufficiently stringent law controlling it, is another topic which should not be left out in the cold; neither that which refers to the procurement of abortion, now so rife in every community. These and many kindred subjects fall within the legitimate sphere of action of the State Society, and it should lose no opportunity in

ventilating its definite opinions upon them in some form or another that shall compel our legislators to listen.

At the last session, quite a discussion arose in reference to the feasibility of publication of the *Transactions* by the Legislature, great objection being made against it on the score of its expense. The question of dollars and cents was seemingly the most important one for consideration, and an open insult was given to the body by an attempt on the part of interested politicians to dictate what should be left out of the forthcoming volume, in order that it might not be a too costly one. Subsequent to the meeting the Legislature passed a resolution to publish thirty-five hundred copies, instead of fifteen hundred as before, and the members were disposed to take this as an apology for the insult previously offered. But how does the matter stand at present? Up to the time of going to press, nearly at the end of a year after the meeting, and on the eve of the coming one, not a single one of these precious copies has come to hand. It strikes us, in view of all this, that there arises another important question for the body to act upon, and that is the practicability of being independent enough to publish its own Transactions, thus insuring their appearance within at least a reasonable time after the meeting. Since the time the promise to publish the extra number of our Transactions, we have received those from nearly every other State in the Union, the reason probably being that such associations help themselves, instead of trusting their real interests to the tender mercies of legislative bodies.

Owing to the usual circumstances attending a "strike" among the printers, we have not been able to get our reports of societies ready for the present number. They will appear with other deferred articles in our next.

Reviews and Notices of Books.

Transactions of The American Medical Association. Vol. xix. Philadelphia: Printed for the Association. 1868. 8vo., pp. 486.

The present volume of the Transactions has the merit of being less bulky than the preceding one of last year, and containing a goodly number of short and readable articles. The majority of the contributions are so much above the standard of those usually found in the volume as to make it of considerable value to him who is constantly searching after what is new. The report of the Treasurer shows that the Association is again solvent, which is a good starting-point for better things. The Annual Address, by Prof. Gross, was a model of its sort for wise suggestions, noble expressions, and sound advice. We are glad to see that the Committee on Prize Essays took a decided stand against awarding the prizes to any articles save those founded upon original research, and, accordingly, did not report upon any that were presented. Their suggestion to have one prize of two hundred dollars instead of two at one hundred dollars each, is a good one. The Committee on Medical Education, in their report, have been compelled to modify very much the one offered by them last year, and we trust, that as far as good results may be anticipated therefrom, they have done wisely. The report on Medical Literature is a very fair one; all the works published during the year are duly noticed, but the remarks upon the periodical literature are little more than a skilful attempt to pay each journal a compliment. The reports on Topography and Climatology are, as usual, more or less heavy and uninteresting. The contribution of Dr. J. C. Peters, of this city, on the Conveyance of Cholera, is a model of patient research and accurate reasoning. The maps which he furnishes are invaluable to any student of the disease. The really valuable contributions are made by Drs. C. A. Lee, Sayre, Buck, Quimby, Elsberg and Eve. We cannot close this brief notice without a special reference to the admirable manner in which the Committee on Necrology have discharged their duties. The obituary notices are perfect in every desirable respect, are well written, truthful, discriminative, and are pruned of those hackneyed phrases usually met with in such efforts.

Outlines of Physiology, Human and Comparative. By John Marshall, F.R.S., Prof. of Surgery in University College, London; Surgeon to University College Hospital, etc.; with Additions by Francis G. Smith, M.D., Prof. of Institutes of Medicine in the University of Pennsylvania. Illustrated with numerous wood-cuts. Philadelphia: H. C. Lea. 1868. 8vo., pp. 1,002.

The American edition of Mr. Marshall's work comes to us in a large-sized volume of over one thousand pages, comprising the two volumes of the original work. Although the coupling of the two volumes makes it a rather bulky work, it has nevertheless the recommendation attached to it of cheapness.

Viewed in the light of a contribution to a particular department of science, it has in its way no equal. Its plan of arrangement of subjects, as well as the thorough treatment of such subjects, is its real recommendation to such as desire to form a thoroughly substantial groundwork-knowledge of physiology. Designed for purely educational purposes, the science is treated as dependent on comparative anatomy, chemistry and physics, and successful pains are taken to interest as well as instruct. The importance of a more or less thorough knowledge of the allied sciences in enabling the student to appreciate the truths embodied in physiology, is now universally acknowledged by teachers, and it is with feelings of no small gratification that we welcome the work before us as the *beau-ideal* of one that ministers to such a necessity. The systematic arrangement of its subjects is not, however, its only commendable feature, but the subjects themselves are so numerous, and each so thoroughly treated, that no one can fail to obtain a suggestive thought from almost every page. Again, we have another general remark to make concerning the value of the work, and that is, that the account of the structure, functions, constitution and properties of the different systems is brought up to the present state of our knowledge. No one can study carefully the pages of this voluminous work without being astonished at the erudition and painstaking spirit of the author, and without being thankful to him for the great and varied amount of information which is imparted.

Our author commences with a general description of the human body, the beginner being assisted by studies in comparative anatomy; next the gross and microscopic characters of the tissues are studied. Attention is then drawn, in an admirable chapter, to the vital properties of the tissues, and the functions of the living body. Next follows a sketch of the animal kingdom, to which man

belongs, and of the types and laws of form which it presents, together with a comparison between the animal, vegetable, and inorganic kingdoms. The special physiology of the respective animal functions follows, in the detailed treatment of which a rich mine of valuable, varied, interesting and practical facts is opened to the student; constituting, as a whole, one of the most readable portions of the entire volume. Next in order follows a discussion of the functions of vegetative life, in an equally comprehensive manner. The subjects of animal heat, light, electricity, and their dependence on vito-chemical action, are taken up in due course. Animal statics and dynamics embrace a separate section of the work, and comprise an account of the weight of the body and its organs; the various forms of force exerted in the living body, and the relations of these to the quantity of air and food consumed, etc., etc. The interesting subject of generation is presented in an admirably clear manner; and last in the order of topics appropriately comes those which refer to growth and decay in their general relations to life and death.

Our readers can, from the foregoing summary of the divisions of this work, form some idea of its design, scope and utility, but to fully appreciate its intrinsic worth, quiet, appreciative, and earnest study is absolutely necessary. We can, as the result of a careful perusal of the work, assure every one that there can seldom be found a volume more interesting and edifying than this.

The illustrations are not as numerous as they might be, and are, with a few exceptions, copied from other standard works.

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 Appendix 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 Prof. Materia Medica, &c., College of Pharmacy. Twelfth edition, carefully revised and much improved by ALBERT H. SMITH, M.D., Fellow of the College of Physicians, etc. Philadelphia: H. C. Lea. 1868. 8vo, pp. 374.

THE twelfth and last edition of the late Prof. Ellis's Formulary is now before us, and under the editorial supervision of Prof. Smith, is brought up to all the requirements of the practitioner of the present day. There is now nothing to be desired to make the book more complete, more useful, or more practical. It is absolutely invaluable to the physician who wishes to make the best use of the important articles in his materia medica.

THE SCIENCE AND PRACTICE OF MEDICINE. By WILLIAM AITKEN, M.D., EDINBURGH, Professor of Pathology in the Army Medical School. Second American, from the fifth, enlarged and carefully revised, London edition; adopting the new nomenclature of the Royal College of Physicians of London. With large editions by MERIDITH CLYMER, M.D., ex-Professor of the Institutes and Practice of Medicine in the University of New York, formerly Physician to the Philadelphia Hospital, etc., etc. In two volumes, with a map, lithographic plate, and numerous illustrations on wood. Philadelphia: Lindsay & Blakiston, 1868. 8vo., pp. 927 and 1079.

BUT eighteen months ago we had occasion to notice the first appearance of an American edition of Dr. Aitken's famous work on the Science and Practice of Medicine, the rapid exhaustion of which, and the prompt supply of a second American edition, prove it to have justly deserved the encomiums which were so generally bestowed upon it by the medical press. Since its reprint in this country, the original work has gone through another, its fifth, edition in London. In this edition the author has added material to the amount of upwards of one hundred pages, principally upon the subjects of progressive locomotor ataxy, progressive muscular atrophy, glosso-laryngeal paralysis, aphasia, dilatation of the bronchial tubes, and the application of the sphygmograph, and its tracings in disease; subjects treated of by the author for the first time in the fifth edition, although, as we are reminded by the American editor, they were all treated of in the additions of the previous American edition. Dr. Aitken has entirely rewritten the articles on malignant cholera, epidemic cerebro-spinal meningitis, and intestinal obstruction. In addition to all this, we have contributed by the American editor matter to the amount of about five hundred pages of the English edition, inserted in their appropriate places, including thirty-six new articles from his own pen, many of them upon subjects now appearing for the first time in a text-book on the practice of medicine. These contributions of the American editor are upon the following subjects: 1. Camp measles; 2. Spinal symptoms in typhoid fever; 3. Prognosis and diagnosis of typhoid fever; 4. Chronic malarial toxemia; 5. Pernicious remittent fever; 6. Typho-malarial fever; 7. Chronic camp dysentery; 8. Cholera morbus; 9. Cholera infantum; 10. Hereditary syphilis; 11. Corpulence; 12. Gonorrheal rheumatism; 13. Delirium of inanition; 14. Chronic alcoholism; 15. Epidemic cerebro-spinal meningitis; 16. Progressive general paralysis; 17. Acute centripetal paralysis; 18. Myo-sclerosic paralysis; 19. Physical diagnosis of diseases of the cerebro-spinal system; 20. Auscultation in health and in disease; 21. Irritable heart; 22. Disease of the heart, how far a disqualification for military service; 23. Chronic pyæmia; 24. Capillary bronchitis; 25. Plastic bronchitis; 26. Dilatation of the bronchi; 27. Sclerosis of the lung; 28. The inoculation of tubercle; 29. Curability of consumption; 30. Acute and rapid phthisis; 31. The neuroses of the larynx; 32. Medication of the throat and lungs by atomized fluids; 33. Syphiloma of the liver; 34. The neuroses of the stomach; 35. Addison's Keloid-Scleriasis; 36. Statistics of tracheotomy.

It will be seen from the above enumeration from the editor's preface, that he presents to his professional brethren in one work, dissertations on many subjects of interest at present under discussion and examination in medical journals and monographs; subjects upon which views are not yet sufficiently generally established to have made their way in the subject matter of a text-book on physic; still they enhance the value of the work to the reader, and are, therefore, acceptable, and not the less so though perhaps unlooked for. We see that several subjects treated of by the editor in the first American edition, are now incorporated into the body of the work; and it is not unlikely that the additions referred to furnished in part the incentive.

Prof. Aitken has adopted throughout the text the new nomenclature of the Royal College of Physicians of London, a tabular view of which has been substituted for the nosology of Dr. Farr, which had been made use of in previous editions.

The introductory sections of the work indicate the more important elements of general pathology; and those principles are shortly stated on which the more modern systems of nosology have been founded since the time of Cullen.

The remainder is arranged in three divisions; the first part treats of Systematic Medicine, Nosology, or the Classification of Diseases; the second and more practical portion is styled Nature of Diseases, Special

Pathology and Therapeutics; and part third, under the head of Medical Geography, or the Geographical Distribution of Health and Disease, treats of a most important and neglected portion of the science of medicine; a branch which, when thoroughly investigated and incorporated into our schemes of professional study and tuition, promises much towards our enlightenment upon many obscure points in relation to epidemic, endemic, and many constitutional diseases; in relation to cause and effect of disease, and in reference to the climatic influence of therapeutical remedies; with bearings upon social and national hygiene, and other medical questions of like character.

It will be seen therefore from the scope of the work and the character of its contents, that it comprises as comprehensive a view of the present state of medical science as is accessible in our language, and while inferior to none, may take precedence over many; and we would recommend it to a prominent position in the library of the practitioner of medicine.

The work is elegantly printed on tinted paper of excellent quality; the proof has evidently been read with extreme care; and it is substantially bound; so that the appearance of the volumes is a credit to the house from which they emanate.

CRIMINAL ABORTION: Its Nature, its Evidence, and its Law. By HORATIO R. STORER, M.D., LL.B, Fellow of the American Academy of Arts and Sciences, and late Professor of Obstetrics and Medical Jurisprudence in Berkshire Medical College; and FRANKLIN FISKE HEARD. Boston: Little, Brown and Company. 1868. 8vo., pp. 215.

THE authors of this timely work on abortion very properly state to lawyers and physicians of this country, that the two professions should go hand in hand in the investigation of medico-legal matters, rather than as adversaries in the display of their attainments. During the year 1859, some papers on the subject of abortion were published in the *North American Medico-Chirurgical Review*, and afterwards put in book form; and this work before us is in part re-written from the one referred to. The authors have endeavored to exhaust the Criminal Law of the subject, and that portion of the work is especially worthy of perusal. Many of the cases cited are copied from English Reports, which are not generally accessible, even to the lawyers of this country.

The work is divided into two parts, or books. *Book 1st* contains seven chapters, all showing up criminal abortion "From the Stand-point of Medicine," the heads of which are as follows: "Is Abortion ever a Crime?" "Its Frequency, and the causes Thereof." "Its Victims." "Its Proofs." "Its Perpetrators." "Its Innocent Abettors." "Obstacles to Conviction."

We learn on perusing the second chapter, that in the city of New York, in eight years from 1848 to 1855, the number of premature still-births amounted to 2,078, and 10,792 still at the full time; showing an average of 1 in 5. In 1856, the average was 1 in 4.02.

Dr. Harris estimates that an eighth of the still-births in New York are now (1868) at the seventh month. That abortion is steadily increasing is proved by statistics in this country, and confirmed by foreign records, which by the way are abundantly quoted.

In France, the living births are diminishing, while the still-births are increasing.

The causes of abortion are classified as follows; "1st. The low *morale* of the community as regards the guilt of the crime. 2d. The doctrines of political economists. 3d. The fear of child-bed. 4th. The ease with which the character of the crime may, in individual cases, be concealed. 5th. The unwillingness of its victims to give testimony that would also criminate themselves. 6th. The possibility of their inducing abortion upon themselves without aid. 7th. The ease with which the laws, as at present standing, may be evaded. 8th. The lack or inefficacy of judicial preventives; such as statutes for registration, and those against concealment of birth and secret burials. 9th. The prevalent ignorance of the true principles of its jurisprudence, in both government officials and medical witnesses. 10th. Social extravagances and dissipation."

In the perpetration of this crime, woman herself stands as the principal, but the accomplices represent several classes, such as nurses, female physicians, husbands, druggists, abortionists, and we regret to say, occasionally, physicians in regular standing.

Part *Second* is peculiarly well adapted to the wants of the legal profession, as the remaining five chapters are devoted to the subject of Criminal Abortion "From the Stand-Point of Law."

The work as a whole is very readable, and is calculated to do a great deal of good.

Progress of Medical Science.

A SUBSTANCE EXTRACTED FROM THE ESSENCE OF THYME. —The last number of the *Journal des Connaissances Médicales* of Paris contains an article by M. Bouilhon on a substance extracted from essence of thyme. The author remarks with reason that, notwithstanding their eminent preservative qualities, phenic carbolic acid and creasote have never been much used in therapeutics, owing chiefly to their very disagreeable smell. It is seldom possible to dress a sore with phenic acid in a hospital ward without inconveniencing all the other patients. In private houses such operations are loudly complained off by all the inmates. The practitioner himself, being necessarily exposed to soiling his hands with it, will find soap and water insufficient to get rid of its bad smell, which, for the rest of the day, he must make up his mind to carry about him in visiting all his other patients. As for creasote, it is hardly ever used except by those who have tried every other remedy for a decayed tooth in vain, and even then it is generally resorted to when it is too late. Under such circumstances, substituting a more agreeable agent for these may be considered a very useful service rendered for medicine; and this agent, M. Bouilhon contends, is thymic acid, the chemical formula of which is twenty equivalents of carbon, fourteen of hydrogen, and two of oxygen. It was until lately called thymol, and is capable of crystallization. It then melts at forty-four degrees centigrade and boils at 230. When once in a state of fusion it will sometimes remain liquid indefinitely. It has an agreeable smell, resembling that of thyme. It is but little soluble in water and very much so in alcohol, ether and fatty bodies; it has no rotatory power, and easily combines with alkalies, with which it forms salts. It enjoys the valuable property of combining with skin and animal tissues, thus rendering them incapable of putrefaction. In a concentrated state it has an acrid and caustic taste, but when much diluted it produces on the tongue the agreeable sensation caused by peppermint. M. Bouilhon has found by experiment that it may be substituted for phenic acid and creasote in every case in which they are used as therapeutic agents.

STRANGULATED CRURAL HERNIA IN ADVANCED AGE. —Mr. Labbe, Surgeon to the Paris Salpêtrière Asylum, operated a short time since upon a woman 105

years of age for strangulated crural hernia. The wound suppurated for about a week and the patient recovered.

Ergot in the Treatment of Purpura.—Dr. Bauer, of Neutershausen (Deutsche Klinik), reports great success in the treatment of purpura hæmorrhagica with secale cornutum. He gives 8 to 10 grains three times, or oftener, daily, until hæmorrhagic manifestations cease. When anæmia remains he treats it with chalybeates.

Nitrate of Silver in the Treatment of Uterine Polypi.—Dr. M. M. Eaton (*Chicago Med. Examiner*) gives his experience in the use of the nitrate of silver in a case of uterine polypi which he treated successfully. The patient was 46 years old, of a nervous temperament, anæmic and emaciated. A digital examination revealed two small polypi attached by a long pedicle to the margin of the os uteri. These were soon discharged spontaneously, and she was free from hæmorrhage for some months. An examination about a year after, revealed the uterus enlarged, and a considerable flow of blood mixed with pus. A sound producing an alarming hæmorrhage, a sponge tent was introduced and the os freely dilated. The finger being easily passed in the neck of the uterus, the whole surface was found thickly studded with polypi, from the size of a *grain* of wheat to a hickory-nut. To these the solid stick of nitrate of silver was applied, and the sponge tent reintroduced, to act as a tampon. On removing the tent next day, several small polypi came away, and the nitrate of silver was again freely used and the os left open. On the fourth day of the use of the caustic all hæmorrhage had ceased, and the tumors in the neck were all found to be detached and discharged. The uterus was then syringed with tepid water, and caustic applied to the suppurating spots where the pedicles had been removed, at the same time giving tonics and good food. This treatment was continued ten days, when she began to flow again very freely, and an examination revealed two large tumors in the cavity of the womb about the size of an orange. Ergot was given to cause contraction of the womb and descent of the tumors, and nitrate of silver was applied locally. By this means the hæmorrhage was controlled, but the caustic was applied for about ten days, when by forceps they were removed and the uterus left empty, though enlarged. By tonics and generous diet the patient entirely recovered, and has had no return of the polypi.

Opium and Stramonium.—Dr. J. F. Treuman was called to see a mother and two daughters. They had had paroxysms of ague, and had taken, as they supposed, fennel-seed, but it proved to have been stramonium-seed instead. When first seen the mother and one daughter were raving like maniacs, while the other was rapidly sinking into coma. Tr. opii was at once given, and morphia injected subcutaneously. The youngest girl recovered rapidly, but the others only after having taken several large doses of morphia. The recovery in each case was complete.—*Chicago Med. Jour.*

Hypertrophy of Half the Body.—Dr. S. Logan reports to the *N. O. Journal of Medicine*, an instance of this occurring in a child. The hypertrophy was noticed about ten days after the birth of the child, and was of the right half of the body, and the disproportion has seemed steadily to increase. She is now strong and healthy, and the disproportion is particularly seen when the opposite extremities are compared. One leg is about an inch longer than the other, causing a peculiar gait, and the first requires a shoe at least a size and a half larger than the other. The hands and arms show a corresponding disproportion. The difference is observable in the whole right side.

Secondary Attack of Small-pox after Vaccination.—Dr. S. S. Herrick was invited to see a negro man, suffering with a mild attack of modified small-pox. He had been seized eight days before with fever and pain in the back and lower extremities. On the fourth day the eruption came out, when the fever and pain subsided. The eruptions covered the body from head to foot, and were not abundant. He had been vaccinated in infancy, and he showed a well-defined wound on the left arm as evidence, and had also had small-pox (in 1864), as shown by numerous pits on the face.—*N. O. Journal of Medicine.*

Case of Colloid Cancer developed in the Connective Tissue of the Peritoneum, and embracing the Abdominal Viscera.—Dr. P. F. Eve reports this case in the *N. O. Journal of Medicine*, as having occurred in the person of a previously healthy planter, over 65 years of age. He received a fall, striking upon the nates and hip, and severely jarring his back and body. He complained of pain in the dorsal and lumbar regions, and want of full control over his lower extremities. He still continued, however, to do light work about the farm. After this he slowly declined, and in a year and a half an abdominal tumor could be felt which was thought to be scirrhus. Soon after several tumors could be felt, and he slowly sank, and died in about two years from the receipt of the injury. The autopsy revealed in the abdominal cavity about 16 pints of serum. The small intestines were greatly inflamed, with apparently impassable occlusion of the colon from enteritis. Besides three large tumors in the abdominal wall, there was a continuous colloid mass in the connective tissue of the peritoneum over the liver, stomach, pancreas, spleen, kidneys, bladder, and the whole length of the colon down to a portion of the rectum. On opening the abdominal cavity, nothing could be seen except the small intestines and the bladder, all the other viscera being imbedded and obscured by the colloid mass. The omentum was adherent to and forced into the anterior tumor, which thus formed the largest of three tumors. The colloid character was plainly marked, was quite firm in places, and exuded a rather stiff jelly when pressed. The whole cancerous mass weighed about four or five pounds.

Hernia of the Ovary.—Dr. Englisch mentions a case of this kind occurring in a patient of 32 years of age. She had suffered from a reducible tumor in the left groin for 13 years, and presented, on admission to the hospital, all the symptoms of strangulated hernia. The taxis not succeeding, the usual operation was resorted to, and, on opening the sac, the ovary and Fallopian tube were discovered, but not a trace of the intestine. The former were tied and removed. Twelve days after the herniotomy, the patient died of severe erysipelas and partial peritonitis. Another patient presented an ovarian hernia on both sides. She had never actually menstruated, but at each period molimen was apparent, with swelling of the inguinal tumors. The vagina ended above in a cæcal pouch, and absence or extremely small size of the uterus was suspected. The patient was not deficient in sexual sensations.—*Lancet.*—*N. Y. Journal of Medicine.*

Discharge of a Small Portion of Intestine after the Operation for Strangulated Hernia.—M. Mazel publishes in the *Montpelier Med.*, a case in which the above-mentioned phenomenon occurred. The patient was operated on the third day after strangulation. A

portion of the small intestine, in a pretty normal state, was returned, and the patient remained in a precarious state until the 14th day after the operation, when he discharged what he supposed was a piece of skin. This proved to be a piece of small intestine, and the patient slowly recovered.—*Lancet.*

Bromide of Potassium and Antimony in Puerperal Convulsions.—Dr. T. N. Simmons reports to the *Medical and Surgical Reporter*, the history of a case of puerperal convulsions, in which the efficacy of these remedies was evident. A primipara, while in labor, with the head of the child in the inferior strait, was seized with a violent convulsion, which was followed by four others, with an interval of about 15 minutes between each. Chloroform proving of no benefit, bromide of potassium was administered, beginning with a dose of 40 grains in combination with half a grain of antimony. In combination with the bromide one-half grain of the antimony was given every hour and a half or two hours, until three grains of the antimony were taken. After the first dose there was a return of four paroxysms. The first occurred within an hour, the second in two hours, the third between three and four hours, and the fourth in eight hours. Their intensity and duration were also diminished in the order of their recurrence. Convalescence was rapid.—*N. O. Journal of Medicine.*

An Acidulated Solution of Pepsine as a Solvent for False Membrane in Diphtheria.—W. H. Doughty, M.D., contributes to the *Richmond & Louisville Medical Journal*, an article upon this subject, with a history of a case in which he was entirely satisfied with the efficacy of pepsine in diphtheria. The patient was about 25 years of age, of feeble general health from intermittent fever. He presented himself with sore throat. For the affection cauterization was resorted to, and a gargle of chlorate of potash ordered. The throat became very much inflamed and swollen, and the glands about the neck enlarged. About the fourth day exudation of membrane was observed under the tongue, a portion of which was removed with forceps. The swelling increased and the membrane continued to re-form. Quinine and stimulants were freely used, with inhalations of lime-water. On the fifth day commenced the application of pepsine to the membrane, keeping up the same general treatment: pepsine was used in the following proportion: ℞ pepsine, ʒ j; acid muriatic, dilute, gtts x; water q. s.; ad ℥ iij. M, and filter. This was applied by means of a hair pencil continuously. A few hours from the commencement of the application, "the mouth, as far as visible, is cleaner and better." On the next day the patient feels better, no appearance of exudation, mouth is clean, but continues to discharge broken down opaque masses from the throat, and thinks he must have suffocated but for the solution employed. The breathing is comparatively easy and cough less. Patient died on the 7th day, of asthma.

Enormous Spleen.—A diseased spleen has been sent to the Museum of Toland Medical College, weighing between nine and ten pounds when taken from the body. The patient had leucocythæmia prior to death. The organ was adherent to the diaphragm, the abdominal walls, and the left lobe of the liver.—*Pacific Medical and Surgical Journal.*

New Use of Iodide of Potassium.—Dr. A. de Beaufort (*Bulletin de Thérapeutique*), reflecting that iodide of potassium is freely eliminated in the tears and uterine mucus, tried it in free doses in cases of chronic inflammation of the lachrymal tube and also in chronic metritis. His success was most decided. He says: "In cases of internal metritis, with abundant leucorrhœa, and all that train of circumstances which render so many women miserable, I have often seen, when all other means have failed, prompt and decided amelioration, and, in some cases, a positive cure, result from the free use of iodide of potassium."—*Philadelphia Medical and Surgical Reporter.*

Tetanus treated with Calabar Bean.—Drs. Boslin and Curtis (*Chicago Medical Journal*) have treated a case of acute traumatic tetanus of violent character with large doses of morphia and calabar bean. For a portion of the time, a gram and a half of morphia and three grains of the powdered bean in glycerine were given every hour, with the manifest effect of quieting the patient and relieving the spasm. The patient recovered.

Gonorrhœa.—Starch Injections.—Finely powdered starch, mixed with lukewarm water, so as to obtain a fluid of the substance of cream, but thin enough to allow of injection, forms a most successful injection in cases of gonorrhœa, especially after the inflammatory stage is over.

To Prevent Death by Chloroform.—Experiments on inferior animals show that they may be restored from apparent death by chloroform by the continuous galvanic current, the negative pole being put in the mouth and the positive pole in the rectum. In some cases the animal was left for two minutes in a state of apparent death and then restored.—*Pacific Med. and Surg. Jour.*

New Preparation of Lupuline.—Dr. Dyce Buckworth (*British Med. Journal*) recommends the following *new preparation of lupuline:* lupuline ʒ ij; spirit. ammon. aromat. Oj; macerate for seven days, agitating occasionally; then filter sufficient of the menstruum to make up to a pint. The dose of this is from twenty minims to one fluid-drachm. He proposes to call it "tinctura lupulinæ ammoniata." He considers his preparation of the hop as the best we at present possess.

According to *Christisen*, the dose of tinctura lupuli should be from one fluid ounce to one fluid ounce and a half, to produce any hypnotic effect; the ordinary dose consists of as many drachms.

The Influence of Irritation of the Nerves of the Skin upon the Temperature of the Limbs.—MM. Brown-Séquard and Lombard publish in the *Arch. de Phys. Norm. et Path.*, p. 688, the first results of some experiments instituted by them to determine the effect of irritation of the nerves of the skin upon the temperature of the limbs. They experimented upon each other. Being seated quietly in a room of steady temperature, one of them was pinched in some part of a limb a few moments after placing upon the same limb, or the opposite one, a thermo-electric pile, and the establishment of equilibrium judged of by the steadiness of the flame at the zero of the scale. Suppose the pile was placed on the left forearm; now, pinching the skin somewhere on the hand, forearm, arm, shoulder, or even the neck of the opposite side, produced a diminution of temperature in the limb carrying the pile. If, on the other hand, the limb carrying the pile were pinched, no matter where, below it, at the fingers, hand, and thumb, or above it, at the forearm, arm, or shoulder, the temperature of the limb became elevated. The same results were obtained in the lower limbs. They also found that pinching the lower limb, for instance, while the pile was upon the upper limb of the opposite side, produced a diminution of temperature in the limb carrying the pile; while on

the other hand, pinching the skin of the lower limb of the same side as the forearm carrying the pile, produced an elevation of temperature in that forearm. This elevation and depression of temperature was very little, not more than $\frac{1}{10}$ of a degree centigrade, the diminution being in general greater than the increase. The difference would have been greater had the temperature of the room in which they experimented been less elevated (19 to 21 cent.). The maximum depression or elevation took place at the end of a minute and a half. The deviation of the flame indicating a change of temperature commenced almost immediately after the pinches. The stronger and more numerous the pinches the more marked the changes of temperature. Repetition of the experiments on the same person rendered the results, after a while, less and less pronounced. The elevation of temperature is ascribed to increase of blood in the part, the depression to a diminution; and the phenomena of change of temperature are attributed to the effects of vascular contraction or dilatation, taking place by reflex action.

Ovariotomy in Italy.—Ovariotomy, which has now become so common an operation in this country, and to which our German and Gallic neighbors are beginning to be accustomed, is still a surgical proceeding of supreme importance in countries where it has seldom been adopted. In Italy, the operation had until now been performed eleven times only, and this accounts for the great enthusiasm with which a twelfth case, which has just occurred at Pisa, is spoken of and commented upon in the Italian medical journals. Prof. Landi has been the venturesome surgeon who has added the twelfth operation to Italian experience of ovariotomy, and it is said that he accomplished his task beautifully. This is so much the more to be admired as it was his first attempt, and as he undertook it before a very large attendance of curious and anxious compeers. Not only all the medical officers of the hospital, but all the medical men of the town and suburbs, nay, *confreres* from Leghorn and still more remote localities, crowded round the operator to witness the performance. Things went off in the best possible manner; no unfavorable circumstances troubled the course of the operation, and a large unilocular cyst, weighing with its contents fourteen pounds, was successfully extracted. Since then the state of the patient has progressed favorably. The Italian journals are warm in their praises of the courageous lady who submitted to the operation, and of the surgeon who undertook it; and we join in their wish that an operation which has produced such excellent results elsewhere, and saved so many lives seemingly condemned to death, may prosper in the warm climes of the south.—*Lancet.*

The Medio-Lateral Operation of Lithotomy.—Before the London Medical Society, on Nov. 2, Mr. Henry Lee gave the following description of the way in which he now performs lithotomy, and which he has named the medio-lateral operation. He gave the particulars of three cases in which this operation had been performed. The first of these had occurred upward of twelve months ago. The medio-lateral operation, he said, was performed in the following manner:—The patient is placed in the ordinary position for lithotomy, and a grooved staff having been introduced, an incision is then made in the median line of the perineum from before backward. This incision should extend through the posterior half of the perineum, terminating two or three lines in front of the anus. From this point the incision is continued for a quarter of a circle round the front and left side of the rectum. The finger of the left hand may then be put into the wound, and the rectum pressed back, whilst an additional touch or two with the knife separates it still further from the parts in front. The forefinger of the left hand is now passed into the rectum, and the knife, with its back toward the bowel, is passed at the posterior part of the central incision, and in the median line, into the membranous portion of the urethra. With the finger as a guide this is done with great ease and certainty. A bistoury or knife, with a probe at its extremity, is then passed into the same opening, and made to slide along the staff into the bladder. The blade of the knife is then directed toward the patient's left side, and somewhat backward, and as it is withdrawn the heel of the knife passes in the direction of the original incision through the skin. The point of the knife remains very nearly in the median line. A free external incision is thus produced, involving no important parts, with a small opening into the bladder. The urethra being opened, the median line is reached with the greatest facility with the finger, and the incision into the bladder is in the same way very easily dilated. The forceps, or any other instruments that may be used, are also introduced more directly into the bladder than in the ordinary lateral operation. In this operation all the usual accidents and difficulties which are likely to occur in lithotomy are guarded against. With the finger in the rectum as a guide, the urethra may be opened without difficulty, and a probe-pointed bistoury, being guided by a grooved staff, cannot well fail to enter the bladder. The incision into the prostate gland is made from within outward, and this he (Mr. Lee) considered an advantage. An incision made in the opposite direction partakes more or less of the nature of a stab, and the point of the knife, even when guided by the most skilful hand, will sometimes wander from the groove in the staff.

The medio-lateral operation for lithotomy is performed in far less time than it requires to describe it, and Mr. Lee had been impressed in operating both upon the dead and living subject with the facility with which it is accomplished. The instruments used are an ordinary staff grooved in the median line, a common narrow scalpel cutting on one side only, and a curved bistoury with a probe projecting two lines beyond the termination of its cutting edge.

In children a single incision with the scalpel is generally sufficient, but in adults the circular part of the wound should be deepened either before or after the urethra is opened. Should the stone prove large, there is no difficulty in obtaining more room at the neck of the bladder by making an incision in the prostate gland on the right side, as well as upon the left. This is easily accomplished by the probe-pointed bistoury introduced upon the finger, and guided by it.

The external incision in the medio-lateral operation combines, as it appears to Mr. Lee, the advantages of all the different incisions which have been recommended. It affords sufficient room for the use of instruments. These may be introduced in the median line, and the rectum is not likely to be displaced or injured. The operation as a whole is, he thinks, the simplest in conception, the easiest in execution, and the least liable to be attended or followed by any unfavorable complications, of all the operations for lithotomy.

Morphia in Anæsthesia.—Prof. Green, of the Marine Medical School (*Missouri Dental Journal*), recommends morphia as an antidote to nausea, during and after the anæsthetic state, and also to the other unpleasant after-effects of an anæsthetic. It is to be given at the commencement of anæsthesia.

Carbolic Acid in Small-Pox.—Arthur B. Stout, M.D. (*California Med. Gazette*), has great confidence in *carbolic acid* in mitigating small-pox, and divesting it of its *contagious* character. He believes that its course may be shortened, and by this agent the poison will be destroyed, be it animal or vegetable in its nature. Carbolic acid not only extinguishes the existing germs, but arrests their future development in the fluids in which it is infused.

In conjunction with the use of the *Sarracenia purpurea*, he is confident that the general horror and fear and desertion from the holiest duties of life, which follow the announcement of small-pox, may be put at an end.

Let the patient be lightly moistened over several times daily with a weak solution of carbolic (phenic) acid. Use a broad camel's hair brush, say two inches wide. The cure of the pustules will be hastened, it being a gentle stimulant. After its first use, and the slight infusion of its vapor in the air, giving to the atmosphere a faint color like creasote, and plunging all the cast-off clothing into a solution of this acid, the patient and the apartment occupied will be disinfected. The inhalation of carbolic acid vapor, as it comes atomized from a weak solution in Cologne water, commences the internal carbolization of the system. Carbolic acid should be given internally, so as to eradicate the poison in the tissues; the dose being from one half to one drop of the alcoholic solution, and may be given with the sarracenia. The *Sarracenia purpurea* was introduced to the profession in 1861, by Dr. F. W. Morris, of Halifax, Nova Scotia. Keith & Co. prepare the extract, which he uses in doses of a teaspoonful every two hours.

Correspondence.

MINOR SINS AGAINST THE CODE OF ETHICS.

To the Editor of the Medical Record.

Sir,—In the Record for the 15th inst., in your editorial "Minor Sins against our Code of Ethics," you specify as one of the sins—"another has his office address upon the card used in his dispensary class." This I am glad to see. I think it can very well be examined. I know only one sufficient reason for it—that the physician may say to his patient: "This card will show you when you will find me here, but if at any time you become worse and cannot wait until I am here, it will also show you where you will find me. I would rather have you come to my office (it will cost you nothing) for relief than suffer until you would find me here again."

In my opinion this action will justify the practice, *but this only*. If the office is so far from the dispensary (or infirmary, or hospital—the name is of no consequence), that it cannot reasonably be expected that the patient will come; or if, as I have heard, the physician tells the patient he expects to be paid if the patient comes to his office, I can see no propriety whatever in the practice of putting the office address on the dispensary card. I would have no difficulty in finding cards that come under the first class, where, from the very nature of the case, the patient's going to the physician's office is almost impossible.

I hold that a physician should not accept the charge of a dispensary class unless he is willing, *in case of necessity*, not only to have the patient come for gratuitous advice to his office, but to visit the patient at home.

I know that the continual presence of the resident physician, and the regular corps of visiting physicians in the large New York dispensaries, enable the patient always to procure gratuitous advice in the appointed way without calling on the physician in charge of his case, but these complete arrangements do not obtain *everywhere*.

P——.

Brooklyn, January 14, 1868.

CHRONIC RHEUMATISM AND GOUT.

From our Special Paris Correspondent.

To the Editor of The Medical Record.

Sir—Pathological facts, like those of healthy nature, may be ranged in two classes: 1st, those which are newly discovered; 2d, those which are newly interpreted. From time to time adventurous pioneers light upon diseases hitherto ignored, and the names of locomotor ataxy, muscular atrophy, endocarditis, are inscribed on the roll-call, and gradually win a place in systematic treatises; while on the other hand, maladies which have afflicted mankind since the days of Hippocrates, occasionally press so heavily on the medical conscience, that it rouses itself to attack them afresh with a new theory and new researches. So with epilepsy, tubercular phthisis, and rheumatism, which last has just been the subject of various discussions whose results may not be uninteresting to your readers.

The rheumatismal topics—if I may be permitted the expression—upon which discussion has especially borne are, chronic rheumatism or rheumatic gout; rheumatism in its relation to gonorrhœa—with chorea; visceral rheumatism. Chronic rheumatism was universally confounded with gout until Baillau first suggested a distinction between the two affections, founded upon clinical characters. Some years ago Dr. Adams described chronic rheumatic arthritis as a disease *sui generis*, but his ideas were generally forgotten, or never accepted in France until in 1853, two theses—by Charcot, and by Trastour—revived and confirmed the doctrine. M. Charcot, now an eminent physician at the Salpêtrière, has recently published a series of lessons on this same subject, and his views, defended in several recent theses, are becoming rapidly current.

It is only by anatomical researches that Charcot has been able to definitely distinguish two diseases which have so many symptoms in common as gout and chronic rheumatism. Thus both are apyretic chronic affections, liable to exacerbations, principally seated in the articulations, but also attacking the internal vital organs. So extensive is their influence, that both must be considered as general diseases, but characterized by unusual peculiarity and predominance of local manifestations. In both, the articulations are deformed and enlarged, more or less painful, rendered useless by all degrees of immovability, from stiffness to anchylosis. In both the hypertrophy is dependent upon new tissues surrounding the joint. Although gout rarely affects the large articulations, chronic rheumatism is equally common in the large and the small, and at every joint the question of diagnosis may be raised. Finally, whatever may be their differences, gout and rheumatism are closely allied in a common arthritic diathesis,* often hereditary, the two branches of a common trunk—according to the expression of Prideux.

* See Bazin's Le-sons on Arthritis, endorsed on this point by Charcot.

But the two branches differ, in the concomitance of other diseases: scrofula, phthisis and cancer, for rheumatism; diabetes, gravel, obesity, for gout; in complications on the side of the stomach for gout; of the heart for rheumatism;* or, even more minutely, fatty degeneration of the muscular fibres of the heart, in gout, endopericarditis in rheumatism; atheroma angina, bronchial catarrh, albuminous nephritis, in gout; pulmonary congestion and meningitis, in rheumatism; uric acid in excess in the blood in gout, deficiency of blood-globules, excesses of fibrine, in acute rheumatism—in the chronic disease, no change of fibrine, but increase of phosphate of lime, which is proportionately diminished in the urine. Finally marked differences in the anatomical lesions, which, as I have said before, themselves served to definitely unravel the confusion arising from the clinical symptoms.

In gout the cartilages are always healthy, although they gradually disappear under the pressure of *tophus*, but, *from the very first attack*, become incrusted with a deposit of urate of soda. This deposit is, therefore, essentially connected with the nature of the disease, and is not, as has often been supposed, an epiphenomenon, occurring only when the malady has become inveterate. The urate is always in the most superficial part of the cartilages, and at their centre—as far as possible, therefore, removed from the vascular tissues of the synovial membrane or the bones. It is also found in the appendices to the synovial.

All the lesion of gout is comprised in the deposits, which gradually increase by the formation of new strata at each acute attack of the disease, and finish by clogging the cavity, distending the synovial, rubbing away the cartilages, and forming the well-known, tophaceous chalky masses around the joint, which thus becomes deformed and immovable.

Totally different is the pathological anatomy of rheumatism, where the alterations of every tissue of the joint supply the place of heterogeneous deposit. The slightest degree of the alterations is found where hitherto no one has thought of expecting any,—or rather has given up the search, namely—in acute rheumatism. Examination of a patient who died of cerebral meningitis during a first attack of rheumatism, revealed to M. Ranbier † the following lesions of the cartilage.

It will be remembered that the diarthroidal cartilages are formed of a hyaline fundamental substance, in which are disposed cavities or chondroplastes, lined by a membrane, and containing one or more cells, or cartilage capsules. The most superficial chondroplastes are flattened, and their long axis is horizontal or parallel to the surface of the cartilage. Underneath this layer, they are vertical, and placed in quite regular rows. But as they approach the bone, they become larger, more irregular, contain two or three secondary capsules, and finally dissolve, setting free the cells contained in these capsules, to become surrounded by osseous tissue, and constitute the osseous corpuscles.

Now the first sign of alteration appears in the superficial layer of chondroplast. Although the injection of the synovial under the influence of the inflammation may have been so slight as to have disappeared after death, the cartilage cavities are found to be already increased in size and changed in form, becoming first oval, then globular. The mass of protoplasma or cell contained in the cavity is strangled in the middle, separates into two portions, of which each surrounds itself with a limiting membrane, and becomes a secondary capsule. This segmentation is repeated once or twice, until the hypertrophied cavity is distended by secondary capsules. In the interior of these latter, the cells multiply, and the whole process of segmentation and proliferation extends towards the deeper layers of the cartilage. Presently—as, according to Ranvier, is always the case when the chondroplasts have been thus modified, whether in a physiological or pathological intention—the intermediate amorphous substance splits up into a multitude of microscopically fine fibres, directed perpendicularly to the surface of the cartilage, and separated by equally microscopic furrows. So far the process is precisely like that of the ossification of cartilage, and only differs by the absence of calcareous impregnation of the amorphous substance. Instead of that, the secondary capsules burst, and pour their cells into the furrows just signalized, and the cells undergo a transformation into mucosine. The *ensemble* of these conditions, proliferation of the chondroplasts, fibrillation of the hyaline substance, mucous metamorphosis, constitutes the velvety alteration of the cartilage. This is the elementary lesion of chronic rheumatism; if the alteration has not advanced far enough to produce effects visible to the naked eye, it is in the stage peculiar to the acute form of the disease. Thus at one stroke we find established two points of extreme importance. 1st, the first radical distinction between rheumatism and gout, where the cartilages, though gradually worn away by pressure, undergo no interstitial transformation. 2nd, the identity of chronic and acute rheumatism, identity which many observers have been disposed to deny. To continue with the lesions of chronic rheumatism:—

The striation of cartilage, commencing as above described, increases in depth and extent, until finally the whole splits up into fragments. The capsules, after the disappearance of the interstitial furrows, open into the articular cavity itself, and the cells mix with the synovine, and degenerate as before. Finally, and in this manner, the rest of the cartilage disappears, leaving bare the surface of the bones. Already, in acute rheumatism, M. Ranvier has found an increased vascularization of the epiphyses, and tendency to proliferation on the part of their osteoplasts. In chronic rheumatism, the surface of the bones immediately underneath the cartilages, is eburnated, but the ivory-like mass is often divided by little furrows, separating fragments which may interlock, and become one cause of immobility of the joint. This eburnated portion is formed of superposed osseous lamellæ, destitute of Haversian canals.* Underneath is a layer of bones, red and vascularized, and still lower, the osseous trabeculæ are thinned, and the spaces occupied by much fatty matter.

Around the cavity of the joint cartilaginous and osseous excrescences begin to form, and in two ways: First, the capsules of the edge of the cartilage, covered by synovial, and unable, therefore, to open freely into the articulation, continue, nevertheless, to multiply, and form a ring of little cartilaginous tumors. Again, the bones shoot out on all sides of the joint into osteophytes, whose rounded form and smooth surface are in remarkable contrast to the irregular stalactites in scrofulous inflammation of the articulations. They have been compared to drops of softened lard.

So much for the lesions of the cartilages and bones, in articulations affected by chronic rheumatism. But the other tissues are equally involved. The synovial membrane, injected even in the acute disease, becomes permanently red and thickened, and covered with villosities, which, according to Bonnet,† consist of

* "The gout is to the stomach, what rheumatism is to the heart."—Bull. Thèse d'Agrégation Viscerale—Rheumatism.

† Société de Biologie—also These Inaugurale, 1865—and Thèse 1866, Paul Vergely.

* Vergely. These citè.

† Maladies des Articulations.

fibrinous deposits, but according to Billroth* are constituted by dilatations of the swollen surface of the membrane itself. Its fringes creep over the cartilages, and implant themselves upon their surface, "like ivy taking root," says Billroth. Their continuous development eats away the surface of the cartilage, and contributes largely to the ulceration of this tissue, already commenced by the interstitial changes taking place in its substance. If this proliferating membrane reaches the bone, it equally determines its ulceration or caries, and that rarely happens except in fungous arthritis, of which there will be question in another place.

The cartilage cells contained in the synovial appendices proliferate like their kindred elements, and form little cartilaginous tumors, that become pediculated, or even entirely loose in the cavity of the joint, constituting the "foreign bodies," whose origin has perplexed so many observers.

The synovial is generally diminished in quantity, whence the name of *arthrite sèche* applied to certain forms of chronic rheumatism, and is never purulent.

The ligaments, sometimes unaltered, more frequently lose their suppleness, become indurated and retracted. Occasionally they are ossified, or at least infiltrated with calcareous salts; generally there is proliferation of the cartilage cells which they contain. Finally, they are most frequently ruptured, torn from their insertions in the course of the alterations of the bones, ulcerated, even disappear, partially or altogether. Hence the displacements and spontaneous dislocations so frequent in chronic articular rheumatism.

The muscles are pale and wasted, sometimes in fatty degeneration, as happens after any circumstances immobilizing the joints, generally, and this is most important, retracted.

The deformity of the articulations depends, therefore, upon four conditions: 1st. Distension by liquid, which only occurs during the acute period of the disease. 2d. Growth of osteophytes. 3d. Dislocations, partial or complete. 4th. Muscular retractions. This last condition is the most influential of all, as is proved by its frequency and its efficiency in the absence of all others; and also by the fact that the attitudes assumed resemble those witnessed in cases of partial muscular paralysis, in shaking palsy, and congenital cerebral atrophy, when the joints are permanently bent in one direction by the muscles which remain healthy. Thus the hands are often flexed as in saturnine paralysis of the interossei; the third phalanx flexed on the second, the second extended on the first, that again flexed on the metacarpal bone, and the entire wrist flexed on the fore-arm, which is in pronation. Finally, and this is most curious, the phalanges of all the fingers are deviated on their respective metacarpals towards the cubital edge of the hand. This is the first type of deformity; in the second, the third phalanx is extended, the second flexed, the first extended, the rest as in the former case.

Deformities of the other articulations vary in their consequences. When the cervical vertebræ are affected the head may be flexed till the chin touches the sternum. Or the whole dorsal and lumbar part of the spine may be curved outwards, so that the body is bent, and, as it were, collapsed. M. Charcot gives some painful examples of this condition, wherein patients dragged out years of miserable existence, like the woman in Scripture bound by Satan, and who, indeed, was presumably afflicted with chronic rheumatism. At the articulations, acromio-clavicular, scapulo-humeral, and coxo-femoral, the lesion often closely simulates a dislocation. In the two first cases, the extremity of the clavicle, or head of the humerus, may be so enlarged by osteophytes that it seems to have escaped from the acromion or glenoid cavity. At the hip-joint this enlargement is not at first directly perceptible, but the position of the limb—the thigh flexed on the basin, the leg on the thigh, the whole in abduction and outward rotation—suggests displacement of the femoral head inwards and downwards. And, as before remarked, spontaneous dislocations actually occur in an advanced stage of the disease, and render the diagnosis still more difficult.

As the final term of these progressive deformations, comes anchylosis of the joint—real, determined by the soldering of the osteophytic masses, or the bones denuded of cartilage; or false, occasioned by the formation of strong fibrous bands, into which the neoplastic cellular tissue originated in the early stages of inflammation has gradually condensed.

All these lesions characterize chronic rheumatism, and separate it, on the one side, *generically* from gout; on the other, *specifically*, from acute rheumatism, where the articulations have nothing to show but a greater or less injection of the synovial membrane, increase, and on rare occasions, purulence of the synovial liquid, and microscopic alterations of the cartilages and bones.

Charcot divides chronic rheumatism into three varieties: 1st. Progressive chronic rheumatism, the gouty rheumatism or rheumatic gout,* opnax or *rheumatism noueux* of most authors. This form is the most grave of all; the articular lesions are generalized, and visceral complications are frequent, either those common to the acute disease, or affections peculiar to the chronic, as ophthalmia and albuminous nephritis. 2d. Partial chronic rheumatism, where only one or two joints are affected. This is the *arthrite sèche* of authors, and, when confined to the hip-joint, constitutes the *morbus coxæ senilis*. Visceral affections are less frequent; still the patient is liable to asthma, and to cutaneous arthritis. 3d. Arthritis of the second finger-joints, described by Heberden in 1704, and called by Charcot Heberden's nodulations. The lesion is identical with that of the generalized affection, but, from its limited extent, has little gravity. It holds hereditary relations, however, with the severer forms of rheumatism. These nodulations constitute a purely local disorder; partial arthritis is rarely accompanied by general symptoms, but may begin in an apparently acute attack, and this is a common *début* for the generalized chronic rheumatism. But the fever and effusion soon disappear, much sooner than is expected; the patient flatters himself upon an unusually rapid recovery, yet does not get well. The joints remain stiffened—stiffness no longer due to pain, but muscular contraction, and this persists, increases during weeks and months; the other lesions gradually become perceptible, and the convalescent finds himself an incurable cripple. If the disease has attacked young people or puerperal women its evolution is comparatively rapid, a number of articulations are attacked simultaneously, the muscular retraction is marked, the pain extremely intense as also the fever, which, however, soon becomes first remittent, then hectic, and finally ceases. The disease reaches its climax in from two to four years, and leaves the patient with a varying number of articulations crippled by lesions at various degrees, from simple deviations and stiffness to complete anchylosis. Subjects between forty and sixty are commonly affected by the slowest form, where the articulations are attacked one after another,

* Pathologie Externe, Trad. Française.

* Dr. Fuller, in his book on Rheumatism, published in 1860, still retains this title for the disease above described.

during several years; the pain and redness are less, as also the subsequent deviation (caused by ulceration of the ligaments), but the deformity is more advanced. In both forms of the disease, after subsidence of the acute symptoms, the patient rarely suffers spontaneous pains, but movements communicated to the joints are painful, and accompanied by a characteristic crackling sound.

Partial arthritis may occur in a scrofulous subject, or degenerate into a fungous inflammation in a patient debilitated by long confinement or other unwholesome hygienic conditions. In this case the synovial membrane, already vascularized and swollen by inflammation, degenerates into granular, structureless masses, which fill the cavity, eat away the cartilages, and determine abscesses of the soft parts, through which they project. The bones are always affected with caries to a greater or less extent, and, as before noticed, shoot out irregular stalactites, quite characteristic of fungous arthritis. The muscles become too flabby and degenerate to exert much retracting force, but on the other hand, the cavity becomes distended by purulent liquid, and displacements are more frequent. Cellular tissue forms firm lardaceous bands, or itself degenerates into homogeneous fungosities.

Chronic rheumatism is thus placed between ordinary acute rheumatism, from which it may result, and fungous arthritis, into which it may degenerate. The diagnosis between these two latter affections is particularly important at the hip and knee-joints, where arthritis, *as such*, stands more chance of cure than at the hands, and where scrofulous inflammation is so serious a disease. The diagnosis is largely based on the general condition of the patient, and the arthritic or scrofulous antecedents. Also, when stiffness and cracking exist, with pain, some redness and heat, but without much swelling, the coxalgia is probably an *arthrite sèche*. Swelling, but continued firmness of the tissues, indicates the formation of lardaceous neoplasms. Pale, soft swelling, without heat or pain, indicates fungosities, the mildest form of scrofulous inflammation; and abscesses, with ossifluent pus, are the mark of a purulent diathesis, a degeneration of the scrofula into which the arthritis has passed.

In speaking of the attempts at treatment instituted for chronic rheumatism, I will mention some of the methods at present employed here, in the treatmetn of rheumatic coxalgia.

P. C. M.

New Instruments.

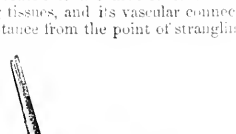
A SUBSTITUTE FOR ACUPRESSURE.

By JAS. ANDREW MILNE, M.D.,
Aleppo, Syria.

There are some cases in surgery where none of the modes of acupressure now employed seem to be applicable, and as deligation is not desirable, I have had constructed delicate forceps to use as a substitute. The body of the forceps is a little more than an inch in length, the two halves cross to furnish a grasping power to the beak—which is of delicate size, standing nearly at a right angle with the body—and in the one represented, three-fourths of an inch in length.

Its mode of action is simple and effective. The beak passes into the wound and clasps the vessel, bringing its two surfaces in contact, and then retaining them until adhesive inflammation takes place, and a firm clot forms. The body rests upon the surface, and is retained in place by a strip of adhesive plaster.

This mode may be considered applicable in all cases where acupressure is employed, and possesses the advantage of greater ease of application and removal. But its superior merits will be found in occluding vessels in their continuity. In applying a ligature, or acupressure, to an artery in its continuity, an incision has to be made of sufficient size to admit of the necessary manipulations, and lay the vessel bare to some extent, passing the ligature under the vessel; or in applying the mode of acupressure employed in these cases, it is disturbed from its bed, and by the two procedures separated to a considerable extent from the surrounding tissues, and its vascular connection cut off for some distance from the point of strangling. Softening and degeneration are the frequent results; and secondary hæmorrhage, and many evil constitutional effects are produced.



By the use of the forceps only a small incision is required, and no larger surface of the vessel need be denuded than to admit of the passage of the beak of the instrument. The vessel is not disturbed from its connection with neighboring tissue or vascular relation.

By thus creating but little injury to the vessel and its surroundings, we materially diminish the danger attendant upon these operations, and simplify the mode of procedure to so great an extent that the strangling of the carotid or femoral is an easy matter, and the occluding of the innominata, subclavian, vertebral, and iliac, much lessened in danger and difficulty.

The time necessary for the adhesion of the two surfaces of the vessel, and the formation of a firm clot, is from thirty to fifty hours, when the instrument should be removed. The wound, which was closed at first, is now freed from all foreign bodies, and left to accomplish a speedy cure.

Aleppo, Syria.

Medical Items and News.

New York Pathological Society.—The following officers have been elected for the ensuing year:—Dr. L. A. Sayre, President; Drs. J. C. Hutchinson and E. Lee Jones, Vice-Presidents; Dr. Geo. F. Shrady, Secretary; and Dr. Wm. B. Bibbins, Treasurer.

A Statue Erected to Laennec.—A statue to Laennec was recently inaugurated at Quimper (Brittany), his native place, with imposing ceremonies. Messrs. Tardieu, Roger, Bouillaud, Lediberder, and Hallegnen delivered orations on the part of the General Association of Physicians of France, of the Academy of Medicine, and of the Faculty of Medicine of Paris. A grand banquet followed.

Human Skulls without Sutures.—Professor Rolleston finds that some human skulls brought from Greenland, by Mr. Wynmper, possess the singular character of being devoid of sutures.

Significant Facts.—It is said that the lectures of Professor Pollitzer, at the Vienna University, are attended by the only female student that ever was admitted to that institution of learning. The lady in question, Miss Laura R., is the daughter of a New York lawyer, and has already acquired great proficiency in the dissecting-room, where she works for several hours daily.

Fifteen princesses and other noble Russian ladies volunteer to attest the respectability of the Woman's Movement Society in St. Petersburg, organized, among other things, for the purpose of establishing faculties for women in the University of that city; earnestly recommending, also, that women should study for physicians.

Medical Rank in the U. S. Navy.—The bill to increase the rank, pay, and emoluments of naval surgeons, met with a sudden death in the House of Representatives last month. Another bill afterward introduced in the Senate by Senator Anthony in relation to the medical staff of the navy, differs from the one laid on the table in the House, in the particulars that it does not seek to increase the pay or authority of the medical department in the navy, and only claims to secure by law the rank now given to the medical staff by regulation.

Obligations due John Hunter.—Among the great obligations which the profession owes to this distinguished surgeon, the museum of the Royal College of Surgeons is alone a monument. Others include the operation for aneurism which bears his name; he advocated the performance of delayed amputation in cases of gunshot wounds, but *was the first to recommend excision of joints as a substitute for removal of the whole limb*; he reduced the treatment of injuries of the skull to more definite principles than had prior to his time been acknowledged; he advanced the treatment of hernia, diseases of the spine and joints, and published a work on venery, which still holds its place among the most important treatises ever written on that disease.

Treatment of Acute Mania.—Thomas Inman, Liverpool, states that in a conversation with an old professional friend, now connected with a Lunatic Asylum in England, with reference to the treatment employed, he replied as follows: "At one time, when first I began to practise, the doctors ordered me to bleed the maniacal patients, but they raved, and raved, until they stopped, to die. Then antimony and calomel were adopted, and the same results followed. Then opium was used in heroic doses, but still the patients raved on. Now, sir, we knock them down with food—beefsteaks and porter, ale and mutton-chops, roast-beef and plum-pudding, half-and-half, pint of stout and a slice of mutton; all this every three or four hours. Why, bless your soul, not any of them can stand this for more than two or three days; they fall to sleep in spite of themselves."—*Lond. Med. Mirror.*

Homologies and Notation of the Teeth of Mammalia.—Mr. W. H. Fowler (*London Medical Mirror*) has made some important investigations on the *Homologies and Notation of the Teeth of Mammalia*, which lead him to infer that the first set of teeth, or milk-teeth, is not to be regarded as the typical or chief series—a view which Professor Owen has enunciated—but is rather to be regarded as something superadded to the normal dentition in the higher mammalia. The facts on which he bases this view are, that in several groups of animals supposed to have only one set of teeth, which of course would be classed as a first set, and analogues of the milk-teeth in animals having a second set, these so-called monophyodont mammals he finds to possess a prior set of teeth, which in the seals are merely minute points of tooth-substance, serving only to maintain the structural analogy, but in the armadilloes are more perfectly developed. The presence of this set of course places the normal set, by which the class-dentition is estimated, in the second series, and leads us to regard this second series as being the true series for the determination of the class-dentition.

Bad Wine and Whiskey.—The London *Lancet* says: "The impunity with which our ancestors used to drink so much port and claret is less a proof of the strength of their constitutions than of the excellence of the liquor imbibed—not even the strongest of them being one whit better able than ourselves to indulge with any freedom in the so-called 'port' of second-rate hotels, or the 'sherry' that scares visitors in middle-class houses on its entrance with the luncheon-tray. Ligneous port and igneous sherry, however, are innocuous compared with the vitriolic whiskey or the fiery gin with which the lower orders are accustomed to refresh themselves; and no movement deserves more encouragement from medical practitioners, or, for that matter, from the payer of poor-rates, than that which places good, wholesome wine within their reach.

"The Victoria Wine Company propose to open in the thickly-populated region of London a number of stores for the sale of cheap wine; and already they have succeeded in selling to the poor of Hackney, Bethnal-green, Islington, and the Old Kent-road, port and sherry at one penny per glass, or fourpence per quarter of a pint, including the bottle."

New Appointment in the Hospital Clinic of La Pitie, Paris.—Dr. Paul Broca has been appointed Professor of Surgery in this Hospital. Dr. B. was previously Professor of Surgical Pathology in the Prussian Medical Faculty.

Retirement of an Honored Ophthalmic Surgeon.—Mr. James Dixon, of the Royal London Ophthalmic Hospital, has retired from the active duties of hospital practice, with the honorary and well-earned title of Consulting Surgeon.

Cast-Iron Stoves.—When the attention of the Academy of Sciences of Paris was drawn some time since by M. Carret, one of the physicians of the Hotel Dieu of Chambéry, in several papers, to the possible evil consequences of the use of cast-iron stoves, but little interest was excited in the matter. Recently, General Morin has again brought the subject forward with better success. M. Carret does not hesitate to assert most positively that cast iron stoves are sources of danger to those who habitually employ them. General Morin speaks in the highest terms of M. Carret's memoirs, to which the recent experiments of MM. Trost and Deville give additional importance. These able investigators have established that iron and cast-iron, when heated to a certain degree, become pervious to the passage of gas. They have been enabled to state the quantity of oxide of carbon which may, as they suppose, transude from a given surface of metal, and have shown that the air which surrounds a stove of cast-iron is saturated with hydrogen and oxide of carbon. They conclude that cast-iron stoves, when sufficiently heated, absorb oxygen, and give issue to carbonic acid. General Morin related some comparative experiments which had been performed by M. Carret, and which, he said, corroborate this theory. Thus, after having remained during one full hour in a room heated to 40° (centigrade) by means of a sheet-iron stove, M. Carret perspired abundantly, got a good appetite, but felt no sickness whatever; he had obtained the same result with an earthenware stove; but the experiment, when performed during only one half hour with a cast-iron stove, had brought on intense headache and sickness.

Reports of Societies.

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

Sixty-Second Anniversary.

The Medical Society of the State of New York met, pursuant to statute, in the Common Council Chamber, City Hall, Albany, on the 2d day of February, 1869, at 11 A.M.

The Society was called to order by the President, Dr. J. V. P. Quackenbush, of Albany.

Prayer was offered by the Rev. Mr. Larimer, after which the President delivered the following

inaugural address.

Gentlemen of the Medical Society of the State of New York—The language of congratulation is the language which my heart prompts me to utter at this, the first meeting of our session of 1869. I congratulate the Society that so many of its permanent members and delegates have been permitted and inclined to come hither, to renew the acquaintanceships which have here been formed; to interchange the sentiments of friendship which they entertain for each other: to enter the arena of social combat to sustain their own opinions, or overthrow those of their opponents; to impart the knowledge they have acquired, and by the various means which our meetings afford, to add their individual efforts for the advancement of that science, in the interests of which this Society has been organized and sustained. I congratulate you, too, upon the fact, that by means of these annual sessions you are enabled to break away from your routine duties for a few days, and by mingling in social converse with your associates, to gain that relief from labor, and that recreation for body and mind, which gentlemen of our profession so much require. I would that I could continue to speak the words of congratulation, but I must cease, "for I am sent to you with heavy tidings." Since our last meeting death has entered our Society, and robbed us of one who then participated in our counsels, one who devoted his influence and his gifted intellect to the advancement of our science, and one, too, whom you have honored by having once chosen him to be your presiding officer.

Thomas C. Brinsmade is dead! Suddenly, in the midst of his labors, in the height of his usefulness, with his armor on, the shadows of death gathered round him, and he sank to his grave. Not a faculty of his mind was dimmed, nor were the cordial, honest, expansive sentiments of his soul in the least diminished with his increasing years. He was the upright man, the gifted gentleman, the honest adviser, the warm friend, and the good physician; and in the exercise of all these qualities of his noble mind, he continued actively engaged till his summons came

> "To join
> The innumerable caravan, which moves
> To that mysterious realm, where each shall take
> His chamber in the silent halls of death."

The memory of his many virtues remains. Let us imitate those virtues, and emulate the noble professional and social reputation he enjoyed. It will be proper for the Society to notice in a becoming manner his death.

The by-laws impose upon me the duty of making a communication to the Society, setting forth the condition of the medical profession in the State, with such suggestions in relation to its improvement as may seem appropriate. I can cordially adopt the remarks of my immediate predecessors as to the condition of our profession. The medical schools throughout the State are in a prosperous condition, and the system of instruction is becoming improved, and advancing to greater perfectness. The study of pathology is receiving more attention from the teacher and the student, and the use and advantages of the microscope are better understood and appreciated. In relation to the medical press, I announce with pleasure the establishment of two new periodicals: the *Monthly Medical Reprint*, and the *American Journal of Obstetrics*. There are now published in the State the *Buffalo Medical and Surgical Journal*, the *New York Medical Journal*, the Medical Record, the *American Journal of Insanity*, the *Quarterly Journal of Psychological Medicine*, the *Medical Gazette*, the *Monthly Medical Reprint*, and the *American Journal of Obstetrics*. I would call the attention of the Society to the great progress made in the use of the physical aids in the investigation and diagnosis of disease. Percussion and auscultation; the various forms of specula, such as the ophthalmoscope, the microscope, the endoscope, and more lately the laryngoscope, have all furnished most useful results, and added very materially to our knowledge of diseases by dissipating those false notions of physiology and pathology, which were founded upon mere theory and speculation. But while these aids have rendered essential service, they have failed in one particular, namely, the capability of recording their results, and rendering them permanent. This has been overcome in a measure by the sphygmograph, which with its pen traces the character of the pulse in different diseases, and this trace can be studied and investigated, not by him only to whom the patient has been present, but by all who view the trace after it has been made. Another instrument of this character is the dynamograph, which reveals to us the condition of muscular power and nervous energy, and which, like the sphygmograph, furnishes a written trace of the phenomena which take place under the influence of health and disease.

Another important advance has been made in pathology, in the method of representing the appearance of diseased organs. The pathological plates hitherto published, are apt to give false ideas of the size and aspect of the part represented. Their correctness has depended upon the skill of the artist; and it matters not how great that skill might be, it was impossible to give that appearance of solidity and depth to the picture presented by the specimen itself. Photography was first called upon to remedy this defect. It furnished the true outlines of the object, but failed in giving the necessary appearance of solidity, till by the means of the stereoscope a painting was obtained, which fully equals a view of the specimen itself, and now this pathological painting can be multiplied to any extent, and the instruction derived from it can be enjoyed by him who sees it, almost as well as by him who made the autopsy. The more minute tissues can now be studied by microphotography, and attempts are now being made to obtain stereoscopic views of the ultimate histological elements. The credit of calling to our aid the stereoscope in perfecting the photographic views of diseased organs, I am pleased to say, belongs to a member of our Society.

In offering suggestions in relation to the improvement of our profession, I would recommend that the different county societies wake up to greater and more extended usefulness. They can, and should, in all cases be sustained in such a manner as to conduce to the benefit of their individual members and the profession

at large. The meetings should be held more frequently than they are, and each member should feel under obligations to do his part in making these meetings both interesting and instructive. These meetings bring the members together, make them feel their individual responsibility, their common interest, and give them a position and power which they cannot possess when they remain separated, isolated, and divided. In union there is strength. Let the members of our profession become more united and thus more strengthened. Our State Society is directly interested in this, for as the standard of each county society is elevated, so will be the character and the influence of those whom they send here as their representatives. I would recommend that post-mortem examinations be made more frequently than they have been. This means of acquiring knowledge and promoting the interests of our profession has been too much neglected. In this county, and especially in this city, I am happy to say there has been a marked improvement, and more autopsies are now made in one month—or even in one week—than were once made in the whole year. The community seem more willing that these examinations should be made, and this feeling should be fostered. The public should be induced to think that they have an interest in these investigations, and that the investigations tend to benefit not only the profession, but it also. When these examinations are made, pathological specimens should be carefully obtained, and these specimens should be exhibited in the meetings of the county society, thus affording instruction to all the members, and causing them to take a deeper interest in their profession, and giving a better and more definite knowledge of the diseases which they are called upon to treat. A suggestion was made in 1867, that a revision of our by-laws should be made. In accordance with this suggestion a committee was then formed and continued the next year, and that committee, after much care and attention, have proposed a revision of the by-laws, which I doubt not will commend itself to the approbation of the members of this Society. This committee is entitled to the thanks of this Society for the time and attention which they have devoted to this subject.

I had intended to make some recommendation in relation to the election of officers, but the Committee on the proposed new by-laws have had the subject under discussion, and I think the change which they suggest will be one that is required.

I would call the attention of the Society to the subject of the unauthorized renewals of prescriptions by apothecaries, and to the sale and dispensing of medicines by persons who are not qualified for such work. This subject was brought to your attention by my predecessor. A committee was formed to consider the matter, and a report from this committee was transmitted to the Society, in a series of resolutions, in one of which "they recommended the appointment of a local committee to present, if practicable, the necessary documents to the present Legislature of the State of New York, to procure such legal enactments as shall accomplish the end desired." In accordance with this recommendation a committee was formed, and I would express the hope that that committee would attend to this subject and bring it to the attention of the Legislature at the present session.

In conclusion, gentlemen, I thank you for the honor you have conferred upon me in selecting me as your presiding officer. I shall endeavor to discharge in an acceptable manner the duties thus imposed, and in the performance of these duties I shall crave that indulgence which your partiality authorizes me to expect from you.

I would now announce that the Society is ready to proceed to the transaction of business.

Dr. Ellsworth Eliot offered the following, which was adopted:

Resolved—That the thanks of the Society are due and are hereby tendered to its President for his inaugural address, and that a copy thereof be referred to a committee of three to report what action should be taken in reference to the subjects contained therein.

The Vice-President, in accordance with the above, appointed Drs. E. Eliot, Burdick, and Jewett, as a committee.

Dr. J. V. Cobb then offered the following, which was also adopted:

Resolved—That the President appoint a committee of three to extend an invitation to the Governor, and such members of the Legislature as belong to the medical profession, to attend the meetings of this Society during its session.

Drs. Cobb, J. S. Bailey, and T. B. Reynolds were appointed the committee.

The President announced the following committees:

Business Committee—Drs. Sandford Eastman, W. C. Wey, and —— Odell.

Committee on Credentials—Drs. Saunders, Boulware, and Govan.

Committee on Medical Ethics—Drs. Bibbins, Chubbuck, and Calvin.

Committee on Receptions—Drs. March, Heusted, and Van Kleek.

Dr. March, on behalf of Committee on Receptions, introduced the following gentlemen delegates from other State organizations: Dr. Smalley, from N. H. Medical Society; Drs. O. S. Root and C. T. Collins, from Berkshire Medical Society; Dr. B. H. Catlin, from Connecticut State Medical Society; and Dr. W. G. Wheeler, from Massachusetts Medical Society.

The following gentlemen were, on motion, made members by invitation: Drs. R. J. O'Sullivan, of N. Y.; H. Knapp, of N. Y., late Professor in the University of Heidelberg; Wm. Fitch, Dryden, N. Y.; M. W. Townsend, Bergen, N. Y.; James L. Babcock, Albany, N. Y.; R. Frazier, Camden, N. Y.; W. M. McLaury, N. Y.; N. E. Sheldon, Glenn's Falls, N. Y.; M. L. Fitch and J. S. Reynolds, Saratoga, N. Y.; J. H. B. Whiton, Troy, N. Y.; R. H. Ward, Troy; W. T. Bassett, Jacksonville, N. Y.; H. S. Case, Albany, N. Y.; C. H. Porter, Albany, N. Y.; J. J. Flint, Fort Edward, N. Y.; E. G. Clark, Sandy Hill, N. Y.; J. O. Van Hoevenbergh, Kingston, N. Y.; F. W. Root, East Hamilton, N. Y.; S. S. Shultze, Danville, N. Y.; W. H. Craig, George T. Stevens, A. Vandeveer, —— Newcombe, and Traver, of Albany, N. Y.; S. Peters, Crescent, N. Y.; and H. S. West, Binghamton, N. Y.

Dr. Eliot, from Committee on President's Inaugural, offered the following report:

The committee to whom was referred the President's inaugural address, would recommend in regard to the death of Dr. Thos. C. Brinsmade, once President of this Society, that Dr. Geo. H. Hubbard be requested to read at this meeting the eulogium which he pronounced before the Rensselaer County Medical Society.

The recommendation was on motion adopted.

THE MERRITT H. CASH PRIZE.

Dr. Squibb, on behalf of Committee on Prize Essays, recommended the award of the Merritt H. Cash Prize to Dr. J. C. Hutchison of Brooklyn, for a paper on acupressure. Adopted.

PROPOSITIONS ON SLOUGHING, ETC.

Dr. Hutchison, from the committee on the case of

malpractice referred to at the last meeting, made the following report:—

The committee to whom, at the last meeting of the Society, was referred the consideration of a paper entitled "Propositions on Sloughing, with a case and its consequences," respectfully report:

That having examined the paper and the resolutions appended thereto, they find that these resolutions are in their main purport and significance correct, and so far as they understand the facts set forth in the paper, they believe them relevant to the case, and worthy of consideration.

The following are, in brief, the more important facts in the history of the case:

In the year 1871, on April 8th or 9th, the patient, John Sears, aged 15, sustained fracture of the femur. The surgeon, who presents the paper before mentioned, was called in April 10, and began treatment by means of the double-inclined plane. Coaptation splints were used over the broken bone, and a retaining roller-bandage from ankle to knee. The surgeon states that the same blow which produced the fracture, caused also "partial paralysis of the lower extremities." He also states that the general physical condition of the patient was bad, and that his surroundings were unfavorable to a successful issue of the case. April 12.—He found that in his absence the bandage had been removed on account of pain. The leg, however, appeared normal. He then removed the remaining dressings, and from that time forward they were never reapplied; the sole reliance for treatment being the double-inclined plane. This was done, he says, "through fear that the circulation was too feeble to bear the pressure of the bandage." A fracture bed was subsequently (no date given) used. May 12, thirty-three days after the first fracture, the patient suffered from refracture. The treatment employed before was continued, namely, the double-inclined plane, without bandages, "except sufficient to confine the foot to the foot-board." "A few days thereafter" (no date given) "there began symptoms of trouble in the calf of the leg, where it pressed upon the pad of the plane. This was the beginning of the sloughing. The surgeon attempted to relieve the leg by varying the point of pressure, first to the heel, then to the side of the foot, but wherever pressure was made, there the destructive process soon appeared. This condition of the leg persisted and progressed, the ultimate results being the loss of muscles of the calf, part of the heel and part of the side of the foot, anchylosis of ankle-joint, and great disfigurement of the limb. The soft parts covering the rest of the tibia were not attacked, and the greater part of the foot with the toes 'remained sound.'"

Before the fracture had reunited, or the ulcerations had healed, the case ceased to be under the observation of the surgeon.

In 1869, suit having been brought by Sears against the surgeon, a jury rendered a verdict in favor of the plaintiff, with $500 damages, on the ground that the surgeon had been guilty of malpractice in applying a bandage in such a way as to cause sloughing. Three surgeons, as experts, testified on behalf of plaintiff, and two on behalf of defendant; they holding diametrically opposite views as to the causation of the sloughing—one side saying that the bandage was the cause, the other side declaring that it could not be the cause. These are the leading facts in the history of the case, and while your committee recognize the great difficulty there must be in presenting facts with exactness and without bias, in any given case, on which report is made from memory, after a lapse of years, yet they believe there are sufficient facts here to warrant them in expressing an opinion favorable to the surgeon who presented the paper. This is especially so, when we emphasize the three following points:

1st. The interval of more than thirty days between the removal of the alleged offending bandage and the first appearance of sloughing.

2d. The unusual seat of the sloughing. Supposing, for the moment, that the bandage was the cause of the trouble, the point at which the sloughing began is the point which in the ordinary history of the disease is about the last to be attacked. Gangrene, from obstructed circulation, attacks by preference the toes or some part of the foot, and ulceration caused by undue pressure is likely to begin in those parts where the bone is least protected, namely, over the crest of the tibia.

3d. The manner in which the sloughing followed each successive attempt of the surgeon to vary the point of pressure, indicates that the grade of vitality of the parts was low, and that causes were at work to produce the sloughing, which were beyond the control of the surgeon.

Passing to the resolutions, which are appended to the paper, and which were presented to the Society for their approval, your committee commend so much of them as is included in the following propositions:—

1st. Sloughing when caused by a bandage too tightly applied from ankle to knee, begins ordinarily as a gangrene of the toes or other part of foot, and is the immediate result of obstruction to the venous circulation.

2d. Ulceration from undue pressure, occurring in the continuity of the leg, attacks by preference, those parts which are least covered by muscular and adipose tissues, i. e., over and along the crest of the tibia.

3d. The bad results of tight bandaging should be seen within a few days after its application; a delay of thirty days before symptoms of sloughing appears is entirely unprecedented.

4th. If after a bandage has been removed, any considerable time intervenes before sloughing takes place, its cause must be sought elsewhere than in the tight application of the bandage.

5th. Sloughing may occur, in cases of fracture of the femur, under the most skilful treatment.

6th. The conditions under which this is most likely to occur, are prolonged confinement to the bed, a depraved state of the system, and the concurrence of other diseases, by which the health and strength are impaired.

7th. In cases where these conditions exist, the weight of the limb alone, and of itself, may be a sufficient cause for the occurrence of sloughing at the point where pressure is being made.

Jos. C. Hutchison,
Saml. G. Wolcott.

The report was received and referred to the Committee on Publication, after which, on motion, it was adopted as an expression of the opinion of the Society.

Dr. Squibb, from the Committee on Pharmacology, made an interesting and elaborate report. Referred to Committee on Publication.

Dr. March presented a letter from Dr. C. A. Lee suggesting an alteration in the by-laws, in regard to a proposed change in the election of the President. Referred to the Committee on Revision of Constitution and By-Laws.

The Eulogy on Dr. Thomas C. Brinsmade.

The Business Committee submitted the eulogy upon the late Dr. Thomas C. Brinsmade, by Dr. George B. Hubbard, of Lansingburgh, N. Y., and recommend a departure from the usual custom of referring such com-

munications to the Publishing Committee, and that the paper be read by the author, on account of the high professional standing and elevated personal character sustained by our departed friend and brother, but chiefly from the fact that Dr. Brinsmade had been for many years a regular attendant on the annual meetings of the Society, and was honored by the highest office in our gift, being elected President of our Society.

Dr. H. Jewett, of Canandaigua, read a paper on the Apocynum Cannabinum.

An invitation, tendered by the President to the members and invited guests to meet him at his residence on Wednesday, at 9 P.M., was accepted with thanks, after which the Society adjourned to meet at 3 P.M.

First Day—Afternoon Session.

The Society met pursuant to adjournment at 3 P.M.

The meeting was called to order by the President.

At the suggestion of the Business Committee the minutes of the meeting were to be read every morning.

Dr. Geo. B. Bulkley, in accordance with the action of the morning, read his eulogy upon Dr. Thomas C. Brinsmade.

Spontaneous Lithotomy.

Dr. March read a paper, entitled Spontaneous Lithotomy, giving an account of a case in which a large-sized vesical calculus was discharged through an ulceration in the perineum.

The following was received from the State Dental Society:

"By a by-law the officers of the State Medical Society are made honorary members of the State Dental Society, which is now in session in the City of Albany. You are cordially and respectfully invited to the privileges of the floor."

On motion, the communication was received.

A Case of Exsection of Hip.

Dr. W. G. Wheeler, the delegate from the Massachusetts Medical Society, reported a case of exsection of the femur for morbus coxarius, in which, however, it did not appear that anything unusual occurred.

Ovarian Dropsy Cured by Tapping through the Vagina.

Dr. Corliss took occasion to continue his report of a case of ovarian dropsy tapped through the vagina, and to state that the patient was still living. The case has already been reported in full in the Record, pp. 481. Dr. C. expressed his conviction that tapping per vaginam in these cases would eventually supersede the more capital operation of ovariotomy.

Dr. White, of Buffalo, did not agree with Dr. Corliss in reference to the operation named by him, and believed that as each case must depend upon its own merits, ovariotomy must take the precedence. In that connection he referred to a patient that Dr. Miner of Buffalo had refused to operate upon on account of acute inflammation of the ovary. Dr. White subsequently tapped her through the vagina with at least temporary relief. This case, however, to his mind, proved only an exception to a general rule.

Dr. Bibbins referred to a case of spontaneous recovery from ovarian dropsy. A patient presented herself to him at the dispensary with a tumor to the left of the umbilicus. After a careful examination he came to the conclusion that the protrusion was not a part of the ovarian tumor, but a small abscess. He accordingly opened it, and to his astonishment the tumescence collapsed without any external discharge. In the course of a day or two adhesion took place about the incision, and a characteristic discharge was established. Subsequently an opening established itself in the groin. The patient soon passed out of his hands, and at the end of some years he found her perfectly recovered.

Dr. Wheeler, of Massachusetts, referred to a case of spontaneous rupture of an ovarian sac through Douglas' fossa, occasioned by riding over a very rough road. The patient eventually recovered.

The Certainty of the Operation for Vesico-Vaginal Fistula.

Dr. Nathan Bozeman next read a very elaborate paper on the certainty of the operation for vesico-vaginal fistula.

The Importance of Certainty in the Operation of Vesico-Vaginal Fistula, and the best Means of Securing the Greatest Success.

Dr. Bozeman, after stating that the maximum of success was 92 per cent. of all cases consecutively presented for treatment, endeavored to show from statistics the real difference in the results that had been secured with the usual forms of suture now in general use, including the double rows of interrupted silver suture and the button suture.

He said, although the above limit of success had not heretofore been quite reached with his button suture, still he believed it would be with the valuable aid afforded by his late improvement, consisting of a self-retaining speculum and a support and confining apparatus. This he said did away with the necessity of assistants, and enabled him now to operate successfully upon a small class of cases previously unmanageable. The most obvious results from those improvements, however, he thought would be seen in the diminution of the number of operations actually required, and of the consequent suffering of the patient.

In support of his statements, he then narrated five cases presenting seven fistulous openings, one a vesico-uterine, all of which had been cured at six operations, since the adoption of the two improvements above made. The size of the fistula and the peculiar adaptation of his suture required in each of these cases, he illustrated with models made of buckskin and the same buttons that had been used.

After summing up the results of these operations he called attention to the great value of the *linen list* which he had used a number of years as a means of diagnosis in cases presenting fistulæ so small as to escape the closest search with the probe, especially those opening into the cervical canal known as *vesico-uterine*. He also called attention to cases of fistulæ complicated with laceration of the anterior lip of the cervix uteri, and showed the importance of the procedure first adopted by him in their management.

His classification of fistulæ, which is an extension of that of Velpeau, he still thinks is preferable to any other that has been proposed, it being considered more in harmony with the anatomical peculiarities of the parts involved and the modifications required in his suture apparatus to suit individual cases.

Dr. T. A. Emmet remarked, in reference to some statistics of his hospital mentioned by Dr. Bozeman, that many of the cases reported as not benefited, had left the institution without giving a chance for operation.

The President announced the following as the Committee on Nominations:—1st District, Dr. Oliver White; 2nd District, Dr. J. Foster Jenkins; 3d District, Dr. Ferris Jacobs; 4th District, Dr. Potter; 5th District, Dr. Jno. P. Gray; 6th District, Dr. J. G. Orton; 7th

District, Frederick Hyde; 8th District, Dr. S. B. Corliss.

The case of Dr. W. K. Freeman *vs.* West Chester Co. Medical Society, was, in consequence of the death of chairman of committee of last year, Dr. Brinsmade, referred to the Committee on Ethics of the present year.

PAPERS BY TITLE.

The Business Committee presented the following papers by title. Obstetrical Statistics, by Dr. H. S. Clubbuck; Placenta Previa, by Dr. C. C. Gay; Biographical Sketch of Dr. F. D. Putnam, by Dr. H. S. Cheeseman; Purpura, by Dr. H. S. Crandall. They were severally referred to the Publishing Committee, as was also a paper on Cocaine, by Dr. O'Sullivan.

Dr. Biggins moved that Dr. Rogers of New York be allowed thirty minutes for the reading of an abstract of his paper on Opium and its salts. As Dr. Rogers was not a delegate the motion was lost by a very decided vote. The Society then adjourned until 8 P. M.

FIRST DAY—EVENING SESSION.

The Society met pursuant to adjournment at 8 P. M.

The Committee on the Revision of the Constitution and By-laws made their report, the different articles were severally discussed at length, and the report as amended was adopted. Want of space forbids us publishing the report in full.

SECOND DAY—MORNING SESSION.

The Society was called to order by the President, and prayer was offered by the Rev. Mr. Hackman.

The minutes of the first day's sessions were read and approved.

Dr. March, on behalf of the Committee on Reception, introduced the following medical gentlemen to the Society: E. Hutchman, Utica; W. H. Earlville, M. R. Peck, Glenn's Falls; E. S. Danster, N. Y. City; Wm. Vosburgh Lyons; Dr. Robert Loughran, of Kingston, Ulster Co., N. Y.; and Henry L. Sabine, Williamstown, Mass.

Dr. E. R. Squibb presented a biographical sketch of Dr. Dewitt C. Enos, of Brooklyn, which was referred to the Committee on Publication.

Dr. Teffts announced the death of Dr. A. B. Shipman, of Syracuse, and moved that a committee of three be appointed to draft suitable resolutions.—Drs. Teffts, Bradford, and Purple were appointed.

CONSANGUINEOUS MARRIAGES.

Dr. R. Newman, as Chairman of Committee on Consanguineous Marriages, made a report, which was received with thanks by the Society.

Dr. Geo T. Elliot, of New York, made some remarks upon the importance of the subject, and the necessity of continuing investigations, contending that those cases in which exception to the rule was taken, were examples only of triumph of vital forces over the well-acknowledged evils arising from a union of kindred blood.

The Treasurer then made his report.

Drs. Teffts, Bates, and Little were appointed an Auditing Committee.

Dr. Eastman, from Business Committee, introduced a resolution indorsing the action of the State Dental Society, in regard to the elevation of education of dentists.

GLAUCOMA.

Dr. Henry D. Noyes, of N. Y., made some very interesting remarks upon the subject of glaucoma. He stated that the disease was more common in females than males, generally occurred in persons of a gouty or rheumatic diathesis, and in those past the age of forty. The general symptoms of glaucoma simplex, which was the first form to be considered, were pretty well marked, and consisted in some pain in and around the eye, floating specks upon the field of vision, with a few phosphorescent appearances. As it generally occurs about the time for commencing the use of glasses, it is generally noticed that these require to be stronger than usual. There is also sluggishness of the pupil; but the most important external condition is a more or less well-marked hardness of the eye-ball to the touch, due to intra-ocular pressure from accumulation of fluid contents. Indirect or lateral vision becomes diminished, usually commencing upon the nasal side. The vessels of the exterior of the eye are somewhat tinged, the cornea is more or less insensible, and the iris has a muddy appearance. If an inflammatory element, acute or subacute, is superadded to this condition, the symptoms are proportionately exaggerated, and the course of the disease more rapid.

Ophthalmoscopic examination showed a sharp and abrupt depression of the optic disk, with pulsation and interruption of vessels at the surface and edge of the nerve.

The principal causes recognized were divided into two classes. 1. Those referring to a diseased condition of the sclerotic, similar to arterial atheroma; and, 2. To irritation in some portion of the fifth pair of nerves. He remarked, in this latter connection, that experiment had proved that irritation of the trifacial had the peculiar property of inducing a hyper-secretion of the fluids of the eye-ball.

The prognosis of the disease was always bad, leading to a disintegration of the internal tunica, except when an operation was made with the view of diminishing the internal pressure.

The operation advised in all the curable stages was iridectomy, performed through the sclerotic, as near as possible to the point of the origin of the iris. The incision was recommended to be large enough to occupy from one-fifth to one-sixth of the circumference of the iris. There was sometimes—on account of the relative displacement of the parts by the internal pressure—considerable difficulty in introducing the ordinary lance-knife, in which cases he recommended the employment of a straight, narrow knife.

In very acute cases of inflammatory glaucoma, he advised paracentesis of the eye, in accordance with Hancock's method; and for cases in which absolute blindness existed, extirpation of the eye was considered the *sine qua non*.

The advantages of iridectomy were, in his opinion, due very greatly to the permanent relief to internal pressure by the substitution of an elastic cicatrix in the place where it is most needed.

Drs. Rider, of Rochester, and Knapp, of New York, remarked upon the great utility of the operations spoken of, and of the importance of their early performance in arresting the progress of an otherwise intractable disease.

ACUPRESSURE.

Dr. J. C. Hutchison, of Brooklyn, next read his prize essay on acupressure, setting forth the great advantages of arrest of hæmorrhage by that means, describing the different methods, and exhibiting, by drawings, the direct effects of the needles upon the vessels.

Remarks were made upon the paper by Drs. March, of Albany; Wheeler, of Mass.; and Drs. Howard and Little, of New York.

SECOND DAY—AFTERNOON SESSION.

The President called the Society to order at the proper time, after which he added Dr. J. S. Mosher to the committee appointed last year on so much of the President's address as related to the legislative action on abortion. The committee now consists of Drs. Banks, Rochester, Lansing and Mosher.

PAPERS BY TITLE.

The Business Committee presented the following papers by title, viz.: biographical sketch of Augustus Willard, M.D., by William D. Purple, M.D.; a chart showing the influence of impure air and over-crowding on the health of the various wards in the city of New York, by Wm. Faulds Thoms, M.D.; and an obituary notice of Dr. Freeman Tourtellotte, by Dr. R. L. Allen.

TRICHINIASIS.

The following was submitted by the Business Committee:

The Business Committee having learned that a number of deaths from trichina have occurred in different localities in this State during the present winter, and that Dr. Hunn, of Albany, and Dr. Cobb, of Rome, have made some valuable observations on the subject, we therefore suggest that they be invited to communicate to the Society the result of their observations.

DISEASES OF ASIA MINOR.

DR. H. S. WEST, late of Asia Minor, read a paper entitled Medical and Surgical Experience in Asia Minor, which will be presented in abstract in a future number. After the passage of thanks by the Society for the paper, it was referred to the Publishing Committee.

INTRA-OCULAR TUMORS.

DR. H. KNAPP, of New York, made some remarks upon the different forms of intra-ocular tumors, with the intention of proving that in their study better facilities were offered for the clinical appreciation of growths in that locality, especially in regard to the significance of the appearances of malignancy under the microscope than in any other part of the body.

DR. NOYES related a case of intra-ocular tumor.

DR. MARCH introduced Dr. PERRY, from Oneida county, and Dr. Buckland, of Lansingburgh, to the Society.

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS.

The committee on the suggestions contained in the President's Address made the following report:

The committee to whom was referred the President's Inaugural Address, agree in his opinion that our county societies should "wake up to greater and more extended usefulness," and as one method to accomplish this result they would recommend for adoption the following resolution:

Resolved, That in every county, meetings should be held as often as every quarter, and wherever practicable, every month.

The committee would suggest that annual meetings for the election of officers and delegates should be held at county seats and the other meetings at such places in the county as each society shall think most advantageous.

The committee would also suggest that special efforts be made to enroll as members of county societies the names of all persons duly authorized to practise our profession who conform to the code of ethics of this Society, and that of the American Medical Association.

In regard to the unauthorized renewal of prescriptions by druggists, the committee are of opinion that for safety of the patient, and in justice to the physician, this practice as a rule should be discouraged, and should be forbidden where medicines are ordered which would produce serious results if used injudiciously. This subject has been discussed in many medical journals and societies, and many have recommended that our legislators should be asked to enact a law forbidding it without a written order from a physician. However just and wise such a law might be, the committee think that an appeal to our law-makers would be injudicious.

The communication sent to us by the New York Academy of Medicine, and referred to your committee, does not, in our opinion, call for any action on the part of this Society.

ELLSWORTH ELIOT, M.D.
HARVEY JEWETT, M.D.
FRANCIS BUDDICK, M.D.

After some discussion in reference to the practicability of the meeting of some county societies in the State, the report was adopted and referred.

DR. J. G. ORTON'S paper on "A Successful Case of Ovariotomy," was referred to the Publication Committee.

STANDING COMMITTEE ON HYGIENE.

DR. HUTCHISON offered the following, which, after eliciting much discussion, was adopted:

Resolved, That Dr. A. N. Bell be appointed a standing committee on hygiene to continue the plan of report expressed in Dr. Bell's last report, to be found on page 91 of the last volume of the Transactions, viz.: "to report upon and present such subjects as may seem to the committee of special importance for the administration of hygiene," and also to consider such subjects as may be referred to them by this Society.

LIGATURE OF EXTERNAL ILIAC FOR ANEURISM.

DR. MINER, of Buffalo, reported by invitation, a case of aneurism of the femoral and lower portion of the external iliac artery. The patient was admitted to the Buffalo General Hospital; was 33 years old; otherwise healthy. Tumor had been of three months' standing, was the size of the closed hand, the anterior surface being irregular in outline, and apparently so very thin as to be liable at any time to give way entirely. All other modes of treatment being considered inapplicable, the external iliac was ligatured in the usual way at its middle part, without delay or embarrassment, in presence of the class in the Buffalo Medical College, and nearly the entire medical profession of Buffalo. No unpleasant symptoms followed; the ligature separated from the vessel on the twenty-third day after operation, and at the present time the patient may be reported as cured, so far at least as this operation is concerned. About the time of the separation of the ligature, aneurism was noticed to be developing in the artery of the opposite side in exactly the same part of the vessel.

Remarks were made upon the disease of arteries, allowing of the formation of such disease by rupture of the inner and middle coats of arteries. He also spoke of the inapplicability of acupressure, and of the modes of operation.

Remarks on the case were made by Drs. March and Hutchison of Brooklyn.

DR. B. HOWARD, of N. Y., presented his manikin, devised for the purpose of illustrating the anatomy of hernia to students, and also a new truss.

The peculiarity of this truss is that the spring above the pad is widened and so bent as to some extent to serve as an abdominal supporter. Also by means of a series of holes in this end of the spring, with corre-

sponding holes in the back of the pad, the adjustment of the pad may be altered over an area of several inches—or other pads may be thus attached, securing a perfect fit during changes in the pads from growth or otherwise, without buying a new truss.

Report received with thanks, and referred.

NEW OPERATION FOR EXTERNAL URETHROTOMY.

DR. J. W. S. GOULEY, of New York, remarked upon a new operation for external urethrotomy, devised by himself. The publication of the remarks will be made in a future number.

DR. MANLIUS SMITH, through Dr. E. R. Squibb, presented a report on conium maculatum, which was, on motion, referred.

A CASE OF FAULTY DIAGNOSIS.—A LARGE ABSCESS, WITH SEVERAL SMALLER ONES, IN A COMMON SAC, ON POSTERIOR WALL OF UTERUS, MISTAKEN FOR FIBROUS TUMOR.—DEATH FROM RUPTURE INTO RECTUM.

DR. THOMAS ADDIS EMMET, of New York, reported the following case by title.

I beg to engage the attention of the Society for a few moments in the relation of a case, instructive from a false diagnosis, and of interest from its pathological character:

In November last, a female, aged twenty-nine, was admitted to the Woman's Hospital. She had given birth to her first child without complication, and remained in good health until some five years since, when she was delivered of twins, by a somewhat tedious but natural labor. Shortly afterward she consulted an eminent physician of New York, for the relief of a feeling of discomfort experienced whenever she assumed the upright position. Her difficulty was recognized as due to the existence of a fibrous tumor on the posterior wall of the uterus, and to its presence was attributed her previous tedious labor. Some two years afterward she gave birth to her last child by a natural labor, but one equally as tedious as the preceding one. Her recovery was slow, and she was confined to her bed for six weeks before she regained her strength. On resuming her household duties she became conscious that her local difficulties had increased, with for the first time a constant irritation of the bladder, aggravated whenever she stood on her feet for a short time. Three years ago she sought the advice of another physician, equally skilled, who confirmed the previous diagnosis. While her general health remained good, the irritation of the bladder gradually increased, until she came under my observation. I found a cystocele existing, which presented at the labia, and due to the crowding forward of an enlarged uterus toward the pubes, which was partially retroverted from a large nodulated fibrous tumor on its posterior wall. By placing the forefinger of one hand in the vagina, and with the aid of the other over the relaxed walls of the abdomen, I was able, with but little difficulty, to antevert the uterus without pain. As I elevated the cervix on the point of my finger while the fundus was thrown forward against the pubes, I pointed out to several of the gentlemen connected with the institution, with what facility the size and relation of the tumor to the uterus could be mapped out through the abdominal wall.

December 1, I operated for the relief of the cystocele, by turning in the excess of tissue and bringing together the denuded surfaces with interrupted silver sutures, as in the operation for procidentia uteri. By this means the vagina was restored to its original size, and a firm support given to the bladder. On the eleventh day the sutures were removed, and the line of union was found perfect, with the exception of half an inch near the neck of the bladder, where several sutures had torn out. In a few days she sat up without having had a bad symptom, but did not regain her strength rapidly. She was, however, entirely relieved of all irritation of the bladder, and considered herself cured.

On Friday, January 22, last, I closed, with four sutures, in a few moments, and without ether, the small opening, as a portion of the tissue turned in protruded, and I feared that this might cause the whole line gradually to separate. Nothing unusual occurred in her condition until Sunday afternoon, when she had a slight movement from the bowels, which was exceedingly offensive. Shortly afterward, the expression of the patient's face indicated the fact that some trouble was brewing, but without the existence of any indicative symptoms elsewhere. The pulse was 95 per minute, with the skin and tongue in a normal condition, and the abdomen was found free from tenderness on pressure.

No change took place until five o'clock, Monday afternoon, when suddenly she had two copious and fetid evacuations per rectum. The pulse rose rapidly to 170, the tongue was soon dry, the body covered with a clammy sweat, and she sank into a profound collapse. By means of stimulants, heat to the extremities, and with constant friction to the surface of the body, continued during the night, she partially rallied. During Tuesday her condition improved somewhat, but about seven P.M. she suddenly had another large evacuation of offensive pus from the bowels. She sank rapidly, and died shortly afterward.

The following morning a post-mortem examination was made. On opening the abdomen the peritoneum was found in a healthy condition. The supposed fibrous tumor proved to have been a large abscess, with several smaller ones in connection, between the peritoneum and uterus, several of which had opened into the rectum. These abscesses were encysted within a common sac, and free from adhesions above, except at one point to a portion of the small intestine, in the separating of which for removal, the large sac was entered. The other adhesions extended along the bottom of the cul de sac, from the uterus to the rectum. Some thickening of the left broad ligament had resulted from a previous attack, but the surrounding tissues were entirely free from any appearance of recent inflammation. The other organs were in a healthy condition; the brain was not examined.

In regard to the diagnosis, I fear that I would be liable to fall into error in a similar case, presenting no previous history more to the point, with the patient in good health, the uterus somewhat enlarged, and with menstruation more profuse than natural. The absence of fluctuation was due to the density of the outer cyst, while the mobility of the uterus, the mass in connection with it, and its nodulated surface, added greatly to the deception. My diagnosis was made after a careful examination, and without any knowledge whatever of the opinions which had previously been given in her case. In fact, I did not learn until after her death, that she had consulted these gentlemen; and did so from her friends, in the endeavor to trace her previous history in regard to the formation of the abscesses.

In recapitulation, the point of interest in her case lies in the fact that she had been a healthy woman, attending to her daily duties for at least three years previous to admission, suffering during that time from no inconvenience beyond that to be attributed to the existence of the cystocele, which was entirely relieved by the operation. She dated the beginning of her troubles to the birth of twins five years ago; and to

the fibrous tumor, detected shortly afterward, it was thought her tedious labor was due. Her difficult labor two years afterward would be naturally explained by the presence of the mass behind the uterus, which was also pronounced at this time a fibrous tumor. Since that time, during three years previous to my first examination, the irritability of the bladder was constant, except while in the recumbent position. The inference is therefore a natural one, that a mass had existed behind the uterus for at least five years. The question as to its character at once presents itself—either these abscesses formed after labor, or they were a result of the breaking down of a fibrous tumor, producing no constitutional disturbance or recognized local inflammation. From my examination of the specimen, my impression is that they were primary abscesses, for I am not aware that such a change taking place in a fibrous tumor has been placed on record, except as the result of violence. It is a point, however, which I must leave to be determined by the pathologists.

Mr. E. S. M. Hays, photographer, of Albany, presented some stereoscopic views of morbid specimens.

Moved that the Society meet to-morrow morning, at nine o'clock.

Dr. Corliss made some humorous remarks concerning the progress made in medicine during the last twenty months, after which,

Dr. Samuel Peters, of Cresent, remarked upon the great utility of the let-alone treatment in typhoid fever, and recited a case in point.

Adjourned to meet at 8 P.M. in the Assembly Chamber, to listen to the address of the retiring President.

Second Day—Evening Session.

The Society met in the Assembly Chamber, at 8 P.M., to listen to a very interesting and eloquent address by the President, Dr. J. V. P. Quackenbush, "On Individual Effort." Sketches of the lives of the pioneer discoverers in medicine were given, for example: Jenner, Harvey, Laennec, Bright, and others; and it was urged that each individual, however humble in the ranks of medicine, was expected, for the honor of his calling, to make his mark.

At the conclusion, on motion of Dr. Bissell, of Utica, a vote of thanks was tendered, after which the Vice-President announced that a telegram had just been received from the State Society at Michigan, which the Secretary read as follows:

A telegram from Michigan State Medical Society.

"The undersigned, in the name of the Medical Society of the State of Michigan, send fraternal greetings to the Medical Society of the State of New York. Health and happiness to its members, and durability to their honorable and ancient organization.

"Z. Pitcher.
"Wm. Brodie."

The reading was received with great enthusiasm and applause, and a motion was immediately made to authorize the President and Secretary to send a suitable reply to the same.

The answer.

The following was accordingly sent:

"The Medical Society of the State of New York have instructed the President and Secretary to acknowledge the receipt of the telegram from the State Medical Society of Michigan, which was announced immediately after the delivery of the presidential address at the Capitol.

"This fraternal greeting from a distant sister State demonstrates a triumph of modern civilization, the brotherhood of medicine, and renders instantly apparent that warm current of affectionate professional sympathy which distils its benign influences over the hearts of men, as the Gulf-stream over the climates of distant countries.

"J. V. P. Quackenbush.
"Wm. H. Bailey."

Third Day—Morning Session.

The meeting was called to order by the President.

Prayer by the Rev. S. P. Sprecher.

The minutes of the previous meeting were read and approved.

Dr. Tefft presented some resolutions in regard to the death of Dr. A. B. Shipman, of Syracuse.

The Committee on Statistics, through Dr. J. G. Orton, reported progress.

Drs. Samuel Hart and J. H. H. Burge reported by letter as delegates respectively to the New Jersey Medical Society, and the State Medical Society of Rhode Island.

Freeman *vs.* Westchester County Medical Society.

The following report of the Committee on Ethics was submitted by Dr. Bibbins, Chairman.

The Committee on Ethics ask leave to submit the following report:

That a meeting of the Committee was held at room No. 63 Stanwix Hall, on Wednesday Morning, February 3, 1869, commencing at 9 1-2 o'clock.

All the members of the committee were present.

The case of the Westchester County Medical Society against Dr. Norman K. Freeman, brought before this Society on appeal, and referred to the committee, was, in accordance with notice to the parties interested, made the subject of consideration. Dr. Freeman appeared in his own behalf, and the Westchester County Medical Society was represented by Dr. G. J. Fisher. Both parties desired and were allowed a full hearing.

The Committee find that the facts pertinent to the case are the following:

I. That at a meeting of the above-named County Society held October 22, 1867, at Sing Sing, a charge was brought against Dr. N. K. Freeman by Dr. J. Curry, which was referred to the Censors of said County Society for investigation, and report at the next meeting of the Society. The charge is as follows:

"I charge Dr. Norman K. Freeman, of Morrisania, who is now a member of this Society, with irregular practice of medicine—with conduct derogatory to the honor and dignity of the medical profession.

"James Curry, M.D."

II. That Dr. Freeman admits service of the notification of said charge on November 6, 1867.

III. That the Censors of said County Society awarded Dr. Freeman a hearing at Pleasantville on November 7, 1867, and notified him of their intention to report upon the subject at the next meeting of the Society, to be held at Peekskill, on the 26th of the same month.

IV. That said County Society heard the report upon said subject at its meeting November 26, 1867, and Dr. Freeman not appearing and not communicating to the Society any reason for his absence, unanimously expelled him from its membership.

V. That the appellant alleges as the cause of his absence, attendance upon his father residing in Central New York, who at that time was very ill, and that the reason of his apparent default in the case was inability to report from interruption of telegraphic communication.

VI. That Dr. F. has never made formal application

to said County Society for a reopening of his case on the ground of the alleged unavoidable absence.

VII. That the questions properly existing between the said County Society and Dr. Freeman are, whether, since April 7, 1856, the date of the enactment of a law applicable to county medical societies, the latter has violated the Code of Ethics of the Medical Society of this State, and the American Medical Association, by intentionally conveying to persons in the community where he resides the idea that he is at times a homœopathic practitioner; and, second, whether he has wrongfully represented himself a member of the American Medical Association. The decision of the former question rests upon these particulars.

Dr. Freeman *admits*,

First, That in his own neighborhood an impression prevails that he practices homœopathically.

Second, That the carriages of wealthy families who are homœopathists have, in not a few, but many instances, been driven to his office, under the belief that he was a homœopathic physician.

Third, That while he maintains to all that he is a regular physician, he claims to be free to do as he pleases in his intercourse with believers in homœopathy.

Fourth, That he has purchased globules of sugar of milk, by the pound, from the Homœopathic Pharmacy in New York city.

And it must be added, that when Dr. Fisher reported as Dr. Freeman's statement before the Censors that he used these homœopathic globules in his practice to induce his children patients to take the medicine which he prescribed for them, Dr. F. offered no denial of the allegations.

With respect to the second question, has the appellant wrongfully represented himself a member of the American Medical Association? The Committee, from the admissions of Dr. Freeman and the information furnished by the Westchester County Medical Society, have to reply affirmatively. They have explicitly to say, judging from the declarations of the appellant, that he has never been a member of the American Medical Association, and was culpable in erroneously styling himself, either through gross ignorance, or with intention of deceit, a member of said Association.

From these considerations the Committee unanimously recommend confirmation of the action in the case in question of the Medical Society of Westchester County.

TRICHINÆ.

Dr. E. R. Hun, of Albany, made interesting statements regarding trichinæ, giving cases under his observation in the city of Albany.

It was moved and carried that the remarks of Dr. Hun be reduced to writing, and referred to Publication Committee.

Dr. March read a letter from Dr. W. B. Atkinson, Secretary of American Medical Association, regarding the delegates to New Orleans.

DR. CORLISS'S PRIZE FOR ESSAY ON PHTHISIS.

Dr. H. Corliss, of Greenwich, Washington County, made remarks regarding a prize essay.

Moved by Dr. Squibb, as a member of the present Committee on Prize Essays, and in consideration of the possible absence of members of the new committee, that an accurate phonographic report of the remarks of Dr. Corliss upon the subject of his prize for an Essay on Tubercular Consumption, be entered upon the minutes *in extenso*, and a copy of them be given to the Chairman of the Committee on Prize Essays, as the precept of that committee in fulfilling the objects of the donor's liberality in offering this prize. Adopted.

The following papers presented by their titles:—1. *A Memoir of the late Dr. William Rockwell*, of New York, a permanent Member of this Society. By Dr. J. R. Vankleeck, Censor of Southern District. 2. *Report of Censors of Southern District*, on the Examination of a candidate for License. By Dr. J. R. Vankleeck. Obstetrical Statistics; from the Practice of the late T. W. Blatchford, M.D. By R. H. Ward, M.D., of Troy. Referred to Committee on Publication.

R. S. Stiles, of Brooklyn, made report as delegate to the Medical Society of Pennsylvania.

Dr. Shultz, delegate from Pennsylvania State Medical Society, made very interesting remarks.

Dr. J. P. Gray offered the following:—*Resolved*, That the thanks of the Society are hereby tendered to the Rev. Mr. Loramer, Rev. Mr. Harkman, and Rev. Mr. Sprecher, for services as chaplains to the Society during this session. Adopted.

By Dr. Bibbins:—*Resolved*, That the thanks of the Society be presented to the Common Council of this city for the gratuitous use of their Hall during the present session of the Society. Adopted.

On motion of Dr. S. Eastman:—*Resolved*, That the thanks of the members of the Medical Society of the State of New York be and are hereby tendered to the President, Dr. J. V. P. Quackenbush, for the kind and generous hospitality extended to them at his residence, on Wednesday evening, Feb. 3, 1869. Adopted.

On motion of Dr. W. C. Wey:—*Resolved*, That the thanks of the Society be tendered to the President, Dr. J. V. P. Quackenbush, for the able, dignified, and impartial manner in which the duties of the chair have been discharged. Adopted.

On motion of Dr. Odell, a vote of thanks was extended to the Secretary, Dr. William H. Bailey, for the faithful manner in which he has discharged the duties of the office. Adopted.

OFFICERS FOR THE ENSUING YEAR.

The following report of the Nominating Committee was then received.

The Committee on Nominations have the pleasure of reporting to the Society

For President.

Dr. James P. White, of Buffalo.

For Vice-President.

Dr. George Burr, of Binghamton.

For Secretary.

Dr. Wm. H. Bailey, of Albany.

For Treasurer.

Dr. John V. Lansing, of Albany.

For Censors.—Southern District.—Drs. Edward R. Squibb, of Brooklyn; Samuel T. Hubbard, of New York; N. C. Henstead of New York. Eastern District.—Drs. B. P. Staats, of Albany; P. McNaughton, of Albany; C. C. Covell, of Stamford, Delaware Co. Middle District.—Drs. M. M. Bagg, of Utica; C. B. Coventry, of Utica; Jenks S. Sprague, of Cooperstown, Otsego Co. Western District.—Drs. Sanford Eastman, of Buffalo; Edward Hall, of Auburn; Alexander Thompson, of Aurora.

For Committee on Correspondence.—1st district, Dr. Jerome C. Smith, of New York; 2d district, Dr. Wm. Govan, of Stony Point; 3d district, Dr. Orson M. Allaben, of Margaretsville; 4th district, Dr. Samuel Peters, of Saratoga; 5th district, Dr. A. Van Dyke, of Oswego; 6th district, Dr. J. G. Orton, of Binghamton; 7th district, Dr. Harvey Jewett, of Canandaigua; 8th district, Dr. Sanford Eastman, of Buffalo.

For Permanent Membership.—1st district, Drs. John R. Van Kleek, of New York; James L. Banks, of New York. 2d district, Drs. J. S. Wigton, of Spring Valley; Darling B. Whitney, of Queens. 3d district, Drs. C. H. Porter, of Albany; H. B. Whiton, of Troy; 4th district, Drs. J. J. Flint, of Fort Edward; M. L. Finch, of Jonesville, Saratoga Co. 5th district, Drs. Wilson T. Bassett, of Jacksonville; James B. Murdock, of Oswego; 6th district, Drs. W. C. Wey, of Elmira; S. H. Herrington, of Chenango Forks; 7th district, Drs. Daniel W. Burdick, of Cortland; William T. Swart, of Ontario; 8th district, Drs. M. W. Townsend, of Bergen; Julius M. Miner, of Buffalo.

Eligible for Permanent Members.—1st district, Drs. Nathan Bozeman, of New York; George T. Elliot, of New York; R. Cresson Styles, of Brooklyn; —— Barbour, of Brooklyn; James L. Little, of New York; Benjamin Howard, of New York; J. S. W. Gouley, of New York. 2d district, Drs. T. B. Smith, of Tappan; M. R. Holbrook, of Poughkeepsie. 3d district, Drs. John Calhoun; James S. McLarry; James S. Bailey, of Albany. 4th district, Drs. John Parr, of Buell; Hiram McNutt, of Warren; Asahel Perry, South Eastern, Washington Co. 5th district, Drs. Walter Booth, of Boonville; T. S. Green, of Parish; T. S. Low, of Oneida. 7th district, Drs. S. McFarland, of Oxford; Dwight S. Chamberlin, of Lyons. Wayne Co. 7th district, Drs. James W. Wilkin; E. S. Smith, of Yates; Lyman Congdon, Tompkins. 8th district, Drs. J. R. Cotes, of Batavia; J. R. Lathrop, of Rochester, Thos. F. Rochester, of Rochester; Rufus C. Reynolds, of Rochester; William W. Ely, of Rochester; George Swinburn, of Rochester; E. M. Moore, of Rochester.

Honorary Members.—Sir James Y. Simpson, Scotland; Dr. Theodore K. Varick, of Jersey City.

Eligible for Election for Honorary Members.—Drs. Henry S. West, of Asia Minor; John H. Webb, of Texas.

Delegates to National and Quarantine Conventions.—Drs. Elisha Harris, of New York; John H. Griscom, of New York; John Swinburne, New York; John W. Green, of Long Island; Alden March, of Albany; Stephen Smith, of New York; A. N. Bell, of Brooklyn; Franklin B. Hough, of Lewis Co.; John Ordronaux, of Long Island; W. F. Thoms, of New York.

Delegates to Connecticut State Med. Society.—Drs. Henry D. Bulkley, of New York; Samuel T. Hubbard, of New York; H. D. Dalema, of Syracuse; George W. Bradford, of Homer; Drs. J. R. Chamberlain, of Madison; Nathan Bozeman, of New York; Geo. F. Shrady, of New York; James L. Banks, of New York; John Fowler, of Geneva; Alex. H. Thompson, of Aurora; Geo. J. Fisher, of Sing Sing; Francis Burdick, of Johnstown; John Root, of Batavia; Solomon Bassett; Andrew T. Doolittle, of Herkimer; D. P. Bissell of Utica; Ellsworth Eliot, of New York; J. Foster Jenkins, of Yonkers; Thos. Hun, of Albany; Lewis A. Sayre, of New York; Jas. K. Bellows, of Norwich; A. Van Dyke, of Oswego; John H. Wheeler, of Athens; A. E. Varney; P. Stewart; N. Nivison; C. C. Wycoff.

Delegates to Massachusetts State Medical Society.—Dr. Wm. Govan, Stony Point; Dr. Francis Burdick; Dr. J. C. Hutchison, Brooklyn; Dr. Benj. Howard, Brooklyn; Dr. James L. Little, New York.

Delegates to New Jersey State Medical Society.—Dr. Ferris Jacobs; Dr. Frederick Hyde, Cortland; Dr. H. S. Crandell; Dr. J. G. Orton, Binghamton.

Delegates to New Hampshire State Medical Society.—Dr. M. R. Holbrook, Poughkeepsie; Dr. Geo. B. Hubbard, Troy; Dr. E. R. Peaslee, New York; Dr. W. B. Bibbins, New York.

Delegates to Vermont State Medical Society.—Dr. Thompson Burton, Fultonville; Dr. Joseph Bates, New Lebanon; Dr. Morgan Sneyder, Fort Plain.

Delegates to Pennsylvania State Medical Society.—Dr. Caleb Green, Homer; Dr. Robert Frazer; Dr. Sandford Eastman, Buffalo; Dr. Wm. Lamont.

Delegates to Ohio State Medical Society.—Dr. C. C. Wyckoff, Rochester; Dr. Thos. F. Rochester, Rochester; Dr. J. F. Miner, Rochester; Dr. H. W. Dean, Rochester; H. H. Langworthy, Rochester.

Delegates to Maine State Medical Society.—Dr. E. F. S. Arnold, Yonkers; Dr. Moses C. Hasbrouck, Rockland; Dr. E. W. Bottom.

Delegates to Rhode Island State Medical Society.—Dr. George J. Fisher, Sing Sing; Dr. J. H. H. Burge, Brooklyn.

Delegates to Illinois State Medical Society.—Dr. Hiram Corliss, Washington county; Dr. Hiram N. Eastman, Geneva; Dr. Daniel G. Thomas.

Delegates to American Medical Association.—Dr. Geo. Burr, Binghamton; Dr. Lake I. Tefft, Onondaga; Dr. Alden March, Albany; Dr. A. N. Bell, Brooklyn; Dr. Wm. C. Wey, Elmira; Dr. Wm. H. Bailey, Albany.

Committee on Statistics.—1st district, Dr. Wm. F. Thoms; 2d district, Geo. J. Fisher; 3d district, Dr. C. H. Poster; 4th district, Dr. Alex. M. Vedder; 5th district, Dr. A. L. Saunders; 6th district, J. G. Orton, Chairman; 7th district, Dr. N. Nivison; 8th district, Dr. L. B. Cotes.

Committee on Prize Essays.—Drs. Edward H. Parker, Poughkeepsie; J. Foster Jenkins, Yonkers; Edward L. Beedle, Hyde Park.

Committee on Publication.—Drs. Thomas Hun, Jacob S. Mosher, Wm. H. Bailey.

Committee on By-Laws.—Drs. Oliver White, Thomas Hun, Wm. H. Bailey.

Respectfully submitted,
J. G. ORTON, Secretary.

O. WHITE, Chairman.

The President, Vice-President, Secretary, and Treasurer, were separately balloted for, and elected as per nomination.

The Society then adjourned to meet the first Tuesday in February, 1870.

THE SUN AS A GLASS-STAINER.—Glass is generally supposed to be one of the most unchangeable of chemical compounds, and that its single weak point is frangibility. Recently, Mr. T. Gaffield, of Boston (*Chemical News*), has shown that nearly all kinds of window-glass, at least, become altered in color, and that the change is not superficial, but extends wherever the light penetrates. Some specimens show a change in a few hours of exposure, while others hold out for years. The tints seem to be limited to purples and yellows, the purples running from pale lavender into lilac, mulberry, flesh, amethyst, rose, violet, pink, and deep purple, and the yellows through all shades of light lemon to the brightest gold color. M. Pelouse has found that glass which has been stained by sunlight is bleached by an exposure to a red heat, and that the successive coloring and bleaching may be carried on indefinitely. From these facts photographers and green-house proprietors have opportunities to learn that they are of practical importance.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, JAN. 13, 1869.

DR. WILLIAM B. BIBBINS, President, in the Chair.

THE Committee on Microscopy reported upon the two specimens referred to at the previous meeting. The one exhibited by Dr. Clark was declared to be chronic pneumonia; the other, presented by Dr. Newman for Dr. Hutchison, was found to be a simple chronic inflammation of the tunica vaginalis, the testicle itself being perfectly sound.

DR. FINNELL presented several specimens removed from coroners' cases, for which he was indebted to Dr. Joseph Cushman, Deputy Coroner.

NUTMEG LIVER.

The first was a fine example of nutmeg liver, taken from a German, who had been a notorious wine and lager-bier drinker. He had been suffering from ill health for the past two years, and finally died comatose. There was no dropsical effusion present. The kidneys were enlarged and diseased.

AN EMBALMED HEART.

The second specimen was the heart removed from the body of Dr. Adam Zinker, who died of pneumonia. The body was embalmed by the infusion of gas into the vessels, the nozzle of the syringe being introduced into the posterior tibial artery, in the neighborhood of the malleolus.

The heart was exhibited to show its perfect state of preservation at the end of twelve days. During all that time it had been exposed to the atmosphere, and it was to all appearance as fresh as when first removed.

ATHEROMATOUS DEPOSIT IN MITRAL VALVES.

The third specimen was also a heart taken from the body of a female, sixty years of age, who was found dead in her bed. The only lesion discoverable was atheromatous deposit in the mitral valves. The head was not examined.

STATE OF LEFT PULMONARY VEIN.

The next and fourth specimen consisted of the lungs and heart removed from a man who died of a stab wound of the left pulmonary vein. Death was instantaneous. The wound through the integument was a simple cut on the outside, and was angular on the inside.

PLACENTA PRÆVIA—DEATH FROM NEGLECT.

The fifth specimen was one of placenta prævia. The patient was seized at full term with labor pains, which continued for nearly twelve hours, at the end of which time death took place from hæmorrhage. She was attended by an ignorant midwife. The child was only removed at the autopsy. The placenta was found attached over the internal os.

SUB-ARACHNOID APOPLECTIC EFFUSION.

The seventh specimen was a brain, showing a sub-arachnoid apoplectic effusion over the under surface of the cerebrum and cerebellum, removed from a female aged fifty, who was found dead in her bed. She had enjoyed previous good health. Both Fallopian tubes were occluded and distended with fluid. The gall-bladder was literally packed with gall-stones of different sizes.

INFANTICIDE BY STRANGLING—AN INSTANCE OF MATRIMONIAL INFIDELITY.

The eighth and last specimen was an infant that had been strangled shortly after its birth. The mother of the child married a man when she was six months pregnant by another, and her husband being in blissful ignorance of her condition, lived with her in peace and quiet until the full time of delivery arrived, when, returning from his work in the evening, to his surprise he found the police in possession of his house, in consequence of a well-grounded suspicion of infanticide on the part of his wife.

Shortly after her husband left the house that morning, the woman became subject to what she termed "colicky pains," repaired to the water-closet, and gave birth to the infant. It was afterward fished from its foul tomb and carefully examined. The mark of a cord was discovered around the neck, and the lungs on examination clearly proved that the child had been alive at the time of its birth. The parietal bones showed at different points evidences of that imperfect ossification occasionally supposed to be due to cranio-tabes.

THE LOOSE LIGATURE.

DR. HOWARD presented a number of specimens of ligatured arteries in the sheep, tending to prove the benefits of a loosely applied silver wire in arresting the current of blood and occluding the vessel. A detailed statement of his experiments will be published in due time.

On the motion of Dr. SAYRE, the whole subject was referred to a committee, consisting of Drs. Post, Hutchison, and Krackowizer.

INTERESTING TUMOR OF BRAIN WITH UNIMPAIRED INTELLECT.

DR. HUTCHISON exhibited an interesting tumor of the cranium, removed from an unmarried female teacher, aged forty-three years. She entered the Brooklyn City Hospital on the 20th of December last. She stated that she had always enjoyed good health, with the exception of occasional attacks of asthma. There was no hereditary disease in her family, so far as ascertained. Her father died of heart disease, and her mother and brothers were still living. In the fall of 1866, she received a blow upon her forehead, which caused her no inconvenience at the time. Six months subsequently a tumor began to make its appearance at the edge of the hairy scalp, at the left of the median line of the frontal bone. For the first six months it grew slowly, then for a period of two months with great rapidity, and then slowly again as before. The growth gave rise to no symptom save nausea. At the time of admission to the Hospital it was about the size of a large orange, was conical in shape, and extended from the orbit upward to the hairy scalp, and from the median line of the frontal bone to the anterior border of the temporal. It was perfectly smooth, and was so elastic to the feel as to excite the suspicion that it contained a fluid. Around the base of the tumor was a well-recognized bony ridge, more raised from

the surface of the bone at one point than another. Pressure upon the growth gave rise to sensations similar to those when the brain itself suffers pressure. It was, withal, rather sensitive to the touch, rendering a thorough examination of it impossible without anæsthesia. She had come to the institution on the advice of her family physician to have the tumor removed.

A consultation was held, but no definite conclusion was arrived at as to the nature of the tumor, but a decision was made in favor of a removal. Accordingly on the 5th of January the patient was anæsthetized for the operation. An exploring trocar was introduced, but nothing but blood escaped. A vertical incision was made through the skin, the pericranium was turned off, and the tumor exposed. A small portion was taken from the convexity of the growth and placed under the microscope, but owing to a deficiency of light, the day being a very dark one, no satisfactory opinion as to its nature could then be determined. The base of the tumor was then surrounded by the chain of the écraseur, and the removal was accomplished in thirty-five minutes. Considerable hæmorrhage followed over the whole of the incised surface, necessitating the free use of Monsel's solut on to control it. Examination now proved, what became evident during the operation, that the growth was from within the calvarium. The wound was left open, and a compress applied waiting the complete arrest of the hæmorrhage, and subsequently this was replaced by cold water dressings.

After the operation, the patient rallied very well, and remarked that her appearance would be very much improved as the result. She soon after, however, became very restless, so that at the end of five or six hours it was thought expedient to make use of a hypodermic injection of fifteen minims of Magendie's solution of morphine. She soon after fell into a sleep, which became stertorous and assumed all the characters of opium poisoning. A hypodermic injection of fifteen minims of belladonna was next made in the course of six hours, with no apparent effect; the coma, which had been gradually coming on, began to grow deeper, and continued to do so until the fortieth hour after the operation, when death ensued.

The post-mortem was made ten hours after death. Rigor mortis well marked; body well nourished. The brain alone examined, was found healthy in structure, but its right anterior lobe displaced and pressed backward by the existence of a large tumor (ovoid in form), having on its posterior and inner aspect a teat-like projection, an inch or more in length, the tumor resting upon the supra-orbital plate of this side, and occupying the convexity of space along the frontal bone above as far back as the coronal suture, and below to nearly the optic foramen, bounded on its inner surface by the fissure of Sylvius and the falx. Its investing membrane was a reflection of the dura-mater, leaving the bone at its point of exit through the skull, the tumor having pierced the same in an annular opening, two and a quarter inches in diameter, taking before it, as its outer investment, the pericranium; the portion removed in the operation was the external development of this structure.

In conclusion, Dr. Hutchison remarked that it was singular that, with all this immense pressure upon the brain, there should be no other disturbance than simple nausea, the intellect itself being allowed to remain, until after the operation, unimpaired.

Dr. Cutter exhibited two specimens of epulis removed from the lower jaw; one from a boy, ten years of age, from between the incisor and bicuspid of the left side; the other from the same locality, from a lady, sixty years of age. The former tumor had existed for three years, and the latter for fifteen. Neither occasioned any special inconvenience by its presence. Both were removed with the bone forceps.

ENLARGED GALL-BLADDER MISTAKEN FOR FLOATING KIDNEY.

Dr. Loomis presented an enlarged gall-bladder which had been removed from the body of a German, seventy years of age, who had been admitted to Bellevue Hospital on the 4th of the November previous. The patient stated that he had been perfectly well until three months before, when he noticed that he was getting yellow, that he began to lose flesh, and that his strength ran down. Two weeks before his admission, his feet became œdematous, so that five days before he gave up for sick he was unable to follow his occupation of a shoemaker.

When examined, he was deeply jaundiced; was stupid and disposed to sleep, yet easily aroused; his intellect was dull, and his pulse one hundred, and very feeble. His urine was passed in about normal quantity, contained no biliary salts, no albumen, and no casts. Physical examination revealed a mitral regurgitant murmur, with hypertrophy, and rude respiration over the whole of both lungs. There was hepatic dulness from an inch below the right nipple to two inches below the free ribs. The lower border of the liver was sharp, thin, and tender on pressure. In the right iliac region was a swelling which could be distinctly felt, easily grasped, and which was not tender to pressure. The patient said that it gave him a sensation rather of uneasiness than pain. This tumor was very movable, did not seem to be attached anywhere, could be carried over to the umbilicus, backward in the lumbar region, and downward to the crest of the ilium; and it had the feel and shape of the kidney.

It was a matter in diagnosis which attracted the attention of nearly all of the visiting staff. The diagnosis was made by some of movable kidney, by others of dilated gall-bladder, by others of omentocele, and by others of cancer of the liver.

The man seemed to improve for the first few days after admission, but soon became more stupid than before; then a pericardial friction sound developed itself on the 20th of December, followed on the 2d of January by a pleuritic friction sound; then he went into a typhoid state, became more deeply jaundiced, passed into a coma, and died on the 4th of January.

At the autopsy, the tissues were found deeply stained with bile. The lobules of the lungs were studded with deposits of cheesy pneumonia, and there were tubercles within and underneath the pleura. The heart weighed ten ounces, and the pericardial sac contained plastic exudation of recent origin. The peritoneum was studded with tubercles, and in its cavity there was some fluid effusion. The liver weighed three pounds and a half, was of a deeply bronzed hue, and on cutting into it the hepatic ducts were found distended with bile of the same color. *In the site of the tumor felt before death was the gall-bladder distended with bile.* On careful examination the common duct was found pervious; there were no gall-stones; there was no tumor or point that pressed upon the duct; and there was no reason for obstruction of the hepatic duct.

Dr. Loomis remarked that the case interested him very much in reference to diagnosis. It was the first one of distended gall-bladder that he had seen that extended so far down, and was so movable. One member of the consultation, of very large experience, was so certain that the case was one of movable kidney, that he declared if it were not he had never seen one in his life, and he had met with a great many. The

tumor during life dropped as low as the level of the umbilicus.

CROUP AND TRACHEOTOMY.

Dr. Jacobi exhibited a portion of the respiratory organs of an infant aged one year and fourteen months, for whom he had performed tracheotomy for croup only twelve hours after the invasion. The operation was deemed advisable on account of the rapidity with which the suffocative symptoms set in, there being no evidences at the time of pneumonia, eclema, or bronchial catarrh. The child died about twenty hours after the operation.

At the autopsy the larynx was found filled to its utmost capacity with membranes extending from the epiglottis over the vocal chords, filling up the fossa Morgagni and a large portion of the trachea down into the bronchial tubes below the bifurcation. The lungs showed a commencing pneumonic condensation, with partial atelectasis and a more or less universal catarrh.

DIPHTHERIA.

He also presented another specimen of croup. Six weeks before the child was attacked with diphtheria, from which it recovered, and was well for perhaps a week and a half, when it had a relapse, with more fever than before, and more constitutional disturbance. During lifetime there were not many symptoms of obstruction in the larynx, the little one dying more of constitutional symptoms than of suffocation. Tracheotomy was therefore not thought to be advisable, and was not performed.

The larynx was found in a condition similar to the one already exhibited.

IMPERFORATE RECTUM.—DISCHARGE OF MECONIUM IN PERITONEUM.

Another specimen consisted of a portion of the rectum and colon of a new-born infant that had suffered from imperforate rectum. An operation was made for its relief, and the usual incision failed to cause the discharge of meconium. A second was then made, when the instrument reached the diseased spot; but, as shown in the specimen, it had passed through a portion of the peritoneum, causing some of the meconium to escape into its cavity.

STOMATITIS OF THE GUMS.

The last specimen presented by Dr. Jacobi was one of that peculiar form of stomatitis which attacks the gums. The child had been sick for a number of weeks with scarlatina, diphtheria, and follicular stomatitis. It had become very much reduced in consequence, when the peculiar local inflammation of the parts referred to took place, causing its death.

It commenced in the gums near the molar teeth, and extended inside and outside along the teeth in the upper and lower jaw, eating away the upper portion of the gums down to the insertion of the lip, and communicating by direct contact with the cheek, changing the latter in a few days to a pulpous mass.

He remarked that this form of inflammation consisted of nothing but a rapid formation of a large number of young cells, together with an amorphous fibrinous deposit, which was imbedded between the fibres of the gums. This deposit loosens and breaks up the normal tissue in a very short time. Such cases were not very common, the doctor having seen but a very few, and those were always in patients very much lowered in vitality. He believed that the reason why this particular locality was preferred was on account of the natural slowness of circulation in the part, and the many changes which it undergoes during dentition. The same disease had been observed among adults who had been previously much broken down.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, THURSDAY, JANUARY 21, 1869.

The President, Dr. A. C. Post, in resigning the Chair to his successor, briefly thanked the members of the Academy for the kindness which had made his duties, for the past year, so agreeable. He then introduced the President-elect, Dr. Henry D. Bulkley, who spoke as follows:

ADDRESS OF THE PRESIDENT-ELECT.

Fellow Members of the New York Academy of Medicine,

Gentlemen:

It is not without misgivings that I occupy the position with which you have favored me—a position I owe more to your partiality than to any special fitness for it—a position which, while it is one of honor, I feel to be also one of responsibility—a responsibility arising from the character of the Academy, the long list of distinguished men who have preceded me in this office, the honorable record it has made in its published proceedings, and the hopes and expectations which may be reasonably entertained of its future.

While I acknowledge, therefore, the favor thus conferred upon me, I must earnestly beg your forbearance with shortcomings and failures, which must almost necessarily occur, and your co-operation in my efforts, however feeble, to promote the interests and elevate the standard of the Academy. Without such sympathy and such sharing of my labors, I should feel that I have a burden greater than I can well bear; while with them, I trust that we shall be able to rejoice together in the advancement of the true interests of the Academy, which all its friends have so much at heart.

But, in addition to the personal responsibility resting upon me in this position of honor and trust, there are also responsibilities which should be felt by us all, as fellow members of the Academy.

Our very name of *Academy*, gentlemen, involves responsibility—a name consecrated to institutions devoted to science and art since the time that Plato first taught in the groves of Academus—a name long appropriated abroad to associations for such purposes, and recognized by foreign governments as the highest authority in their several departments of learning, under their fostering care, and acknowledged as a medium of communication between governments and people.

Then, again, ours is an Academy of *Medicine*, the part of its title most endeared to us who glory in laboring for a profession whose sole object is, or ought to be, the relief of suffering, the cure of disease, and, above all, its prevention; and last, and not least, in our special case, the *New York* Academy of Medicine, which brings its interests home to us, and appeals most directly to our pride, as well as to our sense of duty, as citizens of the commercial metropolis of our country, and which can be made, if it is not already so, its scientific metropolis also—a city that furnishes both men and material which leave us without excuse in this respect.

Our Academy has also a *history*, which appeals to us for our support and sympathy.

Originating under the most favorable auspices, at the close of the celebration of an anniversary of our most noble professional benefaction; jealously watched over at its organization by our leading men, lest sectional prejudices or personal aspirations should mar its purity; ushered into existence by representatives of all honorable interests in our profession—alas! that there should ever be more than the one interest, to elevate our profession and increase its sphere of usefulness for the common good—with the object of uniting us all in one faith, that of duty to ourselves and to others, and with

one common altar on which to lay our votive offerings with a long list of worthies who have presided over it, and with a public record which has given us a position among the learned institutions of the day, and with a social influence which has done much to promote friendly action and cooperation among us, our Academy, having passed through its teens, has claims upon our united labors to carry it to the still higher pinnacle which we believe it destined to reach.

I have said that we have a *name;* and now what we most need, is a local habitation to give emphasis to that name—a building, over the portal of which this name shall stand out with prominence, so that strangers among us, as well as our fellow-citizens, may be constantly reminded of the fact that we are not only a live institution, but that we have a house to live in—a house which we can call our own, in which our books and our archives can be safely deposited, in which we can hold our regular meetings, as well as find an occasional resting-place in the midst of our active duties and arduous labors—a medical exchange, to which we can introduce our friends, and where we can gather items of intelligence from each other, and enjoy mutual courtesies—where we can find the treasured learning of other times, as well as of our own—and not only the current medical literature of the day, but the magazines and the papers of the hour; for in a city like this, so stirring, and with scenes so rapidly shifting, we do almost have papers by the hour.

While other associations, those of science, art, and benevolence, rear their stately and attractive structures, which constantly remind the busy crowd that they are active in their own branches, we should have a building to bear the same testimony for us; to show that we are not idle, but meet at times to discuss the important subjects of life and health, and to labor together for the common weal.

I have said that we need an edifice which we can call our home; and I am happy to be able to congratulate you upon the progress making in this direction by means of a committee, both active and judicious, with a chairman whose labors for the Academy, in the position in which I have the honor to be his successor, have entitled him to the lasting gratitude of the Academy; and who, I trust, will continue his labors in behalf of the institution for which he has already done so much, and be spared to have the satisfaction of taking an active part in the inauguration of the building, in the erection of which he has shown so deep an interest.

Let me bespeak your sympathy and aid in behalf of this committee, in their labors for this most desirable object. While we contribute, according to our means, from our hard earnings, let us endeavor to influence those who have been more favored by fortune, in pursuits which yield more golden results, to give us of their abundance.

And then, again, gentlemen, our responsibilities are increased by the nature of our organization, and by the privileges which we enjoy in the great amount of material we have at command, and the facilities for its use, for the proper improvement of which our brethren may justly hold us accountable.

Our association embraces a large portion of the talent and working capital of the profession in this large and busy city. Its roll of members contains the names of the greater part of those to whom we look for aid in cases of emergency of every kind—of those who hold leading positions in our colleges and hospitals and dispensaries; and of those who, whether occupying such positions or not, are most zealous workers in the common cause of elevating our professional standing, and contributing to the health and welfare of our fellow citizens, and extending our reputation and usefulness.

An institution of this kind also affords the most appropriate, as well as most available, medium of communication of the profession with the public authorities, when such communication is desirable, as in questions of public hygiene and of protection against the invasion of diseases from abroad.

Besides the great advantages enjoyed by many in the positions which they fill, and the abundance of material within their reach which they are called upon to improve for the benefit of others as well as themselves, there is the obligation resting upon each one to labor for the improvement and advance of both the science and the art of our profession as a whole. We have had the extent of this field of labor recently presented, and the reward which labor in it promises, most fully portrayed to us, in the admirable anniversary discourse by one of our distinguished Fellows, which so much delighted and instructed us. We had, first, a graphic sketch of what was known in the early part of the present century, and of the numerous and brilliant discoveries which have advanced our profession to the point where we now find it, and the vivid picture of what it may be in the future, and of how much is left for us and for those who are to follow us in the different departments both of science and of art.

And now, gentlemen, in view of our privileges and our corresponding responsibilities, and of the success which is always the reward of labor, what is our duty as members of an institution holding such a prominent position in a city like ours? It is comprehended in one word, WORK. It is work which has brought the world to where it is, and upon which all dependence is to be placed for future progress; and it is to this that we must look for the success of the Academy. We must remember that "the world moves," and that if we do not keep pace with its movements, we shall be left to slumber in our sloth and ignorance.

I need not dwell upon the value of associated labor which an organization like this affords, and which, while it furnishes a stimulus for individual labor, also gives that labor additional value by this very concentration of effort, and provides an opportunity of diffusion by which its usefulness is increased and its sphere of good enlarged.

At the same time, I wish to impress upon you the importance of individual labor, and of the individual responsibility which rests upon every member to labor in this common cause, and to lead you to realize that the reputation and success of the Academy rest entirely upon the personal efforts of its members. We must remember, too, that it is a law of our nature that no one can improve himself without doing good to others. If every one has not ten talents intrusted to him, no one is without the one talent, for the improvement of which he is as responsible as the more favored for the use of their ten; and while the latter shed lustre upon the Academy by their labors, we can at least encourage them by our presence and punctual attendance at the meetings, while we, at the same time, profit by what they teach us, and thus improve our smaller number of talents, and work together with them for the common good.

Let us for a moment ask, what should be the aim and object of an organization like that of our Academy? While we should be alive to everything which concerns the honor and dignity of our profession, and should be a regular and acknowledged channel of communication of scientific intelligence, and should be ever ready to discuss subjects of scientific interest and of practical importance in our profession, we should es-

pecially seek to call forth scientific papers—papers evincing original observation, as well as extensive research, which should not only do credit to our printed pages at home, but show to those abroad that we are not so much absorbed with our daily labors as not to find time to contribute our quota to the store of learning, which is so constantly and so rapidly accumulating in the world. Our labors should be for the world at large as well as for the city in which we live—*orbi* as well as *urbi*.

There is another organization among us, now happily in a most flourishing condition, and to which many of us are giving a share of our time and our labors, to which we can well leave other fields of professional labor, an association which forms a constituent part of our State organization. And, in a city like this, with such a supply, both of material and of men abundantly qualified to improve it in different ways, we should be fellow-workers in the same good cause—rivals only in the strife which shall accomplish the most good and reflect the most honor on the profession of our choice and of our pride.

We have also another association, now in vigorous youth, uniting the two desirable objects of familiar discussion and social union, with an inviting room for books and periodicals, which I trust many of us will live to see domiciled under our own roof if not incorporated with us.

I have spoken of the necessity of work, if we would raise the standard of our Academy, and extend its reputation and its usefulness. And now, in what way shall we work? I mentioned the importance of solid, substantial papers, evincing both originality and research—and how shall these be obtained? I reply, in two ways—first, by voluntary contribution; and secondly, through the Sections, which should be made, and can be made, valuable auxiliaries to the Academy. There are, as you are aware, six of these Sections, representing the different leading branches of our profession, composed, or supposed to be composed, of members who associate themselves with one or the other of them, according to their individual tastes and preferences. One of the duties of these Sections is to present subjects for discussion before the Academy, from time to time, selecting one of their members to open the discussion, in which others are expected to prepare themselves to join. If all these Sections would be thus active, our trouble would be want of time to dispose of the material, rather than want of material. This is not only what can be done, but what has been done. We owe some of the most interesting and valuable papers and discussions which we have ever had, to subjects brought forward by the Section of Theory and Practice and Medical Pathology; and the Obstetrical Section is now a commendable instance of what can be done by associations of members in this way, both in their own improvement and in doing good to the Academy. The latter Section is the only one, so far as I know, which is living up to its privileges, and performing its duty; though I am happy to announce that the Section of Theory and Practice and Medical Pathology, is again about entering this field of labor and of pleasant reunion.

Trusting that the other Sections will at once reorganize, and demonstrate their activity by their fruits, I would suggest that when any Section shall have selected a subject and matured its plan for discussion by the Academy, the fact should at once be reported, either to the Secretary or to the President, so that it may come up in its regular time, and be announced from the Chair in anticipation of its appearance in the notices issued for the meetings of the Academy. This would give a better opportunity for those not belonging to the particular Section to prepare themselves to take part in the discussion.

Let me, in closing, gentlemen, again touch the keynote of what I have to say on this occasion, and urge you all to join in working for the common good. Let this new year be the beginning of a new year of earnest labor, and what must necessarily follow it—*success*. Let those who do not contribute to this success by their mental labors, do it by their punctual attendance at our meetings. We shall be thus twice blessed—blessed in what we *do*, and blessed in what we *learn*—and even thrice blessed, in the good we do to the Academy; and, in this way, in the good we do to our profession and to the world.

PLASTIC SURGERY.

Dr. Detmold made some general remarks upon this subject, before introducing several patients upon whom he either had operated or proposed to operate. Plastic surgery took its origin in rhinoplasty, just as orthopœdic surgery began in the treatment of club-foot; and in this it simply furnished an illustration of the law of demand and supply. We find the first traces of rhinoplasty in the East Indies, where not only was it a common punishment for political and other crimes, to cut off the noses of the criminals, but it was also customary, in the frequent wars between the tribes, to cut off the noses of the prisoners of war. Thus the demand was formed and the supply followed; among the lower classes of priests, for centuries—so long that the date is lost—the custom existed of supplying the lost noses. Fabulous stories were circulated about the matter; it was thought that the new noses were made from the flesh of chickens and other animals, till finally it was discovered that they were made from the skin of the forehead. The report of this was brought to England, but excited little notice there or on the continent, until the same principle of demand and supply called it up. The gold of Spain demoralized the people, and syphilis spread wildly over Europe, especially in the Franco-Spanish wars carried on in Italy. The disease was not only wide-spread, but exceedingly destructive, partly, perhaps, because its treatment was not well understood. About this time Tagliacotius, a professor of anatomy in Bologna, began to supply noses; and he, too, was at first accused of using for this purpose the tail-piece—the "pope's nose"—of the chicken. After him we know little of plastic surgery until Dieffenbach, of Berlin, devoted his genius to its development. Since then, it has, like orthopœdy, almost assumed the position of an independent specialty.

Leaving the history of anaplasty, the speaker proceeded to describe its different methods—by transplantation from a part near or distant, and by sliding (*glissement*). He dwelt upon the fact that true skin is never reproduced, but is replaced by fibrous tissue; upon the progressive contraction which takes place in the cicatrix, even for years or through life; and upon the deformities thence resulting, even the bones yielding to its persistent force.

The first case shown was one of slight ectropion of the lower lid, from a burn on the cheek. The doctor proposed to remedy it by the sliding method, making a V-shaped incision beneath the part, dissecting up the flaps, and bringing them together so as to change the V into a Y.

The second case was one of loss of the septum nasi and both alæ, with complete occlusion of the nostrils. It was proposed to restore the columna from the lip, and the alæ by flaps from the cheeks. This was deemed preferable to taking the flaps from the forehead

when the destruction was no greater than in this instance. The Tagliacotian operation of making a nose from the skin of the arm had never, the doctor believed, been performed in this country. He had had a case a few years since, where he had intended to undertake it—that of a man who had lost the whole nose from lupus, which had also affected the skin of the forehead, so as to render it unfit for transplanting. But the patient had found a woman who would marry him without a nose, and then considered the operation no longer necessary. There were two methods of making the nose from the arm. The first was to cut the flap sufficiently large; attach its free end to the root of the nose; and after it had firmly adhered, cut it loose from the arm, and form it into shape upon the face. The second method was an improvement by Dieffenbach, who shaped the nose upon the arm—letting the flap shrink, approximating its edges by stitches, and finally, when it had assumed the proper form, transplanting it.

The third case was one of contraction of the neck, from a burn. This the doctor would operate upon by the sliding method, making a Y-incision, and stitching it into the shape of a Y, as in the case of ectropion above. He proposed, also, to introduce a novel feature, in order to gain length by drawing upon the breadth of the skin. He would make either a single large transverse incision, or several small ones; dissect subcutaneously above and below; draw the ends of each transverse incision together; and by a sufficient number of sutures convert the transverse incision into a longitudinal slit. He had never known this method applied to lengthening cicatrices in the neck.

Dr. Gurdon Buck said that he should await, with interest, the result of this operation. It commended itself to his judgment, and, if successful, would both greatly simplify the ordinary methods of operation in such cases, and also, probably, give better results.

Dr. Bulkley exhibited an interesting case of *Elephantiasis Græcorum*, in the person of a native of Connecticut, who had never resided in warm latitudes. The face was covered with tubercular elevations of varying size, all of which, as well as the spaces between them, were of a deep bronzed hue; the skin was found to be anæsthetic. The case elicited some discussion.

The Advantages of an Interne in a Hospital.—Sandford Eastman, M.D., Prof. of Anatomy and Clinical Surgery in the University of Buffalo, stated in his introductory address to the students of that institution, that he could not forget the advantages he enjoyed while serving as *interne* in the Buffalo Hospital of the Sisters of Charity; and he should remember with heartfelt gratitude the kindness of his preceptor, Prof. White, in securing for him so desirable a situation, where he was under the immediate instruction of Prof. Austin Flint, Sen., who then had charge of the medical ward, and of Prof. Frank H. Hamilton, then Attending Surgeon of the Hospital.

A New Anæsthetic in the Extraction of Teeth.—Dr. Seymour (*Boston Med. and Surg. Journal*) employs the protoxide of azote in the extraction of teeth. Insensibility is produced in two minutes. It is said to be perfectly innocuous, and to be respired without difficulty or repulsion.

The Greatest Age ever attained in New Hampshire.—Mr. Lovewell, of Dunstable, N. H., who died at 120, attained to the greatest age ever known in that State. William Perkins, of Newmarket, reached 116; and Robert Macklin, of Wakefield, 115 years.

Deterioration of Coal from Exposure.—Grundmann has found that coal exposed to the weather in heaps lost during a period of nine months, fifty per cent. of its value as fuel, or as a gas-making material, undergoing a process of slow combustion by taking up oxygen from the air, and giving off the products of oxidation without utilization.—*London Med. Mirror.*

Death from the Use of Arsenic by a Cancer Quack.—The following case of death from the use of arsenic by a cancer quack is detailed in the *Lancet*. A certain Mrs. Landers, of Paisley, was recovering from an abscess of the breast, consequent, apparently, on weaning her child. She consulted one Alexander Paterson, and the abscess was pronounced a cancer, which he proceeded to attack heroically; by first applying a blister to the breast, and then an arsenical ointment, which, according to the analysis of Prof. Madagen, was nearly half arsenic and half lard. She had headache, vomiting and retching, great thirst, and the inflammation increased rapidly, and spread from the breast to the arm. She died in ten days. Arsenic was found in the various tissues and organs of the body. No trace of cancer was found after death, but it was confirmed that the patient had died of arsenical poisoning. The only defence set up was, that he had cured many cancers with this ointment, and that it had been laid on a little thicker than he ordered.

Chloride of Copper is extensively used in Germany against the cattle plague.

The Use of Carbolic Solutions.—On perusing the prominent medical journals of England and France, also of this country, we find recorded several cases of poisoning from the external application of strong carbolic solutions. Medical men should be extremely careful in employing proper persons in the preparation of the solution. From the prescriptions sent to apothecaries, by medical men, the fact is evinced that some prescribers are ignorant of the nature of carbolic acid, whether it is a fluid or solid.

The Appetite for Medicine.—At the Paddington Board of Guardians it was shown that 138 gallons of medicine had been dispensed in two months, including 30 gallons of quinine mixture. It was remarked that the inmates were never satisfied unless they were taking medicine.

To Protect Water from the Action of Lead Pipe.—Dr. Schwarz, of Breslau (*Dingler's Polytechnisches Journal*), notes a simple method of protecting water from the action of lead pipe, by forming on the inside surface of the pipes an insoluble sulphuret of lead. The operation, which is a very simple one, consists in filling the pipes with a warm and concentrated solution of sulphuret of potassium, or sodium; the solution is left in contact with the lead for about fifteen minutes.

Diseases of Advanced Life.—Henry Samuel Purdon, M.D., of Belfast (*Lond. Med. Mirror*), states that the number of aged inmates annually in the Poor-House and Infirmary at Belfast, is generally one hundred, and the number of deaths which have been recorded from November, 1850, till November, 1867, is 217.

Decay of Nature, or Senile Marasmus, has the greatest number of deaths attributed to it; the number of males and females being nearly equal, viz.: 33 males and 31 females. The following soup is recommended by Dr. P. as serviceable in these cases, as well as in some forms of dyspepsia: Take of linseed, half an ounce, fine bran, one ounce, water, one quart; boil for two hours and strain; then add beef, from half a pound to a pound, and make it into a soup, with vegetables, etc.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—R. HEEMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—SIEBDENS Y CA.

New York, February 15, 1869.

THE METROPOLITAN BOARD OF HEALTH—ITS DOINGS LAST YEAR.

THE Third Annual Report of the Metropolitan Board of Health has made its appearance, filled with useful matter for the contemplation and study of every sanitarian. The Board in question, vested with powers enjoyed by no other association, and having a jurisdiction over the most densely populated district of the country, has been trying many experiments in the way of improving the health of the community, which under the circumstances are of great importance. So far as the strict performance of its duties is concerned it has been an acknowledged success, but none are more willing than the Board itself to acknowledge that it has been far from the accomplishment of its dearest objects. The promise for the future is, all other things being equal, better than it has been for the past, and the slow and gradual education of the people is beginning to show its good results in the seconding of many of the endeavors which previously it attempted almost in vain.

During the past year no epidemic diseases have prevailed in this District, but this comforting state of things has been considerably overbalanced by the fact that the mortality among the infant population has been unreasonably great. This has wisely led to the inquiry on the part of the Commissioners as to whether the general management of these little ones is not radically wrong, and the deaths out of proportion to the known causes which exist to endanger their lives. There is no doubt in the minds of such as have studied the subject that many changes in regard to caring for them by our authorities must be instituted before much change of the alarming death-rate of eighty per cent. of the whole mortality can be made. The discussion of this subject in our columns may tend to throw considerable light upon the real causes, and will doubtless accomplish an end in shaping the purposes of such as have the power to bring about a necessary reform.

The Registrar's report shows that 25,459 deaths occurred in the city and county of New York in the year that ended on the 1st of October last; and that there were 9,015 deaths in Brooklyn in the same period. Though these totals show a slight increase in the aggregate mortality in the two cities, the increase is by no means as great as the medical officers justly feared it would be, in consequence of the increase in population and the excessive temperature of the winter and the summer. The Registrar states that no summer in the previous 40 years was as hot, damp and unhealthful as the last season. The total number of deaths by the diarrhœal diseases in New York amounted to 3,826, and the zymotic or ferment diseases amounted to 7,581. In Brooklyn the former amounted to 1,675, and the total of the latter classes of death was 3,012. The greater portion of this lamentable mortality occurred in the hot months. And although it did not equal the amount of mortality which this class of maladies gave in the corresponding months of 1866, it was so great as to cause intense anxiety, and to lead to the adoption of vigilant measures to hold in check whatever sources of these disorders could be reached.

The suggestion made to remove the tenement population to the suburban districts is one as good as it is original. In order, however, to practically accomplish such a measure, the necessity for readier and cheaper means of travel to and from the business portions of the city is urged as one of the wisest of sanitary reforms. Steam is the only feasible plan that can at present be recommended to meet the end in view.

The immense horse population, which is for the most part relied upon as a means of travel, is an objection in itself, on other grounds, in causing much of the filth in the streets, and the bad air. It is affirmed that "if the use of all these could be dispensed with, it would be a great aid to public health." And in the contemplation of the means to be adopted to accomplish the end, the following refreshing glance into the future is made.

"In this age of mechanical ingenuity, it is not too much to hope that steam in some modified form, or some motive power, like calorie or electricity, but more manageable than steam, may be applied to the transportation of passengers in public vehicles, and the day may not be remote when it will be used with safety instead of horses for private carriages."

The removal of filth from the streets is another topic of great importance which claimed the attention of the Board. It is truthfully said that the removal of filth and street cleaning are inefficiently and expensively done by the means at present employed. The report goes on to say:

"Raised platforms should be built at convenient places where carts could be driven and deposit their contents into cars which could be sent at once out of the city, provided the different horse railroads could be made use of for the purpose. The expense of horses and carts could thus be saved, and no dumping-grounds needed. It is surprising, considering the facilities offered by the railroads, that they have not been used for this purpose. Some modification of their charters

might be necessary, but could be easily obtained, if an earnest wish were shown to use them for the purpose of street cleaning."

The practice of pushing the snow from the city railroad tracks, and thus causing it to be piled up in ridges against the curb, is another one of the evils for which a remedy is proposed by the Commissioners. The recommendation made to compel the companies to carry away all the snow that they remove from their tracks, is a just and practicable one. In reference to the condition of the streets during snow-time, we are further informed that the contractor, whose duty it should be to keep them constantly in good condition, is not then compelled to perform the duties of his office except only to keep the cross-walks in a reasonably passable condition. The natural consequence of this has been to cause the accumulation of an immense amount of filth during many weeks together, which is laid bare by the warm spring rains. A very laudable attempt on the part of the Board was made to remedy this state of things, but in reporting the results of their labors the very humiliating statement is made, that "there was no authority that could be invoked for relief." It should, however, be noted in this connection, that the streets during the summer months were regularly swept (at sufficiently long intervals of course), and that the ashes and garbage, when not thrown into the street, were regularly removed. That it is evident that the Board was not accountable for the condition of the thoroughfares, and that its intention was to do the best in its power, we quote the following:—

"There are portions of several wards where the streets should be cleaned daily, as in the First, Fifth, and Sixth Wards, but the contractor is now only paid for sweeping them once a week. To remedy this evil during the Summer months, the Sanitary Superintendent, availing himself of a small fund in the hands of the Comptroller for that purpose, employed a force of laborers, with carts, who daily visited the districts most requiring their presence, cleaning the gutters, and removing the offensive substances thrown into the streets by the residents. In some of those districts where formerly the death-rate has been fearfully large, and the Asiatic cholera has reaped a bountiful harvest, there has been a material improvement in the public health during the Summer of the present year. The fund of $20,000 placed at the disposal of the Board two years ago, has served a most beneficent purpose for two seasons, and one-third of the amount yet remains unexpended. The work of street disinfection was begun on the 24th of July, and prosecuted, at first, with a large number of carts, both night and day. The wards selected were the Eleventh and Twentieth, but afterward the work was extended to other wards, where diarrhœal diseases were most prevalent. It was continued for about two weeks, with a diminished force, and was suspended by the occurrence of heavy rains. The effect of the disinfectants upon the organic matter of the streets where they were employed, was proved by Prof. Chandler to be the complete arrest of all putrescent changes, and this effect continued for upward of a week, or until another layer of filth was deposited. The people of the districts where the sprinkling was done spoke approvingly of the measure, and expressed their pleasure at the change of the odors of street filth to that of carbolic acid."

In order to prevent the crime of infanticide, it is advised that a new lying-in hospital for the unfortunate victims of seduction be founded, as well as a foundling hospital in connection with it. It would appear that the law has been appealed to in vain to stay the progress of this social pestilence, and even the very judicial courts, in some of the most important cases brought to light, have not enforced any penalties or restraints; consequently a surer way of accomplishing the most good is advised.

As another one of the many evidences of good intentions of the Board, we may instance that of introducing a thorough system of vaccination in our public schools. At first no opposition was made to it, the Board of Education favoring the project, but with shame be it said somewhat of the same opposition was made against the introduction of the virus as disgraced the time of Jenner, which was in a measure led on by some of the members of our own profession. Notwithstanding that all the arguments of the opposers were successfully refuted, the project received for the time a fatal blow.

In concluding our remarks we cannot pass over without commendation the very excellent report on the cattle plague. It is one of the best of the sort ever made, and reflects infinite credit upon such of the medical gentlemen as have had it in charge. By the enlightened action of the Cattle Plague Commissioners of the State of New-York, and the energy of the State printers, the greater part of a valuable series of chromolithographic illustrations has been engraved and printed from the original sketches which the medical officers of this Board caused to be prepared in the course of their researches, to illustrate the medical history of this disease.

The general results of the efforts of the Board to improve the sanitary condition of the District during the past year have been very satisfactory. The enforcement of the Tenement House act, the decisions of legal tribunals defining and establishing the powers of the Board, the more general voluntary obedience to its orders and ordinances, and the enlarged experience of its sanitary officers, have united to secure these gratifying results. There has been an improvement during the year in the sanitary condition of basements and cellars used as human habitations. By drainage, by the introduction of light and air, many which were before unfit for use as dwellings have become comparatively safe and comfortable, and are permitted to be occupied during the present scarcity of tenements for the indigent. A large number heretofore occupied

have been vacated by order of the Board, and their use for human habitation prohibited. The business of bone-boiling has been banished from the built-up portions of the District.

The Board, then, during the past year, has done well, and is deserving of more than ordinary commendation. It is not too much to say, however, in this connection, that the greater part of its work has been performed by its medical members. This assertion must necessarily carry with it a significance in reference to the forced resignation of those officers, and at best augurs very badly for the future.

The grounds of acceptance of the resignations were based principally upon an implied unwillingness to meet the just demands of the Board upon their time. For this statement there is, in our opinion, not the slightest foundation. The one and only apparent reason why these gentlemen resigned, was an attempt on the part of the Board to degrade their positions, assign them to unprofessional and undignified duties, and make use of them for political purposes. Similar attempts have been made from time to time, ever since the organization of the Board, but never, until recently, were there a sufficient number of men upon it of a character to sanction such action. That it is so now is much to be deplored. With few exceptions, the business of the Board of Health has, up to the present time, been conducted thoroughly, quietly, and in a manner eminently deserving the approbation of the profession. Its officers have been men thoroughly in sympathy with the profession, bound up in the same interests, and taking part, so far as the faithful discharge of their official duties permitted, in the same pursuits. As Commissioner Stone justly remarked at a late meeting of the Board, sanitary officers should, in justice to the public, be *practitioners* of medicine, not men so constantly immersed in the drudgery of office as to have no time for hospital service or other professional observation or study, but men bright, and in every way up to the time. Any other policy will certainly be subversive of the highest duty of the Board. What will be the result of the opposite plan? Of what advantage will it be to the city to have its sanitary condition watched over by men who have abandoned the practice of their profession, and are every day becoming necessarily rusty and behind-hand? Men, who from never combating actual cases of disease, are as sure to cry "Wolf, Wolf," when there is no wolf, as they are to fail to recognize the stealthy beast when he really comes. The profession must, under the circumstances, naturally call upon the medical members of the Board to stand by their trusts, as we are glad to see by Dr. Stone's course they are likely to do, and not allow them to be suborned to political chicanery.

In closing the present volume we are happy to inform our friends that the MEDICAL RECORD is in every respect in a prosperous condition. Its subscription list has steadily increased during the past year, and everything promises for us even a better future. We cannot however, in this connection resist the temptation of acknowledging our indebtedness to DR. JOHN WINSLOW, of New York, for his very many elaborate and finished Society reports, and to DRS. BRADFORD S. THOMPSON and JAMES B. HUNTER, of New York; and DR. J. SOLIS COHEN, of Philadelphia, for invaluable assistance in our department of Progress of Medical Science. DR. HENRY M. LYMAN, of Chicago, PROF. C. A. LEE, of Peekskill, DR. D. B. ST. JOHN ROOSA, DR. JOHN SHRADY, and GEO. M. BEARD, of New York, and a host of others, are alike deserving of thanks, for many very useful and practical contributions.

We are pleased to record the fact that the meeting of the State Society was a more than ordinarily interesting and profitable one to all concerned. The papers read were, without exception, of great value, and were appreciated accordingly, their only fault being their extreme length. It would save time if the readers of papers could be induced to present only abstracts of their remarks to the Society. This would not prevent the subsequent publication of the papers in full; at the same time an increased opportunity would be offered for all who might wish to discuss them to do so without encroaching upon other business.

Our city was well represented by the presence of many of our distinguished men, and the "Cash Prize" was carried off by our near and esteemed neighbor, Dr. J. C. HUTCHISON, of Brooklyn.

There was an absence of the usual number of receptions, but the elegant entertainment at the house of the President, DR. QUACKENBUSH, made ample amends.

The choice of PROF. WHITE, of Buffalo, as President for the ensuing year, was, as it should be, unanimous. The efficient Secretary, DR. W. H. BAILEY, was of course re-elected.

Our very full report of the meeting will excuse us from entering into a more detailed review.

We would call the attention of our readers, especially those interested in army matters, to the communication on army organization, published in another column. Every one, after reading it, will agree with us, that we have reason to be proud of our army medical staff, even in comparison with the best in Europe.

Despite the fact that a number of extra pages have been added to this number, making it virtually a double one, we find ourselves still cramped for place for many other articles already in type. In the next number we hope to be able to do better, and would ask a little more indulgence on the part of some of those contributors whose articles we have been compelled, for the present, to defer. The annoyances of the "strike" have now all disappeared, and there will be no hindrance to smooth working in the future.

Correspondence.

ARMY MEDICAL ORGANIZATION.

To the Editor of the Medical Record.

M. Leon Lefort, secretary of the Surgical Society of Paris, has published a series of papers in the *Gazette Hebdomadaire de Médecine*, on the relative excellence of army medical organizations in Great Britain, France, and America.

"Patriotism consists," he says, "with most of my countrymen in regarding only those things of which we have a right to be proud, and, above all in giving publicity to such things, while carefully concealing those subjects respecting which we should be compelled to admit an inferiority. A son, say they, should ignore the faults and infirmities he is pained to observe in his parents, and the duty of a citizen to his country is like those of a son to his mother. A doctrine more pernicious or destructive of all progress could hardly be imagined."

After further generalities M. Lefort arrives at the conclusion that it is the duty of every citizen to call attention to defective administration and to suggest remedies, however ungrateful the task may be, and believing that serious reforms are needed in the military medical system of France, he proceeds to particulars. After referring to a paper in which he believes that he has established the fact that the mortality of the civil hospitals of Paris exceeds that of the hospitals of London, and that this excess in mortality is due to preventable causes, he considers the mortality of armies, and compares, or rather contrasts, the results of the British medical service in the Crimea, and that of the Americans in the late war, with the results obtained by the medical staff of the French army.

"Three important works," he says, "give precise information on the subject. In France, the report of M. Chenu to the army *Conseil de Santé*; in England, the *History of the British Army in Turkey and the Crimea*, presented to Parliament by the Queen's government; in America, *Circulars 6 and 7* of the Surgeon-General of the United States Army, Dr. J. K. Barnes, published by the War Department."

One might be astonished to see these "circulars" of the Surgeon-General referred to in comparison with the voluminous and formal reports of the British and French armies, since they were printed simply as a preface to the general medical and surgical history of our war, and are modestly entitled by the Surgeon-General: "Reports on the extent and nature of the materials available for the preparation of a medical and surgical history of the rebellion." Yet M. Lefort only concurs with other leading European reviewers in his estimate of these well-known documents, of which the chief medical quarterly, the *British and Foreign Medico-Chirurgical Review*, declares, that professedly only a preliminary survey, "it will itself long form an authentic book of reference, both to the military and civil surgeon."

"If," says M. Lefort, "we ask what these two great wars have cost humanity, one having for its object to maintain what is called the 'European equilibrium,' and the other to free a race of men, and to suppress slavery, we find that the sacrifice has been truly frightful.

"So without knowing the exact number of Union American soldiers killed in battle, and in ignorance of the great losses of the American confederates, we know that these two wars have cost the human family not less than 856,183 lives, and if we add to this enormous aggregate the losses in the French and Austrian armies in 1859, and those of the Prussians, Italians, and Austrians in 1866, which have not yet been accurately estimated, we learn that in the last ten years at least a million of men have been sacrificed to political passions or to the progress of ideas."

		Killed.	Died of wounds or disease.	Totals.
French army	1854-56	10,240	85,375	95,615
British "	1854-56	2,755	19,427	22,382
Sardinian "	1855	12	2,182	2,194 ?
Turkish "	1853-56	10,000 ?	25,000	35,000
Russian "	1853-56	30,000 ?	600,000	630,000
		53,007	731,984	784,991 ?
Union American army	1862-63	.....	71,192	.....

Mr. Lefort next reviews the results of surgery in the three armies, from which precise returns have been published. Laying aside the minor operations, he says, that the French and British in the Crimea, and the American, so far as reported, have practised 12,291 of the major amputations, thus:

British Army	721
French "	4,703
American " (Federal)	6,867

"Examining these operations in detail," he continues, "we discover the shocking inferiority of the French Medical Service:

AMERICAN UNION ARMY.

	Total.	Deaths.	Per centage of Mortal.
Disarticulations at the shoulder	237	93	39.2
Amputations of the arm	1949	414	21.2
" " forearm	399	99	16.5
Disarticulations at the hip	21	18	85.7
Amputations of the thigh	1597	1029	64.4
Disarticulations at the knee	116	64	55.1
Amputations of the leg	2348	611	26.0
	6867	2328	33.9

The ratios in the three armies are:

	English Army. Mortal.	American Un. Army. Mortal.	French Army. Mortal.
Disarticulations at the shoulder	33.3	39.2	61.7
Amputations of the arm	24.5	21.2	55.5
Amputations of the fore-arm	5.0	16.5	45.2
Disarticulations at the hip	100.0	85.7	100.0
Amputations of the thigh	64.0	64.4	91.8
Disarticulations at the knee	57.1	55.1	91.3
Amputations of the leg	35.6	26.0	71.9
	40.2	33.9	72.8

"In thigh amputations, then, while the American and British lose 64 in 100, the French lose 91.8. The former lose but 26 per cent. in leg amputations, and we lose 71.9. Such a result is heartrending; it is essential to discuss the cause of such a state of things, for the welfare of French soldiers, and the honor of French surgery, demand imperiously that they be removed.

"Are the statistics exact? Do they express the truth, or have involuntary errors crept in? That is the first question. The British statistics, made with that minute care characteristic of our neighbors, emanate from the English government itself, and England is a country where the word "official" is a synonym for exactness. The American statistics do not comprise all the cases, but only those reported to the medical bureau up to the date of *Circular No 6*. As to the careful manner in which they have been compiled, no

IN THE FRENCH SERVICE WE FIND:

	Primary Amputations.			Secondary Amputations.			Intermediate Amputations.			Total.		
	No.	Deaths	Mortality per 100.	No.	Deaths	Mortality per 100.	No.	Deaths	Mortality per 100.	No.	Deaths	Mortality per 100.
Disarticulations at the shoulder.	139	94	67.6	50	31	62.0	33	12	36.3	222	137	61.7
Amputations of the arm	753	467	62.0	149	83	59.2	255	88	34.5	1118	638	55.5
Amputations of the fore arm...	423	34	27.6	91	55	60.4	109	57	52.2	623	146	45.2
Disarticulations at the hips....	12	12	100.0	8	8	100.0	..	..	..	20	20	100.0
Amputations of the thigh.....	1449	1337	92.2	197	179	90.8	20	15	75.0	1666	1521	91.8
Disarticulations at the knee...	33	28	84.8	7	6	85.7	29	29	100.0	69	63	91.3
Amputations of the leg	399	193	48.3	207	137	66.1	647	573	88.5	1255	903	71.9
										4703	3428	72.8

IN THE ENGLISH ARMY:

	Primary Amputations			Secondary Amputations.			Total.		
	No.	Deaths	Mortality per 100.	No.	Deaths	Mortality per 100.	No.	Deaths.	Mortality per 100.
Disarticulations at the shoulder.	33	2	27.2	6	4	66.6	39	13	33.3
Amputations of the arm	96	22	22.9	6	3	50.0	102	25	24.5
Amputations of the fore-arm...	52	1	1.9	7	2	28.5	59	3	5.0
Disarticulations at the hips....	7	7	100.0	..	..	..	7	7	100.0
Amputations of the thigh.....	140	87	62.1	24	18	75.0	164	105	64.0
Disarticulations at the knee...	6	3	50.0	1	1	100.0	7	4	57.1
Amputations of the leg.	89	28	30.3	12	8	66.6	101	36	35.6
							479	193	40.2

one conversant with the magnificent works emanating from the American surgeons will entertain any doubt.

"The French statistics are equally authoritative. Unlike the American and British statistics, they do not result from the concurrence of many observers, but have been compiled by one man of great perseverance and energy, who has utilized the innumerable documents filed at the War Office. From hospital registers, from death-lists, from pension, retiring, and recruiting returns, M. Chenu has made up his admirable report of the numerical results of French surgery in the Crimea. It is in vain to dispute the figures. Whence results, then, our inferiority?

"M. Velpeau used to say: 'English muscle bears operations better than French,' in his familiar lessons on hospital hygiene; thus glancing at the difficult subject of the relative vital resistance of the two races. The question merits the attention of anthropologists and of surgeons, but data are as yet wanting to discuss it with advantage. But hereafter in determining therapeutic results, we should compare them as they are presented in the English, German, and French races, at least. Many striking facts lead me to the belief that the influence of race on surgical results is far greater than was supposed only ten years ago. When, at that time, I was studying surgery in London hospitals, I was often surprised to see men sent to their homes, treated as 'out-patients' as it was there expressed, who had undergone quite serious operations; such patients as in Paris we should never think of sending from the hospital on foot, and who, for that matter, would not with us believe for a moment that they were capable of walking home. It is not uncommon to read in the English or American journals of patients who have been subject to a ligation of the upper extremity, and have gone immediately in a carriage to their homes, several miles distant. Now the *moral* of patients has an immense influence on their physical condition, as every one knows, and I have been often impressed by the energy of character of many Englishmen who had undergone surgical operations. Is our feeble resistance to wounds, mutilations, and operations, due to a degeneration which many suspect, but dare not affirm? It is very possible. A nation, which at the beginning of this century lost on innumerable battle-fields more than a million of its strongest men; which, by its conscription laws, places the most robust portion of its male population in a condition of temporary celibacy, during the period when the generative function is in its fullest activity, and leaves the scrofulous, the rachitic, the hunchback—every man, in short, who has some physical defect—to propagate the species. Such a nation is sure to witness a gradual physical deterioration and numerical diminution of its population. Our numerical increase has so far, it is true, only fallen off in a degree to excite the gravest apprehensions. Whether the physical degeneration which we are forced to suspect and dread, is already betraying itself by certain effects, is a question I dare not decide. However, whatever influence we ascribe to difference of race cannot adequately account for the difference in surgical results; for truth, not less than national vanity, forbids us to believe that the French can possibly differ so widely from the Anglo-Americans in moral energy or in vital resistance.

"Were the French surgeons in the Crimea inferior in talent, in knowledge, in devotion to duty, to the British surgeons?" To propose such a question is to answer it negatively. Was the after-treatment directed by the British surgeons preferable to that employed by the French? Evidence on this point is wanting. We know that the former used after their amputations the same sustaining and stimulating regimen which they employ in their civil hospitals, while our colleagues of the army followed substantially the same practice we adopt in our Parisian hospitals. We resort too little, in my opinion, to the supporting measures employed by our neighbors across the water, but the immense difference in mortality cannot be attributed wholly to this cause, were we even to exaggerate its influence. The real cause seems to be such as can readily be removed, namely: the numerical inadequacy of the medical staff, both in surgeons and in nurses, and the inadequacy of hospital supplies—a penury which involved the necessity, so to speak, of prematurely removing the wounded and amputated of the Crimea far from the scene of strife.

"It is well known that at the commencement of the Crimean war, the French medical staff had a good outfit, whereas the British surgeons were deplorably unprovided; but the fact that in the course of a few months the rôles were inverted, has been studiously ignored. * * *

"The English journals freely and earnestly denounced the evils that existed, and numerous medical men were sent to the East, and unlimited hospital supplies, so that at the end of the campaign the French army was often indebted to the British for succor to its wounded.

"The insufficiency in numbers of the French medical staff was a public calamity. The over-crowding of the wounded was such that they had to be laid outside of the barracks, and God knows how dreadful then was the task of the surgeons, called on for aid simultaneously by hundreds of mutilated men. To cite but one example among many given by M. Chenu: 'M. Pillet, 80th Infantry, on May 23, 1855, was struck by a fragment of shell, which tore off the wrist so that it hung only by a few shreds of mangled flesh. Amputation was of course imperative, and yet "*taking his turn*" amid the crowds of wounded, this officer could not be amputated until two days afterward, May 25, on account of the want of medical officers.' M. Chenu adds that, if the *personnel* of the medical staff was doubled, the number would still be less than the wounded had a right to demand.

"The state of things at the field-hospitals found parallels at Varna and at Constantinople. Everywhere too few surgeons, everywhere inadequate supplies. Public edifices were crowded, even the old barracks of the Janissaries. Soon the admissions far exceeded the discharges. The wards were first crowded with beds, and then the corridors. Soon the deplorable results of overcrowding were manifest, and hospital gangrene, erysipelas, and pyæmia forbade the surgeon to undertake any operation hopefully. How were such difficulties to be met? Recourse was had to the homicidal measure of premature removal of the wounded—a policy to which I attribute the frightful mortality of the French wounded. I have witnessed these evacuations. I have seen the working of the system in Italy, when, at Genoa, we received the wretched wounded of Solferino coming from Milan and Brescia to embark for France. I saw in midsummer, in the finest weather, under the loveliest sky in the world, in a friendly country abounding in supplies, multitudes of wretched men suffering from gun-shot fractures, who were subjected to the horrible torture of long journeys, sent off to die, when it would have been easy to have improvised pavilion hospitals. But it was in the Crimea that this system of evacuations beggared description.'

M. Lefort here quotes at length from M. Chenu regarding the horrors of the French hospitals on the Bosphorus, and then resumes:

"The English surgeons kept their wounded at their field hospitals, at Balaklava, at the monastery of St. George, and only sent them to their hospitals on the Dardanelles when they were able to be moved. Why were our wounded so little cared for? M. Chenu replies that the French army had six times the effective force of the English. Then the necessities of the former were six times greater. It is a culpable want of foresight to send a numerous army far from the mother country with inadequate supplies. The question reduces itself to this: Now, who was responsible? Was it our army surgeons? Surely not. Eighty-two officers of the French medical staff laid down their lives in consequence of epidemics brought about by maladministration and the neglect of hygienic precautions—dangers encountered by the entire medical staff with that courage and abnegation which everywhere characterize the true physician. But, alas! in France, the medical service of the army is not directed by medical men, and such men as MM. Levy, Larrey, Serire, and Legouest have no voice in the arrangements indispensable to the physical well-being of our soldiers. When the medical director of the army of the East wished to erect a few pavilion field-hospitals, he had for weeks to exhaust his patience in demonstrating their necessity to intelligent, well-meaning men, who were quite incapable of comprehending his reasoning, and who followed his advice or not according to their personal prejudices or predilections.

"Happier than the French army, the Americans have no system of military 'intendants;' and though their medical officers had to grapple with difficulties very far greater than those we encountered in the Crimea; although their theatre of war embraced a territory larger than the whole of France; although in the first two years only of the war, the enormous aggregate of 143,318 wounded was one of the problems with which they had to deal, the American military surgeons, left to themselves, free to display all their energy, to avail of all opportunities, to profit by their special training, found means to open to the sick and wounded soldiers 205 general hospitals, containing 136,894 beds; to tend these so that they lost but 33 per cent. of those operated on; whereas the French surgeons, under the tutelage of the military administrative officers, had at their command in the Crimea inadequate hospitals, and supplies which were a mockery, and lost 72 per cent. of the patients operated on.

"And yet France was supposed to possess, before the campaign began, a complete medical organization, and sufficient supplies, while in America it was necessary to organize everything. The United States maintained a standing army of a few thousand men only, employed chiefly in protecting its settlements in the far West. When, therefore, the Southern States revolted for the protection of the institution of slavery, menaced by the legislation of the United States Congress, the Great Republic was totally unprepared for war. Volunteers came to its armies in multitudes, it is true; but, if patriotism may make a soldier of every armed citizen it cannot improvise administration, and so for several months there was a chaotic state of things, which terminated in the disaster of Bull Run. Soon the nation, learning from its free press the condition of affairs, came to the aid of the Medical Bureau. There was formed the Sanitary Commission, an institution little understood in France. The direction of the sanitary service always

remained absolutely within the control of the Department of War. No physician was allowed in the army unless appointed with the approval of the Medical Bureau. It was not, as some persons ignorant of the necessities of an army in the field have stated, with the fanciful belief that independent civil medical establishments can be substituted for the military medical staff—it was not to the 'Sanitary Commission,' that the honor was due of organizing the most remarkable and important military health-service that the world has seen.

"The medical staff was soon amply provided with the necessary supplies. To give a single item, we may state that the depot at New York issued 12,867 stretchers and that at Philadelphia 5,548. Numerous transient hospitals were erected as near as possible to the seat of hostilities. When the removal of the wounded to the rear was imperative, they were conveyed on hospital railway cars, or on steamers converted into salubrious hospitals, and not like those of the Crimea—pestilential prisons, in which hapless patients were crowded without any medical men to succor them. But above all, and we may well repeat it, and so earnestly and emphatically that everyone must hear it, the American Union sick and wounded were treated by their own medical staff, in hospitals constructed according to the designs of the medical bureau, erected under the supervision of medical officers, and administered by medical officers. If the French army lost so much larger a proportion of those who underwent operations than the English and American armies, the fault was not in the French surgeons; it was with those who, without the right acquired by special professional studies, tyrannize over the medical staff; with those who give orders instead of receiving advice; these men must bear the responsibility of disasters which were a great national reproach and calamity.

"Yes, it is with legitimate pride, with the authority acquired by vast experience, with the palpable obvious proofs in his hands, with the logic of accomplished facts, that our eminent colleague, Dr. Barnes, tells what the medical staff may do when untrammelled and at liberty.

"'Never before,' he says, 'in the world, was so vast a system of hospitals brought into existence in so short a time. Never before were such establishments in time of war so little crowded or so liberally supplied. They differed, too, from the hospitals of other nations, in being under the command of medical officers. Instead of placing at the head of establishments, intended for the treatment of disease and wounds, officers of the line, who, whatever their other accomplishments, could not be expected to understand the requirements of medical science, and who, with the best intentions in the world, might seriously embarrass the action of the surgeon, as was sadly the case in the Crimean war, and has been since in the English hospitals, our government, with a wiser discretion, made the surgeon the commandant of the hospital, and thus, while holding him responsible for the results of its management, put it into his power to make those results favorable. The medical staff can point with pride to the consequences of this liberal course. Never before, in the history of the world, has the mortality in military hospitals been so small, and never have such establishments so completely escaped from diseases generated within their walls.'

"This then is the opinion of the most competent and impartial of judges in relation to an institution which sycophants and men who have intelligence enough only to repeat what they have heard, hold up to the admiration of mankind. Here, then, the system of military *intendants* is condemned, not only by men most capable of judging, but by facts! In this intrusion of military *intendants* in the most important matters relating to the treatment of the sick, the secret of our disasters is to be found. Let not the lesson be lost for France. Victims enough have been sacrificed. '*Cavant consules*.'"

After describing at length the different plans proposed at the international convention at Geneva, in 1859, for succoring the wounded on the battle-field, and protecting their surgeons and attendants, M. Lefort proceeds to comment on the impracticability of substituting any voluntary system of relief for the operations of an organized medical staff.

The avowed object, says M. Lefort, of many of the delegates to the international congress at Geneva, was to initiate a system in which the voluntary association should "immediately assist in the surgical service of the army, working with the military surgeons on the same footing, and having their own supplies, their own organization, their own ambulances and hospitals. Such were the aspirations of some of the delegates, and several of them avowed their desire to substitute voluntary for official service."

"The strongest arguments are ever drawn from the experience of accomplished facts. We are told that the proof that voluntary associations can succor the wounded better than the medical staff of the army, is found in the fact that they replaced most advantageously the medical military staff in the American war, and worked side by side with the army surgeons in the late Prussian war. This argument is based on an utter misapprehension of the true state of things. Most French writers on the medical organization of the Federal medical service in the United States have strangely enough ascribed to the 'Sanitary Commission' a part which it never enacted. It was the 'Army Medical Department,' directed by Dr. Barnes as surgeon-general—it was through the War-Office, directed by Mr. E. M. Stanton, that there were erected in America 202 general hospitals, containing 136,894 beds, successively occupied by over two millions of sick and wounded. It was the War Department that provided hospital transport steamers and railway cars, and innumerable ambulance wagons and stretchers. It was the War Department which throughout the campaigns put in motion men and supplies, and not a medical officer or an employé of the military hospitals was ever appointed by any other authority than that of the Secretary of War.

"In Prussia the voluntary associations interposed more directly. In the Schleswig-Holstein war, the chevaliers St. John of Jerusalem, directed by their grand master, Count Stolberg, converted one of the finest houses in Flensburg into a little hospital for Prussian officers, and established near the Nubel church a temporary field-hospital for wounded soldiers. Accompanied by my friend, M. Liouville, I was able myself, in going through the lines of the Prussian army at the siege of Duppel, to appreciate the value of this field-hospital, established by private enterprise, and directed by Professor Klopsk, of Breslau. But what would have become of the great number of wounded in the assault and capture of Duppel but for the regular army medical staff? * * So in the seven weeks' war in 1866, the voluntary associations (Sociétés de Secours) arrived a few hours after the battle of Langensalza, and a few days after Sadowa, with army physicians and students, who greatly aided the regular medical staff, always and everywhere too few in numbers after great battles. They tended the wounded in temporary hospitals, or buildings turned into hospitals, but took no part in the active duties of the campaign, nor appeared on the battle-field. In Prussia, as in

America, the voluntary associations were restricted to the limits within which only they can be useful. For my part, I do not believe that voluntary associations can ever be substituted for a medical staff in countries that have standing armies. European nations maintain at great expense numerous soldiers, because they know that armies are not to be created in a few days. Now, a medical staff composed of specially trained men, is much harder to organize than a regiment. It should exist long before it is called on in war, and a government is culpable that calls on its soldiers to march against an enemy without making sure provision that if a man is wounded he will receive the care to which he is doubly entitled as a soldier and a citizen. To trust to private enterprise, unorganized, without official responsibility, to provide requisite assistance, appears to me to be yielding to a deception so very serious in its results that I consider it useless even to discuss the visionary plan of replacing by voluntary associations the duties of army surgeons.

"These associations, having their ambulances, their staff of surgeons and nurses, their stretchers and supplies, can they go on the battle-field, and work on the same footing as the army surgeons co-operating with them? Most of the delegates at the Geneva Congress thought they could; but I believe that the question should be answered most emphatically in the negative.

"MM. Moynier and Appia, in their book entitled '*War and Charity*,' depict a battle-field, on which the staff of the aid-societies shall figure as follows:

"'The stretcher-bearers (of the regular ambulance corps) have bravely confronted the hostile cannon to remove the wounded; the surgeons are at their posts, to apply the first dressings. But the battle goes on. The bearers have gone a mile or a mile and a half from the line of battle to the first field hospital station. Their strength begins to flag! How shall they continue in their laborious duty? Behold! a crowd of young, vigorous, *modest* young volunteers, fired by a generous enthusiasm, and by a few noble chiefs, who inspire a most chivalric courage! They are not soldiers nor retainers of the medical staff. Let us assist you, they cry; let there be no distinction between official and unofficial; or, if you wish to see our commission, we are the brevetted official delegates of humanity, we are voluntary Samaritans! Officers, surgeons, stand aside!'

"Doubtless this is ingeniously put, and written in a lively style, but if we come down to the level of practical common sense, I presume that no one of military experience would recommend the admission on a battle-field of a corps, not wanting in bravery certainly—that is a cheap commodity—but deficient in that coolness which characterizes the trained soldier, and which is imparted by a sort of wholesome contagion to the young recruit at his elbow. Excited by the sound of battle, the volunteer is intoxicated with courage; but this feverish excitement is absent, and it is imperatively necessary that it should be absent, in the military surgeon, who must maintain coolness and composure in the execution of his difficult mission. Fancy the ambulances of the voluntary associations inadvertently exposed to fire by some retrograde manœuvre! Are we quite sure that the volunteer nurses would not create a panic, a disaster common to all armies? What security would there be that the volunteer ambulances would not block the road of the batteries, and caissons, and ammunition trains? Along the line of battle, during the combat, the military surgeons have ever proved equal to their noble, laborious, and perilous mission. But it is after the fight that their overwhelming labors begin. A civilian surgeon, however skilful and experienced he may be, lacks some of the indispensable qualities of the military surgeon. I have often heard it maintained that there should be no special army medical staff—that medicine and surgery are alike everywhere, and that a civilian can take care of wounded soldiers as well as a military surgeon. A very little practical experience disproves this hypothesis.

"The duties of a military surgeon are not to be learned without experience. To know soldiers, their habits and prejudices, to be familiar with military regulations, to be cool under fire, are attainments that require training. The military surgeon, accustomed to the usages of armies and of war, must ever remain the real battle-field doctor, to whom pertains, by right of his special experience, the organization and administration of the field service. Voluntary associations cannot then be substituted for a military medical staff; they cannot even co-operate with the latter under all circumstances; but, if admission to the field should be denied to such societies during the battle, they may still render great service at the base hospitals, thus leaving the military surgeons at liberty to devote themselves exclusively to field surgery * * * * * * *

"What happens inevitably in war time? An army takes the field; its medical staff is complete; each regiment has its surgeon and assistants. Presently a battle is fought. The surgeons at headquarters, and at the division hospitals, aided by the regimental surgeon, attend the wounded, and send those who can be moved to the nearest hospitals. Then the army moves on. The medical staff, sufficiently numerous at first, has to leave surgeons behind with the wounded of the first battle, and at the next engagement the number of medical men is insufficient. If the campaign is protracted, the army has the alternative of being accompanied by an inadequate medical staff, or of leaving its wounded without suitable attendance, unless the regular medical staff calls to its aid either the civil practitioners of the country in which the war is carried on, or obtains auxiliaries from its own country. Thus in the Italian campaign, more than two hundred Italian physicians co-operated in the care of our wounded in the hospitals of Milan, Alexandria, Brescia, and Genoa; while, nevertheless, it was still necessary to call upon a large number of French medical students as dressers and assistants to reinforce the medical staff."

After describing at considerable length what he regards as the appropriate functions of aid-societies, and dwelling upon the indispensable necessity of having experienced physicians and not raw medical students at the base hospitals, Dr. Lefort continues:

"Here comes the most difficult part of the problem. How is a numerous efficient auxiliary medical staff to be had? The answer is simple; it may be considered almost brutal. Such assistance is to be had by paying for it, and paying dearly, that is to say, at its real value. In questions of this sort, it is well to dismiss illusions and avoid sentimentalism. Devotion to the country and to humanity is not a money question; but a capable doctor of medicine, however patriotic, cannot afford to leave his family and his employers, unless adequately indemnified pecuniarily for the sacrifice he makes. If one's own country is invaded, he may indeed volunteer; but it is a different thing in foreign wars. Here is a proper occasion to remember that money is the sinew of war. The aid-societies are admirably fitted for making appeals to the patriotism, charity, and purses of citizens, and such appeals would be responded to, doubtless, in France, as they have been in Germany and America.

"But it is not enough to have a sufficient *personnel* of surgeons, students, and nurses. Adequate supplies are requisite. And here we approach a most im-

portant question, for I believe that we must completely revolutionize our field hospital service and ambulance organization.

"When a battle takes place, it is customary to send the wounded as soon as their condition will allow, and frequently sooner, to the nearest town provided with hospitals, or with transportation into hospitals. These structures are presently filled. Two or three times the number of patients they ought to contain are crammed into them, and when the terrible results of overcrowding are manifested, those who can be transported are moved on to more distant depots. The revolution which should be brought about, would bring the hospital to the patient, and not, at all hazards, to take the patient to the hospital; and this is not only desirable and possible, but easy.

"Last year, the Exposition collected at Paris specimens of the ambulance outfit of the United States and of almost every country in Europe. These appliances were subjected to various tests by the international committee on ambulances, and not only from participating in their experiments, but because I had seen, in actual operation, in Italy and in Schleswig, the ambulance trains of the French, Austrian, and Prussian armies, I acquired the absolute conviction, that with the possible exception of the American Rucker ambulance, we possessed no unexceptionable means of transport for the wounded. The aid-societies and our War Minister devoted much attention to this difficult subject, and yet, up to the present time, we possess no stretcher or ambulance wagon that is not liable to grave objections. Moreover, if we had ambulance trains properly constructed, however complete and numerous they might be, they would always be inadequate when the necessity occurred of transporting thousands of wounded for considerable distances, without the aid of railroads, from such fields as Solferino or Magenta. What is done under such circumstances? Why, wheeled vehicles of all descriptions are impressed, and one does not like to think of the torture of a wretch with a gunshot fracture of the thigh for example, carried twenty or thirty miles in a carriage without springs."

"Instead of ingenious improvements of means of transport for the wounded, we should seek to render transportation unnecessary. In Europe, until 1859, the wounded who were captured were regarded as prisoners of war, and an army had always to strive to keep its hospitals protected from the vicissitudes of a campaign. But a decree of the Emperor Napoleon III. was published in the *Moniteur* of May 29, 1859, a few days after the battle of Montebello, in these terms:

"'The Emperor Napoleon III., wishing to diminish as far as rests with him the sufferings that war involves, and to give an example of the suppression of unnecessary hardships, declares that, from May 28, all wounded prisoners will be restored to the enemy, without being exchanged, whenever their condition will permit them to be safely returned to their countrymen.'

'This decree, incorporated into the articles of the convention at Geneva, and accepted by all the European powers, protects the ambulances and their attendants and supplies and patients, and removes all obstacles to the erection of hospitals near the battle-field.

"Another objection will be raised here. It is easy to say create a hospital, but a hospital is not built in a few hours, and the materials for its construction are not always available. I have asserted that the hospital should move to the patient, and not the patient to the hospital; I refer not to massive edifices of stone, but to the excellent hospitals made of simple tents, and I maintain that it is easier to transport canvas than wounded men, and that it is not worth while to expend so much ingenuity on ambulance-springs and elastic beds, when it is much easier to carry in any vehicle on wheels a tent that will hold thirty men, than to transport thirty men to any distance to a shelter.

"But, the objector will reply, you surely do not mean to give these unfortunate men simple canvas for shelter, to expose them to currents of air, the rain and the cold; you cannot make seriously such a proposition. I respond that facts are stronger than hypotheses, and that facts have decided this matter. In 1861, in his remarkable discourse on hygiene, Michel Lévy demonstrated the great advantages of tent and pavilion hospitals, illustrating his lecture by the experience in the Crimea, and he showed how superior they were to hospitals established in permanent buildings, whether specially constructed for hospital purposes or otherwise. During the American war the greater number of hospitals established by the War Department, many of which were represented by models at our Exposition, and illustrated by plans in *Circular No. 6*, were nothing less than an agglomeration of board pavilions and tents. Tents are even employed in Germany, not as makeshifts, but as preferable, at least in the warm season, to stone buildings, and are pitched in the yards of great hospital establishments. I have seen such at Berlin and Leipsic, where they had been found most serviceable. They had been in use four years, and everything leads me to believe that they were far safer than ordinary wards—a fact which it is most important to determine by exact statistics. At the Bethanian hospital, for example, early in the summer the surgical patients of Dr. Wilmo were transferred to tents provided with a fly (an indispensable precaution) pitched in the garden of the hospital, and I can affirm that they were most comfortably off, and greatly preferred their domicile to that of the main wards. Wishing that Paris should not be behind Berlin, I this year applied to the Director-General of Public Assistance to transfer my surgical patients at the Cochin Hospital to tents in the great open space beyond the hospital. M. Husson, with a distrust which I regret but cannot blame, was unwilling to accede to my request or to assume the responsibility of an experiment so opposed to our custom and prejudices.

"Such a revolution in the case of the wounded in field hospitals can be brought about by the authority of governments as by aid-societies, and it will be carried out, I am sure, from the best of reasons, from necessity. The introduction of arms of precision renders it probable that in the great battles of the future thirty and forty thousand men, even, may be stretched on the sod, and it is certain that the means of transport for so many wounded would be not only imperfect but absolutely inadequate. The aid-societies should not forget, in fulfilling the part which their devotion to humanity leads them so much to covet, that in our time wars break out promptly, the first battle soon following the opening of hostilities, and that a medical service equal to the exigencies is not to be organized in a day. It must be arranged beforehand. *Si vis pacem para bellum*, is a maxim followed strictly with regard to everything concerning the methods of destroying life, and it is not only logical, but indispensable to prepare, in anticipation, the means of repairing, as far as may be, the terrible consequences of war.

"In France, the aid-societies are directed by Count ——, the Marquis ——, the Duke of something, excellent gentlemen, full of good intentions, worthy of all eulogy in this respect, much in earnest in their mission too, but who, quite ignorant of military medicine, may very well organize a ball at the opera, an exposition, or a museum; but would be very much puzzled at eight

days' notice to set ambulance trains in motion, to assemble a multitude of surgeons, and large hospital supplies; for nothing would be ready. If civil practitioners, through patriotism, might be willing to place themselves temporarily under the orders of the military intendants, of men who by long experience have learned a little of what military surgeons alone can know thoroughly, they will never consent to receive their instructions from these directors of voluntary associations. Men animated by the best motives no doubt, but utterly incapable of learning what a military medical staff is and should be."

While literally translating we have still greatly abbreviated M. Lefort's commentaries, which are elaborated at great length. His eulogies on the American system of army medical organization are simply a reproduction of what has already been pronounced by the ablest European authorities. In France, M. Didiot, writing under the inspiration of Baron Larrey, has devoted a volume to the subject, and has translated the reports in *Circular No. 6*, for the benefit of his brother surgeons. In Russia, the chief surgeon of the navy, Baron Haurowitz, has published a voluminous account of his inspection of our army medical department, and recommended that the Russian medical staff should be reorganized in conformity with our system. The head surgeon of the unhappy Maximilian, Dr. Neudorfer, chief medical officer of the 8th Austrian Army Corps, has equally praised the American organization in his journal surgical treatise, and Staff Surgeon Munich, of Prussia, Staff Surgeon Nicholaysen, of Norway, and Inspector-General Muir, of the British army, have urged, in their reports to their respective governments of their examination of the medical organization of the United States army, the adoption of the system which worked so admirably in our colossal struggle. A. B. C.

"HUMAN EYES."*

To the Editor of the Medical Record.

Sir.—When any of the laity write articles on medical subjects and publish them in the popular periodicals, no matter what misstatements or untruths they may contain, I am always indisposed to take notice of them, because those reading them will naturally refer to some professional person for explanation, and so learn their incorrectness. It is somewhat different, however, when those to whose names M.D. is attached, publish in the periodicals articles which exhibit utter ignorance of anatomy and physiology, and particularly when, in addition, advice and recommendation are given of a character to do harm to persons who might follow it, misled by the idea that because M.D. was appended to the author's name, therefore what he says in print must be true. My attention has been called to, and I have been requested to notice, an article headed "Human Eyes," in the October (1868) number of a popular monthly of New York called *Hours at Home*. The piece is only some four or five pages in length, written by Dr. J. V. C. Smith, formerly editor of the Boston *Medical and Surgical Journal*, and Mayor of Boston. The title of M.D. and having filled these two positions, might naturally give some weight to his statements.

The article exhibits such profound ignorance of anatomy and physiology, and all the recognized laws of optics, that it is a little difficult to deal with it properly. The opening sentence is curious and startling. "All land-seeing eyes are constructed anatomically upon the same plan." As the author afterward speaks of the "water-seeing" eye, we may conclude that he means the one is to see in the air, the other in the water. Upon the slightest consultation of any of the text-books of comparative anatomy, Dr. Smith would have found that his opening statement was incorrect—the eyes of insects, for instance, being anatomically adapted to the law of the *radiation* of light, and the eyes of higher animals being anatomically adapted to the law of the *refraction* of light. In the next paragraph we are told that "such is the constitution of the organ that the rays of light in crossing each other while passing through the beautiful magnifying glass at the anterior part of the globe present the image bottom upward." The reader would naturally infer that the eye was wonderfully constituted, till perhaps he happens to find that his simple burning-glass does the same, as every convex lens. "Telescopes," says the author, "are made with a second convex lens, to take the rays on leaving the first, and recrossing them. That simple contrivance gives a natural aspect to the image, and thus the astronomer sees the bodies he is contemplating in celestial regions precisely as they are, and not topsy-turvy, as they would appear with only one convex lens in the instrument." This ought to satisfy any intelligent reader why his spy-glass has more than the lens in the end, because it is so simple and easily understood. Moreover, it will be a warning to him when purchasing a telescope to assure himself that the optician has put in the *second convex glass*. If, however, the seller of the instrument takes it apart and shows him more than two glasses, he can readily add up the number, divide it by two in his head, and if it comes out even, depart with the assurance that with that telescope there will be no danger of his seeing things "topsy-turvy" because the even numbered lenses correct the odd ones.

"Various theories," says Dr. S., "have been proposed in explanation of the fact that we see things right side up, although the image is not so; but none of them are satisfactory." The reader must however be satisfied with Dr. Smith's, which is: "Probably the mind takes cognizance of the object on which the eye rests, with regard to the impinged image which happens to be made, because the fabric of the retina is actually a reflecting mirror. Yet without an image there is no vision." I have vainly attempted to comprehend this lucid explanation, and trust the general reader obtained some distinct idea of it. If the author would study the theory of *projection* he might possibly find it more "satisfactory" than his own, and I am confident the general reader would.

We are next gravely told that "the eye is no more conscious of the presence of light in its interior, than is a spy-glass. Both receive the light and transmit it to the nervous pulp of the optic nerve, which is spread out in an extremely delicate tissue, like a cup." This is really unpardonable anatomical ignorance. If the author does not, he will find that many of the laity even, do know, that the *retina* is a very distinct organ, alone perceiving light which does not affect the optic nerve; this latter, where it enters the eye being the cause of the "*blind spot*" in our field of vision.

Again we are told that, "in the night-seeing animals, and in fishes, there is a remarkable modification of the apparatus, apparently extremely simple in its mechanical aspect. But there is a vital endowment superadded which no artist can imitate, and no philosopher elucidate, that gives the individual a capacity for distinct views and an unmistakable apprehension of outlines, distances, and colors in darkness. A cat's eyes appear quite phosphorescent, when met in a dark corner. She sees by a very few rays from a feeble illuminating source, which striking the *tapetum*—a sort of metallic-looking portion of the retina—they are thrown back, and finally conducted from one angle to another, in conformity to a

* Read before the Suffolk District Medical Society.

law in optics, operating on the principle of a dark lantern, which concentrates the light on the object in front, while she is unseen by the rat or mouse, as the case may be, on which she is resolved to pounce. Her little victims have night-vision precisely like her own, but her dark-lantern being the largest, confuses them by the effulgence and brilliancy of its volume of reflected light."

After carefully reading this over I am quite at a loss to know whether Dr. Smith believes, or would have his readers believe, the utter nonsense that the eyes of anima's can under any circumstances *emit* light, or do anything but reflect incident rays.

Next we have the "water-seeing eye," the external tunics of which vary in different species of fishes with reference to their habits, and the functions they are to perform in fresh or salt water, in shallow basins, turbid streams, or in the profound depths of the restless ocean." If Dr. S. can tell a fresh, salt, or muddy-water fish by the sclerotic coat, he must be possessed of some data in comparative anatomy which ought no longer to be kept in the dark. Some anatomical notice of two "*huge monsters*," namely the white shark and horse-mackerel, I will pass over, to call upon all to admit, with the author, a "creative intelligence" from "having seen the effect from the beginning, and therefore adjusted the changing focal axes, and protected its inimitable chromatic adjustments within, to meet the exigencies of shark-life in the one, and horse-mackerel peregrination in the other, in their descendants through millions of generations." Will Dr. Smith give to the profession a description of these "chromatic adjustments" in the "water-seeing eye?" I think it is generally conceded that the human visual organ is the most perfect; and certainly with regard to *it*, physiologists are unable to definitely decide whether it is *achromatic*, or whether achromatism is necessary for distinct vision.

In the next paragraph we are told that the eyes of insects "are covered externally with a kind of protecting network, analogous to a wire screen over a cellar-window—*each* opening between the meshes corresponds with a facet or cornea that transmits light independently of all others on the same hemispheric prominence directly to the optic nerve."

In the dragon-fly, we are told that "the eye is pierced, or rather, presents eight thousand orifices, equivalent to eight thousand eyes, since each one gives a distinct, independent impression." The slight inaccuracy in reference to the number of the "*orifices*," in reality computed at about one-half as many more, I will not discuss, but simply call attention to the fact that the author seems totally ignorant of the anatomical relation of these eyes to the law of the *radiation* of light, as distinguished from all eyes constructed on the principle of the camera obscura. Again I must recommend a perusal of the common text-books on comparative anatomy. Now I have quoted and commented upon these few points in order to show the degree of knowledge of the author who, after this extraordinary exhibition of ignorance, coolly goes on to say: "These preliminary observations open the way to some practical reflections on the philosophy of vision, which, if regarded as they should be, simply as contributions to the current fund of useful knowledge, may prove of inestimable service to those whose eyes are more important to them than they have supposed. This is a spectacle age; that is, there is a fashionable proneness to look through glasses of some sort. A majority of all pedestrians on the street, have lunettes dangling at the end of a ribbon. Young misses, whose eyes are as bright as Golconda diamonds, use eye-glasses, and so the mania pervades all communities. With this well-known disposition of the people, especially in cities, to have some sort of artificial aid to the eye, we assume it as a lamentable misfortune that spectacles are so easily procured. Were they $500.00 a pair, and only attainable by persons of wealth instead of being within the reach of aping multitudes at fifty cents, there would be more quiet eyes, and far less occupation for oculists—a profession that came into existence with eye-glasses."

Dr. Smith says he "shall not argue the case logically, because it would take too much time, and too much space, and become a book to provoke criticism. But the man who has not yet put on glasses never need do so. Our ears, sense of feeling, sense of taste and smell, last to the last day of our life, under ordinary circumstances. Why should not vision? Our eyes should last as long as our fingers and toes, and to the day of death, were it a century from birth, and correspond in vigor and susceptibility to impressions, like the other special senses. Incidental injuries, diseases, accidents which produce blindness, etc., are not brought under consideration in this connection."

All this is on a par with the complete ignorance of anatomy and physiology which preceded it. This is a "spectacle age" I grant; for thanks to the re-searches of Helmholtz, Donders, and a host of other great minds, we now know how to ascertain the errors of refraction and accommodation, and correct them by proper glasses. If Dr. Smith will study the Sydenham Society's translation of Donders on the Anomalies of Refraction and Accommodation, he may possibly learn something. It is certainly too bad for any one with an M.D. attached to his name publishing such statements, at a time when ophthalmic surgeons are just commencing to enlighten the community as to the necessity of proper examination of all eyes where vision does not seem normal, and the possibility of restoring useful if not perfect sight by appropriate glasses. If the author knows what hypermetropia, myopia, and astigmatism are, and still writes like this, then it is unpardonable: if he does not know of them, the sooner he learns the better. The mistaking cause for effect, as to oculists and eye-glasses, is of course simply amusing. For him to tell the laity that their senses last to the last day of their life, seems unnecessary, because they know better; and although they will admit that their eyes do last "as long as their fingers and toes," they know very well that the *power of use and control over all these* does not last, but grows less and less with advancing age.

The following paragraph, however, conclusively proves the author's entire ignorance of the anatomy and physiology of vision. I quote it entire. "With most persons, there is an epoch in life when the eyes become slightly flattened. It arises, probably, from a diminished activity of the secreting vessels. The consequence is, that the globe is not kept quite as completely distended with fluids as in youth and middle age. There is thus an elongated axis of vision. A book is held further off to be read. Finally becoming more flattened by the same inactivity within, the difficulty is met by putting on convex glasses. This is the waning vision of age. If, however, when that advancing imperfection is first realized, the individual persists in the attempt to keep the book in the old form of vision—even if he reads under perplexing disadvantages, never relaxing, but perseveringly proceeds just as he did when his eyes were in the meridian of their perfection—the slack vessels will at last come up to his assistance, and the original focal distance will be re-established."

Under almost any other circumstances I should be inclined simply to reply to this in the words of our comic friend at Selwyn's, "So glad;" but it is to be remembered that all this is published in a "Popular

Monthly of Instruction and Recreation" in New York, by an M. D., who once held such positions in Boston as would, in the eyes of his readers perhaps, entitle him to be believed. Again, I would refer Dr. Smith to the ordinary text-books on the eye, and he will there find that the eyeball does not change its shape, and he will likewise hear of accommodation and its causes, of which he seems now to be entirely ignorant. The idea of the "elongated axis of vision," and the "slack vessels," to account for it, has done some good, since it has afforded others as well as myself cause for a hearty laugh. Dr. Smith goes on to say, "This statement will unquestionably be combated, energetically, by those who use glasses. But it will be a waste of forensic power, because the fact is established beyond cavil." I, however, doubt if those who wear glasses will take the trouble to do more than from curiosity read the author's statement by their help, without which they never could have done so. His statement may do harm nevertheless, from some parent in consequence taking away from his hypermetropic child already commencing to squint, the convex glass an ophthalmic surgeon has ordered. The author's speaking of old people (introducing Cicero, Humboldt and John Quincy Adams as proofs) being able to see without glasses, and therefore that everybody else should, certainly reveals a fund of ignorance in reference to the anatomy and physiology of vision ample for him to draw upon for all future time. He finishes by cautioning his readers not to furnish glasses to "weak-eyed boys" or "fashionably-inclined daughters," but graciously accords them the liberty, if they do not believe in his theory, "of buying glasses like the Vicar of Wakefield's son."

To those of my hearers who may consider that such nonsense had better be passed over in dignified silence, I would reply, that except they are at work in my specialty, they can have no idea of the sort of morbid interest with which people with ophthalmic troubles read or have read to them all they find in print; and from the assumed position of superior knowledge on the part of Dr. Smith in this article, many readers of it might be induced to act upon his advice, and thereby cause themselves irreparable trouble. My advice to Dr. Smith, when about to write another article on the human eye, is that of Mr. Punch to those about to marry, simply, "*Don't.*"

B. JOY JEFFRIES, M.D.

BOSTON, Dec. 1868.

THE NEGLECTED CAUSES OF INFANT MORTALITY IN NEW YORK.

REPLY TO PROF. A. JACOBI.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—Dr. Jacobi having concluded his comments on my paper, in compliance *only* with the expectations of many medical friends, I beg you to allow me to make a few remarks. These friends admit, however, that he has presented but few things which call for more than an expression of thanks from me. As I regard the whole subject of the health and life of our infants one too sacred to be trifled with, I shall for most obvious reasons disregard the mass of his communication, and touch upon such parts as may have a scientific interest, or may require an explanatory remark, leaving the balance to the care of an appreciative profession. The first notable point I find at the bottom of page 464, RECORD, December 15, relating to the sorrow of the philanthropists that my paper should have been published; especially in the secular papers. I have no reason to name the persons who are bowed down with this sorrow; any of us can read by count them upon our fingers. As to its getting into the secular papers, I can only say that it, no doubt, took the same course that the Rules for the Management of Infants did, and the Doctor, no doubt, knows what that was. I beg the liberty of suggesting that any irregularity that may attach to the appearance of these productions in the daily papers be referred to the Committees on Ethics. The next point relates to the resolution of thanks for the publication of my paper, introduced by myself at the meeting, and adopted by the Society, and found at the above reference. I am glad that he has given me the opportunity to say that, besides so doing, I *prepared* the resolutions. I did it for the purpose of ascertaining if the New York County Medical Society, after voting the paper printed, in order to give each member an opportunity to study it, and having so studied, if it, upon mature reflection, still approved its original action; the unanimous vote of the Society thanking me for the publishing of the paper is quite sufficient evidence that this "unworthy" document was acceptable. I would simply state, in the matter he discusses at the bottom of the last column on page 464, that whether I spent minutes or months in obtaining information relating to the Infant Hospital, I am willing to leave the decision upon the truth or untruth of my statements to any responsible tribunal. Let ten per cent. a week of mortality among these helpless infants, over whose condition he labored and contemplated so long, respond. It is much easier, as well as shorter, to tell the truth, even though distasteful, than to devise a method how not to tell it. I find nothing more calling for my attention till I reach the top of the last column of page 465, where I am charged with an unwillingness to teach my fellow physicians philosophy. It seems hardly necessary, and yet this charge makes it so, to again remind him that the very character of the audience rendered more than a simple allusion to well-known facts, not only unnecessary, but tiresome. The educated mind requires no elaboration of first principles. "A word to the wise is sufficient." And I will here venture the remark, that the habits of public teachers too often lead them into didactic dilatation upon subjects quite as well known to their auditors as to themselves, and indeed sometimes much better. As to the variety of subjects which I ventured to mention in my paper, which is regarded by him as quite startling (*vide* page 464, December 15), I am satisfied with the decisive vote of the Society, that as a report on public health, it had a right to call attention to any subject relating to the health and life of the community, and that it touched no other one. Had I presumed to discourse upon rudimentary physiology before that audience, I should have been careful not to make such groundless statements as that in a temperature of 104°, animals, unless they are given water and food, will die within two to four hours." (*Vide* page 465.) Were that statement true, how many of the horses would have been left alive at the close of many days last summer, who were driven about our streets for six and eight hours with neither food nor water, in a temperature varying from 110° to 110°. It is a matter of established record, that when the temperature in the shade, away from reflection, rises to 90° and upward, it will rise to 150° and upward in the sun's rays. I should also have been very careful not to state that, in atmospheres of high temperature, the temperature of the animal is "apt to rise beyond the external temperature," for that is only true where the temperature of the atmosphere rises to about 110° as applied to man. I am surprised that Berger and Delaroche should be quoted in support of any such random statements as those. It is very well known that these experimenters

practised mostly on rabbits and guinea-pigs, whose normal temperatures are above that of man, and that the animal's body was confined in a close box with its head projecting. On a count of the closeness of the box it is presumed by competent observers that the exhalations from the body of the animal soon surrounded it by a moist atmosphere, and so added greatly to the effect of the temperature upon the animal. To this must be added the powerful effect of the struggles of the animal, when so circumstanced, in augmenting his temperature, and we get an idea of the value of the results of these experiments in determining the *atmospheric temperature* even rabbits can live in. They are worth absolutely nothing, and have long since been discarded. They found, however, that under these circumstances, such as have been described, these animals would, in a box heated to 120 to 130, *not* 104, at length experience an elevation of temperature of 11 to 16, and suddenly die. Various experimenters have obtained results differing little more or less from these. I might point out many other inaccuracies in the statements of my reviewer, such as the coagulation of albumen, myosine and hematosine at 120 to 127, and at 104 in the mammalia, birds and fish, but as it is a subject so perfectly familiar to all well-read students, it seems a work of supererogation. I feel bound to say, however, that his mistakes aside, the general tenor of his "elucidations" upon the subject of solar and animal heat, and remarks on the natural philosophy of the behavior of water on flannel and on linen, as applied to garments, have so well defended my own views, as set forth in my paper, that I feel grateful to him. We next come to his copy of the "Rules for the Management of Infancy" (page 466, RECORD for December 15). In my judgment, and I speak from the experience of nearly twenty years in this kind of management, they are far more sensible than the copy furnished as by "some thoughtful" but unknown "mind," through the daily papers, and republished in my paper. (*Vide* RECORD, Oct. 1.) It will be observed that the whiskey and water have been taken away from his rules, and that flannel shirts have been added. He insists upon the two-hour rule for suckling babies. I especially call attention to his expatiation upon this subject, and, if he will allow me the immodesty of doing so, then refer the reader again to my comments upon the same, at p. 339, RECORD for Oct. 1, 1868. It may strike parents who, like myself, have watched their own children for years, as a decidedly Utopian idea that infants have no desires that any one but our reviewer can interpret. He may "*insist*" upon it, but his idea will be voted down as one founded upon *badly conducted* observation. It will be observed, also, that he thinks that after all, either from the breast or from some other source, the infant should be allowed "*enough*," even if the intervals should not be just *two hours*. This I presume is all that he will "insist" upon, and as that is precisely what the child will "insist" upon, no disagreement can possibly occur.

At all events, I find no cause of disagreement. But I must unfortunately disagree with him in the statement that barley is not a vegetable substance (p. 501, RECORD for Jan. 1). I desire to call attention generally to his "elucidations" relating to barley, because of the support they give to the statement made of this article in my paper.

It will be seen at a glance that his remarks upon it have no reference whatever to the use of the infusion of barley as food for infants.

And this leads him into the physiology of digestion—a department in which his "elucidations" are so remarkable, that I trust no physiologist in the land will fail to read them, not because they contain any new physiological information, but because they show how the devotee to a hobby will ignore the plainest demonstrations of bedside observation, and attempt to show that the secretions of the stomach, duodenum, and pancreas of the infant behave on "*amylum*," as do the corresponding secretions of the adult dog.

I presume no person at all instructed in the matter will doubt that a very young infant may digest some starch, or some barley; I certainly do not pretend to question that; but that it is a proper substance for a constant and large ingredient of infant diet, I am sure that not even he will "insist." I next find, on p. 502 RECORD for Jan. 1, 1869, the, to me, remarkable statement, that one of the functions of the pancreas is to "*transmute albuminous substances into peptine*." I cannot but think that the doctor has been misrepresented by the printer in this sentence, for certainly if anything is agreed upon among physiologists it is that *pepsine* is exclusively a product of the glands, or follicles of the mucous membrane of the stomach.

He knows undoubtedly, as well as all of us, that the combination of this product of the *stomach* with the alimentary substances it dissolves, forms gastric *peptone* or *pepton*, and that the like union of the pancreatic fluid with substances, forms pancreatic pepton. These well known facts I presume he intended to remind us of; if not, he is again in error. As regards the power of the pancreatic juice of most adult animals to transform starch into sugar, there can be no question among physiologists, for it is another fact long since settled. The same fact is equally true, however, of many other fluids of the body, and the doctor is certainly *not* sustained by physiology in the opinion that the secretion of the duodenal glands has nothing "to do with the digestion of starch." (*Vide* RECORD, Jan. 1, 1869, p. 501, bottom of last column.) Nor have his "elucidations" furnished a single item of proof—a fact which I regret—that the secretions of the pancreas, or duodenum, or stomach of the human young act upon starch as the adult organs, or as those of animals do.

There are no other scientific points in his review which appear to me to require comment.

But I cannot let this opportunity pass without an expression of my gratitude to him for thus again calling the attention of the profession to my paper. Many, no doubt, will now read it who have never before done so, and many will re-read it under the light of his "elucidations." He has rendered it historic, no doubt, if not immortal, and rescued it from untimely death perhaps. I confess to a desire that it be read by both physicians and by the people, not because I wish to discredit a soul in the world, not because I hope thereby to diminish my milk-bill, as is intimated (*vide* p. 502, last column), but because I wish its truths kept before our physicians and before our people—truths of vast importance to the infants and adults of our city and county, truths that are scientific, truths that may lead to practical results, truths that the Almighty has established from the beginning of time. I am now additionally desirous that it be read side by side with the doctor's "elucidations" of the subjects it is supposed *elucidates*, and I am quite willing to trust it to the educated and practical judgment of the physicians, simply directing their attention to the discovery of the proof that an *infusion of barley* adds value to the food that Providence has prepared for the human young; to the proof that farinaceous food, and especially "*amylum*," is proper for the infant; and to the proof that the too general practice of forcing them to digest these substances is *not* a most fruitful cause of infant-mortality.

The doctor makes another statement, which, if true,

is too important to be passed over in silence, viz.: that he *knows* the "Rules for the Management of Infants" "*have done some good.*" (P. 465 RECORD, Dec. 15.) How one can take this flattering unction, with the fact staring him in the face that, with his rules spread broadcast among the population, the mortality of infants ran suddenly up, from the very date of their dissemination, to numbers more frightful than we had ever before witnessed, I do not see, the people don't see, and I very much doubt if the profession can see. (*Vide* RECORD, Oct. 1, p. 311.)

This, like the doctor's "expositions" of my paper, seems to me a decidedly "negative" good. (*Vide* last paragraph of his review, p. 502, Jan. 1.)

I need not call attention to any more points "elucidated" by my reviewer, for there can be scarcely a doubt that all will now read my paper. I cannot be too thankful to him for *this* "good," at least. The evidence before us all, that he and others whom I might mention have thoroughly studied the paper, is a source of very great satisfaction to me. That it has been read with profit, even by those most ferocious in its denunciation, the transpiration of events shows, and I hope will continue to show. With the doctor's long review of it before us, it can hardly be said to have been "barren" of results, as he declares; and as to anything else it may have produced, it does not become me to speak. But I see with satisfaction that, as a continuation of the effects of that paper, the doctor promises us some further "facts and opinions concerning the diet of infants." No one more sincerely hopes that they may be instructive and useful than I do; but I assure him beforehand that if they appear, in my opinion, absurd and dangerous—and I pretend to be entitled, by both education and experience, to an opinion—I shall so tell the profession and the people.

For the greater good of his contributions, I hope he may keep them away from the "Bureau," an institution for which I have an undisguised contempt, else they may be deprived of their spirits and blanketed, as were the "Rules," by some "thoughtful" but unknown "mind."

Respectfully,

STEPHEN ROGERS.

249 West 42d street.

Progress of Medical Science.

BROMIDE AND BI-BROMIDE OF MERCURY AS THERAPEUTICAL AGENTS.—Dr. Protheroe Smith (*Am. Jour. Med. Sciences*), in a paper read at the British Medical Association, states that he has used the bromide and bi-bromide of mercury for upward of five years, and has found the bromide valuable as an efficient cholagogue and purgative, promoting absorption of morbid tissue, with less constitutional disturbance than from calomel. He cited instances, and referred on members of the Association to aid him by their efforts further to investigate the subject, and to prove his conclusions.

EXTERNAL APPLICATION OF IODIDE OF POTASSIUM.—The following formula is recommended by Mr. James Hird, of Pembroke (*Practitioner*), for the "*external application of iodide of potassium*": Take of glycerine, ʒj; iodide of potassium, ʒ iss; best yellow soap, ʒ iss. Rub up the iodide thoroughly with the glycerine, and then all the yellow soap. This application is found to be very active in removing glandular tumors, &c.

TREATMENT OF RUPTURE OF LIGAMENTUM PATELLÆ AND OF TRANSVERSE FRACTURE OF PATELLA.—M. Sistach is of opinion that position and immobility for a sufficient length of time are quite sufficient to effect a good cure, without any use of the compressive bandages and apparatus so generally used, which are liable to do harm rather than good, preventing the nutrition of the limb, and specially the formation of the new material which is to unite the divided ends of the tendon, causing atrophy of the limb and local scurvy.—*Gaz. Med. de Paris.*

A CASE OF ENCEPHALOID AND MELANOTIC TUMOR OF THE LEFT ORBIT.—M. Sichel, Paris (*Chicago Med. Journal*), reports a case of encephaloid and melanotic tumor of the left orbit having crowded back and compressed the ocular globe. Extirpated by himself at his clinic, in 1859, resulting in apparent cure, followed by relapse after nine months, and a second extirpation, and cauterization with chloride of zinc paste; the destruction by cancerous disease of the upper and internal portion of the orbital wall, which had not been subjected to the action of zinc; the cerebral pulsations being visible through the encephaloid mass. The disease was again developed in its fullest intensity after two years (in 1861), and after a fall from a wagon, upon the head, and again removed successfully in 1862. The learned professor reports the case as one of the most curious which has ever occurred to him in the course of his long and extensive practice.

BRAIN SUBSTANCE CANNOT BE LOST WITH IMPUNITY.—The following case, bearing on this point, has come to the knowledge of A. J. Steele, M.D., of St. Louis, Mo. (*The Humboldt Med. Archives*). It occurred in the practice of Dr. Hinkle, of Columbia, Pa., in the year 1851. A lad, aged 14, received a severe blow from the kick of a horse; the corks of the shoes produced a severe compound, comminuted, depressed fracture of the left parietal bone, one and a half inches in length; the brain had been lacerated, and fragments of its substance were found on the patient's hair and coat collar; a comatose condition, with symptoms of depression of the brain, immediately supervened. The impinging tables were, through the aid of the trephine, raised, and, strange to relate, the patient immediately took up and finished the sentence which had evidently been interrupted by the accident. He made a good recovery physically, and also mentally—seemingly—but as years advanced he displayed a decided weakness of mind, the intellectual powers neither expanding nor maturing in proportion to his age, and to this day he continues pleased and contented with boyish sports and occupations, while his brothers are able, energetic men.

HYPODERMIC USE OF THE BI-CHLORIDE OF MERCURY IN CONSTITUTIONAL SYPHILIS.—At the last meeting of the St. Louis Medical Society, Dr. Hammer (*The Humboldt Archives*) reported a favorable result from the use of bi-chloride of mercury in constitutional syphilis. For the hypodermic treatment two great advantages were claimed—the rapidity of cure, and the little liability to the "constitutional effects" of the drug. Experience has shown that the least amount of local irritation follows the use of the remedy when injected beneath the thick dermoid tissue over the loins. The amount used was one-eighth of a grain daily, to one injection, in twenty minims of water. The case selected by Dr. H. for the trial of this treatment, was one of long standing and with the most severe constitutional lesions that were then in hospital. The man had been so long under treatment by numerous physicians, that he had almost or entirely despaired of being cured. Sixteen injections had now been made, and the man may be said to be well. The cutaneous eruption had almost en-

tirely disappeared, and all his other symptoms are relieved.

NASAL MEDICATION.—Dr. Rambert, of Chateauden (*Gazette des Hopitaux*), recommends using the lining membrane of the nasal cavities as a medium for the absorption of remedies in cases of severe neuralgia of the face and head, and certain diseases of the eye. By his method, of one grain of morphia rubbed up with sugar seventeen grains, he has obtained very good results.

TESTING WATER FOR ORGANIC IMPURITIES.—Half fill a common water-bottle, cover its mouth with the hand, violently shake for a minute, and quickly apply to the nose. If nothing unpleasant is detected, tightly cork the bottle, set it in a warm place about the temperature of one's body, for two or three days, and repeat the shaking, etc. Water of very bad quality may thus be recognized, without the trouble and expense of analysis.—*Med. and Surg. Reporter.*

ERECTILE MOVEMENTS.—Prof. Chas. Ronget communicates to the *Archives de Physiologie, Normale et Pathologique*, for November, an exceedingly interesting article upon the mechanism of erections. He denies the existence of any special erectile tissue, and likens the action of those parts capable of erectile movement to the distension of the tentacles of certain marine animals, by accumulation of water in the interior. In the higher animals we have the same conditions, a fluid contained within a membranous cavity, and muscular contraction, only the fluid is blood instead of water, as in the invertebrates. The muscles of the organs endowed with erectile power have nothing special about them, nor do they constitute a special apparatus. The so-called erectile tissues are composed of nothing but ordinary arteries, veins, and capillaries, without anything peculiar but their form, distribution and dimensions, and muscular tissue, which, relaxing, permits the blood to distend these vessels, and, by their subsequent contraction, press the blood out and terminate the vascular turgescence. We find no thing essentially different in the erection of the cock's comb and the phenomena of blushing. The skin of the face has its derm and epiderm finer and more transparent than elsewhere; its vessels are rather more dilatable about the cheeks, and in some instances they remain dilated in advanced age, as a result of repeated emotion, or of habitual congestion. This is not sufficient to constitute a new tissue, though sufficient to explain the characteristic changes of color. The erection produced in the comb of the cock, in the caruncles of the turkey, are essentially the same in character, results of the same excitation, emotion, anger, love. The afflux of blood is the same, and the subsequent pallor on the one hand, and relaxation on the other, due to the expulsion of the blood, is also the same. The accidental erectile formations, as nævi, hæmorrhoids, are not considered new tissues, requiring a special classification.

Neither in the erectile organs of the genitary apparatus do we find this special erectile tissue. We find only the ordinary tissues which, by modifications in their dimensions and relation with neighboring parts, become capable of performing the office of temporary reservoirs of a certain amount of blood, of thus changing their form, volume, and consistence, and adding a new *rôle* to their primitive functions. Erection is not a simple act of a special tissue, but a complex act, requiring blood and elastic and contractile vascular walls. In the simple and most rudimentary form of erection, as in the vascular turgescence of the skin of the face, the erection of the comb of the cock, there is nothing else in movement but the blood and the vascular walls alternately dilated and compressed under the alternately paralyzing or exciting influence of the vaso-motor nerves. In a second form of erection more complex, that of the body of the uterus and the bulbs of the ovaries, the initial phenomena are the same, but soon there intervenes the energetic action of the uterine muscles, utero-ovarian, and ovario-tubal, which contract upon the blood accumulated in the erectile plexus. In the third and most complex form of erection, the intrinsic muscles of the copulating organs concur in a very direct manner to give to the phenomenon its highest degree of development in both sexes.

Our author does not believe that the muscular trabeculæ of the cavernous and spongy body are paralyzed and inert during erection. He has proved the contrary by experiment. On the cadaver, when these trabeculæ are really inert, it requires an enormous distension to give the penis a rigidity much less complete than that of erection during life. He has found it take a size of a third or more larger than the dimensions observed during life. He believes that there is a state of tension and relative contraction of the muscular trabeculæ during the physiological erection of life.

The blood accumulated in the parts is prevented from issuing by the dorsal vein and the veins of the bulb, by the ischio and bulbo-cavernous muscles, or by the large veins which pass out between the crura of the cavernous bodies, by the deep transverse muscles, by the veins of the plexus of Santorini, by the muscles of Guthrie, and of the prostatic region, and of the vesiculæ seminales. All these muscles act like a forcing-pump to direct the blood toward the glans and the anterior portion of the organ. The impossibility of micturition when erection is complete is evidently the result of the contraction of all these muscles. Thus we see that erection, instead of being the result of one property of a special tissue, is a phenomenon of variable complexity according to the organs where it occurs, the agents placed in motion being more numerous as the act itself is more energetic and more important.

POISONING BY NITRO-GLYCERINE.—In a restaurant where many young men are wont to dine, there stood one day upon a table a half-filled bottle, which one of the servants mistook for the undrunken portion of a bottle of wine that had been ordered, and he poured himself out half a wineglassful and drank it. The disagreeable taste, the burning in the mouth and œsophagus, the retching and vomiting which immediately ensued, and the severe pain in the stomach, showed that he had drunk something else than wine, and it was soon discovered that it was nitro-glycerine, that had just been placed there by a party who intended to make some use of it. The vomiting which ensued rendered the administration of an emetic unnecessary. The patient was given almond emulsion with opium, and demulcents. The result was a favorable one. Terrible pain in the stomach, with loss of appetite and intense headache, was endured for three days, after which the patient recovered entirely.—*Memorabilien*, xiii., No. 7.

HYPODERMIC INJECTION OF CURARE IN EPILEPSY.—Injections containing from one-fifteenth to one-twelfth of a grain were tried in four cases. In one there was no improvement, in another very doubtful improvement, in a third marked improvement, and in a fourth entire subsidence of the paroxysms thus far, perhaps a cure. The poisonous effects of the drug were not produced in any instance. This treatment was instituted in the Rudolfs-Spitale of Vienna (*Memorabilien*), but no particulars are given as to frequency of injections or other treatment. The injections were made almost

entirely upon the breast, only exceptionally on the arms.

Telescopic Uterine Speculum.—Dr. Riefenstahl, of Driburg, describes in the *Allg. Med. Cent.-Zeit.*, No. 80, a new uterine speculum (illustrated with a cut) devised by him. It consists of four small cylinders fitting into each other, and arranged very much as the pocket telescopic drinking-cup carried by travellers.

A Case of Maternal Impression. By E. Child, M.R.C.S.—On the 26th of August last I was summoned at eleven P.M. to attend Mrs. A—— in her first labor. On arriving at the house I found the pains very lingering and slight; the os was dilated to the size of a sixpenny-piece. I could not detect the presentation. Finding I should not yet be wanted, I returned home, telling the nurse to send for me when the pains came on stronger. At six A.M. the following morning I was called up. The labor was progressing, and the breech presenting. It continued to do so until four P.M., when as soon as the breech passed the os externum, the whole body of the child was expelled with some degree of force. It was dead, and from the peeling of the skin I conclude it had been so for some time. When I touched the cord it came away in my hand, leaving the placenta in utero, which I extracted after a little manipulation. It was a fine, full-grown male child, formed naturally as to its body, with the exception of the nails on the thumbs, which were like those of a rabbit. On examining the head I was surprised to find the parietal, frontal, and part of the occipital bones wanting; and at the space corresponding to, but larger than, the anterior fontanelle, was the brain, entirely denuded of skin or membrane, not even being covered with arachnoid. There was a little hair over the eyes, none elsewhere. The eyes, palate, and tongue were similar to those of a rabbit. At first I was inclined to think that in the absence of these bones the action of the uterus had squeezed the eyes into the shape I had found them, but on making inquiries as to any fright, and having heard the following story, I was induced to consider it a case of maternal impression.

"During the second month after conception the mother went to a penny show, in which she saw a trained horse pull the trigger of a pistol, pretending to shoot a rabbit. A dummy was then thrown out; the back of its head was bleeding, having to all appearance been shot off. This corresponded, as the mother-in-law declares, to the mark on the child's head. My patient seems never to have forgotten the circumstance during the remainder of her pregnancy, and was considerably frightened at the time. I was lucky in having to contend with a breech presentation; if it had been a natural one I should either have been puzzled to ascertain what it was, or, perhaps, have inadvertently pushed my fingers through the brain itself. The mother did well, and is now quite recovered.—*Lancet.*

Poisoning by Atropia cured by Hypodermic Injection of Morphia.—A strong little boy, aged three and a half years, drank more than the half of a solution of a grain of atropia in three drachms of distilled water. He immediately succumbed to the poisonous influence. An eighth of a grain of morphia was injected under the skin of the foot. In ten minutes the beneficial effects of the morphia began to be manifested, and in a few hours the patient was out of danger. The pupil remained dilated for some days.—*Allg. Med. Cent.-Zeit.*, No. 80.

A Third Nipple in the Human Subject.—Dr. W. Bathurst Woodman (*Transactions Obstetrical Society of London*) reported three cases of *a third nipple in the human subject*. The first two cases occurred in a mother and her daughter; the third in a male. The supernumerary nipple occurred on the left breast in all these cases.

Medical Items and News.

Death of Dr. Dewitt C. Enos.—At a meeting of the Board of Directors of the *New York Medical Journal Association*, held at its rooms, Jan. 11, 1869, it was

Resolved—That we have heard with extreme regret the announcement of the death of Dr. Dewitt C. Enos, late a member of this Board.

Resolved—That we hold in respect the memory of our deceased associate as that of a devoted student of medicine, learned without pretension, a careful practitioner, an agreeable friend, a virtuous citizen; and in all these regards a model worthy of imitation.

Resolved—That we sympathize most sincerely with the family and friends of the deceased in their great bereavement.

Resolved—That a copy of these resolutions be sent to the family of the deceased, and that they be published in the medical journals of this city.

Drs. L. Damainville, W. H. B. Post, C. F. Roberts, and Albert Strang, have received appointments as Sanitary Inspectors for the Board of Health.

The New Orleans Marine Hospital, for several years in possession of the Freedmen's Bureau, was to have been turned over to the United States Treasury Department on the 31st ult.

New Publications.

BOOKS RECEIVED.

The Ship Captain's Medical Guide. Compiled by Harry Leach, Resident Medical Officer, Hospital Ship "Dreadnaught." London: Simpkin, Marshall & Co. 1868.

Compendium of Auscultation and Percussion, etc. By Prof. Austin Flint, M.D. 4th Ed. W. Wood & Co.

Pennsylvania Hospital Reports. Vol. II. 1869. Philadelphia. Lindsay & Blakiston. 1869.

A History of the Medical Department of the University of Pennsylvania, etc. By Joseph Carson, M.D., Professor Mat Medica, University of Pennsylvania. Philadelphia. Lindsay & Blakiston. 1869.

A Handbook of Uterine Therapeutics and of Diseases of Women. By Edward John Tilt, M.D., Member of the Royal College of Physicians; Consulting Physician to the Farringdon General Dispensary, etc. 2d American edition, thoroughly revised and amended. New York: D. Appleton & Co. 1869.

A Conspectus of the Medical Sciences, comprising Manuals of Anatomy, Physiology, Chemistry, Materia Medica, etc., for the use of students. By Henry Hartshorne, A.M., M.D., Prof. of Hygiene in the University of Pennsylvania, etc. Philadelphia: H. C. Lea. 1869.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M.D., Curator to the Nursery and Child's Hospital, New York, Physician to the Infants' Hospital, Ward's Island, etc. Philadelphia: H. C. Lea. 1869.

Essentials of the Principles and Practice of Medicine; a Handbook for Students, etc. By Henry Hartshorne. 2d edition, revised and improved. Philadelphia: H. C. Lea. 1869.

Syphilis and Local Contagious Disorders. By Berkeley Hill, M.B., London, F.R.S., Assistant Surgeon to University College Hospital, etc. Philadelphia: H. C. Lea. 1869.

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