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THE CANADA MEDICAL RECORD.

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CONTENTS.

Original Communications.

MONTREAL GENERAL HOSPITAL.

OVARIOTOMY—RECOVERY.

By DR. WILKINS, Professor of Physiology, University of Bishop's College.

HISTORY.—Catherine B. McM.—,widow, aged 60, dressmaker, was first admitted into Hospital under my care on the 19th September, 1877. She has been pregnant ten times, has had two miscarriages, and also has had ten children in eight pregnancies (twins twice). Menstruation was always regular, commenced when she was fourteen years of age and lasted until she was forty-five, the menstrual flow lasting six or seven days. Since the birth of last child, twenty years ago, she says she noticed a lump in left side, but it is only within a year previous to her first entering hospital that it pained her, since which time it has grown very rapidly, so much so that respiration and progression were rendered very difficult. During the whole of this time she has had pain on defecation.

SYMPTOMS ON ADMISSION.—The abdomen is tense, and measures at its greatest circumference thirty-nine inches. A large hard mass can be felt occupying the lower part of abdominal cavity; a little to the left of this mass a cyst can be felt containing fluid. Per vaginam a semi-fluctuating immoveable mass can be felt. Sound enters uterus three inches, passing directly forward. She suffers very much from frequency of micturition.

On consultation with other members of the Hospital staff, taking into consideration the rapid growth of the tumor latterly, and risk consequent in performing ovariotomy in a general hospital, it was considered advisable not to attempt to remove the tumor, but simply to relieve symptoms by paracentesis. Forty ounces of a dark grumous fluid were removed, affording very considerable relief to the patient, and in a few days she was dismissed.

About seven or eight months subsequent to her dismissal from Hospital she again consulted me, begging me to operate, no matter what the consequences might be, as she could not exist long in the condition in which she then was. She had a very haggard appearance, was very much wasted, and appeared to be suffering agony. I placed before her the extreme danger there was in such operations being performed in a general hospital. Notwithstanding this she still persisted in her request no matter what the consequences might be.

At my request the Committee of Management of the Hospital very kindly placed a private ward at my disposal. I had it thoroughly renovated, the floor and other woodwork washed

with carbolic soap, and the walls all freshly tinted.

Patient was readmitted into hospital on the thirty-first of May, 1878. She says she had been confined to bed ever since last September. Last November there was great anasarca of both legs. She suffers from frequent micturition, being obliged to make water about every hour; sometimes, on the other hand, she has retention of urine. She is prevented from resting well at night on account of the severe pains over the seat of the tumor.

MEASUREMENTS.

Greatest measurement around abdomen	42 inches.
From right spine of ilium to umbilicus	9 "
From left	9¾ "
" Ensiform cartilege	7 "
" Symphisis pubis	7½ "

HEART.—Apex beat by inspection not perceptible; by palpation, feeble but in the normal position; by auscultation, sounds all normal.

LUNGS, by inspection, expansion seems good; by auscultation, in both subclavicular regions, slight mucus rales are to be heard. Percussion souds normal. Superficial veins of chest are enlarged.

LIVER, dulness normal. Umbilicus completely obliterated. Veins of abdomen enlarged. Ensiform cartilege considerably everted.

A large hard mass can be felt in the right lumbar and adjoining portion of umbilical region; immediately to the left, outlines of two cysts can be plainly seen, one apparently the size of an orange. Fluctuation was very marked at both sides of abdomen as well as in these two cysts. There was considerable tenderness in the region of the cysts.

Patient kept under observation for three days; her temperature, pulse, amount of urine and of urea excreted per diem were all ascertained. Her urine was also tested for albumen and for sugar, neither of which were present. The day previous to the operation her bowels were freely moved by the administration of castor oil, and on the morning of the operation an enema was given completely emptying the bowels. Her diet for the three days previous to operating was limited to milk and beef tea, omitting the latter on the day previous to the operation.

June the 4th, I proceeded to operate with the assistance of Dr. Roddick. Patient was put under the influence of ether. A large rubber sheet with an oval opening in the centre, 8 x 6, was smeared around the edges of the opening with adhesive plaster; these edges were caused to adhere to patient's abdomen, the lower edge of the opening being adherent just above the pubis, and the upper edge about two inches above umbilicus. The exposed part of the abdomen was washed with solution of carbolic acid and the spray of two Lister's apparatus placed opposite one another, directed over this part of the abdomen. Both sprays were kept working until the completion of the operation. An incision was made in the median line, commencing about an inch below umbilicus, and continued downwards until within about two inches of symphisis pubis. The different layers of the abdominal wall were cautiously divided until the peritoneum was reached, when it was divided on a director, and the walls of the cysts came into view.

As soon as the peritoneum was divided a very large quantity of ascitic fluid escaped, in all about eighty ounces. On introducing the hand into the abdominal cavity, the cyst was found to be adherent at the sides to the peritoneum, and above to the mesentery and portions of the small intestine. Adhesions to the intestine were of older date, and some of them so firm that it was impossible to separate them, in which case the cysts were emptied and the adherent portion of the walls left attached to the intestine. The walls of some of the cysts were so very thin that in manipulating with the tumor before removal they were unavoidably ruptured, the fluid escaping into the abdominal cavity. Flannels wrung out of hot water were used to protect the bowels when much exposed. After the adhesions were separated—a very slow proceeding—the pedicle was clamped, the peritoneal cavity sponged out with carbolic acid lotion. The right ovary was found to be perfectly normal. The edges of the opening were now brought together, the pedicle being secured outside. Antiseptic dressings were applied, and the patient put to bed. Hot water bottles were applied to her feet, a morphia suppository introduced into rectum, and she was immediately placed on full doses of opium.

For the first five days after the operation the catheter was passed every six hours.

Immediately after the operation the temperature was 96°.8, the pulse 92; three hours later, the temperature became normal, and did not begin to rise above normal until midnight, when it reached 100°.4 (pulse 104), falling again next morning to normal (pulse 84). At mid-day temperature reached 101° (pulse 112), its highest point. From this time forward both temperature and pulse approached the normal, the temperature becoming so on the second day after the operation, the pulse being much more tardy in regaining its normal frequency. The amount of urine secreted during the three days preceding the operation averaged daily twenty-four ounces, sp. gr. 1009, average percentage of urea .005. The three days following operation average amount of urine secreted was thirteen ounces, the percentage of urea being for the same days .02, .029, and .0185, after which it rapidly diminished, averaging for the six following days .015, the amount of urine being at least double, one day twenty-eight ounces, the next thirty-four, and the following day twenty-six ounces. The tumor is multilocular cystic, and when the larger cysts were emptied weighed seventy-two ounces; when examined under the microscope, the walls of the cysts were found to consist almost entirely of connective tissue, having the layer next the fluid in the cyst lined with cylindrical epithelium, some of the cells assuming more of a goblet shape. The contents of the cysts were of a very varied character, dependent apparently on their size, the smaller ones containing a gelatinous fluid, whilst the larger ones contained fluid which appeared to differ very little from ascitic fluid.

There are two or three points in connection with this particular operation to which I wish to draw attention: In the first place, with respect to performing this operation in a general hospital. Almost all who have written on the subject say that it should not be performed in a general hospital, because of the greater mortality in those cases, due either to peritonitis or septacæmia. There are, no doubt, grave objections, but these have been overcome by the isolation of the patient in a ward which had just been thoroughly renovated, and more especially by the use of the antiseptic spray. In this case I think a matter of some importance is the form of antiseptic fluid, that which I used being absolute Phenol, which was then used for the first time in the Hospital. It is much less irritating than carbolic acid, and consequently more valuable where the serous membranes are exposed.

Another manner in which I believe the spray to have proved useful, aside from all consideration of Germ theory, is the fact that when one of the cysts was accidentally ruptured, allowing its irritating contents to escape into the abdominal cavity, the serous membrane was less susceptible to irritative action through its previous bathing in the antiseptic fluid. The contents of ovarian cysts, especially after being once tapped, are of such an irritative character that, when escaping into the abdominal cavity, are a frequent cause of peritonitis, one of the commonest causes of death after this operation.

Progress of Medical Science.

HAGER'S DIGESTIVE PELLETS (*Globuli peptici*).

Dr. Herman Hager recommends the following compound as an excellent digestive, to be taken after a hardy meal:

Cinchonidia sulphate	5.0 gm.
Pepsin (*not* saccharated)	30.0 "
Ginger, powd.	3.0 "
Cardamoms, powd.	3.0 "
Pimento, powd.	3.0 "
Gentian root, powd.	6.0 "
Althæa root, powd.	6.0 "
Tragacanth, powd.	6.0 "

Mix and add to them a mixture of

Glycerin	10.0 "
Hydrochloric acid	6.0 "
Water	6.0 "

Make into 300 (to 360) pills or globules, dry them in the open air for about 10 hours, and cover them with pill-varnish (see page 296)—These pellets are useful either after a hearty meal, or defective appetite or digestion.

In the former case, according to the degree of "fulness" felt, 4–5 or at most 6 pellets are taken, which, in the course of one hour, will cause the sensation to disappear. In defective appetite 1 to 2 pellets may be taken two or three times before the meal in intervals of one hour, and immediately after the meal 3–4 pellets. Children may take 1 to 2. In gastric disturbances one pellet may be taken every 30 minutes or every hour, best with water a little.—*Pharm. Centralh.*, 1880, 37.

IODIDE OF POTASSIUM is decomposed by all acids and acidulous salts, except cream of tartar. Most of the metallic salts decompose it. If iodide of potassium and spirit of nitrous ether

are ordered in a mixture, the latter must be carefully neutralized before it is used.

CONVULSIONS IN CHILDREN.

By A. A. Smith, M.D., Prof. Mat. Med. and Therapeutics, and Clinical Medicine in the Bellevue Hospital Medical College, New York.

It is not my intention to undertake an exhaustive discussion of the subject of convulsions in children, but rather to call attention to a few practical points; nor have I chosen the subject "Infantile Convulsions," as my remarks will apply to both infants and older children. In going over the literature of the subject, I have been struck by a statement made by most authors, that convulsions in children not dependent on organic disease of the brain are rarely ever serious. Certainly such a statement is calculated to mislead particularly the young practitioner, and put him off his guard; and especially will he be off his guard if he happen to have seen several cases of convulsions in which there was but one convulsion, and the child recovered rapidly, and there were no bad sequelæ. If we admit that only one case in a hundred *may* be dangerous, then the statement I have referred to must at least be modified. *Any* case of convulsions may be dangerous, and we should, therefore, always be on our guard for that one case, to study all cases carefully, and be reserved in our prognosis.

The age at which children are most apt to develop convulsions is perhaps still a disputed question, but it is probably the period of dentition—from 6 to 28 months. It is not alone because dentition is occurring at this period, but in addition there are other active processes of development going on. The nervous system of the child is much more impressible than that of the adult, and during this dentition period is developing very rapidly, perhaps more so than at any other period; unless we except the period of puberty, and even this exception is doubtful. Some children are much more liable to develop convulsions than others, and, even in the same family, sometimes one child from a slight cause will have a convulsion, while another will have comparatively little disturbance of the nervous system from much more severe causes. Usually, however, the tendency to disturbance of the nervous system runs in families, affecting one in one way, and another in an entirely different way. When I see a child capable of having an elevation of temperature as great as 105° F. from an attack of indigestion, even though no convulsion occur, I feel quite certain that the nervous system of that child is very susceptible to slight influences, and I always try to be especially watchful of it in any illness, for fear that a more severe cause may produce a very stormy outburst. If there is a general cause in families for this tendency to disturbances of the nervous system, we must look for it back of the children. In other words, inherited tendencies play an important part in the etiology. It is more than probable that the unknown and unexplained predisposition to convulsions in some children is given them by their parents, and in the majority of the cases by the mother. The tendency to transmit "nervousness," as it is called, is easily recognized. Only a few days ago, a young mother said to me, "it is no wonder my baby is so nervous and sensitive, for when I was carrying her, I was a bundle of nerves. I was unable to sleep sometimes because of nervousness, and frequently I have arisen in the night to wash my hands and face, which seemed always to soothe me." Could not something have been done during pregnancy to lessen, to a certain extent at least, the nervous sensitiveness of the child? Under the head of treatment, I shall refer to this question again.

Another interesting question suggests itself just here, in connection with the view held by many good observers that diseases of the nervous system are greatly on the increase among Americans. If these diseases are on the increase, and if the view is a correct one that the predisposition to convulsions is transmitted to children by their parents, then the subject of convulsions in children becomes one of still greater importance to us, as American physicians, than it has ever been before.

In some cases of convulsions in children, it is possible to trace a history of convulsions in the childhood of the mother. This I have been able to do in a few cases which have come under my observation. The statistics on this point are very meagre, and are only sufficient to strengthen slightly the argument for the transmissibility of the tendency.

The question as to whether puerperal convulsions create a tendency to convulsion in the child is one that has been considerably discussed. The weight of opinion is, that puerperal convulsions do not leave a permanent tendency to convulsions in the child. If the convulsions in the mother are uremic, the same poison may produce convulsions in the child the first few days after birth, but not later.

It is a well-established fact that children with the rickety diathesis are very susceptible to the influences which produce convulsions. This is a point of great practical importance, as I shall endeavor to show when I come to consider the treatment. All observers agree that in a certain proportion of cases rickets may be traced, but Gee makes the proportion the largest of any. Out of 61 cases of convulsions, he found rickets in 56 of them, certainly a proportion sufficiently large to make the few remaining cases the exceptions to a rule. His observations, however, were all made among the children of the poor.

The subject of the feeding of children seems

to be a vexed one. Young children no doubt suffer from many of their illnesses because of injudicious feeding. If one is called to a child suffering from a convulsion, which has developed soon after eating, naturally he will presume that the convulsion has something to do with the condition of the stomach, although this diagnosis will not always be correct. If, with this presumption, the nurse boasts that the child has eaten particularly well at his last meal, an emetic will probably reveal the immediate exciting cause when the child gets rid, by vomiting, of a large quantity of food, and a great mixture as to quality.

Overfeeding undoubtedly often produces convulsions, and I repeat, such convulsions may be serious. Is it not a serious matter, when we see that, in a post-mortem examination of a child who had died during a convulsion, nothing was found to account for the death except a very full stomach? I have found the reports of quite a number of such cases.

Unwise feeding, too, often results in convulsions. Any diet which produces indigestion in the child may be the exciting cause of convulsions. The habit of giving starchy food too early, and likewise animal food, is a pernicious one. The giving to young children a little of everything, as is often done, is calculated to do mischief. In a large proportion of cases of convulsions in children, not dependent upon organic disease of the brain or spinal cord, the exciting cause may be found in some error in diet; and even in cases of organic disease, the exciting cause may often be found in an attack of disturbance of digestion. Malarial poison is accountable for convulsions sometimes. During the fall of 1872, I had the opportunity of seeing many cases of malaria in one form and another in the practice of Drs. Lente and Murdock at Cold Spring. It was not at all uncommon to be called to see a child somewhere under three years of age suffering from convulsions, which were considered to be due to malarial poison. As, in relating the histories of some of these cases to medical friends, some doubt was expressed as to the diagnosis, it may not be out of place to give some of the reasons for such diagnosis. If a child has a paroxysm of intermittent fever—chill, fever and perspiration—every day for four days; on the fifth day, at the time the chill ought to occur, the child is seized with a violent convulsion, perhaps several in succession, followed by fever and perspiration, and the same again on the sixth day, it is fair to presume the convulsions were due to malarial poison, and that the convulsion has merely taken the place of a chill. If there be no return of the convulsions or chills, after the child has had given it full doses of quinine, the presumption becomes still stronger. If the quinine be stopped, and after a time the paroxysms return along with the convulsions, and then again these symptoms all disappear quickly under the influence of the quinine, the presumption becomes as near a certainty as anything in medicine. I observed such a sequence of events time and again, during my two months' stay at Cold Spring. I ought to say that, in some portions of the village, the atmosphere seemed very highly charged with malarial poison, and when we were called to see patients in those quarters, we almost took it for granted the convulsions were due to malaria. I find very little in the books on malarial poison as a cause of convulsions in children, and where it is referred to, it is spoken of as indicating the pernicious form. The cases I saw at Cold Spring were apparently all of the simple form, at least they all recovered. It is not alone in malaria that a convulsion takes the place of the chill, for one frequently sees this at the ushering in of pneumonia. At the beginning of certain acute diseases, not usually ushered in by a chill, we sometimes find a convulsion occurring: scarlet fever, measles, small-pox, diphtheria, etc. It is still a question what it is which produces the convulsion in these diseases; whether the special poison itself, or the high temperature, or possibly the sudden hyperemia of the brain which is thought by some to occur. May it not be that, in all these cases, there is that pre-existing and unexplained tendency to convulsions which I have referred to? Convulsions occurring at the beginning of diseases need not usually be regarded as dangerous. Sydenham thought that a convulsion at the beginning of an exanthem indicated that the attack would be mild; but in the majority of cases now, where convulsions usher in the attack, the disease is severe.

A convulsion occurring in the course of an acute disease, particularly if it occurs toward the close of it, is a grave symptom, and should lead us to make an unfavorable prognosis. It should not be forgotten that, in the child as in the adult, a convulsion may be due to uremic poisoning; and the prognosis in such a case will, of course, be based to a certain extent upon the amount of renal disease present. In the course of whooping-cough, a convulsion is an especially grave symptom if it is a complication of the whooping-cough, and is not dependent upon dentition or some disturbance in the alimentary canal. Convulsions in whooping-cough are thought to be due, in some cases, to direct irritation of the membranes of the brain and medulla oblongata, and in others to congestion of the brain, dependent mainly on interference with the pulmonary circulation. The most dangerous convulsions in children are those which in their course affect especially the respiratory system, and which, by their frequency, keep the child in an almost comatose condition.

Does syphilis ever produce convulsions in

children? Cases have been recorded in which post-mortem examination of children dead of convulsion have been made, and gummy tumors found within the calvarium. We have seen that, in a large proportion of cases of convulsions, the rickety diathesis existed. Many continental and some English physicians believe that rickets is but another phase of syphilis. I have found some recorded cases of unmistakeable evidences of congenital syphilis, in which convulsions occurred during the first three months of life. During my term of service as an interne in Bellevue Hospital I saw a case of this kind. A woman was confined under my care, who had had syphilis five years before. The child, a male, had evidences of syphilis when he was seven days old. When he was fifteen days old, he had his first convulsion, and during the following ten days he had a number of them, some days having three. He was put upon antisyphilitic treatment (inunctions of mercurials), with but little hope of his surviving. He did, however, and improved very rapidly, so that when he was twenty-five days old his convulsions ceased; and when he left the hospital, at five weeks of age, he gave evidences of development which were encouraging. He was not allowed to nurse the mother, but was put upon hospital milk. After the mother left the hospital she kept up the inunctions. I saw the mother again when the child was five months of age, and she said he was an exceptionally fine and healthy-looking child.

Many observers believe that the child *in utero* may have convulsions, and that many of the deformities, such as paralyses, club-feet, etc., are due to convulsions *in utero*. The opinion can only be based on theory, as the evidence is not clear that any one has ever diagnosed the disease *in utero*.

We are often, while attending a child with convulsion, asked the question by anxious parents: "Is the child more apt to have further convulsions, having had them once; and are they likely to leave any permanent disturbance? Like most questions, this one is more easily asked than answered. If there is clear evidence of some direct source of irritation, and we can remove it, we hope the child will remain free from convulsions in all the future; but we cannot always say that such will be the case. Nervous excitability, which shows itself in a tendency to develop convulsions in childhood upon a slight provocation, may later in life develop into a more serious disease—namely, epilepsy. There may be a latent tendency to epilepsy, which is brought out by convulsions due to some slight cause. Hughlings Jackson says, "epilepsy in adults not rarely dates from convulsions in infancy." It is hardly probable that the convulsion in infancy ever has any direct relation with the development of epilepsy in the adult, other than the relation that any disturbance of the nervous system in the child may have with the latent tendency to epilepsy. Certainly, not all epileptics have had convulsions in childhood; and many children have had convulsions who have never developed epilepsy in later life. It is fair to presume that, if a child has convulsions, and develops epilepsy later in life, there already existed in that child the pathological changes which result in epilepsy.

Some cases have been reported in which idiocy, or at least some defect in intellect and paralysis, resulted from convulsions in childhood; the child having been free from such defects, so far as could be judged, previous to the development of the convulsions. It would seem almost impossible that functional disturbances of the nervous system could lead to such permanent changes in the central nervous system as to produce such effects, unless there existed, previous to the attack of convulsions, some lesion of the brain or spinal cord; and yet, upon theoretical grounds, it would seem just as impossible that such stormy outbursts as we see in convulsions should occur, and not leave permanent ills behind them. It is astonishing how many and how violent convulsions a child may have from even slight causes, and yet apparently recover completely and have no bad sequelæ.

A report of a case has appeared recently in one of the journals, which bears on this point.

"A child under one year of age suffered for several weeks from convulsions which varied in severity, and were frequently repeated. It appeared to be healthy in all other respects. All the usual methods of treatment were employed without success. At last the mother noticed the end of a hair lodged between the two incisors of the child, and in drawing upon it, removed a hair nearly a yard in length, which had hung down into the throat of the little patient." After the removal of this foreign body the convulsions ceased as if by enchantment, and the child recovered completely.

If convulsions are violent and frequently repeated, it would seem that they must leave some permanent disturbance. Possibly in some cases such disturbance does remain, but is attributed to other causes.

It would be interesting to know whether convulsions in children are purely a disorder belonging to civilized life. I know of no observations which have been made to ascertain whether the children of savages ever have convulsions.

Treatment.—I will take up the points of treatment under three heads: The management of the immediate attack, the prophylaxis of convulsions, and the treatment subsequent to the attack. It may simplify the subject to name over the remedies we have for meeting the immediate attack, and then discuss their merits and special indications.

Anesthetics, opium, chloral, the bromides, hot

bath, veratrum viride, stimulants, emetics, cathartics, calomel, and the cold bath.

When called to see a child with a convulsion, the first endeavor, if the child be in a convulsion at the time, should be to arrest it; or, if another is about developing, to anticipate it. We have no agent for this purpose equal to the anesthetics, preferably chloroform. Whatever the cause of the convulsions, whether due to organic disease or to functional disturbance, they should be held in check by the inhalation of the anesthetic, and then the cause may be ascertained if possible.

If the convulsions be due to pain anywhere, the remedy of the greatest service is opium, with perhaps two exceptions. If the cause be an external irritant, such as a pin pricking the skin or a very tight abdominal bandage, these can be quickly removed and there will be no necessity for the opium. The other exception is pain from a full stomach. In such a case, an emetic will answer a better purpose. In all other cases of convulsions accompanied with pain, I would use opium, if the child be more than four months of age. Convulsions dependent on the pain from teething should first be controlled by opium, and then the gums should be lanced. The very effort to lance the gums, before the convulsions are controlled by opium or some other such agent, will probably cause the child to have another.

Convulsions dependent upon abdominal pain, due to indigestion from some error in feeding, or from having swallowed some substance which acts as a foreign body, should first be controlled by opium and then a cathartic given. And under this head may be included the irritation due to worms in the intestines, although where there are worms the convulsions are not always due simply to the pain. The object should be first to control the irritated nervous system, and then to remove the cause. There can be no objection to giving the opiate and cathartic together; indeed this is the plan I usually follow. If there is reason to believe that the irritating cause is in the rectum, or near it, and an enema is indicated, an opium should be given first, the child allowed to get sufficiently under the influence of it to control the convulsion, and then the enema may be given. I believe this to be better practice than to attempt to remove the cause before first quieting the nervous system. The very attempt to give the enema agitates an already over-excited nervous system. The opium is especialty indicated if the convulsions be due to earache, as is frequently the case. In giving opium for the control of convulsions, it is desirable to give it in full doses, and repeat it as often as every half-hour until they are controlled.

Convulsions due to malarial poison, although not attended with pain, yield to opium more promptly than to any other treatment. Having controlled the convulsions accompanying one paroxysm of malaria, the endeavor should be to get the child fully under the influence of quinine or some other anti-malarial agent before the time for the next paroxysm to occur. As bearing on this point I will read some extracts from a letter I have received from my friend Dr. Murdock, of Cold Spring:

"I have happened to treat a pretty large number of cases of convulsions occurring in quite young children, from eccentric causes, chiefly malarial. I saw the bulk of these several years ago, when malaria was very prevalent and severe here, and when, during July, August, and September, malarial convulsions were of almost daily occurrence in the practice of Dr. Lente and myself. The use of opium in some form, to control the convulsions until the paroxysm should pass over and sufficient time elapse to permit the attack to be broken up by quinine or other remedy, was a matter of almost routine practice with us. In those cases I came to give opium without hesitation, and found there was usually great tolerance of it. To a child six months or a year old, I would give perhaps five drops of McMunn's elixir every thirty or forty minutes until the convulsions were controlled or the pupil began to contract. I recall now one very severe case of convulsions (malarial), in which I gave between fifty and sixty drops of McMunn's, to a child four months old, within seven hours."

I quote from this letter to show the frequent occurrence of convulsions in children in malarious regions, the tolerance of opium, and the results of the opium treatment. Dr. Murdock, in the same letter, states that he never lost one of these cases.

Not only is there great tolerance of the opium in malarial convulsions, but in all cases of convulsions in which its use is indicated there is great tolerance. A sufficient irritation of the nervous system to result in convulsions would seem to demand a remedy of considerable power to overcome it.

I have referred to the lancing of the gums when dentition is the cause of the convulsions. I am aware of the differences of opinion among physicians as to the advisability of lancing the gums under any circumstances. I have no new facts to present on this much discussed question; I feel convinced that the eruption of the teeth is often attended with sufficient irritation of the nervous system to produce convulsions. If the gums are swollen and hot, they ought to be lanced. I will go further. It it is time for the eruption of a tooth, I believe the gum ought to be scarified over the spot, for often, I believe, the irration is due to the pressure deep in, and there may be no evidence on the surface of this pressure. It is contended by many that the tissues over the tooth harden after the lancing, and thus delay the advance of the tooth. I do

do not accept this view. It has been proven that the spongy tissues of the gums do not form a cicatrix which is harder than the original tissue. I wish to put myself on record as decidedly favoring the lancing of the gums when indicated. Whatever theories may teach us, or attempt to teach us, clinical observation, it seems to me, is conclusive to the effect that the lancing of the gums is frequently attended with marked relief. A mistake is often made in being satisfied when the gums are found swollen, and the observer looks no further. Every case of convulsions in children ought to be most carefully investigated, not only for positive evidences, but also for negative, to exclude causes as well as to find exact ones.

I am often asked by mothers, "What shall I do in case the baby has convulsions?"

As an opiate is indicated in the great majority of cases, I usually tell the mother to give paregoric if the baby is over four months of age, giving explicit directions as to the dose, and to repeat it every half-hour until the convulsions are controlled, or she has obtained a physician. If under four months of age, I direct to give a a mixture of bromide and chloral for which I give a prescription, in which each teaspoonful shall contain one grain each of these remedies and bicarbonate of soda. As before this age the convulsions, in the great majority of cases, are due to gastric or intestinal colic, this combination meets the indication, and the two seem to relieve better than either alone. To a child under six weeks, a teaspoonful may be given every hour or two in warm sweetened water. After six weeks and up to four months, double this quantity may be given every hour, or two hours, according to the frequency and violence of the convulsions. If there still remains indigestible food in the alimentary canal, it should be removed. In these young children, even though there be evidence of organic brain disease, I know of no better treatment than this combination of bromide and chloral. The mother usually says: "Of course, I must put the baby in a hot mustard bath!" to which I reply, "Of course, you must not." Now I dislike to criticise unfavorably a practice which has become traditional, and which is used by the large majority of physicians to-day, and every text book I have looked at recommends the hot bath in convulsions. I have great respect for traditional remedies, but I confess I very early became skeptical as to the advisability of the hot bath; and the more I have seen of it, the more I have become convinced that it is not good treatment. Almost invariably the child has one or more convulsions in the bath, the very agitation of giving the bath adding to the disturbance of an already excited nervous system. Perhaps many give it with the same feeling that a medical friend of mine does. When I spoke to him of the hot-bath treatment he said: "I always feel that I must show the mother I am doing something, and as the hot bath has been given from time immemorial, I always give it as the most harmless way of showing it." All of which may be very commendable; but if what I have stated early in this paper be correct, namely, that *any* convulsion *may* be dangerous, and if the view be correct that the hot bath usually produces one or more additional convulsions, then it is not a harmless thing to do. I do not believe the hot bath should ever be given children with convulsions, and I utter a protest against it. I do not deny the sedative influences of the hot bath and use it very frequently, but it is in convulsions that I am opposed to its use. In my instructions to the mother I put great stress on absolute quiet. I direct that the child shall not be forcibly held during the convulsions, as the mother or nurse is apt to do; that it shall be put upon a bed that does not squeak, that there shall be perfect quiet in the room, plenty of air, the room partially darkened, no opening and shutting of doors, no going in and out more than is absolutely necessary, and but one person in the room at a time. These directions should be given in all cases of convulsions. The object is to keep the nervous system as free as possible from agitation. Over active treatment is dangerous; at least it is uncalled for. The bromides again are indicated after the immediate convulsions have been controlled by opium, and where we wish to keep up a sedative influence on the nervous system, but do not desire to continue the use of opium. The bromides are indicated also in threatened convulsions. They are useful in cases of dentition, where the agitation of the nervous system is great; and especially if there have been convulsions with the coming or previous teeth. Some observers even go so far as to say that since we have the bromides, the necessity for the use of the gum lancet has been done away with.

There is a cause of convulsions in children which I do not remember to have seen referred to by any author, and which can be controlled better by the bromides than by any other remedy. It is well known that the itching of the skin in some cases of the exanthems, notably scarlet fever and measles, is intolerable to older children. I believe it is frequently the cause of convulsions in younger children. In these cases the bromides act most favorably. They seem to control the itching completely.

In some cases in which the bromides seem to be indicated, they aggravate the symptoms. I remember a case treated by Dr. Barker and myself, in which, after the immediate convulsions were controlled, we gave a combination of bromide with chloral with the hope of quieting the nervous system and producing sleep. Although given in quite large doses, and frequently repeated for thirty-six hours, the agitation kept

up and the child would only sleep a few minutes at a time. At the end of this time the bromide was stopped, and a single dose of five grains of chloral produced a sleep of ten hours, with the most happy results. In the convulsions of whooping cough the combination of bromide with chloral seems to give the best results; the bromide diminishing the quantity of blood in the brain, and the chloral relieving the spasm and producing sleep. If the child is much exhausted, along with these agents stimulants should be given, preferably alcoholics. Convulsions coming on in the course of any disease and depending on cerebral exhaustion are best controlled by stimulants. They are indicated in such diseases, particularly if there be a tendency to failure of heart-power. In the exhaustion which comes on in the course of a severe attack of summer diarrhea of children, convulsions are not infrequent. In such cases the stimulants need not be limited to alcoholics. Musk and camphor often do more good even than alcoholics.

Many cases of convulsions depend on elevated temperature. Some children's nervous systems are much more disturbed by elevation of temperature than others. I have seen children with a temperature of 105° with less constitutional disturbance than another with a temperature of 102°. Children will, as a rule, tolerate a high temperature much better than adults. Frequently no other cause can be found for the convulsion than the febrile movement. In such cases, quite recently the veratrum viride has been used most successfully. In its physiological action, not only is it a powerful vascular depressant, but it very decidedly diminishes the irritability of the spinal cord. From the reports of it thus far, in the treatment of convulsions in children, it is destined to a much more important place and more frequent use than it has hitherto had. It has one objection: it is liable to produce vomiting. But this can be to a great extent overcome by combining with it small doses of opium. I am able to testify to the good results in cases of convulsions where I have used the veratrum. Children tolerate relatively larger doses of the veratrum than adults. A child of six to eighteen months may be given two drops of the tincture every hour; and even if it does produce vomiting, it need not give alarm, because almost invariably when the vomiting occurs the temperature falls and a pulse diminishes in rapidity and the convulsions cease. If the temperature remains high and the veratrum fails to control the convulsions, then the cold bath is indicated. Coma is quite frequent with the convulsions in these cases of high temperature. The child is in imminent danger unless the temperature be soon reduced. Nothing is equal to the cold bath for this. As in other cases of high temperature, the fever must be brought down and kept down by the bath. I have named one more remedy—calomel. When a convulsion occurs at the beginning of an acute disease, or occurs in the course of an acute disease of the respiratory organs, I would give calomel; but in order to get its good effects a large dose must be given, that is, a sedative dose. To a child from one to three years of age give five grains. It usually produces not more than two to three evacuations from the bowels, and acts as a direct sedative to the nervous system. It will in many cases reduce the temperature, arrest the convulsive movements, and produce sleep. Along with the calomel, the veratrum viride is indicated; and if these two fail to reduce the temperature, the cold bath should be used.

In large cities, one cause of convulsions in children is heat stroke. It is responsible for many deaths from convulsions As in the adult, so in children there are two forms of heat-stroke: one form is characterized by a very rapid and full pulse, great elevation of temperature, marked redness of the face, dilated pupils and hot head. The cold bath is always indicated in this form, and unless the temperature is quickly reduced and kept down, death will ensue rapidly. I believe if the cold bath were more quickly and boldly used, many cases of this kind might be saved. The other form of heat-stroke is characterized by a rapid but feeble pulse, very little elevation of temperature, great pallor of countenance and usually quite profuse perspiration. This form is much less frequent than the first. The indications are to combat nervous exhaustion. This can be best done by stimulants.

With a view to ascertain if the records of the Board of Health, of this city, contained any facts bearing directly on this subject of the influence of heat-stroke in the production of convulsions in children, I consulted them. Although they did not contain any positive facts bearing on the question, I was informed by Dr. Nagle that the mortality from convulsions during the hot summer months was greatly in excess of that during the remainder of the year. I will give some of the facts which I did ascertain from those records.

During the six years from 1871 to 1876, there died from convulsions of children under one year of age, 3,392. From one to two years of age, 686. Making a total under two years of age. 4,078. These were all cases in which the death certificate simply read "convulsions," without including those in which a cause for the convulsions was given.

In 1878 there were 478 under 1 year.
1879 " 515 "
In these six years from 1871 to 1876 the total number of deaths among children under 1 year was.....51,452
Over 1 year and under 2 years.....17,810

Total under 2 years.....69,262

And of these, as I have stated above, 4,078 were from convulsions.

I begin the prophylactic treatment with the mother before the child is born. If she have had any children, and they have shown any tendency to the development of nervous troubles, she should be taught how to live in order that the children to come may have the benefit of what knowledge we have, and especially should great attention be paid to the health of the mother if she be of what is called the nervous temperament. Nothing extraordinary need be demanded of her. Her diet should be nutritious, but not too rich. She should exercise daily, short of fatigue. The wealthy are apt to eat too rich food, and to take too little exercise; and the poor are apt to be underfed, and to take too violent exercise. Her clothing should not be heavy and should be worn loosely; a difficult matter, I admit, when the demands of society are remembered. If she is anemic, she should have the proper remedies. If she is gouty or rheumatic or has any other blood disease, she should have remedies directed against these. Disturbances of digestion should be corrected. One of the most important points is to see that she has the proper amount of sleep. She ought to have eight or nine hours. The nerve sedatives should be given if there be no other way of inducing sleep; but they are to be avoided if possible. The physician cannot always control the habit of his patient. If he is consulted he can give advice. He is not always consulted sufficiently early to do full justice to the case, but he can often, by judicious advice, diminish the tendency to these disturbances of the nervous system in the child by the treatment before the birth of the child.

Prophylaxis in the child itself.

The very naming of some of the predisposing causes of convulsions in children will suggest their own prophylaxis. Deficient or improper diet taken daily, impure air constantly breathed, deficient exposure to the sun's rays, want of cleanliness, and want of exercise in the open air, all produce perversion of general nutrition; and if of general nutrition, then of the nervous system too. These suggest their own management. We have seen that the rickety diathesis predisposes to convulsions. Rickets can in many cases be recognized very early, and should always be treated. There are very few ills of children which are more productive of evil than rickets, if neglected; and few are more amenable to treatment. Codliver oil is almost as much a specific for rickets as mercurials for syphilis. Proper diet and proper sanitary surroundings aid much in the treatment. Among the children of the poor, as Gee and others have shown, rickets is found in so many cases of convulsions that its early recognition and treatment become all important.

The rheumatic diathesis is very frequently an accompaniment of convulsions. This is the case with other convulsive movements, as well as of chorea. There seems to be some special influence produced on the nervous system by the rheumatic blood. The special remedies against this diathesis are the alkalies and salicylic acid; sometimes the one, and sometimes the other, produces the better results. Even in quite young children, I am in the habit of using these remedies with good results. If there be anemia with the diathesis, as is very apt to be the case, then iron and cod-liver oil are indicated.

I have already said sufficient of the disturbances of the digestive organs to show the necessity of the greatest care and attention to them.

Children with very excitable nervous systems are those most apt to develop convulsions, if there be the exciting cause. Such children need to be specially watched to see that their nervous systems are kept free from excitement. Their sleep is all important to them; and yet how frequently is the habit of parents of going into the nursery in the evening to have a frolic with the little ones, just about the time for those little ones to go to bed. The temptation is great. They are the very children who are the most fascinating, they are the brightest and notice when very young. In fact they are apt to be precocious, and this precociousness is encouraged by the parents. The nervous system is kept in an almost constant state of excitement, sleep becomes poor, the child becomes more excitable, and then comes the train of disturbances of the nervous system. Children are thus abused, if I might use that term, because of the ignorance on the part of parents as to its ill effects. It is the physician who should teach them the management of their children, so as to prevent the development of such disturbances.

Children who manifest what are called "fits of temper," ought to be more carefully studied to ascertain whether it is mere wilfulness, or some disturbances of the nervous system not wholly under the control of the will, and for which the child may not be altogether responsible. Certainly some children display these much more violently than others, and it is not always because of want of proper discipline on the part of parents.

The treatment of the patient subsequent to the attack. If the cause has been removed, and we can discover no sequels, the treatment is simple. If there exist any of the predisposing causes I have referred to, they claim appropriate treatment for their removal. The child must be put in the best possible physical condition, and kept so.—*American Obstetrical Journal, July* 1880.

GLYCERIN is most easily incorporated into ointments by using a mortar which has been first thoroughly warmed by hot water.

SLEEPLESSNESS FROM THOUGHT.

The loss of power to cast off the burden of the day, and find rest in unconsciousness or forgetfulness at night, is one of the greatest of personal afflictions. Only those who have endured it know how terrible this experience, in its worst form, may prove. There is no escape anywhere, no respite, no—even momentary—lessening of the strain on the mind, when sleep is impossible; and the worry is increased when the mind, instead of finding ease, falls into a state in which every source of disquietude seems exaggerated. Sleeplessness of this sort is often the prelude—and it may be either the first indication, or itself the cause—of insanity. The condition into which the mind is thrown when endeavoring to sleep is essentially unsound, and tends to disease.

Physicians realizing the peril of the position give their patients a drug of some sort to procure sleep. They do this with the double purpose of breaking the habit of wakefulness when this has been formed, and of rescuing the mind from a condition in which it is unsafe. Those who adopt this treatment point to cases in which after a few doses of a sleep-potion, the sufferer has regained the power of falling asleep naturally. Such patients have undoubtedly been benefited by something, but it is still an open question whether the relief may not be due to mental influence rather than the medicine. However this may be, the point in which we are chiefly interested is the state which precedes and seems to bar sleep. We recognize its perils; in what way or by what means may they be avoided?

Examined closely, the condition of thought-worry preventing sleep will be found to be one in which the thinking faculty is beyond control. We may start a subject, but we cannot either keep the attention fixed, or compel thought to take rational and comparative views of the objects presented to it. There is a tendency to exaggeration, which the judgment is powerless to restrain or correct. There is at the same time another peculiarity, which throws more light on the nature of the condition, namely, an impulse to *repeat;* the mind goes over the same ground again and again. The explanation of this phenomenon is simple and suggestive; there is a perpetual endeavor to sleep, and although the circumstance may not be recognized, each train of thought breaks off at the precise moment when it ought to become a dream, and every recommencement is a new departure after a fresh act of wakefulness. The condition we are describing occurs on the road to sleep when the way is barred. The point to make clear is, that it is quite as likely the distressing thoughts of a sleepless person are the consequence of the wakefulness as that the inability to sleep is occasioned by thinking.

Thoughts, passing through the mind when the brain is falling into state of sleep, ought to be of a nature to change easily into a dream. The problem is to carry the mind over the boundary line, and convert what is conscious but uncontrollable thought into a dream. If this can be accomplished naturally—that is, without the aid of drugs, which stupefy the consciousness and burlesque the state of sleep rather than produce it—the subject of thought will be soon changed, and oblivion, or at least forgetfulness, induced. The solution of this problem may be attempted by either of two processes:

1. A particular thought, or train of thoughts, present to the mind may be seized upon at the moment of their occurrence, while as yet they are manageable, and turned into grotesque, thus preparing them to become the material or centre of an amusing dream. This method is less easy to describe than to carry out: but experience proves that it is abundantly efficacious. Fancy must be directed to play with the thought and weave a little scene or story out of its slenderest threads. Just enough effort to preserve the connection of ideas is necessary, or the expedient will fail, thought reverting to its former worrying courses. The secret of the method lies in holding the thought fixed, and projecting the train of ideas by fancy on a line which may carry it into dreamland, the dreaminess of thought inducing sleep. This is a perfectly natural and rational process, and it is harmless, whereas the production of stupefaction by drugs is artificial, and more or less perilous to brain and mind. The one lulls the consciousness to sleep, the other overpowers it with a poison.

2. The alternative mental method by which sleep may be sought consists in giving thought a monotonous task in the way suggested by those who can win sleep by counting, repeating, and the like expedients. This is more difficult in really bad cases of "sleeplessness from thought" than that first described, in which an idea, or train of ideas, already present to the mind, is converted into grotesque. The mind is not easily taken out of itself when engrossed with worrying topics, and, though fancying cornfields and rising tides, or counting and piling up packages, or smoking an imaginary pipe and watching the clouds of tobacco smoke rise over the head, so as to direct the eyes upwards as in sleep, are good enough devices, it is not always practicable to shut out distressing or plaguing ideas, and concentrate the attention on these meaningless conceptions for the full success of which the sleep-wooer needs a vacant rather than a harassed mind. It is an effort quite as great as the wakeful, but worried, can make, to turn a troublesome thought into grotesque imagery, but this is easier than to call up a wholly new and incongruous idea.

Perhaps the most general cause of sleepless-

ness of the kind we are considering is the habit of carring work over from day to day, instead of parcelling it out so as to create natural breaks in the enterprise, when the mind can rest with the consciousness that duty has been discharged, and a task accomplished. Nothing so much conduces to sleep as the feeling of contentment, and this feeling can generally be produced by giving the mind a tale of work in the morning which may be completed before the time of rest. When the obligation has been fulfilled, the mind seeks, and generally finds, repose as the recompense of its toil. To break off suddenly in the middle of labor, and expect to command sleep at call is unreasonable.

It is a common mistake to plan the business of the following day at night. This is like turning over a new page when the book should be closed and laid aside. The task of laying out schemes for the future ought to be the first duty on waking, and if it were then discharged, many mischievous dreams, and much of the feeling that a whole night has been spent in dreaming, would be avoided. Each night should see the book of life closed, with the feeling that the account has been duly made up. It is the task of the morning to carry over the debit or credit and start afresh. Better by far finish the work of the day, close the record, and seek rest. When the consciousness returns examine the situation, lay plans for the future, and while the impression lasts act on it.

Sleeping and waking are states which are mutally dependent, and must succeed each other in orderly sequence if health is to be preserved. Life is very much an affair of rhythm, and a sound mind in a sound body can be secured only by concord, method, and orderly self-control, by the will.—*J. Mortimer Granville, M.D., in "Common Mind Troubles."*

TREATMENT FOR STAMMERING.

Dr. W. B. Hammond, in the *British Medical Journal*, gives the following practical hints on this subject:—

If the attention of the stammerer can be diverted from himself and his articulation, he will often speak to others as calmly and as perfectly as he does to himself when alone. Now, there are various ways of accomplishing this object, but the one that I found most effectual was the performance of some slight muscular action synchronously with the articulation of the difficult syllables. The words that troubled me most were those that began with the explosive consonants—those that require the sudden opening of the lips for their enunciation—*b*, *p*, and *t*. I could no more have repeated the alliterative lines, "Peter Piper picked a peck of pickled peppers," etc., to other persons without stammering than I could have walked to the moon, though perfectly able to say the whole piece through without a flaw when speaking alone. With each troublesome word, especially with one beginning a sentence, I made some slight motion with the hand or foot, or even with a single finger, and I found that this plan enabled me to get the word out without stammering. With the enunciation of "Peter," for instance, I would tap the side of my body with the hand just as I opened my lips, and the word was articulated without the least halting. In the procedure, the attention is diverted from the effort to speak to the performance of the muscular action mentioned, and hence the speech becomes more automatic than it is with stammering. It consists in efforts to render the speech automatic. No orator thinks of his articulation when he is making a speech; no one in ordinary conversation thinks whether or not he will be able to pronounce a certain word, or to acquit himself well in the management of his tongue and lips. His mind is concerned with his thoughts, with what he is going to say, not with the manner in which he will articulate, and the more thoroughly we can succeed in bringing stammerers into the same way of procedure the more successful shall we be in our efforts to cure them.

THE ORIGIN OF THE STETHOSCOPE.

M. Chereau, in a French Medical journal, gives the following interesting history of this useful little instrument:—

One day, as Laënnec was crossing the court of the Louvre, he observed some children who, with ears applied to the two extremities of a long beam, were transmitting reciprocally the light sound provoked by the stroke of the finger against the opposite end. In the intermediate space no sound was perceptible. Thecareful observer reflected, and soon, like Archimedes, he was able to exclaim, "I have found it!"

Some time afterward, in fact it was in 1816, being consulted for a young woman who presented general symptoms of heart disease, in which percussion gave small results on account of the stoutness of the subject, the age and sex of the patient forbidding his listening directly with the ear, he remembered the children of the court of the Louvre. Immediately he took a paper copybook, of which he made a roll closely pressed together, placed one end of it upon the chest of the young woman, applied the other to his ear, and found with pleasure that in that manner he could perceive much more clearly the beats of the heart. So a play of children and regard for modesty were two facts which led to the discovery of medical auscultation.

Laënnec then modified this roll of paper,

giving it more firmness, limiting its length to a foot, its diameter to sixteen lines, smoothing the two extremities with a file. Then he made other experiments: he constructed a tubular cylinder of gold-beater's skin, which he filled with air by means of a spout, and of which the central opening was maintained by means of a support of pasteboard; he made an experiment with glass and metals; finally he stopped with a cylinder of light wood, pierced in its centre with a tube, expanded at the extremity in the form of a funnel. We have seen in our youth the original stethoscope of Laënnec. In truth, it had a size altogether useless and well adapted to terrify patients.

ERGOT IN CONGESTIVE DYSMENNORRHŒA.

Mr. H. B. Blackburn writes to the *Lancet*, Jan. 31st, 1880 —

A year ago I was called to see an unmarried lady, aged 28, who was in great pain, and had been so for about four hours with dysmennorrhœa. I learned that for about twelve hours before the commencement of each period she suffered extreme pain, becoming worse just before the beginning of the flow. She would often lie down and roll about in the greatest agony. Her two unmarried sisters suffered in the same way and as much, and the same was the case with one married sister until her marriage. All three were strong healthy-looking girls, though all were the subjects of that common affection of women, chronic constipation, the bowels often remaining for a week together without acting. I am not now going to speak of the radical treatment of these cases; but having been called in during a paroxysm of pain I had to endeavor, in the first place, to relieve it. I accordingly prescribed ergot, in doses of half drachm of the liquid extract every quarter of an hour. The pain began to diminish before the second dose had been taken, and after the third the flow had commenced, and the pain entirely gone. It may be objected that I am calling what was only *post hoc, propter hoc;* but this is not so, and for the following reasons: On this occasion the young lady had been in pain only about four hours before treatment, so that the duration of pain was now only about five instead of twelve hours, as on previous occasions. Secondly, she and her sisters have ever since kept a bottle of medicine, according to prescription, in the house, and they have recourse to it on each occasion, at the very earliest warning of the period, and they hardly suffer pain. I am of course disposed to treat them radically—*i. e.*, by prescribing for and giving instructions as to the bowels, to endeavour to do away with the necessity for specific treatment of the symptoms, but they are perfectly satisfied to have a remedy for these on each occasion.

Now a rational system of therapeutics is far more satisfactory than an empiric one. I may, therefore, be excused if I draw attention to my theory of the action of the drug in these cases, my recourse to it in the first instance being founded on this theory.

Ergot is supposed to cause contraction of the muscles of organic life. I do not compare its action in cases of congestive dysmennorrhœa to that on the uterus at term. I suppose that here it acts not on the muscular fibres of the uterus so much as on those of its vessels; contraction of the uterine small arteries being the cause of relief from congestion, then, the congestion and general pressure being removed, the menstrual flow comes on.

AN EMETIC FOR INFANTS.

Dr. S. W. Smith (British Med. Journal) writes: I beg leave to record that half a teaspoonful of glycerin acts as a simple and efficient emetic for infants. Perhaps some of your readers can confirm this by future experience.

A NEW REMEDY FOR EPILEPSY.

Dr. Shields, in the *Southern Clinic*, reports two severe epilepsies cured by white peony-root. He uses the remedy as follows: Root of the white peony, ℥ x; boiling water, cong j; boil to two quarts and filter. Of this decoction give about one ounce three times a day.

DOUBLE PNEUMONIA AND ABORTION.

Dr. L. A. Rutherford reports the following interesting case to the *Medical and Surgical Reporter*. The case is of so great interest that we publish it in full:

On the 14th of March I was called to see, with another physician, a white woman, aged thirty-three; skin very hot; both cheeks flushed; eyes suffused; respiration about twenty-three; pulse 120. Complained of severe pain in both sides of the chest. Cough constantly. Both sides dull on percussion, right side more involved. Respiratory murmur at upper part of both lungs very loud, accompanied by some fine crepitation. Tongue very broad and flat, deeply furrowed in center, base covered with a dense, dirty, brownish fur; lips red; breath very offensive. Diagnosed double pneumonia. Ordered a large mush poultice, to cover both sides of the thorax, to be as hot as the patient could endure it. Acetate of ammonia, in one drachm doses, to be given every three hours. Five grains of dextro-quinine every six hours. Eleven A. M. next day pulse was 120. Right lung more involved, pain more acute, respiration more rapid, mouth dry, tongue more brown, fissure deeper, heat of skin 103½. Ordered poultice to

be continued, and increased my dose of dextro-quinine to twelve grains, to be given at once, and repeated in four hours. At 9 P. M. saw the patient; complained of diarrhœa. Three doses of dextro-quinine were taken, and the symptoms were much improved. For the diarrhœa a few drops of Monsell's solution of iron were ordered every hour. Nourishment principally consisting of milk. Dextro-quinine was given only twice during the night. On the morning of the twelfth symptoms much improved, though the dullness was as great, but heat and restlessness abated somewhat; diarrhœa under control. During the next two days the acetate of ammonia was continued in one drachm doses, every four hours, five grains of dextro-quinine to be given three times a day.

On the fifteenth I was called in haste to her. Found pulse 135, respiration very rapid, skin very hot; two slight convulsions came on while I was with her. Ordered beef tea and milk to be given frequently in small quantities. Tincture of veratrum was given in small doses every hour. Four o'clock I saw her again; was told that labor pains were on her. She was four months advanced. Made a vaginal examination, and found the os dilated, perineum soft and yielding, but little hemorrhage, and before I left the house the fœtus was expelled, minus the placenta. The shock this abortion inflicted on the system was fearful; she became semi-comatose, pulse went up to 150, small and thready, breathing diaphragmatic. Several convulsions then came on. Hard ones were on her in twenty minutes or more. Face was pale, skin of body intensely hot, while the extremities were cold. Something had to be done forthwith, and as I put about as much faith in dextro-quinine as most men do in a good brake on an express train, I poured out what I thought to be a good twenty-grain dose of that drug, which was dissolved in a solution of tartaric acid, and poured it down her throat. This was repeated in an hour. It was certainly marvelous to witness the effect produced. In two hours the pulse was reduced to forty beats, and the skin much cooler. Though the convulsions did not entirely subside in that time, they were very much lessened. In three hours more I gave her ten grains again; by night she recovered her senses. Next day I found, to my surprise, that there was very much less solidness of lung than at any other time since I first saw her. I removed the placenta with a hook this day; but very little hemorrhage occurred at any time. The dextro-quinine was now combined with Squibb's tincture of iron, five grains to thirty drops every three hours. From this time on the convalescence went on uninterruptedly. I make no comments on this case, but would ask the attention of the profession to the line of treatment followed, which I believe will be found a successful one in cases both of double pneumonia, pleuro-pneumonia, intermittent fever, and allied diseases.

DEXTRO-QUININE IN PERIODICAL HEMICRANIA.

By C. A. Bryce, M.D., Editor of the Southern *Clinic*, Richmond, Va.

I was called to see a little son of Mr. Charles Lankford, of this city, several months ago, who complained of headache in the right side of his head and through the right eye. His sight was imperfect while suffering from the pain, and there was decided periodicity about the attacks, being much worse every other day; his nose would bleed very often when he was troubled with the headache. From the history of the case I regarded this as a neuralgic hemicrania of malarial origin. I accordingly prescribed quinine, iron and hyoscyamus; I found no improvement, but an increase of the head trouble with more hemorrhage from the nose. I then put him upon quinine alone; his head continued to be congested and nose would bleed frequently. I then discontinued the quinine and put him upon ergot and bromide potassium. This seemed to check the hemorrhage to some extent but the headache and imperfect vision remained. I then discarded all remedies and put him upon 3 gr. doses of Dextro-Quinine (K. & M.), three times a day. I am pleased to report that after the second day's use of Dextro-Quinine the hemicrania was entirely relieved, nor has it since returned; the eyesight became perfect, the bleeding from the nose has occurred but once since.

This boy could not take quinine without producing congestion and necessarily hemorrhage. Dextro-Quinine obviated the difficulty and cured my patient.

SYMPATHETIC NERVOUS COUGH OF PREGNANCY.

℞ Spiritus ætheris, f ʒ iij;
Tinct. chloroformi comp., f ʒ i;
Acidi hydrocyanici, ♏ xv;
Liquoris morphiæ sulph., f ʒ i;
Tinct. cardamom. comp., f ʒ vi;
Aquæ, ad f ℥ viij.—M.

A sixth part every six or eight hours.

Ergot in Pharyngitis.—In chronic pharyngitis, where the blood-vessels of the pharynx are enlarged and tortuous and the secretion moderate, the following is recommended:

℞. Ergotine.....gr. xx.
Tinct. iodine.....fl. ʒ j.
Glycerine.....fl. ℥ j. M.

Sig. Apply to the pharynx freely twice daily with a camel's-hair brush.

TREATMENT OF PHAGEDENIC CHANCRES BY MR. JONATHAN HUTCHINSON.

The sore is freely and carefully cauterized with acid nitrate of mercury, and the patient made to sit eighteen out of twenty-four hours in a warm hip-bath. He states that phagedenic chancres often occur in persons who have had syphilis before. Mr. HUTCHINSON warns his class not to tell their patients that syphilis cannot occur twice. A second attack of syphilis is usually peculiar. It is seldom in such cases that a well-characterized indurated sore is developed, and very frequently the sore sloughs. The phagedena may prevent the occurrence of constitutional symptom, if it comes on early enough. He has seen, however, severe constitutional symptoms follow a phagedenic sore in a man who had gone-through syphilis some years before. Indeed some of the worst cases of syphilis rupia he has seen occur under these conditions. When syphilis runs its most usual course—a well-indurated sore, a symmetrical copious papular or blotchy rash, and symmetrical sores in the tonsils—you may assume that it is a first attack. Second attacks are almost always modified, and are either much worse or much more slight.—*North Carolina Medical Journal.*

VASELINE AS A BASE FOR OINTMENTS

Dr. P. H. Cronin, in the *St. Louis Courier of Medicine*, gives some practical suggestions with reference to the preparation of unguents with vaseline as a base. Being slightly soluble in alcohol and insoluble in water, tinctures and aqueous solutions do not combine with it. It mixes with glycerin, but on the addition of water separates. Such substances as iodide of potassium, chloral hydrate, iodine, or tannin, should be finely triturated and thoroughly mixed with the vaseline. Chloroform ointment is prepared by melting the vaseline in a wide-mouthed bottle in a water-bath, at 97° Fahr., adding the chloroform, corking quickly, and shaking briskly till cold. Gynæcologists will find that by triturating borate of sodium to a fine powder, and mixing with a little glycerin before adding to vaseline, they will have a fine preparation for vaginal examinations, instead of the gritty, "salted butter," preparations which they sometimes obtain from the pharmacist.

A SIMPLE METHOD OF EVACUATING SMALL CALCULI.

Dr. Mercier recently demonstrated before the Société de Médecine of Paris an easy and practical means of getting rid of small vesical calculi. It consists in making the patient lie on his belly; then the calculi fall by their own weight into the anterior part of the bladder. The patient is then allowed to rise slowly on to all-fours. He micturates in this position, and the calculi, which have not yet had time to return into the *cul-de-sac* behind the prostate, are carried away in the stream of urine.—*Medical Press and Circular.*

REMOVAL OF MOLES (NÆVUS).

According to Dr. Sigler, they may be removed by means of croton oil in the following manner. Push a number of needles through a cork, so that the points project 3 to 4 millimetres. Dip the points in croton oil, then insert them in the mole and withdraw. This is a sort of Baunscheidtismus. A scab will form upon the mole; and after it has dried up and dropped off, the operation is twice more repeated.—*Pharm. Centralh.* and *Ph. Zeit.*

TREATMENT OF HEMORRHOIDS.

Prof. H. C. Wood, of Philadelphia, says: "The most extraordinary results in internal piles often follow injections and retention in the rectum after each passage, of a half-ounce to an ounce of a saturated solution of chlorate of potassium with a few drops of laudanum. Of course the usual systemic treatment must be carried out, and the free use of water injections after the passage, but before the chlorate of potassium, is very serviceable."—*Phila. Med. Times.*

TO PREVENT HEADACHE FROM TINCTURE OF IRON.

A writer in the *Boston Med. and Surg. Jour.* says: "During the administration of the tincture of the chloride of iron, functional derangements of the stomach and liver often arise, with furred tongue, impaired appetite, headache, etc. These symptoms rapidly disappear upon adding one-half grain of the chloride of ammonium to each minim of the tincture. This combination is useful in cases of heart disease accompanied by anæmia and debility.

IODOFORM IN CHRONIC ARTHRITIS.

Prof. Gubler employed ten parts of iodoform to twenty of sulphuric ether and twenty of alcohol. When dissolved the liniment should be applied to the diseased joint by means of a pencil. The parts should then be covered with a piece of oiled silk. For the same affection Dr. Cottle dissolves iodoform in chloroform.

HOARSENESS—BORAX AND NITRATE OF POTASSIUM.

These two salts have been employed with advantage in cases of hoarseness and aphonia occurring suddenly from the action of cold. the remedy is recommended to singers and orators whose voices suddenly become lost, but which by these means can be recovered almost instantly. A piece of borax the size of a pea is to be dissolved in the mouth about ten minutes before singing or speaking. The remedy provokes an abundant secretion of saliva, which moistens the mouth and throat. This local action of the borax should be aided by an equal dose of nitrate of potassium, taken in warm solution before going to bed.—*La France Médical.*

ADMINISTRATION OF CASTOR OIL.

The following method of administering castor oil is recommended by M. Potain, and described in a recent number of *Le Practicien:* An orange is cut in halves, and after removing the pips, the juice of one half is pressed out into a tea-cup. The oil is poured carefully on the top of this juice, and on this again the juice of the other half of the orange is squeezed out. The oil remains between the two layers of juice in the shape of a meniscus, and may be swallowed without any unpleasant taste.

TREATMENT OF PNEUMONIA.—Commenting on a case of pneumonia in which speedy recovery had followed the use of ergot, Dr. Handfield Jones states that the action of the ergot seems to have been beneficial, though he does not attribute the cure solely to its agency. Ordinary pneumonia runs a determined course, the inflammatory processes terminating by more or less rapid defervescence about the sixth or seventh day from the initial rigor, while the exudation undergoes resorption sooner or later, according to the energy of the vital powers. Results which are therefore due in reality to the natural course of the disease must not be attributed to the remedies employed; moreover, any means which affect injuriously the strength of the patient, especially those which enfeeble the heart, must be carefully avoided. Though the disease cannot be cured, its severity may be materially mitigated, and life may in some cases be preserved. Ergot and liquor ferri perchloridi may check and control the inflammation, opium may allay the pain, and calm and steady the nervous system; bark and ammonia with wine may give tone to the failing heart, especially in the collapse of the crisis; effervescing salines, or brandy and soda-water with or without a dose or two of calomel, may quiet gastric irritation, and enable the patient to take food better; quinine in large doses, or the cold bath may serve in dangerous hyperpyrexia. Dr. Jones believes that no risk should ever be incurred with the idea of cutting short the disease. He also finds that ergot has to a certain extent disappointed his expectations, when employed in the various inflammatory affections, and of those more especially in bronchitis.—*British Med. Jour.*

THE TREATMENT OF PULMONARY HEMORRHAGE.

The case before you is one which has just come in, suffering with hemorrhage, and reports having lost two basinfuls of blood by expectoration. What is the best means to pursue for the arrest of pulmonary hemorrhage? The very best remedy, in my opinion, is what we here constantly employ—Squibb's extract of ergot, or ergotine, as it is termed. Of this, as much as twenty or thirty grains may be given hypodermically, although so large a quatity is seldom necessary, and it will generally suffice to introduce five or six grains. It is exceedingly difficult to decide whether any remedy is efficient in this condition, since the hemorrhage constantly subsides spontaneously, and any drug that happens to be given at the time, of course, gets the credit; but the stopping of the spitting of blood so often follows the injection of ergot that I have no doubt that these cases are benefited by its administration. Another remedy is ipecac. It seems strange to use it in pulmonary hemorrhage, but it is one of the best means that we have. In causing nausea and vomiting it affects directly the pulmonary circulation. You should give enough ipecac to cause nausea, and be indifferent whether it causes vomiting or not. One of the dangers of the condition is that the blood will remain in the air cells and smaller tubes and close them, and thus set up irritation and further mischief. The administration of ipecac has the advantage of clearing the lobules, and at the same time it has an influence upon the circulation, which makes the vomiting entirely safe. He shall have—

℞. Extract ergot, fluid, ʒ ss-j
Extract ipecac, fluid, M v. M.

Every three or four hours.

Ice should be applied to the chest, and pieces of ice allowed to melt in the mouth. The patient is to be kept as quiet as possible, in a semi-recumbent posture. A very common household remedy is table salt, and it is not without effect, but ice is more valuable. A large piece of ice placed at the nape of the neck will sometimes succeed, especially if followed by hot water. The quick alternation of heat and cold produces

a most decided contraction of the arterioles, and is better than cold alone.

If the hemorrhage prove persistent we may employ blood letting, in order to quickly reduce the blood pressure.—*Prof. Barthalows' clinic in Jefferson College Hospital, Philadelphia.*

A CLINICAL LECTURE ON AMENORRHEA AND DYSMENORRHEA.

Delivered at the Hospital of the University of Pennsylvania.

By WILLIAM GOODELL, M.D.

[Special Report.]

AMENORRHEA FROM TORPIDITY OF OVARIES.

This woman has not seen her menses for the past four months. She has one child and has had one miscarriage. This child was born about eight months ago, after a very difficult instrumental labor. The woman got out of bed in the course of a few days and went about her household work as usual. She has been in the habit of working with bare feet, did so, in fact, just after her last child was born. She tells me, too, that she has been imprudent in other ways. She has a great deal of leucorrhea, which is greatly increased in amount just about the time her menses should appear. This seems to be the only kind of compensatory vicarious hemorrhage to which she is subject. She has never vomited or spit up any blood, has no piles, and has never been troubled with epistaxis. There has never, so far as she knows, been any blood in her stools. In weight she has gained enormously since she first had this trouble. She thinks she is fully one hundred pounds heavier now. There is a truly enormous deposit of adipose tissue all over her body. If I were alone with the woman I should question her closely with regard to her sexual appetite, and I should most probably find that she had but very little sexual desire.

Acting on the belief that the case is one of amenorrhea from torpidity of the ovaries, I shall order the following prescription for the patient, and ask her to return and report progress in the course of a week or so:

℞ Ex. aloës..... ʒ j;
Ferri sulph. exsic..... ʒ ij;
Asafet..... ʒ iv.
M. et in pil. No c, div.

Sig. One pill after each meal. This number to be gradually increased to two and then to three pills after each meal.

If the bowels are at any time over-affected the patient must stop and begin again with one pill after each meal.

AMENORRHEA FROM ARRESTED DEVELOPMENT.

This child is fourteen years of age, and comes to us complaining of arrest of her menses. Until she was thirteen and a half years old she lived among the mountains in the interior of the state. While there she was always regular and her general health was excellent. About a year ago she came to Philadelphia and was put to hard work. No sooner was this change made in her habits and mode of life than she began to break down. She feels and looks very miserable. The skin under her eyes is quite black, owing to impaired oxidation of carbon She is anemic and chlorotic. It is very easy to see what has brought on this suppression. She has been breathing impure air, has been overworked, and is getting no sunshine.

What treatment shall I recommend? She must go to bed early, eat wholesome food and get as much fresh air and sunlight as possible. The best remedy would be for her to go back to her home among the mountains for a month or so, but she says this would be impossible.

In cases such as this one I have had the very best results from the constant use of Blot's pill, as recommended by Niemeyer:

℞ Pulv. ferri sulph.....
Potas. carb. puræ ..... } aa ʒ ij;
Muc. tragacanth.....q. s.
M. et in pil. No. xlviii div.

Sig. To be given daily in increasing doses until three pills are taken after each meal.

This gives the large quantity of twenty-two and a half grains of the dried sulphate of iron per diem.

If these pills give rise to constipation I use this formula:

℞ Pulv. glycyrrh. rad.....
Pulv. sennæ..... } aa ℥ ss;
Sulphur. sublm.....
Pulv. feniculi..... } aa ʒ ij;
Sacchar. purif..... ℥ jss. M.

Sig. One teaspoonful in half a cup of water at bedtime.

In cases such as this, where the suppression is due to change of habit and loss of health, tonics are indicated. When the suppression comes on suddenly, from cold or exposure while in the midst of the menses, and is accompanied by severe lumbar pains, our treatment would be different. We should then place the patient in a mustard hip bath, administer Dover's powder, put her to bed, and give her hot drinks to provoke copious diuresis and diaphoresis. Chronic uterine trouble is likely to supervene if we do not act promptly in such cases.

DYSMENORRHEA.

CASE I.—M. F., aged twenty-seven (col'd), unmarried, Has never had any children. The dysmenorrhea at her monthlies has been very severe, and has always confined her to bed at those periods. She tells us she also suffers from great tenesmus at times. When just twenty years of age our patient injured herself by lifting a heavy weight, and so produced a retroflexion

of the womb. This condition, together with an already abnormally narrow cervical canal, has been the cause of all the trouble.

Before going any further, however, I will first make a careful examination. There may be a fibroid tumor of the womb, for this is a very usual occurrence in young colored women. I find that the womb is very much out of its place, but I am sure that there is no tumor. I will introduce a speculum, and I find that the external os uteri is very small. It is what is usually known as a pin-hole os. I dilated it last week, but it seems that I did not dilate it sufficiently. In cases of this nature, where the os is so small, you will generally find it necessary to seize and hold it down with a pair of uterine tenacula, and be sure that you purchase a stout pair.

I introduce the sound, but experience great difficulty in coaxing it through the internal os uteri. The measurement which I get shows the womb to be about two and a half inches in length. No matter how much bent the cervical canal may be, you can usually introduce the sound after two dilatations. I am going to dilate the cervix again to-day. It is so difficult to insert the dilator that I am going to use this curved probe as a guide. In passing a dilator into the cervix of a retroflexed womb always pass it with the curve downward. Pass it in up to the fundus of the womb, and then withdraw it half an inch before dilating. When the cervix has been dilated to the desired extent do not attempt to pull the dilator out without closing it, for you may seriously lacerate the external os in so dong. Stop the administration of ether when you have introduced the dilator, and leave the instrument in the canal until the woman begins to show some uneasiness; this serves the double purpose of bringing the patient more rapidly out of the influence of the ether, and also makes the operation more permanent and satisfactory.

Some very excellent authorities advise incising in these cases, but I think that this practice is open to serious objections. There may be copious hemorrhage, and there very often is a resulting permanent deformity of the cervix. There is always a little bleeding, indeed, after the dilator has been removed, but never any serious hemorrhage.

CASE II.—Some time since a new plan of treating dysmenorrhea was very highly recommended to me. It consisted in taking pieces of slippery-elm bark, whittling them to the size of matches, tying a string to each of them and packing the cervical canal with them. It struck me at the time as a very promising method, and I made up my mind to give it a trial in the first case of dysmenorrhea that occurred in my hospital practice. That case happened to be the one that I now bring before you. I put the slips in three times; after removing them the third time the woman had a severe attack of acute peritonitis.

I have had the woman brought into the ampitheater this morning, and shall insert my finger in her vagina and move the womb about gently, to see if any pain or plastic adhesions remain. Since the attack of peritonitis she has experienced a great deal of pain in passing her water. There has also been a considerable amount of leucorrhea. I intend to pass a sound very gently. It stops at the internal os. There is not much tenderness at the external os and it is quite roomy, so that the slippery-elm did some good after all.

What is the best treatment under the circumstance? I will tell this woman to put a dram of chlorate of potassium in a pint of water when she goes home, and to syringe her vagina out well with this solution. She had better use a fountain reservoir for this purpose. The water should be of such a temperature that she can just put her elbow in it. The reservoir should be put on the mantlepiece and the water conveyed into the vagina through a piece of rubber tubing. The patient must pursue this treatment steadily for a month's time, and then return and report progress. When the woman comes back again at the end of the month I shall make an application of carbolic acid to the fundus of the uterus. I shall then introduce an Elliot's repositor, and turn the handle of the instrument. The womb will thus be carried in the same plane into a position of retroflexion. When you use an Elliot's repositor you must work very slowly or you will cause the patient a great deal of needless pain. Do not introduce this instrument oftener than once every four days, or every week. If you persevere patiently you will generally succeed in completely reducing the displacement.—*Louisville Med. News.*

DIGESTION AND ABSORPTION IN THE LARGE INTESTINE.

There has always been considerable uncertainty in regard to the question whether the large intestines are capable of digesting food. This power has been absolutely denied by several authors, as Blondlot, Frerichs, Braune, Funke, and Quincke, while others, as Zander, Schiff, and Eichhorst, have asserted quite as positively that the fluids of the large intestine are able to digest both albumen and starch, the latter being first changed into sugar. Again, in regard to the form under which these substances may be absorbed in the bowels, opinions are also at variance; some claiming that the albumen must be first changed into peptone before it can be taken up, and others that fluid albumen may be, as such, absorbed directly. A similar diversity of opinion prevails regarding the ability of the intestines to absorb fats.

Some recent experiments by Drs. Czerny and Latschenberger, of Freiburg, throw some light

upon these questions. The experiments were made upon a man who, through a malformation, had the anus situate in the left inguinal region, opposite the sigmoid flexure. The rectum was so separated from the intestine above that matters could be introduced into it by the anus, and again washed out by a stream of water from above as from a retort. Various articles of food were thus introduced and experimented with, and the results which were obtained are thus stated:

"*The human large intestine and its secretions have no digestive action upon either coagulated or fluid albumen, nor upon fat.* Coagulated albumen, although left in the intestine for two and a half months, was not appreciably altered, nor was any change effected in fluid albumen in solution. After pouring in an emulsion of fat, the latter rapidly collected at the top, flowing together in large drops. Hence the large intestine not only has no emulsifying effect, but tends to destroy an emulsion already formed.

"The portion of intestine experimented upon absorbed 40 to 50 grammes of water within seven hours.

"*In the normal condition, fluid albumen in solution in water can be absorbed unchanged, as such, by the large intestine, and will be taken up in larger quantity the longer it remains.* Any state of irritation, as, for example, catarrh, hinders absorption or prevents it entirely. Chloride of sodium likewise interferes with absorption, but is taken up itself by the intestine in spite of an irritated condition and impaired power of absorption. The albumen of the hen's egg is in an unfavorable form for absorption. When the white of an egg is introduced into the bowel unmingled with water only a very slight portion will be absorbed, and the same is true of it, even when beaten into a froth.

"*Fat in emulsion is absorbed by the large intestine, and the amount actually taken up is proportional to the concentration of the emulsion and the length of time that it remains in contact with the absorbent surface.*

"*Starch, when hydrated, is absorbed by the large intestine*, but whether directly as such or after being changed into sugar the experiments did not determine."

It was ascertained that $1\frac{1}{2}$ grammes of albumen in a $4\frac{1}{2}$ p. c. solution could be taken up in 24 hours. Since the portion of intestine experimented with was not over one-fourth the length of the whole large intestine, it follows that the latter can absorb 6 grammes of soluble albumen in 24 hours. This quantity, however, is quite inadequate to maintain the nutrition of the body, since 120 grammes is the quantity necessary for an ordinary person. It is presumed that by using more concentrated solutions of albumen the amount absorbed might perhaps be increased.—*Virchow's Archiv*, Bd lix. 2.—*Allg. Med. Cent.-Ztg.*, 49, 1874.

A PERFECT SOLUTION OF SALICYLIC ACID.

To the Editors of the Louisville Medical News.

Quite a serious obstacle to the use of salicylic acid, as is well known, is the difficulty of giving the proper dose in a small bulk without causing irritation, and in obtaining a solution containing the free acid which can be sufficiently diluted. The solution in strong alcoholic liquids, besides deriving irritant properties from the menstruum, deposits the acid in dilution; and, moreover, alcohol is contra-indicated in many cases to which the acid would otherwise would be applicable. In glycerin we have a substance which overcomes some of these difficulties, but is still not altogether unobjectionable. The solubility of the acid in solutions of some neutral salts of the alkaline bases has filled many indications, but the comparative quantity of the solvent required, as well as the taste of the resulting solution, has debarred many from their use, and driven them back to capsules when a dose of five or ten grains has been indicated.

In the formula which follows advantage has been taken of the solubility of the acid in both glycerin and neutral salt, thinking that by their combined use the objections to each would be in a measure overcome, since smaller quantities of each were required to obtain the strength of acid that was demanded. The salt chosen is the citrate of potash. It is preferred because of its unobjectionable taste, its ready solubility in glycerin, and its lack of properties that would preclude its use in any case calling for salicylic acid. The formula and its manipulations are as follows:

℞ Salicylic acid..... ℥ j–ℑ viiij;
Citrate of potash..... ℥ ij;
Glycerin..... ..... ℥ viij;
Simple elixir, q. s. to make Oj.

The citrate is to be dissolved in the glycerin by the aid of a gentle heat, after which the acid is to be stirred in, and a gentle heat maintained until it is completely dissolved. On cooling, simple elixir is to be added to bring it up to the required measurement. The solution is then to be strained; and when prepared with a colorless elixir is of the color of a very pale sherry. It contains five grains of salicylic acid to the fluid dram, and is miscible in all proportions with water without the separation of any acid.

This solution, under the name of "elixir salicylic acid," has been prescribed quite largely in this city for the last four years. It has been given to children as well as to adults; and although as high as one table-spoonful, containing twenty grains of the acid, has been administered at a dose, but very few cases have come to my notice in which the use of this preparation has not been well borne. However, it is not my purpose to discuss the therapeutical

bearings of this solution. The authority I have named is within easy reach, and the preparation can be easily made by any respectable apothecary, so that he who wishes may examine its merits. J. F. FLEXNER.

Louisville.

[This is the best solution of salicylic acid we have ever used, and Mr. Jacob Flexner deserves the thanks of the profession for producing it—ED. NEWS.] —*Louisville Med. News.*

NECESSITY OF PROVIDING CHILDREN WITH WATER TO DRINK.

Dr. Murdoch, of Pittsburg, has written a very sensible health-paper on the Causes and Prevention of Cholera Infantum. The majority of cases is to be traced to the food, and the number is greatest among bottle-fed infants—on sour milk. This cause is well known, of course, to physicians, but we doubt if the profession is at all times wholly alive to the sanitary necessity of providing water for children to drink. Dr. Murdoch says:

"Another cause of the great mortality among children is the neglect to provide them with cold water to drink. This, especially during the hot weather of summer, is the source of more deaths of young infants than all other causes combined. The explanation is simple. The little ones during hot weather perspire freely. This would not be the case if they were entirely naked, but, as is too often the case, they are kept sweltering under clothing or blankets. The water which they lose by perspiration causes them to be very thirsty; they require water. If no water is offered, they will drink freely of any fluid which is offered to them. The fluid which is offered is usually milk, often milk which has become sour by the extreme heat. The child is thirsty, but not hungry; but, not getting the water, which it does want, it drinks the milk which it does not want. The consequence is, the child's stomach becomes overloaded with food which it has not the power to digest. This food, instead of nourishing, is a source of irritation to the child's stomach and bowels, and causes vomiting, purging, cholera infantum, and death.

"Children to whom no water is offered in hot weather are like men cast away at sea with no fresh water to drink to cool their parched tongues and quench their tormenting thirst. These men will drink of the salt sea-water, and, it is said, that they go mad with the distressing thirst which they have thereby increased. The salt water which these poor shipwrecked men are tempted to drink is hardly more fatal to them than is the sour milk which is often the only fluid offered to the thirsty child.

"Water is the *sine qua non* in the management of children during the hot weather of summer. Even children at the mother's breast should often be offered water. But to children reared upon the bottle it is indispensable. It is their life. It quenches thirst, supplies the place of water lost by perspiration, keeps up the perspiration which is necessary for maintaining the proper temperature of the body, and makes the little one comparatively comfortable. It will do all this, and it will do more; for if the child's thirst was always appeased, it would refuse food when not hungry, and would never drink milk when the milk was sour. The consequence would be that it would only take milk when the milk was sweet, and in quantities which it would be able to digest."—*Louisville Medical News.*

PILL VARNISH (HAGER).

Balsam Tolu	15.0 gm.
Resin	1.5 "
Alcohol, absolute	15-0 "
Ether	100.0 "
Boiling water	50.0 "

Digest the balsam with the boiling water in a water-bath for one hour, shake frequently, then decant the liquid. To the residue add the resin, and then pour on the absolute alcohol and ether. Macerate, so as to form a tincture which is to be filtered through cotton.

TREATMENT OF BARBER'S ITCH.—Brame recommends the following treatment: Shave off the hairs, or cut them very short; then apply once or twice a week an ointment composed of

℞.	Prepared chalk	10 parts,
	Coal-Tar	1 to 4 "
	Glycerine	5 "
	Simple Cerate	50 "

La Duche Pharm.

PROMPT RENEWALS of subscriptions are in order. If you do not like the *Canada Medical Record* and its policy, and *do not intend to pay for it*, be courteous enough to say so, pay up arrears and discontinue in a gentlemanly way. If you do like it, renew your subscriptions and ask your medical friends to subscribe.

CREASOTE AND PHTHISIS.—Creasote is extensively used and highly extolled in this disease in France. The dose employed is about gtt. iss, twice a day. It is said to produce marked improvement in the symptoms and signs, increase of weight, &c.—*Practitioner.*

CALOMEL is decomposed by alkalies, alkaline earths, and their carbonates, sulphides, hydrocyanic acid, bitter almonds, lime-water, iodide of potassium, iodine, soap, nitric acid, salts of iron, lead, and copper, nitrate of silver, etc. Be careful not to use *soap* in pills containing calomel.

ICE IN CROUP.

Dr. J. N. Norris, of Birmingham, Iowa, in the Philadelphia *Med. and Surg. Reporter*, has the following in regard to ice in the treatment of pseudo-membranous or true croup in children, and acute laryngitis in the adult:

"I am abundantly satisfied, by ample experience, that we are in possession of no remedy that will meet this indication so surely and so expeditiously as ice, and notwithstanding the apprehensions of the old women, and the condemnation of medical men in high standing, I would now no more think of treating true croup without ice, than of treating a severe attack of malarial fever without quinine.

"Let the little patient's chest be protected by two or three folds of flannel, and let a bladder partially filled with coarsely pounded ice be applied in front of the neck, and retained there closely, and as soon as the ice in the bladder becomes melted, or nearly so, let it be immediately replaced by another which has been prepared before hand, thus giving no time for injurious reaction in changing the bladders. The ice should be unremittingly applied, till the last vestige of the peculiar metallic or brassy sound is no more to be heard in the cough.

"The employment of ice does not preclude the use of other appropriate measures, as a mercurial cathartic, occasional emetics, verat. virid., tart. antim., etc. Spasm of the glottis being an extremely distressing element in most cases of this disease, the patient should at once be brought fully under the influence of belladonna (evinced by dilatation of the pupils and capillary congestion of the face), and so kept under its influence throughout the whole course of the disease. When we study the physiological action of this medicine in connection with the spasmodic element of croup, the beneficial influence of this drug cannot fail to be seen and appreciated.

"Acute laryngitis is not a very frequent disease in this section. In a continuous practice of over 38 years I have encountered only four well-marked cases. In acute laryngitis we have not the fibrinous deposit, as in true croup, but in its stead, infiltration into the abundant loose submucous areolar tissue about the glottis, and, per consequence, death by apnœa It is an admitted fact, that the treatment prescribed in standard works for this particular form of croup, and for acute laryngitis, is notoriously unsatisfactory in its results—failure being the rule, success the exception. It is true I have treated but one case of well-marked acute laryngitis in the adult since adopting the ice treatment. In this instance the disease was ushered in with rigor, followed by heat of surface, pulse 135, tenderness over the *pomum adami*, complete aphonia, painful deglutition, every movement of the tongue accompanied with pain. Ice in bladders was unremittingly applied to the front of the neck for four days and four nights; cal. tart., antim., verat. virid., etc., were used; but without the ice I would have had but little confidence in any treatment. Permit me to say that if I were restricted to the use of but one remedy in these two inflammations, that remedy would be ice, emphatically, ice."

SUGGESTION FOR TREATING SWOLLEN FINGERS.

A correspondent writes to the *Medical Times and Gazette*, London—

Allow me to suggest to your readers the use of the material in the treatment of the swellings of the fingers, which are often tedious and painful, in persons of rheumatic or gouty constitution.

For two or three years past I have used a piece of india-rubber finger-stall in fissures and slight cuts of the fingers; and for twelve months or more I have used it in cases of thickening or deposit around the joints of the fingers after injury, with great relief to the patient. It has seemed to me that the brown finger-stalls of pure rubber are better than the black or vulcanized.

A piece of tubing may be cut into lengths of about an inch or an inch and a half. One of these can be sliped over the joint by the patient himself, after he has been taught how to do it. It should be worn constantly, day and night. The patient will soon learn how to roll it off, and reapply it after washing his hands. When it has become too loose to give the necessary support another length can be taken.—*Med. and Surg. Reporter.*

VILLATE'S MIXTURE IN THE TREATMENT OF SINUSES.

A report from the Charity Hospital, New York, in the New York *Medical Journal*, states that several deep sinuses have recently been under treatment in the surgical service, in which no necrosed bone could be found, but which proved intractable to heal. Villate's Mixture was tried, first of half strength, then in full strength. In some of the cases it proved of value, in others it failed partially or completely. The case in which it proved of most service was one of deep sinus in the neighborhood of the hip joint. The original composition of the mixture was—

℞	Liq. plumbi subacet,	ʒ j
	Zinci sulph. cryst.,	
	Cupri sulph. cryst.,	aa ʒ ss
	Aceti vini albi,	fl. ʒ vjss.

The mixture was injected once a day, and proved a more satisfactory application than any other. Some patients complained of severe pain, others felt but slight inconvenience from it.

ARISTOCRATIC REMEDY FOR ITCH.

Balsam of Peru	1	ounce.
Benzoic acid	110	grains.
Oil of cloves	40	drops.
Alcohol	2½	drachms.
Simple cerate	7	ounces.

Dissolve the essential oil and the benzoic acid in the alcohol, and mix them with the cerate. Lastly, add the Balsam of Peru. It is said to effect a cure in twenty-four hours.

FILLING TEETH AFTER EXTRACTION—REPLACEMENT IN ALVEOLAR CAVITIES.—SUCCESSFUL.

Dr. W. recently extracted four teeth, two of which were molars (one upper and one lower), cleaned and filled them after extraction, and then replaced them in the original alveolar cavities. The operation was successful, and the patient can use them in mastication.—*Centralblatt für Chir., No.* 50, *p.* 847.

THE CANADA MEDICAL RECORD,

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MONTREAL, AUGUST, 1880.

CANADA MEDICAL ASSOCIATION.

We desire specially to remind our readers that the 13th annual meeting of the Canada Medical Association will be held in the City of Ottawa, on Wednesday, 1st September. We have so often expressed our opinion of the value of this Association, and of the claims which it has upon the support of the entire profession of the Dominion, that we will now only express the hope that there will be a large attendance. We publish below a list of the papers, and we would suggest to those who propose to be present the desirability of *preparing* for discussion upon them. We are satisfied that, as a rule, the want of discussion upon many of the papers has not had a vivifying influence upon their authors.

Dr. R. A. Reeve, "Some *Principles of Ophthalmology.*"

Dr. Hingston, "On Surgical Wounds."

Dr. Sewell, "Tea as a Valuable Therapeutic."

Dr. D. Clark, "On Brain Lesions."

Dr. J. Workman, "Atrophy of the Cerebellum."

Dr. Osler, 1st, "A Contribution to the Question of Spinal Paralysis. 2nd. Demonstrations of a Series of Specimens illustrating the Morbid Anatomy of the Brain and Spinal Cord."

Dr. T. K. Holmes, "Surgical Treatment of Laceration of the Cervix Uteri."

Dr. Oldright, "Some Common and Mischievous Defects in House Drainage illustrated by *Apparatus.*"

Arrangements have been made for reduction of rates to members on presentation of their certificates. These may be had from Dr. David, Montreal, General Secretary, or from the following local secretaries: Dr. Wright, Ottawa; Dr. Ross, Montreal; Dr. Wickwire, Halifax, N.S.; Dr. Allison, St. John, N.B.

COLLEGE OF PHYSICIANS AND SURGEONS OF QUEBEC.

We direct attention to the advertisement of the College which will be found upon our advertising sheet. The preliminary examination takes place on Thursday, September 23rd. The semi-annual meeting of the Board of Governors of the College takes place on Wednesday, September 29th. Both these meetings are held at Quebec.

CLORINDA.

OR, THE RISE AND REIGN OF HIS EXCELLENCY EUGENE ROUGON.

To those persons who knew Paris during the reign of Louis Napoleon, each character in "Clorinda" bears a name; even the fair American, of whom mention is made in the description of Compiegne, is recognized—although Zola himself, in speaking of this work

says distinctly: "In it I have studied temperaments rather than characteristics—this is the distinguishing feature of my writings. I have chosen persons governed by their nerves and their blood, deprived of free agency, and impelled to each act of their lives by the fatalities of their flesh." That Emile Zola has painted the days and times of the Imperial Court of Napoleon III., with a powerful and vigorous pencil is very certain—as he had many opportunities of knowing of what he writes, for, if we are not mistaken, he was at one time the Duc de Morny's private secretary, and as a picture of the manner in which a scorned and slighted woman avenges herself, this work is absolutely without a parallel. The restless ambition and the gnawing sense of defeat, as depicted in the character of Eugene Rougon, carries with it a sense of reality which strengthened the conviction that the character was drawn from life, while the Duc de Morny is also easily recognized as one of the principal characters in the work. "Clorinda" is complete in one volume, in uniform style with "Nana," "L'Assommoir," and "Dosia," and will be found for sale by all booksellers and News Agents, and on all Railroad Trains, or copies of it will be sent to any one, to any place, at once, on remitting the price in a letter to the Publishers, T. B. Peterson & Brothers, Philadelphia, Pa.

PERSONAL.

Dr. Spencer (M.D. McGill, 1879) is about to remove from Montreal to Harbour Grace, Newfoundland.

REVIEWS.

Theory and Practice of Medicine. By FREDERICK T. ROBERTS, M.D., F.R.C.P., Physician to the University College Hospital, London (with illustrations). Third American from the fourth London edition Philadelphia, Lindsay & Blakiston. Montreal, Dawson Brothers.

We have upon more than one previous occasion expressed our opinion upon the high character of this work. An almost daily use of it during the past three years has more than confirmed our estimation of it, and we now have not the slightest hesitation in placing it in the very front rank of works upon the practice of medicine. The rapidity with which new editions of some works are brought forward does not in our opinion indicate their popularity, but it is different with the work before us. Its terseness and conciseness, yet withal its fullness, has so pleased those who purchased it that its value has become thoroughly recognized. As a result a legitimate demand has been created, and a call for fresh editions made. In the present volume we notice that many additions have been made, bringing it fully up to the times. The chapter on diseases of the absorbent system has been improved by reference to Bradley's work on diseases of the lymphatic system, and the Gulstonian lectures of 1879 on the same subject. In the chapter on diseases of the nervous system the very latest views of Ferrier, Charcot and Hughlings Jackson are given. The germ theory is discussed, and the latest from this field of observation faithfully recorded. Dr. Roberts is on this subject not as pronounced in his views as we would have wished him to be. Although noncommittal, we think his leanings are towards the truth of this theory. Some few illustrations are added, which add somewhat to the value of the book. The manner in which the publishers have done their work is admirable.

Elementary Anatomy, Physiology and Hygiene for the Use of Schools and Families. By EDWARD PLAYTER, M.D., editor of the Sanitary Journal, Toronto. Toronto, Hart & Rawlinson, 1879.

One pleasant sign of the onward progress of our Dominion is the appearance now and again of original works upon scientific subjects from the pen of our own men. The little work before us is written by one who during the last six or seven years has done a noble work in enlightening the Canadian public upon sanitary matters through his Sanitary Journal. His qualification for such a work is undoubted, and a careful examination of it enables us to say that he has done his task admirably. It is well written, is fully up to the times, and the illustrations are all that could be desired. We trust the Canadian public will appreciate it, and we strongly recommend its introduction in our schools. The better educated the growing public are in the physiology of their being, the better chance there will be for scientific medicine, and the less for those charlatans who prey upon the public through their fears.

Transactions of the College of Physicians and Surgeons of Philadelphia. Vol. 4, 1879.

This volume, like those which have preceded it, gives ample evidence that the College of Physicians of Philadelphia is comprised of active, intelligent and enthusiastic workers in the field of Medical Science. The various papers are well written, one of the most interesting being a case of spinal paralysis due to so-called spinal exhaustion from over sexual indulgence. The patient was only twenty-five years of age, and in many respects the symptoms are analogous to those present in the case of spinal appoplexy published by Dr. Wilkins (Professor of Physiology in Bishop's College, Montreal) in the May number of this Journal. The paper is from the pen of Dr. Tyson. His patient fortunately recovered. There is also an interesting paper on Medical Missionary work in Japan.

Reports to the St. Louis Medical Society, on Yellow Fever, St. Louis, Mo. GEORGE O. RUMBOLD & Co., 1879.

These reports are most exhaustive, and to those interested in the story of this very fatal disease, almost we believe unknown in Canada, they are of great importance. They certainly prove the great value of quarantine; also that the disease may be robbed of much of its fatality and productiveness by a rigid enforcement of sanitary laws.

"The Stranglers of Paris," Adolphe Belot's last and best novel, is one of the most fascinating and interesting romances ever written, as well as powerful and graphic. It has been dramatized, is now the great dramatic sensation of Paris and London, and is to be performed throughout the United States at all the principal Theatres in the fall. "The Stranglers" is a story of rare power, written in bright crispy sentences, and right up to the point. It deals with a mysterious murder committed in Paris, and the ingenious means taken by the police to discover and capture the unknown assassins. The reader follows the rapid development of the plot breathlessly, is kept in a state of constant excitement by the movements of the detectives and the murderers, and does not feel willing to lay aside the book for a moment until the stranglers are finally trapped and sentenced. The novel is worthy of Wilkie Collins or Emile Gaboriau, and though highly sensational is not in the least trashy. It is certain to find hosts of readers. "The Stranglers" has been translated in the most thorough manner by the well-known and popular translator, George D. Cox, and the reproduction is faithful and complete. It only remains to say that the romance is as pure as it is fascinating, and a credit to the gifted author of "Article 47."

This book will be especially interesting to the Legal and Medical mind on account of its extraordinary evidence in both branches.

Price 50 cents in paper, or $1.00 in cloth, and is published by T. B. Peterson & Brothers, 306 Chestnut street, Philadelphia, Pa.

Messrs T. B. Peterson & Brothers, Philadelphia, have in preparation a Sarah Bernhardt edition of the younger Dumas' powerful novel, "Camille: or, The Fate of a Coquette." The work will be highly important as a complete key to Mlle. Bernhardt's conception of Camille. It will also be a fitting souvenir of the great French actress' visit to this country, and on the cover will be found a capital portrait of her. Paper cover at a low price.

Henry Greville's new Russian story, "The Trials of Rassia," is speedily to be published by Messrs. T. B. Peterson & Bros., Philadelphia. It deals with life and love in the far-off dominions of the Czar, and is full of interest from beginning to end. No one can write a Russian novel like Henry Greville.

Petersons' popular "Dollar Series" is soon to be augmented by the addition of "One for Another," a sparkling society story. This novel has a strong plot, well-defined characters and continuous interest. All readers of fiction will relish it. Publishers, T. B. Peterson & Bros, Philadelphia.

"The Black Venus," now in press by T. B. Peterson & Bros., Philadelphia, is a thrilling novel destined to create a sensation of no ordinary kind. The scene is laid in the unknown regions of Central Africa, and the slave traffic engrosses attention. No better description of the cruel and ferocious dealers in human flesh was ever given than in this great novel. It was written by Adolphe Belot, and the Kiralfys' grand spectacular play was founded on it.