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Original Communications.

OÖPHORECTOMY, AS PERFORMED BY DR. JOHN B. DEAVER, OF PHILADELPHIA.

BY DR. INGERSOLL OLMSTED,

Superintendent of the Philadelphia German Hospital.

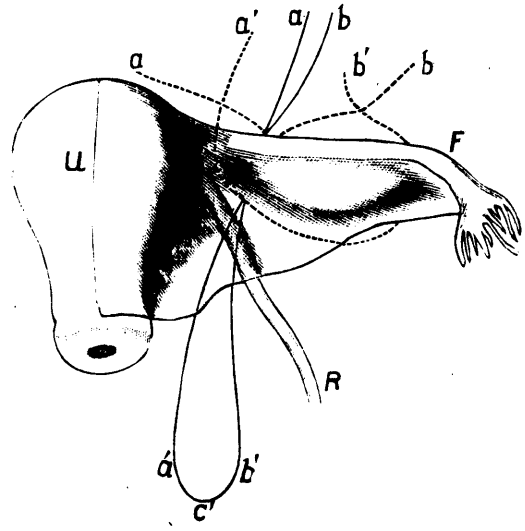
CASE.—N. W., æt. 36, married. Patient having been in hospital for a week; the bowels were thoroughly emptied two or three times by salines; appetite improved by tonics, and skin brought into healthy action by baths and friction. On 23rd Jan., '88, the day preceding the operation, the patient was given a saline cathartic, and had hair on abdomen and part of pubes shaved off.

Jan. 24. In a.m. patient was given an enema, and had abdomen and genitals washed with soap and warm water, the creases around umbilicus being thoroughly cleansed; this was followed by a boracic acid bath. The abdomen and pubes were then washed with the following solutions, in order named: linimentum saponis co., spts. turpentine, sulphuric ether, and solution of corrosive sublimate (1 in 2000). Towels wet with the last solution were then placed upon the parts until time of operation, four hours later. Some beef-tea, and milk and lime water were also administered.

The patient having been anæsthetized with ether, was carried into operating room and placed on a narrow, short table, with buttocks resting close to the lower end, over which the legs projected, supported by an assistant.

The operator and assistant were arranged as follows: the operator on patient's right side, chief assistant on left, behind whom was a third who took charge of instruments, etc., the fourth administered the anæsthetic, and the fifth supported the patient's legs.

An incision about two inches long in median line, was made, midway between the umbilicus and pubes, dividing skin, superficial and deep fasciæ. The small divided vessels were immediately caught up with hæmostatic forceps, a point which was particularly noticeable, and the surfaces of the wound sponged. The incision was then continued through the linea alba down to peritoneum. The operator and chief assistant now washed their hands in hot boiled water. The peritoneum was now caught up with forceps, incised with knife, and slit up to extent of 1½ inches, using finger as director. The operator again dipped his hands in hot water and then passed the index and middle fingers of left hand into abdominal cavity, hugged the under surface of abdominal wall, displaced



a a' and *b b'*, two halves of ligature which has been divided at loop.
c. The dotted lines show how the two ends of each ligature are brought together and tied.
r. Round ligament. *f*. Fallopian tube. *u*. Uterus.

upwards the great omentum, and located the fundus uteri. He then placed the index finger in front and middle finger behind the left Fallopian tube, by which means he was able to grasp the left ovary. It was bound down to the floor of the pelvis by adhesions, which having been carefully separated by fingers, it could be brought to the opening in abdomen, when its pedicle was transfixed, close to the cornu of the uterus, by an ordinary aneurism needle threaded with strong twisted Chinese silk. The loop of silk was then grasped and needle withdrawn. The loop was then divided,

and each half of ligature was tied tightly around the corresponding half of the pedicle; the one ligature thus encircling the Fallopian tube close to cornu of uterus, the ovarian ligament and part of broad ligament; the other half, the remainder of broad ligament; the whole pedicle was then tied with the remaining part of one of the ligatures. The pedicle was then divided with scissors close to the point of ligation, sufficient only being left to prevent the ligatures from slipping off. The stump was sponged off carefully and held up for a short time, when, no hemorrhage occurring, it was allowed to drop back into the abdominal cavity. The right ovary was now grasped and found enlarged, and bound down in Douglas's pouch by adhesions, being closely adherent to the rectum, about one inch above the internal sphinc ter. In order to get more room, the superficial part of the wound was enlarged three-quarters of an inch. The adhesions were separated, the ovary brought to the abdominal opening, and the pedicle treated in the same manner as its fellow.

The abdominal cavity was then carefully wiped out with soft sponges, wrung out of hot boiled water. Two sponges were then left in abdominal cavity, attached to a sponge-holder, until sutures were inserted, when they were removed. The stitches were of silk, and included the entire abdominal wall and peritoneum, and were placed about three-eighths of an inch from the edge of the wound, and half an inch apart.

To procure a nicer apposition, slight traction at either end of the wound was made with a tenaculum, before tying the sutures. The wound was now washed with boiled water, well dusted with iodoform and dressed with about sixteen layers of carbolized gauze, the whole being kept in place by a nicely adjusted, many tailed, flannel bandage. The only antiseptic solution used was boiled water, in which all instruments sponges, sutures and ligatures were cleansed previous to use.

The thread was prepared by being first placed in boiling water for a few minutes and then wound on glass spools, enclosed in a glass box having small holes in the top (one over each spool), through which the thread could be drawn. Previous to the thread being used, it was drawn through a towel wrung out of boiling water.

AFTER-TREATMENT.—During the first twenty-four hours the patient received only a little soda water to sip. She also had morph. sulph. gr. $\frac{1}{8}$, pot. brom. gr. xxx, the first night. This was the only narcotic given during treatment. The next twenty-four hours she received a teaspoonful of magnes. sulph., every four hours, in soda water, till bowels moved; also barley water and some beef tea. On the third day some milk and lime water was administered. Soft food and animal broths were given her on the fourth day, and the bowels were regulated with salines as before.

During the second and third days the patient suffered from pains in the lumbar region. On the third day she had the usual bloody discharge from the wound, which lasted more or less for five days.

The temperature ranged from 98°–99½° F., and never rose higher than the latter figure; pulse between 80–100. On the ninth day, the patient being in good condition, the dressings were removed for the first time, when the wound was found to be perfectly united. The stitches were then removed, the parts washed and dried, and strips of adhesive plaster and the many tailed flannel bandage applied to support the abdominal wall.

The patient was allowed to sit up on the sixteenth day, and left the hospital on the twenty-third day after operation. Since leaving the hospital, the patient has greatly improved, and gained flesh, with no return of her former symptoms.

The unique element in the above description of the operation, is the entire setting aside, during the operation, by one of the first gynecologists of the day, of all antiseptic measures, except boiled water, and assured perfect cleanliness. The result, as shown by the patient's rapid and uninterrupted recovery, warrants my placing it before your readers.

LARGE SPINDLE-CELLED SARCOMA OF THE BRAIN IN A GIRL ÆT. 16.

BY G. A. BINGHAM, M.D.
Pathologist to Toronto General Hospital.

Mr. Auld, who attended her prior to her admission to the General Hospital, kindly furnished me with the following history of this rather interesting case:

Nellie S., æt. 16, has always been in good health, except seven years ago, when she had typhoid

fever, from which she made a good recovery. Family history good.

She first noticed symptoms of present illness about the beginning of August, 1887, when she began to suffer from headache and occasional restlessness at night. She has been gradually growing weaker since that date, although there has been no marked loss of flesh. Saw her first on Saturday, Nov. 26th, 1887; she was very weak, anæmia pronounced, headache intense, and neuralgic in character, pulse and temperature normal. Her menses had been suppressed for about three months. Prescribed—Quiniæ sulph.; tr. ferri mur.; tr. nuc. vom.; et. R. Pil. aloes et myrrhæ et ferri.

Dec. 1st—Complains of dimness of vision; headache continued, and pupils slightly dilated; temperature and pulse normal; vomited two or three times, matter of a greenish color.

Dec. 3rd—Completely blind; headache continued, pulse and temperature normal; examined urine and found it normal.

Dec. 6th.—Very drowsy, sleeping most of the time; other symptoms same as before.

Dec. 7th—Last night headache was intense; gave, chlor. hyd.; morph. sulph. This gave relief, and she slept for the remainder of the night.

Dec. 10th—Has been troubled for two days with incontinence of urine; still continues drowsy. Had several screaming fits last night, presumably hysterical; anæmia seems improved.

Dec. 15th. Appetite morbid; she can distinguish objects in the room.

Dec. 24th—Completely blind again.

This is all the history I have until Jan. 9th, when she was admitted to the General Hospital. After this date until her death she was most of the time in a semi-comatose condition, quite blind; had occasional screaming fits and vomited a few times.

The coma gradually deepened, and she died Jan. 12th. I made the post-mortem on the same day.

P.M. appearance.—Body in fair state of nutrition; eye-balls, prominent; lungs, normal; heart, anæmic, with beginning fatty degeneration; stomach and gall bladder, normal; liver, highly congested, normal in size and friable; spleen, almost colorless; left kidney, smaller than normal, capsule easily separated; right kidney, normal; uterus and ovaries normal; bladder, full of clear urine; brain, blood vessels on dome of brain were congested. In right frontal lobe was found a hard, lobulated tumor as large as an orange, extending to the base of the brain and upwards to within a few lines of the convex surface, extended backward to the ascending limb of the fissure of Sylvius, and formed the anterior boundary of the anterior horn of the lateral ventricle, upon which it encroached. It had a small protuberance from its left side, extending into the left frontal lobe.

The tumor was indistinctly encapsuled, and the brain substance surrounding it was softened and easily washed away by pouring water upon it. This clearly out-lined tumor, on being examined microscopically by Dr. Teskey and others, was found to be a large spindle-celled sarcoma, with here and there a giant cell. In places, the process of degeneration was begun and the cells were beginning to break down.

Remarks.—I think it is worthy of notice, that there were no symptoms observed until about five months prior to her death, and that, even then, it was not thought necessary to call in a physician until a month and a half before she died.

About a month after she first noticed symptoms of trouble, her menses became suppressed and remained so until her death in spite of medicinal treatment. Was this the result of the anæmia, or were both connected reflexly with the cerebral tumor? I have been informed that her surroundings were all that was desirable as regards sanitation, and that she had abundance of nourishing food.

ON THE NECESSITY FOR A MODIFICATION OF CERTAIN PHYSIOLOGICAL DOCTRINES REGARDING THE INTERRELATIONS OF NERVE AND MUSCLE.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.*

TWO EXPERIMENTS.

Here are two experiments which show that the combined effects of strychnia and electrization are equivalent to the destruction of the spinal cord. In a rabbit undergoing the convulsions of strych-

* Read before the Physiological Section of the Ninth International Medical Congress, held in Washington, September, 1887.

nia poisoning, the spasms will be at once arrested on breaking up the spinal cord by a wire thrust into the spinal canal. If instead of destroying the spinal cord in this manner, it be subjected to electrization, the spasms will be averted, or arrested if already present. The rabbit dies, but without the characteristic spasms *(a)*. Is a powerful electric current needed here? Not at all. Quite a moderate current will suffice; because the strychnia poison is causing general contraction of the arterioles *(b)*, filling the veins and deoxygenizing the blood. Asphyxia is also setting in from the same cause, joined with fixation of the chest by spasm of its muscles, whose motor nerves are being paralyzed *(c)*. Electrization produces parallel effects and intensifies the fatal processes already in operation. A weak current suffices to complete the arterial emptiness, the venous engorgement and the non-oxydization of the blood. The spasms cease probably because such blood as is now present is inimical to the life of the muscle, and destroys its contractile energy more rapidly than no blood at all *(d)*.

If the theory of the day were true, the rabbit ought not to have died! With the stimulating and vitalizing action of an electric current, added to the previous exhilaration of strychnia stimulation, the rabbit should have lived and flourished, in the interests of the theory, which alas! as usual, is found to be out of harmony with the facts. Why does Dr. J. Russell Reynolds say that "it would be very unwise to use any form of electricity during the period of shock"? *(e)* Why do eminent authorities discourage its employment in cases of suspended animation, as in apparent death from drowning? *(f)* Why does Dr. B. W. Richardson, F.R.S., of London, write: "I feel it too unreasonable to recommend galvanic action as a means of resuscitation in threatened death from chloroform." . . . . fearing least under the semblance of restoring life he should clench death! *(g)*. These are precisely the conditions under which a "stimulant, tonic and vitalizer" should be eagerly sought for and diligently employed! It is evident that electrization is none of these, and therefore it is forbidden "in any form."

I think I am justified in claiming for the foregoing facts that they prove, as fully as any doctrine in physiology can be proved, that electrization as ordinarily employed is a paralyzing process.

BENEFICIAL EFFECTS OF ELECTRICITY.

Electricity is no doubt a valuable therapeutic agent, and like other paralyzing agents, does good in appropriate cases. But its beneficial effects may all be accounted for in strict accordance with its *role* as a paralyzer of nerve activity. Thus, it eases pain in a perturbed nerve by temporarily paralyzing it. It lowers the activity of the vaso motor nerves, and by thus setting free the contractile energy of the muscle it reduces the calibre of the arterioles, lessening or curing congestion, and consequently starving the hypertrophic growths. In other cases, by a momentary arrest of nerve action in the motor trunks, it induces prompt spasmodic contractions in the muscles, thus exercising them, and by attracting blood and pabulum to wasted muscles or tissues in the same way, it improves their nutrition. In chronic indurations and hyperplastic growths the purely chemical effects of the opposite poles, or electrodes, so modifies the nutritive activities of the tissues as to prove beneficial in restoring a more normal condition. Thus the curative effects of electrical treatment are all accounted for in strict accordance with its *role* as a paralyzing agent. To proclaim it, therefore, as "nature's own tonic," or to laud it as a "vitalizer," or extol it as the ally of nerve force, may be pardonable in the instrument makers, but is to be condemned on the part of scientific medicine.

HOW THERAPEUTICS HAS SUFFERED.

It has sometimes been remarked that the department of therapeutics lags behind other branches of the medical art. Perhaps it will be pardoned if I venture to suggest that therapeutics has suffered greatly from the adoption of the *dictum* that electricity is a *stimulus* to nerve function. How much of a huge and hypothetical inhibitory system has found, perhaps, its chief support in this very error. When electricity stopped the heart, some mechanism had to be found for the arrest of its action by a stimulus. On what must the excitation expend itself? Not on the proper motor ganglia of the heart, which a stimulus would drive faster. To

(a) Matteucci, Periera, Radcliffe. *(b)* Fothergill.
(c) Ringer. *(d)* Foster, Phys., pp. 126, 833.
(e) Lect. on Clin. Uses, p. 84.
(f) Dr. Ringer, Ther., p. 792.
(g) Med. Times and Gazette, 1861; Braithwaite, Jan., 1873, p. 256.

meet the exigency of the theory it was necessary to imagine a purely hypothetical system of inhibitory nerves, the excitation of which, by antagonizing the proper motor ganglia of the heart, would bring it to a standstill. It is worthy of notice that in this experiment "the most marked effects are produced when the electrodes are placed on the boundary line between the sinus venosus and the auricles." (*a*) Now this is the precise location of the chief motor ganglion of the heart in the frog, —the animal in which this observation has been made, so that the assumed stimulus has to pass over the proper motor ganglion in order to reach the supposed inhibitory ganglia, farther away in the septum dividing the auricles! It needs explanation why, under these circumstances, the "stimulus" should ignore the motor ganglion in order to excite its rivals, which are further out of reach of the current.

The theory of the day on this subject, or rather the "temporary hypothesis," as Dr. M. Foster calls it, necessitates that the action of drugs be wrought out amid the struggle for supremacy between two rival nerve factions or camps, as it were, with results which are far from encouraging. For instance, a recent physiological work on the "Action of Medicines," informs us in the opening paragraph regarding belladonna, that "It paralyzes the motor nerves in frogs at the same time that it excites the spinal cord; after they recover from the motor nerve paralysis the tetanic symptoms of spinal stimulation appear"! Would it not be well to try how far the results might be simplified on the view that, under the circumstances, the heart's action ceased from paralysis of its motor ganglia;—thus dispensing for a time with this part of an inhibitory incubus, which threatens to become unmanageable through its very complexity?

THE VOLUNTARY MUSCLES.

The foregoing considerations have reference especially to the relations of nerves to involuntary muscles. Why it is that muscles of the voluntary or striated class do not also pass promptly into a state of spasm or contraction when their motor nerve trunks are cut, or when the body is dead, I am unable to explain; unless it be admitted that here the motor nerve trunks are more than mere carriers of nerve force—are in fact, with the nuclei and nerve plates at their endings, miniature magazines of nerve energy, which continue for a time to restrain the muscle after section of the nerve trunk or after somatic death.

POST-MORTEM MUSCULAR CONTRACTION.

If such an hypothesis were admitted it would serve to explain certain phenomena for which an explanation is necessary, such as the remarkable contractions of muscles which are known to occur in certain cases after death. There can be no doubt that the activity of both nerve and muscle survives for a time the death of the organism. The life of the nerve, which is more intimately dependent upon vital conditions, succumbs before that of the less vital and more enduring contractile power of the muscle (*b*). And as one fasciculus, or one muscle, or one group of muscles attains its freedom, the contraction which follows gives rise to the movements referred to.

RIGOR MORTIS.

Is a muscle contracted or shortened when it passes into rigor mortis? All observers agree that such is the case, and Dr. M. Foster tells us that the shortening and contraction "may be considerable." (*c*) Is this contraction and shortening the last act of the muscle in dying, or does it occur after the actual death of the muscle—that is, in a dead muscle? Let us consider the latter view first, since it appears to be the one in favor by our physiological teachers at the present time.

If the muscle be dead, not only is its nerve force extinct, because nerves die first, and consequently there can be no stimulus from nerve energy to cause the muscle to contract, and further, the chemical changes in the muscle which generate its contractile force must also have ceased to operate, so that its contractile power is at an end. In the assumed absence of contractile energy, it has become customary to attribute the death-stiffening to coagulation of the muscle plasma in the muscle. This would account for the rigidity of the muscle, but would fail to account for the contraction and shortening admittedly present. Muscle plasma, in the living muscle, bears the same relation to the myosin of dead muscle that certain albuminous substances in the circulating blood do to fibrin, after blood is drawn off in a vessel. According to Dr. Lionel Beale, fibrin is "non-living matter, and

(*a*) Dr. M. Foster, Phys., p. 232.

(*b*) *Ib.*, p. 121. (*c*) *Ib.*, p. 94.

is the product of the death of albuminoid bioplasm." (*a*) If this be true of fibrin, it may fairly be assumed to be true also of myosin, which closely resembles the former. Coagulated plasma, or myosin, is dead, and if the muscle also be dead, and its inherent contractile power at an end, in what manner does dead myosin acting on a dead muscle produce so perfect a counterfeit of muscular contraction, that one of the keenest observers of the day pronounced it "The most steady and persistent contraction which muscle can possibly exhibit"; (*b*) so perfect a counterfeit, indeed, that our eminent English physiologist, the late Dr. Carpenter, employed the microscopical appearances of muscle during rigor mortis as the chief basis for his description of the changes taking place in ordinary muscular contraction, as he himself has told us (*c*).

Again, the reaction of a living muscle in repose is neutral, or alkaline, but after exercise, or tetanus, the reaction becomes acid, an effect in some way depending upon the chemical processes in the muscle associated with its contraction. In rigor mortis the reaction becomes "most distinctly acid" also. But if the muscle be already dead and these chemical changes at an end, what is the source of the acidity? To the presence of this acid, the coagulation of the myosin and the rigidity of the muscle, are of late attributed. But since the acidity is the *result*, or *effect*, of muscular contraction in the living muscle, how can it be the *cause* or starting point of the contraction and stiffening in the dead muscle?

Dr. Lauder Brunton finds that muscle plasma "coagulates too quickly in the muscles of warm-blooded animals to allow of its preparation from them." Now rigor mortis does not usually set in for several hours after death,—Dr. Brown-Sequard found it to be ten hours in four rabbits,—and its onset may even be artificially delayed. The statement, therefore, is only explicable on the supposition that coagulation of the mnscle plasma and rigor mortis do not occur together—that is, as cause and effect. It would seem to be implied that the muscle plasma coagulates too early to be the cause of rigor mortis. Dr. Brunton further shows that the muscle plasma may coagulate without producing rigor mortis. In an experiment, detailed on page 363 of the Hand-book, it is shown that, if half a fresh muscle be immersed for a few minutes in water at a temperature of 104° Fah., the reaction will be acid, as Dr. Brunton says,—"from development of rigor mortis" The other half of the muscle is to be placed for a similar time in boiling water; and here the reaction "will be alkaline." Dr. B. adds,—"Before rigor mortis had time to set in, the albumen of the muscle was coagulated. This coagulation set free a quantity of alkali, hence its reaction." Dr. Brunton's exposition of this experiment, if correct, would be fatal to the myosin hypothesis, since if the coagulation of the muscle plasma be attended by an alkaline reaction while in rigor mortis, the reaction is strongly acid, the former could not be the cause of the latter, and they must be regarded as separate and distinct processes.

The foregoing difficulties certainly seem to create distrust in the myosin hypothesis; and we now turn from it, with its dead muscle and inert myosin, to the other aspect of the case, under which the complete cessation of nerve activity and the final contraction of the muscle marks the onset of rigidity. "The rigidity, the loss of suppleness and the diminished translucency," observable in the muscle in this state, are reasonably accounted for by the condensation of tissue which is here permanent, as the contraction is continuous. That a certain relaxation subsequently occurs, during which meat or game, which is at first tough, becomes more tender and toothy, is attributed by M. Rosenthal to the action of the acid referred to, which relaxes the connective tissue which holds the fibres together, so that the latter separate more readily (*d*). This is but the beginning of the chemical change which ends muscular contractility in the ruin of putrefaction. The following remarkable series of conditions are common both to muscular contraction and to rigor mortis: In both the reaction becomes acid. In both carbonic acid is set free in the muscle. In both the temperature rises,—often markedly so in rigor mortis. In both the muscle is contracted and shortened; in some cases, as in death from cholera, "rigor mortis may be said to be simply a continuation of the

(*a*) Disease Germs, pp. 136, 137.
(*b*) Anstie, Stim. and Narc., p. 70.
(*c*) Hum. Phys., 5th Amer. Ed., pp. 307, 308.

(*d*) Muscles, etc., p. 87-8.

cramps and contractions occurring during life." (*d*) In both, glycogen is converted into sugar. Do not all these coincidences in appearances and effects point strongly to a similarity of processes in muscular contraction and cadaveric rigidity? Of course the parallel is not complete in every particular. It is said that the muscular sound emitted during ordinary muscular contraction is absent. This sound is attributed to vibration of the muscle substance. Might it not be due in part to the altered circulation in the ordinary muscle during contraction, for it is well known that the blood channels, under certain circumstances, give out a musical note? In rigor mortis, of course, the circulation of the blood ceases, as does also the removal of waste products. That the muscle substance continues to vibrate in rigor mortis is evident, because chemical changes are still taking place there, as is shown by what is said above, and especially by "a marked accession of heat"; (*b*) and "heat is only another form of motion." (*c*) So that, after all, it would seem as if the atoms of the muscle continue to vibrate, even though no sound is audible.

That indefatigable observer, Dr. Brown-Sequard, some time ago, related to the Biological Society of Paris, "some experiments he had made, by a special instrument, to determine the movements of single muscles in the body after death. He found that there was a very considerable degree of contraction and relaxation, as much, for example, as two and a-half millimetres in a muscle measuring only six millimetres in length. He thought that the results of his experiments disproved the theory of coagulation in the muscular tissue as the cause of cadaveric rigidity (*d*).

I am not necessitated to prove that rigor mortis is due to post-mortem contraction of the muscles; but in the absence of any other satisfactory explanation of this state, I am entitled to refer to it in support of my thesis; and I would ask those who dissent from this view, and who, in consistence with their theory, must hold that nerve stimulus is necessary to muscular contraction, to account for the presence of nerve force under the conditions referred to.

(*a*) Wood's Prac., Vol. I, p. 717. (*b*) Foster, p. 542.
(*c*) Rosenthal, p. 42.
(*d*) N. Y. Med. Rec., Jan. 9, 1886.

SPASMS IN VOLUNTARY MUSCLES.

It would, perhaps, be no difficult task to show that even voluntary or striated muscles pass into a state of partial spasm or contraction during life, much oftener than might at first sight appear, under a form of "irritation," which may very properly be regarded as consisting in a lowering of nerve activity.

"Irritation" is not increased nerve action. A splinter under the nail is attended by a loss of tactile sensibility. A mote in the eye irritates, but it obscures vision. Why should indigestible food oppressing the digestive functions of a child be regarded as a source of increased nervous "discharges"? Such sources of irritation ought to be considered as depressing, rather than exciting nerve action; a view of the case for which authorities have been already quoted, and others are to follow.

Dr. Anstie wrote, "convulsive action of the muscles, as everyone knows, are very common complications of neuralgia," and the same acute observer held that "pain is not a true hyperæsthesia; on the contrary, pain involves a lowering of nerve function" (*e*).

Dr. Hilton, in his work on "Rest and Pain," points out that the irritation of peritonitis induces contraction of the abdominal muscles. In the same way, pleuritis renders the chest-walls fixed by spasmodic contraction of its muscles; while the muscles of an inflamed joint, he says, "are invariably contracted, and continually tend to increased flexion of the limb, not because such a position is easiest for the patient, which is not always the case, but owing to a reflex perturbation transferred to the muscles of the adjoining surface." (*f*) That peripheral irritations *do* produce nerve paralysis, must be admitted on the authority of Dr. Brown-Sequard (*g*), and others.

What is the "irritation" in these cases but a mild form of nerve paresis, just as "the irregular mucular action" which shows itself in tremor, fibrillary contractions, or in spasm, denotes the failure of the ordinary nervous restraint over the corresponding muscles.

Why should "morbid conditions of the medulla oblongata," avowedly depending on "defective

(*e*) Anstie, Neural., p. 12. (*f*) *Ibid.*, p. 96.
(*g*) Lect. Cent. Nerv. Syst., pp. 160, 170.

nutrition," be supposed to give rise to "explosive and atactic manifestations of nerve force," (*a*) when they are much more naturally explained as depending upon nerve failure? The weak point in the theory of the text-books is, that nerve force is required to be displaying the full activity of robust health, and even more, in exaggerated "discharges" and "explosions" at the very time there is the most undoubted evidence of nerve failure and exhaustion. Why, in cases of "early and late rigidity" of muscles, should a clot in the brain be held to be an exciting irritant, seeing that the brain tissue is wholly insensitive, and may be cut, pricked or seared with a red-hot iron without eliciting any signs of pain? It is difficult to express here the multitude of facts which show the very frequent association of paralysis and spasm in disease of the brain and spinal cord. The paralysis is of the nerve and the spasm of the muscle—conditions very embarrassing to the theory of the day, but consistent and harmonious states in the theory of these pages. Is there not much significance in the statement of Seguin, that "a lesion of the lateral columns of the spinal cord produces paralysis with contracture" of muscles. Why? Because, as Dr. Brown-Sequard has shown, "the motor fibres run on the exterior of the cord in its antero-lateral columns." (*b*) Motor nerve disease and destruction induces contraction of the muscle, which later on becomes atrophied, partly, no doubt, from inaction.

It is on record, too, that while injury of the vagus nerve induces contractions of the gastric muscle, injuries of the spinal accessary nerve are attended by spasms of the trapezius or sterno-mastoid muscles (*a*). Other examples of a similar kind are not lacking.

One might imagine that Dr. B. W. Richardson, F.R.S., intended to endorse the theory of these pages, when he wrote as follows regarding the convulsions of the drowning. He says:—"The convulsive movements that are seen are unconscious movements; they are the same as those which mark the period of stupor, in death by hanging, by noxious vapors, by concussion; and they are simply the results of action of muscles from which *the controlling power of the nervous centres has been removed*" (*e*). [Italics mine]. Dr. Henry M. Lyman, A.M., M.D., would appear also to have had a commendable distrust, if not an entire disbelief, in the theory of the text-books, when, in referring to "a temporary increase of muscular movement directly caused by the abolition of some special source of nervous impulse," he says:—"Witness the tremendous *liberation of muscular movement* which follows a *paralysis* of the influence of the brain, by the sudden decapitation of a fowl, for example" (*f*). [Italics mine].

One of Dr. Ferrier's experiments is so much in point here, that, at the risk of being tedious, I cannot forbear a brief reference to it. The right brain of a monkey had been exposed and subjected to faradization. Next day the animal "was found perfectly well." "Towards the close of the day following, on which there were signs of inflammatory irritation and suppuration, it began to suffer from choreic spasms" which rapidly assumed an epileptiform character. Next day hemiplegia became established with the usual symptoms of "paralysis of the left arm and partial paralysis of the left leg." "On the day following paralysis of motion was complete over the whole of the left side and continued so till death, nine days after.' Dr. Ferrier says, "In this we have a clear case of vital irritation producing precisely the same effects as the electric current, and then destruction by inflammatory softening resulting in complete paralysis, etc.," (*g*).

On Dr. Ferrier's view, the stage of apparent inflammatory action was accompanied by increased production and discharge of nerve energy, as seen in the choreic and epileptiform spasms. But "Recent studies show that the inflammatory process is a destructive and depressive one, so far as the tissues are concerned; that it does not irritate and kindle into increased activity the protoplasm of the cells, but rather the reverse" (*e*). So that it is now definitely understood that the inflammatory process in brain tissue does the reverse of Dr. Ferrier's view, and paralyzes rather than excites nerve energy.

Observe here, that the spasms of the muscles,

(*a*) Anstie, Neural., p. 156.
(*b*) Erichsen, Concus. Spine, pp. 29, 30.
(*c*) Bryant's Surgery, p. 208.
(*d*) Braithwaite, July, 1871, p. 255.

(*e*) Anæsthetics, Wood's Lib., p. 26.
(*f*) Functions of Brain, pp. 200, 202.
(*g*) Editorial, N. Y. *Medical Record*, Jany. 30t 1886, p. 128.

on Dr. Ferrier's own showing, began to occur contemporaneously with the "signs of inflammatory irritation and suppuration," and as this term "irritation" (on so good an authority as the able editor of the N. Y. *Medical Record*), must now be interpreted to mean depression and lowering of cell activity, it follows that the spasms referred to occured from the absence or failure of nerve energy, and not from its undue excitation. Observe, too, that Dr. Ferrier held that this "vital irritation," as he saw it, but which we now know is depression or paralysis, produced "precisely the same effects as the electric current." Another evidence of the paralyzing character of electricity!

(To be continued.)

Selected Articles.

A CASE OF ALARMING HÆMORRHAGE FOLLOWING EXCISION OF THE TONSILS.

The infrequency of such cases as the following would seem to justify its publication:

Norman D., American, twenty-five years of age, law student and athlete, came under my care for post-nasal catarrh and hypertrophy of the tonsils, in May, 1887. Having no faith in topical or general treatment of such a condition of the tonsils, excision was advised and done at my office. Mathieu's tonsillotome was the instrument used; as it cuts from behind forward there is no danger of wounding the pillars of the soft palate, and the screw by which the fork of the instrument is adjusted enables one to cut more or less of the tonsil as is desired. The tonsil was very hard and the cutting was accompanied by a grating noise which was noticed by the patient, as well as myself at the time. The usual amount of hæmorrhage followed, but was soon checked by sipping a solution of the tanno-gallic acid gargle of the London Throat Hospital Pharmacopœia (M. Mackenzie).

Mr. D. left my office at 4 p. m. in good spirits, expressing himself as feeling relieved that the slight operation was over. He ate his dinner at 6 p. m. and said to the family he did so without pain. Soon after he dressed himself and attended a wedding, in church, where, at about 9.30, he complained of a sudden faintness, was assisted to the open air, when he immediately vomited a large quantity of blood—variously estimated by his friends, at from half a pint to a quart. He was taken to his home and put to bed where he again vomited over a pint of dark blood. A neighboring physician was called, and his father came for me.

I saw him at 11 p. m., he was then pale, somewhat nauseated, but as yet there were no signs of prostration. With the help of Dr. Little, who had been with him for an hour, I syringed his throat with hot water, wiped away the clots, and examined carefully for any bleeding vessel. None was found, but a very free oozing of blood was going on from the whole cut surface of the right tonsil. Pressure was made with a wad of styptic cotton over the cut surface, and continued as long as he could bear it, but this was for a few minutes only, as the presence of the forceps provoked a violent retching, followed by vomtiing of blood. Trial was then made of the tanno-gallic acid gargle above mentioned, hot water, cold water, ice, solution of salicylic acid in hot water, Monsel's salt applied to the cut surface and pressed down firmly, the patient lying on his right side. Thus we went through a long list of styptic and astringent remedies, each appearing to check the flow for a time, but as soon as we suspended our efforts for a few minutes he would complain of nausea, and soon after vomit a bloody fluid, showing that blood was still trickling down his throat and being swallowed. Hypodermatic injections of ergotin were given and later on brandy.

About three in the morning Dr. Spier was called, and upon his arrival another careful examination of the throat was made, but again we failed to find any special point of bleeding—as before, it was seen to be a general oozing from the whole cut surface. Dr. Spier made trial of pressure with an improvised clamp, but was able to keep it up for a short time only. He then advised a continuance of the astringents and gave his opinion that it would be checked by them. We continued our efforts in this direction until 10 a. m., when the condition of the patient, cold perspiration, pulse at the wrist very feeble, complaining of thirst and a sinking feeling, for which frequent hypodermatics of brandy were given, made it plain that some more vigorous steps must be taken at once.

Dr. Little, who had been with me through the night, very kindly went for Dr. Spier with the request that he come to our assistance prepared to tie the carotid artery. This he promptly did, the ligature being placed upon the common carotid artery above the omohyoid muscle. I wish to state here that this operation was done at my request, and the entire responsibility for the choice of the common carotid artery rests upon me. This in view of possible criticism.

The tightening of the ligature we expected would arrest the hæmorrhage, but in this we were disappointed, for it continued, as nearly as we could judge, exactly as before. It was now

thought best to call another surgeon to our assistance and a telegram was sent to Dr. Sands asking him to come prepared to transfuse the patient if it should seem best.

The artery was tied at about 11 a. m., and the bleeding continued until about 2 p. m. The last remedy made use of before the bleeding ceased was a douche of very hot water which was used by my friend, Dr. McNaughton. I do not attribute the checking of the hæmorrhage to the hot water however, as it had been used a number of times before during the night. The patient was now pulseless at the wrist and hypodermatics of brandy were frequently given.

Dr. Sands, who arrived at this time, at once proceeded to transfuse, about twelve ounces of a saline solution being slowly injected into the radial vein. The pulse returned at the wrist while it was being done.

From this time on there was no further hæmorrhage and the only bad symptom was a pretty severe chill about two hours after the transfusion, following which the temperature rose to 102°, it, however sank to 99° by the next morning and never rose above that point again. The patient was given nourishing food and *no* medicine; in a couple of days he developed a good appetite. The ligature came away from the carotid on the twenty-first day. The transfusion wound healed without suppuration. The operation was most skilfully done with thorough antiseptic precautions. As soon as the ligatures came away the patient was allowed to sit up and in a week he rode out. When last seen by me, a month later, he still showed very plainly the effects of the hæmorrhage.

The following are some of the points which seem to be of interest in connection with this case:

1. *As to the frequency of such cases.* Different writers make varying statements on this point. Sajous says profuse hæmorrhage occurs perhaps once in five hundred times, while an alarming flow does not occur once in a thousand times. According to Cohen, there are several records of more than a thousand operations at the hands of the same surgeon without the occurrence of any serious hæmorrhage M. Mackenzie makes the following statements of his own experience: "As regards hæmorrhage following excisions of the tonsils, I have only once met with a case in which the bleeding appeared actually to endanger life." In the past fifteen years I have done this operation about two hundred times, and have never met with a case of unusual hæmorrhage before the present one. Taking an average of the statements of the authors I have been able to consult, I should say that such a case as this one occurs about once in a thousand operations. There are quite a number of cases recorded in which the hæmorrhage has proved fatal.

2. *Causes and source of the bleeding.* The tonsil is situated between the pillars of the soft palate "in a sort of niche," resting on a layer of loose connective tissue, by which it is separated from the superior constrictor muscle. The whole gland can be enucleated by the fingers, or a blunt instrument, as was an ancient practice. As the internal carotid artery is external to the superior constrictor muscle it is plainly impossible to wound this vessel in excising the tonsil with any of the tonsillotomes now in use. In the reported cases of injury to this vessel while excising the tonsil, a bistoury has generally been the instrument used. Velpeau reported four cases in which the internal carotid artery was laid open while a portion of the tonsil was being cut away with a bistoury. The vessels which supply the tonsils are the ascending palatine and tonsillar arteries (deep cervical branches of the facial), the dorsalis linguæ from the lingual, the ascending pharyngeal from the external carotid, and the descending palatine from the internal maxillary. Not only do these vessels anastomose freely with each other, but also with those of the opposite side. Ordinarily when a portion of the tonsil is excised the hæmorrhage is free, but soon ceases spontaneously by the retraction of the cut vessels into the soft tissues of the tonsil. But if the tonsil has undergone fibrous degeneration, or is in a condition to which the term scirrhus has sometimes been applied, the cut vessels are held open and prevented from retracting and thus putting a stop to the flow. Sajous says that in the cases of profuse hæmorrhage which occurred in his practice, the tonsils were exceedingly hard to penetrate, which led him to think the cut vessels were kept open by surrounding fibrous elements adhering to them. Schede has remarked, "That very firm fibrous degenerated tonsils specially tend to after-hæmorrhage, in that the vessels within the stiff tissues remain gaping." By referring to the history of this case as given above, it will be seen that both the patient and myself noticed the hardness of the right tonsil, it cut like a scirrhus tumor.

Dangerous and not infrequently fatal hæmorrhage follows this operation if the subject is a "bleeder." Whether Mr. D. was or was not a hemophilic, was discussed at the time. We were told that he, had a cousin on his mother's side who was a bleeder, and that he himself bled till he fainted after the extraction of a tooth about a year before the operation on his tonsils. There was, however, no history of his ever having bled unusually from any of the accidents of childhood, nor any suffering from swelling of the joints; nothing, in short, but the bleeding which followed the extraction of a tooth in his twenty-fourth year. There was no hæmorrhage from the left tonsil nor from either of the wounds inflicted by the surgeons. "In true hemophilia the tendency to

bleed usually shows itself in the first year of life and in the great majority of cases before the fifth year." "Recorded cases of the disease appearing first later than the second dentition are not trustworthy" (Legg–Quain's *Dict. Med.*, art. "Hemophilia"). Other authorities might be quoted to the same effect, but I think it is plain that Mr. D. is not a "*bleeder*," and that the cause of this hæmorrhage was the fibrous condition of his right tonsil, and the source of the hæmorrhage was the above mentioned vessels which normally supply the tonsils.

3. *How to stop the hæmorrhage?* Sir M. Mackenzie in his work on *Diseases of the Throat and Nose*, vol. i. page 86, says that, "The use of the tanno-gallic acid gargle of the Throat Hospital Pharmacopœia will *at once* arrest the hæmorrhage. Half a teaspoonful of the remedy should be slowly sipped at short intervals. During the act of deglutition the styptic is worked into the cut surface of the tonsil and the hæmorrhage is effectually restrained in all cases." If this statement were true in *all* cases it would be a sufficient answer to the above question, but, unfortunately, it does not always succeed in the hands of other surgeons. It was used in the case of Mr. D. and did not appear to be any more effectual than several other styptics which were tried, and all failed to arrest the bleeding. A careful search should be made for any vessels that might be spurting, and if one be found it should be twisted or tied. It would seem that pressure should control this hæmorrhage, but we were unable in this case to stop it in this way. Whether made with the fingers or an instrument, such an amount of retching and vomiting was provoked as to oblige us to desist. The suggestion of Cohen to make pressure with a long pair of forceps one blade applied to the tonsil and the other upon the outside to make counter-pressure, seems to me a good one. If the tips of the forceps were made broad enough to cover the whole tonsil and the handles closed with a catch like the ordinary Pean forcep, it could be firmly applied and left hanging from the patient's mouth without danger of being displaced by the retching.

There are a number of cases like this one recorded in the journals, in which the flow of blood stopped when the patient fainted and did not return afterwards. Dr. De Blois had a case at the Boston City Hospital of most alarming hæmorrhage after tonsillotomy, which continued in spite of all efforts to control it for three and a half hours, when the patient fainted, after which it gave no further trouble (*Boston Med. and Surg. Jour.*, March, 1887, page 309). Schede, of Hamburg (*vide* König's *Surg.*), reports two cases which he observed, where, after various attempts to check the bleeding, it stopped permanently upon the occurrence of fainting. This, in my opinion, is the way the hæmorrhage was checked in the case of Mr. D. He had become very restless and insisted upon sitting up, and it was while in this position, on the side of the bed, supported by his father, that Dr. McNaughton made use of the hot water; he became very faint and would have fallen to the floor had he not been held up, and when laid back upon the bed the bleeding had ceased and did not return.

The common carotid artery was tied in this case, because it is the step advised by authorities uuder such circumstances. No one of the medical gentlemen who saw this case had had any experience with similar cases. In Schmidt's *Jahrbücher*, vol. 186, is related a case of severe hæmorrhage after cutting of the left tonsil. Various hæmostatics were tried unsuccessfully and in three hours the common carotid was tied (*vide Boston Med. and Surg. Jour.*, March, 1887, page 303). Mr. McCarthy tied the common carotid artery at the London Hospital for hæmorrhage following excision of the tonsil and the patient recovered (Mackenzie). The common carotid artery has been successfully tied by Pepper for hæmorrhage from sloughing tonsils in scarlatina (Druitt's *Surgery*).

Most of the writers on diseases of the throat mention the ligation of this vessel to check hæmorrhage from the tonsil. The common carotid artery is tied in preference to the external carotid, "Because the uncertainty of origin of the vessels which supply the tonsil is against tying the external carotid" (Druitt's *Surgery*, edit. 1887, page 551).

"The operation of tying the external carotid artery is rarely performed, ligation of the common carotid being preferred on account of the number of vessels given off from the external carotid" (Gray's *Anatomy*).

While holding myself justified by the above mentioned authorities for the course pursued, yet the result of tying the common carotid artery in this case convinces me that it was an error. It had no appreciable effect upon the flow of blood, and in view of the origin of the vessels which supply the tonsils and of their free anastomosis, not only with each other but also with their fellows of the opposite side, it could hardly have been expected to have.

In many of the reported successful cases of tying this artery it is stated that the source of the hæmorrhage was the internal carotid, and probably this is true of all of them. Believing it to be impossible to wound this vessel in excising the tonsil with a tonsillotome, I should, in any future case of excessive hæmorrhage following this operation, depend upon pressure, hæmostatics, and placing the patient in an upright position to encourage fainting; and if the patient were not a bleeder should expect to arrest the hæmorrhage by these means.—Dr. S. E. Fuller, in *Am. Jour. Med. Science.*

CLINICAL EXAMINATION OF CHILDREN

Patience and care are required in the clinical examination of sick children. They are easily frightened, and this disorders circulation and respiration, hence we cannot commence the examination of a sick child abruptly, but there are many things which we can study without contact with the child while it is becoming accustomed to our presence. We can observe the color of the skin. This is waxy in atrophy, tuberculosis, and wasting diseases, yellow in icterus and post-natal discoloration. There are irregular patches of purplish hue in meningitis, dependent upon diminished power of the vaso-motor nerves; these are produced on the cheek, forehead, and neck by pressure of the pillow or the nurse's arm. There is a general congestion of the face in some cases of typhoid fever in its early stages. A circumscribed patch is seen on the cheek in pneumonia and in hectic fever dependent upon tuberculosis or collections of pus. In pneumonia the patch is livid, in hectic pink. The skin is leaden in color or blue in chills, livid in croup, capillary bronchitis, œdema of the lungs, and all diseases of imperfect aeration of the blood. A similar color is seen in cyanosis from whatever cause. There is paleness in nausea and shock. The "tache cerebrale," which is pathognomonic of meningitis, may be brought out by a simple scratching of the skin by the finger nail or a pencil. This is dependent upon the same cause as the irregular mottling of the cheek above described. The redness to which this name is applied persists for a considerable time after the application of the irritation, and I have never been able to produce it except in meningeal inflammation. There is also the white stripe, which may be produced upon the skin by similar means in scarlatina. There are also peculiar eruptions, which we must learn to recognize, in scarlatina, measles, erysipelas, and variola. The rose-colored spots of typhoid fever, the petechiæ of typhus, scorbutus, and epidemic cerebro-spinal meningitis, are of value in a correct diagnosis.

In chronic diarrhœa the skin becomes of an earthy hue.

The eyes when asleep, in health, are directed upward beneath the upper lid, and the pupils are evenly contracted. The pupils may be dilated, irregular, or sluggish in their action from cerebral disease, or from disease located in the structure of the eye itself. They are often dilated to a great extent in the early stage of typhoid fever, and when this occurs it shows that the nervous system is profoundly implicated. Dilatation occurs also in the later stages of diarrhœa, when there is great exhaustion. The eyelids are also partially open during sleep, in the later stages of exhausting diseases, as the result of loss of muscular tonicity in the orbicularis muscles. In the same cases there is an accumulation of sebaceous matter over the cornea, and a great loss of sensibility, for flies may crawl over the eye without any inconvenience. These symptoms are indicative of great danger.

There is photophobia in meningeal or cerebral disease, also in phlyctenular conjunctivitis. Tears make their appearance about the fourth month, they disappear during severe disease, and their reappearance is an indication of improvement. Respiration in diseases of the lungs becomes more frequent. Respiration is interrupted in cerebral disease, and is a symptom of great value. In croup, inspiration is noisy; in asthma and emphysema, expiration is noisy. It is sighing and slow in nausea.

Cough is hoarse and ringing in the commencement of croup, becoming extinguished as the disease advances; spasmodic and subintrant in pertussis, constant and synchronous with each expiration in some cases of irritation of the laryngeal nerves. Cough sometimes exists as a symptom of worms in the intestines, and of jaundice; in these cases it is of reflex origin.

The cry of children in typhoid fever is of constantly changing fancies, and may be changed by external impressions, while in meningitis the cry is a constant repetition of the same word, at intervals more or less regular, with an unvarying cadence.

In some cases of cerebral irritation and typhoid fever, I have observed that the hands are kept constantly in contact with the genitals, and I have learned to regard it as a grave symptom, and that to a great extent it is involuntary.

The persistent flexion of one extremity points to lesion in the brain. Flexion of the thumbs or toes, contractions of the eyebrows, grinding of the teeth, and startings, are often the prodromes of general convulsions. Contraction of the lower extremities, with crying, writhing, and twisting of the body, are symptoms of the colic, vesical irritation, rectal tenesmus, pricking of pins, etc., and a constant pulling at the penis in young boys sometimes is seen in calculous disorders, and in congenital phimosis.

There is retraction of the head in meningeal disease, irregular muscular contraction without loss of consciousness in chorea, boring of the head into the pillow in cerebral irritation and rachitis.

Apathy and quietude in a child are suggestive of rachitis when there are no other indications of disease, and when this is joined to sweating about the head and general soreness the diagnosis is positive.

An intermittent pulse points with great certainty to disease of the brain, and an extremely frequent and feeble pulse is the forerunner of dissolution.

Vomiting may be incidental to the conformation of the stomach, or a symptom of disease. It

is one of the first symptoms of scarlatina, variola, or intussusception ; it accompanies abdominal inflammations, whooping cough, and sometimes pneumonia. It is one of the most rebellious symptoms of meningeal inflammation ; in this disease it is forcible, and has been compared to the action of a force pump. The abdomen is tumid and distended in diarrhœa, but retracted and boat-shaped in meningitis. It fluctuates in dropsy and purulent collections in the peritoneal cavity, and is nodular from enlargement of mesenteric glands. In cases of intussusception the coils of the intestines roll beneath the surface like a mass of writhing snakes. The presence of undigested masses of casein or other albuminous matter in the stool tells that the disorder is in the stomach digestion. Excessive watery discharges in summer point to sympathetic paralysis. There are many things to be learned by inspection, and in obscure troubles it should never be neglected. Needles have been found driven into the brain through the fontanelles, perforating the chest and the abdomen, and plunged into the liver.

One of the earliest evidences of diseased action is found in variations of temperature. In scleremia there is a reduced temperature from the beginning.

The production of heat in excess of the natural standard is the result of several factors. There may be increased metamorphosis of tissues ; impressions upon the vaso-motor nerves, and the actions of poisons upon the blood, as in zymotic diseases, where we infer an action similar to a ferment—all these may be capable of modifying the heat producing processes ; but the subject as yet is to be more fully investigated before we can be fully enlightened. This much we know, there seems to be fully a established law that according to the height of the temperature above 98.4° the gravity of the case and its danger is increased. In intermittent fever there is a great rise of temperature during the febrile paroxysm, often to 104° or 106°, but it speedily begings to decline. In typhoid fever the temperature rises to 102° early in its course, and then by about half a degree or a degree to 104°, which point it does not often pass in children, unless there are complications in the lungs or peritoneal cavity. In diseases of the respiratory organs, when the parenchyma of the lungs is affected, the temperature is notably higher than when the mucous membrance alone is affected. In tubercular meningitis there are great ranges as well as irregularities in the course of the temperature ; the maximum recorded is 108.5°, the minimum 95°. When the substance of the brain is affected, the rise scarcely ever exceeds 101°. A pulse rate increased to 130 or more per minute and a temperature of 102° is prognostic of meningitis, while a pulse rate of 110 to 120, with a persistent temperature of 104°, points to typhoid fever as the disease.—*Mass. Med. Jour.*

COCAINE IN OBSTETRICS.

1. Vomiting in Pregnancy.—Weiss administers hydrochlorate in doses of one-sixteenth of a grain, by mouth, every half-hour. Fraipont prefers to administer it by subcutaneous injection of twenty minims of a four per cent. solution into the epigastrium. Englemann relates a most obstinate case, where morphine, cauterization of the os uteri, and injection into the rectum of CO_2 had all been tried without avail. He gave ten minims of a ten per cent. solution thrice daily by mouth, with recovery in two days. Bois relates the case of a young multipara who was brought to a moribund condition by pregnancy vomiting ; she had arrived at the fourth month. He made a pomade of cocaine hydrochlorate and vaseline (one in fifty) and placed a piece the size of a filbert against the os uteri : a fresh application was made night and morning. Amelioration of her symptoms soon began, and at the end of three weeks recovery was complete. The writer had two cases. In a nervous primipara at her seventh month, vomiting occurred after every meal, and she was induced to lie upon the couch all day, but unfortunately with no good effect. After trying the usual remedies, he prescribed as follows: Cocain. hydrochlor., one-tenth grain ; tinct. aurantii. ℥x; mist. chloroformi, ʒss ; aquam ad ʒ i; every three hours. There was a peculiar numb sensation about the tongue and fauces after each dose, but the effect upon the stomach was remarkable. The vomiting gradually ceased, and in three days she was able to take soup, and in a week became quite well, and went to the termination of her pregnancy without further trouble. In case II., vomiting was general all day, the patient being at the end of the fourth month. The drug was administered as before, and was taken continuously for a fortnight. The vomiting gradually ceased, and never returned. Of course here it might have stopped in consequence of the natural progress of pregnancy.

2. Early Stages of Labor.—Mr. Phillips had four cases, three being successes, and one failure. A. B, a primipara, aged 18 years, had been in labor six hours when he saw her. The os uteri just admitted the tip of the examining finger, and no thinning of the lips had as yet occurred. The pains were most severe ; she was throwing herself about and crying continually One of Head Moore's cones was inserted immediately after a pain ; it was almost entirely dissolved in nine minutes. The effect was at once apparent, the pains coming more regularly even than before : but between them the patient gradually dozed off and cried out no more. The effect of the drug was kept up for four hours, at the end of which time the os uteri was thined out and dilated fully. Labor terminated naturally. The next two cases

were counterparts of the foregoing; but the last, for some unexplained reason, was entirely unrelieved. In order to understand the effect of the drug, we must try to analyze the early pains of labor. Two agents unite to produce them. 1. The pain of uterine contraction,—similar, indeed, to any other organ consisting of smooth muscular fibre, endeavoring to expel its contents. 2. The pain resulting from the stretching of the nerves of the cervix, and the lacerations of the cervical tissue which doubtless occur. Over the first, cocaine has no control, and its beneficent effect in this stage is due to its mitigation of the second kind. Doleris painted the uterine neck through a speculum with a four per cent. solution of glycerin and hydrochlorate of cocaine. Of eight cases, in six the results were decidedly affirmative. Jeannel relates six cases; and in five of them (three of which were successful) he applied cotton-wool tampons soaked in a five per cent. solution to the cervix and posterior vaginal cul-de sac. In the first case he cautions us against the use of bichloride of mercury with cocaine, as he found the former decomposes alkaloids with great rapidity. In three successful cases by Fischel, a two per cent. solution was applied to the cervix on a tampon, and repeated every twenty minutes. In two others, however, a similar application of a four per cent. and then a two and a half per cent. solution produced a negative result. The method adopted by Hartzhorne is to introduce, through a female glass syringe, as high up as possible behind the cervix, the following mixture: cocaine, 6 parts; glycerin, 20; and vaseline, 24.

Mr. Phillips differs from those who use the speculum. The objections appear to be (1) the exposure necessary; (2) the idea which must imbue the patient that some operation is about to be performed in spite of assurances to the contrary; (3) the removal of the vaginal discharge necessary before the application of the drug, which would be detrimental to the course of the labor; (4) a very large number of hyperæsthetic primipara can scarcely bear an ordinary vaginal examination, much less the introduction of a speculum, and these are the very cases in which cocaine is of so much value.

3. Expulsive Stage of Labor.—Here the factors causing pain are much more numerous. The pain from compression of the mucous membrane against the pelvic bones is the only form that any relief is obtained from, as all mucous membranes are anæsthetized by a two per cent. solution of cocaine. The part this factor, however, takes in the totality of an expulsive pain must be so slight that it may be neglected, and almost before making experiment we can say, on physiological grounds, that any certain or marked relief is out of the question. In six cases in which he has tried the drug either in the form of saturated tampon (five per cent.) or painting the vulva with it, he has found practically no amelioration of the pains. It is little probable that cocaine can be used as a local anæsthetic in labor, because anæsthesia and analgesia developed under this drug are essentially superficial, while the pains of labor are the result of distention and stretching of the tissues through their whole thickness.

4. Obstetric Operations.—In this class it has suggested itself that cocaine might be useful to anæsthetize the vulva in the operation for induction of premature labor by catheter, or the application of forceps on the perineum, or removal of adherent after-birth. Hale reports two cases where it was entirely successful in post-partum "vesical neuralgia." He injected twenty minims of a two per cent. solution into the urethra, with an immediate disappearance of the pain. A case is related in which cocaine was applied with success to the vulva of a recently-delivered woman in order to pass the catheter, and there seems no reason why, in cases like this, the drug should not be of great service.

5. Sore Nipples.—Hergott first made a local application of a four per cent. solution in nine cases, and concludes that suckling can be allowed without pain. The fissures rapidly heal, and cauterization of them by nitrate of silver becomes a painless proceeding. Mecuen found complete relief from pain in three cases. Mr. Phillips has tried a six per cent. solution in four cases. The anæsthesia produced was more or less deep, but only lasted two minutes, and the sores certainly did not tend to heal more quickly. In three cases weaning was deemed necessary, while in the fourth healing took place, and successful lactation followed. Children do not object to taking the nipple after the application of the drug, nor do they appear to suffer in general health.

We may therefore draw the following practical conclusions: 1. That cocaine, in whatever way administered, for uncontrollable pregnancy vomiting is a valuable adjunct; and, in some cases, a superior drug to those at present in vogue. 2. That during the painful earlier stages of labor, especially in primipara, it materially assuages the pains, but neither quickens them nor retards their onset, and hence has no effect on the actual dilatation. 3. That it is useless in mitigating the pains of expulsion and those caused by pressure on the perineum. 4. That in the case of sore nipples it relieves the pain attendant on suckling, though the duration of its effects is not sufficiently long to be of material service.—Dr. Phillips, in *Lancet.*

Rohé uses a 1 in 10 solution of liquor sodæ chlorinatæ in gonorrhœa. He finds the discharge promptly ceases in the majority of cases.

THE THERAPEUTICAL VALUE OF BISMUTH SALICYLATE.

Some months since I called attention to the many advantages possessed by the bismuth salicylate in the treatment of summer diarrhœa in children, since then I have been able to employ it successfully in other affections of the alimentary canal.

In an experience extending over two years, with its use in the treatment of inflammatory affections of the gastro-intestinal tract, seldom has it failed to accomplish the desired result and permanently cure the disease. In severe cases of diarrhœa occurring in phthisical patients I have effected diminution in the number of stools by half-drachm doses of the drug at intervals of two hours, reducing the amount of the dose on the amelioration of the symptoms. In cholera morbus, after the cause has been removed, this agent will soon reduce the existing inflammation and induce a cessation of the morbid action.

In dysentery, acute in character and of the sporadic variety, it has proved efficacious when full medicinal doses have been administered, allaying the disorder with great rapidity.

The diarrhœa accompanying enteric fever, especially in children, I have been able to control by its use, when other well-known remedies for this disorder had failed. If impossible to administer by the mouth, an enema may be employed, but in that case, the amount should be double that given by the mouth; and it should always have a small amount of opium administered with it.

In dyspepsia, with acid eructations and pyrosis, with a feeling of heaviness at the stomach after the ingestion of food, bismuth salicylate, in combination with simple bitters, soon tones up the organ and relieves the disorders. Recently, Dr. James Ware, of Lake Charles, La., communicated to me the following cases in which he had found the preparation useful:

1st. Female, æt. forty-five; dysentery. At the end of five days of treatment with opium and so on, I gave:

R.—Bismuth salicyl., ... gr. c.
Bismuthi subnit., ... gr. c. M.
Ft. pulv. No. vj. div.

Gave one powder every three hours. The woman was entirely relieved in twelve hours.

2nd. Female, æt. twenty-three; dysentery. Gave salicylate as above, also by enema, thus:

R—Bismuthi salicyl., ... gr. cc.
Glycerinæ, ... f ʒ j.
Aquæ, ... f ʒ vj. M.

Sig.—f ʒ, in three ounces of tepid water, after each stool.

Woman was well in forty-eight hours.

3rd. Child, æt. three; never fully recovered from an attack of cholera infantum last summer. Relieved by salicylate in eight-grain doses.

4th. Male, æt. twenty-five: periodical fermentation of contents of bowels every ten or twelve days for a year. Relieved now at the beginning of every attack, by fifteen grains each of the bismuth salicylate and subnitrate.

5th. Female, æt. twenty; pruritus vulvæ. Suffered terribly for several days. Used corrosive sublimate, carbolic acid, and other remedies with no benefit; then employed:

R—Bismuthi salicyl., ... gr. c.
Aquæ, ... f ʒ iv.

As a vaginal injection; relief instantly.

6th. Female, æt. fifty-six. Fermentation of contents of stomach and bowels every ten, twenty or thirty days for twenty years, accompained with violent pain and frequent discharges of acid mucus. Relief generally came in from thirty to seventy-two hours. In the midst of an attack I gave ten grains each of salicylate and subnitrate, with immediate relief. She has taken this amount night and morning for thirty days, with no return of the disease.

The preparation of this drug I have used is a pure white, very flocculent and light material. In beginning the treatment of any inflammatory affection of the alimentary canal, full and decided doses should be administered, and subsequently, when decrease in the severity of the symptoms takes place, the amount may be lessened. In severe cases occurring in children I never commence treatment with a dose less than five to eight grains.

The formula I prefer in cholera infantum and many other diarrhœal disorders in children, is the following:

R—Bismuthi salicyl., ... ʒ ij.
Tr. capsici., ... gtt. xij.
Spts. ammon. aromat., . . f ʒ iss.
Pulv. acaciæ, ... ʒ ij.
Aq. cinnamomi, q. s. ad., . f ʒ ij. M.

Sig.—Teaspoonful every two hours, for a child from three months to one year of age.

In the adult I prefer to use the preparation in powder, or combined with some other astringents, as tannic acid, acetate of lead, etc. With the bismuth salicylate it is possible in many instances to entirely dispense with an opiate, and this I always endeavor to do if possible.

The beneficial action of this drug is undoubtedly due to the antiseptic power of the salicylic acid as much as the astringent properties of the bismuth. In many cases of vomiting it will control it if given in five-grain doses, also in pregnant women the vomiting may in many instances soon yield to the action of this preparation, and its return to any great extent will be prevented by its continuance in small and frequently repeated doses.—Dr. Hale, in *The Polyclinic.*

THE GALVANO-CAUTERY IN THE TREATMENT OF ENLARGED TONSILS.

In the *Medical News* of March 10th, I notice the report of a paper read by Dr. Frank Hamilton Potter before the Medical Society of New York, on "The Galvano-cautery in the treatment of enlarged tonsils." It embodies, I think, the experience of the majority of those who have *had* experience in the matter. There has lately been a great deal of literature on the subject in both home and foreign journals, but there are a few points deserving of mention which I have not seen dwelt upon sufficiently.

1st. As to pain. The fact is that while many tonsils may seem utterly devoid of sensation when hypertrophied, others, on the contrary, are quite sensitive to the application of the hot wire. Often, in the same patient, one tonsil may be cauterized freely with total immunity from pain, while the other is so sensitive as to require the application of cocaine, which, I think, should be avoided in the throat, if possible. I think most operators will agree with me that it is not always a "painless operation" as Dr. Potter sums up.

2nd. As to the number of ignipunctures made at one sitting, I had the advantage of Dr. Knight's personal direction before he read his paper at the last meeting of the American Laryngological Association. At that time and since then, I think, he had limited the number of punctures to at most five or six at one sitting (I only write from memory, and may be mistaken,)

Since then it has been my custom to regulate the number of punctures almost entirely by the size of the tonsil and the sensitiveness of the patient to the application of the hot wire. Whenever I have a comparatively insensible organ I make enough punctures to cover the whole tonsillar surface with a slough, even sometimes burning away small projections of tissue altogether. I have used the cautery, with three or four exceptions, for the last nine months in every case of enlarged tonsil I have seen, that number being the proportion usually seen in a throat clinic, for that time averaging 1200 to 1500 new patients yearly, and many times in private practice. With possibly one or two exceptions I have never seen any serious reaction. Occasionally the patient's throat would be very sore for part of the next day, but this has seldom lasted more than two days at the most. One case, I remember, complained of a sore throat for as long as five days. Another had an intervening quinsy, which, however, did not begin until two days after the operation, and may have been simply a coincident. Usually, most reaction is observed in those with sensitive tonsils even if only slightly burned—and mostly after the first sitting—the succeeding operations being followed by little pain.

Of course, this radical procedure can only be adopted at first when the tonsils are still large, because after most of the tonsillar tissue has been destroyed a sensitive area is reached near the normal mucous membrane, where pain always follows any deep or extensive cauterization. When this stage is reached, longer intervals should be observed, as there is always more or less infiltration of the surrounding mucous membrane which will disappear of itself if left untouched.

3rd. As to its use in children. Lately I have ceased operating in patients under the age of twelve with the cautery. It is nearly always unsatisfactory. "Kindness and patience" will often lead the little ones to submit for one or two sittings, by which time you have changed the size and shape of the tonsil so that a tonsillotome can only be used with difficulty, and ignipuncture has become of exceeding difficulty owing to the want of control that even the most tractable child has over its pharynx. You now have a ragged mass of tissue between the faucial pillars full of holes and lodging places for food and secretions.

A tonsillotome, a strong assistant, and a sensible guardian of the child are all a moderately deft operator needs to settle the whole affair of enlarged tonsils in two minutes, without "general anæsthesia" and the danger of blood in the trachea of an insensible patient. I think there are no cases on record of serious—at least fatal—hæmorrhage under the age of twelve. I believe that those who see a large number of cases of enlarged tonsils each year will soon discard tonsillotomy in adults where ignipuncture is possible. In many cases the latter is almost an absolute necessity owing to the diffused condition of the tonsillar tissue, and also, rarely, to the size of the mass to be removed.

4th. As to the number of sittings. I have never met with a case in which the hypertrophied condition was not removed by at most fifteen sittings if properly carried out. Usually half the number is sufficient.

To conclude, recurrence of the hypertrophy is occasionally seen where the tonsil has not been completely removed, or at least restored to its normal proportions. When the two operations of ignipuncture and tonsillotomy are explained to the patient with the advantages and disadvantages of each, I have yet to see the patient who preferred the latter, though one after submitting to both said he preferred tonsillotomy.—Jonathan Wright, M.D., in *Med. News.*

THE *Med. Rec.* the homœopaths of New York are prescribing antipyrine in 15 grain doses.

MEDICAL NOTES.

Manning (*Wiener Med. Presse*) treats *bubo* by injection, every other day, with a small quantity of a one per cent. solution of corrosive sublimate.

An excellent preparation for *chilblains, cold sores, etc.*, is emulsion of oil of sweet almonds, rose water, glycerine and powdered tragacanth, applied on retiring at night.

A CURE FOR WRINKLES—It is said that when lanolin is well rubbed in, it passes directly into the skin and acts as a nutrient to the subjacent tissues, smoothing out the folds produced by the alteration of these structures incident to age.

Huchard, in the *Revue de Clinique*, recommends the following formula for administering *creasote in phthisis* :—

℞.—Creasot,
Iodoform.,
Benzoini pulv.,
Balsam. peru., . . . āā gr. ¾. M.
Ft. pil.
Sig.—One or two to be taken at each meal.

For *cancer of the uterus*, the *Medical Press and Circular* suggests the use of a suppository, as follows :—

℞.—Iodoform, ... gr. x.
Camphori., ... gr. iv.
Extract. belladonnæ, . . gr. j.
Ol. theobromæ, q. s. . . . . M.
Apply every night in the vagina a suppository of this strength.

Bardet, in the *Journal de Méd.*, Dec. 18th, 1886, recommends as a *laxative and gastric tonic* combined, the following :—

℞.—Extract. carscaræ sagradæ
fluid., , ... f ʒ v.
Tinct. nucis vomicæ, . . ℥xxx.
Syrup., ... f ʒ iij, ℥xlv.
Aquæ destillat., . . . f ʒ xxviij, ℥xlv
Sig.—Dose, a teaspoonful. M.

For *Dyspnœa*, Dr. Ellis (*Therapeutic Gazette*, Jan. 16th, 1888) recommends quebracho in the following formula :—

℞.—Syrup. pruni virgin.,
Syrup. tolu,
Extract. quebracho fluid., āā f ℥j
Acid. hydrocyanic. dilut., gtt. xxiv
Morphiæ sulph., ... gr. iss. M.
SIG.—A desertspoonful, to be repeated *pro re natâ*.

Dr. Thomas Addis Emmet urges that a *displacement of the uterus* should never be corrected simply on its own account, nor until the cause has been clearly ascertained ; nor should a pessary be employed without a clear understanding as to what is to be accomplished by its use, beyond merely changing the degree of version.

Gastritis or *Gastric Catarrh* may frequently be relieved, according to the *Pharmaceutical Record*, by giving the patient the following three times a day, before meals :—

℞.—Bismuth. subnitrat., . . gr. xxx.
Liquor. potassi arsenitis, . ℥v.
Acaciæ pulv., ... gr. xxx.
Extract, hydrastis canadensis fluid, ... ℥xv. M.

Or oxide of silver with extract of belladonna, in pills ; or oxide of zinc, or nux vomica, with other bitters. The milk cure is effective. For acute gastritis, etc., hydrocyanic acid and morphia.—*Coll. and Clin. Rec.*

Credé teaches that all interference with the genitals during labor and the days succeeding it are unnecessary unless there be some special indication for such interference. He does not make a vaginal examination at all unless some abnormality presents itself, relying entirely upon external pulpation and manipulation of his diagnosis.

SULPHUROUS ACID IN THE TREATMENT OF PULMONARY CONSUMPTION.

The French seem determined to get sulphur in some form into the body to cure pulmonary consumption. Dr. Darien (*Bulletin Général de Thérapeutique*, t. cxi., 14) gives the history of the treatment with sulphurous acid. It had been used as far back as the second century. Dr. Solland came upon this treatment accidentally in the following way : It seemed that a sergeant having phthisis had been through different kinds of treatment, and was finally sent to the East without improvement. Nothing could stay the march of the malady, and wearied of continued hospital treatment, he demanded his release and left. Wishing some light employment, he was given the work of opening the doors of the rooms of the barracks where sulphur was burned for disinfecting purposes. To do this he was obliged to pass nine hours of his time each day in a sulphurous atmosphere. In sixty-five days he had completely recovered. A case of chronic bronchitis also recovered after inhaling for fifteen days. M. Auriol was led to its use in phthisis from these facts. He found in a factory at Bellegarde, in a room where sulphur was used, a number of consumptive women who refused to work elsewhere, because they always felt better in this room.

He had a large and closed room fitted up ; in one corner he had a small brazier in which was sulphur slightly moistened with alcohol, and in the

other corner the patient was placed, standing erect and taking deep respirations. Soon the effects of the sulphur were felt, and then the patient continued inhaling until chemically prepared paper in the room showed the lead reaction. At times, when the fumes of the sulphur were too strong, the windows were opened for a short time. To make the inhalations less irritating, a little benzoin or powdered opium may be added to the sulphur. In a little while the patient becomes accustomed to the fumes. These inhalations were practised in the morning and evening, on an empty stomach, and were followed up by exercise in the open air. Medicated inhalations were also used. Sixty-six tuberculous patients were treated in this way, in all of which an examination of the sputa showed the presence of the tubercle bacilli. Thirty of these, who were very ill, had their disease arrested so that the sweats and fever disappeared, the appetite and weight increased, and the bacilli disappeared. The lungs cleared up, and the caseous deposits became fibrous and innocuous. This state of things continued for a year, and no bad symptoms returning, they were considered cured. Many of the others were so far advanced in the disease, and took the treatment so irregularly, that they did not show the same improvement.

M. Dujardin-Beaumetz feeling convinced that there is something in this method of treatment, has fitted up a room in the manner above described, and makes the patients inhale the sulphurous fumes, letting in air from time to time to make it more bearable. In using the fumigation, a lamp or sulphurous candle is employed. The lamp increases the amount of CO_2 in the room, but M. Dujardin-Beaumetz thinks this causes the gas to be taken up more quickly. In the small number of patients treated, only seven, he has had excellent results, and he expects to make another report when experience justifies it. His conclusions are that it is not so good as the iodide of potassium in syphilis, but he thinks it is a cure for many cases. It is not only effective in stopping the trouble, but it acts well in ameliorating the bad symptoms when a cure is not possible. The French are so intensely enthusiastic over everything that seems to promise good results, that they are apt to rush into print before their theories are fully justified by facts. This treatment can, of course, only be carried on in hospitals, and it is to be hoped that equally good reports may be heard later, and that it may not share the fate of the rectal injection treatment.—*Med. Rec.*

SUBSTITUTION AND ADULTERATION.

In regard to substitution and adulteration, it must be admitted that in numerous cases the charge is a true one, and the evil is of growing dimensions. With the reduction in the margin of profits caused by the fierce business competition of the present day, comes the temptation to adulterate or substitute inferior quality. No condemnation can be too severe for the man who thus trifles with human life; and if he cannot carry on his business honestly he had better abandon it and seek some other occupation.

Again, the outcry is made that the physician is to apt to prescribe various remedies more or less proprietary in character, put up by large manufacturing concerns and introduced by skilled advertising, and thus require the druggist to carry an endless variety of such articles in stock, many of which are seldom or only once called for, and thus remain a dead loss to the proprietor. But is the physician much to blame? True, he is sometimes imposed upon by the bland and sauve canvasser, and the glowing printed endorsement of his professional brethren in favor of some new remedy—*vide* stenocarpine. But when he sees remedies in convenient and compact shape, of appearance much more elegant than those he can procure from the corner druggist, and of at least equal efficacy, is it to be wondered that he should prefer X., Y. or Z.'s manufactures to the oftentime imperfectly prepared remedies of the pharmacopœia?

And why should the druggist complain? *As long as he keeps open store he must submit to the unalterable law of traffic, namely, the needs of the customer are to be supplied.* He will buy Lubin's extracts for Miss Jones, and Alfred Wright's for Miss Brown. Why should he not keep Bromidia for Dr. A. and Papine for Dr. B? Although he makes a great out-cry about being obliged to carry so much stock, he in reality does it to a very limited extent, and, outside of a few standard preparations, shifts the burden on his wholesale druggist and lets him carry the supply for him. Nearly all the large manufacturers have established depots for their goods in the principal cities, and the druggist very rarely lays in a stock outside of his actual present need, unless he is sure of a steady sale. And let him remember also that if he don't keep what is called for, someone else will, and his customers will be sure to go where their needs receive best attention.

And here let a word be said for that much abused class, the modern manufacturers of pharmaceutical specialties. The medical and pharmaceutical profession owe to them a great debt. It is their industry and their capital which have developed the perfection of the coated-pill, and the compressed tablet, the pancreatic ferment and the scale pepsin, the smooth and palatable cod-liver oil emulsion, and the perfected extracts of malt. To their energy do we owe the modern methods of treating disease with pre-digested and concen-

trated foods—a plan which has been the means of prolonging many valuable lives. They have spread the fame of American pharmacy over the entire globe, and established its supremacy against all competitors; therefore let them receive at least just recognition and honor for their labors.—*Phila. Med. Times.*

NOTE ON NITRO-GLYCERINE IN EPILEPSY.—I have used it in nineteen cases. It may be administered in solution, one per cent., or in pilules of 1-100 of a grain; and I find the latter, as prepared by reliable chemists, very satisfactory. I begin with two, three times a day. As individuals appear to differ in their susceptibility to this drug, each case must be tested before the proper dosage can be determined. I doubt if any good follows unless the physiological effect is obtained. Sensations of flushing of the face, fullness of the head, and a pleasant glow over the body, indicate that the proper dose has been reached. In some patients these symptoms are produced by one or two pilules, but in others not until six or eight have been taken. Headache and dizziness were the only unpleasant symptoms complained of, and on this account, in two instances, the medicine had to be stopped. I have notes of nineteen cases in which the nitro glycerine was tried for periods ranging from six weeks to six months. In thirteen of these cases there were severe epileptic seizures, six were instances of *petit mal* with occasional convulsions. Briefly stated, in nine cases there was improvement, as shown in the reduction of the frequency of the attacks. Of these, six were cases of major epilepsy; and three, instances of *petit mal.* The benefit was usually manifested within a week or ten days. Thus case 16, a man aged 27, had had fits for ten years, and when seen, April 5th, had as many as two or three a day. He had taken potassium bromide largely, and at one time with great benefit. Antifebrin was given in gr. viii, two or three times a day, but seemed to be without any influence. On June 1st, nitro-glycerine was given, ℥v of the one per cent. solution, three times a day. Within a week the attacks were greatly lessened, and in the second week after beginning he had only two attacks. He continued to take it all through the summer, getting up to ℥ viii doses, t. i. d. He does not think that anything he has ever taken reduced the fits so much. On November 11th, he stated that he had stopped it for a month; the attacks have recurred less frequently, and he had been able to be at work.

In some of the cases in which the betterment was most striking at first, the remedy seemed to lose its influence, and after a month or two had to be abandoned. I cannot say that in any one of the nine cases the improvement has been more than temporary. In two of the cases of *petit mal* the attacks were greatly reduced, and one patient remained free for two months, but I learn by letter that the attacks have returned. Altogether, my experience has not been very encouraging. We may say that, in a limited number of cases, when the bromides have failed or are beginning to lose efficacy, nitro-glycerine may be used with advantage.

ELECTRICAL TREATMENT OF UTERINE FIBROIDS AFTER APOSTOLI.—An Edinburgh correspondent writes that Keith accepts the teachings of Apostoli. "Keith and son in less than five months have applied electricity in strong, and accurately measured doses more than 1,200 times upon more than 100 patients, the majority being cases of uterine fibroids. The labor of these operations was very great, but it opens out a study which increases daily in interest. Several cases came to them for hysterectomy in uterine fibroids. After treatment by Apostoli's method these women have gone home without operation, with menstruation almost normal and improving after their return. In every case the tumor was reduced in size, the pain gone and they enjoyed the freedom to walk about and life itself, in a way to which they had long been strangers. In one case only has there been a return of hæmorrhage. The tumor had gone down two-thirds, and unwilling to detain her longer in town she was permitted to go home too soon. Should these improvements be permanent, and he has every assurance from experience of Apostoli that they will be, the field of hysterectomy is reduced to the narrowest possible limits. He would consider himself guilty of a criminal act, were he to advise his patient to run the risk of her life before giving this treatment a fair trial. Dr. Playfair has been experimenting industriously on this subject since his return from the summer holidays. He is not quite decided concerning it in all respects, but does not hesitate to declare it a therapeutic measure of much power and considerable promise. I doubt, however, if it will fulfil Apostoli's enthusiastic estimates. He has found it very valuable in membranous dysmenorrhœa and chronic endometritis, with glairy glutinous discharges. One or two of his cases have been quite remarkable and have yielded to two or three applications. Playfair has had one remarkable case of rapid absorption of a large fibro-myoma under negative electro puncture. The case had been under his observation for years, by the application of currents of 100, 150 and 200 milliametres, it has been reduced from the size of a large human head to that of a small orange. There was, however, considerable pyemic and constitutional disturbance which at one time caused considerable anxiety. If not carried out with care and discrimination, this electrical treatment may cause serious accidents."—*Med. Times.*

UNHEALTHY ROYAL FAMILIES.—"It is recalled now that Bismarck, who was already the chief man in Prussia, in 1858, strenuously opposed the marriage of the Crown Prince with the English Princess, saying that he was against any 'blood alliance with those scrofulous Guelphs.' The existing situation is a strange retributive comment on that utterance. Scrofula, or that worse allied disease with which so many royal strains of blood are contaminated, lays a heavy hand on the Hohenzollerns at San Remo and Berlin alike; but the taint has not come from England. A fact which has been privately known here for some months may now properly be mentioned. The present aged Dowager Empress of Germany, mother of the Emperor, has been a victim to hereditary scrofula, or a cognate malady, for many years. She got it from her mother, Marie Paulowna, who was a daughter of the crazy Czar Paul, one of the most thoroughly diseased men of his generation. All of Paul's daughters transmitted the taint to their descendants. One of them, Anne Paulowna, was mother of the present King of Holland, and the recent death of both his sons and the extinction of his male line are attributed to this. In the male Romanoff line the same malady caused the death of the Czarowitz, who was the elder brother of the present Czar, and now renders it very doubtful if the present youthful Czarowitz will ever reach manhood. In the Hohenzollern case, not only is the Emperor suffering from this hereditary taint, but his son William, who in a few weeks or months will be Emperor, is hereditarily deaf, and was born with a mere shapeless ball of flesh where the right hand ought to be. The Emperor's only sister is the Grand Duchess of Baden, and of her two sons one died last month, and the other is ill at Cannes and not expected to recover, both from scrofulous developments. The malady can, in truth, be traced all through the Almanack de Gotha among descendants of the Czar Paul. The disease only showed itself in the Empress Augusta when she had advanced in life, since when she has worn high dresses, and frequently was not visible to the public for months at a time." It may be recalled that one of Queen Victoria's sons had epileptic attacks and died of purpura hæmorrhagica.—*N. Y. Times.*

COLCHIUM IN THE URIC ACID DIATHESIS.—In an address on the *Therapeutics of the Uric Acid Diathesis*, Dr. I. Burney Yeo says that Dr. Bartholow's description of the effects and uses of colchicum is so complete that he has little to add to it.

"The prejudice against colchicum has induced Ebstein to make the extraordinary statement that it is preferable to relieve the pain of the gouty paroxysm by hypodermic injections of morphine. He says they act "quicker, more easily, and with less danger." I join issue with him utterly. The internal use of opiates in gout I consider, except under exceptional circumstances, indefensible. In a disease of defective elimination, you would be giving a drug which depresses in a remarkable manner the functions of all the excretory organs but the skin. A very shall dose of morphine will, especially in the gouty constitution produce clay-colored alvine evacuations, sometimes for days.

Colchicum then, I maintain, is one of the most valuable remedies, when judiciously given, for most of the morbid manifestations of this "uric acid diathesis," and so far from being a dangerous vascular depressant, I have shown, in my hospital practice during the session just passed, that in a case of chronic gout with subacute exacerbations, moderate doses of colchicum restored regularity and strength to an irregular and feeble pulse. I trust, then, that the absurd prejudice against this most valuable remedy which has been excited in the minds of the public will be removed, for I find many gouty persons who, much to their own disadvantage, positively refuse to take colchicum, because they have been told it is "such a dangerous drug."—*Br. Med. Jour.*

TOBACCO HEART.—Of the cases of heart disease recently treated in the writer's room, at the dispensary, nine were diagnosticated as functional disorders due to the excessive use of tobacco. All the nine cases occurred in young men between the ages of seventeen and twenty-seven years.

The tobacco was used in all the cases in the form of chewing, the amount ranging from a half a pound to one pound a week. The habit of chewing was begun early in life in all the cases; in one case at the age of five years; the oldest age noted at which chewing was begun was twelve years; the average was seven years.

The symptoms complained of were palpitation, pain and dyspnœa. Palpitation was present in all the nine cases, and was greatest upon making any exertion. Irregular action of the heart at the time of the examination was noted in only one case. Pain was complained of in seven cases, and always had its seat immediately over the heart or under the sternum. Dyspnœa was complained of in only three cases, and was not excessive. Hypertrophy of the heart as evidenced by increased area of cardiac dulness was noted in two instances. In both cases the dulness extended to the right edge of the sternum. In the two cases in which hypertrophy had occurred, care was taken to exclude any other cause than tobacco No murmurs were noted in any of the nine cases.

Treatment consisted in prescribing total abstinence from the use of tobacco, and in some cases, where this alone did not suffice, the moderate use of bromide of potassium. Notwithstanding the great length of time during which tobacco had been used, and the early age at which the use had

been commenced, this simple common-sense treatment usually sufficed to give entire relief after three or four weeks. In only one case was digitalis used.

BENZOATE OF SODIUM IN ACUTE FOLLICULAR TONSILLITIS.—L. C. Boisliniere, Jr., in a communication to the *St. Louis Cour. of Med.*, says that in upwards of one hundred cases of acute follicular tonsillitis, the following formula has been used :

Sodii benzoat . . . . . ʒi-iv
Glycerini,
Elix. calisayæ . . . . . āā f ʒj

M. Sig.—One teaspoonful every one or two hours.

In the analysis of the last seventy-five cases, he finds that : 1. By the use of benzoate of sodium the disease is cured in from twelve to thirty-six hours, a great gain in time, as the average duration of the disease has been heretofore from two to five days. The average duration for the seventy, five cases was twenty hours. In private practice when the cases could be watched more carefully, the white cheesy points have been frequently seen to disappear in from eight to ten hours. 2. The benzoate of sodium undoubtedly controls the febrile elements in the disease. 3. It may be given with impunity, even to children ; he has never been able to discover any bad or even disagreeable effects from its action. 4. It is a valuable addition to the remedies used in throat affections, especially in an acute inflammatory condition of the tonsils, when applications only aggravate, and gargles increase the trouble.—*Med. and Surg. Rep.*

A STUDY ON THE ETIOLOGY OF PHTHISIS.—R. W. Philip, of Edinburgh, concludes from a series of experiments upon the sputum of phthisis that (1) in view of the work of Koch, it is impossible to avoid admitting that a causal relationship exists between the tubercle bacillus and the phthisical process. 2. The mere predication of this relationship is not sufficient in explanation of the clinical facts and the generally fatal termination of such cases. 3. The usualy received explanations of the *modus moriendi* in phthisis are insufficieut. 4. It appears probable that the lethal influence of the bacillus is due to the production thereby of certain poisonous products. 5. Clinical and experimental evidence appears to indicate that the morbid secretions from the respiratory surfaces afford a good medium for the growth of the tubercle bacillus, and, presumably, for the elaborating of such products. 6. Such a product is separable from the carefully selected and prepared sputum. 7. This product is possessed of well-marked physiological properties, being eminently toxic to frogs, mice, and other animals. 8. The toxic properties of the product are, speaking generally depressant. 9. More particulary they include a marked depressant influence on the heart. 10. This depressant influence seems to be exerted through the medium of the cardio-inhibitory mechanism. 11. The toxic action of the product is more or less completly opposed by atropine. 12. The amount of the product which may be seperated appears to bear a distinct relation to the abundance of the bacillar elements present. 13. Absorption of the poisonous product most probably occurs by way of the lymphatic circulation.—*Brit. Med. Jour.*

PROFESSIONAL VISITS.—The number of professional visits which a physician can make in a day has of late been the subject of some discussion. A New England doctor is credited with having made thirty-five calls in twenty-four hours, besides attending three confinements. The West produces something far ahead of this in the person of a Sacramento doctor who claims to have made one hundred visits a day, besides attending four confinements ! The *Medical Age* promises something from Detroit that will even surpass the hyperkinesis of Sacremento, and we await the anecdote with eagerness. It appears to us that the conscientious physician can hardly make more than twenty or thirty calls a day and do his patients justice. Naturally much depends upon the distance which one is obliged to travel. But allowing fifteen minutes for travelling and fifteen more for the briefest average of visits, it will be seen that a doctor must work fifteen hours a day to make even thirty visits. And fifteen hours' work in these days turns even conservative knights of labor into raving anarchists.

It has been related that certain physicians in this city have habitually made forty to sixty visits daily ; but inquiry has shown that the story is false, or the physicians have been homœopaths.

We trust there will be no ambition to break the record in number of daily visits. It is quality, not quantity, that is needed.—*Med. Rec.*

VACCINATION AGAINST TYPHOID FEVER.—Chantemesse and Vidal communicated to the Societé de Biologie, at the meeting held March 3rd, some interesting observations on vaccination against typhoid fever. They claim that in mice inoculated with cultures of typhoid bacilli a disease is produced, with lesions the same as in human typhoid fever. Mice inoculated with bouillon in which colonies have lived, but which no longer contain the bacilli, resist subsequent inoculation with the most intense typhoid virus. From the large number of observations, this would seem to be well established. On the other hand, mice inoculated with bouillon in which indifferent microbes had grown, such as the bacillus subtilis, did not resist, and were not in the slightest degree protected against the typhoid virus. The saturation of the organism with the soluble chemical

substance produced by the typhoid bacillus granted immunity from the effects of the fresh virus. The observations are of value as illustrating the influence of organic substances produced by the growth of bacilli, and they indicate, too, the direction in which we may hope for practical results from bacteriological work.—*Med. News.*

BARNES: THE CAUSES, INTERNAL AND EXTERNAL, OF PUERPERAL FEVER.—The simplest forms of puerperal fever arise from deficient gland excretion, and are due to the accumulation of waste material in the blood. They are purely autogenetic; endoseptic.

In another set, the noxious matter is not strictly formed in the body, but is still manufactured by the patient (from decomposition of animal tissue in any part of the parturient canal). A most powerful predisposing cause is hæmorrhage, as it increases enormously the activity of absorption. With the hæmorrhage may be associated a relaxed state of the uterus. These forms, which include some of the cases described as septicæmia, sapremia, and putrid fever, may be called autoseptic.

In a third class, exoseptic, the empoisonment comes from foreign sources, brought by the physician, nurse, linen, or other external media, and includes the cadaveric poisons and the poisons of the so-called zymotics. The specific zymotic poison received and developed in the nursery ground of the puerperal blood is modified, and undergoes a form of metabolism.

The relation of puerperal fever to zymotic fevers in general is graphically demonstrated by means of two sets of tables: the first showing the mean curves of the general temperature and rainfall, the deaths from scarlatina, erysipelas, fevers in general, and puerperal fever during the thirty years from 1845 to 1874, and the second the same for the ten years following (1875-'84). The comparison of these curves is particularly interesting and instructive, as the separate histories of ten years can be studied in parallel with the history of the preceding thirty years. The similarity of the curves is most remarkable, and affords strong evidence of the uniform prevalence of like causes. The tables also illustrate a fact that has been widely recognized, that zymotics are most fatal in the winter. The author speaks particularly of this one fact in connection with puerperal fever, and attributes it in great measure to the prevalence of faulty methods of ventilation, which draw damp, foul air to the sick-room from basement, cellar, or closet; all places where sewage contamination is likely.

Prophylaxis consists in preventing both poisoning from without and the absorption of peccant material generated in the patient's genital tract. The main factor in this latter defense is complete uterine contraction, which should be secured after every labor by the use of a firm binder and the administration of ecbolics, as quinine, cinnamon, nux vomica, ergot, and digitalis. The uterine douche is valuable, but should not be used unless there are indications that septic absorption is going on in the uterus.—*Brit. Med. Jour.*

HULKE ON A CASE OF LONG-CONTINUED PRIAPISM AFTER COITUS.—On Dec. 27, 1885, an artisan, aged 34, was admitted with priapism. His penis was stiffly erect, very turgid, hard, tender and painful. The greatest tenderness corresponded to the attached part of the left crus. The patient said that one week previously, after drinking heavily of cider, he had intercourse with his wife on going to bed at night. Neither he nor his wife was aware of the occurrence of any thing unusual in the sexual act. He afterwards fell asleep. On waking next morning his penis was still erect, and it was also very painful. This condition persisting, and the painfulness of the organ increasing, he was at length constrained to come to the hospital for relief. A mixture containing sulphate of magnesia and tartar emetic was given to the man at short intervals until he was nauseated and purged, and after this he was directed to take bromide of potassium in doses of fifteen grains, three times daily. The penis was smeared with extract of belladonna and unguentum hydrargyri.

On January 3, 1888, a week later, no obvious alteration in the state of the organ having occurred, the above treatment was abandoned and the continuous application of ice substituted for it. This was followed by a marked, but very slowly progressive, decrease of the turgescence. On Jan. 17th the penis had become soft, pendulous, and painless, so that he was then able to bear the pressure of his dress and to leave his bed. Next day he returned to his home. At that date the only remaining objective trace of the former condition was a small hard knot near the posterior extremity of the attached part of the left corpus cavernosum. Abstention from coitus during several weeks was strictly enjoined. He was next seen on February 19th, when he reported that he had obeyed the injunction till two nights previously, when he attempted coitus, but failed through incompleteness of erection. The further history is unknown.—*Lancet.*

CASE OF AORTIC ANEURISM.—Under the care of Dr. Dyson, Physician to the Sheffield General Infirmary. Reported by Mr. G. W. Crookes. The patient, thirty-four years old, a railway-spring worker—a very hard and laborious occupation. About two years ago he complained of severe pain in his left shoulder, dull, aching and much intensified by movement. Subsequently he had severe pain in the left side of the neck and down the arm, which at the time had the character of

cervico-brachial neuralgia. Very little improvement was effected while in the Sheffield Infirmary, and he was sent to the sea-side. He returned thence very little better, and on re-admission to the Infirmary it was found that his left pulse was considerably less in volume than the right, and was a little later in the time of its beat. The pain in the neck and arm continued, and in addition he had severe pains and tenderness just over and just below the left sterno-clavicular joint. On careful examination a tumor was detected in this situation, which had most of the physical signs of aneurism. There was a patch of dulness about the size of the palm of the hand, expansive pulsation over the area of dulness, a systolic bruit, and in the centre of the dull patch, a swelling the size of a marble, which pulsated visibly and palpably, and threatened shortly to invade the intercostals and the skin. There was no thrill, no alteration in the pupils, no difference in the expansion of the two sides of the chest, no paroxysmal dyspnœa, no stridulous breathing, no alteration of voice, and no dysphagia. Heart apparently healthy. The treatment consisted in an ordinary liberal diet, scrupulous rest in bed, and the administration of iodide of potassium in increasing doses. He is now taking fifteen grains three times daily with no apparent inconvenience. His condition is greatly improved. The pain in the neck is much diminished, pain and tenderness over tumor nearly gone, pulsation is much less in quantity and distribution, and feels like the jog of a solidified body; the tumor is much less distinct. Patient has gained flesh considerably. There was no history of syphilis, the probable cause of the aneurism being the strain produced by the man's laborious work. His present condition would lead one to suppose that a cure is being effected.—*Med. Press and Cir.*

Laceration of the Cervix Uteri and its Relation to Disease.—In the *Archiv fiir Gynakologie* is a paper by Nœggerath, read before the Society of German Naturalists and Physicians in September, 1887. In this the writer opposes the operation of repairing the cervix. He says: Out of 100 cases of uterine disease which he had observed, in 50 the cervix had never been lacerated. Displacements of the uterus were equal in both—those lacerated and those not lacerated cases. Twice as many women without lacerated cervixes were sterile after the birth of their first born; and out of 20 cases of abortion, 12 occurred in women without lacerations. Erosions and eversions were more frequent in the nullipara. Ectropion was affirmed to be due to a swelling of the lips and might occur in an intact cervix. Eversion in cases of laceration was produced by introducing Sims' speculum, which put the anterior and posterior vaginal walls on a stretch, and thus caused a rolling out of the lips.

Nœggerath claims that women conceive more readily when the cervix is lacerated than when intact, and they abort less frequently; that displacements of the uterus are not produced by lacerations of the cervix; that hypertrophy of the uterus is an accompaniment, not a result of laceration; that laceration of the cervix has no influence on producing uterine disease. The erosions and ulcerations occur with equal frequency in the torn and in the intact cervix; that ectropion is not the immediate result of laceration, and that restoration of the original shape of the *portio vaginalis* can have no influence upon the existing condition of the uterus.—*Am. Med. Jour.*

Papoma.—There has lately been introduced to the notice of the profession in Canada, by J. Wyeth & Bro., of Philadelphia, through their agents in Montreal, Davis & Lawrence Conpany, a farinaceous food for infants and children, which deserves more than passing notice. It has been advertised in the *Record* before pronouncing our opinion. This we have done for the past four months, during which time Papoma has been the almost exclusive diet of artificially fed children under our charge. The results have been satisfactory in a high degree. The food was in every instance readily taken, digestion seemed to be carried on perfectly, and the bowels acted with marked regularity. Its power is great, for growth was steady. In several instances, where development was apparently at a stand-still, change of food to Papoma was followed in a few days by a decided improvement. We have, therefore, no hesitation in recommending Papoma to our readers as a very valuable addition to the list of infantile foods.—*Canada Med. Rec.*

Base-Ball Pitcher's Arm.—A. H. P. Leuf has contributed an interesting paper on this subject, in which he clearly sets forth the pathology of this affection. It seems that in its severer and more chronic forms we have a painful ostitis and periostitis, combined with a strain of the ligaments and muscles. In order to give the ball different curves individual sets of muscles are called into play. For instance, to give the in-curve, the pectoralis-major, the biceps, brachialis anticus, and flexors of the forearm; the out-curve is accomplished by the pectoralis-major, coracobrachialis, infraspinatus, teres-minor, and the ulner muscles; the down-curve strains especially the pectoralis-major, trapezious, deltoid, and serratus magnus; the up-curve is caused by the pectoralis-major, biceps and supinator previs. All of these movements are given in a quick, jerky manner, bringing a great strain on the individual sets of muscles, besides tending to separate the bones at the outer part of the elbow-joint, this being prevented by the biceps, supinator longus, and extensor carpi radialis longior.

The symptoms produced by this affection are soreness, tenderness, myalgia, and severe continuous sickening pains, due to involvement of the bone. It is, of course, only in the long standing cases that there is an involvement of the bone.

The treatment should be prophylactic, and the pitcher should each day practise in the sun. Liniments, massage and rubbing are all useless. Heat is the best application, with elevation of the limbs. This will often relieve the pain in these cases. The main point in treatment is regular exercise, and not rest.—*Boston Med. & Surg. Jour.*

HYDROCEPHALUS.—Dr. James F. Goodhart, of London, in a paper on hydrocephalus in the *Archives of Pediatrics*, January, 1888, gives the causes of this affection as: 1. Cerebellar tumors (including tentorium and pons). 2. Chronic inflammation and adhesions at the base of the brain between the medulla and the cerebellum. 3. Congenital malformations. These, he says, no doubt act in one of two ways; there may be pressure upon the veins of Galen and the straight sinus, or there may be closure of the communication between the interior of the ventricles and the rest of the subarachnoid space. It might be thought that the pressure upon the veins, and the obstacle thus produced to the return of the blood from the choroid plexuses, would be a sufficient and readier explanation of all cases; but it seems clear from the occasional occurrence of congenital malformations, or of post-congenital adhesion and blocking of the aqueduct of Sylvius, that the mere closure of the ventricles is sufficient for the production of the affection. The congenital malformation is rare. Dr. Taylor has had one such case, the Sylvian aqueduct being obliterated, and it does not appear at first sight quite clear that the mere closure of the communication between the ventricles and the extra-ventricular subarachnoid space should so alter the conditions of the blood-pressure that its equilibrium is destroyed and hydrocephalus results. But it can be shown, he thinks, that this result is probable. It seems to him true, that by the conversion of the ventricles into a closed cyst, the ball-tap action of the cerebro-spinal fluid is in great measure rendered inoperative.

The points of his paper are these: that many every-day occurrences of practice are called hydrocephalus which are not so, and for purposes of discussion this may be taken to include, for time is wanting for specific allusion to the subject, that hydrocephalus and rickets are not often associated, as is very commonly asserted; that hydrocephalus is an infrequent occurrence, due to one of two or three conditions of advanced and irremediable structural change. As regards the treatment, he is not very hopeful, but thinks the only treatments possible, are the old-fashioned ones of firm strapping, the rubbing in of mercurials in such cases as may seem to be of inflammatory origin, and tapping. Believing, as he does, that the consolidation of the bones is a bar to the occurrence of hydrocephalus, he does not believe that systematic support, recommended by Gölis, Trousseau, West and others, has often been carried out with sufficient patience, and is inclined to believe that in suitable cases, paracentesis is deserving of a wider range of practice than it has received. None of these things can, in the nature of the case, show a large percentage of successes. "But," he concludes, "this is not the only occasion on which it happens that 'if by *any* means I can save *some*' must be our guiding principle and aim."—*Compend. Med. Science.*

BEUTIFAUL CHEMICAL PREPARATION.—A snow white mass of Caffeine, the active principle of coffee, 200 pounds and of great value, is now on exhibition in the window of William R. Warner & Co., 1228 Market Street. This beautiful crystalization represents ten tons of coffee, and is used as an ingredient in the preparation of Bromo Soda prescribed for the cure of headaches, migraine, nervousness, sea sickness, &c.—*Philadelphia Inquirer.*

THE LOVES OF THE BACILLI, is the title of the following verses, by H. S. C., quoted by the *Lancet* from the *St. James Gazette.*

Quoth Bacillus to Bacilla
(Surely everything has sex):
"It is quite enough to fill a
Soul with pride, to see the necks
Of these mighty men of Science
O'er the microscope bent low,
While beneath them in defiance
Spins the merry Vibrio.

"Proud am I to think, my Comma,
While the world rolls on its way,
Every fell disease springs from a
Fairy filament, they say.
Autocrats that tower Titanic
Have been known to bow to me;
Mighty potentates in panic
Disinfect at thought of thee.

"Rash would he be who should presage
That no germs behind us are;
We are part of that great message
Which outrings 'twixt earth and star.
What by thousands or by tens is
Multiplied, in vain they show;
Something lies beyond his lenses
Mortal man may never know!

"We are greater, my Bacilla,
Than all monarchs; for meseems
We need but exist to fill a
Strong man's brain with fever-dreams.
Such the thought my passion kindles,
O my microscopic bride:
Kiss me! although twenty Tyndalls
Have their eyes upon the slide!"

—*Weekly Med. Review.*

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THE LESLIE CASE.

Practitioners will have noticed with pleasure the reports in the daily press, showing that the plaintiffs in the celebrated case of Routh v. Leslie, lost their case entirely.

Dr. Leslie, of Hamilton, was called in May last to administer chloroform to Mr. Routh, who was to undergo an operation for hæmorrhoids. The man died on the table, and after a considerable interval, his widow brought an action for damages against Dr. Leslie. At the first trial the jury disagreed, but at the last trial held last March, they brought in a verdict favorable to Dr. Leslie on all the counts.

The evidence all went to show that Dr. Leslie, who is an old practitioner, had exercised the most scrupulous care in the administration of the anæsthetic; more care, we venture to say, than is usually thought necessary. Amyl nitrite was provided, as also forceps for dragging forward the tongue, and every conceivable precaution was taken to prevent untoward result, and to meet any possible emergency which might arise; the drug was given slowly and with the skill and care which years of experience had taught the administrator, and yet the man died while under the influence of the anæsthetic.

Law firms ever since the days of the celebrated case of Bardel v. Pickwick, have been found willing to undertake the defence of widows on spec. It is rather an anomalous thing, however, that counsel for the plaintiff in the case should have been so closely connected with the solicitor for the Ontario Medical Council, and should have used all his genius to get damages against a reputable practitioner, in a case that, even the evidence of the plaintiff's witnesses, showed quite clearly was a manufactured one. How it may appear to the medical mind at large of course we cannot undertake to say, but it seems to us that better taste would have been shown by the learned counsel from Toronto, in this case, had he passed the business over to some of his professional friends.

It is one of the anomalies of the nineteenth century that a jury, that "palladium of the people's liberties," composed of twelve men, honest and true, but totally incapable of forming a correct estimate of purely scientific and technical questions, such, for instance, as the action of chloroform upon the nerve centres, should have in their hands the assessment of damages in such technical and scientific cases.

It was a matter of street report that one of the jurors, a worthy farmer, whose knowledge of the functions of the medulla is no doubt limited, was heard to remark that he thought Dr. Leslie had exercised due care, etc., but that "Mrs. Routh was a widow" and should have some damages, because if it had not been for the doctors her husband might still have been living, and, besides, "it would learn the other doctors a lesson." To place in the hands of such men the power to mar a professional gentleman's reputation, and rob him of his property, is, we submit, one of the crying evils of the present day.

It will be remembered that a scheme was suggested by Dr. Henderson, of Kingston, at the last meeting of the Ontario Medical Association, for the formation of a Mutual Protection Fund, to enable medical men to defend themselves against unjust action for malpraxis; we hope to hear more of the elaboration of the scheme at the next meeting of the Association in June of this year. The idea is a good one and deserving of all support. Many a young man in Dr. Leslie's case might have been ruined, by not having the necessary means to employ counsel and carry on the defence in a proper manner.

It will not be out of place to refer to the absurdly low fees charged by some members of the

profession for giving an anæsthetic. It is stated that *two dollars* is a common fee for giving chloroform for the extraction of teeth. Every time chloroform is given a slight risk is incurred of unpleasant circumstances arising, which may seriously damage the administrator, not only in reputation but in pocket, and yet men appear to be willing to incur that risk habitually for *two dollars*, chloroform and professional skill thrown in. This is not as it should be, but the race is keen, and struggling young physicians, especially in cities, are prepared to take some risk for two dollars. No excuse, however, can be found for old and wealthy members of the profession who constantly cheapen their work.

We congratulate Dr. Leslie on his being able to completely refute the charges of carelessness brought against him, and in this we are sure we but voice the sentiment of the profession at large. His totally undeserved troubles should point a moral for all of us, and teach us to give anæsthetics always as though a suit for malpractice was sure to follow.

METHOD OF EXECUTION OF CRIMINALS.

The State Commission appointed by the Legislature of New York about a year ago, to investigate and make a report upon the most humane and practical method of carrying into effect the sentence of death in capital cases has lately completed its work. The president of the Commission was Mr. Gerry, President of the Society for the Prevention of Cruelty to Children, than whom, perhaps, no abler man could have been chosen for the office. The work of the Commission seems to have been thoroughly performed, this report constituting a pamphlet of about 100 pages, and showing that in civilized countries there exist only five different forms of execution, viz.: the sword, the guillotiné, the gallows, the musket and the axe, in the order of frequency as here placed.

Regarding the deterrent effect of severity in the operation of the law for capital offences, there seems to be a pretty general agreement of opinion that it is almost *nil*, and therefore, to obviate the objections raised by sensitive and humane persons against the methods as in vogue, as also against all capital punishment, the Commission is of opinion that the death sentence should be carried out in the most painless manner possible. The American method of hanging is characterized as cruel, uncertain, liable to miscarriage from mechanical bungling, as also leading frequently to distressing and harrowing scenes from unskilfulness on the part of the executioner. Resuscitation is also possible, and the public sentiment is also strongly against the hanging of women. All the other methods enumerated are open to similar serious objections, and the Commission believes that if instantaneous and painless death could be assured, none of the old stock objections to capital punishment, on the ground of cruelty, could be urged with any force whatever.

The treatment recommended by the Commission is electricity. The report says: "Death, as a result, is instantaneous upon its application. It is the duty of society to utilise for its benefit the advantages and facilities which science has uncovered to its view. An electric shock, of sufficient force to produce death, cannot produce a sensation which can be recognised. The velocity of the electric current is so great that the brain is paralysed."

Professor Thompson, of Lynn, Mass., in replying to a communication from the Commission, says: "The most certain way to produce death would be to pass the current down the spinal cord from the crown of the head, as by the sudden application of wet surfaces or sponges. The result would be, I think, with a sufficiently strong current, of the proper character, a painless extinction of all the faculties; and the current being kept on for a little time would result in such complete nervous exhaustion as to forbid any possibility of resuscitation by any means whatever."

A number of experiments performed upon dogs and witnessed by the Commission, enabled them to come to the following conclusions: 1. That death produced by a sufficiently powerful current is more rapid and humane than that produced by any agent at our command. 2. That resuscitation, after the passage of such a current through the body and functional centres of the brain, is impossible. 3. That the apparatus to be used should be arranged to permit the current to pass through the centres of function and intelligence in the brain.

The necessary arrangements for the practical working of the scheme are outlined. The cost would be very small, as it is suggested that for the

whole Union there be but three places of execution. The treatment of the criminal, after sentence has been passed upon him, is of much importance. He should be kept in solitary confinement, and executed, *without publicity*, on a day not less than four, nor more than eight weeks after passing of the sentence. The body should be given over to the authorities for dissection or destruction, and on no account (if given to the family), should it be allowed to be exhibited. The dramatic death of many hardened criminals, the elaborate newspaper reports, and general public excitement attending many of the executions as carried on under the present system, are believed to lessen the horrors of the death penalty. It is suggested that the present laws be so amended that the new method may go into operation by January 1, 1889.

ONTARIO MEDICAL COUNCIL.

We may be permitted to express our pleasure at the determination which the Medical Council of Ontario has shown in maintaining the standing of the profession. At the recent examination, it refused to admit to the final examination any one who had not completed and shown certificates of attendance upon four regular winter sessions in the study of medicine. Hitherto the Medical Council was debarred from such action, as it was possible for any one, after having obtained a degree from a Canadian university, to proceed to Europe, where he could obtain a license to practise in Ontario, or any where else in the Dominion of Canada. Now this has been done away with and the Medical Council very wisely demands from all candidates for final examination four regular winter sessions.

Anyone who is familiar with the state of things some fifteen years ago, before the Medical Council of Ontario was in existence, and with the present condition of the profession, can easily recognize the great benefit which has arisen from the efforts of the Council, and there is no doubt but that body has the support and confidence of every right-minded member of the profession throughout the Province, in its endeavors to carry out its project of maintaining the interests of medical science. The preliminary examination of to-day is higher than that demanded by most of the licensing bodies of Europe, and the professional examinations are as carefully conducted and as practical as can well be made. We are not unmindful of the necessity of regulating the demand in any professional course, in some degree, by the wealth and resources of the country, and it cannot but be a good thing to encourage the study of medicine; at the same time it is very necessary that those having the great responsibility of treating the sick should be well qualified to do so; and, for our part, we are of the opinion that anyone engaging in the study of medicine will find in it sufficient to occupy his entire time, and can see no reason why four sessions of *six months each* should be thought sufficient; we would be inclined to go further and add a summer session of three months, one or two of which, at least, should be imperative during the four years of study. We are well aware of the advantages gained, by the apprentice, in the office of his preceptor, and we would not wish that the student be denied that experience; it is as essential for him to see, as far as possible, private as well as hospital practice, but we are decidedly of the opinion a summer course might, with advantage to the student, be demanded, and have no doubt the wisdom of the Medical Council of Ontario will work in that direction. We congratulate the medical profession of Ontario in the possession of a medical parliament whose determinations are to the advancement of the profession, and in whose hands we can so safely leave our interests.

ONTARIO MEDICAL ASSOCIATION.

The next meeting of this rapidly growing body will be held in the theatre of the Normal School, Toronto, on the second Wednesday and Thursday in June. If we may judge from the past, the coming meeting will be full of interest and productive of great advantage to the profession. It is certain that no Medical Association in the Dominion has done better work than this one. The numbers in attendance last year, both of Canadians and Americans, were greater than ever before, and we have good reason to believe that the next session will be even better than any of its predecessors. We shall be able to give more definite information in our June issue, but the arrangements already made are sufficient to warrant us in saying that every medical man in the

country may attend with great profit. Some Americans have been invited from New York and from Kentucky.

The following gentlemen have been appointed to open and continue the discussions :

In Medicine.—Dr. Mullin, Hamilton, selects the subject and opens, followed by Drs. Barrick and Geikie of Toronto ; Digby, Brantford ; Waters, Cobourg ; Kaines, St. Thomas; and Forbes, Beachburg.

In Surgery.—Dr. Grassett selects the subject and opens, followed by Drs. Sullivan, Kingston ; Harris, Brantford ; McFarlane, Toronto ; Groves, Fergus ; Burt, Paris ; and Dupuis, Kingston.

In Obstetrics.—Dr. Powell, Ottawa, selects subject and opens, followed by Henwood, Brantford ; Ogden and Macdonald, Toronto ; Fenwick, Kingston ; and Hunt. Clarksburg.

The following gentlemen have been named to discuss the subjects opposite their respective names:

Dr. Daniel Clark, on some functional disorders of the nervous system of frequent occurrence in general practice.

Dr. J. H. Richardson, on any medico-legal subject.

Dr. Temple, on the use and abuse of pessaries.

Dr. Sheard, on the Pathological changes in the blood or tissues wrought by bacteria.

Dr. Oldright, on the sections and sutures in bullet wounds of the intestines.

Advisory Committee, the members of which, members of the Association may consult in cases of unjust suits against them for mal-practice :

Dr. Thorburn, Toronto, Chairman ; Drs. Moore, Brockville ; Sullivan and Henderson, Kingston ; Day, Trenton ; Richardson and White, Toronto ; Malloch, Hamilton; Harrison, Selkirk; Eccles, London ; and Taylor, Goderich.

SUBSCRIBERS TO THE LESLIE TRIAL FUND IN HAMILTON.

We, the undersigned medical practitioners, believing that the evidence brought forward in the recent trial, and the verdict of the jury, show that Dr. Leslie was subjected to an unjust prosecution, hereby subscribe the sums opposite to our names to assist in paying the expenses incurred.

Hamilton, April 5th, 1888.

Henry T. Ridley, $20 ; Geo. L. Mackelcan, $20 ; John A. Mullin, $20 ; Wm. Geddes Stark, $20 ; James White, $20 ; Herbert S. Griffin, $20; J. W. Rosebrugh, $20 ; Thos. Miller, $20 ; Wm. Philps, $20 ; E. H. Gaviller, $20 ; J. H. Wilson, $20 ; G. E. Husband, $20 ; E. H. Dillabough, $20 ; A. Woolverton, $10 ; G. M. Shaw, $10 ; A. C. Reid, $10 ; J. Lafferty, $10 ; R. N. Wallace, $10 ; G. S. Bingham, $10 ; E. Verum, $10 ; A. E. Mallock, $10; Jas. Russell, $10; T. W. Burgess, $5 ; T. W. Reynolds, $5 ; J. Ryall, $5 ; L. W. Cockburn, $5 ; D. G. Storms, $5 ; T. W. McConnachee, $5 ; E. P. Hillyer, $5 ; T. W. Biggar, $5 ; Jas. Anderson, $5 ; Drs. Anderson and Bates, $10.

We are heartily in accord with the spirit which prompted the brethren in Hamilton to aid Dr. Leslie in paying the expenses of the late suit. We understand that his expenses will amount to about one thousand dollars, and, as is usual in such cases, the plaintiff has no means, so that the burden of paying his own costs will fall entirely upon the defendant. It is stated also that Dr. Leslie could have made a compromise for a comparatively small sum, thus saving money, time and worry. He, however, felt that he could not conscientiously enter into any such agreement. The profession at large is indebted to him for thus bravely carrying the case through to ultimate victory.

We think, therefore, that members of the profession generally should, by their contributions, assist Dr. Leslie in bearing the heavy expenses connected with the two trials. Such a course will have a good effect in two ways—it will give courage to those who are unjustly accused, and it will demonstrate to the public that the profession will not allow one of its members to be persecuted without giving him brotherly aid.

A committee has been appointed, for Toronto, for the furtherance of this object, consisting of Drs. J. E. Graham, R. B. Nevitt, P. H. Bryce, and J. L. Davison, to any of whom contributions may be sent. Dr. James White, who is the receiver for Hamilton, will also receive contributions to this fund.

TRINITY UNIVERSITY, TORONTO, M.D.C.M. — *Nelles Scholarship*, $100, L. F. Cline.

L. F. Cline, J. S. Wardlaw, P. McLaughlin, J. Baird, J. P. Ogden, H. Becker, J. A. Neff, A. F. Tufford, W. R. Wade, W. H. Harris, F. G. Thompson, R. E. Walker, D. M. Campbell, A. N.

Hotson, W. E. Harding, J. B. H. McClinton, Jas. Crawford, D. C. Meyers, G. H. Bowlby, J. H. C. F. Fisher, T. J. Jamieson—*Certificates of Honor.*

C. H. Hamilton, A. T. Emerson, C. J. W. Karn, A. W. McCordick, J. C. Connell, L. G. McKibbin, W. T. Campeau, M. Steele, F. P. Cowan, H. A. Minchin, R. A. E. Burns, C. James, A. J. Macaulay, E. S. Jackson, B. Lammiman, E. R. Bishop, F. F. Ferguson, Miss S. Carson, F. H. Kalbfleisch, J. F. Palling, J. A. Howitt, P. McNaughton, W. P. Chisholm—*First Class Honors.*

Miss M. McKay, T. P. McCullough, C. N. Anderson, J. M. Eaton, W. J. Maxwell, H. J. Meiklejohn, W. H. Merritt, J. W. O. Marling, W. L. Bain, J. Brown, J. W. Rowand, L. Auld, C. H. Trancy, M. G. Millman, J. P. Roger, R. J. Wade, A. E. Ardagh, W. H. Cooke, W. H. Jeffs, R. U. Topp, H. B. Thomson, D. E. Jones, R. E. Towle, T. O'Neil, R. P. Robinson, R. J. Macdonald, F. J. Bateman, D. O'Gorman, Miss C. Hone—*Second Class Honors.*

D. McK. Smellie, L. J. Hixson, E. C. McArthur, J. A. Fitzgerald, J. Henry McFaul, H. C. S. Elliott, J. B. Fraser, D. Jamieson, T. A. Wright, Wilton Pratt, A. H. Garratt, E. H. Horsey, T. C. Baker, J. H. Lowe, G. B. Carbert, J. D. Deacon, E. H. Greene, D. A. Kidd.

Primary—J. S. Harris, A. Ross, J. W. S. McCullough, J. R. Macdonald, F. R. Clarke, A. J. Niddery, A. J. Murchison, S. W. Allingham, F. W. Penhall, H. J. Cummings, W Reid, R. W. Rooney, C. B. Oliver, J. M. Sifton, R. Hill—*Certificates of Honor.*

E. J. Boyes, H. W. Walch, F. A. Drake, E. S. Rice, C. McCue, W. H. Alexander, A. H. Speers, H. T. Arnall, T. B. Richardson—*First Class Honors.*

M. Ferguson, R. M. Hillary, T. McEdwards, R. L. Orton, W. J. Fletcher, E. H. Webster, A. M. Spence, O. E. McCarty, W. F. H. Newberry, G. Hargreaves, J. C. McGillivray, J. F. Dolan, G. M. Harrison, Miss M. L. Agar, Mrs. J. E. Lynd, W. D. Springer, J. A. Dinwoody, F. Preiss, E. R. Morton, J. J. Gee, J. A. McGregor, L. E. Morgan, J. F. B. Rogers, W. A. Sargent, J. C. Bell, J. A. Ghent, Miss S. P. Boyle, C. W. Morey, J. F. Wren, W. Wight, J. W. Cunningham—*Second Class Honors.*

R. F. Hay, A. C. Beatty, W. A. Jones, Miss M. Hutton, D. K. McQueen, F. J. Ewing, C. B. Coughlin, D. McLeod, M. C. Black, W. S. Ward, J. Honsberger, J. B. Guthrie, R. McGee, W. A. Thompson, P. Drummond, J. D. Berry, J. A. Mills, E. T. Boyes, H. E. Strathey, A. H. Garratt, D. E. Jones, F. H. Kalbfleisch, J. F. McCormack, T. S. McGillivray, D. D. O'Gorman.

TRINITY MEDICAL COLLEGE.—*Fellowship Degree*—W. R. Wade, *Gold Medal;* L. F. Cline, *First Silver Medal;* Jas. S. Wardlaw, *Second Silver Medal.*

Wade, W. R., Cline, L. F., Wardlaw, J. S., Bowlby, G. H., Fisher, J. H. C. F., Neff, J. A., Meyers, D. C., Campbell, D. M., Crawford, Jas. —*Certificates of Honor.*

Anderson, C. N., Ardagh, A. E., Baird, J., Burns, R. A. E., Bishop, E. R., Campbell, Jos., Cowan, F. P., Emmerson, A. T., Ferguson, F. F., Howitt, J, A., Harding, W. E., Hotson, A. N., Hamilton, C. H., Jones, D. E., James, C., Jeffs, W. H., Kalbfleisch, F. H., Karn, C. J., Lammiman, B., McClinton, J. B. H., McCordick, A. W., McNaughton, P., McDonald, R. J., Marling, J. H. O., Merritt, W. H., Minchin, H. A., Ogden, J. P., Palling, J. F., Rowan, J W., Steele, M., Thompson, F. G., Topp, R. U., Walker, R. E., Wade, R. J.—*First Class Honors.*

Ellicot, H. C. S., Fitzgerald, T. A., Garratt, A., Hixson, L. J., Meiklejohn, H. J., Millman, M. G., Rogers, J. L., Thomson, H. B., McFaul, J. Henry —*Second Class Honors.*

Primary—Harris, S. S., McCullough, J. W. S., Macdonald, J. R., Clarke, F. R., Niddery, R. J., Murchison, A. J., Allingham, L. W., Penhall, F. W., Sifton, J. M., Oliver, C. B., Hill, R.—*Certificates of Honor.*

Boyes, E. J., Drake, F. A., Alexander, W. J., Speers, A. H., Arnall, H. T., Richardson, B. F.—*First Class Honors.*

Hilary, R. M., Fletcher, W. J., McCarty, O E., McEdwards, T., Newberry, W. F. H., Hargreaves, G., Dolan, J. F., Harrison, G. M., Dinmoody, J. W., Preiss, F., Morton, E. R., Gee, J. J., McGregor, J. A., Morgan, L. E., Rogers, J. F. B., Sargent, W. A., Cunningham, J. W.—*Second Class Honors.*

Berry, J. D., Beatty, A. C., Boyes, E. T., Cummings, H. J., Ewing, F. J., Honsberger, J., Hay, R. T., Jones, W. A., Mills, J. A., McGee, R., Strathy, H. E., Thomson, W. A.

Scholarships:—First Year—James Sutherland, 1st Scholorship, $50; Robert Knechtel, 2nd Scholarship, $30; C. C. Fairchild, 3rd Scholarship, $20. *Second Year*—J. S. Harris, 1st Scholarship, $50; J. W. S. McCullough, 2nd Scholarship, $30.

Special Prizes—The Special Prize for the highest in Physiology of the First Year, Jas. Sutherland, value $25. The "Dr. John Fulton Memorial Prize" for the highest standing in Surgery, where the student has spent *four* complete Winter Sessions at the College, D. C. Meyers, value $50. Special Prize given by "Trinity Medical College" for very high standing in the *recent Primary Examinations at Trinity University*, A. Ross, value $30.

QUEEN'S UNIVERSITY.—The following list com-

prises the names of the successful candidates at the recent M D.C.M. examinations at Kingston: —*Gold Medalist*, W. H. Downing; *Silver Medalist*, E. McGrath. T. C Baker, W. P. Chamberlain, J. C. Connell, M.A., W. H. Cooke, Miss A. G. Crane, Miss Elizabeth Embury, J. B. Fraser, A. R. Gillis, E. H. Horsey, D. Jamieson, T. J. Jamieson, F. H. Koyle, Miss Annie Lawyer, J. S. Livingstone, C. O. Mabee, C. N. Mallory, W. J. Maxwell, E. S. Mitchell, S. H. McCammon, T. S. McGillivray, Miss Nettie Ogilvie, T. O'Neil, W. F. Pratt, Wilton Pratt, J. W. Robertson, R. P. Robinson, P. K. Scott, D. McK. Smellie, A. D. Walker, A. W. Whitney, T. A. Wright, Rev. J. F. Smith, Francis J. Bateman, William E. Harding, Kenneth Henderson, Chas. James, Frederick H. Kalbfleisch, Thomas P. McCullough, Hiram B. Thompson, Wm. B. Wade, James S. Wardlaw. John Duff and M. E. McGrath get the Surgeonries of the General Hospital, and O. L. Kilborne and A. Gandier, College Demonstrators of Anatomy.

WOMEN'S MEDICAL COLLEGE, KINGSTON.—Miss Mitchell, of Montreal, and Miss Craine, of Smith's Falls, who graduate from the Women's Medical College this year, were equal for the honour of the Kingston Scholarship of $60. It will be divided. Miss Isabella McConville, of Kingston, carried off the Trout Scholarship of $50.

THERAPEUTICS WITHOUT ALCOHOL.—The question of the necessity for the use of alcohol in medicine may be considered as being nearly set at rest, yet there are a few practitioners who believe it can be safely omitted from the list of therapeutic agents. In this connection the following from the *Br. Med. Jour.* will be interesting to our readers:—"The Temperance Hospital has been in existence now about twelve years, and the annual report for 1886-7 may be studied with advantage in order to compare the results with those of other hospitals. It must not be supposed that the hospital only receives abstainers, though these are in the majority, probably due to the large proportion of infants and children. In the surgical department the results have been very satisfactory, so far as one is enabled to judge from mere figures, but turning to the medical cases, we may restrict examination to one or two groups of disease with advantage. Out of the thirteen cases of acute pneumonia four (abstainers) died, one of them on the fifty-fourth day from exhaustion. Only four cases of typhoid fever were admitted in all, and although the cases were of young people—15, 7, 14, and 32, respectively—and comprised three abstainers, they all proved fatal. The treatment was the same as elsewhere, and the only difference consisted in the non-exhibition of alcohol. Then again, simple exhaustion, eighty-seven days after the onset of the disease, proved fatal in one instance. The average stay of patients in the hospital would seem to show that convalescence is unduly prolonged, and this notwithstanding the fact that the list of cases comprises several of "nasal catarrh" and other trivial complaints. The only occasion on which alcohol was administered was in a case of operation for strangulated hernia, in which death resulted from an unreduced constriction. Every credit is due to the registrar, Mr. Leopold Hudson, for the clear and practical manner in which he has tabulated and arranged his figures. We shall look forward with interest to future reports drawn upon the same excellent plan, as it is only by comparing results that medical men will be enabled to judge the merits of treatment without alcohol. Thanks to the impartial summary with which the report opens, it is easy to grasp its general tenor. It constitutes an innovation which other hospitals would do well to copy.

CARELESS USE OF ANTIPYRIN.—The general use of antipyrin, indulged in by the laity, without medical supervision, calls forth the following timely warning from the *Lancet*. "The public attention given to the latest remedy for sea-sickness and many other affections which flesh is heir to, has its percentage of evil as well as good. Every medicament is not an unmixed advantage, and to suppose that antipyrin may be taken recklessly, any more than chloral, is to adopt a position of a dangerous kind. Antipyrin has on several occasions been administered with unexpected results. It is a drug which has undoubtedly powerful effects on the nervous system, especially as tending to produce a lowering action. We must strongly protest against its indiscriminate employment without the supervision of a medical man."

NEW METHOD OF REDUCING DISLOCATION OF THE SHOULDER.—Dr. Abril, *Lond. Med. Rec.*, inverts the usual proceeding for reduction of dislocation of the shoulder, viz., by fixing the humerus and causing the glenoid cavity to descend upon its head. This he accomplishes in the following way.

"He makes the patient stand with a crutch in his axilla; he then holds the hand of the affected side, making slight traction downward; the patient is now to let himself down as if he were going to fall on his knees, and as he falls the head of the humerus glides into its normal position, and the patient is surprised at finding himself cured." The pain is so trifling that no anæsthetic is required.

THE CANCER BACILLUS.—The *Lancet* thus sums up what the rival experimenters have to say about the discovery of the cancer bacillus, which it says "threatens to have as many claimants as the authorship of Junius's Letters. In addition to Dr. Scheuerlen, who was the first before the public, two Italians announce themselves as having independently made the discovery — Dr. Barnabei, Professor of Clinical Medicine at Siena, and Dr. Sanarelli, a graduate and teacher of the same school. But, it seems, a compatriot of Scheuerlen is also in the field to claim priority in the discovery—Dr. Schill. France, too, not to be outdone, has her special claimant in Dr. Perin. And, finally, Brazil, in Dr. Domingos Freire, seeks to vindicate the honor of the discovery to the New World."

TWINS, ONE BLACK AND ONE WHITE.—Dr. Newton Hill, of Pickensville, Ala., sends to the *Med. and Surg. Rep.* the following report of a case: "A young negro girl, about eighteen years of age, gave birth to twins at seven months, one of which was as black as the *ace of spades*, and the other as white as any white child I ever saw. This girl has been engaged as nurse in a white family a part of a year, but she has associated with white and black. Both cords were attached to the same placenta. Is this merely a freak of nature, or is it possible that they have different fathers? I would like to have the opinion of some of the brethren."

A NEW ANTISEPTIC.—Creolin has been the subject of investigation by Fröhner (*Fortschr. der Med.*) He says it is a non-poisonous antiseptic and is preferable to carbolic acid. It exists as a syrupy liquid, soluble in water and in alcohol in all proportions. He has found it serviceable in the following conditions: (1) in scabies, (2) as an antiseptic (3-per-cent. solution), (3) in chronic non-parasitic eczemas, (4) as an inhalation in infectious bronchitis and broncho-pneumonia, (5) in infectious or zymotic gastric and intestinal catarrh, to be given internally in doses of one to two grammes (℥ xv to ℥ xxx) of a 1-per-cent. solution.

TREATMENT OF URÆMIA. — The following has been used with success by Rolland, (*Jour. de Méd*).

Ext. jaborandi (alcohol.),
Ext. scillæ,
Resin. jalap.,
Resin. scammon, . . . āā gr. ¾.

In pill form.

Four or five pills in twenty-four hours, with an exclusively milk diet, yielded good results.

FOR HOARSENESS AND CATARRHAL COUGHS.—The *Med. News* gives the following as a very useful preparation for the above:—Ammonium acetate, 3 parts; potassium bromide, 3 parts; tincture of belladonna, 1½ parts; tincture of aconite, 2 parts; infusion of balsam of tolu, 150 parts; syrup of balsam of tolu, 50 parts. A tablespoonful is to be taken every three or four hours.

VOMITING OF PREGNANCY.—It is stated, *West. Med. Rep.*, that a single vesication over the 4th and 5th dorsal vertebræ, "promptly and permanently relieves vomiting of pregnancy, no matter at what stage."

NEW ANATOMICAL DISCOVERY.—It is stated that Dr. Bryant, of Boston, has discovered that there are valves in the portal and mesenteric veins, during infant life, in seventy-five or eighty per cent. of cases. These disappear as the child grows.

PERSONAL.—DR. G. STERLING RYERSON, leaves May 1st for a professional trip to Germany, taking in the hospitals of New York, London and Paris, by the way. The Dr. intends studying new methods in the extraction of cataract, especially immature cataract. He intends to return about the middle of July.

Books and Pamphlets.

LOMB PRIZE ESSAYS. No. 1, Healthy homes and foods for the working classes; No. 2, The sanitary conditions and necessities of school-houses and school-life; No. 3, Disinfection and individual prophylxis against infectious diseases; No. 4, The preventable causes of disease, injury and death in American manufactories and work-

shops, and the best means and appliances for preventing and avoiding them. By. Drs. V. C. Vaughan, D. F. Lincoln, George M. Sternberg, and Mr. G. H. Ireland. Published by the American Health Association.

ON A NEW TREATMENT OF CHRONIC METRITIS and especially of Endo-metritis with Intra-uterine Chemical Galvano Cauterizations. By Dr. Georges Apostoli. Translated by A. L. Smith, B. A., M. D. 1888. George S. Davis, Detroit, Mich.

Dr. Smith's translation is admirable. Our readers will remember an article by the translator which appeared in our Dec. No. on Electricity in Gynecology. The great interest which is taken in this method of treatment will render this little work of 113 pages very acceptable to the profession. The methods of the author are placed before the reader with precision and clearness.

We commend the book to those who are anxious to know what Apostoli and others are doing in this line of treatment, which, it would appear, has come to stay.

DISEASES OF THE HEART. By Alonzo Clark, M. D., LL.D., Emeritus Professor of the Principles and Practice of Medicine, etc., College of Physicians and Surgeons, New York. One Octavo Volume, 251 pages. Price, $2.75. E. B. Treat, Publisher, 771 Broadway, New York.

This is the sixth volume of Treat's Medical Classics, and we think presents a better appearance than the former ones, which were not up to the mark as regards the printers' and binders' workmanship.

The information gathered in this volume embodies the substance of his teachings and lectures on "Diseases of the Heart" given to his students. Nothing is omitted which would tend to give a clear exposition of the views which he inculcated as teacher.

The volume cannot therefore fail of being of great value to practitioners, as it contains the results of a singularly calm and judicious mind of one who had long and pre-eminent experience, and whose ripened harvest of thought is gathered into this sheaf, which ought to find an honored place in the medical granary among other distinguished sheaves.

OPHTHALMIC SURGERY. By Robert Brudenell Carter, F. R. C. S., Ophthalmic Surgeon to St. George's Hospital and to the National Hospital for the Paralyzed and Epileptic; and William Adams Frost, F. R. C. S, Assistant Ophthalmic Surgeon to the Royal Westminster Ophthalmic Hospital. Illustrated with a chromograph and ninety-one engravings. Philadelphia: Lea Brothers & Co.

This is a useful treatise on the eye, devoting its space principally to diagnosis and treatment. It deals with the ordinary injuries and diseased states of the eye, and embraces the newest and most practical methods of treatment of the day, and we are sure it is a work which will receive great patronage and be of great use to the profession.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. By James Nevins Hyde, A.M., M.D. Professor of Skin and Venereal Diseases, Rush Medical College, Chicago, and Physician for Diseases of Skin to the Presbyterian Hospital, Chicago. Second edition, enlarged. Philadelphia: Lea Brothers & Co.

This work is profusely illustrated and an able treatise of 676 pages. In it will be found treated every disease of the skin that the practitioner is ever likely to meet with, and its remarks on treatment are especially to be praised. The book is well written and a very readable and practical treatise.

DISEASES OF MAN; Data of their Nomenclature, Classification and Genesis. By John W. S. Gouley, M. D., Surgeon to Bellevue Hospital. New York: J. H. Vail & Co. London: H. K. Lewis. 1888.

PRESCRIPTION FOR RACHITIS.—The following is from the *Progrès Médical:* Phosphorus gr. 1-6; oil of sweet almonds f ʒ viiss; gum arabic (powder) of each ʒ iii ¾; distilled water f ʒ xss. M.—Two or three teaspoonfuls in coffee, a day.—*Am. Med. Digest.*

Births, Marriages and Deaths.

At Brantford, April 3rd, E. E. King, M.D., of Toronto, to Isabella, daughter of J. Franklin Ott, Esq.

At Brockville, Ont., on the 18th April, Jacob Edwin Brouse, M.D., aged 48 years.