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THE
DOMINION MEDICAL JOURNAL.

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Original Communications.

A CASE OF PARTIAL PLACENTA PRÆVIA,

Accompanied with Fœtal Exomphalus.

By J. F. DEWAR, M. D.,

UNIVERSITY OF EDINBURGH, LICENTIATE, AND LICENTIATE MIDWIFERY, ROYAL COLLEGE SURGEONS, EDINBURGH; MEMBER OF MEDICAL COUNCIL OF ONTARIO.

Mrs. ——, æt. 22, mother of two children, on the 4th March, 1864, consulted me professionally with regard to several symptoms in this her third pregnancy. For the preceding three months she had complained of rigors, during the day she suffered from anorexia; but at 10 P. M. her appetite became, as she termed it, "voracious." She complained of great languor after the slightest exertion; she drew my attention to her size, which certainly appeared beyond the common; she felt the movements of the fœtus, but stated that they were more feeble than they appeared to be in her former pregnancies. She expected her confinement early in April. I simply prescribed a mixture composed of the compound tincture of cinchona and spirit of mindererus, and advised gentle carriage exercise.

March 9th.—I received a message that the liquor amnii had escaped, and that labour was supervening. On my arrival she told me that while stepping from her carriage rupture had taken place, and that more fluid had passed than in any of her former pregnancies. On a vaginal examination I felt the os uteri high up in the brim of the pelvis quite undilated. I noticed particularly that the brim and outlets of the pelvis were both in their transverse and antero-posterior diameters larger than ordinary. On applying the stethoscope I heard the placental murmur though feebler than usual. I particularly inquired at the time if the discharge was accompanied with blood, and satisfied myself that it was not.

The pains were evidently false, and after the lapse of a couple of hours, entirely disappeared.

March 10th.—Mrs. —— passed a very comfortable night, and states that the fœtal movements are felt much more distinctly than formerly.

March 23rd, 11 A.M.—I received a message to visit Mrs. ——, immediately. On the evening of the 22nd, at about 11 P.M., another escape of liquor amnii took place, the quantity was about the same as on the previous occasion. She had suffered from irregular labour pains during the whole night. On my arrival, I found labour had steadily set in: the os was well dilated. I discovered it to be a case of Partial Placenta Prævia. The placenta was separated from the uterus in about one-half of its circumference, the remainder being adherent to the right side of the organ; the detached portion of the placenta was dry and was easily lacerated. On insinuating my fingers above the placenta, I thought I recognized the anterior fontanelle, but was unable to determine satisfactorily what the presentation really was, as I distinctly felt between it and the pubes of the mother a tumour, as I thought, which partially overlapped it. I was puzzled with the case. Mrs. —— had been in the habit of taking chloroform in her former labours, and insisted on its being administered. I sent for my friend, Mr. Alexander, who was equally in doubt with regard to the presentation; neither of us supposed for a moment that this was the placenta; the labour pains steadily increasing; the pelvis was large; there was no hæmorrhage. The patient still insisted on chloroform being administered, which was done. Within two hours after my arrival, and rather more than half-an-hour after Mr. Alexander's, she was delivered of a child. The mass, which was such a source of embarrassment to us, was the under surface of the liver. The case was that of exomphalus, and the liver had overlap-

ped the anterior fontanelle. The accompanying plate is a photagraph of the fœtus. In addition, there was a well marked spina-bifida, the tumour being about the size of a pigeon's egg. Immediately after the expulsion of the fœtus, I removed the remaining adherent portions of the placenta. I may here mention, that the great mass of the placenta was expelled on the birth of the child, and that the remaining portions were very small. The hæmorrhage was very trifling, and Mrs. —— recovery was rapid. She stated to me that she noticed fœtal movements, well marked, up to the time of the second escape of the liquor amnii.

REMARKS.

I regret very much that owing to various circumstances I was only enabled to take a photograph, hence must be attributed the vagueness of the description. The fœtus was decidedly an anomaly. Judging from its head, liver, spleen, and the appearance of nails on its fingers and toes, it would have been considered an eight months fœtus, while from the size and shape of the pelvis, the appearance of the external organs of generation it was totally impossible to determine to what sex it belonged, and the size of the thorax would lead one to infer that they were those of a fœtus five months old. We had here, then, a fœtus with a head, extremities, and abdominal contents, of a size nearly the same that we find in infants who have arrived at the full term of utero-gestation, whilst the pelvis, heart and lungs were those of a five months fœtus. The weight of the whole, including the placenta, was not more than six pounds. I have very little doubt, judging from the history of the case, that the exomphalus and the arrest of development was due to inflammation of the amnion. But it certainly does seem strange that fœtal life should have existed for so long a time after the attack. The case was one of a partial placenta prævia, and I believe that the rupture of the membranes on the 9th of March, and that the subsequent and final discharge of the liquor amnii on the 22nd prevented the occurrence of that hæmorrhage which is so alarming in cases of this kind. I confess that I was totally ignorant of the nature of the presentation proper, while in attendance, and should it have been a breech instead of a head presentation, I fear I should have been equally as puzzled under the circumstances to have made a correct diagnosis in such a case.

CASE OF UNUSUALLY LARGE LOOSE CARTILAGE IN THE KNEE-JOINT.

TREATED ON THE ANTISEPTIC SYSTEM, UNDER THE CARE OF MR. LISTER.

By ARCHIBALD E. MALLOCH, M. B.,
House Surgeon,

Reported to The Glasgow Medical Journal, and also to The Dominion Medical Journal.

W. E., Aged 20, was admitted into the Royal Infirmary on the 28th June, 1868, complaining of slight lameness, of a "lump which moves" in his right knee, and at times of slight pain in the joint, especially when carrying any heavy article. A loose cartilage about the size of a half-crown piece, was felt and moved freely about in the joint. The previous history of the case is interesting, as pointing apparently to its origin from the fringed processes of the synovial membrane. He dates the beginning of his complaint eight months back, when he strained his knee in the following way: While unloading and supporting a partially emptied coal truck, he attempted to spring backwards to escape the falling coal, but fell, as his right foot had been caught between two heavy pieces of coal. After lying on the ground for a few minutes, suffering acute pain in the joint, he got up and limped for a short distance, when he was met by a fellow labourer, who assisted him into a house, from which he was carried home. He remained in bed for some days, suffering at firt considerable pain in the joint, which was much swelled though the skin was not red. At the end of two weeks he began to walk with the aid of a stick, and in six weeks resumed his work, though lame and with the joint swelled. Three weeks after the accident' while rubbing his knee with a lotion which he had got from a doctor, he felt a "small hard lump," about the size of a marble, above, and to one side of his knee-cap, which he could move to a slight extent from side to side. This "hard lump" increased gradually in size, and got proportionally freer in its motion, and could

at all times be felt. About four months after the accident the "hard lump," which was then nearly as large as at present, could be felt at times in front of the joint on either side of the knee-cap, below which it occasionally disappeared. During the last four months it has increased in size, and is at times "lost." On ten or twelve occasions he was suddenly stopped short whilst walking, from inability to straighten his right leg. He would then have to sit down, and, by movements of the joint, free the "hard lump" which, he thinks, must have got between the bones. This displacement was attended with slight pain, and was followed by increase in the size of the joint.

Professor Lister determined to perform the direct operation, as the subcutaneous method would be difficult, if not impossible, from the large size of the cartilage, while he felt confident that on the antiseptic system the joint might be freely opened without risk. At 11 a. m. on the 2nd July, the following operation, which is reported in detail, was performed:—The loose cartilage being held steady between the patella and inner condyle and femur, the limb extended on a posterior splint, and the skin on inner side of joint smeared with a solution of carbolic acid in oil—strength) 1 part carbolic acid to 6 of oil—an incision directly over and somewhat longer than the cartilage was made, through the skin only, with a scalpel which had been dipped in the same oily solution. This wound was then gradually deepened in its whole length till the synovial membrane was cut, its surface being kept moist by the same oily solution, which was continually dropped upon it. The incision was gradually deepened to admit of seizing and twisting any bleeding vessel before the joint was opened. A sharp hook, which had been dipped in the same solution, was then fixed in the cartilage; and in order to prevent the chance of regurgitation of air not acted on and rendered harmless by the antiseptic, the instrument; with the skin around, was covered with a piece of lint of considerable size, moist with the same solution, and under cover of this the cartilage was tilted out and drawn away, the lint remaining over the wound. This large piece of lint was removed, and another, dipped in an oily solution of carbolic acid of strength 1 to 10, a little larger than the wound, was at once substituted, the wound being left gaping to permit free exit for any effusion which might take place into the articulation. This layer of lint was then covered by another of larger size and by two pieces of calico, the outer of which overlapped the inner —these had been dipped in the same oily solution. Lastly, an overlapping piece of carbolic acid plaster—strength 1 to 10—was applied, and this covered by a folded towel, to absorb the discharge and by a bandage. Patient was ordered to remain in bed The loose cartilage was thus described at the time:—"One and a quarter inch long by one inch in greatest breadth and a quarter of an inch in greatest thickness, round at one end and more pointed at the other; one surface smooth, the other irregular with a sort of corrugated appearance. On section, a very remarkable difference is seen in different parts of the structure. Towards the smooth surface, a layer of compact white cartilage, almost perfectly uniform in thickness, viz: $\frac{1}{8}$ of an inch, and bounded at its deepest part by a sharply defined line, is observed. Between this layer and the corrugated surface are two constituents in two layers, the one next the corrugated surface being a blueish form of cartilage, while between this and the other layer of cartilage is a layer of true bone, of cancellated structure, the cavities being minute, and, as might be expected, with no medullary material in them. This layer is about 1-16 of an inch in thickness, but thins off towards the edges of the loose body."

July 3d, 3 P.M.—Patient has not suffered any pain since the operation: has slept well, and taken his meals as usual: pulse 72. After removal of the towel, the upper edge of the plaster was raised, and the outermost layer of calico exposed, when watery solution of carbolic acid, 1 to 40, was dropped upon the part.

This solution was then freely applied during the removal of the plaster and outer layer of calico. A layer of calico, dipped in the above watery solution of carbolic acid, was then applied over the remaining dressings, and this covered with one to ten plaster, a towel, and bandage. Upon the plaster and towel removed was some of the grumous compound of blood and carbolic acid, corresponding perhaps to two drachms.

July 4th. 9:30 A.M.—There has been no pain in the limb, but during the night he suffered from pain in his bowels which have not been moved for five days. Tongue whitish. He, however, relished his breakfast. Pulse 60. Discharge upon the towel a minim or two. Dressings repeated in the same careful manner as yesterday. Ordered a dose of castor oil.

July 5th, 4:10 P. M.—Bowels acted with castor oil. Pulse 60. Tongue almost perfectly clean. He slept well and has eaten with his usual relish. Dressings changed as yesterday, the deeper layers being still undisturbed. The oily solution of carbolic acid, strength one to ten, was, however, used to moisten the calico, in place of the one to forty watery solution, which was not at hand. The discharge during the twenty-four hours again amounted to two or three drops of serum. Dressings to be left unchanged for two days.

July 6th, 10:40 A. M.—He continues free from symptoms, either local or general.

July 7th, 3:35 P. M.—The discharge during the last forty-eight hours has been about six minims of a sanguineo-serous fluid. No disturbance in knee or of system. Pulse 70. Dressings repeated.

July 11th.—He complained of uneasiness in the wound, which was, therefore, at once exposed, and was found to be a granulating sore. its surface somewhat irregular, being almost on a level with the skin. The joint is quite free from tenderness, redness, or effusion. Pulse 70. A piece of lint dipped in one to ten oily solution of carbolic acid was applied to the wound, and this covered with one to ten plaster.

July 12th—The joint has remained free from pain except when he moved it, when "he felt it a little." Has slept well and eaten his food with his usual relish. The wound is somewhat more open, and there is a good deal of effusion in the joint, but no redness. Dressings, as yesterday, repeated; pulse 70; tongue clean. It appears that since his bowels were moved, two days after the operation, he has walked each day to the water closet. This circumstance, which was quite contrary to orders, probably explains the slight irritation of the joint.

July 15th.—The 1 to 10 plaster, with lint was removed, and the wound, after being touched with sulphate of copper, as the granulations were high, was dressed with 1 to 40 *emplastrum acidi carbolici*, which permits rapid cicatrisation. The effusion has disappeared from the joint.

August 12.—The patient left the Infirmary, with the wound quite healed, and the movement of the knee perfect.

September 19th.—The patient states that he worked the day after leaving the Infirmary, and felt no pain in the joint; the following day however, it was much swelled, that he has worked everyday since, and has not suffered any pain. There is still a little effusion in the joint but no lameness.

In remarking upon the case clinically, Mr. Lister observed, that though a large incised wound of the knee joint may sometimes do well under ordinary treatment, if carefully stitched with a view to primary union, to leave such a wound as this wide open would, without antiseptic management necessarily involve suppuration of the articulation. Hence, this was a good example of the antiseptic system, enabling the surgeon to adopt, with perfect safety, a course which would otherwise be certainly disastrous.

THE SPHYGMOGRAPH AND ITS TRACINGS.

Read before the Medical Section of the Canadian Institute.

By EDWARD M. HODDER, M.D.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS, VICE-PRESIDENT OF THE CANADA MEDICAL ASSOCIATION, FELLOW OF THE OBSTETRICAL SOCIETY OF LONDON, ETC., ETC.

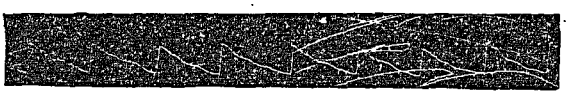
The paper which I am about to read to the Society this evening is almost a literal translation from a French work, entitled, "The influence of Modern Physiology on Practical Medicine," by Drs. A. Berne and J. Delore, in which I have found a better description of the Sphygmographic tracings, and the conditions which give rise to them, than I have hitherto read elsewhere.

The use of the Sphygmograph, as an instrument of Pathological and Physiological research, is now universally admitted by all who have had an opportunity of testing its merits; but, as its application to the exploration of the movements

SPHYGMOGRAPHIC TRACINGS.

No. 1.

The pulse in aneurysms.



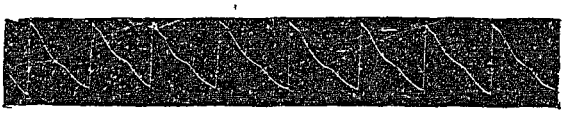
The radial pulse on the sound side.

The radial pulse on the side of the aneurysms.

No. 2.

The pulse in narrowing of the aorta.

No. 3.



Insufficient closure of the aorta.

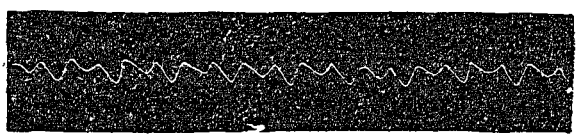
No. 4.

Insufficient closure and narrowing of the aorta.

No. 5.

Affection or disease of the mitral orifice.

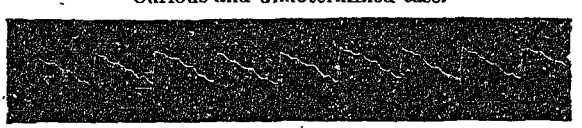
No. 6.



The pulse in Typhoid fever.

Curious and undetermined case.

No. 7.



The patient was highly cachectic, and suffered from lead colic.

NOTE.—Since the Journal has been up in type, we have been able to get the engraver to prepare eight of the tracings, and will give the remainder in our March issue.

of the heart and pulse, in disease, would far exceed the limited time at our disposal this evening, I shall confine my remarks entirely to the indications which have been made apparent by this instrument.

It is evident that few of the characters of a pulsation, occupying, as it does, *but the 70th* part of a minute, can be ascertained by the sense of touch alone.

This fact has been appreciated by Physiologists; and within the last few years, in order to accurately study this important subject, several instruments for registering the impulse felt by the arterial system have been constructed, to enable us to accurately analyze the dilatation or movements of the vessels.

The Sphygmograph of Marey is an apparatus of this kind, securely fixed upon the forearm, so that the spring is directly over the radial artery. The movements of the pulse are transmitted to a long and light wooden lever, and registered upon a plane surface, which is moved at a known rate by clock work.

THE PULSE.

The pulse is the sensation given to the finger by a change in the pressure to which an artery is subjected *during a revolution of the heart.*

Numerous theories have been proposed, from time to time, to explain this phenomenon. M. Flourens attributed it to the dilatation of the artery; but this theory is not sufficient, for the dilatation which takes place in an artery is extremely slight, and this is proved, beyond doubt, by applying the finger lightly on a denuded vessel, when no pulsation will be perceived, unless the pressure is increased; neither is the elongation of an artery the cause of the pulse—for this is a phenomenon synchronous with pulsation, but not the cause of it.

But the real cause of the pulse is a change, an augmentation of pressure, due to the systole of the ventricle.

Let us see what takes place by a change of pressure, as shown by experiments made by such instruments as the Manometer and Cardiometer.

The cardiometers of Bernard and Magendie are both good, and give excellent indications of the action of the vessels, as well also as that of Buisson; nevertheless M. Cheveau thinks that they may prove a source of error by exaggerating the dichrotism; and to avoid this inconvenience he produces a narrowing at the point where the reservoir is in communication with the tube of the indicator.

By this means the mercury finds its level more slowly, and is less subjected to oscillations.—When these instruments are applied to various arteries in man, it is found that the mean pressure on the mercury is equivalent to 12 centimetres. When the manometer is applied, you find in the first place a rapid ascension of the mercury, which rises to 12 centimetres, and in the horse to 20 centimetres. Then (in the horse) the column descends in one stroke to 15; here a slight oscillation, sometimes a little jerk or jump, takes place, which causes the mercury to rise, after which it descends to 13, to begin again a new revolution.

The sudden ascension of the mercury denotes the systole of the ventricle; and it rises higher in proportion as the arterial tension is less strong; therefore, to the theory of M. Harvey, the amplitude or fulness of the pulse is in inverse ratio to the tension of the artery.

The descent of the mercurial column coincides with the diastole of the heart, and the moment of arrest, *with the closure of the sigmoid valves,* which produces the phenomenon of dichrotism; and this has been abundantly proved by the researches of M. M. Buisson and Marey.

THE THEORY OF DICHROTISM.

M. Marey attempted to explain it by supposing it to arise from the shock produced by the column of blood striking the bifurcation of the iliac arteries and returned by the same means to the heart, but, afterwards having discovered the same action in the femoral arteries, he admitted that dichrotism is produced by the closure of the sigmoid valves, which produces throughout the whole arterial system a momentary lessening or decrease of the tension.

Dichrotism exists in the healthy and normal condition of the heart, and if it is not perceptible to the finger of the observer, it is because the sense of touch in the finger is not sufficiently fine to perceive a sensation so faint and evanescent.

In certain pathological conditions it is increased, and then it is appreciable by a practised

finger. But under any circumstance, by close application and habit, in the natural state of the body, it can be detected, and verifies the tracings made by the instruments, and which, without this proof might be held in suspicion.

The arterial tension varies according to numerous conditions which has been fully proved and appreciated by an instrument invented by Ludwig called kymographion, or registering manometer; but the disadvantage to the use of this instrument is that it requires a previous dissection.

The many indications which have been made apparent by these instruments have been still more strongly confirmed by the sphygmograph, which writes or traces by means of a long lever the slightest and almost inappreciable modifications in the pulse of man, either in a state of health or disease, and which to the unaided hand would be quite imperceptible; it also gives its force, its fullness, its irregularities, and movements, with extreme precision.

The first idea of being able to appreciate the different varieties and modifications of the pulse by means of an instrument was due to a French medical man named Herrison, but a German was the first who actually registered the arterial pulsations. Vierordt constructed the first sphygmograph in 1855, but its lever being too heavy, it traced the oscillations too evenly, consequently falsely; but, we now owe to Dr. Marey the credit of having brought the instrument to perfection, and he has thus rendered to physiology, and even to pathology, a lasting service.

As is usual with almost all important discoveries or inventions, the author or constructor of a new instrument is sure to be severely criticised, so with the distinguished physiologist, for Dr. Marey has not escaped the lash of the envious critic.

Certain medical men appear to think that, because the Sphygmograph has given characters to the pulse, which had not hitherto been recognised by Galien, Burden, Solano, Fouquet, and others, that it must evidently lead to error.

But such reasoning is contrary to progression and altogether opposed to the advancement of all human sciences. Is it any slight to the opinions of, or disrespect to the great authorities above named, to state that an instrument can be made more delicate and sensitive to the slightest alterations in an artery, than the tips of their fingers.

PHYSIOLOGICAL SPHYGMOGRAPHY.

The sphygmograph traces two lines, one ascending the other descending, which unite together by angles more or less acute.

The length of the ascending line is indicative of the largeness (or fullness) of the pulse.

The acuteness of the summit of the angles shows that the tension is feeble, and that there is a great difference of the tension between the periods of systole and diastole.

In a pulse where there is but feeble tension, dichrotism is but little apparent.

In the foregoing observations we have confined ourselves entirely to the conclusions which M. Marey has arrived at, and they have elucidated in a very remarkable manner, the numerous points or features which belong to the circulation.

PATHOLOGICAL RESEARCHES.

The sphygmograph, applied to the study of diseases, has not yet produced such fruits as we have every right to look forward to in the future; its study is too recent to suppose that the results already obtained, should be complete; nevertheless, this instrument has confirmed in a singular manner, all that has been discovered or appreciated by the finger, but in a much more clear and precise manner.

At a single examination it will diagnosticate with great exactness which orifice of the heart is diseased, and what is the nature of its alteration. It has also pointed out certain affections of the heart, which the most careful examination by auscultation and percussion would scarcely allow of detection; in consequence of the free border of the lung being placed before the organ. At all events, whether the indications of disease given by this instrument are correct or not, it does not prevent us from employing the ordinary means of exploration.

Hitherto, none of the diseases of the heart, or modifications in the circulation, have prevented the onward march of the pen of the sphygmograph.

An aneurism changes the circulation. If the aneurismal tumour is in the course of the ar-

tery subjected to the sphygmograph, it produces an effect similar to the reservoir of a fire engine; the systolic shock is almost completely destroyed, the blood circulates by one continuous impulsion, and consequently the spygmographic tracing becomes very perceptibly straighter.

This instrument must, therefore, become useful in recognising certain intrathoracic or auxillary aneurisms. when other means of diagnosis are difficult.

There are certain diseases which produce well-marked and characteristic changes in the circulation. Aneurism, chlorosis, and above all typhoid fever, increase the normal dichrotism; which is due to the feeble tension which exists throughout the circulating system.

We are here only able to give a sketch of the applications of the sphygmograph to physiology, as we have not had an opportunity of seeing the results of Dr. Marey's numerous experiments, which have only very recently been published; but to his kindness we are enabled to give a series of sphygmographic tracings, which represent the diseases most commonly met with in the circulation.

I.—*Of the Pulse in Aneurisms.*

The first of these tracings represents the normal pulse. The vertical and ascending line indicates the systole.

It is vertical because the systole is sudden, quick. The oblique descending line represents the intermediate time between two systoles.

The tension diminishing suddenly, the lever of the instrument descends: but, in the middle of its course, it receives a little shock, which is indicated by a slight curve: *this is the dichrotism.*

The second tracing shows an equality almost perfect of the ascending and descending line in the pulse, with a remarkable reduction in the angles and curve.

The aneurismal tumour destroys suddenly the impulsion of the column of blood given by the heart, in consequence of its elasticity.

II.—*The Pulse in narrowing of the Aorta.*

According to M. Marey, the difficulty which the blood has to overcome in passing from the ventricle into the arterial system causes the lever of the instrument to rise slowly, therefore, the ascending line becomes oblique. The dichrotism is here deficient in consequence of the slowness of the wane of the blood.

III.—*Insufficient closure of the Aorta.*

This tracing, which represents the general type of insufficient closing of the aortic valves, shows two remarkable things, The extreme vertical direction of the ascending line, which coincides or agrees with the violent shock felt by the finger when feeling the pulse; a sensation already adverted to and described by Corrigan, and also the extreme acuteness of the angle at its summit, which can be explained by the incomplete closure of the sigmoid valves, by which the column of blood is not prevented from flowing back suddenly into the ventricle, after its systolic expulsion.

IV.—*Insufficient closure with narrowing of the Aorta.*

These cases are of frequent occurrence and offer many varieties, yet, they all have their principal symptoms alike.

The vertical ascending line and the little hook, prove the insufficiency, the curved line slightly ascending, which follows, indicates narrowing.

V.—*Affection of the Mitral Orifice.*

The principal sign or symptom in these cases, is that the pulsation, so to speak, is abortive, besides which the pulse is very irregular.

Where there is narrowing or insufficiency of the mitral valves the column of the blood cannot be driven into the vessels with vigour or force.

Mr. Marey has not up to the present time specified the varieties of lesions to which the mitral valves are liable as indicated by the sphygmograph. But you perceive that the ascending line is not ample, and in some of the tracings some affection of the aorta co-exists.

VI.—*The Pulse in Typhoid Fever.*

The peculiar characteristic here, is the extreme manner in which dichrotism is shown, and which in this diagram is delineated by a convex curve intermediate between the ascending and descending lines.

VII.—*A Curious and Undetermined Case.*

The patient was extremely cachectic and suffering from lead colic.

The recent cardiographic labors of M. M. Cheveau and Marey have also thrown more

light, and pointed out with greater precision the successive evolutions of different parts of the heart, but we are unable to show the tracings of the instrument in such cases; we will confine ourselves, therefore, to an analysis of the three principle experiments which have enabled them to give the autographic representations of the movements of the heart.

1st Experiment.

The determination of the succession of the different movements of the heart.

This sketch represents the tracings of the action of the right auricle in No. 1; of the right ventricle in No. 2, and of the cardiac pulsation in No. 3.

These lines show that the contraction of the auricle precedes considerably the shock, which commences with the contraction of the ventricle.

The systole of the auricle is of extremely short duration; the systole of the ventricle lasts a much longer time.

The cardiac pulsation shows exactly the same duration of time as the ventricular systole.

The auriculo, ventricular, and sigmoid valves produce oscillations at the moment of their closure, which is shown by the undulations of the curves.

2d Experiment.

A comparison of the movements of the left ventricle with those of the right.

From this diagram you perceive that the two ventricles contract together, but they show a great difference in the energy or force of their contractions.

3rd Experiment.

The relations between the ventricular contraction and the aortic pulsation.

The upper line gives, in the first place, a tracing of two pulsations of the left ventricle, then two pulsations of the aorta. The second line indicates that the aortic pulsation is only produced at the moment that the ventricular contraction has arrived at its greatest intensity.

From the sketch which I have been able to give of these experiments and investigations, it is not difficult to see the immense importance they must possess in studying the pathology of the heart, and in the treatment of the diseases to which that organ is liable.

But for a detailed account of the instrument as well as its application to the exploration of the movements of the heart and pulse in health and disease, I must refer you to the able lectures of Dr. Burdon Sanderson and Dr. Francis Astic, published in the *Lancet* in 1866, and August, 1867, to Dr. Marey's work, recently published, and to the "Physiology of Man," by Dr. Austin Flint, &c., &c.

The Dominion Medical Journal,

A MONTHLY RECORD OF

MEDICAL AND SURGICAL SCIENCE.

LLEWELLYN BROCK, M.D., EDITOR.

TORONTO, FEBRUARY 1st, 1869.

PERISCOPE.

SVAPNIA, OR PURIFIED OPIUM,

Consisting of Meconates of Morphia, Codeia and Narceia, made by Assay; an important Substitute for Morphia and Crude Opium.

This is a paper which was contributed to the Detroit *Review of Medicine and Pharmacy*, and discusses the relative effects of narceine, morphine, and codeine. He says morphine acts principally upon the brain; codeine especially on the cerebellum, medulla oblongata, and pneumogastric nerves. When one grain of morphine was injected into one dog, and one grain of codeine into another, both slept calmly for three or four hours. Then the morphine dog waked up wildly, recognized no one, looked haggard, and did not recover his good humour till the next day. The codeine dog waked up bright and playful. The experiment was then reversed, each dog being injected with the other's medicine, with exactly the same results. Morphine produces headache and vomiting very soon, and before a dangerous dose is arrived at, while codeine does not produce these unpleasant effects, and hence requires more care in its exhibition than morphine when given alone. Narceine, as an anodyne and narcotic, may be always employed in place of morphine, and is, in every respect, equal to it in value, and even, in a great many cases, to be preferred to it. In *Svapnia*, all the narceine of the opium is retained, but the attempt to isolate it from the codeine and morphine

produces a decomposition that cannot be artificially re-arranged, without much expense and a consequent loss of anodyne and hypnotic power. Hence the peculiar adaptability of this new preparation to all the cases where the calmative alkaloids are applicable. In comparing the relative value of Dr. Squibbs' liquor opii compositus and Svapnia, he gives Svapnia the preference, because it diffuses its sedative influence over the whole nervous system, instead of being concentrated on the brain. He considers that Svapnia is just the medicine required by the profession, which, having all the good effects of opium, does away with many objections to its use, being, in fact, more convenient for every form of exhibition. One grain of Svapnia is equivalent to half a grain of extract, or one-third of a grain of morphia.

RENEWAL OF PRESCRIPTIONS.

EAST RIVER MEDICAL ASSOCIATION.

STATED MEETING, NOV. 3, 1868.

DR. SHRADY, President, in the Chair.

For a year or more the subject of Renewal of Prescriptions has engaged the attention of physicians in some of the large cities throughout the United States. The *Medical Record*, one of the leading Medical Journals in New York, (and to whose columns we are often indebted, as our readers will notice), has taken an active part in the discussion and dissemination of the views of Physicians upon the subject. We take the following from its columns, and think that it represents the matter, as it at present stands, more completely than anything we can say upon the subject:—

"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 never 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 misdemeanour 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 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 *custodians* 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 pharmaceutist 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.

VACCINE.—Physicians requiring Vaccine can obtain it by forwarding one dollar to the Editor Box No. 670.

Editorial Notices.

SPHYGMOGRAPHIC TRACINGS. — Owing to the great expense it would entail, it has been found impossible to insert wood-cuts of the sphygmographic tracings referred to in Dr. Hodder's paper; but they can be obtained from Mr. Butchart, photographic artist of this city, by forwarding to his address the sum of fifty cents in postage stamps.

CHLOROFORM.—The paper on Chloroform, published in the December and January numbers of this Journal, has been converted into book form, and can be obtained for the sum of Twenty-five Cents, at the book-stores of W. C. Chewett & Co., and Adam Stephenson & Co.

WE call the attention of the profession to the *Price List* published in this Journal, by H. J. ROSE, druggist of this city. Physicians who order their medicines from him can rely upon having them of the very best quality. We notice the following variations in his Price List this month, in consequence of the great advance in the articles quoted:—

Opium	oz.	$0 95
Opium, powd.		1 20
Tinc. Opii	8 oz. bot.	0 80

Quinine is also advancing in price, although he has made no alteration.

From the usage which the *Journals* sustained in transmission by post, some gentlemen have not received their numbers regularly. To correct this, we now direct upon the cover, simply tying with a string. There can be no reason why subscribers should not receive their numbers regularly early in the month.

BOOK NOTICE.

We have received from Dr. BUTLER, his "Physician's Pocket Record," and consider that it is equal, if not superior, to any issued. One great advantage which it possesses, is, that it is not dated for any specified time, thus doing away with the waste which occurs in similar works of this kind. The following are the contents and distinguishing features of this visiting list.

1. A perpetual calendar. 2. A price list of new remedies and doses; doses of medicine for hypodermic injection, for inhalation and for suppositories and pessaries; tables for examination of urine; poisons and antidotes; fee table; visiting list and record of accounts obstetric, vaccination and death records; cash account, etc., etc.

THE ANATOMY AND HISTOLOGY OF THE HUMAN EYE. By A. METZ, M.D., Professor of Ophthalmology in Charity Hospital Medical College, Cleveland, Ohio. Published at the Office of the Medical and Surgical Reporter.

This work is specially devoted to the anatomy and histology of the Eye. The author has collected the results of the labours of the recent histologists in ophthalmological journals and memoirs on special subjects. This, with his own experience and knowledge of the subject, renders it an authority. This work will be found very useful by the general practitioner; but to the specialist, it is essentially necessary. We notice that Dr. Butler, of Philadelphia, has given the work his careful attention.

Selections.

Clinical Society of London.

FRIDAY, DECEMBER 11TH. 1868.

SIR THOMAS WATSON, PRESIDENT IN THE CHAIR.

The following gentlemen were elected members of the Society: Mr. Berkeley Hill, Mr. L. S. Dittle, and Dr. Fish.

The Secretary communicated for Dr. Crouch a case of primary amputation for gunshot wound. The operation was performed, before the patient had recovered from the shock, just below the knee. There was subsequently severe delirium, and a protracted convalescence.

Mr. Callender considered that in this case the amputation was rightly performed whilst the patient was yet suffering from the shock, and pointed out that, in a young subject, an operation was usually well borne in such a state of the system. He referred to the site of the amputation as accounting for some troublesome abcesses which formed along the tracks of the extensor tendons.

Mr. Maunder thought it contrary to recognised principles to amputate during collapse; and he urged that the good results which followed in this case must be regarded as exceptional. He had once amputated when there was extreme prostration of the nervous system, associated with complaint of urgent pain, but such a case he regarded as quite distinct from instances of ordinary so-called collapse.

Mr. Crouch, in reply, said he had followed the rule distinctly laid down by Abernethey for the treatment of cases similar to the one reported.

Dr. Pavy related a case of Diabetes in a female patient, aged sixty-eight, in which the treatment consisted mainly in the exhibition of opium in gradually increased doses, without restriction of diet. The first effect of the drug was limited to a diminution of the quantity of urine, without change in its specific gravity or in the relative quantity of sugar contained in it. But eventually, as the dose was increased, the daily excretion of sugar diminished, until the urine became entirely natural. Throughout the whole period of treatment, the dose of opium, the quantity of urine, and the

quantity of sugar excreted in the twenty-four hours were recorded daily, so that the effect of the remedy could be accurately judged of. By way of further illustration, Dr. Pavy mentioned two other cases, one treated by opium, the other by morphia, in which the beneficial results obtained were equally striking.

A discussion followed, in the course of which Dr. Weber referred to the occasional recurrence of diabetes in patients apparently cured, whether by diet, regimen or otherwise; and suggested that the case should be further reported on after an interval of six months; while the President drew attention to the age of the patient, with reference to the question whether diabetes is not more tractable, and at the same time more liable to recur, in elderly persons than in the young.

Dr. Pavy, in his reply, admitted that in advanced life diabetes might be regarded as a comparatively trivial disorder.

Dr. Beigel read a paper, founded on 152 cases of epilepsy, from which he inferred, that although unconsciousness and convulsion are so frequent as phenomena of the epileptic paroxysm that most writers regard them as characteristic, there are many cases undoubtedly of epileptic nature in which these symptoms are absent. He considered that the only invariable pathognomonic signs of epilepsy were those which arose from disturbances of the circulation, and set forth various facts and observations which had led him to localise these disturbances in the vaso-motor nerves. As regards the treatment of epilepsy, Dr. Beigel believed that the most important remedy for continuous administration was the bromide of potassium. He further strongly recommended the subcutaneous injection of morphia, guarded by atropine in the manner suggested by Dr. John Harley, immediately before an apprehended attack, as a means of warding it off, or at least of modifying its violence.

Dr. Green related a case, which he described as one of Irritative Hypertrophy of the Heart. The patient, a girl of fifteen, was admitted into hospital in the fourth or fifth attack of acute rheumatism. Soon after pericarditis supervened, and she eventually died, with great hypertrophy, adherent pericardium, and "finally granular" degeneration of the muscular fibres of the whole heart. In explanation of this and other cases in which hypertrophy occurs in young rheumatic persons, independent of any mechanical cause, the author maintained the theory that the overgrowth is intimately connected with chronic myo-carditis.—*Lancet.*

Remarks on the Actual State of Medical Science in Japan.

By ALEX. M. VEDDER, M. D.

LATE SURGEON U. S. N., PHYSICIAN TO HIS HIGHNESS THE PRINCE OF NAGATO AND SUWO.

So much interest is attached to everything pertaining to Japan, that an outline of the state of Japanese medical science, and the position held by its practitioners, can scarcely fail to be acceptable to those curious in regard to what concerns these peculiar people. Insignificant as their acquirements may appear, when viewed by the light of modern science, yet they are really remarkable in holding such a respectable position in Asiatic knowledge; and this all the more from the fact of the peculiar isolation of these people during several preceding centuries.

The Japanese system of medicine is essentially based upon the Chinese, and nearly all medical books are written in the square Chinese character, which is read by all professional men. This system has subsequently been greatly modified by the Japanese themselves, and also by a considerable infusion of European medical literature introduced by the Dutch during the last two or three centuries. Still more recently, medical works translated and printed by the missionaries for the use of the Chinese, have found their way into this country, and are doubtless destined to exert no inconsiderable influence.

There are in Japan no regular schools for medical instruction, but in many cases the son follows the profession of the father, and almost every practitioner has one or more students. A school in connection with a hospital has been for some years past in operation at Nagasaki, and many native physicians have availed themselves of its instructions. It seems probable, however that this establishment will soon be discontinued under the recent changed form of government, the Dutch, being the only foreign tongue permitted to be taught in Japan, up to the time of Commodore Perry's arrival, and the first Japanese Embassy to the United States. One frequently meets with native physicians who are more or less acquainted with that language, and who may possess and read a few Dutch medical books. Nearly all foreign medicines are known by Dutch names, so corrupted by Japanese pronunciation that their originals can scarcely be recognized.

The social status of the profession is very fair, and fully equal to what their acquirements or merits entitle them. Physicians carry two swords, mingle freely in the highest society, and their opinions are received with the greatest deference. The Japanese physician receives no fees for his visits, but is paid only for the medicines furnished, each one compounding and supplying his own prescriptions after the manner of the English apothecary. It is, however, by no means uncommon for them to receive an "*honorarium*" after treating a case. As might be inferred from this arrangement, there is no lack of medicine supplied to the poor patient, and it is extremely doubtful whether more harm is occasioned by disease or physic.

As to the professional acquirements of the Japanese faculty, dissection not being at all practised in Japan, and even correct plates of the human structure being seldom seen, the knowledge of anatomy is exceedingly imperfect. Still, they have native names for the viscera, the arteries, veins, nerves, lymphatics, and principal anatomical structures, though topographical anatomy is absolutely unknown. In physiology they are entirely in the dark, knowing, for example, nothing of the sympathetic system of nerves, of histology, or animal chemistry, and attributing to the *liver* very important moral qualities—such as its being the seat of courage, etc. The circulation also is but imperfectly understood, the physicians always feeling the pulse at *both* wrists, from an impression that

each side of the body is supplied with a corresponding side of the heart, independently of the other. The science of diagnosis is, of course, but little known; and disease, when recognized, is treated entirely by name, and according to certain formulas laid down in the books; for as they are profoundly ignorant of the nature of internal lesions, should the disease prove obstinate, they continue to change their remedies until the patience or life of the patient is exhausted. Very many affections are supposed to proceed from the presence of various living organisms and worms infesting the economy, and going under the general name of "mushi." I have seen drawing purporting to represent these terrible creatures, and certainly, were any such existing, should deem them fully capable of producing all the mischief ascribed to them.

The only treatises upon pathology that have come under my notice were certain illustrated works upon tumours, and in these it was evident from the illustrations that the authors had drawn largely upon their imaginations. Most of the medicines employed are of Chinese origin, though of late years many foreign remedies have been introduced, and are largely employed, especially by the physicians in such cities as Osaka and Yedo. The forms in which remedies are exhibited are bulky powders, or decoctions of certain vegetables, and of most forbidding appearance and taste. Musk is universally and largely employed, and, among foreign medicines, iodide of potassium, quinia, phosphoric acid, Hoffman's anodyne, aqua laura cerasi, and extract of hyoscyamus, are very extensively consumed. Most of this medicine is imported from Holland, and from samples that have fallen under my observation, I should consider their principal merit to consist in the low price at which they are sold. Iodide of potassium has proved a great boon to the Japanese, in relieving the pains of tertiary syphilis, a disease of very frequent occurrence in this country, and in the treatment of which mercury is employed so largely and indiscriminately as to be productive of the most disastrous consequences.

Among the people generally but two kinds of medicine are recognized, the *dear* and the *cheap*. Thus, you will be gravely informed that A. died; but then he was poor, and could afford only cheap medicine; while B.'s case, which terminated similarly, is a matter of surprise, since he was supplied with the dearest medicines that could be obtained.

The only attempt at prophylaxis practiced by the Japanese, that I am aware of, is in vaccination, which was introduced by the Dutch some thirty-five years ago, and is now pretty generally, but unfortunately not universally practised. It is much to be regretted that this measure is not rendered legally obligatory upon the people, as in no other country does smallpox commit more frightful ravages than in Japan; and the number of cases of complete or partial loss of sight from this cause is enormous. No care whatever is taken to prevent its spread by isolation of the patient, but infants suffering from the disease are carried about by the mothers as though affected by a slight catarrh. Hygiene, the sister of prophylaxis, is indeed a sealed book to the Japanese, and its laws are so completely and invariably set aside as to make it appear a matter of calculation. There is no drainage or sewerage ever attempted; houses are built directly upon the ground, cellars being unknown, while the lowest and dampest places are usually selected for their location, where stenches abound that would defy even Coleridge in their analysis. Much cutaneous disease is propagated by the barbers and the public baths. Hard, unripe fruit, too, so universally consumed, is productive of an infinite amount of intestinal disorder.

As regards Obstetrics, the practice is, to a great extent, in the hands of midwives, although version, instrumental delivery, and cephalotomy, are employed by medical practitioners. The use of the forceps is unknown, but, while penning this article, a book has fallen into my hands, upon the subject of delivery by means of a cord whose extremities pass through two perforations in the end of a whalebone blade, which enables the operator to carry the noose to the destined point, where it is slipped by the fingers around the presenting part. A net is also used in connection with this instrument in head presentations, apparently to prevent the noose from slipping too far over. The illustrations in this book are profuse, but not calculated to elicit admiration, either from an artistic or anatomical point of view, as the uterus was represented as an enormous chamber, and the vulva lay in the transverse axis of the body. Even with the aid afforded by the fillet referred to, some deliveries must prove excessively difficult, as one plate represents the operator with his feet braced against the patient's buttocks, while the fillet passed about the neck of the child is firmly grasped in both hands, and such traction exerted as makes it pretty certain that "something must come." Cephalotomy is performed by a knife, whose blade is wrapped for some distance from the hilt, to protect the mother. The infant, upon birth, is tightly bandaged about the chest and abdomen, and not allowed to nurse for two or three days, some laxative draught being freely administered meanwhile, in lieu of food!

Of Operative Surgery the Japanese are most profoundly ignorant; they possess but few instruments, and those of very rude construction, but had they the whole modern "armamentarium," the want of anatomical knowledge would prevent them from being of much use. Amputation would, I think, sometimes be performed, if permitted by the patient or his friends, but so prejudiced are the people against it that foreign surgeons have frequently urged its necessity in vain. In cases of fracture, no apparatus whatever for retention is employed, nor any attempt made at reduction, leeches and plaster alone being used to reduce the tumefaction and mitigate pain. In fact, the unaided powers of Nature are relied upon in these cases, and, I must confess, with most unsatisfactory results. I was requested to treat a man, a short time ago, with a simple fracture of the femur, and, although extension by weights was employed, which gave him but little inconvenience, on the thirtieth day he removed the whole apparatus, declaring the cure to be too slow, and expressing surprise at not being at once relieved by the use of foreign internal remedies. The Japanese display either a great want of ingenuity or humanity in having no appliances for the relief of deformities or disabilities. Tenotomy is not practised, or any attempt made, by difference in the height of their clogs, to relieve the inconvenience produced by shortening of a limb.

I have never seen a crutch used, or a sling for the arm or breast; indeed, a crutch made at any suggestion for one of the Prince's officers, who had an anchylosed knee-joint from gun-shot wound, has been regarded as a miracle of skill and ingenuity. The medical men attached to the Japanese Embassy to the United States practised most freely upon the credulity of members of the profession there, in their account of hospitals at Yeddo, and of surgical operations performed in Japan. I need scarcely say that all these accounts were gratuitous falsehoods, and that there is not such a thing as a native hospital existing in Japan. Venesection is employed to a great extent, and it is a common practice for individuals to be bled at regular periods, much the same as with ourselves some fifty or sixty years ago. The moxa is also used as a counter-irritant on any and every occasion. It is even employed for the relief of a slight colic, and there are very few Japanese whose bodies are not well scarred by this barbarous application. Children of a tender age are frequently thrown into convulsions by the pain of the moxa, and I am cognizant of one instance in which it was freely applied to the soles of the feet of a poor young girl, suffering from slight aberration of mind, occasioned by uterine disorder. In this case it was employed to prevent the patient from walking, and thus save an attendant

In addition to what might be called the "regular faculty," and, in some measure, auxiliary to them, there exist two distinct classes of practitioners who gain a livelihood through the aches and pains of the community. These are the shampooers and the acupuncturists, although the latter operation is frequently performed by physicians possessing the requisite knack or tack for its successful accomplishment. Shampooing, as employed in Japan, is not exactly the vigorous breakbone manipulation of the Turks at the mamman, and which makes one imagine that every joint in the body must have been dislocated. It is usually performed after a warm bath, the subject lying extended upon mats, while the operator kneels at his side. The affair consists in sundry blows with the knuckles or tips of the fingers, delivered with great rapidity, as also in kneading, pinching, or rubbing, and is either general, commencing at the head and working towards the feet, or confined to some part that is to be relieved from pain. Many shampooers are exceedingly dextrous, and the sensation is so agreeable and sedative as to make it enjoyed even by foreigners. The class of people engaged in this business are usually wholly or partially blind, going about the streets feeling their way with a long staff, and holding in the mouth a kind of double whistle, whose sound is to me peculiarly plaintiff when heard breaking the silence of a cold winter night. The occupation seems to carry with it a certain amount of respect, and I have been informed that there are "Amas," as these people are called, who are of high rank, belonging, perhaps to the "Kuge," or ancient nobility of Meaco, who have had the misfortune to lose their sight.

Acupuncture is very frequently practised, especially in rheumatic affections and sciatica; it is done by means of very long needles of gold or silver, and of extreme tenuity. These are slowly introduced by a rotatory motion, four, five, or more being sometimes inserted at one sitting. The operation is nearly or quite painless, as I can testify from personal experience, and is performed with great dexterity. Of its effects I need say nothing, as among ourselves it was many years ago practised quite extensively, but it is now, I believe, confined to cases of sciatica, or used in connection with electricity.

It might not be amiss, in the course of these remarks, to add a few words concering a kindred profession to our own. I refer to Dentistry. This *trade*, for such it may be more fitly considered in Japan, is carried on by a very low class of people, usually peripatetic in their habits, and who carry with them a box covered with brass ornaments, by which their occupation is recognized. Now, the extraction of a tooth by one of these gentry is regarded by the Japanese as a capital operation, and not without reason, if the information given me be reliable, that death (from tic anus, I presume) is not unfrequently the result. The tooth is extracted by the operators fingers, but not until it has been well loosened by means of a stick and a mallet vigorously wielded. The operation is seldom performed, but I saw some teeth in the possession of one of these charlatans that had large portions of the alveolar process attached. In the face of these facts it can scarcely be credited that artificial teeth, sustained by *atmospheric pressure*, have been in use from time immemorial. These teeth are carved out of sea-horse ivory, the molars being plentifully studded with little brass bosses, and the whole strongly mounted upon a base cut from the hard shell of a species of gourd, and carved to conform to the irregularities of the gums and palate. I have several sets of these teeth in my possession; they are not expensive, the very best, a complete upper set, costing about five boos, or about one dollar and sixty cents. Colossal fortunes are not accumulated from dentistry in Japan, as may be inferred from the foregoing.

The fondness of the Japanese for taking medicine is almost incredible. They have the most unlimited faith in its powers of healing, especially if it be of the "takai" or dear variety. This love of medicine amounts almost to a mania with some, and may account for the great number of physicians, whose name is *legion*. A few years ago a rather intelligent man called at my office in Yokohama, with some trifling ailment, which I informed him would pass off in a couple of days and give him no further trouble. He then asked me if no medicine was to be given him. "None," was the answer; "your case does not require it." "Well," said he, looking around at the furnished shelves of the dispensary, "this is really too bad. I see here medicines of all kinds, blue, white, yellow, and red, many, no doubt, dear medicines, for which I would gladly pay, and now I am truly afflicted at having to leave without getting any, as I may never again have a chance to take foreign medicines."

Whatever the disease a Japanese is suffering from, or however long its duration, no attention to washing or cleanliness must be paid during its continuance, and the strictest starvation diet is enjoined. There ensues from this a condition of filthiness and abjectness which renders visits to the poor invalid anything but an agreeable office, especially in cases where a physical examination is demanded.

The supporters of a purely vegetable diet will scarcely derive much comfort from the fact that

dyspepsia is decidedly the most common disease in this country; although the people, with the exception of a little fish, consume scarce anything that is not drawn directly from the soil. Doubtless their sedentary existence, and the constant sipping of weak tea at a boiling temperature, contribute powerfully to the prevalence of this affection.

The most ordinary diseases of the Japanese, as I have met them, are dyspepsia, smallpox, syphilis, phthisis pulmonalis, and affections of the eyes and skin. The strumous diathesis is almost universal, and complicates most of the cases. The tendency to inflammation, of the acute variety, is very slight, and recovery from the most severe lacerations and injuries is usually effected "*Tute cito atque jucunde.*" Diseases of marked inflammatory character, as pneumonia, or acute rheumatism, are seldom met with. I have seen but one case of gout, which occurred in the person of the Prince of Nagato.

It is painful to reflect that thousands of lives are annually sacrificed, and an incalculable amount of human suffering endured, from sheer ignorance of the first principles of the healing art. Yet these people are not deficient in natural intelligence, and there is no doubt that as foreign relations become more intimate, and progress is made in other branches of human knowledge, medicine will also make advances commensurate with its importance, and provision be ultimately made for competent instruction. Japanese physicians possess, at least, the merit of candour and modesty (in their own country), and to honestly confess ignorance is undoubtedly the first step towards the acquisition of knowledge.—*American Journal of the Medical Sciences.*

SEA-SICKNESS.

A DESCRIPTION OF A NEW METHOD OF CURE.

By WM. H. DWINELLE, M.D.,
NEW YORK.

During a recent passage across the Atlantic, in the St. Laurent, one of the French line of steamers, I had an opportunity of observing a new method of treating sea-sickness, as practised by Dr. Le Coniat, surgeon of the Imperial French Navy, but temporarily surgeon of the St. Laurent. Something more than curiosity prompted my observations. I had a decided personal interest in the matter, not only for myself, but for an invalid sister who had hitherto been frightfully sea-sick in all her journeyings from port to port.

As we left Brest, on Saturday afternoon, Dr. Le Coniat requested me, in the event either I or any of my friends should be taken ill by sea-sickness, to send for him at once, as he felt confident that in a large majority of cases he could control the malady.

Strong head winds and a rolling sea soon developed sea-sickness in its worst form to us any of our passengers, and none were more ill than my sister and myself. On Sunday evening her illness assumed an alarming character; excessive vomiting and violent retching were succeeded by convulsions, followed by extreme prostration. In this extremity, Dr. Le Coniat was sent for, who, after a few minutes' manipulation, arrested every symptom of sea-sickness, and gave her entire relief. The disposition to vomit was completely arrested, nor did it assert itself again during the voyage, though the sea was rough as before. She ate her meals without interruption, and with a relish, until our arrival in New York.

Although I was so ill that, with the exception of a single instance, I did not leave my berth from Saturday afternoon until Tuesday morning, during which time I had been unable to retain the least food in my stomach. I deferred resorting to the new remedy, thinking I would give time to Nature to come to my relief, should she be disposed to do so. Despairing of any such aid, I submitted to Dr. Le Coniat's treatment, the effect of which so fortified my stomach and removed all disposition to nausea, that I was enabled to eat my breakfast and retain it; nor did I vomit again during the voyage. The effect of the remedy in my case was not altogether complete and permanent, though I experienced great relief at the time. On submitting to the treatment a second time, I was entirely cured.

Dr. Le Coniat applied his remedy to many others during our passage, always producing great and immediate relief, and generally an entire cure. I recollect two instances where ladies had been confined to their berths for several days, unable either to eat or to raise their heads from the pillow. Immediately after the Doctor's treatment, they took their seats at the dining table, and occupied them at every principal meal during the rest of the passage. Dr. Le Coniat's theory is, that sea-sickness is induced by electric disturbance throughout the system, and that vomiting at these times is induced by an involuntary spasmodic contraction of the stomach from the pyloric to the cardiac orifice, thereby emptying that organ. In order to reverse this abnormal condition and restore the electric equilibrium, he places his patient in a horizontal position, uncovers the stomach, and applies to the skin, immediately over it, a solution of sulphate of atropine in the proportion of one grain to an ounce of water; he then places the negative pole of a galvanic battery, terminating in a flat disk, upon the stomach corresponding to the pyloric region. Then, with the positive pole terminating in a moist sponge, he manipulates across the surface of the skin from the cardiac to the pyloric orifice. These manipulations are kept up for three or four minutes, occasionally varying them by vertical passes downward. During the transit of the positive pole across the surface, the muscles can be seen to contract vigorously. The stimulus of galvanism rendered to the stomach by these means is much the same as that given to any other paralyzed or weakened muscle of the body—certainly the effect produced justifies the theory. It appears to be not only local in its influence, but pervading; the whole system seems to be brought under its control; its effects are soothing and refreshing, and generally accompanied with drowsiness, followed by refreshing sleep.

Dr. Le Coniat has been practising and improving his new remedy for about three years past; he has written one or two minor articles on the subject, which have been published in some of the French journals. On his return home, he proposes to pub-

lish a treatise on the subject for the benefit of science.

He claims to cure at least 90 per cent of his patients suffering from vomiting and the pains of sea-sickness. He also claims that he is able, by the electrization of the stomach, with the local application of sulphate of atropine, to control the vomiting and sickness incident to the early period of pregnancy.

I am aware that electricity has heretofore been recommended for sea-sickness, but I think to Dr. Le Coniat alone is due the credit of perfecting a method by which practical and permanent results have been obtained.

The battery used by Dr. LeConiat is one of the ordinary vibrating, carbon, and amalgamated zinc order, capable of double gradation. The solution for the battery is made as follows:—Take ½ oz. of bichromate of potash, dissolve it in 9 oz. of warm water; when cold, add ½ oz. of sulphuric acid.—*N. Y. Med. Jour.*

Prevention of Sea Sickness.

We quote from an article on Sea-sickness, in the *New York Medical Journal*, by Dr. Fordyce Barker.

The following suggestions for the prevention of sea-sickness were first written years ago for a gentleman whose business required him to cross the Atlantic often, and who was always kept in his room by severe sea-sickness during the whole voyage. By implicitly following the directions given, he has suffered very little from sickness, and has been able to go on deck by the second or third day, and has been entirely exempt from sickness for the remainder of the voyage. They have since been copied many times, and their value thoroughly tested. The trouble, however, is that most persons do not appreciate how much easier it is to prevent sea-sickness than to cure it; and so, none but those who have before suffered will thoroughly carry out the directions, and, neglecting some of them, are disappointed in the results:—

1. Have every preparation made at least twenty-four hours before starting, so that the system may not be exhausted by overwork and want of sleep. This direction is particularly important for ladies.

2. Eat as hearty a meal as possible before going on board.

3. Go on board sufficiently early to arrange such things as may be wanted for the first day or two, so that they may be easy of access; then undress and go to bed, before the vessel gets under weigh. The neglect of this rule, by those who are liable to sea-sickness, is sure to be regretted.

4. Eat regularly and heartily, but without raising the head for at least one or two days. In this way the habit of digestion is kept up, the strength is preserved, while the system becomes accustomed to the constant change of equilibrium.

5. On the first night out, take some mild laxative pills, as for example, two or three of the compound rhubarb pills.

Most persons have a tendency to become constipated at sea, although diarrhœa occurs in a certain percentage. Constipation not only results from sea-sickness, but in turn aggravates it. The reason has already been given why cathartics should not be taken before starting. The effervescing laxatives, like the Seidlitz, or the solution of the citrate of magnesia, taken in the morning on an empty stomach, are bad in sea-sickness.

6. After having become so far habituated to the sea as to be able to take your meals at the table and to go on deck, never think of rising in the morning until you have eaten something, as a plate of oatmeal porridge, or a cup of coffee or tea, with a sea-biscuit or toast.

7. If subsequently, during the voyage, the sea should become unusually rough, go to bed before getting sick. It is foolish to dare anything when there is no glory to be won, and something may be lost.

(From the New York Medical Journal.)

On the Microscope, as an Aid in the Diagnosis and Treatment of Sterility.

By J. MARION SIMS, M. D.,
NEW YORK.

(Read at a Meeting of the Medical Society of the Co. of New York, December 7, 1868.)

By the kind invitation of your President, I have the honor of appearing before you, and of stating my views on the subject of sterility; a subject always interesting, whether viewed in its bearings upon the happiness of individuals or the prosperity of states. It has engaged the attention of the profession for ages, but, till within the last twenty-five or thirty years, little or no progress was made in its treatment.

The first step in the right direction was taken by McIntosh, when he dilated the contracted cervical canal by bougies, and thus allowed the semen to pass to the cavity of the uterus. Sir James Y. Simpson followed out the same idea, when he subsequently incised the cervix to render its canal permanently larger. As the Edinburgh school, has, then established the fact that a dilatation of the cervix, whether by bougies or incision, is sometimes followed by conception I claim to have established further facts in the same direction, which facts constitute the basis of the present paper "on the microscope in the diagnosis and treatment of the sterile condition." I have been accused of cutting open the cervix uteri recklessly and unnecessarily. True, I have laid down rules for the performance of this operation, under various circumstances; and I know that I have had some earnest and enthusiastic followers. If I have misled any of my brethren, it is my duty to hasten to rectify the error. So far as incision of the cervix uteri for dysmenorrhœa in the abstract is concerned, without reference to the sterile state, I wish it to be understood that I have nothing to recant, nothing to undo. But, so far as this operation may be indicated in cases of sterility, properly speaking, without regard to the relief of physical suffering, I candidly confess that I have a word of advice for my younger brethren; for I am now convinced that I have repeatedly cut open the cervix uteri, for the sterile state, when the operation was both useless and unnecessary; and I am sure that almost every other surgeon, who has

performed this operation often, has made the same mistake. How frequently have we all heard it said in consultation, "No operation is needed in this case, because the sound can be easily passed along the cervical canal!" And again, how often have we heard it said—how often have I said it myself—"An operation is necessary in this case, because the canal of the cervix is too small to permit the easy entrance of the semen!"

Now, these important questions cannot be determined with any degree of accuracy in this haphazard manner. For it is not always necessary to incise the cervix uteri, simply because it does not easily admit the passage of an ordinary sound; nor, on the other hand, are we justified in condemning an operation, simply because the sound can be passed easily. In other words, a very small os does not always call for operation, nor does a larger one always forbid it. Do you not think, then, that a great service would be rendered, if we could reduce this question of operation or no operation, from the broad domain of speculative opinion to the narrow path of absolute scientific certainty? There is nothing easier, for the microscope accomplishes this in the most perfect manner imaginable. It settles the question of operation, or no operation, in an instant, leaving nothing whatever to be guessed at, and nothing to be desired.

Is it surprising that positive knowledge of this sort should meet with opposition among honest, earnest cultivators of medicine? Not at all. For it is ever so with any great truth. It must first be opposed, then ridiculed, after a while accepted, and then comes the time to prove that it is not new, and that the credit of it belongs to some one else. The truth here announced has had its day of opposition, and it must now soon take its stand as established and acknowledged.

On the subject of the microscopic examination of the utero-vaginal secretions, I have been misrepresented, maligned, and positively abused by a few both abroad and at home; and I have been misunderstood by many who have not taken the trouble to read, to investigate, to think, and to reason for themselves. And, Mr. President, under these circumstances, I cannot thank you too much for the high privilege of appearing here to explain and to defend my position by laying the facts in the case before this learned Society, this great gathering of my countrymen, whose decision, I am sure, will be in accordance with truth and justice.

We may all differ honestly about abstractions, and theories, and mere opinions; but, when it comes to facts and figures, there cannot long be a great difference among men of good common sense, with honesty of purpose in pursuit of truth. I have never yet been afraid of truth, however much it may conflict with prejudices, find it where I may; nor do I ever expect to see the day that I would fear to publish my convictions on any matter of professional importance, be the character of the opposition what it may; and, particularly, when I feel that these convictions are based upon facts that are immutable, and that lead to results of the gravest importance to the honor of medicine and to the advancement of knowledge. Whatever gives to any department of medicine greater exactitude, helps to raise it to the dignity of a science. And this is what I claim to have done with the microscope in this direction.

The microscope has done, and is doing, a great work in medicine, as well as in the collateral sciences. But I know of no field in which it will be of more practical use than in the diagnosis and treatment of the sterile state. For, where everything was a short time ago in doubt and confusion, all is now made clear by this wonderful instrument. Even in this day there are many very honest cultivators of medical science, who do not believe in the value of the teachings of the microscope.

The great Velpeau died, having no faith whatever in its practical utility. A few years ago, I was one of those benighted scoffers who believed it to be merely a scientific toy, with which to while away leisure hours. Fortunately, my ignorance was dispelled, and I now look upon the microscope as essential to the daily duties of a physician.

With these prefatory remarks, I now beg leave to give you some illustrations of its use in the treatment of the sterile state.

In the investigation of any case of sterility, there are three questions that must be settled at the outset, if we expect to treat it understandingly:

1. We must be sure that we have semen with spermatozoa.

2. We must ascertain if the spermatozoa enter the utero-cervical canal.

3. We must determine whether the secretions of this canal are favorable or not to the vitality of the spermatozoa.

For, if the semen does not contain spermatozoa, of course the uterine condition does not call for any treatment whatever. But if it does contain spermatozoa, and if they do not enter the cervical canal, then there is the question of operation or not, to permit their entrance.

On the other hand, if we should find spermatozoa in the cervical canal, then, as a rule, no operation will be needed; and if we should find them there in abundance, and all alive, then the case needs no treatment whatever. But, if we should find them there, all, or nearly all, dead, then it is evident, that the secretions of the utero-cervical canal poison them, and therefore the physical condition, giving rise to this abnormal secretion, must be searched out and treated.

(TO BE CONTINUED.)

Case of Placenta Prævia. Successfully Treated by Simpson's Method.

By JOHN W. BOOTH, M. D.,
OF TALLY-HO, NORTH CAROLINA.

On the 22d of June, 1868, I was hastily summoned, about sunrise, to visit, with Dr. Cozart, the family physician, Mrs. R., about six months advanced in her seventh pregnancy, who had been suddenly attacked, the previous evening, with profuse and bloody hemorrhage, which had almost ceased spontaneously before the arrival of Dr. C. There had been a very slight discharge of blood during the night and until I saw her. We both remained with the patient until the morning of the 23d, when leaving her to the care of Dr. C., I made some necessary calls, and returned late in the afternoon to take charge of her during the night, that Dr. C. might attend to his most urgent duties and

get back, we hoped, before the time of greatest need. During the whole of this time after my arrival, although very little had been done in the way of treatment, there had been no discharge, and only occasional very slight uterine contraction. From the symptoms, we strongly suspected that the flooding proceeded from placenta prævia. The uterus was too high up to be reached by a common digital examination, and the urgency of the case did not yet require any further. Hence we deemed it unsafe to leave the patient without professional assistance at hand.

About 10 o'clock, having gone to bed in an adjoining room, I was awakened and informed that my presence was required, as Mrs. L. was flooding prodigiously. I lost no time, and found her almost in extremis. The bed was deluged with blood. The lady's cheeks and prolabia were blanched; she was nearly pulseless, etc.; in short, almost in a state of collapse from loss of blood, and after that a few pains, which she described as only a "drawing sensation."

I now introduced my hand into the vagina sufficiently to pass my two fingers through to the placenta, which was implanted centrally over the internal os. With my finger I detached the placenta and withdrew it, not without some difficulty. The internal os, which was barely dilated enough to admit two fingers, contracted from the irritation and impeded the movements of the finger. The flooding immediately ceased, and the patient was soon delivered of a small dead fœtus. She did very well, never having a bad symptom after the detachment of the placenta.—*American Journal of the Medical Sciences.*

On Poisoning by Tinctura Ferri Perchloridi.

By J. W. WARBURTON, M.R.C.S.E.

There being, I believe, no case of poisoning by the above tincture on record, and but few by hydrochloric acid taken alone, I am induced to give the notes of a case attended by me on Dec. 5th last.

The patient, Mrs. R——, aged thirty, in rather delicate health, had by her an ounce bottle of "steel drops," which she was taking by medical advice. Previous to the occurrence now related the bottle was full, and she had not taken any food for about seven hours. At 4 P.M. on the day named, Mrs. R——, after a quarrel with her husband, in a fit of passion, swallowed the whole contents of the bottle, with a view to commit suicide. She continued well for about a quarter of an hour, when violent convulsions affecting the whole body came on. I arrived a short time afterwards, and found her lying on a sofa: face somewhat flushed, eyes injected, pulse small and accelerated; unable to speak, and apparently unconscious. A little mustard and water had been given her without effect. Another spasm soon came on, during which the body was much contorted; the muscles of the extremities contracted violently, and the teeth were clenched and ground together. She required to be restrained upon the couch, and her hold upon those near her could not be unloosed until the spasm suddenly ceased. She then appeared free from pain, but was only partially conscious, and continued unable to speak. After some little difficulty in opening the mouth, I gave her a sulphate-of-zinc emetic, with plenty of warm water. As this did not act, and the spasms recurred, in the next interval I repeated it, this time tickling the fauces with a feather. Copious vomiting ensued, of a clear, reddish-yellow fluid, evidently containing a considerable amount of tincture of iron, with a little mucus. I may here remark, that the duration of the attacks was about two minutes, that of the intervals three. After the vomiting, immediate relief was experienced; no more spasms came on, and she rapidly recovered the use of her faculties and limbs. Half an hour after the sickness she had an attack of diarrhœa, with black stools, which soon ceased. At 9·30 P.M. the patient felt quite well, with the exception of some soreness and stiffness of the limbs.

The chemist who supplied the "steel drops," told me it was the Tinc. Ferri Perchlor di, B.P. The symptoms of irritant poisoning in the above case were doubtless caused by the free hydrochloric acid, which is always present, more or less, in tincture of iron.—*Lancet (Eng).*

Sir H. Thompson on the Diseases of Urinary Organs.

A New Mode of Examining the Urine.—I shall here, by way of episode, refer to a mode of determining the true character of a patient's urine, which is of extreme value in some doubtful cases—a mode which has, never to my knowledge, been recommended or practiced, and which I have systematized for myself. I have already told you how essential it is to avoid admixture of urethral products with urine, if you desire to have a pure specimen. It is sometimes quite as essential to avoid its admixture with products of the bladder. And I defy you to achieve diagnosis—by which I mean a demonstration, and never be satisfied with less if it be practicable—in some few cases, without following the method in question. When, therefore, it is essential to my purpose to obtain an absolutely pure specimen of the renal secretion, I pass a soft-gum catheter of medium size into the bladder, the patient standing, draw off *all* the urine, carefully wash out the viscus by repeated small injections of warm water (before shown to be rather soothing than irritating in their influence), and then permit the urine to pass, as it will do, guttatim, into a test tube or other small glass vessel for purposes of examination. The bladder ceases for a time to be a reservoir; it does not expand, but is contracted round the catheter, and the urine percolates from the ureters direct. You have, indeed, virtually just lengthened the ureters as far as to your glass. And now you have a specimen which, for appreciating albumen, for determining reaction, and for freedom from vesical pus and even blood, and from cell growths of vesical origin, is of the greatest value, and has often furnished me with the only data previously wanting to accomplish an exact diagnosis. Mind never to be satisfied to guess at anything; make, very cautiously if you will, your provisional theories about a doubtful case—indeed, the intellectual faculty will do this constantly, and without reference to the will—but arrive at no conclusion, take no action except so far as you are warranted by facts.—*Lancet.*

Sir James Y. Simpson

ON THE PREVENTION OF SMALL POX.

As a proof of Sir James Y. Simpson's indefatigable exertions in the promotion of sanitary science, a recent pamphlet on the stamping out of small pox may be cited, which contains elements of a plan by which small pox may be as easily confined, as well as stamped out, as the recent cattle plague was done. The principle inculcated is that of entire and perfect isolation—that is, that all cases on their appearance, whether in the higher or lower ranks of life, should be placed as it were in quarantine: that no one should, on any pretence, be allowed to enter the sick chamber; that the attendants and nurses should be those who are certified to be non-conductors, or incapable of being affected, in consequence of having already passed through cow-pox or small pox. Not only is the seclusion whether at home or in hospital to be continued during the process of the disease, but as it is well expressed in the system of regulations shown up by Sir James Y. Simpson during the convalescence from the disease, or until the power of infecting others is past. Now, this is a point on which the general public are deplorably ignorant, as they fancy as soon as the disease manifests a remission, that all danger is past, wheras, it is well known to the profession that during convalescence there is more danger from infection than at any other time. One or two instances of this are mentioned in the pamphlet, one particularly, where a healthy merchant took scarlet fever by receiving a letter from the hands of a little girl, his lodge-keeper's daughter, who was in convalescence from the disease, and of which he eventually died. This, therefore, proves how, in all infectious diseases, a strict system of quarantine should be enforced; and though in some diseases this measure is only of partial benefit, from the impossibility of complete seclusion from all susceptible of taking the disease, in small-pox this is so far obviated, it is possible to surround the patient by those incapable of being affected.—*New Orleans Jour. of Medicine.*

Attendance of Medical Officers at Hospitals.

The question has often been asked us, and again quite recently, whether medical officers of hospitals can reasonably object to some record being kept of their attendance at the institution to which they give their gratuitous advice. We cannot see how any such objection can be tenable; for, though "officers," the medical men are still "men under authority;" and although their services are gratuitous, they must, in some sense, be under the authority of the Board which appoints them. At many, if not most, of the London hospitals a record is kept by the medical officers signing an attendance-book on entering the institution; and this is obviously a more agreeable method than being "marked" by a subordinate. At one large school and hospital, whilst no record is kept of attendances, the beadle is provided with a "Register of Ordered Lectures," and it is his duty, whenever a lecture or attendance is omitted, to bring the book to the delinquent at his next attendance, in order that the omission may be registered with his signature. Law is said to have a terror only for evil-doers; and so we imagine any regulation which brings into contrast the regular attendance of the zealous officer with the perfunctory performance of duty by an indolent colleague could have no terrors for the former, whilst it would show those interested in the welfare of the establishment by whom the work was done.—*Lancet.*

Vaccination.

The Board of Controllers of the Public Schools of Philadelphia, at their meeting on December 8th, adopted a resolution that hereafter no child shall be admitted to or continued in the public schools of Philadelphia unless it has been vaccinated. The propriety of such a regulation may be judged by the forcible remarks of Sir James Y. Simpson, the celebrated physician of Edinburgh, who says that "a rattlesnake or a tiger escaping from a travelling menagerie into a school full of children would, in all probability, not wound or kill nearly so many children as would a boy or girl coming among them affected with or still imperfectly recovered from scarlet fever, measles, or small-pox. Most probably these obnoxious animals are always, as far as possible, prohibited from making such visitations, and the infected boy or girl should be prohibited also during the time that they are running through the courses and convalescence of such contagious diseases, or while they exhale from their bodies a virus of dangerous and deadly potency." The School Controllers should, therefore, adopt a further regulation in reference to the re-admission of pupils who have not perfectly recovered from the diseases mentioned.—*Med. and Surg. Reporter.*

Dr. Brown-Sequard and the Paris Faculty.

We are informed that in all probability Dr. Brown-Séquard will shortly be called upon to occupy a chair in the Paris School of Medicine. Before the change which we mention in another part of our journal, and by which Claude Bernard's laboratory has been transferred from the Sorbonne to the Museum, it had been arranged that Dr. Brown-Séquard should take the chair of Comparative Physiology at the Museum. Now, however, in the honour of the gentleman last named, the chair of Comparative Medicine, which had been created for Rayer, and which since his death has remained unoccupied, will again be put up, and will be given to Dr. Brown-Séquard, with the new name of chair of Comparative Pathology. We are glad to be the first to mention this event, and we only see additional evidence of the high estimation in which Dr. Brown-Séquard is held, in the efforts which are being made by the French Government to attach him to one of the scientific or medical chairs of Paris.—*Lancet.*

Medical News, Items, &c.

In a letter from JAMES B. BURNETT, to the New Orleans *Journal of Medicine*, we find the following:

The clinical advantages of New York City are grand. In no other city of the United States are the resources so immense. To give you some idea

of what is going on in this line, allow me to give you the weekly calendar of clinics in the different medical colleges, hospitals, infirmaries, etc. : Monday : 2 surgical, 1 obstretrical, 1 medical, 1 venereal, and 2 eye clinics ; Tuesday : 3 surgical, 3 medical, 1 ophthalmic ; Wednesday : 2 medical, 3 surgical ; Thursday : 2 surgical, 2 medical, 1 obstetrical ; Friday : 2 surgical, 2 medical, 1 eye and ear, 1 venerial, 1 obstetrical ; Saturday : 2 medical, 1 surgical, 1 childrens' diseases. Besides these, on Thursday, at the College of Physicians and Surgeons, Professor Draper holds a clinic on skin diseases ; the Cosmopolitan Eye and Ear Infirmary is open every day at 2 o'clock, P.M., and there are many other institutions where most invaluable clinical advantages can be freely enjoyed by all.

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 the 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 those 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 Hotel Dieu, he does not see any fatal cases after amputations, compound fractures, &c. These favourable results naturally bring to mind the success which is nowadays attending Lister'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 SMALL POX.—This disease is now very prevalent and very virulent in the Western cities. A hundred deaths a day have been reported in Cincinnati. It is declared to be an epidemic in St. Louis. It is scourging Chicago, though nothing is said about it in the newspapers. In Milwaukee the public schools and the rink have been closed in consequence, and the shutting up of the theatres, concert saloons, and other places where people most do congregate, has been discussed. The Board of Health of Detroit have determined, if possible, to take a bond of this deadly fate, and protect the city against it by precautionary and preventive measures, and "stamp it out" the moment it appears. Thus far, thanks to the sanitary authorities, the city has been peculiarly exempted, but in order to guard it still more strictly, the Board of Health is determined to insist upon the necessary sanitary measures. It regards vaccination as absolutely imperative.—*Detroit Post.*

On the Employment of Belladonna in Surgical Affections.—Mr. Christopher Heath states that the action of belladonna, whether applied locally or given internally, is the same, viz., that by its action upon the vasa-motor system of nerves it diminishes the calibre of the capillaries, and thus directly reduces the vascularity of an inflamed part. Its action is thus peripheral; and it is, therefore, the opposite of aconite, whose action is central, or upon the heart itself. It does not follow, however, that the two drugs cannot be employed together ; quite the contrary : the action of the one is to diminish the flow of blood to the part, whilst the other assists the tissue to get rid of the superfluity it already contains and resist its further entrance, and the two may in many morbid conditions be advantageously combined.—*The Practitioner*, Nov., 1868.

—The scientific and medical revolution which has lately been accomplished in Spain, and which we noticed in a recent annotation, is beginning to bear its fruits. As complete liberty of teaching has been proclaimed, the School of Medicine of Madrid has become a sort of open forum, where professors and alumni, workmen and employers, follow each other in rapid succession. The homœopaths of Spain are in a state of jubilation, as the freedom of teaching enables them to propagate freely their own doctrines. We doubt whether the hurried and sweeping reforms which have overturned almost every existing institution in Spain will be productive of much good. The cause of science can but suffer from such precipitate measures, which will bring on a reaction, and will thus retard its slow but certain progress and development—*Lancet.*

—Deputy-Inspector-General LONGMORE, of the British service, professor of military surgery in the army medical school at Netley, has been appointed honorary surgeon to Her Majesty the Queen, vice Dr. Melvin, Inspector-General of Hospitals, deceased.—*N. Y. Med. Jour.*

Influence of Digitalis on the Pulse.—Dr. Constantin Paul has published (*Bulletin Génér. de Thérapeutique*, tome lxxiv., 1868) a research on the influence of digitalis on the pulse, in which his principal results were obtained by the use of the

sphygmograph. He thus states his conclusions: Digitalis, in small doses, generally diminishes the frequency of the pulse; in large doses, it increases it. When digitalis is exhibited in such doses as to produce its hyposthenic effects, it lowers the arterial tension; and the contrary effect may possibly be produced by very small doses, as some investigators have asserted. Finally, it is probable that digitalis raises the arterial tension when it diminishes the frequency of the pulse, and that it lowers this tension when it increases the number of the pulsations.—*Journ. Anat. and Phys.*, Nov., 1868.

Syrup of Codeia in Whooping-cough, etc.—The *Journal für Kinderkrankheiten* (7, 8, Hft, 1868) mentions that melon syrup, containing codeia, is at present used as a specific against whooping-cough in Italy. It is also employed in other convulsive coughs of children, especially those which are the sequlæ of acute inflammations; also in the nervous hacking cough of pregnancy in nervous and sensitive women.—*The Practitioner*, Dec., 1868.

—We regret to have to announce the deaths of several distinguished Continental brethren: M. Guillard, one of the provincial notabilities of France, who as chief surgeon to the Hospital of Poictiers, and as a writer and operator, had enjoyed considerable reputation; M. André Utterhoeven, one of the most distinguished medical men of Belgium, Surgeon-in-Chief to the Hospice Ste. Elisabeth of Antwerp, former Professor of the Free University, Member of the Academy of Medicine and of the Royal Society of Brussels, and the author of several surgical proceedings and valuable writings; and M. Gubian, an able physician of Lyons, one of the founders of the General Dispensary of that city for giving medical relief to the poor in their own homes.—*Lancet.*

—The *Pall Mall Gazette* states that the Russian Government has offered a prize of 3,000 roubles (£400) for the best history of Vaccination, by way of celebrating the hundredth anniversary of the introduction of that practice into Russia by the Empress Catherine II. The prize is open to all European competitors, and the history may be written in any modern European language.—*Lancet.*

—A new effect of the administration of chloroform was pointed out by M. Hurteloup at the last meeting of the Chirurgical Society of Paris. A woman who had been chloroformised was seized, on awaking, by a fit of sneezing, which lasted continuously during a quarter of an hour. H. Hurteloup believes that in cases of autoplastic operations on the face this may constitute an inconvenience, on account of the difficulty of maintaining the sutures of the autoplastic flaps.—*Lancet.*

—The services and sufferings of Dr. Blanc and his companions in Abyssinian captivity, have at length been acknowledged substantially by the Government. We do not think the staunchest advocate for economy will consider that the £2,000 granted to Dr. Blanc is a lavish sum when put in comparison with the imminent risk in which his life was so long passed.—*Lancet.*

HAMILTON CITY HOSPITAL REPORT.

We have received the report of the Medical Officer (Dr. O'Reilly) of the Hamilton City Hospital, for the year 1868, and notice the following items in report:

	M.	F.	T'l.
Patients remaining in Hospital, Jan'y 1st, 1868	24	24	48
Patients admitted during 1868	239	193	432
Births in Hospital during 1868	22	13	35
Total No. in-door patients	285	220	515

	M.	F.	T'l.
Patients remaining in Hospital, Dec. 31st, 1868	26	19	45

The following table gives the number of patients discharged from Hospital during the year:

	M.	F.	T'l.
Discharged	222	187	409
Deaths during the year	15	11	26
Totals	237	198	435

The following are the diseases which proved fatal during the year and the number of deaths from each disease, (including seven persons admitted to Hospital in a dying state.) Coroners' inquests were held on three of these cases.

Ascites	2	Phthisis	9
Cerebritis	1	Injuries	1
Diarrhœa	2	Wounds	1
Heart Disease	2	Peritonitis	1
Pneumonia	2	Puerperal convulsions	1
" typhoid	2	Enteritis	1
Tetanus, idiopathic	1		

The following is the result of treatment of those patients discharged during the year:

Patients discharged cured	314
" relieved	93
" not benefitted	2

The number of out-door patients attending the Hospital during the year was 331. Thirty-seven visits were made during the year, in cases of emergency, and to paupers "too ill" to be removed to Hospital.

TOTALS FOR 1868.

Total No. in-door patients	480
" of births	35
" out-door patients	331
Total number under treatment in 1868	846

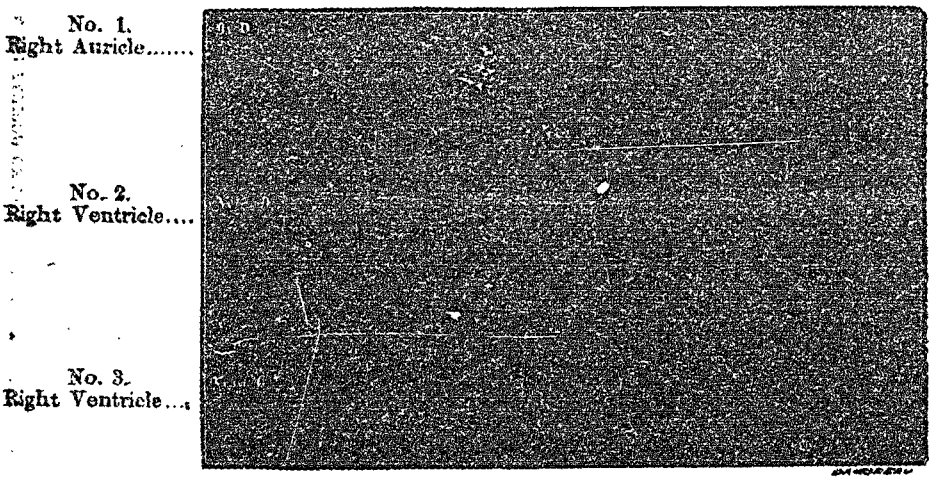
C. O'REILLY, M.D.C.M.,
Resident Physician.

Notice to Readers, Correspondents, &c.

The Editor having been requested by a number of medical men to act as agent for the purchase of Medical Works, Instruments, Drugs, &c., has made arrangements with the leading houses here and in New York, and will be enabled to obtain those articles in such a manner as he is confident will give satisfaction to the profession.

THE DETERMINATION OF THE SUCCESSION OF THE DIFFERENT MOVEMENTS OF THE HEART.

1st Experiment

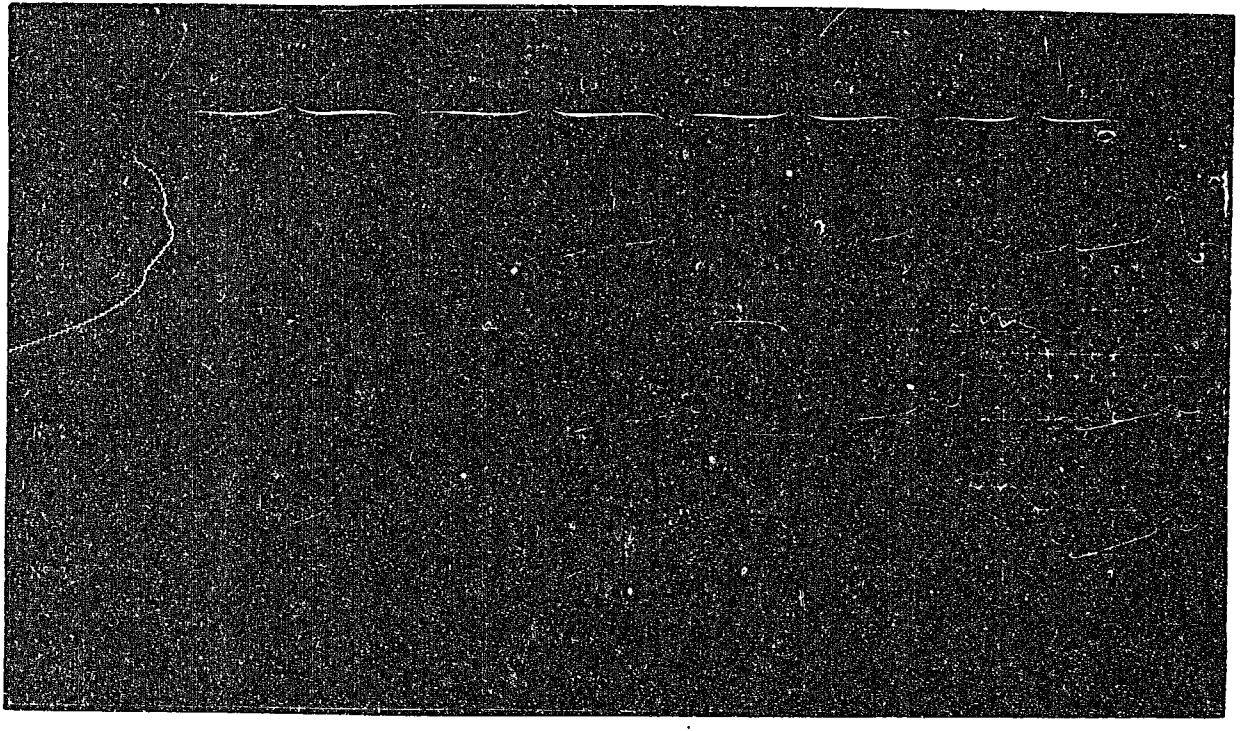


THE RELATIONS BETWEEN THE VENTRICULAR CONTRACTION, AND THE AORTIC PULSATION.

3rd Experiment.

A COMPARISON OF THE MOVEMENTS OF THE LEFT VENTRICLE WITH THOSE OF THE RIGHT VENTRICLE.

2nd Experiment.



Note—In Binding the Journal, these Tracings should face page 110.