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326

CANADA LANCET

A MONTHLY JOURNAL

— OF —

MEDICAL AND SURGICAL SCIENCE,
CRITICISM AND NEWS.

EDITED BY

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VOL. XXIV.

TORONTO:

DUDLEY & BURNS, PRINTERS, 11 COLBORNE STREET.

1892.

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THE CANADA LANCET.

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE,
CRITICISM AND NEWS.

VOL. XXIV.] TORONTO, SEPT., 1891. [No. 1.

Original Communications.

A DISCUSSION OF THE MERITS OF THE DIFFERENT ARTICLES OF INFANT DIETARY.*

BY W. J. GREIG, B.A., M.B., L.R.C.P., TORONTO.

In introducing this subject to you I need offer no apology. In infants and young children diseases of the digestive tract are much more frequent than of any other part of the body. Especially during the hot season is this the case, when the child's food is so apt to sour either before or after ingestion, owing to the presence of micro-organisms.

Again, an infant is too often given improper food, which it is unable to digest.

These facts make the subject a very important one, for from infants men and women grow, and if we have not healthy thriving infants how can we expect to have healthy, vigorous, intellectual men? The future of a child depends to a great extent on its physical development during the first few years of life.

The subject is of special interest at the present time also, owing to the constant advance of the purely scientific aspect of medicine and the better methods of utilizing these facts. It is not my intention to discuss now the amount of food which it is right to give a child at different ages, nor to refer to the proper intervals of feeding. Both of them are very important questions, but which the limits of this paper will not allow me to deal with. Assuming then that we have all necessary knowledge on these points, let us endeavor to enquire into the merits of the different articles of food which are given to infants and young children.

An infant suckled at the breast by its mother

starts in life under the best possible auspices. It starts with a natural advantage, and if the suckling can be continued for nine months or a year nothing more can be desired, under average conditions. But, unfortunately, many events may occur to deprive the child of this natural advantage, and it is then that the respective merits of wet nursing, prepared foods, and cow's milk are discussed. It is then that the physician should be able to give advice. Under such circumstances, how often the guidance of the child's food is based on an advertisement read somewhere, or a pamphlet received either by the friends or the physician. We are all inundated by showers of documents, calling our attention to all sorts of proprietary medicines, and to infant foods.

Henri Nestlè will tell you that his food is better for the child than the mother's milk, or cow's milk. I ask how often are we deceived by these bold statements, and without knowledge or investigation believe the word of the man who has every incentive to push his commercial article on our notice, and order the advertised article for our patient.

All authorities (excepting the manufacturers of some of the infant foods) agree that the mother's milk is the most suitable food for the child. Starting out with this hypothesis, any substitute for mother's milk should approach it as nearly as possible in constitution. This presupposes a knowledge of its chemical constituents. Analyses made at different times have not agreed, varying in their statement of the amount of fat and casein present. The explanation is that the constituents of the milk vary at the different periods of lactation; also with the condition of the mother's health, and with the period of milking. That is, the foremilk, mid-milk, and strippings are very different in the relative proportion of their constituents. The analysis which is generally accepted at the present time, and one made with a full knowledge of all modifying circumstances is as follows:

Reaction.	Faintly Alkaline.
Spec. gravity	1028 to 1034
Fat	3 to 4%
Casein	1 to 2%
Sugar	6 to 7%
Salts	1.5 to 1/2%
Total solids	12 to 13%
Water	87 to 88%

* Read before the Ontario Med. Association, June, 1891.

The milk of the wet nurse is the nearest approach to the milk of the mother, and without doubt a good wet nurse is a very desirable person. But the physician must be careful. A wet nurse must be a perfectly healthy woman. If she has any constitutional ailment, the babe is apt to be affected thereby. If she has syphilis, or tubercle, or rickets, the babe will suffer.

If any functional or organic disease is present, such as indigestion, gonorrhœa, tubal disease, or nephritis, the milk will be affected thereby. She must not menstruate, nor be pregnant, or the milk will be unfit for use. She must be mentally at ease, for mental disturbance is inconsistent with perfectly healthy milk. She must be moral and of good temper and free from licentious habits of any kind. Because the character of the milk is affected by these things, and quantities of albuminoids not natural to healthy milk will be excreted. J. Lewis Smith mentions a case in his practice, where the nurse was allowed to visit her home on Saturday. On her return, the child was seized with an attack of diarrhœa and of vomiting and died. Enquiry revealed the fact that the nurse had spent her visit in debauchery.

Again, the milk of the wet nurse must be of the same age as that of the mother, or it will not agree. If we add to all these considerations the fact that the expense would be beyond the purse of the average family, it is apparent that it is only under the most favorable circumstances that a wet nurse can be thought of. But granted a woman, whose milk is the same age as that of the mother's, free from constitutional taint and present disease, kind disposition, moral, good temper, free from worry, and you have the best possible substitute for the milk of the babe's own mother.

The first of the specially prepared foods to which I wish to call your attention is condensed milk. This article is prepared by evaporating the water from cow's milk and thus producing a thick semi-fluid preparation, which on dilution with water is supposed to resemble the original from which it was made. In some preparations cane sugar is added as a preservative, but others have not this sugar added. Condensed milk is very convenient. It comes to the house along with the groceries. There is no trouble with the milkman, or the servants. No care is necessary to preserve the milk during the hot weather. If it has been or-

dered by the physician, the mother's only care is in the proper dilution, and in feeding. Everything is supposed to be all right when she opens the can. But fraud may be perpetrated in this, as well as in fresh cow's milk. Analyses show that the contents of the cans while generally constant, do vary sometimes, the variability differing with the brand, but there is one noticeable deficiency in them all, viz: in the fat. In the cans as opened, the fat is 10%; dilute this nine times with water and the per cent. is 1.35%, while it should be from 3% to 4%. It is said that in New York city all the condensed milk companies sell cream, which gives a color to the suspicion that the product of their factories is made from skimmed milk. Dr. Chandler, in a report to the Board of Health of N. Y., mentions the deficiency of fats, and stated that in one sample only 1 $\frac{3}{4}$ % was found. Dr. Rotch, of Boston, has pointed out also that often the per cent. of casein is deficient. Another objection is that in the sweetened varieties, the sugar used is cane—while milk sugar is the natural ingredient. The difference lies in the fact that cane sugar ferments more easily; that is, it undergoes the alcoholic and butyric acid fermentation; milk sugar will undergo the lactic acid fermentation, but this is checked by sterilization.

Let us now enquire what the clinical results from feeding on condensed milk are.

It has been noticed that infants fed on it look well, grow fat and have good digestion; but lack vitality. They are easily prostrated by an attack of diarrhœa, or any acute disease. The reason lies in the deficiency of fat, which bears the proportion of 20 parts to one of the nitrogenous elements, while it should be 12 to one.

Louis Park states that infants fed on this have lately been shown to suffer from a form of scurvy. Hæmorrhage takes place under the periosteum of the long bones. The disease is often associated with rickets, and is rapidly cured by changing the food to fresh cow's milk.

Another disadvantage of this form of milk is the atrocious ideas that people have (even physicians) of the proper amount of dilution. It has been given in the strength of $\frac{3}{4}$ to a pint of water, and from this down. Many a child has been starved to death on this diet. Supposing a preparation of the average strength, 28% of water, 72% of solids, and of this latter, 50 parts sugar, 10

parts fat, 10 parts albuminoids, and 2 parts ash. If 1 part of this be taken and 9 parts of water, we have a mixture resembling the average analysis of mother's milk in all but the fat. Let 1 in 9 be the average dilution, slightly more for a young infant, and less for an older child. If you add to this, 3j of cream for each 3j of the diluted mixture, you bring up the per centage of fat to the requisite amount.

One conclusion then is that condensed milk properly prepared and sterilized is a very fair food for infants. It is not so desirable as cow's milk for reasons mentioned before, but often owing to idiosyncrasy when cow's milk will not agree, condensed milk will. In fact, it will sometimes agree when nothing else will.

Next, *the prepared foods*—these are advertised so extensively and so persistently that notice must be taken of them, even though if their merits be considered they are *beneath* notice. They are articles of commerce, and no matter how carefully made at first, in the race for money the original composition is soon forgotten or neglected in the effort to produce a cheaper article. Allow me to name the list that I found in a neighboring drug store—first Nestlé's, then Mellin's, Ridge's, Imperial Granum, Lactated, Carnrick & Reid's Lacta-preparata, Carnrick & Reid's Royal Food, Martin's Concentrated Cardinal Food, Revalenta Arabica, Neave's, Hugo Henschel's, Eupeptica, Papoma, and there are dozens more which are not in the Canadian market. A chemical examination of the contents of tins by experts, reveals the following interesting facts, which are true of all the varieties:—

1st. There is a lack of uniformity between the productions of different years, and in the contents of the tins produced in the same year. This is a dangerous fact, for we do not know what we are giving. It is not what might be expected in an article so highly praised, so well medaled and intended for so important a purpose.

2nd. They advertise that there is no starch—but examination reveals a superabundance of starch in the majority of the tins. The manufacturers claim that the starch is converted into dextrine and sugar under a pressure of 100 atmospheres by overheated steam. Dr. Rotch has found that, after diluting the food as directed, there is

still 3½ parts out of 8½ of solids of unaltered starch.

3rd. Ephraim Cutter, M.D., for Gaillard's *Medical Journal*, some years ago examined microscopically all the infant foods in the market. He found in Ridge's, for instance, beard of wheat, wheat starch mass, starch bundles apparently of maize, caked mass of starch grains and granules. In many cases the cell membranes were not equally crushed, and in many cases not crushed at all. McDonagh states that the fragments of the microscopical elements exhibit the appearance of mechanical destruction and not that brought about by heat.

4th. All the foods contain abundance of starch except Mellin's, in which it is converted into glucose. Even in some of the tins of this food there is a trace of starch, while the per centages of the other ingredients are not what they should be.

Let us now compare a chemical analysis of Nestlé's food prepared according to the directions on the tins, with the accepted analysis of mother's milk:

Mother's Milk.	Reaction.	Nestlé's Food. 1 in 10 of water. Neutral.
Alkaline		
None . . .	Starch . . .	3.65%
3% to 4% . . .	Fat17%
1 to 2% . . .	Albuminoids75%
6 to 7% . . .	Sugar . . .	3.54%
.1 to .2% . . .	Ash14%

That is, the food is defective in fat, sugar, albuminoids, and contains almost 50% of the whole amount of solids in starch, which an infant under seven months of age has no power to digest.

I have stated that Mellin's food contains no starch. Let us examine that and endeavor to ascertain its suitability for a child's food. It is prepared as follows:

Food	3 parts.
Milk	48 "
Water	48 "

Of this there are 8.26 parts of solids.

Comparative analysis as follows:

Mother's Milk.	Reaction.	Mellin's Food. Neutral.
Alkaline		
None . . .	Starch . . .	Usually none
3% to 4% . . .	Fat . . .	2.004%
1% to 2% . . .	Albuminoids . . .	2.17%
6% to 7% . . .	Sugar . . .	3.69%
.1% to .2% . . .	Ash40%

That is, the fat and sugar are deficient, while the ash and albuminoids are in excess.

These two analyses may be regarded as giving typical results. For though the different foods have the constituents in different proportions, they are all very far from bearing a resemblance to mother's milk.

(To be continued.)

INJURIES FROM THE TOO LONG USE OF PESSARIES.*

BY DR. J. H. HAMILTON, ATTWOOD, ONT.

Perhaps of all the diseases met with by the every-day practitioner, the most common is some of the forms of uterine displacement so graphically described by our various authors on "Woman and her diseases," as retroflexion, retroversion, ante-flexion, anteversion, prolapsus, inversion, etc. Why we should have so much trouble of this kind is to me a mystery, inasmuch as such disorders are attributed to over-work, straining, etc. When we know that the present age is not one in which woman figures as a slave, and when we see our healthy-looking neighbors from Germany and other countries where out-door work is not uncommon, passing through life without any troubles of the kind—it leads us to think that the less vigor we see in life and the finer the organization, the more liable we are to see all these forms of uterine displacement. A want of vitality or tonicity in the organ itself and its attachments are no doubt important factors in the causation of the trouble. Dr. Martin, of Berlin, ascribes their causes to defective involution, *i. e.*, where the placenta is adherent to the posterior wall and the site thus remaining longer in a state of sub-involution and consequently longer than the anterior wall, the fundus turns to the front and we get ante-flexion, and *vice versa*, by sub-involution of the anterior wall we get retroflexion; but I have seen many cases, without a shadow of a doubt, of genuine retroflexion in young women where sub-involution was unknown, thus going to show that a uterus can be retro- or ante-flexed by other means—as falls, stepping suddenly out of carriages, horse-back riding, etc.

For the relief of such troubles, the ingenuity of the specialist in this class of diseases has been taxed, and we have had many devices for the relief of these disorders. The history of pessaries shows that we have had, to date, about 150 kinds, together with various uterine supporters for these disorders; and most authors, together with the voice of every-day experience, are unanimous in proclaiming them nearly all faulty. The pessary first made by Hodge was shaped like the letter U and it was found when used any length of time to be injurious to the coats of the bladder, going so far sometimes as to puncture them; and when the two ends were afterwards united, it was found that the cross-bar pressed on the urethra and interfered with its function. Although I have no doubt the Hodge pessary is at the present time more used than any other where a pessary is any use at all.

In years gone by they were made mostly of metal, but at the present time are nearly all made of gutta percha, vulcanite, or, better still, a round of wire covered with india rubber and moulded to any shape we desire.

I have found that the great trouble with all pessaries is, that a small one not reaching from the ischiatic bones to the symphysis, and well over, is useless, and a large one, of whatever form, is liable to produce ulceration of the vagina, leucorrhœa, etc., as well as destroying the elasticity of that organ when worn continually; and I have found in many cases that a pledget of iodoform gauze, borated cotton wool, or any other such substance, gives more relief in cases of minor displacements than the hard unyielding pessary; and the rubber ball with a tube attached, which can be easily placed by the patient and then filled with air and tied, is an excellent device. I have known this to keep *in situ* a prolapsed womb in an elderly lady where the shrivelled womb was not of great weight.

Now we all know that whatever may be the use or abuse of pessaries, a great many are worn in this country, and it is the duty of every medical man when he once places one to not forget it, and watch carefully the results. After they are worn for a time, I have heard of a few women who forgot they were there and lost their lives in consequence, and I will give you a case in point.

In November of 1889, Dr. Philp and myself

* Read before the Ont. Medical Association, June, 1891.

attended a married woman, æt. 57 years, who had an attack of pelvic peritonitis, which afterwards developed into general peritonitis, and we found, on making the first vaginal examination, a pessary shaped like a Hodge and so corroded and adhesive that it could scarcely be removed; it was made of metal and rusted nearly through. When we called her attention to this foreign body, she recollected of a medical man in a town where she formerly lived placing it there 26 years ago. This neglect on her part cost her her life.

We also have a few cases of vesico-vaginal fistulæ, from the too long use of faulty pessaries, and Dr. Baker Brown, some years ago, in lecturing on operations for vesico-vaginal fistula, says: "Next to labor, stone, so far as my experience goes, is the commonest cause of fistulous communications between the bladder or urethra and vagina. Another source of these lesions, never to be lost sight of, is the long-continued pressure from the *old-fashioned wooden pessary*, a terrible instrument which unhappily is not yet obsolete." But in defiance of all that may be said of the injurious use of pessaries, we see many cases where they are found highly useful, and where they are so, they are so much less cumbersome than the uterine supporters in use, that their choice by patient and physician is a foregone conclusion.

Selected Articles.

THE PATHOLOGY AND TREATMENT OF CHRONIC OVARITIS.

The study of the pathology of ovaritis derives a special interest from the fact that the ovary differs from all other organs of the body, in that its function is performed at the expense of a portion of its structure which is never restored to its original condition. The rupture of each Graafian vesicle in ovulation, causes the destruction of the vesicle. Rudimentary vesicles mature and repeat the function of their predecessors, and are in turn destroyed. Finally the supply ceases, and the ovary, worn out in structure, becomes functionally incompetent long before the general organization has reached the end of its life and activity. In all other organs of the body, function is effected through cellular disintegration and restoration.

This peculiarity in the natural history of the ovary makes it difficult for the superficial observer to distinguish between the normal degeneration, and the structural changes which result from chronic

ovaritis. Experts also find it no easy matter to distinguish, by gross appearances, the atrophy of old age from the cirrhosis of inflammation.

In discussing the pathology of ovaritis, I shall briefly point out some of the established facts, which are of most interest in relation to the diagnosis and treatment of this affection, and omit all that is ill-defined, uncertain, and of little interest to surgeons.

The pathology of ovaritis is characterized by changes of structure, brought about chiefly by areolar hyperplasia first, then by atrophy of the normal tissues, and finally by a condition of cirrhosis. In this respect the morbid process and its products more resemble degeneration than an inflammation such as is observed in other organs. It is more like certain forms of chronic nephritis in the natural history of its pathology. Owing to these peculiar and distinguishing features, the affection has little in common with acute puerperal or non-puerperal ovaritis, or with secondary acute ovaritis due to peritonitis and therefore all such conditions will be carefully excluded from the discussion of the subject in hand.

The first variation from the normal towards the pathological is deranged innervation; the ovary, owing to its important office and intimate relations to the other organs, being peculiarly prone to reflex disturbances. These, though temporary as a rule, when oft repeated and prolonged in duration induce changes in the circulation, which impair nutrition and finally produce changes of structure. This ovarian hyperæmia, the first step in the process, may subside and complete recovery follow. Reliable evidence of this has been obtained, first by clinical observation of cases which gave all the signs and symptoms of ovarian congestion, and which, under careful management, completely recovered. Secondly, by inspection after laparotomy. I have not infrequently found a prolapsed, tender and painful ovary which, upon inspection after opening the abdomen, was markedly hyperæmic, but presented no apparent change of structure, except œdema. After fixing it in place by stitching the utero-ovarian ligament to the upper border of the broad ligament, the signs and symptoms have all subsided. The continuation of the hyperæmia slowly produces those structural changes which are invariably affected by prolonged malnutrition. The first noticeable changes take place in the blood-vessels themselves. They become dilated and a peculiar degeneration of their walls occur. These changes have been elaborately studied by Dr. E. Noeggerath; he advanced the idea that these vascular changes were closely related to the genesis of ovarian cystomata. This may be true in certain cases, but it more frequently ends in hyperplasia of the stroma which gradually goes on, and in time crowds out all the normal structural elements of the ovary. Finally,

a true cirrhosis is produced. With these changes in the blood-vessels, the circulation is interrupted to a degree that causes œdema, which increases the size of the ovary and renders it softer. Apoplexies sometimes occur, and occasionally one or more of the blood clots may be seen near the surface. These conditions can be distinguished from a diseased vesicle by the staining of the tissues around the clot. This last-mentioned lesion occurs in the early stage of the ovaritis, and gradually disappears as the process of hyperplasia proceeds to a complete cirrhosis. These changes explain some of the important facts in the clinical history. The ovary which is found enlarged, softened and tender to the touch, will, in months afterward, appear subnormal in size. Likewise the same lesions may be recognized upon inspection after laparotomy, if one has become familiar with them by previous study.

While hyperplasia of the stroma is going on, the follicular elements undergo certain changes. The contents of the follicles become cloudy from degeneration of the epithelial elements. The gross appearance of the ovary at this time would lead one to suppose that there were a number of vesicles approaching maturity, but the uncommon number of these distended vesicles is evidence that they are abnormal.

The full value of a knowledge of the gross pathology of ovaritis can be fully estimated by those who have mistaken the normal for a pathological degeneration of the ovaries, and have removed them, to learn subsequently, through the microscopist, that they were not diseased. I well remember hearing an interesting discussion regarding cases in which one ovary has to be removed for advanced disease. The question was: Should the other ovary be left or removed if there is no positive evidence of its being diseased? Much was said, pro and con, but not a word was uttered about how to detect pathological changes which should decide the matter. The morbid appearances which aid the surgeon in deciding when to remove an ovary and when not to remove it are as follows:

Follicles which, from their size, number and dark color are evidently diseased, should be removed. Enlargement, congestion and softening from œdema, and patches of induration with irregular distention of the vessels and the evidence of small blood-clots as described above, are conditions indicating removal.

Cirrhosis, indicated by subnormal size, induration and rough surface, when found in a young subject, can be easily passed upon. But in a subject near or after the menopause, this appearance of the ovary does not decide with certainty whether there is cirrhosis or simply senile atrophic degeneration.

I have thus briefly described this part of the subject, introducing only such facts as I have ob-

tained from observation, and which have appeared to be of possible use in guiding the surgeon. This brevity arises in part from my limited knowledge, but mostly from the hope of raising a discussion which will doubtless bring out much that we need to know. Much might be said about the influence of chronic ovaritis upon the functions of the sexual organs and the nutritive and nervous systems, but time will only permit me to say, that menstruation is often deranged, and in various ways. Dysmenorrhœa is often present, and in some the menses are retarded and scanty, while in others too frequent and profuse. When the latter condition exists, the ovaritis is more easily controlled than in patients who have a scanty flow.

The effect upon the nervous system is peculiar and marked. Depression and irritability are usually pronounced. The hysterio-epilepsy which has attracted much attention from the neurologists, is really an epileptiform affection, due, in all cases that I have seen in my own practice, to ovarian disease. Ovaritis also ranks first among all diseases of the sexual organs in the causation of mental disorders.

The causation of chronic ovaritis demands a brief notice, owing to its intimate relation to the question of treatment. According to my observations, the cause which most frequently obtains is imperfect menstruation. When the uterus is undersized or flexed forwards or backwards, and the menstrual flow scanty and attended with pain, the ovaries are liable to take on chronic inflammation. This is far more liable to occur if the sexual function is perverted in this class of subjects. Specific causes, such as produce the eruptive fevers, are said to affect the ovaries; but I believe that acute ovaritis is more liable to occur under these circumstances. It is probably true, also, that gonorrhœa causes acute rather than chronic ovaritis.

The strumous diathesis (which I understand to be that condition of organization which invites tuberculosis), predisposes to chronic ovaritis, and inherited or acquired syphilis does likewise.

Much has been written about endometritis as a cause of ovaritis, upon the ground that the structure of the endometrium and ovaries have a common embryonic genesis, and the fact that the two diseases are often found together; but this is still an open question.

In regard to the diagnosis of chronic ovaritis, I refer all interested to the able paper on the subject by my esteemed friend, Howard A. Kelly, in the *Am. Jour. of Obst.* for February, 1891.

TREATMENT.

The advancement of abdominal and pelvic surgery in recent times has led to the removal of the ovaries as the most prompt and effectual treatment of chronic ovaritis. There are reasons for this upon

theoretical grounds. The ovary is causing much suffering; there is a likelihood that it will be a long and tedious trouble, especially is this the case if general treatment has failed; the ovaries are not necessary to existence, and can be removed with safety; it is according to the rules of surgery to remove any organ, or other portion of the body that one can live without, in case a disease of the part tends to take life or cause unlimited suffering and invalidism. Hence, from this way of looking at the matter, the ovaries should be removed.

The facts are (facts that have been proven almost sufficiently), that chronic ovaritis does not end fatally, and is self-limited though often of long duration; the removal of the ovaries is not free from all danger, though all cases properly operated upon have recovered, and it does not in all cases give complete relief. In fact, many of the cases are not much improved, if any; even those who are nearing the menopause, and who bear the loss of the ovaries better than younger subjects, occasionally suffer much from those nervous disturbances which follow an abrupt menopause, and have to endure pelvic pain in the region of the stumps. The clinical history of cases in which the ovaries have been removed does not, in all cases, show great advantage over those in which the ovaries are left to complete the natural history of the disease. Younger subjects do not bear the loss of their ovaries agreeably. Some become fat, indolent, inefficient, and subject to headaches. Others are irritable, dyspeptic and despondent, while but few enjoy good general health and mental vigor. This statement is contrary to much of the published literature, but is closer to the actual facts. The cases cured are those operated on when near the menopause; those who are improved are generally those who suffered from complicating affections, such as dysmenorrhœa; while the unimproved are the younger subjects, in whom the disease was uncomplicated.

The objections to surgical treatment apply to the removal of both ovaries. In cases in which one ovary alone is affected, and especially where there is prolapsus of the affected ovary and retro-displacement of the uterus, ovariectomy is perfectly satisfactory. The removal of the diseased ovary gives relief and the retro-displaced uterus can be restored, while the remaining ovary performs its functions, and the general health of the patient is preserved. I desire to be understood as advocating the removal of the ovary only when there are structural changes from inflammation and prolapsus at the same time. Prolapsus can be relieved by fixing the ovary to the upper border of the broad ligament, and the welfare of the patient can be thus conserved to a higher degree. When advocating conservative measures in regard to abdominal and pelvic surgery, it may be inferred that I am behind the age in experience; but I have

had a large field for operative surgery, and have acted to the fullest extent justifiable, according to my judgment. In fact, I have in the past violated the rules I now advocate, but I have not been satisfied to have my patients simply survive the operations. I require that they be cured, and failures in this regard have led, I trust, to a rational conservatism.

I have no word of condemnation for those who have removed, and are still removing, ovaries for the relief of chronic ovaritis. Their work, while not always beneficial, has been of vast interest to science. Their doings help to perfect surgery. The rough, unsightly scaffoldings employed by builders are temporary necessities, which are all cleared away when the structure is perfected and completed. In like manner the heroic, daring experiments of the surgeon are valuable stepping-stones, which lead to mature science and art.

The indications for general treatment are to lessen the blood-supply, and relieve pain by correcting the deranged innervation. This demands rest in the recumbent position in the early stages. At the same time general exercise should be enjoyed, either by massage or gymnastic exercise, in the reclining position. I specially desire to commend systematic calisthenics, in the recumbent position, as a most valuable aid in improving or maintaining the general health in many diseases of the pelvic organs which require rest as an important part of the treatment. The condition of the digestive organs should be carefully watched. The poor appetite, coated tongue and constipation; or the capricious appetite, flatulence and occasional diarrhœa, can be relieved by a number of small doses of mercury and a laxative. The saline laxatives are the best when they act without causing flatulence. The use of Saratoga waters often gives good results by improving digestion and keeping the portal circulation active. By keeping up a free elimination by the bowels and kidneys much benefit is obtained.

This applies in cases that are apparently debilitated. Many times I have taken cases away from tonics, stimulants and forced feeding, and given saline laxatives, with the effect of increasing the patient's strength. To relieve the pain and lessen the hyperæmia, the bromide of sodium and fluid extract of hydrastis canadensis, are by far the most potential agents that I have found; they are given in combination and in doses sufficient to produce the desired effect. Twenty to thirty grains of the bromide and ten to twenty minims of the hydrastis, three times a day, until the physiological effects of the bromide are noticed in a mild degree. If the hydrastis is given alone, in such doses, it sometimes causes pelvic pain of a dull character, but when combined with the bromide it has no such effect. These agents are most efficacious in the beginning of the attack, and

hence they should be discontinued as soon as the pain is relieved in a marked degree. Should the pain and tenderness return at the succeeding menstrual periods, the bromide and hydrastis should be resumed. In some cases, much larger doses of bromide are required, and in others it fails altogether to relieve pain. Then it is necessary to employ other agents especially during menstruation. Ten grains of salicylate of soda and five of antipyrine given between meals and in the night when the stomach is empty, answers for some; others, more especially those markedly debilitated, do better on full doses of aromatic spirits of ammonia, camphor and chloric ether, with small doses of cannabis indica. This combination is best suited to those who get relief from gin and whiskey, but it is to be preferred, as alcoholic stimulants ultimately do harm, though they may give temporary relief. Direct or local treatment should be adapted to the social state of the patient, and the presence or absence of complications such as endometritis. In the unmarried local treatment is often injurious. In fact, in such cases, it is better to avoid any examination of the pelvic organs, if the history is sufficiently clear to enable one to make a diagnosis with reasonable certainty. Hot Sitz bath, counter-irritation and hot vaginal douches, the latter to be employed by a competent nurse, comprise about all that I employ in the way of direct treatment. The vaginal douche should not be continued unless it is decidedly sedative in its effects. In married women (and those who are so in all but the name) local treatment is more valuable. The treatment of any disease or displacement of the uterus that co-exists should be managed in the usual way, and such local applications should be used as may aid in relieving the tender and hyperæmic ovaries. I employ a small tampon or pledget of cotton or wool saturated with equal parts of the tincture of belladonna and glycerine, applied behind the cervix uteri, and permitted to remain forty-eight hours, and after its removal a hot douche. These are continued during the first days of treatment. The effect is to support or steady the ovaries, while the sedative effect of the belladonna and the depleting effect of the glycerine are obtained. This I have followed with applications of tincture of iodine after the manner of Dr. Emmet. Recently I have used, with good effect, the sulphur ithyolate of ammonium, five parts in ninety-five of glycerine, applied in the same way as the belladonna and glycerine.

The general and local treatment, thus briefly outlined, gives relief from the more pronounced symptoms. The pain becomes less and the tenderness also. The general health improves and the pelvic congestion subsides. This is apparent in the color of the mucous membrane, the improved menstrual functions and diminished leucorrhœa.

Then the local treatment may be employed at longer intervals or suspended altogether. The constitutional treatment should now be modified. Tonics and laxatives may still be required, but alteratives are also indicated. Iodide and mercury are the chief agents. They act upon the ovaries, as they do upon all glandular organs, and modify or arrest the morbid histological changes which take place slowly. Small doses of bichloride of mercury, with chloride of iron, when iron is indicated, followed by syrup of the iodide of iron in doses as large as can be borne. These can only be used when the bromides are given up. When giving these alteratives the patient often misses the bromides used to give sleep. Sulphonal, at such times, is of great value. In fact, it is the most potent sedative that is at the same time free from ultimate or after-effects that are unfavorable, that we have in gynecological practice. When a sedative is required while iodine of mercury is being used, I find ten grains of salicylate of sodium and five grains of antipyrine, given three times a day, an hour before meals, gives much relief, especially in those who suffer from nervous dyspepsia and flatulence.

One important element in the treatment is patience and careful watching. Improvement comes and the patient or the physician gives up treatment, and there is danger of relapse. The poor in hospitals often suffer for want of time for prolonged treatment, and this often tempts the surgeon to seek more prompt relief by removal of the ovaries. This does not apply with the same force to those who have time and means to secure the needed care.—Alex. J. C. Skene, M.D., in *Boston Med. and Surg. Jour.*

HYSTERIA.

I well appreciate the onerous, and, in some respects, questionable, task which I have set myself in attempting to discuss the subject of hysteria. I approach the task with some degree of temerity, too, for there can be but few more difficult than that which requires the orderly arrangement and intelligent analysis of such a conglomerate as that presented by this disorder.

In the first place, then, can the task be accomplished? Is there a disease, having a sufficient identity to justify its separation and independent study, which can properly be called hysteria? The term hysteria is so inappropriate to most cases which have been so designated, that there has been a constant rebellion against its use, and numerous attempts have been made to furnish a more rational and scientific substitute. The influence of precedent and usage is so strong, however, that we constantly revert to the old term, and possibly it is as well to adhere to this, known to be inappropriate

and unscientific, until there has been determined a sufficient basis for an accurate scientific nomenclature, rather than to accept now, with our imperfect knowledge, another term which pretends to indicate a solution of the problem of its pathology, and yet may be as much at fault as the old.

While we may willingly concede that this term hysteria is a misnomer, and as applied to this group of symptoms, misleading, we will, I think, all concede that it has served a useful purpose in enabling a distinction to be made between this group and all others which may be simulated by it.

We do then encounter something in nosology, which we can conveniently and profitably designate as hysteria. The conditions, however, of its use, and the nature of its symptom-group, are such that it is very difficult to keep in mind a clear conception of the meaning of the term. This arises from several causes: first, there is no known pathological anatomy; second, the symptoms are in chief part simulative of other disorders with well-defined pathological bases; third, these simulations are so multiform and varied, in both seat and characteristics, that it is quite difficult to recognize anything common to them all; while lastly, the long continued and almost universal custom of practically assuming, because of its simulative characteristics, that when its existence can be determined it means that there is no disease whatever, so disposes the mind of the observer that he ceases further to investigate its nature.

My plea to-day shall be for two concessions: first, that when hysteria is diagnosed it does not mean that there is no disease present; and second, that it is the duty of every physician to study and record its manifestations to the end that our knowledge regarding its nature may be made more complete, and our treatment of its manifestations more successful. It is not alone in its want of a pathological anatomy; chorea, paralysis agitans, and other fully accepted and well-determined diseases have no known pathological basis. The difference between this disorder and those is chiefly in the want of cohesion in the second elements of its symptom-group, and we cannot obtain any clear idea of the thread of similarity which runs throughout these until we have clearly-defined ideas of its pathology. This is a prime necessity in the study of the disorder, and must be satisfactorily settled before we can make any permanent progress.

A slight review of its manifestations may throw some light on this. First, then, these manifestations are fugacious in character. They flit from one tissue to another and from one locality to another with a reckless disregard of all pathological laws. Second, in its manifestations it assumes the garb of nearly every disease with which the animal economy can be afflicted. Where its local evidence appear they resemble, in most particulars,

some other disease having the same habitat and the same local symptoms. Like the cuckoo it builds no nest of its own, but steals into that prepared by every other pathological process, aping the real, and itself evading the knife of the surgeon or the diagnostic investigations of the physician. It puts on the garb of the most serious and fatal maladies as well as of the less dangerous. Paralysis, contractures, convulsions, sensory disorders, ocular and aural diseases, degeneration of the cord, loss of voice, ovarian and uterine disease, diseases of the joints and in fact disease of every organ and of every tissue may be simulated by this protean influence. This diverse character and this proclivity to manifest itself in every conceivable locality, will give us a clue to the seat of its pathology.

I assume that no one will be willing, in this age, to admit that disordered functional activity can exist without some representation in the physical arrangement of the tissue substratum. That we cannot detect it by our present methods of investigation is true many times, but this is no sufficient reason for assuming that function can be so far dissociated from organ that one can be deranged while the other is normal.

Now the structure of every tissue and every organ in the body comprises essentially two parts, the one the elements which go to make up its individual identity, and the other that structure which connects it in function with the other portions of the structure of which it is one of the integral parts. In this disease the absence of visible structural change in the first, and the fitting character of the functional disorder, render improbable any change in the structural arrangement of this part.

In other words the machine itself is probably intact. The mechanism by which its activity is developed, and which comprises the second element in its structural arrangement, if it can be so defined, is that which is at fault. This, it need not be mentioned, is the nervous tissue. This alone, is omnipresent in the organism, and this alone presides over physiological activity of every organ.

This nervous system is a most complex structure. It may be divided, however, for our present purpose, into three portions of tissue subdivisions: terminal organs or tissue developments, conducting lines, and central cellular elements. In what part of these is located the pathological change which gives rise to hysterical manifestations?

The second subdivision may be excluded, first, because there is found no structural change, where its tissue arrangement is comparatively simple, and secondly, because all tests demonstrate that there is in reality no disturbance of its function, these being those of conduction. This leaves the central cell and the terminal structure, in one of which we must look for whatever pathological

change pertains to the diseases. That the terminal organ is diseased, and its structure permanently changed, is not probable, because of the transient character of the disorder of its function. To-day, this is deranged, to-morrow, it is normal in every particular, though the disease may still be present, as shown in other parts. Experience, too, demonstrates that the only function of these terminal organs is to receive certain forms of impressions, and this function is never deranged without an accompanying change in structure which is visible either macroscopically or microscopically. To this last assertion there may be exceptions taken by some, but I believe a careful reflection will establish its truth. In this particular instance it is undoubtedly true that no evidence, either of pathology or disordered function, indicates any form of molecular change even, in the terminal organ of the part where the disease shows itself. This leaves only the central cell which may be the seat of the pathology of hysteria, and a careful review of the entire symptomatology will, we feel assured, justify this analysis by exclusion. There is no visible pathological change here, more than in the other portions considered. We must therefore, look to other proofs on the assumption that pathological changes may exist which are not discoverable by any known method of investigation, and show themselves only in functional derangement.

First, then, the function of this central cell is both to receive impressions and to transform these into other forms of activity. Its function is first to receive, and second, to react under the reception. The symptoms of hysteria relate to the second part of this functional activity. The entire group of symptoms in hysteria may be reasonably referred to either an increase or a diminution in the tendency of this central cell to react under an impression of given intensity.

Second, this central cell, besides these functions, also should possess the power to control within certain limits this reaction, both as to the degree of its intensity and the direction which it will take. This is the power of inhibition, and it is this function, *par excellence*, which is disordered in hysteria. Reactions are immediate and uncontrolled. Reactions to impressions may occur, giving rise to simulation of disease in some organ or tissue of the body when there is no local pathological change of any character. Again, a local change of given kind and extent may be productive of a reaction in these central cells, altogether abnormal in character or out of proportion to the local cause. Thus inflammation of a joint may result in hysterical contracture and impaired motion. Epilepsy may be accompanied by hysterical manifestations in almost every imaginable degree. There is scarcely a pathological process in any tissue which may not be accompanied by hysterical mani-

festations of greater or less extent. This is an important fact, and one which should be kept constantly in mind. Do not permit yourselves to see view hysterical manifestations that their presence will cause you to drop all further investigation of the case. A careful differentiation should be made in each case between those symptoms which are the result of local changes in the tissues, and those which depend on the pathological condition of the central nervous cell. Bear in mind that they may co-exist, and the presence of one does not therefore exclude the other. I have known the gravest mistakes to be made, and most serious results to follow a failure to keep this fact in mind.

It being determined that the pathology of hysteria consists essentially in a molecular modification in the central cellular elements of the nervous system, how much further differentiation can be made. The cellular elements of the central nervous system are found in several distinct portions of that system. They exist in the gray matter of the spinal cord, in the nuclei of the cranial nerves, in the collections of gray matter at the base of the brain, in the cortex of the cerebellum and in that of the cerebrum.

To determine this point it is necessary to consider again the symptomatology. In all the manifestations of hysteria of whatever form or habitat, there is a distinct psychic element, which of course discloses functional disorder of the cerebral cortex. This is the one universal and essential element in hysteria. It is always present, and is that which gives the disease its peculiarities and defines its individuality. The cellular elements of the cerebral cortex then are always involved and display disordered functions. It is questionable whether the cells in the lower collections of gray matter are modified in any particular. The normal state of the reflexes, in most cases, would contra-indicate any change in the cells of the spinal cord. Those of the collections of gray matter at the base of the brain may be changed in some of their functional capacities, but we have no certain method of gauging this change. Their physiological functions have not been well determined, and it is not possible, therefore, to determine the part which they play in pathology.

Reasoning from the character of the symptoms, and by methods of exclusion, we determine that the pathology of hysteria consists in a disordered functional activity of the cellular elements of the cerebral cortex, dependent upon molecular changes in their structure, which have thus far eluded all forms of investigation, but which we assume from analogy to exist; that this functional change is shown in a modification or perversion of their normal reaction under stimulus from without themselves, and in a loss of their normal capacity to control and direct within certain limits, the direction and intensity of this reaction.

In addition to these conditions, hysteria requires for its development cerebral cortical cells of a certain type. The disease can be developed only in tissues of certain peculiarities of structure, and like all other structural characteristics these are very prone to be transmitted from generation to generation. Strictly speaking, these inherited organic peculiarities are not elements in the pathology, but they are usually so marked and dominant in this affection that they must be considered defects, and consequently pathological. Such influences, then, as civilization and race are powerful factors in its development. Sex, also, exerts an influence. It is much more frequent among women than men, and among boys than men. The cause for this is probably in the peculiarities of the structure of the central nervous tissues of women and boys, rather than in the presence or condition of any sexual organs. We must admit, however, that these peculiarities are closely connected in some obscure manner with the states of the reproductive functions.

As to age Briquet and Landozy give the percentages of hysterical cases as follows: 8 per cent. under ten years, 50 per cent. between ten and twenty, 28 per cent. between twenty and thirty, 10 per cent. between thirty and forty, 3 per cent. between forty and fifty, and 1 per cent. between fifty and sixty years of age.

Among exciting causes, moral causes are very prominent. Injudicious training, indulgence and license, fright, love affairs, domestic difficulties and financial reverses may be named as the most frequent.

Among women their co-exists in about one half the cases some form of disorder of the sexual organs: ovarian tenderness is very frequent. Among boys and men, masturbation, sexual excesses or extreme continence are not unfrequent causes.

The diseases which it may accompany and complicate are so numerous and diverse, and it is so important to recognize the fact that because of its presence it does not mean that other forms of organic disease may not co-exist, that I feel like urging a most careful study of this point. Such diseases as typhoid fever, tuberculosis, rheumatism, the secondary stage of syphilis, and local inflammations of almost every form, may be disguised by hysterical symptoms. Arthritis may cause a hysterical joint, laryngitis may cause hysterical aphonia, bronchitis may cause hysterical dyspnoea, and blows or falls may develop hysterical pains, anaesthesia and contracture. Cerebral tumor, infantile paralysis as the child approaches puberty, epilepsy, diphtheritic paralysis, and hemiplegia of embolic origin (Growers) may all be accompanied by hysterical manifestations which more or less obscure them and cast doubt on their true character.

Upon cortical brain cells with such a susceptibility, all local pathological conditions act as irritants and produce symptoms directed to the locality of the actual local disease, which are altogether out of proportion to this disease, or sometimes even antagonistic and misleading. Here, just as in cases where there is no local irritant, the central perceptive elements are at fault, misinterpreting and misusing the stimuli which they receive.

Remember in every case of hysteria, whatever be the condition of the locality giving rise to the special symptoms, that there is a pathological condition of the central cortical cells, and that to these you must address your attention if you hope for success in the treatment. You cannot afford to scout the idea of disease simply because the peripheral lesion does not correspond to the symptoms existing. Disease just as important and far more troublesome is present and will require the skill of the most expert for its mastery.

The treatment cannot be prescribed on any hard or fast lines. As has already been stated, the principal element in the development of the disorder is the structural peculiarities or defects in the cortical cells, and this necessarily influences the treatment. It must be prophylactic and hygienic rather than directly curative. Two objects must be kept in view—the first to remove or diminish the abnormal, susceptibility of the central cells by proper environmental, educational and tonic regulations, and the second to remove all local irritants which tend to develop or intensify this susceptibility. Moral means are usually mentioned as those which are to be used for this purpose, but I strongly object to such use of this word and such designation of the treatment to be used. It is not that we should not use what may be called moral influences, but because we should not concede that we treat mind in any sense as separate and apart from physical structure. We must keep the particular organs in mind, the functions of which we desire to correct, and as far as possible, when this is known keep distinctly before us a clear conception of the pathology, the tendencies of the pathological changes and the most rational means of combating these. With our present knowledge of the influence of over-excitation of the cortical cells, especially when this is coupled with abnormal irritability of tissue, and the series of pathological changes, which result from this overstimulation, we need have no difficulty in outlining suitable remedial measures. These changes are intimately connected with nutrition, and show themselves in pervisions of the circulatory and lymph conducting systems. In these the first evidences of pathological changes are seen as hysterical conditions pass, as they often and readily do, into states of more pronounced mental disturbance.

The limits of this paper will not admit of further entrance into this interesting subject, but I can but cordially commend a study of the minute anatomy of the cerebral cortex, with its physiology, and pathology, as offering most satisfactory results in the elucidation of this "bête noire" of medical practice. — A. B. Richardson, M. D., in *Cincinnati Lancet-Clinic*.

SOME PRACTICAL SUGGESTIONS FOR DEEP URETHRAL MEDICATION IN THE TREATMENT OF POSTERIOR URETHRAL CATARRH.

Mr. President and Fellows of the Academy: When I was asked to add my voice to the entertainment, which the Section I help to represent is expected to afford you to-night, I cast about me for a subject which, while as free from technicality as possible, might yet be far-reaching enough to interest the greater number, and at the same time probably provoke from the fellow-members of my Section a discussion profitable for all.

I have been unable to select one which seemed to me more appropriate than the one I have chosen. For posterior urethritis has become of late years a malady very well recognized by those who deal closely and often with genito-urinary cases, and its management is much simpler than what it was a few years ago; yet there exists in the profession at large, seemingly, a lamentable ignorance about it, which leads to much misconception and a considerable amount of mismanagement of cases, the diagnosis of which is very easy and the treatment of which may be successfully carried out by any one in many instances without calling for expert skill in the use of instruments. I have certain ideas on these subjects, ideas which have brought me to the satisfactory conduct of some very stubborn cases, and if a display of these in a general assembly like the present can lead the mind of anyone, until now unaccustomed to make distinctions, to a little more thoughtfulness and the exercise of something like logic in the diagnosis of gleet, and in that way to a more general application of reasonable therapeutics, I shall feel repaid for whatever effort this paper may cost me.

A gleet, as we all know, is not a disease. It is simply a symptom of some morbid condition, the nature of which it should be the function of the physician to determine; and it is as irrational to prescribe for a gleet, in any hope of curing the malady which occasions it, as it is to prescribe for cough with the same end in view without first by physical examination endeavoring to ascertain the source from which the symptom derives; yet my experience leads me to believe that in the profes-

sion at large the opposite course obtains, and that a gleet is treated in a routine way by the vast majority of practitioners, either by injections and internal medicine, or by sounds, or internal urethrotomy, or all, according to the imagination of the prescriber which leads him to generalize as to the causes of gleet and the methods of curing it.

This generalization is based upon the very undeniable efficacy of injections in most gleet conditions, and upon the wide-spread and more proper belief that one of the most constant symptoms of urethral stricture is gleet.

Such a generalization would be not unprofitable in a therapeutic sense if anyone were in a position to say exactly what stricture is; but the modern doctrine of stricture of large calibre has rendered this well-nigh an impossibility, for every natural undulation of the canal may be so classed by the physician who is properly impregnated with the large calibre stricture idea, and he is sure to find what he looks for in every case of gleet.

And so it turns out in many and very many an instance. When a patient with a gleet seeks advice, his physician has no thought of, perhaps little knowledge of, the possibilities and the prevalence of posterior urethritis; he neglects to make the very simple tests by which posterior urethritis may be demonstrated, and he first injects his patient and dilates or cuts his urethra, on the stricture theory—often to the considerable detriment of his patient, who finds himself after the treatment with his gleet still persisting, and the added discomfort of a wide-mouthed dribbling urethra, which never clears itself entirely after the urinary act, or possibly a permanent deviation of the penis from the correct line during erection (as a result of over-cutting), or a relapsing epididymitis or permanently irritable bladder from the injudicious use of very large sounds.

I make this general criticism not as directed against any urethral therapeutic measure, or any school of thought in urethral pathology. I personally believe in, advocate, and practice the cutting of anterior (and some posterior) strictures, of large as well as small calibre, when, but only when, they can be demonstrated to be the cause of the gleet which is to be overcome. My criticism is directed against the indiscriminate employment of a method, most useful when appropriate, and against the frequent neglect of such a study of the case as would lead in many instances to a direct localization of the cause of the gleet in the posterior urethra, and thus save the patient unnecessary mutilation, and the general body of the profession many animadversions from the laity.

I speak of what I do know, and can state honestly that the vast majority of cases of chronic gleet which come to me, are referred to me for advice, have already been cut anteriorly in the ure-

thra from one to eleven times, and that very few of them have ever been tested by their attendants, or any effort made to ascertain whether they had posterior urethritis or not.

Such a state of affairs is not professionally creditable, and although neither I nor anyone (in my opinion and belief) can tell you how to cure every case of posterior urethritis, still one may easily learn how to cure many, and diognosticate all cases, and at least may know what he is treating and how to direct his fire against it, rather than to take a random shot into the bushes in the hope of bringing down some game, because, forsooth, some feathers are seen on the boughs.

Gleet is really an insignificant matter (unless still virulent, a point I do not care to touch upon in this paper), and if a like amount of mucous or muco-pus escaped daily from a man's nose, or mouth, or anus, or even his ears or eyes it would generally discomfort him not at all, or certainly much less than it does when he sees it exuding or milks it out of his urethral canal. Gleet must be classed with the little miseries of life, like shirt-buttons, and corns, a mother-in-law, a wrinkled stocking, a cross in hopeless love; yet philosophers have discovered it is the sum of these little miseries that make up the real woes of life, and there are few of us who have not seen a very sensible man driven nearly to the verge of desperation and despair by the very insignificant torture of a protracted urethral discharge; therefore, it is worthy of consideration, and any means tending to modify it is deserving of respectful contemplation.

The morbid conditions capable of producing a gleet are very many, so many that I shall not weary you by enumerating them here, since it is my intention to deal only with that variety dependent upon posterior urethral catarrh. I need only to say that when a gleet is due to anterior urethral catarrh, caused by stricture, granulations, or what not, the source of the pus may be demonstrated without the endoscope by gentle, thorough, hot irrigation of the anterior urethra by means of a soft catheter passed into the sinus of the bulb, and the immediate use of the simple metallic bulbous bougie, provided the meatus be reasonably large; for if the pus comes from granular or strictured portions of the pendulous urethra, the irrigation will only wash away what lies loose in the canal, and the bulb will subsequently bring forth upon its shoulder soft muco-purulent clots generally tinged with blood, which have been scraped off the excoriated areas from around which the inflamed mucous membrane secretes whatever free pus exists. There may be tight areas which the bulb will detect, but if there be not a granulating surface upon the tight area or behind it which the bloody muco-purulent clots on the shoulder of the bulb will demonstrate, or their absence disprove, then

the cutting of such tight areas will not, in my opinion, favorably modify a given gleet in most instances. Yet, even allowing that there be some tightish areas, and even granting that they be moderately granular, still, if there be posterior urethritis the cutting of the tight areas, although it may greatly moderate, will not cure the gleet, and the patient should be so informed before any cutting operation is undertaken; or he is quite sure to be disappointed, and often to misjudge the physician who has been zealously working for his relief.

Therefore, again, it is desirable to recognize the existence of posterior urethritis, even when it is associated—as is often the case—with coincident anterior urethral catarrh; and the manner of doing this is so simple that it is surely worthy of being put on trial. Indeed, this diagnostic method is so well and so generally known that I almost hesitate to present it before a body of gentlemen so well equipped in general knowledge as the members of this Academy are; yet its constant neglect in good hands emboldens me and fortifies me in reiterating it with emphasis before you.

When there is posterior urethritis, from whatever cause, the quantity of pus lying in the urethra behind the bulbo-membranous junction is disproportionately great when compared with the amount of gleet discharge that appears at the meatus. This may be easily demonstrated.

When pus forms in front of the triangular ligament, it readily and promptly, for the most part, favored by gravity and the fact that the urethral walls lie in contact with each other, reaches the meatus. When it forms behind the bulbo-membranous junction, it more readily takes the opposite course, flowing backward into the prostatic sinus and into the bladder.

When, therefore, a case of gleet is examined, if the urethra be milked by firm pressure with the finger, from the perineum forward, until all the pus that will come be squeezed out and then the patient be instructed to urinate in two parts, into separate glasses, if he have even moderate posterior urethritis the quantity of pus mixed with the first urinary gush, representing the washing out of the deep urethra, will be disproportionately great when compared with what has flowed out spontaneously from the meatus or been milked out by the physician before the urinary act, as shown by gross inspection of the specimen. And if the grade of posterior urethritis be intense not only will the first urinary gush be purulent, but also the entire second urinary flow will be turbid with pus. In case of doubt the anterior urethra may be irrigated before the urinary test in two flows is applied.

The one obvious source of error here is a focus of suppuration in the substance of the prostate, in a seminal vesicle, in the bladder, or in the kidney.

The differentiation of these sources of purulent flow opens up a field rather too wide to be critically considered in a paper of the limited length my time affords. Suffice it to say that prostatic and seminal vesicular suppuration may usually be demonstrated by a milking of the prostate and seminal vesicles by a finger in the rectum, between the first and second urinary flows, a portion of urine being retained in the bladder to be ejected in a third urinary flow and the specimens examined microscopically after settling.

Bladder and kidney suppurations, although they may occur in company with both anterior and posterior urethritis, and will of course render all the urinary specimens turbid with pus, are beyond the scope of this paper and need not be considered.

The commonest kind of posterior urethral catarrh, ordinarily following a protracted gonorrhœa, is the one upon which I prefer to concentrate my and your attention.

Its clinical picture is this: A patient has gonorrhœa, following a more or less protracted course, perhaps complicated toward the end with swelled testicle or a more or less pronounced attack of gonorrhœal cystitis or vesical irritability, and then subsiding into a condition of mild gleet. Such a patient procures some, as he conceives, suitable injection, and as long as he continues to use it once or twice a day his urethra remains apparently dry, and he considers himself well. Within a day or two, however, after leaving off his favorite injection the discharge reappears and goes on to reach a certain grade of intensity, possibly without other symptoms, or perhaps accompanied by itching or discomforting sensations in the anterior urethra near the meatus, or referred to the perineum, and sometimes accompanied by a little urinary urgency and precipitancy. Such a man, even while keeping down his show of gleet by means of injection, will notice that if he drinks wine or spirits, or if he indulges in sexual intercourse, especially to excess, even or if he has a nocturnal emission, that his show of gleet will certainly become promptly aggravated. These are the cases that get a new gonorrhœa every few months, and those who claim to have acquired a new discharge from perfectly healthy women—and their number in the community is considerable.

They are cases of posterior urethritis often pure and simple. They fly from one nostrum to another, and from one physician to another. Sooner or later all of them have the anterior urethra widely cut for alleged stricture of large calibre, and some of them by this means receive temporary, permanent, benefit—when the membranous others urethra is the seat of soft stricture which keeps up the posterior urethritis in their particular cases, and when the deep urethra will tolerate the

passage of sounds without resenting the traumatic violence thereby inflicted.

But this factor of deep urethra tolerance to sounds does not by any means always exist, and the sequel to the cutting and the passage through the deep urethra of large dilating instruments is quite often an aggravation of the discharge and a lighting up either of mild cystitis, prostatitis or epididymitis,

This picture is surely a familiar one to many of you.

Take such a patient at his best, between his acuter attacks, when he thinks that he is keeping himself well, as he calls it, by the use of an injection, and when he has no visible show of gleet—and ask him to urinate in a glass. Floating about in the urine will be noticed cottony chunks and irregular masses of fleecy muco-pus (not simple compact linear shreds), and more or less free pus. This patient is playing the ostrich role, and ignorantly imagining that because he sees nothing there is nothing to see, when all the while the drops of pus are oozing backward in his urethra and being washed out by each urinary act—drops which, if they did come forward and show at his meatus, would convince him that his injection was a snare, and only a mask to conceal the presence of the enemy.

If one of these little fluffy cottony chunks that float about in the urine be caught up in a pipette and examined microscopically, it will be found to be made up of more or less closely arranged rows of layers of pus-cells, strung out in straited films of colloidal prostatic mucus, entrapping the larger oval and rounded succulent cells from the neck of the bladder, some granular bodies, occasionally a crystal of oxalate of lime or uric acid, occasionally a stray spermatic element or a sympexion, sometimes a perfect hyaline prostatic cast—a cast to deceive even the elect, especially when, as is often the case in patients showing prostatic casts, particularly if there be also spermatozoa, the urine contains a faint trace of albumin.

A case like the typical one I have just described is often posterior urethritis pure and simple; there may be a small meatus and points of physiological anterior narrowing, but often the posterior urethra is alone at fault, and is responsible for the relapsing attacks of urethritis, and for the mild persistent gleet.

The sceptical among you may well ask at this point, if this be a case of pure posterior urethritis, why does any of the discharge at all show at the meatus, and why does an injection, which does not reach the alleged diseased area behind the triangular ligament, so positively moderate or even control the anterior discharge, at least in so far as causing it to cease to appear at the meatus is concerned. The explanation is easy.

Although the focus of disease is posterior

to the bulbo-membranous junction, yet the congestion extends forward along the mucous membrane into the sinus of the bulbous urethra, and from this point a moderate oozing of pus occurs—as well as, to a very moderate extent, from the true focus of disease behind the bulbo-membranous junction. Now, the injection reaches and acts as an astringent upon the turgid vessels in the bulbous sinus, and the astringent exerts itself along the continuity of muco-membranous surface to a moderate extent into the membranous urethra and beyond the bulbo-membranous junction, and a repetition of the injection by a continuance of astringent action keeps down the discharge without reaching or curing the actual focus of disease itself; for if the anterior injection be too strong or be forcibly crowded back too far, cystitis or swelled testicle is, as is well known, a not uncommon result.

That a local application, acting simply upon the livid congested membrane in the sinus of the bulb, may control a gleet without curing it, can be often demonstrated by touching this livid membrane carefully with an astringent through an endoscopic tube; and that an application made on one side the bulbo-membranous junction extends its influence more or less to the other side may be also demonstrated by making a membranous urethral instillation of nitrate of silver, ever so carefully, and then inspecting the mucous membrane of the bulb, anterior to the triangular ligament, through an endoscopic tube. This spot, before of a more or less livid red, shows the pale white staining of the nitrate of silver solution. This fact was first observed and pointed out to me by Dr. James P. Tuttle; the only possible criticism upon its accuracy is that a minute portion of the silver solution has followed the injecting instrument on its withdrawal, in spite of all precautions taken.

But my subject drags. I came here to make some practical suggestions to cure posterior urethritis, and must hasten to that point. My suggestions are certain substances to be injected into the seat and focus of the disease with the deep urethral syringe. Though the method is not new, some of the substances are not ordinarily in use.

I do not at all claim that posterior urethritis must be treated locally to get well. On the contrary, most cases ultimately get well, and they do so without local treatment. Rest, the balsams and alkalies, the demulcent drinks, counter-irritation, time, change of air, sea trips, treating the anterior urethra, iron in chronic cases—all these things are potential, and most of them can be happily combined with the local posterior treatment, to the great advantage of the latter, and their co-operation is sometimes essential to the rapid and perfect effectiveness of the posterior treatment. I do claim, however, that most cases are

suitable for local direct treatment, and that such cases under suitable local applications improve with a rapidity which is gratifying to the physician, and quite obvious to the patient; and I claim further that by recognizing the malady and treating it locally, many a urethra may be spared the use of the knife, and very much time saved.

Finally, I state candidly that a few cases are positively unsuited to local treatment, and get worse under it, no matter what substance is injected. To this class belong most tubercular cases and some simple inflammatory, and some ordinary gonorrhœal cases. When, however, the treatment disagrees, the symptoms (notably the discharge of pus) becomes so promptly and so obviously aggravated, that the futility of repeating the application becomes at once clear, while very little time is lost in making the test. I may add, finally, that there is practically no danger of producing cystitis or epididymitis, if the instrument be used carefully, and not inserted too far. The risk of occasioning these complications is vastly less, according to my experience and belief, than that incurred by treating the malady with anterior injections or with sounds—or indeed less than is the risk of these complications if it is left untreated locally, and internal medication be relied upon.

The instrument I employ is the syringe that bears my name. It is founded upon Ulzman's model, and is superior to the latter in being made in one piece, so that no injection soils the fingers, and in being more solid. Guyon's syringe has a bulb at its extremity and injects backward. It must, therefore, be introduced through the inflamed area to be effective, a manœuvre which inflicts unnecessary mechanical violence upon the tender parts. The same objection obtains in the case of all syringes having lateral holes or slits. My syringe and that of Ulzman have only one minute opening at the tip. This tip need be inserted only just within the hole in the triangular ligament, just beyond the bulbo-membranous junction. So inserted, the membranous urethra grasps the tip of the instrument and the contents of the syringe—twenty minims or more—may be gently thrown in, and the entire injection will quietly flow backward along the membranous urethra, through the prostate, and into the bladder, with as little violence as possible, not one drop escaping at the meatus upon the withdrawal of the syringe. The little air sucked up into the syringe upon charging it may be disregarded, as it remains at the top of the instrument and in its tube, and need not be discharged into the urethra.

Formerly, in using strong injections I deemed it important to throw in only a very few drops at the diseased focus. Now I endeavor to produce my result by using much milder injections than formerly, and I throw in the entire contents of the syringe in every instance, except where nitrate

of silver is used in a strength greater than ten grains to the ounce, when I use a few drops only. I increase the strength of injection of a given substance only gradually, after establishing a tolerance of the milder strength, and in this way I avoid irritation, formerly more common. When the source of the flow of pus is reasonably well forward in the membranous urethra, I generally make the injection before the patient urinates. When the inflammation extends farther backward and the supply of pus is considerable, I cause the patient to urinate just before making the injection, so that the injected fluid may flow into the bladder and become applied thoroughly to the mucous membrane at the internal prostatic urethral orifice, without being there diluted or neutralized by coming into contact with urine in the bladder at this point.

In suitable cases the free pus first disappears from the second urinary flow (the urine being voided in two parts), then it disappears entirely from the urine, some shreds still remaining. These are attacked by increasing the strength of the injected fluid, or, if there be some stricture in the membranous urethra, by the safe use of sounds after the catarrhal surface has been modified by the previous use of the injections, combined often with anterior astringent injections, which the patient administers himself.

I have employed in deep urethral injection most of the substances which have repute in controlling the flow of pus from mucous membranes, even Pond's Extract. Such substances as hydrastin, boro-glyceride, nearly all the lead and zinc salts, iodoform, creolin, pyoktanin, etc.; but at the present writing I have come to rely almost exclusively upon four substances—the sulphate of thallin, the glycerole of tannin, the sulphate of copper, and the nitrate of silver. I never now make a preparatory injection of cocaine, as I consider it unnecessary, often harmful.

The Sulphate of Thallin.—This I consider a very valuable drug. Its chemical name is tetrahydro-tarachinisol. It was introduced into anterior urethral medication as an ordinary injection, with words of high praise, by Goll, of Zurich, about five years ago, and since that time has constantly appeared as one of the ingredients of the antrophore, an instrument of torture, when employed in the deep urethra, which I only mention to protest against. I am not aware that anyone else has employed it in solution for deep urethral medication. I have so used it for about four years, and always with increasing frequency and confidence. It is bland and practically unirritating, and may be used up to a saturated solution, which is about twenty-four per cent. It is suitable for all the acuter forms of inflammation (except in cases of acute, recent gonorrhoeal cystitis, in which the nitrate of silver has the preference), and it is

the substance I almost invariably commence with in a solution in water of about three per cent., increasing at each injection up to six, nine, and twelve per cent. The last-named strength will usually do all that thallin can do in reducing the show of free pus in the first urinary rush. The intervals of making this mild injection are best spaced by two, three, or four days, according to the effect, which is sometimes wonderfully prompt and gratifying. The injection causes practically no discomfort, only a little warmth as a rule, and may be retained as long as the patient chooses.

The Sulphate of Copper.—This substance I use in a ten per cent. solution in pure glycerine. This I dilute with water for use, commencing at about one grain to the ounce and working up rather rapidly, if it agrees and has a good effect, to the full forty-eight grains in the ounce. It is markedly astringent in suitable cases, and generally in weak solutions, pains but little more than thallin; very strong solutions, however, of course feel hot and cause precipitate and moderately painful urination for perhaps several hours. The stronger the solution, the longer the interval before a second application is advisable. I do not very often go above a strength of ten grains to the ounce.

The Glycerole of Tannin.—This substance, pure, is too thick to be sucked up into the syringe easily. I use it reduced by adding water, seventy-five, fifty, or twenty-five parts, where a more astringent (but sometimes less irritative) influence is aimed at than that procured by the copper solution.

The Nitrate of Silver.—I employ this remedy as high as a ten per cent. solution, but very, very rarely—practically never in catarrhal cases—use anything like this strength. It is most useful in acute gonorrhoeal cystitis, and as a final astringent when copper and tannin are not efficient. I dilute it with water at each time of application, commence usually at a strength of one grain to the ounce, and very rarely have to go beyond ten, making the applications every three to eight days—studying the effect and being guided by it. This is the harshest of the applications, causes the most pain, precipitancy, and urgency of urination (which often lasts several hours), but frequently renders incalculable service. Carefully used, it is free from the danger of producing complications.

By the careful and observant use of these four solutions, which anyone may easily master after a few trials, the greatest advantage may be obtained in suitable cases of posterior urethritis. Did I not have them at my command, I think I should give up the treatment of gleet. When they disagree the fact is immediately obvious, and their good effect equally clear when they suit a given case, while their employment is generally progressively satisfactory. The thallin makes a black solution when used in the same syringe with the nitrate of

silver, which it takes some time to wash out. I therefore use two syringes, one for thallin and tannin, the other for copper and silver.—Dr. E. L. Kees, New York, in *Med. Rec.*

METHYL-VIOLET AND PERCHLORIDE OF MERCURY IN THE TREATMENT OF CANCER.

In the *Hospital Gazette* of last February I see that Professor Von Mosteg believes he has discovered a new cure for cancer in the hypodermic injection of methyl-violet.

As I have myself been experimenting in the same direction for the relief of malignant growths, the following notes of a case of cancer treated by me last year may be of interest to your readers.

On my return from Capetown on the 25th of August last, I received a telegram requesting my immediate attendance on a patient in a distant district.

Providing myself with methyl-violet and other germicides, I left the same evening by train, and arrived on the evening of the 27th, having crossed a mountain range 6,000 feet above sea-level, its peaks covered with snow, at the base of which he lived.

The patient—J. H. S., a Dutch farmer, aged 52, of healthy parents, but whose sister died from cancer of the stomach—had been hale and strong until two years before, when a small pustule appeared on his lower lip, where his pipe usually rested. It was destroyed twice with nitric acid, and then cut out in June, 1889. Four months afterwards, an enlarged gland appeared in the neck, which, in December, was as large as a walnut, increasing slowly till June, and then rapidly. When I saw him, the tumor extended from near the sternal end of the clavicle nearly to the point of the shoulder and to the lobe of the left ear, measuring $6\frac{3}{4}$ inches across, and $3\frac{3}{4}$ inches vertically; and round the neck, over the two colloid prominences, $17\frac{3}{4}$ inches. Pulse feeble, 88; temperature, 102° ; tongue furred, swollen, indented on edges, sublingual glands swollen and painful, difficulty in swallowing, no appetite, unable to lie down, sleeping in a chair at short intervals as the pains would permit, restless and low spirited, complains of fixed pain at back of neck, and a burning sensation with partial deafness in left ear, head on one side from pain and pressure of the tumor. He had been visited by a medical gentleman from the town, who declined to give an opinion.

A most unfavorable case certainly, and in a locality not favorable for remedial treatment, his residence being situated in a village of gardens and cornfields, on the alluvial banks of a moun-

tain stream, flooded at times, and receiving the silt and drainage of the cultivated farms and homesteads above; with a deep impermeable clay subsoil.

After frankly representing the hopelessness of a cure in such an advanced stage of the disease, whilst firmly believing in the curability of cancer in the earlier stages, I could only hold out hopes of relieving the pains and other distressing symptoms without opiates, and of checking the progress of the disease for a time at least; and tried to cheer him up by instancing cases of lupus ("Die Wolf") which I had cured, a disease more dreaded by the Boers than the worst forms of cancer. He started excitedly, "Well, doctor, if you have cured 'the Wolf,' you must try my case; the tumor has not yet burst, you may be mistaken. Do your best; I promise to do all you advise."

I injected at once 3ss. of liq. hydr. perchlor., P.B., in three places round the hard base of the tumor, and gave a dose of sodæ sulphas to remove vitiated secretions. Next morning I was surprised at the change. He told me he had more sleep than he had had for weeks past, the pains were less severe, the colloid mass less tense and flatter, his pulse 80, and temperature normal. Hope and confidence had been restored by the sleep without drugs and he decided to accompany me to Grahamstown to the Albany Hospital, if I would remain two days for him to prepare for the journey. I saw a case of lupus, and one of goitre, and heard of two more, one of which had quite recovered after removal to the Orange Free State, that day. I drove into the town next day, and saw both of the medical men who had attended him, and both considered the case hopeless, and agreed with me that the only chance for relief was removal to a higher altitude; and indeed, on the journey the reduced barometric pressure, change of climate, scenery, and dry, keen air of the upland plains had already produced a marked change in his condition and spirits. No medicine was given.

On arrival at Grahamstown on the 2nd September the germicide treatment by lotions and subcutaneous injections of mercury perchloride was commenced, 10 ℥. at first every day, increasing gradually to 20 and 30 ., with marked improvement in all his symptoms. The pains left with the removal of pressure as absorption progressed. In a few days he could lie down, and slept sometimes all night. Injections of methyl-violet were now alternated with the perchloride.

Both my *confrères* on the hospital staff examined him, Dr. Greathead on the third, and my brother, Dr. Edwin Atherstone, a few days later, and though both deemed the case hopeless they advised him to continue the treatment. The appetite improved, and he was able to walk into the Botanic Gardens, and even to attend to business.

One of his sons and his wife were always with him. On the 7th I injected the colloid cysts with ʒss of perchloride daily for three days, and afterwards alternately with methyl-violet. It soon began to break up, and showed signs of necrosis, but did not open till the 25th, when three openings gave vent to a brown, grumous, offensive discharge. Sulphurous acid (one to six water) was then injected into the cyst, ʒij at a time, and afterwards one part to four, which quite removed all offensive smell, although the mass was entirely necrosed.

On the 25th, September internal medicines were for the first time commenced, to support his strength, his appetite beginning to fail. Quinine, phosphoric acid, and methylene-violet were given internally with good results three times a day, with wine. He had been taking nutritious soups, eggs, etc., from the time the difficulty of swallowing ceased, which was a few days after his arrival.

On October 6th, I was confined to bed, completely prostrated by a severe attack of epidemic influenza, and Dr. Edwin Atherstone took charge of the patient for me. On the 16th, the patient's brothers came up and induced him to leave for home, and all attempts to dissuade him failed. He thanked me for my care and kindness, but went off the same evening by train to travel 600 miles, over a hundred of it in a spring wagon over the mountain range in winter. I heard that he died eleven days afterwards from exhaustion, free from pain and in the possession of all his senses. He died on the 28th of October.

In this case I trusted entirely to local treatment by hypodermic injections of germicides; it was too far advanced to trust to methyl-violet alone, as I intended to do if in the early stage, but the combination of the two by alternate injections, and afterwards by both combined, sufficed to reduce pressure and consequent pain; and there was no constitutional disturbance, no extension to glands, etc., no *anodyne* of any kind was given, either internally or by hypodermic injections. Forty-five injections were given during the fifty-two days of treatment. The sulphurous acid injections into the necrosed colloid mass prevented the poisoning of the system by the gangrenous discharge usual in such cases. I gave the methyl-violet in the quinine mixture more to affect the *mind*, the color being so exquisite, and *mind* and faith have a marvellous curative effect in disease. At any rate, I think this local treatment is worthy of a trial.—W. Guybon Atherstone, M.D., F.R.C.S., England, in the *Hospital Gazette*.

At a conference of public bodies held in Edinburgh, it was stated that Sir Archibald Geikie has been nominated for the Presidency of the meeting of the British Association in Edinburgh in the year 1892.

AN IOWA QUACK.

Fearing lest a benefactor to his race should be compelled by his native modesty to blush unseen, and waste his sweetness on the desert air, we give space in our columns to a remarkable instance of his diagnostic skill. From Dr. J. G. Pace, of Nebraska, we received the following edifying document, which is printed *verbatim et literatim* :

—26TH—

PROCLAMATION

—OF—

DR. O. G. W. ADAMS TO THE PEOPLE OF THE WORLD.

COLFAX, IOWA, JANUARY, 1890.

TO MY PATRONS :

The past year having been to me an exceedingly prosperous and successful one, I desire to tender to you my sincere thanks, with the hearty wish that during the New Year we all may enjoy all of Earth's richest blessings. For the past year I have manufactured all my medicines in lozenge form, dispensing with alcoholic menstruum, and find that their medical virtues are in no wise impaired, thus preventing the formation of a habit for alcoholic stimulants and avoiding the pernicious results therefrom. All medicines are manufactured at my Laboratory under the supervision of a careful and practical chemist, who, after much study and many laborious experiments, perfected my medicine in lozenge form—making my remedies the only true temperance medicine *EXTANT*. In conclusion, allow me to say, give me and my medicine a fair trial, follow my directions and I will build up your debilitated constitutions, renew the vigor of life, and restore you to health again. I have treated during the past year 36,791 people, and established a business unequalled by any other medical man in the United States.

PSYCHOLOGIC SPECIALIST.

This science is fully understood by me. I will give a clairvoyant diagnosis either by lock of hair or presence of person, telling you how you are, better than you can yourself.

In the progress of civilization, old ideas, in almost every department of life, give place to those which are new, or essentially modified by them. Foremost among the interests which pertain to society, is health. With health, what can we not endure?—what can we not enjoy? Without it, trifles become burdens and the joys of life are turned into mourning.

VITAPATHIC SYSTEM, OR LIFE-PRINCIPAL.

The extraordinary cures which this system has affected, very naturally attract toward us the profound attention of the public. Medical men, clergymen, philanthropists, all see that we are performing a most valuable service. Under this system we give chyle and lymph of Roots, Herbs and Barks, acting in harmony with the great laws of Nature, gradually and kindly removing the hidden cause of disease. Nature's operations are almost invariably of the gentlest kind, all healthful ones certainly are. The gentle rain and the gentle dews teach us a lesson on this point. The wonderful power of medicine under the Vitapathic system cannot be too strongly urged.

To purify the blood is one of the cardinal principles of the Vitapathic system, which embraces a combination of various medical sciences and experiences—taking what is good from others and rejecting the rest. All medicine given in lozenge form.

CONSULTATION FREE.

References from every State in the Union. All

medicines made at our pharmacy. All letters must be accompanied by five 2-cent stamps.

O. G. W. ADAMS, M.D. Colfax, Iowa.

Our correspondent was so affected by this wonderful lucubration, that he immediately forwarded the doctor a lock of hair from his Gordon setter. In reply he received the following, which very fairly represents the diagnostic acumen of this worthy and reverend practitioner of the divine art of medicine:

OFFICE OF

O. G. W. ADAMS' SANITARIUM.

COLFAX, IOWA.

Thine at hand and contents noted. I find thee has nerve Blood and Seminal weakness and Rheumatism of the Blood Kidneys Spine Stomach Heart lungs and fluids of body all affected and Neuralgia of the Blood thee can be Cgred

It will cost thee 5 Dollars for two months medicine.

Registered Letters, Money Orders or Express Orders at my risk. All medicine sent by Express

Write the Town, County, State and nearest Express office plainly to avoid mistakes. In ordering medicine return this diagnosis. No medicine sent unless money accompanies the order.

References from every State in the Union. All medicine made at our pharmacy. All letters must be accompanied by five 2-cent stamps.

O. G. W. ADAMS, M.D.

The dog is being watched with extreme solicitude, but bears his numerous inflictions with equanimity. This man Adams is registered in Polk's Directory as an Eclectic; but his name is followed by a star, showing that no record of his graduation was furnished.—*Times and Reg.*

SUMMER DISTURBANCES OF CHILDREN.

There are times when it is desirable to change the food of the babies the same as we need to change the bill of fare upon our own table. We must not forget that the palates of the little ones are to be consulted. That "variety which is the spice of diet" may be applied in a mild way even to the babies. The food that agrees with the baby to-day, or this week, or this month, may need changing next month. I present the following conclusions:

1. During the heated term keep the baby cool, but not too cool, just cool enough. Uniformity should be the ruling thought. Babies do not enjoy extremes of anything.

2. The proper regulation of the diet, the proper degree of sleep, the proper uniform temperature, pure air and the proper relief of thirst will enable every infant to weather the time of the hot sultry days of midsummer.

3. The severe intestinal diseases and the one which is the very acme of infantile danger—

cholera infantum—may be passed serenely by if we impress upon the mothers the fact that the very first variation from the proper digestion should be corrected by the family physician and not by the "busy body" neighbors.

4. The mother should be impressed with the fact that the opinion of the physician is of so much importance in the matter of food as though medicine were to be administered, in fact it is of paramount importance, in that food is life to the child.

5. Experimentation at all times is risky, and particularly so when dealing with infants, and doubly so when the experiments are not conducted by an expert experimentalist. In the correction of disturbed direction we should aid nature in getting rid of undigested and indigestible materials.

6. We should bear in mind the antiseptic thought.

7. We should see to it that less diet and a more digestible diet be brought into requisition.

8. During the entire period of infantile life we should protect the abdominal region against possible chilling by the wearing of a light woollen belly-bandage.

9. Relieve the thirst by good pure water instead of the breast or the nursing bottle.

10. Proper rest and tranquilization of the little one is desired; above all things let it be kept away from the heated body of the nurse or mother, who in addition to elevating the temperature of the child by contact with her own personality, will more than likely after each filling up with milk proceed in an affectionate way to trot it up and down, from side to side, and in a generally gymnastic way exercise her motherly muscles in giving the little one the soothing effect of thorough agitation, resulting in that which we find at every street corner, the "milk shake," more than likely the baby will reject the particular milk shake made in that particular way, but the result is not always so fortunate. It is far better for the little one to be placed upon a recliner the bulk of the time in a manner favorable to sleep and digestion.

11. Religious regard for cleanliness of all food utensils, refrigerators and nursing bottles should be insisted upon.

Not less than three or four of the simplest form of bottles should be always on hand.

The nursing nipples should be plain black rubber. The handy but filthy tubular affair should be condemned in toto.—*I. N. Love, M.D., in Dietetic Gazette.*

Two Chinese, alleged to be lepers, were admitted to the New York Charity Hospital last Monday.

THE IMPORTANCE OF EXAMINATION OF THE GENITAL TRACT DIRECTLY AFTER LABOR.

In a short paper some time since I endeavored to point out the advantages of flushing the uterus with hot water directly after labor, and my reasons for adopting such a proceeding.

I now wish to point out the importance of making a close exploration of the genital tract for any injury that may occur (more especially in primiparæ) during the process of parturition, by visual and tactile examination. The cervix uteri is frequently torn, the edges of the os lacerated, and the vaginal walls injured, *leaving the perineum intact*; so the conclusion is oftentimes come to that all is well, while considerable mischief may have been done unobserved.

By the hot water flushing we get rid of several sources of danger, and if a thorough examination is then made for vaginal and cervical injuries it will be comparatively an easy matter to draw together the torn surfaces in severe cases, and cauterize in minor ones with strong carbolic, thus leaving the parts concerned in a better condition for repair, and less liability to absorb. It will be obvious that at no other time subsequent to labor have we a better opportunity. No objections will be raised by the patient, and on the old proverb principle that "a stitch in time saves nine," may save a patient from septic absorption, with all its train of misery. The comfort to the practitioner's mind (when such lesions are found), by treating them *at once*, is no small recommendation to the adoption of this proceeding, and the no less pleasurable disappointment of finding that none exist (*which could not be determined without examination*), will also commend itself.

As a general rule the uterus is not washed out after labor, and no examination made except of the perineum.

The consequence is that in some cases when septic symptoms develop *the true cause is never known*; whether depending on a piece of membrane left to decompose *in utero* (which should have been removed at the time of labor), or a lacerated cervix never discovered, or some tear in vaginal surface, allowed for days, perhaps, subsequent to labor, to absorb the morbid products of conception, and so by permeating the patient's system bid defiance to the best directed efforts of the practitioner. I may also allude to the danger in cases where no examination has been made, and septic symptoms develop, of syringing with corrosive sublimate solution the abraded or torn surface which, in the first instance, took up septic water, being also capable (as proved by some cases lately published of severe burn) of absorbing the corrosive solution, and so contributing, if not actually occasioning,

the patient's death.—Alexander Duke, F.R.C.S.I., in *Hosp. Gaz.*

ALCOHOL AND LONGEVITY.—Dr. Ridge, in writing to the *Lancet* on this subject, deals with a matter of great public interest and importance, but in a way which leaves something to be desired. Underlying the whole of his argument from the published figures of the United Kingdom Temperance and General Provident Institution is the assumption that the two sections into which the members of that society are divided, *i.e.*, the Temperance Section and the General Section are substantially on the same footing in reference to such matters as bear upon longevity save in the one particular of the use or renunciation of alcohol. On this assumption the figures are both striking and significant, for they show that over a long period of years the mortality rate in the Temperance Section has been consistently and markedly lighter than in the General Section, and therefore, to use Dr. Ridge's words, "the use of alcoholic liquors produces degeneration of the tissues and shortens life." But is the assumption of parity between the two sections in all other material respects than the use of alcohol a sound one? We believe not. It has been frequently stated, and never to our knowledge denied, that those members of the society who, having entered in the Temperance Section, cease to practice total abstinence, are thereupon passed from the Temperance Section into the General Section. Thus the ranks of the latter are constantly receiving recruits from the former, and a moment's reflection will show that these recruits must be of an undesirable class. Not only are they brought in without medical examination, but even by a process of selection which obviously works against the office. In many cases failing health is the cause of recourse to alcohol; and a sensible proportion probably of these transferred risks are cases of persons in this plight. If so, it is manifest that the process must entirely destroy the comparative value of the resulting mortality figures. The mortality of the Temperance Section is relieved by the withdrawal of more or less moribund members, and the mortality of the General Section is aggravated by the accession of the same individuals. To what extent this effects the result it is obviously impossible to say; but as most of the Life Assurance offices which publish their mortality are able to show as the result of medical selection a sensible reduction in the number of actual claims as against expected claims on a general business, the General Section of the United Kingdom Society would seem to be below par, and we strongly suspect that the explanation is what we have suggested. But the point is one that stands greatly in need of elucidation, and if those who have command of the very

large statistical data which must have accumulated in the United Kingdom office would make a full disclosure, they would certainly produce a result not of merely statistical interest, but also of great public value.

ABORTIVE TREATMENT OF PNEUMONIA—The indications for treatment are exactly the same here that they are in an inflammation in any of the extremities. We must stop the engorgement and prevent the exudation; if that is impossible we must limit it to its lowest possible extent. We have, through the agency of some force the nature of which is not considered in this paper, a weakening or possibly a total suspension of vaso-motor control over the calibre of the small vessels in the lungs, and the result is congestion, then inflammation. This force must be met and overcome. We can strike directly at the cause and abort acute lobar pneumonia with as much certainty as we do the rigors of ague. If we can see the cause while the crepitant r le can be detected, in other words, while the exudation is taking place, we can stop it right then and there by the administration of ergot.

Give me Squibb's fluid extract of ergot, an oiled silk jacket and a mustard plaster, and I will treat successfully and in most cases abort more pneumonias than can be saved by the entire balance of the *materia medica*. I do not offer this treatment as something new or novel. The action of ergot upon unstriped muscular fibre, has been well understood for years. It has been used to control h morrhages in all parts of the body, where bleeding was due to relaxation of the arterial tone, with the most gratifying success. It has been found invaluable in h morrhages from the bowels, in fact it is the most universal and potent internal h mostatic known, the happiest results being produced in h moptysis by the hypodermic injection even when due to purpura h morrhagica. But, gratifying as these results have been, they cannot compare with the glorious results obtained by its timely and fearless administration in pneumonia. I mean by the term "fearless," a deliberate, conservative attempt to poison the patient with ergot. I have done this repeatedly, and long before the first symptom of ergotism appeared, the pneumonic inflammation has faded away like snow before the sun of June.—F. W. Epley, in *N. W. Lancet*.

INTUBATION v. TRACHEOTOMY.—Dr. Jerome Anderson, of California (*Occidental Medical Times*), says intubation of the larynx is a simple, easily performed operation. The head should be held erect, and strongly lifted, the epiglottis will then be elevated, and prevented from approximating too closely to the glottis. In this way one of the chief obstacles to rapid intubation will be overcome. The fear that the aperture may be too

small to permit the introduction of the tube is a pure chimera; long before this stage is reached a child dies. The danger of pushing loose membrane into the trachea need not be taken into account, because, if the child has reached the exfoliative stage without fatal asphyxia, it will hardly require intubation afterwards; and, in any case, nothing but awkwardness or the use of unwarrantable force could detach or push membrane before the tube. The proper after-treatment depends entirely on the recognition of the dual nature of the disease. Diphtheria of the larynx usually invades this organ some days after its appearance in the fauces, and after the first systemic fever, due to its ptomaines affecting the nervous centres, has partially subsided. Membranous croup is due to reflexion outwardly upon the larynx of a profound impression upon the nervous centres by a common "cold." The treatment of diphtheritic croup after intubation is simply that of diphtheria; the one absolute essential in the treatment of membranous croup in steam. As to the comparative merits of intubation and tracheotomy, Dr. Anderson, says there is absolutely nothing that the cutting operation does which will not be accomplished by intubation better and more surely. A table of 27 cases is given; 14 cases of croup, with 11 recoveries, and 13 of diphtheritic croup, with three recoveries. One case is recorded in which the intubation tube was swallowed, and remained in the intestinal tract fifteen days before being passed *per rectum*.—*Br. Med. Jour.*

DENTITION AS A FACTOR IN THE CAUSATION OF DISEASES IN CHILDREN.—Dr. A. Brothers publishes a paper on this subject in the *Archives of Pediatrics* for June, and makes the following observations:—Having kept carefully compiled records of about five hundred teething infants in private and dispensary practice, he believes that dentition is rarely, if ever, the direct cause of disease; moreover, precocious or retarded dentition may occur in otherwise healthy children of an entire family, but the period of protrusion of the first teeth occurs in healthy breast-fed children at six months and a half in the vast majority of the cases. Further, he concludes as follows:—The first dentition is usually complete from the thirteenth to the thirty-sixth month; dentition is distinctly retarded in the first as well as in the late teeth of children brought up on a mixed or artificial diet; congenital diseases, as syphilis, seem to have a retarding influence on dentition. Rickets has a very pronounced retarding influence on the whole course of dentition. Struma seems to hasten the eruption of the first teeth, but does not affect the later teeth. In cases of undeveloped brain there is marked retardation during the entire period of dentition. Chronic diseases have a retarding effect upon the first teeth, but do not seem to influence

the later teeth. Children suffering from marasmus seem to be precocious with the first teeth, tardy with the later teeth; while infants in whom epilepsy develops seems to have their first teeth early.—*Med. Press.*

MERCURY AS A SPECIFIC IN TYPHOID FEVER; CONCLUSIONS FROM THE STUDY OF SEVEN HUNDRED CASES.—From a clinical experience embracing nearly 700 cases of typhoid fever, Smakovsky (*L'Union Médicale*, April 10th, 1891) concludes that the simplest and most efficacious treatment consists in the administration of calomel in fractional doses, according to the method of Professor Zachariine, of Moscow. Three-fourths of a grain of calomel is given every hour for ten doses, if necessary, or till copious, soft, greenish stools have been secured, a gargle of chlorate of potash being meanwhile used to prevent stomatitis. In cases in which cardiac weakness already exists, an infusion of digitalis is used before the calomel. If instituted in the course of the first seven days of the fever, this treatment is said to abort the disease, even when grave in type. If this result is not obtained, the drug exercises the most favorable action in shortening the duration of the disease and preventing complications. A second course of calomel may be given a day's interval after the first, the abortive action being produced sometimes only after this second administration. During the interval, and subsequently, if the disease is not aborted, the author prescribes:

R.—Subnitrate of bismuth, . . . gr. ijss.
Pure naphthalin, . . . $\frac{3}{10}$ gr.
Sulphate of quinine, . . . gr. jss.

Sig.—One powder. Four of these daily.

The author is convinced that the mortality should be *nil* in all cases where the treatment is commenced before the tenth day of the disease, excepting with the very old, or where it occurs in the course of another grave malady.—*University Medical Magazine.*

TREATMENT OF INTERCOSTAL NEURALGIA.—Menard treats intercostal neuralgia by applying a blister over the painful spot; by painting the spot with iodine; or by the use of hot and cold douches. At the same time, if the pain is severe, he administers small doses of opium, or even hypodermatics of morphine. Sometimes atropine or chloroform may be needed, and frequently soothing liniments have to be applied. The causes of intercostal neuralgia are numerous, and the condition which provokes the pain must be discovered and removed. If it is due to anæmia, Menard advises a course of baths, accompanied by the use of one of the preparations of iron. On the other hand, if the neuralgia be due to rheumatism, the salicylates, analgesin, or diaphoretics, must be resorted to; and if the case is a chronic one, sulphur, alkaline,

or thermal baths should be adopted. Venesection, however, in the majority of cases gives excellent results. In other instances, iodine ointment applied to the wall of the chest, protecting the clothing by means of an adhesive plaster, seems to do great good.—*Maryland Med. Jour.*

THE TREATMENT OF WHOOPING-COUGH.—The following treatment is used very largely by certain of the leading specialists in diseases of children in Paris, in cases of whooping-cough. It is divided into three periods. The patient should remain in one room or in bed, and the physician employs belladonna and small doses of opium with aconite, as in the following prescription:—

Tincture of aconite	} of each
Tincture of belladonna	
Camphorated tincture of opium	

Two to five drops once or twice a day, according to the age of the child, is the proper dose. If there is no febrile movement the amount of the aconite can be much decreased, and if constipation is present the opium should not be used. In the second period, or when vomiting comes on, ipecac may be given in small amounts to allay gastric irritation, and in the third period, when convalescence is established, cod-liver oil tonics and Fowler's solution will be found of service.—*Med. News.*

A WARNING ABOUT THE FORCEPS.—In a recent clinical lecture Dr. Goodell said to his class: "Let me warn you, as young men, to resist the temptation of keeping the forceps on too long, in your undue haste or excitement to deliver the woman. Make it your rule always to take them off when the head is well down and the perineum begins to bulge, unless the pains have stopped, or the woman is in puerperal convulsions, or she is in any condition demanding prompt delivery. By observing this precept you will at least avoid the accusation that 'the doctor tore her with his instruments;' for indeed it is too true that the physician, in his haste to deliver, does often tear his patient either by a too hasty delivery or by pulling parallel with the long axis of the woman's body, instead of following the curve of the Carus."—*Practice.*

TO DETECT COPPER COLORING MATTER IN TEA.—Sometimes worthless and exhausted tea-leaves are restored to their natural color and made to look like a superior article of green tea by coloring with copper or drying on copper plates. The addition of a little aqua ammoniæ to an infusion of tea thus colored will at once produce a blue color, more or less intense, according to the amount of copper present. The presence of copper coloring matter in pickles, preserved vegetables, etc., may be similarly detected.—*Nat. Drug.*

THE TREATMENT OF ACUTE ARTICULAR RHEUMATISM BY HYPODERMIC INJECTIONS OF CARBOLIC ACID—As long ago as the year 1875, Professor Senator read a paper before the Berlin Medical Society on the "Treatment of Acute Articular Rheumatism by Hypodermic Injections of a Strong Solution of Carbolic Acid in the neighborhood of the Affected Joints." He pointed out that marked alleviation of the local, and some amelioration of the general, symptoms quickly ensued, and that without any appreciable ill effects to the patient.

In the *Medical Press and Circular*, June 17, 1891, Mr. A. L. Gillespie states that he has tried this treatment in about twenty-four cases, and that in all instances the results were quite as satisfactory as the five cases reported in detail in which the hypodermic injection of from 2 to 5 minims of a ten per cent. solution of carbolic acid relieved the pain almost entirely within a few hours. In all these cases the salicylates had proved inefficacious.

Having regard to the speedy relief afforded in the first four cases, this procedure seems to merit some attention, for though it might appear somewhat heroic to inject into or close to acutely-inflamed joints a strong solution of carbolic acid, yet the relief afforded was so great and welcome that the patients often begged for a repetition of the injection when another joint became painful. The short time that elapses between the injection and the cessation of pain, only half a minute in one case, the rapid return of freedom of movement, and the ease and ability to sleep thereby afforded, warrant our using it in many cases. It is of special value in cases of gonorrhoeal rheumatism, in which no good has arisen from the use of salicylates, but does not seem to act so well when many of the joints are affected.

Although the author has injected the solution directly into the distended synovial cavity of an inflamed joint without untoward results, it is safer and as efficacious to pass the point of the needle of the syringe through the skin obliquely, and, judging where the synovial membrane is, to inject the fluid as close outside the sac as possible. Injected into the sac itself a ten per cent. solution of carbolic acid precipitates the albumen present in the serous contents.

The rationale of the rapid disappearance of all the symptoms is, first, that it is due to the powerful local anæsthetic action of the acid; secondly, to some slight specific action against the rheumatic poison exerted by it. While with regard to the dose one might give, a grain of the pure acid in a child to 2 grains to 2½ grains in an adult would not be excessive.—*Thera. Gaz.*

PERMANGANATE OF POTASSIUM IN DIPHTHERIA.—Dr. Netzetky says that his twenty-two years'

practice convinced him that the best treatment of faucial diphtheria consists in an energetic use of permanganate of potassium. The drug should be administered in the shape of paintings and gargle. The following strong solution should be employed :

R.—Potassii permanganatis, 5 j.
Aquæ dist., 3 j.—M.

Sig.—To paint the affected surface every 3 hours.

For gargling, which is to be repeated as often, a teaspoonful of the same solution should be mixed with a tumblerful of boiled water.

In those cases in which the child is unable to gargle, the following mixture should be given internally :

R.—Solut. hydrogen. superoxydat., 2%, 3 ij.
Glycerinæ, 3 ij.

M. Sig.—A teaspoonful every 2 hours.

—*Med. Rec.*

ANGINA PECTORIS.—R. Douglas Powell (*Practitioner*, April, 1891, No. 274) argues that angina pectoris is a disturbed innervation of the heart or vessels, associated with more or less intense cardiac distress and pain, and a general prostration of the forces, always producing anxiety and often amounting to a sense of impending death. Considerable stress is laid on habitual high arterial tension as a factor in causation. Angina is not necessarily associated with coronary or other disease of the heart or vessels, although it is true that in fatal cases disease or obstruction of the coronary arteries is the most frequent lesion found, after which in order of frequency come fatty degeneration, aortic dilatation, aortic regurgitation, and aneurism. The author classifies the varieties of the affection as follows :

1. In its purer forms we observe disturbed innervation of the systemic or pulmonary vessels, causing their spasmodic contraction and consequently a sudden extra demand on the propelling power of the heart, violent palpitations, or more or less cramp or paralysis ensuing according to the reserve power and integrity of that organ—angina pectoris vasomotoria.

2. In other cases we have essentially the same mechanism, but with extra demand made upon a diseased heart—angina pectoris gravior.

3. The trouble may commence at the heart through irritation or excitation of the cardiac nerves, or from sudden accession of anæmia of cardiac muscles from coronary disease—primary cardiac angina.

4. In certain conditions of blood (often gout), or under certain reflex excitations of the inhibitory nerves, always, however, with a degenerate feeble heart in the background. We may observe intermittence in its action prolonged to syncope—syncopal angina.

Treatment.—In group 1, nitrite of amyl, and still more nitro-glycerine, are of great value, and may require to be combined with nervine tonics or sedatives, iron, zinc, valerian, bromides, etc. In groups 2 and 3, carminative stimulants, or digitalis with nitro-glycerin, are recommended; and of all tonics arsenic, as a rule, is the best.—*Am. Jour. of Med. Sciences.*

AN EPIDEMIC OF PUERPERAL FEVER.—This unusual occurrence in a well-conducted clinic forms the subject of an interesting narration by Döderlein, of Leipzig (*Archiv. für Gynakologie*, Band xl. Heft 1), whose contributions on the bacteriology of sepsis are familiar. Three cases of lymphatic infection by the staphylococcus pyogenes aureus and streptococcus pyogenes occurred, the focus of infection being suppuration beneath an ill-fitting glass eye in a patient's orbit. In some manner the midwife who examined her infected her genital tract and that of two others, one of whom died. By control experiments upon animals it was observed that the union of the two microorganisms produced an especially virulent infection. From the standpoint of treatment the intra-uterine douche is of value as soon as high fever announces the infection; if delayed, the microorganisms are beyond the reach of the antiseptic and the douche is harmful. It is given by Döderlein by inserting a Cusco's speculum, washing out the vagina with sterile water and inserting a glass douche-tube into the uterus, through which sterile water is allowed to run until it is seen that the flow is uninterrupted. A two per cent. creolin solution is then used to thoroughly douche the uterus. For the treatment of puerperal peritonitis, he advises absolute rest, ice to the abdomen, antipyretics, and opium. He believes that internal examination for diagnosis should be as infrequent as possible.—*Ibid.*

COMPLETE PROLAPSE OF THE PREGNANT UTERUS.—A case of complete prolapse of the pregnant uterus at six months is reported by Berne (*Lyon Medical*, Nos. 14 and 15, 1891). The patient was pregnant for the fourth time, and had suffered for several weeks from the presence of the prolapsed uterus between her thighs. Difficult micturition and leucorrhœa had resulted. Replacement was easily effected and maintained by a tampon; pregnancy continued to a successful termination. We recently had occasion to note the remarkable tolerance exhibited by the pregnant uterus in a case of total prolapse at the fourth month in a working woman, who sought treatment at an out-patient clinic. Reduction was easily effected and a fairly good position maintained by a tampon, the mass of which was carded jute covered by cotton, the whole smeared with a lanolin-iodoform paste.—*Ibid.*

TREATMENT OF URTICARIA BY IODIDE OF POTASSIUM.—Stern (*La Semaine Médical* 1890) has treated five cases successfully, four of them being more or less chronic and rebellious to all previous treatment. None of the patients were either syphilitic or asthmatic. In one case, of four months' duration, the itching disappeared on the second day of treatment, and the cure was completed after two and a half drachms of the remedy had been taken. In two cases (one acute, the other chronic) the itching was at first increased, but a successful result was obtained in each case after the administration of seventy-five grains of the drug.—*Ibid.*

PYOCTANIN.—Dr. Willy Pohl (Berlin), says that pyoctanin: 1. Is positively non-poisonous. 2. Does not coagulate albumen. 3. Is very diffusible. 4. Has no smell. 5. Does not pain on application, but apparently stops pain. He further speaks of its use in surgery, especially in bruises of the skin, contusions, slight burns, wounds, fistulas, and suppuration of bone. In skin diseases, such as herpes, acne, lupus and erysipelas, it has an excellent curative effect. In diseases of the mucous membranes (nose, throat and ear), it also shows its therapeutic value. Diseases of the eye, as conjunctivitis, iritis, keratitis, choroiditis, etc., may also be effectually treated with pyoctanin. Dr. Schubart (Reinsoz) says that if 1-2 per cent. solutions are ineffective, 5-10 per cent. solutions may be used. Regarding the treatment of the mucous membrane, he cannot state in what per cent. solution to use it.—*Deutsche Med. Zeit.—Times and Reg.*

THE TREATMENT OF AMENORRHOEA AND DYSMENORRHOEA BY APIOL.—According to Dr. Delmis, apiol is the active principle of the seeds of parsley. It is an oily fluid of an amber color, heavier than water, having a special odor resembling that of the seed from which it is obtained; has a piquant acrid flavor; insoluble in water, soluble in alcohol and ether, and in chloroform. It was at first supposed to be succedaneum for quinine, but observation has not confirmed this. The experiments of Joret and Homelle have pronounced it to be a valuable emmenagogue. These observations have been confirmed by many other authorities, which are enumerated. In a physiological point of view apiol is absolutely innocuous. In doses of from fifty centigrammes to one gramme it produces slight cerebral excitement, such as is caused by coffee. In doses of from two to four grammes it produces drunkenness. With reference to its therapeutic action it has an effect on the uterus analogous to that of digitalis on the heart. To produce its full effect it should be given shortly before each period.—*Le Progrès Médical.*

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TORONTO, SEPTEMBER, 1891.

**The LANCET has the Largest Circulation of any
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LANNELONGUE'S NEW TREATMENT FOR TUBERCULOSIS.

It has been wisely said that children learn by asking questions. Everyone knows how tiresome children become with their innumerable "why's" and "what fors," but such is the natural means by which they gain information. We, as children endeavoring to fathom the secrets of nature, and to frustrate her designs, when they are inimical to the well-being of her created beings, and especially of man, must proceed in a manner very similar to our children, by questioning our great mother Nature. And, like them, our questions are often wrongly and weakly put, and our comprehension of her answers, however truly and plainly given, is often childish and weak. The attempts of scientific men to find out from nature the manner of her procedure in destroying animals by the bacillus tuberculosis have been many, and we have at length arrived at a satisfactory conclusion regarding that first great problem. But, unfortunately, although the attempts to interfere with this destructive process, have been vastly numerous, they have so far been in vain, and tuberculosis and its allied diseases are as fell as ever they were.

So that while we are apt to grow weary in the everlasting strife, and have, perhaps, experienced that "hope deferred which maketh the heart sick," we must still welcome any new means of combating that dread enemy—tubercle. And the very latest,

and one which at first blush promises well, is that of M. Lannelongue, Professor of the Faculty of Medicine in Paris.

In a recent communication by this gentleman, at the Académie of Medicine, on what he calls "a method of prompt transformation of tuberculous products in the joints and other parts of the human body," he brings forward his plan of operations. The idea was suggested to him by the reduction of a large congenital hypertrophy of the arm by sub-aponeurotic injections of a solution of zinc chloride, which speedily reduced the size of the arm, and changed in a few months, what was a mass of flabby moist tissue into a dense hard tissue. This sclerosis is not confined to the immediate points of injection, but radiated as from centres, and apparently closely imitates cicatrization. In conjunction with M. Achard, the action of the drug has been tested on animals, the tissues of which had been subjected to tuberculous changes, with the result of producing a sclerosis of the tissues which stopped the further eccentric ravages of the bacillus. The injections were made, not into the foci of the bacillary zone, nor in the granulations, but outside and around them, where the active spreading process is going on, the central portions being at the same time in a condition of degeneration and necrosis.

Thus he attacks with his agent, the peripheral, active portions, where the bacillus is spreading eccentrically. He thus causes these peripheral parts to take on sclerotic changes, which render them unfit to propagate, by continuity of substance, the morbid process. These changes are, broadly speaking, a fixing and killing of the anatomical elements of the tissues, an obliteration of the capillaries and small blood vessels of the zone, and a narrowing of the lumen of the arteries and veins by setting up an inflammation of their walls. There is also an enormous influx of new anatomical elements, or new embryonic cells into the changed tissues, not only at the point of injection, but for some distance around it. These not only infiltrate the tuberculous tissue, but as M. Lannelongue suggests, commence an active warfare upon the bacilli (see work on Leucocytes, CANADA LANCET, Vol. xxiii, p. 368) ending in their destruction. The morbid tissues acted upon by the zinc chloride are slowly absorbed and finally disappear, while the young tissues undergoes or-

ganization, forming a tissue dense and hard and containing but few blood vessels.

The Dr. uses a solution of from one in 40 to one in 10, and so far no abscess has formed so long as the injection was carried beneath the investing aponeurosis. They cause more or less pain, differing in different cases. In two or three days the granulation tissue becomes more resistant and tense, and later on nodules, which feel like cartilage, may be felt at the seat of injection. The sclerosed tissue gradually becomes softer and looser, and permits natural movement of joints, and even ensuring their proper shape.

Upon the general health the treatment has little effect. We cannot do better than to give in conclusion, Dr. Lannelongue's *modus operandi* and rules of procedure, taken from the *Hos. Gaz.*

Taking the knee as the type of the application of the method, each region of the synovial membrane should be considered separately. I plunge in the needle above the superior *cul-de-sac*, so as to reach the femur on a level with the reflexion in the fungating synovial membrane, and I deposit the fluid right on the femur, either inside or outside the peritoneum. In this way I make four or five punctures deeply in the half circle formed by the superior *cul-de-sac*. About double this number would be necessary in the case of an adult. The parts of the synovial membrane below the patella on either side of the ligamentum patellæ are likewise accessible, but it is desirable to proceed systematically, and to choose the spots with care.

The principal rules to observe in carrying out this method are (1) Avoid injections into the cavity of the articulation. (2) That injections should be made as far as possible at the points whence arrive the blood vessels; following up the granulations along the large ligaments, avoiding the vessels themselves wherever this can be done. (3) Avoid injections immediately beneath the skin. (4) Beginning with solutions of 1 in 40, the strength may be gradually increased to 1 in 10. In the lung I use 1 in 40, and in the epididymus 1 in 20. (5) In tuberculosis of the ribs, iliac bones, and glands, I use a 1 in 10 solution. (6) It is preferable to inject small quantities at a time, a couple of drops for example, multiplying the points of injection. (7) Before having recourse to the method, the limb should be placed in a good

position and maintained there. (8) If, after a time, there are signs of recurrence, the treatment should be forthwith recommenced.

We shall endeavor to keep our readers posted as to further developments of this system. It has, so far, been apparently successful, Dr. Lannelongue having in the month treated 22 cases, 2 being of pulmonary phthisis. Of these, 6 are cured, 2 almost cured, 9 are doing well, the remainder are not reported upon.

TRACHOMA—ITS RECENT TREATMENT.

Among the various treatments of trachoma, or granular lids, as seen in the ophthalmic hospitals of New York city, the operation of "squeezing," and Sattlee's method, seem to give the greatest satisfaction.

The first named has proved very successful in recent cases where the palpebral conjunctiva is covered with the characteristic sago-like granulations. Knapp speaks very highly of it, declaring that it hastens the cure of the affection in a very marked degree.

It is performed as follows: the lid is everted, exposing the swollen mucous membrane studded over with the "spawn-like" bodies. This is then scarified with an instrument consisting of several little knife-like points, although some do not scarify at all. Next, a special pair of forceps, of which Knapp's fashioned at the end like a pair of minute stirrups seems the best, grasps the membrane, beginning either at the inner or outer end of the *cul-de-sac*; the instrument being closed, the operator draws it towards him, squeezing out the contents of the granulations with the contained microbes. In this way the whole membrane is gone over as carefully as possible, leaving the conjunctiva almost as smooth as normal. The pain being rather severe, a general anæsthetic is necessary; ether being the one preferred in this city. If the operation be thoroughly done, in order that none of the granulations be left behind to cause a relapse, the result will be very gratifying, and as far advanced in the direction of a perfect cure, as if the sulphate of copper or any of the older methods had been used for months. It is customary to follow up squeezing by the employment of the "bluestone," after the primary irritation has subsided, in order that any tendency to re-

lapse may be prevented. Knapp has exhibited several cases where he employed this operation, and seems to be very much pleased with the results.

Sattlee, who had the honor of discovering the micro organism of trachoma, performs an almost similar operation, curetting the conjunctival *cul-de-sac* thoroughly, in order to remove the colonies of microbes which may be present, then washing out the wound with a 1-500 solution of sublimate-Trousseau, criticizing this method, fears that the deep curetting may be followed by entropion. However, even sulphate of copper has the same objection urged against it, beside taking months longer to bring about a cure.

Some New York surgeons use, instead of the curette, a tooth-brush with short stiff bristles dipped in a 1-500 solution of sublimate, and scrub the conjunctiva thoroughly, washing the lids after eversion for a few days with the same solution.

Many cases are cured this way which had long been treated without success by cauterization with sulphate of copper.

Taking all things into consideration, the operation by squeezing seems to be the preferable one, and less liable to be followed by organic changes of an entrophic nature.

CANADIAN MEDICAL ASSOCIATION.

The next meeting of the Canadian Medical Association, which will be held in Montreal on the 16th, 17th and 18th September, 1891, promises to be of more than usual interest. Many prominent members of the profession have promised to be present and contribute papers, and although the number is by no means complete, yet, from the following list, the scientific interest of the next meeting is well assured:

The Address on Surgery—Dr. Praeger, Nainimo, B. C.

The Address on Medicine: "Malaria, its Relations to and Influence over other diseases."—Dr. Bray, Chatham, Ont.

Address on Therapeutics: "Water, Some of its Therapeutic Uses."—Dr. Spencer, Brandon, Man.

Dr. V. P. Gibney (New York)—"Early Diagnosis, the most important factor in the Treatment of Pott's Disease of the Spine."

Dr. John Ridlon (New York)—"Spondylitis."

Dr. John Price (Philadelphia)—"A Plea for Early Hysterectomy."

Dr. F. Buller (Montreal)—"Functional Abnormalities of the Ocular Muscles." This paper is expected to be discussed by Drs. Stevens, Roosa and Webster (New York).

Dr. Mullin (Hamilton, Ont.)—"Some Notes on Cases of Post-partum Hæmorrhage."

Dr. Cotton (Cowansville, Que.)—"Appendicitis."

Dr. Slack (Farnham, Que.)—"Surgical Cases occurring in Country Practice."

Dr. Small (Ottawa)—"Malignant Disease of the Cervix Complicating Labor."

Dr. W. S. Muir (Truro N. S.)—"Graves' Disease."

Dr. Geo. Fenwick (Montreal)—"Calculous Pyelitis."

Dr. Shepherd (Montreal)—"Case of Strangulated Cæcal Hernia."

Dr. Buller (Montreal)—"Conservative Surgery of the Eye."

Dr. Jas. Bell (Montreal)—"The Local Treatment of Tuberculosis of the Bladder through a Suprapubic Incision."

Dr. R. F. Ruttan (Montreal)—"Lead and Drinking Water."

Dr. Wyeth Johnston (Montreal)—"Microscopic Examination of Sputum in Heart Disease."

Dr. Phelps (New York)—"The Mechanical Treatment of Hip Joint Disease."

Dr. Macallum (Toronto)—"The Pathology of Anæmia."

Papers have also been promised by Drs. T. Johnson-Alloway, Major G. E. Armstrong, H. Lafleur and L. Smith (Montreal).

An entirely new, and doubtless to many, an interesting, feature of this year's meeting will be the devoting of an hour and a half each day to visiting the city hospitals. These hospitals are—Hotel Dieu, Montreal General, and Notre Dame. Members of the staff attached to these institutions have kindly undertaken to exhibit cases and present other matters of interest in connection with hospital work.

The delegates and visiting members will be tendered a dinner by the profession of Montreal, to be held in the Windsor Hotel, and arrangements are being made for an excursion should time and weather permit.

A CANADIAN MEDICAL TEMPERANCE ASSOCIATION.

It has been decided to organize a Canadian Medical Temperance Association during the meeting of the general Canadian Medical Associations in Montreal this month (September). Similar associations already exist in the United States and Great Britain. The objects will be to advance the practice of total abstinence in and through the medical profession, and to promote investigation as to the action of alcohol in health and disease. Members will be expected to be total abstainers, but will not be required to sign any pledge. The liberty of members in prescribing alcohol as a medicine will be entirely uncontrolled. All regular practitioners of medicine, or of any of its recognized departments, who are willing to join such an association, will confer a favor by sending in their name and address *at once* to Dr. Harley Smith, 256 Spadina Ave., Toronto. To become members, it is not necessary to be present at the meeting, but it is earnestly hoped that all who can, will go to Montreal, in order to give the association a good start.

There will be a nominal fee, sufficient to cover the expense of management.

ICE IN PHEGMASIA ALBA DOLENS.—Dr. Jno. A. Miller (*Pacific Med. Jour.*) in entering on the subject of phlegmasia alba dolens, speaks highly of the efficiency of the cold treatment of the disease. He first used it in 1886, and since then has used it in six cases. He says:—"My first case became infected from the nozzle of a vaginal syringe, which the nurse had employed in a crude manner. A pelvic cellulitis on the left side was the beginning or first evidence of anything wrong; in the course of a few days, the corresponding limb first became painful and afterwards œdematous. That I exhausted all the resources that were laid down in the books at my command, is to put it mild, for the pain in the limb was so excruciating, especially in the calf of the leg and in the inner aspect of the thigh from the groin to the knee, that notwithstanding large and repeated doses of morphine, rubefacients and hot fomentations, the patient got little or no relief. I had treated pelvic cellulitis and perimetritis satisfactorily by means of ice bags

and cold water compresses, and there was every reason that a similar application to the painful regions of the affected limb would result in palliation, if not hasten the cure. This was under protest from the patient, because she dreaded the shock and feared bad consequences. I, however, insisted, and carried out my intentions. The procedure was in the following manner: an ordinary large towel was dipped into iced water, wrung out and clapped around the affected limb; a heavy flannel roller bandage was then applied from the toes upward to the groin. Flannel is preferable, because it does not get hard when moist, and remains softer under similar conditions than cotton material. On the most painful parts, like the inner aspect of the thigh, the popliteal region and the calf of the leg, I laid rubber bags filled with ice. These were kept in place by a circular binder, independent and outside of the roller bandage. The patient was a little shocked when the cold towel was first applied, but the unpleasantness was only momentary, and then the reaction brought ease and comfort. She desired the ice bags to be removed quite often at first, as she claimed they relieved the pain, as anything else had never done before. The morphine was at once discontinued. The pain was entirely controlled by the cold. The temperature dropped from 103° to 100° the next day, and the patient commenced to improve, which continued uninterrupted. The towel was freshly dipped from four to six times in the twenty-four hours. As soon as the patient experienced relief, she was quite anxious to endure the temporary chill from a fresh compress, because the limb felt always better for it afterwards; as the towel soon became dry and hot, and this gave rise to painful symptoms again. Since this first gratifying experiment I confidently and unhesitatingly employed the identical local measures, and the success was uniform and decided.

THE "UNCONTROLLABLE" VOMITING OF PREGNANCY.—Dr. Amand Routh writing to the *Br. Med. Jour.* says: In an editorial on the above subject in your journal of May 30th (p. 1192), allusion is made to a paper read by me at the Harveian Society, in April, and I am stated to have "strenuously advocated the painting of the cervix with a strong solution of iodine." This is not

quite correct. I advised that the iodine should be applied to the cervix and to the vaginal end of its canal; and stated that since 1883, when I first adopted the theory that the vomiting of pregnancy was reflexly due to the centre of irritation near the os uteri internum, I had used this method of counter-irritation in every severe case, and that I had not as yet failed to relieve the vomiting immediately. A few cases have needed one or two repetitions of the application at the end of from five to fifteen days, when the effect of the counter-irritation had worn away, but the relief then became permanent.

In the paper referred to, I argued that a prompt use of this remedy in severe cases would prevent the occurrence of the so-called "uncontrollable" or "pernicious" type of the disease, which differs only in degree and not in kind from the milder forms. Many cases, "uncontrollable" when treated by drugs, local application of cocaine, etc., have yielded to this counter-irritation.

I have taught this method for some years at Charing Cross Hospital, and students have told me how useful it has proved to them afterwards in private practice, and I trust that others may now give it a trial, for I believe it to be perfectly safe, easy, and certain. Hitherto I have found that a solution of iodine made of equal parts of iodine, iodide of potassium, spirits of wine, and water, gives the surest results.

THERAPEUTIC VALUE OF INDIAN HEMP.—Mr. Suckling, of Birmingham, writing to the *Ther. Med. Jour.* on the above drug, says: "I have, during the last few years been accustomed to prescribe Indian hemp in many conditions, and this drug seems to me to deserve a better repute than it has obtained. In one form of insanity, more common in women than in men, and brought on usually by mental worry, often owing to the illness of a near relative, or by a moral shock, the drug acts almost as a specific. In this affection the patient is depressed and apprehensive, she imagines that animals are after her, or that someone wants to injure her. There is great mental confusion and mental loss, the patient is unable to carry on any conversation, and sometimes is unable to dress herself, the condition being one of acute dementia. I have notes of several such cases that have been cured by Indian hemp within

a fortnight. I usually give 10-minim doses of the tincture thrice daily, combined with iron and strychnine. I prescribe also complete rest and plenty of food. The Indian hemp is an essential factor in the treatment, for without it the rapid recovery does not ensue; it seems to remove the mental distress and the restlessness. Indian hemp has proved very useful in my hands in the treatment of melancholia and mania. I have also found this drug of great value in the treatment of chorea when arsenic fails, as it frequently does. It may be combined with chloral with advantage in such cases. In migraine the drug is also of great value; a pill containing $\frac{1}{4}$ grain of the extract, with or without a $\frac{1}{4}$ grain of phosphide of zinc, will often immediately check an attack, and if the pill be given twice a day continuously the severity and frequency of the attacks are often much diminished. I have met with patients who have been incapacitated for work from the frequency of the attacks, and who have been enabled by the use of Indian hemp to resume their employment. This drug is also a valuable gastric sedative in cases of gastric ulcer and gastrodynia. It may be combined with nitrate of silver, and it increases the efficacy of the latter. Its value is well known to asylum physicians, but it does not appear to have obtained the confidence of the profession generally. Indian hemp is also a very valuable hypnotic.

PRURITIS ANI.—Dr. A. H. Ohmann-Dumesnil, of St. Louis College of P. and S., thus treats pruritis ani which may be of a few months' or a few years' standing (*St. Louis Med. and Surg. Jour.*) The functions of the rectum must be properly performed. Tone up the nervous system as follows:

R—Syr. hypophos. co., $\bar{3}$ iv.
Sig.— $\bar{3}$ j. in water four times a day.

After a time the following is ordered:

R—Liq. kali. arsenit., $\bar{3}$ ijss.
Vini ferri, $\bar{3}$ iv.
Sig.— $\bar{3}$ j. in water after each meal.

After having been taken for a sufficient time, the following pill is administered:

R—Strychniæ sulph., gr. j.
Ferri redacti,
Quiniæ bisulph., āā $\bar{3}$ j.—M.
Ft. massa et divide in pil. No. 60. Sig.—One pill three times a day.

Such anodynes should be given as to produce refreshing sleep and rest. For local treatment, the anus and rectum should be examined and disease treated when found, such as fissure, piles, ulcers, etc. If there is much thickening of the skin, pure creasote should be applied night and morning; this will pain for a short time, but soon gives relief. This should be followed night and morning by an anti-pruritic remedy, which should also be anti-parasitic, such as the following:

R—Hydrarg. bichlor., gr. jss.
 Ammon. mur., gr. ij.
 • Acid. carbolic., ʒj.
 Glycerini, ʒij.
 Aquæ rosæ, q.s. ad. . . ʒvj.—M
 Sig.—Apply locally.

STRYCHNINE AS AN ANTIDOTE TO ALCOHOL.—It is a well-established fact that when alcohol is employed in acute diseases (*Jour. de la Santé*), as pneumonia, much larger doses are tolerated by the patient if strychnine is simultaneously administered. A Russian physician, Dr. Yarochevaki, has recently reported some experiments on dogs, bearing on the subject. He gave them alcohol of a strength of 42°-65°, and produced a staggering gait by the injection of 60 grams, and complete intoxication with 90 grams. The alcohol was given for a week and produced considerable emaciation, followed by death. If, however, a hypodermic injection of 2 milligrammes of strychnine was administered with each dose of 30 grams of alcohol, the latter could be run up to 180 grams without the development of intoxication or symptoms of strychnine poisoning. On the ground of these experiments the author formulated the following conclusions: 1. Strychnine suppresses the toxic action of alcohol. 2. It enables persons to ingest large quantities of alcohol for a long time without appreciable injurious effects on the organs. 3. The increased doses of alcohol which may be taken with impunity, if associated with strychnine, have a limit, *i.e.*, as soon as the quantity of strychnine necessary to counteract the effects of the alcohol commences to give rise to toxic symptoms. 4. Strychnine is applicable as an antidote in all forms of alcoholism.

FETOR OF LOCHIAL DISCHARGES.—We remember hearing the late Angus MacDonald, of Edinburgh,

after examining the lochia of a recently delivered woman, that he "always liked to have them smell." He was a giant in his day, but that day has gone, and it would not be easy to find a practitioner who prefers stinking discharges. Boxall (*Practitioner*), has conducted researches upon 640 patients to determine the relationship existing between fetor in the lochial discharges and septic infection; six deaths occurred from sepsis among these patients. He concludes, from his observations, that septic infection may take place without fetor, and that fetor also may occur without sepsis or fever. Fetor is most frequent in cases where the tissues are bruised and torn, and, therefore, in primiparæ and operation cases. It is generally but not invariably associated with fever, but in such cases the fever almost always precedes the fetor by a considerable interval. While the presence or absence of fetor is a very uncertain guide to the presence or absence of sepsis, still it indicates the failure to maintain local asepsis, and vigorous antiseptic measures should be at once instituted. The vulva and vagina should first be cleansed and the uterus not be entered unless it is absolutely necessary.

TREATMENT OF CONDYLOMATA.—This may be summed up as follows, *Internat. Jour. of Surg.*:

1. Many disappear when kept dry by the application of powders, the best being either calomel or boracic acid.

2. In some cases an astringent, such as tannic acid, will effect a cure; but many cases require more radical measures.

3. In the more severe cases, all treatment should have as its object the destruction of the base of the growth. In ordinary cases, electrolysis is the best treatment. In very severe cases, the galvano-cautery is the very best treatment, as there is no hæmorrhage, and little pain. The Paqueiin cautery and escharotics almost invariably leave a painful wound, confining patient to bed.

4. After removing condylomata, the condition that caused them should be treated, otherwise they are apt to re-develop.

THE TREATMENT OF CHRONIC ULCERS.—Dr. J. M. J. Finney, of Baltimore (*Maryland Med. Jour.*), states that he has obtained the quickest and best results from multiple deep crucial incision

through the base of the ulcer. This is done in the following manner: After producing either a local anæsthesia, with cocaine, or the primary stage of general anæsthesia, the incisions are made deep enough to go through the layer of dense fibrous tissue underlying the ulcer, and should extend far enough beyond the edges to reach healthy tissue. If there are any large veins in the immediate neighborhood of the ulcer, they should be cut through. The succeeding hæmorrhage, which is often quite profuse, and rather beneficial than otherwise, is easily controlled by pressure with a snugly applied bandage. In rare instances it may be necessary to control the hæmorrhage by a ligature or stitch. A ten per cent. ointment of iodoform and vaselin is then applied, which is allowed to remain for three or four days, and then renewed.

TINEA TONSURANS.—Simpson (*Med. Analectic*), has had good success in the treatment of ring worm of scalp and body, as follows:

Cut the hair short and wash the scalp well with tincture of green soap, and apply the following solution with a camel's hair brush:

R.—Hydrag. perchlor. gr. i.
Collodii. ʒ i.—M.

This treatment acts (1) by destroying the fungi. (2) By the corrosive sublimate being conveyed to the root of the hair by the ether of the collodion, and (3) by the film formed by the collodion shutting off the supply of oxygen to the fungi, thus assisting in their destruction.

WOMAN'S MEDICAL COLLEGE, TORONTO.—We have received the announcement of Woman's Medical College for the 9th session, 1891-92. It shows that the institution, under the fostering care of a number of zealous workers, is spreading its roots wider and deeper. We wish them all success. Their work so far has been largely, if not entirely, a labor of love.

We note the following changes in the College teaching staff of this vigorous institution: Demonstrator of Anatomy—Dr. S. P. Boyle *Vice* Dr. Alice McLaughlin, resigned; Associate Lecturer in Obstetrics—Dr. H. T. Machell; Lecturer in Theoretical Chemistry—Prof. Shuttleworth; Lecturer in Toxicology—Dr. Graham Chambers; Assistant Demonstrator in Anatomy—Drs. L. A. Davis and Lowe Graham.

DIURETIN IN DROPSY.—Dr. R. A. Babcock in the *N. Y. Med. Jour.* gives the following as his conclusion on the use of the above drug in dropsy. He gives as a rule ninety grains in 24 hours or seven and a half grains every 2 hours:

1. Diuretin (Knoll) is a diuretic of great power and promptitude, suitable to all forms of dropsy.
2. Not increasing arterial tension, it is likely to succeed where digitalis, caffeine, and their congeners fail.
3. In cases of cardiac dropsy, with great feebleness of the pulse and arrhythmia, it will strengthen and regulate, rather than depress, the heart's action.
4. It appears to cause no irritation of the stomach or kidneys.
5. It requires to be given to the extent of from ninety to one hundred and twenty grains daily, and preferably in small doses frequently repeated.
6. It is best administered either in solution in warm water or in gelatin-coated pills, since, if exposed to the air in powders, it undergoes change, with precipitation of much of the insoluble theobromine.

The salt is sodio-theobromine-salicylate, consisting of theobromine, with nearly an equal proportion of salicylate of sodium. It is expensive, being listed by McKesson & Robbins at three dollars an ounce.

GONORRHOEA.—Dr. Broome, of St. Louis (*Weekly Med. Review*), recommends the following method of treating gonorrhœa. Instead of rendering the urine alkaline he irrigates the urethra and bladder with an acid, using a solution of benzoic acid. Besides bathing the entire penis in hot water several times daily, the patient is subjected to no change of treatment for several days; then the urethra is insufflated with five grains of the pure substance of methyl-violet, which seems to penetrate the urethra walls and destroy the deep-seated micro-organisms. Average time to cure the disease is two weeks.

DR. N. M. GRAY, of Allegheny, Pa., says: I have tried PAPINE in two cases, and with the best effects. Both were cases of children from one to three years old, and both so complicated with cerebral trouble that I feared to use opium or any of its preparations, and yet I wished for an anodyne to control some very marked symptoms.

So I tried the PAPHINE, and am happy to say that it had the desired effect, without any of the unpleasant consequences so often following the use of the drug in any form I have heretofore used. I think it an excellent preparation for that class of diseases, and intend to use it hereafter.

THE NEW ENGLAND MEDICAL MONTHLY.—We have great pleasure in noting the tenth anniversary of the *New England Medical Monthly* which has just issued a souvenir edition to celebrate the completion of its first decade. We congratulate our esteemed brother editor, W. C. Wile, A.M., M.D., on the position his journal has among the monthlies of to-day. We always expect to find a good deal of common, hen sense, when we tear off the wrapper. Many happy returns both of subscriptions and of decennials.

THE fifth annual meeting of the American Orthopædic Association will be held at Washington September 22nd, 23rd, 24th and 25th, 1891.

Books and Pamphlets.

ON APHASIA AND LOSS OF SPEECH, and the Localization of the Faculty of Articulate Language. By Frederic Bateman, M.D., F.R.C.S., Lond.; Senior Physician to the Norfolk and Norwich Hospital; Foreign Associate of the Medico-Psychological Society of Paris, etc., etc. Second edition; revised and enlarged. London: J. & A. Churchill. Toronto: Carveth & Co., 1891; pp. 420.

The first edition, published twenty years ago, is so widely and universally favorably known, not only to the medical profession, but to scientific men generally, that no words of ours can adequately express the pleasure which must be felt in perusing the second edition. Now-a-days new editions of books often come quite as regularly as a hen lays her eggs, and often with as little change, or new thought or matter as in the above-mentioned product. The author here has, however, preferred to wait till he had something more to give the medical and scientific world, till the horizon of scientific controversy was somewhat cleared, and the tangled skein of medical psychology partly unravelled. The work is up to the present date, and a vast amount of new matter has been added, amongst which may be noted the chapter on the jurisprudence of aphasia. The work will well

repay perusal by all medical men, and we heartily commend it as *facile princeps* of its kind in the English, and, indeed we believe in any language.

A PRACTICAL TREATISE ON FRACTURES AND DISLOCATIONS. By Frank Hastings Hamilton, A.B., A.M., M.D., LL.D., Late Professor of Surgery in Bellevue Hospital Medical College, and Surgeon to Bellevue Hospital, New York, etc., etc. Eighth Edition, revised and edited by Stephen Smith, A.M., M.D., Professor of Clinical Surgery in the University of the City of New York, and Surgeon to Bellevue and St. Vincent's Hospitals, New York. Illustrated with five hundred and seven woodcuts. Philadelphia: Lea Brothers & Co.

The old edition has been enriched by clinical cases. The editor has endeavored to bring the work abreast of the times, and has succeeded fairly well. As a matter of fact we are inclined to think it would have been wiser for both editor and publisher to have produced a new book, for in many cases the "adding such new facts, cases, and opinions as were deemed necessary to render the work a correct exponent of the present state of knowledge in this department of practice," has resulted in not the most satisfactory reading—a kind of "silk on fustian" whole.

THE SURGICAL TREATMENT OF WOUNDS AND OBSTRUCTION OF THE INTESTINES. By Edward Martin, M.D., Instructor in Operative Surgery University of Pennsylvania, etc.; and H. A. Hare, M.D., Professor of Therapeutics, Jefferson Medical College; Attending Physician to St. Agnes' Hospital. Philadelphia: W. B. Saunders, 1891. Pp. 169.

This is the prize essay of the Fiske fund, and contains a large amount of original matter, which will be very valuable to the surgeon. The authors have incorporated the fullest statistics regarding gun-shot wounds of the abdomen. We commend the work to the notice of our readers interested in the subject.

THE POCKET ANATOMIST. Founded upon Gray. By C. Henri Leonard, A.M., M.D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynæcology, in the Detroit College of Medicine. Fourteenth revised edition, containing Dissection Hints and Visceral Anatomy. Detroit, 1891. The Illustrated Medical Journal Co., Publishers. Cloth 297 pages, 193 Illustrations; price, postpaid, \$1.00. Toronto; Carveth & Co