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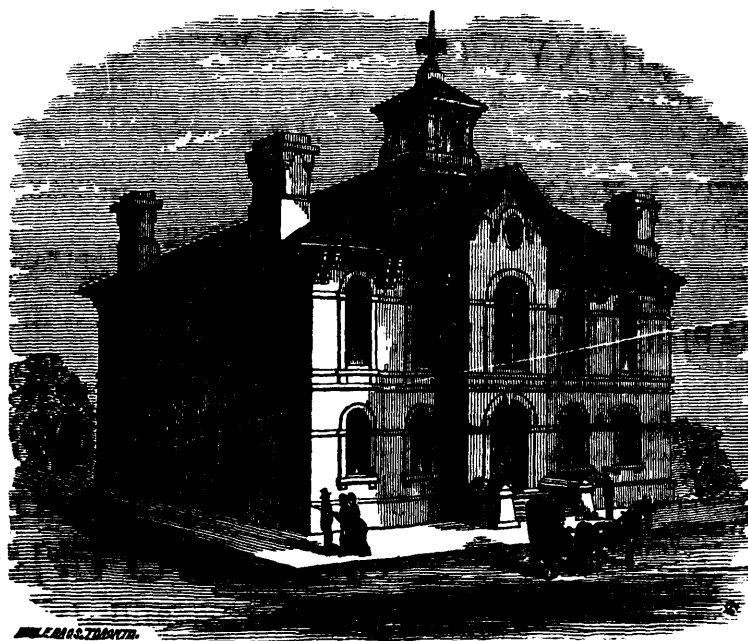
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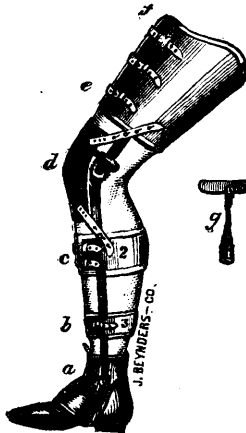
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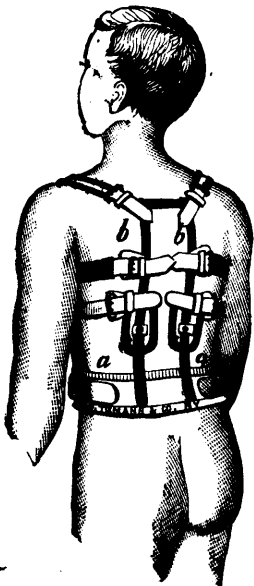
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Selections: Medicine.

REMARKS ON

A CASE ILLUSTRATING THE OCCASIONAL PROTRACTED COURSE OF MALIGNANT (SCIRRHOUS) DISEASE OF THE STOMACH.

BY I. BURNEY YEO, M.D., M.R.C.P.,

Senior Assistant Physician to King's College Hospital;
Assistant Physician to the Brompton Hospital.

The following case, besides being interesting in many of its details, affords proof of a fact which is perhaps not very widely known—viz., that scirrhus disease of the stomach occasionally runs a very protracted course, and extends over a period of ten, fifteen, or even twenty years. The patient in question died in 1874; he first suffered severe gastric pain in 1857.

For the first part of the history of this case I am indebted to the kindness of Dr. Wilson Fox, who was consulted by the patient in August, 1868, he being at that time fifty-five years of age.

The following are Dr. Wilson Fox's notes:—"He first felt severe gastric pain in 1857, relieved by sulphuric acid, but it continued at intervals until 1861, when it increased in severity and became attended by acid vomiting. The vomited matters were never black or bloody. Fæces at this time black but not tarry; appetite lost. In the spring of 1868, after suffering from pain, great weakness, and loss of appetite, he suddenly became faint. The stomach became distended and painful, and the pain radiated across the chest. At this time he passed tarry stools repeatedly on several occasions, and they

were seen, certainly on one occasion, by Dr. Grimsdale, of Liverpool. He suffered from frequent vomiting after food. His attacks of vomiting were associated with anorexia; these attacks would last for about a week, when the appetite would return and become ravenous. The vomited matters were acid, but not frothy, nor had they even the appearance of coffee-grounds. There was no increase of pain before passing the tarry evacuations. He stated that the pain in 1861 used to be relieved by eating, and would return three or four hours after food."

Dr. Fox further noted that the patient presented at this time an appearance of intense pallor; that there was no tenderness or tumor in the region of the stomach; that there were no piles, though he had suffered from them some years ago. The diagnosis was "carcinoma ventriculi."

The patient first consulted me in November, 1870, and complained of symptoms of dyspepsia. He told me of the unfavourable opinion Dr. Wilson Fox had formed of his case in 1868, but added that he had subsequently consulted a very eminent physician in London, who had given him a more favourable opinion, which he was himself disposed to accept—viz., that he was suffering from functional dyspepsia.

He was a gentleman of very great energy both of body and mind; he was in the habit of taking very active exercise, and of consuming a large amount of food, and his chief trouble was severe pain, with flatulence and acid eructations on going to bed at night—i.e., three or four hours after his dinner.

There was no tenderness or tumour in the region of the stomach or over any part of the

abdominal cavity, but he was emaciated, and had a pinched and unhealthy aspect.

A day or two after first consulting me he was seized with very severe pain, and I was sent for to see him, but being out of town he passed under the care of a homœopathic practitioner at Highgate, where he lived, and I saw no more of him until the autumn of 1873. In October of that year he called on me to tell me he was quite well, that the *fons et origo mali* (I use his own words) had been discovered. That the fact was, he had all along been suffering from gall-stones, and that two seasons at Carlsbad and a winter in Algeria had set him right. He did not mention then, what I discovered subsequently, that he had been taught to use morphia hypodermically for the relief of the stomach pain, and to this fact must be attributed much of the obscurity which appeared hereafter to hang over his case.

He passed through the winter of 1873-74 comfortably, in the firm belief that all his previous sufferings had been due to gall-stones, and that, should they ever return, he had a certain resource in the Carlsbad waters.

In April, 1874, I was asked to see his wife at Norwood, and, observing that he was not well, I was told, incidentally, that he was suffering from another attack of gall-stone, but that he knew quite well how to manage himself: he was drinking a large quantity of Carlsbad water; and when the pain was very severe, he obtained certain relief by the injection of morphia hypodermically. I was simply referred to by his wife to know if it was right for him to have recourse so constantly to this mode of relieving his symptoms: a question which was then, and on many subsequent occasions, pertinently answered by the patient, who demanded why he should be allowed to suffer pain when an easy and safe means of relieving it was in his own hands.

I did not see him again until the end of the following month (May, 1874), when I was summoned to see him as he was passing through town on his way to the north. I found him very ill, suffering intense pain in the stomach, vomiting everything he took, and passing black motions, consisting of fluid and solid matters, the latter composed partly of broken-down

scybala and partly of black gritty powder. The pulse was weak, and the tongue red and thinly covered with a brownish fur. The superficial arteries were markedly atheromatous. I asked to see the matters vomited, and found them to consist wholly of the farinaceous foods which had been given him; but on the surface of the vomit I noticed a few small patches of brownish scum, which, on closer examination, appeared to consist of mucus stained with blood. I removed these, and, together with my friend Dr. Lionel Beale, examined them under the microscope; and we found entangled in a fibrinous coagulum, numerous large nucleated cells precisely like cancer cells.

The more urgent symptoms yielded rapidly to appropriate treatment. I limited his food at once to animal jellies and fluids, such as could be completely or chiefly absorbed in the stomach, and forbade entirely the use of farinaceous food, which would have to pass out of the stomach before they could be digested. This obvious precaution was attended with immediate and entire relief of the vomiting. The rest of the treatment consisted in the use of creasote, lime-water, hydrocyanic acid; still, also, the hypodermic injections of morphia, to relieve the severe pain; but these were now alternated with doses of chloral and bromide of potassium combined, which quieted his nervous system and procured sleep. Thus we were able to diminish considerably the amount of morphia employed. He recovered rapidly from all the symptoms, except the gastric pain, which I noticed again and again was rarely or never absent, except when it had been quieted by the hypodermic use of morphia. Under these circumstances, his friends objected to accept the very unfavourable prognosis I felt bound to give, and I was repeatedly urged to adopt the gall-stone theory as sufficient to account for all his symptoms. Three or four dark-looking, irregular concretions were produced which had formerly been passed, and which we were told were gall-stones. These were submitted to analysis, and were reported to contain no cholesterin, and "to present more the character of urinary than biliary calculi." I had the advantage of consultation with two very eminent physicians, and they both felt uncertain as to the precise nature of the case,

and were both more disposed than I was to give weight to the evidence in favor of gall-stones as the "*fons et origo mali*," as the patient was fond of expressing it. At any rate he rapidly mended, and left London about the end of June for the north. About six weeks later I heard from him, to the effect that he was much better, that he had "turned the corner," and that he was about to start the following day for Sweden. His brother-in-law, however, wrote to me that "he thought him in a bad way when *not* under the influence of morphia."

The sequel of this case is told in the following report of his last fatal illness and the post-mortem examination by Dr. C. Forsenius, of Gothenburg:—

"Mr.—, sixty-two years old, arrived at Gothenburg, in Sweden, from the little bathing-place Sârâ, on the 29th of August, 1874, in a comparatively good state of health. The sea-air and the voyage excited an unusual appetite, for which reason he took a rather copious breakfast, and ate also afterwards a good dinner. The same day, at eleven o'clock in the evening, he was suddenly affected with pain in the stomach and sickness. In the night he made a subcutaneous injection of morphia (8½), and fell asleep. I was called at 4.30 a.m., and found him then in a soporose state, with very dilated pupils, with a scarcely perceptible pulse, of about 130 beats in the minute, with cold bluish hands and feet, with the belly very swelled, hard, and tympanitic. I then at once considered it to be a peritonitis from a perforating ulcer of the stomach, and ordered only to put a flannel moistened with oil of turpentine and a warm poultice on the belly. At my next visit, between ten and eleven o'clock in the forenoon, he was in agony, and died soon, very quietly. On the 31st of August, thirty hours after death, I made a post-mortem examination in company with Dr. Ewart, and we found then all signs of death, the body exceedingly meagre, the belly very swelled, the intestines covered with a viscid lymph, distended by gas, and in the upper part lively red; the ventricle, or stomach, very large and dilated, had a hole or perforation in the minor curvature, near the cardia, of round form and with rounded edges, of about the size of a sovereign, which had been covered by the un-

derside of the liver, to which it had been lightly adherent; its mucous membrane was grayish and sloughy, with dark spots and striæ of extravasated blood. The pylorus and the upper part of the duodenum were indurated and contracted, so that only the end of the little finger could be enforced in the passage, and the wall was there nearly half an inch thick. The liver was rather diminished in size, more dark and dense than usual. The gall-bladder was enlarged, as also the gall-duct (choledochus), but contained at present no gall-stone. The head of the pancreas was also somewhat enlarged and indurated as the surrounding duodenum. The heart was of diminished size and contracted, empty from blood; its mitral valve was white and a little thickened; the aortic valves were ossificated, and the aorta was dilated to the double of its natural size (aneurisma), with many small atheromatous patches on its inner side. The lungs were otherwise healthy, but had in the agony been œdematous. There was also in the serous sacs of peritoneum, pleura and pericardium, yellow, watery exudations. He had even very large hemorrhoidal piles yet bleeding after the death."

I am much indebted to Dr. Forsenius for this careful and excellent account of the post-mortem examination.

The issue of this case possessed very great interest for all those who had seen the patient professionally during life, and were acquainted with his medical history, and it seems to me that there are many points of general interest to be noticed in it.

In the first place, it shows that scirrhus disease of the stomach may run a very protracted course, extending over a long series of years, and that the patient may enjoy long intervals of apparently perfect health. This latter fact was strongly dwelt upon by one of the physicians whom he consulted as a counter-indication of the existence of malignant disease. Here seventeen years elapsed between the first onset of gastric troubles and the fatal illness. In the second place, we learn the striking efficacy of judicious treatment in relieving the symptoms attending this disease. The benefit derived from the Carlsbad course was remarkable, and lasted for some time. We can easily understand

how a carefully restricted diet, and a daily washing out of the stomach and intestines with large quantities of warm, alkaline, aperient fluid should have the effect.

The hypodermic injection of morphia doubtless also contributed much to the patient's comparative comfort, although it at last lulled him into a false sense of security, masked important symptoms, and induced the most careful clinical observers (who had not the same advantages that I had of watching him from day to day) to hesitate to give an entirely unfavourable prognosis of the case.

The immediate cessation of the gastric irritation and vomiting on the change from farinaceous food to animal fluids and jellies which could be absorbed in the stomach, was a strong indication of the existence of obstructive disease at the pylorus, and it points to a fact that is often overlooked in practice—viz., that in some conditions of gastric and intestinal disorder, soft farinaceous foods are by no means easy of digestion.

Another point of interest in this case was the supposed existence of gall-stones as the original and sole cause of the symptoms. This opinion was put before us with so much circumstantial detail by the patient and his friends, and the success which had followed the treatment based on this opinion was pointed to as so evident; the actual passage of what were supposed to be biliary calculi; the long periods of freedom from suffering; the absence throughout the whole case of any local tumor or evident tenderness; all these facts naturally led us to give great weight to the considerations whether or not the symptoms could be thus satisfactorily accounted for.

When, however, I observed the other obvious features of the case, at the time when I had the opportunity of seeing the patient daily, the constancy of the pain, except when under the influence of morphia, coming on the instant the effect of the morphia passed off, the striking change in the symptoms produced by the change of diet, the persistent appearance of black stools, and, above all, the presence of bodies, having a perfect resemblance to cancer-cells, in some fragments of mucus on the surface of the vomit,—these facts assured me that although gall-stones might coexist, or might have existed,

we had to do with a case of malignant disease of the pylorus running a somewhat unusual course.

Protracted as was the course of this case, there seems to be good reason for believing that had this patient realized fully the serious nature of his malady, and being willing to remain under medical supervision and direction; had he, in short, adopted the habits of an invalid, taken only such food as was ordered him, instead of travelling about as a sound man, and eating heartily of any food he felt disposed, his life might have been prolonged much longer. As it is, I think the case an important and instructive one, as illustrating a probably not inconsiderable class of cases in which malignant disease of the stomach exists for many years before coming to a fatal issue.—*London Lancet.*

CAPILLARY PUNCTURE OF THE INTESTINES IN TYMPANITES.

An interesting article in the *Bulletin Medical du Nord*, by Dr. Cuignet, contains the following points:

1. The puncture should be made by giving a rotary motion to the needle, which is held between the fingers at the surface of the body.
2. It can be perceived the moment the needle reaches the gaseous cavity, as well as the moment it touches the opposite wall, thus showing the exact dimensions of the cavity.
3. The gas does not escape spontaneously, however distended the cavity may be which contains it, but it must be withdrawn by aspiration.
4. Only the fold of intestine in the immediate vicinity of the puncture is evacuated, but all of the folds of the intestine must be punctured to obtain any considerable relaxation.
5. Each fold, as it is punctured, collapses, and its place is filled by the two folds above and below it, which maintain all the tympanites in the same region, until they also are punctured.
6. Either the gas alone may be withdrawn, or both the gas and the liquid matter in the intestine, by graduating the depth to which the needle is made to penetrate.
7. It is esteemed prudent to always extract the liquid in the vicinity of the puncture.—*La Tribune Medicale.*—*St. Louis Med. Record.*

ON THE OCCURRENCE OF RENAL TUBE-CASTS IN NON-ALBUMINOUS URINE.

BY JAMES FINLAYSON, M.D.,

Physician and Lecturer on Clinical Medicine to the Western Infirmary, of Glasgow.

THE habitual occurrence of renal tube-casts, without albuminuria, in cases of jaundice, while forming an interesting feature in this affection, raises some important questions as regards tube-casts themselves, and the significance to be attached to them as signs of renal disease.

In a "Report on Renal Cases" in 'The Glasgow Medical Journal' for January, 1874, I called attention to the occurrence of tube-casts in non-albuminous urine, citing a case of jaundice, a second case where the urine was loaded with urates and dumb-bell oxalates, and a third which seemed to resist explanation, but in which there was some suspicion of renal calculus. Since then my attention has been more or less constantly directed to the subject, and several cases throwing some light on the matter have come under my notice, partly in the hospital, but chiefly in private. . . .

The tests for albumen relied on were those so long and so well tried in clinical work, viz.—(1) heat and cautious acidulation with acetic or nitric acid, and (2) nitric acid poured gently to the bottom of the cold urine, care being taken to allow some time to elapse before the absence of albumen was pronounced. . . .

The six following headings cover nearly all the cases which I have observed bearing on this subject:—

I. *Tube-casts may be found in the sediment of urine, which contains so little albumen that great care is required to bring out the reaction.*

Without going into details, I may say, generally, that tube-casts associated with these minute traces of albumen occurred in a great variety of different diseases, and in urine in which the albuminous reaction seemed due to minute quantities of blood, as well as in other more ordinary cases.

II. *Tube-casts may be found in samples of urine passed at times when the albumen has temporarily disappeared.*

In a case, for example, of parenchymatous nephritis, resulting in contraction of the kid-

neys, I found that in the progress of the illness the amount of albumen diminished, and for a few days none could be made out; it reappeared, however, in small quantity for two or three weeks before death. *Tube-casts were present in the urine throughout, even when no albumen could be detected by the tests. . . .*

III. *Tube-casts may be found in urine which has been albuminous, but in which the albumen has disappeared for a considerable time, so that we may be in doubt how far the kidneys are restored to their normal state.*

An old lady (æet. 75), subject to chronic rheumatic arthritis, and suffering from severe pains in the left leg resembling sciatica, was found, when I first saw her in January, 1874, to have œdema of the feet, and to be suffering from very frequent micturition, with a sense of straining, and her urine was supposed to have been at times bloody. On examination of two samples, I found a considerable sediment of pus in both; both were albuminous and acid to litmus; specific gravity 1018. Tube-casts were found in the sediments; some of them presented distinct fatty specks; pus-corpuscles, likewise, were seen, but no blood or crystals. The patient subsequently had a severe bronchitic attack, from which she recovered, although still tormented by her rheumatic pains; but I was surprised to find that the albuminuria had ceased in one so old, as I supposed the renal disease likely to continue till her death. She remained, with but little change, almost constantly in bed till November 16th, when she rather suddenly became very drowsy and confused, without any marked alteration in the pupils; indeed, she seemed to be sinking. Still impressed with the idea of renal disease, I procured a sample of the urine, but *I could not establish the presence of albumen*; although a very slight opacity occurred on heating and acidifying, no reaction was obtained with nitric acid in the cold. The colour was good, and the sp. gr. about 1020; under the microscope pus-cells were still found; *tube-casts, some granular and some distinctly fatty, were found without much difficulty.* She rallied from this alarming condition (the real nature of which remained doubtful), and still continues much as before. In January, 1875, the urine was found turbid; it still contained

pus, but neither albumen nor casts were detected. Another examination in August last gave likewise a negative result. . . .

IV. *Tube-casts are found occasionally in non-albuminous urines which are loaded with urates and urea.*

In my "Report on Renal Cases," already referred to, I gave one case coming under this description in which the urine was loaded with urates and octohedral crystals of the oxalate of lime, with a few dumb-bell forms; in this case tube-casts were found, although no albumen could be detected. Since then a remarkable case has come under my notice which may be placed in the same class. A young man was suddenly seized with an inflammation of the cæcum, and on the second day of the illness the urine was examined and found non-albuminous; and, though frequently examined since then, no albumen has ever been detected. The specific gravity, however, was high—1035. On testing for sugar a very marked reduction of Fehling's solution was produced by a few drops of the urine.

V. *Tube-casts are found in the urine in cases of renal calculus and gravel, associated with blood, pus, and albumen in variable and sometimes very minute quantities, and occasionally with a complete absence of albumen, as judged by the ordinary tests.*

A lady was seized, for the first time, with the typical symptoms of renal calculus on the 7th of December, and the urine was found on the 9th to be loaded with urates, and to have abundant crystals of oxalate of lime; no blood-corpuscles were seen; the reaction for albumen was uncertain, only a slight cloudiness was detected on heating and adding acid. On the 15th a trace of albumen was entered in the notes; the urine was acid, and urates were thrown down on adding acid to the cold urine; the specific gravity was 1029; no distinct blood-corpuscles could be made out, but a few tube-casts were seen, chiefly hyaline, a few contained some renal epithelium; loose renal epithelium was present in considerable quantity.

A number of medical men in Liverpool have signed a memorial certifying, from a medical point of view, that prolonged standing is, in many cases, injurious to the health of shop assistants.

ACUTE PNEUMONIA OF THE APEX OF THE RIGHT LUNG; PHYSICAL SIGNS SIMULATING EXCAVATION; RECOVERY.

(Under the care of Dr. WILKS.)

There is at present in Stephen ward a man convalescent from an acute affection of the right lung, that at one time so closely simulated excavation that it was impossible, from physical examination alone, to decide whether the patient was suffering from phthisis pulmonalis or not. The history of the commencement of the illness and its duration seemed to point to an affection of the lung partaking of the nature of acute pneumonia, and the result has justified the opinion expressed at the time by Dr. Wilks, that the disease from which the patient was suffering was pneumonical rather than phthisical, notwithstanding the strong testimony afforded by the physical signs that the man was really consumptive. Cases in which such a difficulty in diagnosis presents itself are not common, but they are by no means rare. Simple uncomplicated instances of acute pneumonia of the base occurring suddenly in persons previously quite healthy cannot, as a rule, present many difficulties; but when pneumonia commences less abruptly at the apex or affects this part as well as the base, in persons not previously very robust, absolute certainty of diagnosis is often for a time impossible. These facts should never be lost sight of in considering the serious question of the diagnosis of phthisis and the still more important one of prognosis. When the subject was raised three years ago, as to the contraction and cicatrization of pulmonary cavities, it may be remembered that many competent and trustworthy authorities expressed grave doubts as to the practicability in some instances of distinguishing with certainty between excavated and solidified lung. Some relied on one sign, some on another, but there was by no means an agreement as to the value to be assigned to any one sign or even set of signs.

The case that has given rise to these remarks is that of a fair-complexioned, thin but muscular man aged thirty, who was admitted into Stephen ward on January 7th, looking pale, distressed, anxious, and evidently very ill. His breathing

was short, rapid, and difficult, and he was troubled with a severe cough and copious expectoration. It was ascertained that he was married, of moderately temperate habits, and of good general health, for although he was a waterside labourer, exposed to all kinds of weather, he had never before been ill, except when a child he had a fever. His father is living, aged sixty-three and healthy, but his mother died of mammary cancer some years ago.

On January 3rd the patient was seized with sudden shivering and pains in the limbs. Next morning he felt great pain in the right side, especially on coughing. The respirations were short and rapid, and he coughed and expectorated a great deal. It was not, however, until January 7th that he applied at the hospital, where he was at once admitted in the condition already described. On examining the chest dulness was detected over the right front to the mammary line. The breathing was bronchial, there was marked bronchophony, but no crepitation. Behind, on the right side there was dulness extending down to the angle of the scapula; there were bronchial breathing, bronchophony, and some fine crepitation on deep inspiration beneath the scapula. Temperature 103° ; pulse 112; respiration 36. One ounce of brandy-and-egg mixture was given three times a day, and milk diet was ordered.

On Jan. 9th the morning temperature was 104.4° ; pulse 120, small and wiry; respiration 38, quick and shallow. The physical signs were unaltered, and there was no pain in the chest; the tongue was furred in the centre, but moist; the cheeks were flushed, and the skin hot and dry; heart sounds healthy; there was great thirst, and much expectoration, which was rusty and tenacious; urine acid, chlorides diminished, sp. gr. 1018, and containing a slight trace of albumen.—Evening temperature 104° ; pulse 120; respiration 44.

On Jan. 10th there was complete dulness of right chest, back and front, tactile vibration was diminished, and the breathing bronchial. Temperature 103.2° ; pulse 112; respiration 40.

On the morning of Jan. 11th the temperature was 102.6° ; respiration 108. The brandy-and-egg mixture was ordered to be given every four

hours, and ten grains of compound ipecacuanha powder at night. Beef-tea ordered.

On Jan. 17th the patient was much better; the dulness had diminished. There was loud, harsh respiratory murmur all over the right chest, and some moist râles at the base on the same side.

From this time the patient rapidly improved, the temperature soon became normal, the dulness gradually subsided, and all the physical signs resumed a natural character. He gradually regained strength, and declared on Monday last that he felt quite well.—*London Lancet.*

PATHOLOGY OF CHOREA.—At a meeting of the Royal Medical and Chirurgical Society, Dr. Dickinson read a paper on this subject. In seven fatal cases which he had observed, he came to the conclusion that the changes were all connected with vascular disturbances. The injection in the arteries was very marked; the degenerations were usually periarterial, and the spots of sclerosis similarly placed. These changes affected both brain and cord, the cord most severely. Whether in brain or cord, the changes on two sides were symmetrical. The parts of the brain most usually attacked lay between the base and the floor of the lateral ventricles, and in the track of the middle cerebral arteries. In the cord the changes attained their maximum in the posterior and lateral parts of the gray matter, and in the upper portions of the cord. The prominent fact brought out by twenty-two fatal cases examined after death, and seventy cases under observation during life, was the frequency of mitral endocarditis in connection with the disease. This duplex relation between the nervous and the cardiac disorder was discussed with the conclusions that chorea was not in any way, either embolically or otherwise, a result of endocarditis, though associated with it, as having a common origin in rheumatism; while endocarditis was continually a result of chorea. Dr. West thought at present we were not in a position to establish from pathological observation alone the nature of a disease in which the mortality was so small as one per cent. Dr. Jackson still maintained the idea that embolism was the cause of chorea. Dr. Dickinson replied that there were certain spots, both in the brain and cord, which were specially affected, and that the symmetrical distribution of these was a strong argument against the embolic view. Further, that chorea will occur independently of heart affection.—*London Lancet.*

Surgery.

OPERATIVE TREATMENT OF HIP-DISEASE.

BY THOS. ANNANDALE, F. R. S. E.

Mr. Annandale is a thorough believer in the use of antiseptics and the knife for purposes of diagnosis and treatment, and does not hesitate to lay open the hip in any case in which there is doubt as to the exact condition of the joint. He relates twenty-two cases to illustrate the success of his method, but *we* are not yet quite prepared to go all the way with him in excision, having strong faith in rest and extension as now obtainable by the improved methods of American surgeons. He says:—

I advocate an antiseptic incision in all cases of hip disease in which signs of suppuration are present; and if an examination of the joint by this means determines that destruction of the articular cartilage of the head of the femur and caries of the bone exist, I advise the immediate excision of this bone, believing that the removal of this bone will, in the large majority of cases, check further disease and allow the patient to recover with a useful and movable limb. Should the disease be limited to the head of the femur, and not involve, or only affect slightly, the acetabulum, it is, in my opinion, only necessary to take away the head of the bone by sawing through its neck. If more than the head of the femur is affected, or if the acetabulum is deeply involved, then it is advisable to take away the great trochanter as well, in order to allow the free escape of pus from the acetabulum, or from the pelvis, if the former should have become perforated. Cases of acute and rapid disease of the hip-joint have generally been considered unsuitable for the operation of excision, but the complete success obtained in one case, which was a most acute form of the disease, proves that this idea has been erroneous. When the antiseptic examination of a suppurating hip-joint determines that the articular cartilage and bone are unaffected, or only slightly involved, the excision of the bone will not be required; for a careful antiseptic treatment of the wound, with perfect rest of the joint, will, I believe, result in a

good recovery in most cases. If, however, the articular surfaces are markedly involved, I strongly advocate excision, as I do not believe that even the use of antiseptic treatment will cure disease of the cartilage or bone, when it has once become thoroughly established, so as to have a movable joint. The excision of the head of the femur in more advanced cases of hip-disease, and where external sinuses exist, although not so favourable in its results as when performed in the earlier stages of the disease, is a proper and justifiable operation, and I believe that even in these cases much may be done to lessen the mortality by thoroughly scraping the lining membrane of the sinuses according to Volkman's plan, and then dressing the wound antiseptically. In such cases it is important to take away the diseased bone freely, so as to remove as completely as possible all source of irritation, and also to allow the free escape of pus from acetabulum or pelvis. Before performing excision in any case of hip-disease it is essential to ascertain the condition of the internal viscera. Should these be seriously diseased, operative interference is not advisable; but I do not myself consider slight and inactive affections of these viscera as necessarily a bar to operative interference, especially if the local disease is causing profuse discharge or irritation.

METHOD OF OPERATING AND AFTER-TREATMENT.

Abscesses connected with hip-disease require to be opened in the most suitable situation, and external sinuses enlarged if need be; but when making an exploratory incision into a suppurating hip-joint, I find it most convenient to enter the knife immediately above, and in a line with, the posterior margin of the great trochanter, and to make an incision long enough and deep enough to allow the finger to pass into the joint. If, then, it is considered advisable to excise the head of the femur, sufficient space will be obtained by extending the wound upwards and downwards for about two inches each way. Should the trochanter require to be removed, the incision should be carried downward an inch or two more. If any portion of the acetabulum requires to be taken away, an incision across the centre of this longitudinal

one will best expose the cavity. Having in the incision advised divided the skin and cellular tissue, I introduce a strong probe-pointed bistoury, and cut across the attachment of the muscles close to the bone, saving their periosteal connection as much as possible. This division of the muscles allows the head of the bone to be turned out to a sufficient extent, and its neck sawn through by a fine narrow saw. In this way the head of the bone can be removed with little disturbance of the surrounding parts—a circumstance which must assist in making the resulting new joint more perfect.

If the trochanter and neck require also to be sawn off, the division of the muscular attachments must be more free; but, even in this case, I think it of consequence to interfere as little as possible with the neighbouring tissues. Few or no arteries of any size are wounded in this method of operating, and it frequently occurs that not even one ligature is required.

In my early cases I found that the posterior flap of the wound had a great tendency to fall down, and so separate its edges; but I now find that the introduction of two or more button-sutures in addition to the ordinary superficial ones, successfully counteracts this.

I have further to add, that I strongly advocate antiseptic precautions during the operation, and the antiseptic treatment of the wound afterwards, and, also note the importance of having a free escape—by the use of drainage-tubes—of pus or other fluids from the deep part of its cavity. In addition to the usual antiseptic treatment, I always apply freely to the exposed articular surfaces or bone, De Morgan's solution of chloride of zinc. The after-treatment of the operation is of the most simple kind, and consists in supporting the limb in the extended position with one or more sand-bags or pillows; or, if there is any tendency to contraction, drawing up of the limb, or painful startings, the application of extension by means of a light weight is useful. Gentle movements of the new joint should be commenced at the end of three weeks, unless there is any painful symptom or condition of the wound which forbids it; then the movements should be employed as soon as this condition or pain has passed off. When the wound is healed, or nearly so, the patient

may be allowed to sit up or use crutches. In cases in which the limb was weak, I have used with advantage some form of wire or other splint while the patient was in the upright position, but in the majority of my cases this support was not required. The time of recovery, after excision of the head of the femur, varies according to the condition of the parts before the operation and according to the strength of the patient. The progress is usually slow, and I should say that from four to five months is the average time that a case of hip-excision requires for its recovery. Should the wound be slow to heal, or should sinuses continue to discharge, a careful search with the probe or finger ought to be made; for portions of dead or diseased bone are frequently the cause of this condition, and their removal is necessary for the proper healing of the wound or sinus. When the patient is able to bear weight on the limb, it is necessary to add to the boot or shoe a raised sole of light material, in order to compensate for the shortening resulting from the operation. This shortening is usually from two to three inches.—*Edinburgh Medical Journal.*

ATROPIA SULPHAS IN ACUTE MYRINGITIS.—Dr. A. N. Ellis, Assistant Surgeon U.S. A. (*Amer. Jour. of the Medical Sciences*), says: "Having been very familiar with the effects of the active principle of belladonna in painful and troublesome affections of the eye, I was led to use it in acute inflammation of the drum. About one year ago a soldier, standing near a cannon while the piece was being fired, suddenly experienced severe pain in the head accompanied with hemorrhage from the ears. His sufferings were great. I saw him about six hours after the accident occurred. After carefully syringing the ear illumination showed fracture of the malleus and the seat of the hemorrhage. Acute inflammation of the drum supervened. Placing the patient in bed, a few drops of a solution of sulphate of atropia (four grains to one ounce of water) were dropped into the ears, six more upon the mastoid process. The effects were all that could be desired. Since that time I have used the atropia in many cases of myringitis, and in every case with the best results. I am convinced that the prompt use of the remedy, conjoined with that of leeches and perfect rest in the recumbent position, will in almost every case give instant relief, thus arresting perforation of the drum and consequent suppuration."

DIAGNOSIS OF SPINAL DISEASE.

BY THOS. P. GRANT, M.D.

The difficulty of differential diagnosis in spinal disease in its earlier stages not unfrequently perplexes the most experienced practitioner. It is a common thing to hear persons, and sometimes even medical men, say there can be no disease of the spine, because there is no pain or tenderness along the spinal column. An absence of pain at the seat of disease is so characteristic that Dr. Chas. F. Taylor, a practitioner of large experience in this and kindred diseases, says, "There *never is any pain in the back* in spinal disease." But in point of fact both pain and tenderness have been found in some well-marked cases of Kyphosis. Both the rational and the physical symptoms of Pott's disease of the spine are so characteristic and generally so well marked as to enable a careful observer to detect them, and pronounce with almost unerring certainty upon the character of the disease, even in the absence of angular curvature. Among the earliest rational symptoms is a listless, anxious expression of countenance, notable at first only at intervals and generally after exercise or some sudden jar. As the disease progresses a sad, careworn, melancholy expression becomes habitual; the patient is quiet, lies or lounges around, and will not join in the sports of his companions, or does so for but short intervals, and complains of weariness and perhaps of headache, slight colic, or pain in the side or chest, or pain in the thighs. If a child, he will be inclined to lie across his mother's lap or a chair, or rest his elbows; and if the point of attack is in the cervical or upper dorsal vertebræ, will be inclined to rest his head on his hands. The digestion is usually impaired, the bowels irregular, and the urine charged with urates.

If the seat of disease is in the lower dorsal or lumbar vertebræ, the pain will be most felt in the hypogastric or iliac regions, and may be mistaken for *colic*. If it be in the cervical or upper dorsal vertebræ, there will be sharp intercostal pains.

The action of the heart is usually quick and regular, and as the disease progresses becomes irritable. This disturbance, together with the characteristic intercostal pains, often cause an

error in the diagnosis, and cardiac trouble of a serious character is apprehended. A half suppressed sigh and an occasional catching of the breath during respiration may be often noticed. The sleep becomes uneasy and accompanied with more or less moaning.

Among the first physical symptoms the observing practitioner will notice is a great caution in moving about. Sometimes the toes are adducted and the knees bent. In picking up any object the patient will flex the knees and thighs rather than bend the back, taking care to steady himself with one hand. He walks with the head and shoulders thrown back or to one side in a stiff, awkward manner, and with a cat-like step.

The clothing being removed and the patient told to stand erect, there is generally more or less lateral curvature. This lateral curvature almost invariably precedes the angular curvature. The abdominal walls will usually be found to be relaxed, and the adductor muscles of one or both thighs contracted. The patient will soon become fatigued in standing, and complains of pains in the sides or chest as above mentioned.

This state of case may continue for some time without any visible change, and then the disease run rapidly on, causing great constitutional prostration, carious destruction of the bone, generally a deformity, and sometimes paralysis and death.

Deformity usually appears some time after the lateral curvature as a slight projection of a single spinous process; this gradually enlarges, and an angular curvature is established unless relief is obtained. The symptoms are then so well marked that they can not be mistaken, unless the disease is situated in the cervical regions. Here the upper compensating curve is immediately above the point of disease, the head thrown back or to one side. The trapezii, the splenii, the sternocleidomastoid muscles, and the posterior and lateral muscles of the neck are drawn so tense that they cover or hide the angle in the spinal column, and thus render the diagnosis more difficult and the exact seat of disease obscure; but the same careful walk and disposition to rest the head will be observed, and sometimes a great difficulty in respiration and deglutition.

I call to mind a case brought to my father by Dr. D. W. Yandell, who was the first to diagnose cervical curvature. This child was anæmic beyond belief, and apparently about to die of inanition, yet her respirations could at times be heard all over the house. In most cases of cervical curvature a partial or a total paralysis of the extremities rapidly supervenes, due to a pressure of the diseased bones on the contents of the spinal canal. This fact has been disputed, but I am unable to discover the slightest ground for a reasonable doubt.*

Among patients with cervical curvature I have seen one case of paralysis of the upper extremities, and five cases of paralysis of the lower extremities, and three cases in which both upper and lower extremities were paralyzed. In each case the paralysis was relieved by relieving the pressure on the spinal cord. In some of these cases the paralysis was complete, extending even to the nerves of sensation.

These are some of the principal characteristic symptoms of Pott's disease of the spine. They are often slight, and are seldom all seen in any one case; but attention to these characteristics will aid the practitioner in a differential diagnosis of this disease, and enable him to seek proper remedies before great deformity has supervened; but I have known one case in which all the usual symptoms were wanting, or so slight as to escape observation, till after the disease had made considerable progress, and a projection as large as an egg had formed on the back, when the symptoms became acute and painful.—*Louisville Med. News.*

THE DANGERS OF OPERATING UPON HABITUAL DRINKERS.—Sir James Paget, in his recently published Clinical Lectures, says, "One does, indeed, sometimes meet with habitual drunkards who pass safely through the perils of great operations; but these are rare exceptions to the rule, according to which one may reckon that the risks of all operations increase with the increasing degrees of habitual intemperance. I think you will find that a habit of slight intemperance is much worse than occasional great excesses; that regular soaking is

worse than irregular carousing; probably because of the steady impairment of the blood and of all the textures to which the soaking leads. Of course you will keep your hands off notorious drunkards, unless you are driven by the stress of strangulated hernia, or a stopped windpipe, or something leaving you as little choice as they do. But you must be on your guard to detect a good deal of drunkenness of the soaking kind, which is not notorious and not confessed. Be rather afraid of operating on those, of whatever class, who think they need stimulants before they work; who cannot dine till after wine and bitters; who always have sherry on the sideboard; or who are always sipping brandy-and-water; or are rather proud that, because they can eat so little, they must often take some wine. Many people who pass for highly respectable, and who mean no harm, are thus daily damaging their health, and making themselves unfit to bear any of the storms of life."—*Sanitary Journal.*

SUCCESSFUL RESTORATION FROM CHLOROFORM NARCOSIS BY NELATON'S METHOD.

BY EUGENE SMITH, M.D.

The patient was a girl seven years old, and after the operation (for strabismus) was finished, she suddenly ceased breathing, and "there was no RADIAL or CAROTID pulse." The patient was held up by the ankles, the head hanging down, and artificial respiration made, while she was held in that position. After three or four minutes "there was a feeble gasp—and after awhile another, and then another," and afterwards the breathing was restored. The breathing ceased a second time, shortly after laying her down, and a second restoration, similar to the first, was similarly effected. For the THIRD time she passed through the same terrible experience, in a few moments subsequently, and the same means restored her again, just as they were about to give her up, because this period was the longest of the three, and the doctor supposed the patient dead. The third restoration was followed immediately by vomiting, and complete consciousness quickly followed.—*Detroit Review of Medicine.*

*Vide Gross, Vol. II, page 202.

ABDOMINAL SECTION FOR INTUSSUSCEPTION.

At a recent meeting of the Royal Medical and Chirurgical Society, three papers were read upon this operation. Mr. Howard Marsh related a successful operation, performed by himself on an infant seven months old, that had been complaining for thirteen days. The bowel was found projecting two inches beyond the anus, and the ileo-cæcal valve could be seen at the extremity of the protrusion, while in the abdomen a firm cylindrical tumor was felt. Insufflation, and the careful distension of the large intestine with lukewarm water, failed to reduce the intussusception. Abdominal section was then decided upon. Chloroform having been administered, the abdomen was opened to the extent of two inches in the median line, just below the umbilicus. It was impossible to reduce the intussusception by the introduction of two fingers into the abdomen, so the bowel was first withdrawn from the abdominal cavity, and then reduction was easily effected. At least one-half of the colon and an equal part of the small intestine were invaginated. The intestine was returned into the abdomen, and the wound closed with hare-lip pins and superficial sutures. No bad symptoms followed. Sickness ceased at once after the operation, flatus was passed on the second day, feculent matter on the third, and on the fourth the child was convalescent. Mr. Marsh thought that in this case the intestine was merely invaginated for thirteen days, and that inflammation set in twelve or fourteen hours before the operation. He concluded by referring to the necessity of undertaking the operation, if all other means had failed: first, in acute cases of not more than twelve or fourteen hours' duration; and, second, in chronic cases in which there had been no symptom of inflammation or strangulation of the intestine. The second case was under the care of Dr. Hilton Fagge and Mr. H. G. Howse. This case, an adult with intussusception, without symptoms of strangulation, had inflation performed three times without success. Mr. Howse thereupon proceeded to open the abdomen by a vertical incision opposite the umbilicus. The intussuscepted mass was readily felt

and drawn out of the wound. It was only by a kind of kneading movement with pressure upon the distal end, that reduction was effected. The length of the included bowel was eighteen inches. The patient recovered without a bad symptom, the wound healing by first intention. In this case, hemorrhage from the bowels was absent, and in their remarks the two gentlemen showed it was of great importance not to delay the operation till hemorrhage occurred. Mr. Hutchinson related a third and fatal case, where the same operation was performed upon an infant six months old, after the other methods of treatment had failed. The intussusception involved the whole length of the colon and the ileo-cæcal valve. Considerable difficulty was encountered in replacing the intestines within the abdomen. They were accordingly punctured with a hare-lip needle in two or three places. Death occurred six hours afterward, and the post-mortem examination showed evidences of recent extensive peritonitis. He was not inclined to consider the length of the incision as unimportant in the operation. There was no analogy with ovariectomy, where one had to deal with flaccid abdominal walls after removal of a large tumor. In intussusception, on the other hand, all the contents of the abdomen that were extruded had to be replaced, and this replacement was difficult, just in proportion to the length of the incision, and the amount of the prolapsed bowel. He had sometimes to reduce the size of the incision before he could replace the intestines. The present was the only case in which he had punctured the intestines, and which he hoped never to do again, attributing the fatal issue to this puncture. The general opinion in the discussion seems to have been, that the operation should only be reserved for those cases where all other means had failed.—*London Lancet.*

Dr. Mackintosh, one of the most popular city physicians, and a resident of Hamilton for over twenty years, died suddenly at his residence on March 23rd. He arose at his usual hour apparently in good health, and went about the ordinary duties of the day. At ten o'clock he expired, it is supposed in a fit of apoplexy.

PSORIASIS—TAR INTERNALLY.

I have come to regard tar in the light of one of the most valuable remedies we possess in the treatment of psoriasis. And it is not merely in mild cases that it does good, for it has, in my hands, frequently yielded the most satisfactory results in very obstinate cases after long courses of arsenic and many other orthodox remedies had been tried in vain. Perhaps it may be that the dose and mode of administration of the tar may have something to do with the difference of results obtained by Mr. Squire and myself; and, therefore, it may be well to state that I generally begin with two minims three times a day in a teaspoonful of treacle, and gradually increase the dose, if necessary, to half a teaspoonful, or even more. The small dose is advisable at first, as in some persons the medicine cannot be tolerated, and produces derangement of the digestive organs, fever, and a bright red rash upon the skin. I can testify also to the virtues of this remedy in catarrh of the bronchial tubes, as pointed out by Dr. Ringer, and in chronic affections of the mucous membranes generally; and I conclude with the remark that it is very singular how such a valuable remedy, which seems in earlier days to have been highly esteemed, should, as an internal medicine, have fallen into such disrepute in our own time.—Dr. T. M'Call Anderson, *British Medical Journal*.

A REMARKABLE CASE OF ANEURISM.—On the 25th, inst. Mr. Oliver Pemberton, of Birmingham, tied the external iliac artery in a case presenting features of unusual occurrence and interest. The patient, a country gentleman of forty-seven, had led a life of great activity, especially in horse exercise; had been syphilitic, but was otherwise vigorous and healthy. Six months previously an aneurism formed in the left popliteal region; shortly after a second, at the apex of Scarpa's space; and when seen (Jan. 11th) by Mr. Pemberton there was a third under Poupart's ligament, all being in the same limb. The lower tumours were as large as the closed hand, and the upper the size of a goose-egg. The artery was secured about an inch from the bifurcation by an antiseptic ligature—which Professor Lister specially prepared, by a new method which he has just devised, and which, as soon as he has perfected its details, he intends to

bring before the notice of the profession. The immediate result of the operation was that all pulsation ceased in the three aneurisms, and has never returned (nine days having now elapsed). The patient is well, the pulse never having exceeded 84, and the wound without disturbance under antiseptic dressings. It need hardly be said that the all-important question here was, to what extent would the collateral circulation be established? How much of the limb could be preserved from gangrene? Let the position of affairs for a moment be reviewed. The main artery, extending from the seat of ligature below the bifurcation of the common iliac to a little above the origin of the anterior and posterior tibials, arrested, at four distinct points, by absolute barriers to circulation—by one ligature and three solid aneurisms! Despite these difficulties the existing conditions seem to assure the preservation of the limb to about the middle third of the leg, a marvellous instance of what collateral circulation can do when tried to its uttermost.

“A SENIOR MEMBER” makes the following remarks in the *British Medical Journal* on the dispensing of medicines by surgeons:—“Either the principle of general practitioners dispensing their medicines is right or wrong. If right, why should it not be continued? or if wrong, let it be given up. The general practitioners of the present day are much more highly educated than their predecessors of even twenty or thirty years ago, and the tendency of the age in almost everything is division of labour; and the time, no doubt, will come, if we continue to increase and prosper as a nation as we have done during the last half century, when pharmacy and dispensing will be entirely relegated to chemists and druggists. Still, for a young man commencing practice as a general practitioner, it is a great mistake for him not to dispense his own medicines, which, with coated pills, and concentrated infusions, &c., can be easily done, and without much expense. Giving a prescription, and charging a fee of 2s. 6d. or 3s. 6d., especially in chronic cases, is ruinous practice to a young general practitioner. By so doing, he plays into the hands of his patient and the druggist, who are the real gainers, whilst he and his wife and family, should he possess such blessings, may starve at home; and did not midwifery come to the rescue, many a young general practitioner must pay the penalty of such folly by going to the wall.”

Midwifery.

CASE OF CÆSAREAN SECTION, WITH SUCCESSFUL RESULT TO THE MOTHER.

By JOHN PARKS, M.R.C.S., LONDON.

CASES requiring the Cæsarean operation to be performed are of such rare occurrence, and the favourable termination of such operations, as far as the mother is concerned, are so few in number, that I have no doubt the following particulars of a case, which has so terminated, will be interesting.

Mrs. H.—, aged thirty-two, a worker in a bleach works, of a nervo-sanguine temperament, was in labor of her second child. She had had one previously, about seven years before, which was born prematurely, and was putrid. In this case she was in labor about two days, and made a very tedious recovery. She had been in labor about eight hours when I first saw her. On making an examination per vaginam, I discovered the right foot protruding. She had only slight pains at this time, but I was informed they had been severe before my arrival. Upon further examination, and endeavoring to seize the other foot, I found it impossible, as the antero-posterior diameter of the pelvis was so small I could not introduce my hand. The pains continued slightly without any change as to the advance of the child. Finding this to be the state of the case, and doubting the practicability of delivering the woman by any ordinary means, I called in the aid of my friend, Dr. A. Fletcher, who, after making a careful examination, came to the conclusion that the space was altogether too small for a full-sized child to be extracted. He also agreed with me, after carefully considering the case, that the only chance for the poor woman was delivery by the Cæsarean operation. I then called in Mr. Bott, who, together with his son, Dr. T. B. Bott, examined the case, and arrived at our opinion. This being the case, and as the patient was by no means exhausted, I determined to lose no time, but to proceed to operate at once.

The room being well warmed, the catheter having been passed, and the patient being placed on a table suitable for the operation, she was put well under the influence of chloroform. I

commenced by making an incision in the linea alba, about seven inches in length, from just below the umbilicus to a little above the pubes, through the skin, adipose tissue, and fascia to the peritoneum. This having been reached, I made a small puncture through it at the upper part of the incision, and, passing the forefinger of my left hand through the opening thus made, I ran it so protected along the line of the incision from above downwards through the peritoneum. At the lower point of the incision the empty bladder was brought into view, and along the whole remaining length was the external surface of the uterus. There had been no hæmorrhage of any moment thus far. I next proceeded to make an incision along the surface of the uterus corresponding to the one through the parietes of the abdomen, and upon the first incision the hæmorrhage became brisk, evidently from the uterine sinuses having been opened. Great care was taken to prevent the escape of any blood into the peritoneal cavity. Having completed the incision through the uterus, the hæmorrhage abated somewhat. After breaking through the membranes the fœtus was brought into view, and I speedily extracted it, taking care to keep my hand in the uterine wound after the extraction of the fœtus in order to remove the placenta, which I did by detaching it from the fundus. Contraction of the uterus was now going on quickly, and great care had to be taken to keep the parietes of the abdomen in contact with it. This, however, was done; and during the whole operation no particle of intestine ever became visible. The child was unusually large, weighing 10½ lb., and was dead, as had been ascertained before the operation. When all oozing had subsided, I closed the uterine wound firmly by passing four silver-wire sutures through its entire substance, twisting the ends securely and cutting them off short. The contraction kept on at intervals, and it was satisfactory to observe that after the uterine wound had thus been secured, there was no discharge of blood from the uterus. The wound through the abdominal parietes I now drew together, and securely closed by six sutures of double silk (well waxed), which I passed through the whole substance of the abdominal parietes. In the intervals between the sutures, long strips of adhesive plaster

were placed, above these a pad of dry lint, and to secure all a well applied many-tailed bandage completed the dressing. During the whole time she remained well under the influence of chloroform, and did so until she was comfortably placed in bed. Shortly after recovering consciousness she vomited, (no doubt from the effects of the chloroform). Small pieces of ice to suck and forty minims of tincture of opium were now administered. The operation was completed about eight p.m., and during the night small pieces of ice, together with forty minims of tincture of opium, were all that she took.

July 21st (first morning after the operation). Has slept about one hour during the night; there has been slight retching, but no vomiting; has taken ice freely; passed urine. Pulse 110; temperature 102 degrees. Complains of pain in abdomen like after pains. Ordered a grain of opium in a pill, to be taken every hour when in pain. There has been very slight oozing from lower point of external wound, also slight discharge per vaginam.

22nd.—Has had a restless night up to five a.m., with constant vomiting. Pulse 112; temperature 102 degrees. Skin moist; has a restless, anxious appearance; continues ice; passes urine freely; has taken some milk and soda-water, which has been retained by the stomach.—Evening: Seems easier; has had no return of vomiting since five a.m.; has slept several hours; passed water. Pulse 112; temperature 100 degrees. Tongue slightly coated, but moist; perspires freely; has had no shivering; has taken milk and soda-water, with a little brandy. Takes one grain of opium when in pain. I also gave her a hypodermic injection of one-third of a grain of morphia at the pit of stomach.

23rd.—Passed a comfortable night; no vomiting. Pulse 110; temperature 100 degrees. Continues milk, soda-water, and brandy; passes water freely; tongue slightly coated, but moist; discharge per vaginam continues slightly; very slight oozing from lowest point of external wound.—Evening: Has had more pain in abdomen, apparently from uterine contraction; very little tenderness on pressure over abdomen. Pulse 98; temperature 100 degrees. Continues milk, soda-water, and brandy; takes her opium

pill when in pain; had another hypodermic injection to-night.

24th.—Had a good night; passing water freely; very little pain; no sickness or vomiting; had egg and milk with brandy, which was retained. Pulse 104; temperature 101 degrees; tongue moist.—Evening: Has had a comfortable day; no sickness. Pulse 100; temperature 102 degrees; tongue moist; passed water freely; skin acting nicely; breasts are just showing signs of secreting milk. Belladonna plasters applied to breasts, and the only medicine she takes is an occasional grain of opium; has taken three grains during the last twenty-four hours.

25th.—Had a good night. Pulse 90; temperature 100 degrees. No pain; discharge per vaginam continues slightly; tongue cleaning and moist.—Evening: Continues much the same; had bowels moved freely four times. Pulse 92; temperature 100 degrees. No pain; seems quite cheerful; has taken several eggs with milk; no sickness; had another hypodermic injection of one-third of a grain of morphia, and takes a grain of opium when in pain.

August 21st.—Sat up to-day for the first time. I have got her a strong abdominal belt, which supports her well. Wound healed with the exception of a very small bit at the lower part.

24th.—Went out to-day for the first time. From this time she continued to progress, and at the end of six weeks from the operation she menstruated, and has done so regularly since. She commenced her work in the bleach craft in the early part of October, and says she is now as strong or stronger than ever.

Since the operation, on inquiring into her previous history, I was informed that when she was a child she had been the subject of rachitis, and for four years was unable to walk without the aid of crutches. With this exception she had always previously enjoyed good health.

The points to be noted in this case, and which no doubt contributed very materially to the happy result, are the following: 1. The woman was of a good sound constitution. 2. The operation was performed before the powers of nature were greatly exhausted. 3. The great care that was taken to keep the abdominal parieties in contact with the uterus during the whole of the opera-

tion, thus preventing the exposure of the intestines. 4. The complete closure of the uterus so as to prevent the escape of any discharge into the peritoneal cavity. 5. The keeping the patient constantly under the influence of opium. —*London Lancet.*

IRRITABILITY OF THE FEMALE BLADDER OF FIFTEEN YEARS' STANDING CURED BY DILATATION OF THE URETHRA AND NECK OF THE BLADDER.

Mr. H. B. Hewetson observes:—The notes of this case are of extreme importance in connection with an operation, still on its trial, introduced by Mr. Pridgin Teale, and but recently published, which comprises dilatation of the urethra in the female for the relief of irritability of the bladder, and, as in this case, occasional retention of urine. The absolute success attendant upon its performance in some cases, and its partial, if not complete, failure in others, render it incumbent that strict records of the symptoms, general as well as local, which affect females, the subjects of irritable bladder upon whom this operation is performed, should be kept. The extent to which the dilatation of the urethra is carried should especially be noted, since the partial or complete failures may possibly be the result of too cautious stretching from fear of producing incontinence of urine. Moreover, the general symptoms must be taken into account, for it may be that it is upon them the surgeon is consulted, without the slightest reference being made (as this case will show) to the more delicate point of irritability of the bladder; when it is upon the latter trouble that the general malaise depends.

The following are the notes of the case:—Miss M—, aged thirty-six, sent for Mr. Hewetson on the night of March 3rd, 1875. On arrival at her home, he found her to be suffering intensely from retention of urine. He relieved her (by the use of the catheter) of a large quantity of urine—such an amount as must have distended the bladder nearly if not quite up to the umbilicus. This point he did not test, being anxious to relieve her without delay from the worst agony of retention. The

retention returned in a day or two, and he had again recourse to the use of the catheter.

Her previous history is as follows:—That she was a perfectly strong and robust woman, following the *arduous* duties of a “present day” schoolmistress until fifteen years ago, when she was seized with an inflammation of the bladder, for such it was termed by her medical attendant. This was followed by the formation of a small abscess in the region of the urethra, which discharged of itself. Since that time her health had been bad, her nights had been wakeful and disturbed by being constantly “every half hour or hour” obliged to get up to pass small quantities of urine with great effort and some pain. She is low and depressed, with headache, loss of appetite, and continual bearing down, resulting in a total unfitness for prolonged exertion of any kind. She has lost flesh considerably.

On examination Mr. Hewetson found the orifice of urethra to be completely surrounded by warty growths of considerable size, and on examining the rectum the introduction of the finger was impeded by a very tight sphincter ani. The rectum was baggy, and there was a small external pile. The uterus was in its natural position, and the catamenia were and had always been, regular, and the urine was natural. Not being able to estimate to what extent the retention was due to the warty growths, and seeing she was suffering considerably from rectal difficulties, he deemed it advisable to negative the possibility of the retention being caused by the warty growths by removing them, and whilst the patient was under the influence of an anæsthetic stretching the sphincter ani with the forefingers introduced back to back sufficiently forcibly to paralyse it for a time and allow the sore produced by the snipping off of the pile to heal in the same way as one could cure a fissure of the anus, by setting the spasm of the sphincter ani at rest, which constantly contracting, might possibly be an element, through reflex action, in helping to keep up the vesical irritability.

Accordingly, on March 5th, chloroform having been administered, Mr. Hewetson completely carried out the above suggestions. The result of this was, that during the next few

weeks relief was given to the retention of urine and to the pain in passing the motions ; but there was no relief at all from the vesical irritability. Her general condition, with these exceptions, continued as before, and there was a return of the retention of urine at the end of three weeks from the operation.

Mr. Hewetson had told her a second operation would possibly be necessary should the first fail to give relief, and accordingly, on April 11th, he again placed her under the influence of chloroform, and introducing Weiss's female dilator into the urethra to the extent of about two inches, he then *slowly* separated the blades of the dilator, stretching the urethra so as to admit of the introduction of the fore-fingers within the bladder while the parts were on the stretch. On closing the blades and withdrawing the instrument, the urethra contracted upon the little finger, so as sensibly to grip it when introduced into the bladder, the coats of which were thickened. There was no foreign body or stone to be detected.

She was very much upset by the chloroform-sickness, which continued more or less all night ; there was, however, *no more irritability of the bladder, no retention, no incontinence produced*, and, to use her own words, "I have not passed water so freely for years ;" nor had she retained it so long without being disturbed ; for the first time she made water was in the evening after the operation, and she was not disturbed during the whole night.

April 14th.—She slept the night through, and awoke with little or no headache, retaining and passing her water quite naturally with the exception of some soreness.

Her progress now continued to be satisfactory and very rapid.

May 4th.—She reports her old symptoms to have all disappeared. She sleeps and eats well, and takes a fair amount of exercise.

At this stage Mr. Hewetson ordered her into the country, where she resides, and returning on May 31st, she reported herself as perfectly well, and as having gained three stones in weight. On the day previously she had walked a distance of eight miles without feeling more than ordinary fatigue, and remarked that

before the operation "she could hardly trail herself about."

Thus, then, were the miserable and intractable sufferings of years, shutting out this poor woman alike from society and employment, put an end to at once by an operation whose best recommendation is its simplicity and its success. —*Lancet*, Dec. 1875.

EMBOLISM OF THE PULMONARY ARTERIES FOLLOWING THE USE OF ESMARCH'S ELASTIC BANDAGES TO THE LOWER EXTREMITIES.

Dr. J. V. Massari reports at length the following case, which occurred at the clinique of Prof. J. Spaeth : A woman, 33 years of age, and in the sixth month of her eleventh pregnancy, was brought in suffering from hemorrhages, which were soon ascertained to be due to placenta prævia. Labor was artificially induced, the placenta separated and the foetus delivered in the afternoon. After the operation the patient fell into a condition of collapse, with fainting fits, and difficulty of breathing. An elastic bandage was therefore applied from the toes to the upper third of the thighs of both extremities, with the effect of relieving the urgent symptoms of exhaustion. Stimulants, beef extract, etc., were given, and there was no further hemorrhage. During the evening she complained so much of the pain of the bandages, that they were taken off, but had to be replaced on account of the threatening symptoms of pulmonary and cerebral anæmia. The next morning they were once more removed, and again replaced at once for the same reasons. During that day her condition somewhat improved, but at 11 o'clock at night, as she could not sleep from the pain of the bandages, that on the left leg was carefully loosened. At once her face became pale, in her wrists the pulse was lost, there was dizziness, panting for breath, and great complaint of pain and palpitation about the heart. After various remedies, including compression of the abdominal aorta, and restoration of the bandage, had been used, the pulse became perceptible again ; but the bad cardiac and respiratory symptoms constantly increased, and she died after two hours. The autopsy

was made thirty hours post-mortem. In the pulmonary arteries of the third class on both sides several clots from 3 to 4 mm. thick were found. The saphenous veins also and their radicles, in both thighs, were found dilated, convoluted, and filled with small partially adherent clots, strikingly resembling those found in the lungs. The author's conclusion is that this thrombosis of the pulmonary arteries, which caused death, doubtless took place when the bandage was taken off the left leg; that the clots came from the region of the saphenous veins, and their formation there was favored by their varicose condition, and the long retention of the bandages *in situ*, being respectively seven and thirteen hours consecutively. The patient also showed an unusually low degree of recuperative energy. We should therefore be very cautious in the use of the elastic bandages where there are any varicose veins, because of the difficulty of completely emptying them as it is applied, and because blood so retained favors the formation of finer clots. The author refers to a similar accident reported by Prof. Kundrat, where flannel bandages had been used over varicose veins.—*Wiener Med. Woch.*, Nov. 27, 1875.

ULCERATION OF CERVIX UTERI—NITRIC ACCID.

Nitric acid, as a caustic in uterine practice, is preferable to nitrate of silver and to potassa fusa. Nitric acid is a really efficient caustic, producing a slough, which is peculiarly firmly adherent, and which consequently necessitates a healthy effort by the subjacent parts for its separation. The only other caustic which produces a slough of the same character, is nitrate of mercury. Nitric acid moreover requires no special preparation; it does not spread like potassa c. calce, nor is its action so deep; it produces little or no pain and no hemorrhage. These advantages are trivial compared with the fact, that when once it has been properly applied, in many cases no further interference is necessary, and thus the frequent use of the speculum may be done away with. The acid is best applied by means of a small and tightly rolled piece of cotton-wool, which is to be placed by an ordinary speculum forceps in con-

tact with successive portions of the surface until the whole is covered with a white eschar. In a case of chronic endocervicitis, the acid should be applied to the interior of the open cervical canal, and if it is not open the case is not one suitable for the treatment. The contraction which accompanies healing is only to a healthy and natural degree. Provided the caustic has been used with ordinary prudence, I have never seen anything but good follow its use, and the ease with which a chronic case of catarrh, with ulceration or erosion, may be cured by it is something marvellous.—Dr. James Braithwaite.

INDUCED LACTATION.

BY R. D. GILBERT, M.D.

Mrs. —, of this city, a married lady, but having no children, took an orphan child three weeks old to raise. She began feeding the infant on cow's milk, tea and crackers, etc., and, as is usually the case, the child soon got sick, and thus I was called in to prescribe. We found it with a slight diarrhoea, and somewhat emaciated, and continually crying; indeed the crying was almost incessant, which was quieted only by repeated doses of paregoric. Our prognosis was of course unfavourable, for statistics show that three fourths of the "spoon-fed" children die before completing the first year. Therefore the plan of treatment for our case was to procure the natural food—that is, a wet nurse; for we attributed the crying and diarrhoea to two causes—viz., loss of its mother and the character of the food; and thus to furnish a wet nurse would meet both indications. After diligent search a wet nurse could not be found. We then recommended the "next best thing," and that was for Mrs. — to suckle the baby herself! She was shocked at the suggestion at first; but after assuring her that I thought it could be done, and citing other similar cases as reported by Dr. Gilfillan of Brooklyn, and remarking upon her great love for the infant and its dependence upon her for life, she came to look upon it as a Christian duty to nurse the child and suckle it if possible. Moreover, she was anxious to become a mother, but had despaired of becoming one naturally, hav-

ing been married five years ; she the more readily undertook the experiment. We allude to these matters because we consider the mental influence of greatest importance in the secretion of milk, and think our treatment very favourably influenced by having cultivated a *desire* in that direction.

We directed her on retiring at night not to give the accustomed opiate, but let it take hold of the breasts, which were well developed. The child took hold with avidity, and after sucking nearly an hour at the dry breast it went to sleep and slept nearly all night. The following day we caused a large poultice of the green leaves of the *ricinis communis* (castor-oil plant) to be applied, and at the same time giving teaspoonful doses of castor oil internally every three hours. At the end of the first twenty-four hours she experienced a peculiar sensation in the breasts, and in three days the flow of milk was well established. It is needless to add that the infant speedily recovered, and the adopted mother experienced great satisfaction.—*Louisville Med. News.*

TREATMENT OF UTERINE FIBROIDS BY ERGOT.

Through the kindness of Dr. Byford, of Chicago, we have received a copy of his address in Obstetrics, before the American Medical Association, at its meeting last summer ; and as the subject is one of very great practical importance and value, we take the liberty of publishing his general conclusions, for the benefit of our readers.

GENERAL CONCLUSIONS.

The fibrous tumor of the uterus may be affected by ergot in three ways :—

1. It may be gradually disintegrated and absorbed, In this way it disappears without any violent or disagreeable symptoms.

2. Its nutrition may be so interrupted as to produce a rapid destruction of its vitality ; thus, decomposition may occur within the capsule, and a semi-putrid mass be expelled a little later. This process is accompanied with evidences of inflammation of the uterus, and toxæmia more or less grave, according to the size of the tumor, the length of time between the commencement

of decomposition and the expulsion of the tumor, and the vital resistance of the patient.

3. The tumor, inclosed in its capsule, may be totally or partially expelled from the cavity of the uterus, attended with a greater or less degree of inversion of the organ. In this condition it becomes amenable to surgical process for completing its removal.

When these tumors disappear in the manner first mentioned, no evil consequences to the patient are experienced, but grave and even fatal effects are likely to arise during their gangrenous disintegration within the uterine tissues. Even when the tumor is small, great suffering and peril to the patient supervene, and when large it is pretty certainly disastrous. I have not been so unfortunate as to witness fatal consequences from the effects of ergot, but I have seen the overwhelming results of gangrenous disintegration of large fibrous tumors arising from other causes. In the case of a large tumor now under treatment, I was upon one occasion forcibly reminded of what might happen by the violent and prolonged contractions of the uterus, brought about by large doses of ergot. Very dangerous symptoms of inflammation were excited in this case.

Ergot is not always immediately, or even soon, followed by contraction of the uterine fibres. Its effects are in certain cases cumulative ; hence its steady administration for a length of time may be followed by extremely violent and prolonged action when it does occur. In the case above referred to, its effects were not observed until the patient had taken the medicine for two months ; then with explosive suddenness the patient was attacked with terrific uterine contractions, which did not subside under the use of opium and chloral until the fifth day. The patient took the fluid extract internally. This effect should be regarded as possible in all cases where the patient appears to resist the influence for several weeks, and when the tumor is large we should be cautious to avoid, and prompt to counteract, such consequences by appropriate means.

The violent action of ergot may also be brought about somewhat suddenly, by increasing the quantity beyond a moderate amount.

From a review of the cases it will be seen

that the gradual disappearance of the tumor takes place under doses too small to cause the violent action here referred to. Dr. Hildebrandt administered hypodermic injections containing what was equivalent to fifteen or twenty grains of crude ergot once a day or every second day. Dr. Dean's treatment proved to be sufficient, although the amount was not greater than Hildebrandt's, and was administered but once a week.

Our opportunities for observation have been too limited to enable us to arrive at accuracy of detail in the use of ergot for the cure of fibrous tumors of the uterus. I think, however, we are warranted in saying that moderate doses of ergot, say half-drachm doses of the fluid extract twice or three times a day given internally, or five grains of the solid extract once a day hypodermically persistently used, is generally sufficient when we wish to cause a gradual disappearance of the tumor, and that this quantity should not be exceeded in the treatment of large multinuclear tumors. When, however, we desire to cause the expulsion or gangrenous disintegration of a tumor, it is necessary to give much larger quantities and persevere until it produces the violent action necessary for such effects.

I conclude my address with the cautionary observation that ergot, in the treatment of fibrous tumors of the uterus, is a prompt and very powerful agent, which cannot be recklessly used without great danger; and that much careful observation is still necessary to enable us to determine the circumstances under which its administration will be both safe and effective.

COMPRESSION OF THE AORTA IN PROFUSE POST-PARTUM HEMORRHAGE.—Dr. Leon Gros, from numerous and conclusive observations maintains that compression of the aorta is a most effectual means for promptly arresting profuse post-partum hemorrhages, and may often preserve from certain death. This compression should be sometimes continued for hours and assisted by the administration of ergot. Besides promptly arresting the hemorrhage, the compression has a decided influence when the hemorrhage has been already profuse, by maintaining in the brain and heart sufficient blood to re-establish the functions of these essential organs.—*L'Union Méd.*, Sept. 14, from *Bull. de Thérap.*, 1875.

Materia Medica.

PROPRIETARY MEDICINES.

For some months past the pharmaceutical journals have been loudly proclaiming the anticipated virtues of a *Popular Health Almanac*, which, by exposure of their composition, is intended to upset the trade in proprietary medicines. It is edited by Dr. Hoffman, of New York. The following results of analysis are given in it. Of course we do not guarantee the correctness of the formulæ.

MRS. WINSLOW'S SOOTHING SYRUP comes in vials containing $1\frac{1}{2}$ fluid ounce; it consists of sugar syrup strongly flavoured with an alcoholic tincture of fennel, anise, and a little caraway-seed, or an alcoholic solution of their essential oils, and with or without an admixture of solution of sulphate of morphine in varying quantity. While recently it has been found not always to contain morphine, at times as much as one-half of a grain and more has been found in each fluid ounce of the syrup, as often reported in the course of years in medical and pharmaceutical journals.

GODFREY'S CORDIAL is a mixture of dilute alcohol sweetened with molasses, scented with oil of sassafras and with an addition of a small amount of carbonate of potash, and about 15 drops of tincture of opium to each fluid ounce.—*United States Dispensatory.*

WALKER'S CALIFORNIA VEGETABLE VINEGAR BITTERS.—Each bottle contains 19 to 20 fluid ounces, consisting of a decoction of aloes and a small quantity of gum guaiacum, aniseed, and sassafras bark, in water slightly acidulated with acetic acid, or by subsequent fermentation, or by the use or addition of sour cider; to this are added about 1 ounce of sulphate of soda, $\frac{1}{4}$ ounce of gum arabic, and $\frac{1}{2}$ to 1 fluid ounce of alcohol.—*Eberbach, Hoffmann, Nichols.*

HOOPEE'S FEMALE PILLS.—Each box contains 36 to 40 black pills, weighing 40 grains, and consisting of 4 parts by weight of aloes, 2 parts of crystallised sulphate of iron, 1 part of myrrh, 2 parts of extract of black hellebore, 1 part white Castile soap, and $\frac{1}{2}$ part white canella.—*United States Dispensatory.*

RADWAY'S READY RELIEF.— $2\frac{1}{2}$ fluid ounces of a light brown liquid consisting of 2 ounces of soap liniment, 2 drachms of alcoholic tincture of Spanish pepper, and 2 drachms of strong aqua ammonia (heartshorn).—*Hager, Peckolt, Hoffmann.*

PIERCE'S GOLDEN MEDICAL DISCOVERY.—7 fluid ounces of a dark brown liquid consisting of a solution of 1 drachm extract of lettuce, 1 ounce of honey, $\frac{1}{2}$ drachm tincture of opium in 3 ounces of dilute alcohol, and 3 ounces of water.—*Hager.*

PIERCE'S FAVOURITE PRESCRIPTION.—10 fluid ounces of a greenish-brown turbid liquid consisting of a solution of $\frac{1}{2}$ ounce of sugar, and 1 drachm of gum arabic in 8 ounces of decoction made from 2 drachms of savine, 2 drachms of white agaric, $1\frac{1}{4}$ drachms of cinnamon, and 2 drachms of Chichona bark; to this mixture are added $\frac{1}{2}$ drachm of tincture of opium, and $\frac{1}{2}$ drachm of tincture of fox-glove, and a solution of 8 drops of oil of ainseed in $1\frac{1}{2}$ ounce of alcohol.—*Hager.*

CHLORAL.—By J. S. Unzicker, M.D.—(Communicated to *Cincinnati Lancet and Observer*, March, 1876.) “Chloral at the present time is not quite the same as that first introduced. Since it became easier to make the hydrate than the alcoholate of Chloral (at first used) the latter, and all mixtures of it, has practically disappeared from the market, without any probability of its ever re-appearing. When chloral first came into use, from ten to fifteen grains were generally found sufficient to produce quiet and refreshing sleep; but no sooner had it become a fashionable remedy, than thirty to sixty grains were considered a dose. Much mischief, as is well known, was frequently the consequence, and many cases of fatal termination, by overtaxing the system by large doses of chloral were reported. Dr. E. R. Squibb, the only manufacturer of a pure article of chloral at present in this country, says in his excellent paper on the subject: ‘Chloral supplies another forcible illustration of the baneful effects of speculation and inflation, and of the danger which must always attend popularity, and particularly attend the popularity of potent medical agents. It seems hard to teach the public that nothing can be potent only for good; that to be potent (only) for good involves in the very nature of all things, an even potency for harm.’ Hence the danger, that the

most valuable remedies, when used empirically or indiscriminately, must fail to become ‘cure all,’ are unjustly thrown aside and forgotten by those who employ them with the expectation of producing sleep, even in the most unsuitable cases. Many are in the habit of combining chloral and potassium bromide, and then expect the effect of each combined. What the effect of this mixture may be is hard to tell, from the chemical changes that must naturally take place. Alkalies, either in the form of solid hydrate or of aqueous solutions, decompose chloral readily at ordinary temperatures, with evolution of heat, converting it into formate of potassium and chloroform, and a portion of the latter compound is further decomposed, yielding formate and chloride of potassium.”

RESIN OF COPAIBA IN ASCITES.—Dr. Samuel Wilkes has tried this remedy for two years past, as a diuretic, and considers it of great value. The old objection to the use of copaiba is entirely done away with by using the simple resin after the nauseous oil is removed. In cardiac and hepatic dropsy its efficacy is undoubted, more especially in the former case. In a case mentioned, after digitalis, squill, and mercury had ceased to be effectual, the copaiba taken in doses of fifteen grains (made into pills), three times daily, removed all dropsical fluid in a few days. The excellent property of this drug is, that if it acts on the kidney at all, it acts at once. If the first or second dose does not display its diuretic effect, there is no use in persisting in it.—*British Medical Journal*, December 25, 1875.

SEVEN SPRINGS MASS.—Our attention was called to this “mass” by the remarks of Dr. W. F. Barr, of Abingdon, published in the Transactions of the late session of the Medical Society of Virginia. The proprietors kindly sent us an ample quantity for testing purposes, and since the exhaustion of that supply we have prescribed it on several occasions. These repeated trials of the mass enable us to endorse the fact that it is a very valuable alternative, ferruginous tonic.—*Virginia Medical Monthly.*

TREATMENT OF BURNS.—In the treatment of burns, when of a superficial character, a preparation consisting of two parts of collodion and one of olive-oil has been found to be very efficacious. When the burn is of an extensive character, gasoline proves of decided benefit. The advantage of gasoline is, that it is of the right consistence, and does not become rancid.

Translations.

THE CURE OF INSANITY BY MORPHIA.

BY DR. VOISIN.

(Translated from a review in the *Paris Médical*.)

Almost all the varieties of insanity improve under the morphine treatment, and there are few which have not resulted in cure. But that which gives the most satisfactory result is *melancholic insanity with hallucinations*. One might say, in reading the observations published by M. Voisin, that muriate of morphia is a specific against hallucinations. The reader will perhaps think that the treatment has been lengthy; but we will draw his attention to the fact that the question is principally of affections [generally considered] incurable, and that the morphine treatment deserves a good deal of consideration, as well on account of this specific property as for the facility of its administration in the form of subcutaneous infection.

(The histories of fifteen cases are here recorded. In all the patients were females, their ages ranging from sixteen to sixty-three years. All recovered; in several cases the recovery is reported as being permanent as far as was known—no cases are recorded as having relapsed. One case was cured in twelve days, one in three weeks, one in six weeks, three in three months, one in three months and a half, two in four months, one in five months, one in six months, one in seven months, two in eight months, one in ten months. The smallest dose commenced with was three milligrammes, about one twentieth of a grain, the largest dose reached was thirty-nine centigrammes—about six grains. The injection was usually given twice daily, morning and evening, the dose being gradually increased until improvement was evident, and then gradually decreased until recovery took place. In some cases the dose never exceeded half a grain.)

It is to be remarked that the patients absorbed considerable quantities of morphia muriate, without, in certain cases, any physiological effect being met with. One case is extremely remarkable in this connection. They injected into her

more than 818 grains in a month, from June 22nd to July 22nd. This tolerance of the drug is exceptional; however, patients afflicted with insanity and other neuroses sometimes bear with impunity enormous doses of narcotics. The practitioner must approach the large doses gradually. In reading the histories of the cases one sees that the treatment is (generally) pretty long. It is with a few milligrammes that one commences, increasing the dose slowly and gradually till well-marked improvement in the mental condition is manifested. It is then diminished till a dose of a few milligrammes is again reached, and the treatment is not stopped till after the symptoms have disappeared.

In the most of the cases where the patients offer great resistance to the action, even physiological, of the morphia, one will find a great deterioration of the general condition; in these cases M. Voisin employs transfusion to improve this. The morphia treatment afterwards acts with greater efficacy.

Under certain circumstances a complete intolerance of the drug is remarked, manifesting itself by frequent vomitings, loss of appetite, heaviness, wasting. M. Voisin sees in this intolerance an indication that the disease is of a congestive form, and in these cases it is necessary to precede the morphine treatment with anti-congestive treatment.

If this congestive condition of the brain could be diagnosed beforehand, it would be a contra-indication to the administration of opiates.

SYMPTOMS OF PREGNANCY IN VERY YOUNG GIRLS.

We owe to one of our French exchanges the following *résumé* of a paper published in *Annales de Gynécologie* by M. G. Bergeron, associate Professor in the Faculté de Médecine, &c., Paris:—

When a very young girl, in whom the catamenia have only recently made their appearance, is subjected to the approaches of a man, it may happen that the courses may cease for some months, that the breasts swell, that the most characteristic symptoms of pregnancy show themselves.

Three cases are reported, in all of which the breasts were much enlarged, the areolæ dark, and the abdomen much swollen, and in one there was a well-marked brown line. One of the others said she had felt movements for three weeks before she was examined. The ballottement and auscultatory signs gave negative evidence. One had nausea. In all the courses re-appeared in from six to nine months.

FORMULE OF M. GUENEAU DE MUSSY FOR THE HEMOPTYSIS AND VOMITING OF CONSUMPTIVES.

For hæmoptysis :

Ext. Krameria	3i.
Secale Cornut.	gr. xlvi.
Pulv. Digitalis.	gr. vii. ss.
Ext. Hyos.	gr. iii. ss.

Divide into 20 pills: 4 to 6 in twenty-four hours. The krameria and ergot are given as hæmostatics, the digitalis to lower the circulation; and the hyosciamus for the cough,

For vomiting caused by fits of coughing :

Ext. Belladon.	gr. iii. ss.
Ext. Cinchon.	3ss.
Div. in pil.	xx.

The following plaster may also be applied with benefit to the epigastrium :

Emplast. Diachylon.	
Theriace.	aa. partes ii.
Ext. Belladon.	partem i.

—*Paris Medical.*

NEW MODE OF DIVISION OF THE INFRA-ORBITAL NERVE FOR OBSTINATE NEURALGIA.

(From the *Lyon Medical.*)

In a case of obstinate neuralgia Dr. Letievant operated for its relief by cutting down on the anterior edge of the floor of the orbit, breaking open the superior wall of the infra-orbital canal, raising the nerve, separating it from the artery and excising a piece nearly four lines in length.

ON THE ACTION OF THE ALKALIES ON THE GLUCOSE OF DIABETIC PATIENTS.

In the *Progrès Medical* we find an article on the above subject. The Editor considers the

beneficial effects of alkaline mineral waters,—especial reference being made to Vichy,—to be a well established fact; and he proceeds to consider the *modus operandi*. After referring to physiological experiments by Poggiolo, Lehmann, Claude Bernard, Pavy and others, he draws the following conclusions:—

1. The Alkalies have no action on the glucose already formed.

2. They interfere in the production of urinary glucose by diminishing the sugar-making power of diastatic liquids, and consequently, by hindering the introduction of an excess of sugar into the blood.

3. The bicarbonate of soda acts not only on the salivary diastase, but also on the pancreatic juice.

4. In the last connection its action is far more apparent on the pancreas of omnivorous than on that of herbivorous animals.

EXTRACTION OF A LIVING INSECT FROM THE EAR.—The *Archives Médicales belges* relate the following case: A little girl three years old put an insect, "*bête à bon Dieu*," into her ear. Sharp cries, agitation, convulsive symptoms ensued; injections of water were made without result. The physician then conceived the idea of asphyxiating the insect by means of chloroform; he dropped four drops of chloroform upon a small piece of cotton which he introduced into the ear. Immediately the child ceased crying and complained no further of any disagreeable sensation; the insect had become asphyxiated; an injection of warm water brought it away dead, and no further trouble ensued.—*Paris Medical*, Feb. 20 1876.

DOG'S MILK FOR CHILDREN.—Dr. P. Luzun (*Bordeaux Medical*, No. 43, and *Gazette Hebdom.*, November 5, 1875) relates the particulars of three cases in which he employed dog's milk. In the first, a girl between six and seven years old, affected with rickets, who was unable to walk. Within twenty-five days she became vigorous and able to walk. He states that dog's milk contains as much again of butter as human milk or that of the cow, and seven or eight times more than that of the donkey. It is also of all milks which are employed by man, save that of the sow, the richest in casein.

THE CANADIAN
Journal of Medical Science,

A Monthly Journal of British and Foreign Medical
Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, APRIL, 1876.

UNIVERSITY REFORM.

The spirit of *unrest* was never more apparent on the surface of human society than at the present time. There is scarcely an institution, either civil or religious, which is not being disturbed by an agitation for reform or change. In many instances, as in the case of the merchants' shipping, the agitation came none too soon, and it is likely a Plimsoll could find many objects in this country to call forth the energies of his warm-hearted philanthropy; but the desire for change or reform is not limited to the institutions of commerce, it extends to the various departments of the Christian Church, and even to our oldest and most cherished colleges and universities. From nearly all parts of the British Empire, we hear calls for University reform, even in regard to institutions supposed to have been founded on the most firm and reliable basis. We are not believers in the absolute perfection of human judgment, and therefore do not wonder, that as time rolls on it should be found necessary to make certain changes in our schools, colleges and universities, by which they will be better adapted to the requirements of modern society. Our universities, the admiration and ambition of so many, are very apt, as they grow old, to become so encumbered by traditions and customs of the past, as to lessen the full measure of their usefulness in advancing years, and to call for the active intervention of the pruning knife to adapt them to the wants of the on-coming ages. It is no wonder, therefore, if the Toronto University, and University College, hitherto the pride and glory of Canadians, should come in for a share

of the attentions of the reforming spirit of the time. There are some who feel inclined to blame the University because its degrees and honors have not been more largely taken by the people; but we think it has acted wisely in looking more to the attainments, than to the number of its graduates. The University and College have, in our mind, always occupied rather an anomalous position, and should not be held altogether responsible for results arising from the peculiarities of their position. When the Institution was emasculated in 1852, by the removal of the faculties of law and medicine, it was rendered incapable of competing, on equal terms, in regard to numbers, with other Universities, retaining all their faculties.

The University of Toronto is now a graduating body only, and has to depend for its candidates chiefly upon University College, the teaching department; but as the College only consists of the faculty of Arts, it is manifestly impossible that University College can number as many students per annum as other teaching colleges with all the faculties, of Arts, Law, Medicine, and Divinity, in full operation, and the graduating class of the University of Toronto must fluctuate *pari passu* with the absence of its faculties.

At the same time, a system of prizes and scholarships was instituted, with the view of assisting meritorious talent; but oddly enough, these rewards were all equally available to the students of competing colleges, still exercising their graduating functions and examining their own students; while the students of University College were always liable to be examined by strangers, an arrangement which, no doubt, did tend to make the Degrees of the Provincial University highly respected wheresoever the English language is spoken; but which, undoubtedly, had the effect of keeping down the numbers attending the College, or graduating at the University, to a point not commensurate with the expectations of the public. It was thought, that by the system of affiliated schools, the absence of the usual Faculties in the College would be compensated for; but it has been found the reverse; for while some did send their students to the College for certain lectures, and to the University for their degrees, yet, in many

instances, the affiliation was only availed of, to enable their students to compete for the rewards of the University, while a large proportion of the students of the affiliated schools preferred to spend the last two years where they could be examined by their own teachers. That it will be for the advantage of the University or the country to divide the Arts degree, in the way proposed by some, we very much doubt; but we are of opinion that, in view of the facilities afforded by our admirable system of High Schools throughout the country, the entrance or matriculation examinations might be very considerably raised in all the branches, and perhaps increased by the addition of Botany and some other subjects, in such a way as to enable the lecturers to devote their time to the higher departments of their several subjects, instead of having to first take their class over those rudiments which ought to have been mastered before entering the College. If there are weak places in the present teaching staff, of which we are not aware, let them be strengthened; but let vacancies be filled by men who have a warm sympathy with, and a clear knowledge of the wants of Canadian students, if they can be found among ourselves qualified for the positions.

We think it is not so much on account of deficiencies in the teaching staff, or defects in the curriculum, that the University and College have come short, as on account of an inherent weakness in their Constitution, and that weakness we have tried to point out.

THE death is announced of Sir Duncan Gibb, Bart., aged 55. The deceased was educated for the medical profession, first at St. Bartholomew's Hospital, London, and afterwards at Montreal, in Canada. He graduated M.D. at McGill College, Montreal, in 1846. He was also a member of the Royal College of Physicians, London, and was for some time physician to the Westminster Hospital, and to the West London Hospital. He was a member of many societies in Europe and America, and the author of several works on the diseases of the throat and windpipe.

TALIPES VARUS.

We have been shown a very neat and useful shoe for keeping the foot in its normal position during early infancy, and after division of the tendons in older children. A gentleman in Brampton, whose child was operated on by Dr. Moore for double *talipes varus*, found that if the usual surgical instrument and boot were worn both night and day the feet did not grow, but remained in a rudimentary state; while if the instrument was left off during the night the projecting bones resumed their abnormal positions, and the gain of the day was lost at night. He therefore contrived a boot which could be worn at night without confining the toes, but with sufficient firmness to keep the foot in whatever position the instrument had brought it during the day, and the result has been eminently satisfactory.

The boot being small, smooth and light, does not interfere in the least with the child's rest, and it is so firm that the patient can walk upon it in the morning with perfect ease and safety, without having to wait for the application of the larger instrument by an older person; whereas throwing the weight of the body on the *unsupported* foot always restored the original distortion. The boot is made altogether of firm sole-leather. The sole of the shoe is the full length and exact size of the sole of the foot, the upper is made high enough to reach well above the ankles, moulded to a last the exact size and *shape* of the foot when brought as nearly as possible into its normal position, and then firmly stitched to the sole, which is also moulded to the last. The upper only reaches forward enough to cover the ball of the great toe, while all the other toes are left free and exposed. The shoe is laced up the front, and when completed, forms a perfectly unyielding case which stands square on its bottom and rigidly maintains during the night all that has been gained during the day. The toes being exposed, have a tendency to spread outwards in the natural direction whenever the child throws its weight upon the foot, and the foot grows more rapidly. Being unpatented and only costing fifty cents, it is quite within reach of the poor, and will probably, when applied early, supersede, in many cases, more expensive instruments.

ELECTIONS TO THE SENATE OF TORONTO UNIVERSITY.

We observe that the Hon. Edward Blake, M.A., L. McFarlane, M.B., and T. W. Taylor, M.A., are the retiring members for this year, all of whom are eligible for re-election, and that the election of members to supply their places will take place early in May. As there is likely to be some modification in the curriculum and general management of the University before long, it is very important that the Convocation should select men who have the interests of the University at heart and who know the wants of the country as well.

From our personal knowledge of Dr. McFarlane and Mr. Taylor, we know that better men could not be selected to fill their places, as they are both fully alive to the requirements of the situation, both are true to their *Alma Mater* and in their allegiance to *legitimate medicine*, and we hope to see them both returned as they belong to the class of working members. If it be true that Mr. Blake is about to be elevated to the Chancellorship, we hope the graduates in arts and medicine will be able to unite on a successor to him, who will not only be willing to devote the necessary time to the trust, but who will be thoroughly true to the University and to the medical profession, from which the University has derived such timely aid, at a period when its friends were comparatively few. Of course if another *medical graduate* could be chosen to fill the vacant post we should be pleased, but if that is not deemed possible or expedient, we hope Convocation will see that the new representative shall be as true to *legitimate medicine* as the proposed Chancellor is known to be.

THE authorities of the Medical Department of the University of Louisville, upon the 9th day of February decided to abolish hereafter the requirement of theses from candidates for graduation. We believe this is the first institution which has taken this step, the propriety of which must be apparent to all. Why the fearful and useless bore should have been kept up so long is inexplicable. We understand that one of the other colleges of this city will also abolish this unnecessary exercise, and we doubt not the centennial year will see it pretty well swept out of existence everywhere in this country.—*Louisville Medical News.*

Communications.

TRICHINA SPIRALIS.*

BY WM. OSLER, M.D.,

Prof. Institute Med. McGill College, Montreal.

Of all nematode parasites the trichina spiralis is the most directly inimical to man, frequently causing wide-spread and fatal epidemics. This parasite was discovered in 1835 in a dissecting-room subject, by Mr., now Sir James Paget, while a student at St. Bartholomew's Hospital. From this period up to 1860, they were often met with in subjects, and also found in many of the lower animals; but they were looked upon in the light of pathological curiosities, and nothing was known of their development, nor of the fact that they might occasion a violent disease in man. During the latter year Prof. Zenker of Dresden made the discovery that their development and growth were accompanied with grave symptoms, sometimes followed by death. Since this date numerous cases have been recorded, and extensive epidemics have occurred; so that the disease, called Trichinosis is now thoroughly recognized, and the history of the parasite better known than that of any other nematoid form.

As usually met with, trichinæ occur in the muscular system, closely coiled in a spiral form and enclosed in oval cysts, which appear as small specks, just visible to the naked eye, of a whitish colour, and measuring about 1-75" in length. While in the muscles the trichinæ are immature, and though a digestive canal is present the reproductive organs are not fully developed. To attain maturity it is necessary that they should be transferred to the intestines of some animal, so that we may say the trichina exists in two forms, the larval form, represented by the muscle trichina, and the intestinal or adult condition. In the intestines the larvæ grow considerably, and in about two days after their ingestion become sexually mature. The female parasite contains an enormous number of eggs, which, while within her, develop into young trichinæ, and are born living and active the seventh day. These embryos do not stay long in the intestines, but make their way through the walls and along the cellular tissue of the mesentery, to the various voluntary muscles. Many, no doubt, gain entrance to the blood and lymph vessels, and are in this way quickly transferred to the most distant parts of the body. Having reached the muscles they

* Extract from a lecture on "Animal Parasites and their relation to Public Health," being one of the Somerville Lectures of the Natural History Society.

increase greatly in length, and in two weeks attain the full larval size. After wandering about for some time they roll up in small coils, a wall of connective tissue is gradually formed around them, and in this way they become encysted. The cyst wall thickens and is rendered opaque and white by the deposition of the salts of lime. It is in this condition, as oat-shaped calcareous cysts, that they are usually met with in the muscles, and in order to see the enclosed worm, it is necessary to employ a dilute acid to dissolve out the salts of lime. After a time—the exact period has not been determined—the worms degenerate and die; eventually the process of calcification involves them, and their remains may be detected as dark irregularly coiled fragments. The intestinal trichinæ after having given birth to a single brood of embryos, also degenerate and die.

In addition to man, the trichina infects the pig, rat, cat, and several other animals. Experimentally they have been reared in rabbits, sheep, calves, and dogs. From this it is not difficult to see how man becomes affected; in the vast majority of cases it is through eating the partially cooked flesh of the pig, in which animal, above all others, trichinæ abound. The disease, trichinosis, is consequently most prevalent in those countries in which, by the customs of the natives, raw or partially cooked pork forms part of the dietary. This holds good in North Germany, for example, where the malady was first discovered, and where all the formidable epidemics have occurred.

The disease begins with gastro-intestinal disturbance, which, after lasting for nearly a week, is followed by prostration, high fever, and extreme painfulness in the muscles. These symptoms last a variable time, according to the severity of the attack; in mild cases, *i.e.*, cases in which few trichinæ exist, the patient may be convalescent in three weeks; in more severe forms many weeks or months may elapse. Death usually occurs in the fourth or fifth week from paralysis of the respiratory muscles, caused by the enormous number of trichinæ in their substance. The proportion of deaths varies in the different epidemics; in some it has reached 30%, in others it has been as low as 3 and 5. The prognosis in individual cases depends entirely on the number of living trichinæ which find their way to the muscles; the more abundant these are, the greater the danger. This, in turn, depends in great measure on the amount of parasites in the meat eaten, and the proportion which arrive at maturity in the intestines. When recovery takes place, it does not mean that the worms have died, but simply that they have

become encysted, which is nature's mode of cure, for in this state they may remain living, yet harmless, for years. In north Germany, epidemics are of annual occurrence, owing to the barbarous custom of eating half-cooked or wholly uncooked sausages, which, even in respectable restaurants, are upon every bill of fare. In South Germany they eat quite as much pork, yet the disease is comparatively rare, the natives preferring their "wurst" thoroughly cooked. On this continent the malady is almost entirely confined to the German inhabitants who have not abandoned, in their new home, the semi-cannibalism of the "Vaterland." In the Dominion we have had very few cases; three occurred in Hamilton, in the year 1869, in a German family, and of three, two died.* They had partaken of a partially cooked ham in which, as I had an opportunity of judging, encysted trichinæ existed in abundance. The only other instances I know of, were in this city a few years ago, the circumstances of which will be fresh in the minds of many.†

(To be continued.)

THE MCCONNELL CASE.

BY JOSEPH WORKMAN, M.D.

"In the interest of the State it would be better to hang a murdering madman once in a while than to permit it to be understood that if a man will only foster and cherish his murderous impulses until they become ungovernable, he may escape the full penalty of his offence. For the good of the insane, the insanity law of the doctors is the best: for the safety of the lives of citizens, the judge's insanity law is indispensable."—Vide Hamilton Times of the 21st Feb. 1876.

"Fiat experimentum in corpore vili."

To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.

SIR: The above enunciation of the editor of the *Hamilton Times* is so frank and explicit a concession of the entire question at issue between him and me, on the just appreciation of the mental condition of Michael McConnell, at the time of killing Mr. Mills, that I might very safely allow it to pass unnoticed, were it not that having already drawn him down from his lofty perch, I cannot avoid hoping that his returning reason may permit him, in the end, to descend to the level of sound common sense. It must not be denied that the High Priest of the *Times* has a notable precedent to offer in support of his penal theory. A long time ago, on

* Vide.

† Vide *Canada Medical Journal*, Montréal, 1869.

a very momentous occasion, a certain other High Priest spoke very similarly, thus : " Ye know nothing at all, nor consider that it is expedient for us that one man should die for the people, and that the whole nation perish not."

Expediency, Mr. Editor, is a venerable and very potent authority in all cases in which "*the interest of the State*," is concerned. It ever has been so, and it would seem it is ever to be so ; but has it always, or ever, been found in the long-run, the safest pillar of States ? Did the expediency inculcated by *Cataphias* fortify or re-integrate the Jewish nation ? Is the editor of the *Times* ignorant of, or does he ignore, the fact, that thousands of men have, in our mother country, in times not long past, been hanged for stealing sheep, or indeed for offences far lighter ? Learned Judges in pronouncing sentence on such offenders, were wont to tell the convicted that although the life of a man was more valuable than that of a sheep, yet, "the interest of the State" required that sheep-stealing should be prevented. It was prevented as far as the hanged man were concerned. Throughout many centuries the suppression of sorcery, witchcraft, and other diabolical crimes, was earnestly essayed by Legislators, Judges and prosecuting Counsellors. So late as the middle of the 17th century the great Sir Matthew Hale presided at the trials of witches, and not only applauded the verdicts of juries saturated with ubiquitous superstition and petrified ignorance, but expatiated largely and learnedly from the august seat of British Justice, on the reality and the enormity of the crime of witchcraft. A hundred years later, and the great juris-consult Blackstone was among its expiring believers.

Now, I would politely ask the editor of the *Times*, who, or what class of men first urged the plea of mercy on behalf of the sadly persecuted family of the witches ? Was it the Judges and Lawyers ? Was it the Clergy ? Let him condescend to dip into history a little deeper than, it is to be feared, he has done, and he will learn that in this great reform, as in many others, Doctors, not of Law, nor of Divinity, but of *Medicine*, have been the leaders ; and, thanks to their superior intelligence, their unswerving humanity, and their undaunted courage, the victory over legislative and judicial ignorance and barbarity was finally achieved.

But the erudite High Priest of the *Times* has been pleased to inform us that the Judges "have at least been in liberality in advance of the doctors, who, up to a few years ago, treated insanity more as a crime than as a disease."

The man who could deliberately pen the above misstatement must be either regardless of truth, or most defectively read in the annals of insanity and its treatment. Not until insanity began to be recognized as a physical disease, and not as a diabolical possession, were its unfortunate victims regarded as deserving objects of Christian philanthropy ; and who, and what class of men initiated the rational and humane system of treatment ? Proudly and triumphantly may the Medical Profession assert its claims to that honor. Who entreated, almost with tears, for permission to enter the festering cells of the *Bicetre*, and give bodily freedom to the long immured, chained, inmates ? I can hardly imagine that even the editor of the *Times* has not heard of *Pinel*. He fearlessly unchained fifty-three, though he was admonished that he would in all probability fall a victim to his own temerity. At the present day a *Pinel* may be said to be at the head of every insane Asylum in Europe and America. But when did the system of chains, starvation and stripes, in the treatment of insanity, give place to that which now obtains ? Is the *Times* ignorant of the fact, that only within the last fifty years has the direction of insane asylums and the efficient treatment of their inmates been committed to the medical profession ? Even to-day I could name at least two asylums, so called, in British Dominion, which do not yet rejoice in emancipation from non-medical domestic control ; and should the *Times* desire to visit them, with the view of brushing off his ignorance and moderating his sarcastic pace, I shall cheerfully give him travelling directions. The *Times* errs most egregiously in saying that medical men now "are disposed to go to another extreme, and treat not only insanity, but all crime, as the result of disease." I have yet to meet a respectable, moral, and intelligent member of the profession of medicine who entertains any such opinion. For my own part I have attended as expert witness in a number of murder cases, in which the plea of insanity has been urged by the defending counsel, and I have been deputed by the Minister of Justice to examine, and report upon the mental condition of several convicts under sentence of death. I can safely say that it has been my calm study, and unswerving purpose, to discriminate between actual crime and insanity. I believe as many have been hanged on my evidence and reports, as have been saved from execution by them. Not one of the latter, I am convinced, was wrongfully rescued, and, *as yet*, not one of the former has been unjustly punished.

Medical witnesses have nothing to do with the severity or lenity of the law. If it is consistent with British law, and the effectual administration

of justice, that insane criminals should be punished just as sane ones, by all means let them be so punished; but let there be no legislative, legal or judicial jugglery, in any part of the process; nay, stoop not even to the bald pretext of *expediency*,—the abhorrent justification of the *means* employed, by the *end* to be achieved. Reverse the wheel of Christian rational progress, unseat the holder of the reins, and ensconce a Nero or a Torquemado in his place. Do this, and appease the hungry appetite of the *Times*. Would the *Times* have any objection to learn that some, at least, of the most enlightened British judges have begun to diverge from the beaten track, in their charges to juries, in cases involving the question of the mental condition of parties tried before them, on charges of capital offences?

The *Globe* has applauded the "*rough and ready*" method of deciding the prisoner's guilt, on the ascertainment of the fact of his knowledge of right and wrong, and of course the *Globe's* satellites must revolve deferentially around their centre of gravity, and men who have devoted their lives to the earnest study of insanity, and have honestly endeavored to acquaint themselves with its multifarious protean shapes and shadings, must stand aside and bear with becoming humility and dread the sneers and scoffs of the inane penny-a-liners who do the drudgery required of them by their infallible dictator.

Last May, the boy O'Connor, who, on a certain occasion, had presented a petition and a rusty pistol at the Queen, and was found *sane* and guilty, and sentenced accordingly to penal servitude and the lash, once more turned up in his old haunts, and was soon captured, and "brought before Sir Thomas Henry, at Bow street, and *quietly removed to a lunatic asylum*, as mad as a March hare." The London *Telegraph* reminds the gentlemen of the long robe that "during his trial at the Old Bailey the law officers of the Crown laughed to scorn the physicians who expressed their strong belief that he was a lunatic." I know not on what canon of jurisprudence, or in obedience to what judicial precedent, O'Connor was adjudged to be not insane. If it was on the "*rough and ready*" rule, applauded by the *Globe*, I should very much like to see the proofs of the boy's actual knowledge of right and wrong. In my belief it amounted just to this, that he thought it was wrong to detain the Fenians in prison, and it would be quite right to let them out. The sneer and the scoff might now well be turned on the other side; but physicians can afford to be forgiving. It is their daily experience to encounter ignorance, and

it is their ennobling duty to pity it, and patiently wait, and work, for its removal.

But to return to the divergence of British judges from the beaten track, I would now submit to the *Times* the following extract from the charge to the jury by a Scottish judge, Lord Ardmillan, on the trial of a man named Tierney, at the Glasgow circuit court last September, for the murder of a fellow-laborer named Campbell.

Lord Ardmillan said, "Liability to sudden irritation, susceptibility to sudden provocation, sullenness, ill-temper, silence, gloom, none of these would do"; that is to say, to warrant a verdict of insanity. "All these," continues his Lordship, might exist without that *deprivation of reason*, that shattering of the powers of the mind which constitute insanity. But if there was a recurrence of the *disease, depriving the man of the power of controlling his actions, impelling him irresistibly to commit certain actions, that excluded responsibility.*"

Now, that which I deem worthy of special note in the above extract from Lord Ardmillan's charge is the total absence of the threadbare appeal to the "knowledge of right and wrong" test of mental competency and legal responsibility, or the knowledge possessed by the accused, that the act committed was *contrary to the law of the land*. Experienced alienists may, or may not concur with Lord Ardmillan in holding that "liability to sudden irritation, susceptibility to provocation, sullenness, ill-temper, silence, gloom," *all*, should be regarded as excluding the presence of insanity. Experienced alienists well know that, not only are these mental conditions, when *all* combined, but merely when only two or three of them are present, very usual concomitants of insanity. A physician examining any patient for the purpose of his commitment to an asylum, finding *all* the above facts, would perhaps not seek much farther, and examining physicians make much fewer errors of diagnosis of insanity than judges.

Lord Ardmillan, however, strikes out on new judicial ground, when he speaks of a "*disease depriving the man of the power of controlling his actions, impelling him irresistibly to commit certain actions.*"

It was not until insanity was recognized as a physical *disease*, and no longer regarded as a metaphysical *ignis fatuus* that the world calling itself sane, began to regard it as amenable to rational, medical, humane treatment; and not until judges, barristers and jurors, shall have been taught to regard it in the same light, will they begin to comprehend its true nature.

Would it not be preposterous, say in an action of damages for mal-practice, that the sworn opinion of an eminent surgeon or physician should be disregarded and the judges or the prosecuting counsel should appeal to some or a score of old precedents utterly at variance with advanced medical or surgical science? Would the proprietor of the *Times*, in any difficulty requiring for its settlement a correct knowledge of the rules and customs of his craft, have more confidence in the decision of a carpenter or a watchmaker, than in a man pursuing the same business as himself? Has one of our judges ever spent an hour in a lunatic asylum? I never but once saw a judge inside the walls of the Toronto asylum; and that one came, not to visit the patients or acquaint himself with their mental peculiarities, but on private business.

I do not think that any more succinct or pointed exhibition of the contrast between law and medicine in their relations to insanity could be given than was submitted to the association of medical superintendents of American Asylums, by Dr. Landor, in a paper read before them by him, at their annual meeting in Toronto, in 1871. "Medicine," says Dr. Landor, "declares that insanity is physical and corporeal disease. Law, that it is not. Medicine says that imbecility and insanity are different conditions. Law, that they are identical. Medicine asserts that a theoretical (and practical) "study of mental diseases and defects is necessary to a proper understanding of such diseases and defects. Law denies this, and says that insanity is a fact to be determined by any dozen of ordinary men in consultation on the case, selected at random from any class of the population. Medicine says that a man may be insane and irresponsible, and yet know right from wrong. Law says that a knowledge of right and wrong is the test both of soundness of mind and of responsibility to the law. Medicine says restrain and cure the insane. The object of the action of the law is punishment, and if its severity is mitigated, it is not by the law, but by the suspension of the law, by authority above the law."

[Owing to pressure on our columns we are forced to hold over the balance of this interesting letter till next month.—ED.]

PROFESSOR SCHRÖDER, of Erlangen, has accepted the chair of Obstetric Medicine, in University of Berlin, vacant by the death of Professor Martin.

Meetings of Medical Societies.

WESTERN AND ST. CLAIR MEDICAL ASSOCIATION.

The fifth regular and second annual meeting of the Western and St. Clair Medical Association was held at the Rankin House, Chatham, on Friday, the 4th of February, at which were present Dr. Coventry of Windsor; Drs. Bray, Holmes, Murphy, Roe, Fleming, and Pentland of Chatham; Ross of Birkhall; Eccles of Arkona; Gaboury of Belle River; Harvey of Watford; Beemer of Wyoming; Mitchell of Wallaceburg; Tye of Thamesville; Samson and Richardson of Blenheim; Bucke, Johnstone, and MacLean of Sarnia; and by invitation, Drs. Smith and Shirley of Detroit.

In the absence of the President, Dr. Edwards, the chair was taken by Dr. Holmes, vice-President for Kent.

The minutes of last meeting were read by the Secretary and adopted.

Telegrams of apology and regret for absence were received from Drs. Edwards, Hoare, and Mott. Communications from several life assurance companies on the subject of fees for life assurance examinations were read by the Secretary.

The Treasurer's account with the Association was referred to auditors and reported correct.

The election of office-bearers for the ensuing year took place with the following result:

President—Dr. Bray.

Vice-President for Essex,	Dr. Carney.
" "	Kent, " Murphy.
" "	Middlesex, " Billington.
" "	Lambton, " A. E. Harvey.

Treasurer, Dr. Tye; Secretary, Dr. MacLean.

Committee on Essays and papers, the President, vice-Presidents, and Secretary.

A resolution was unanimously carried, recommending to the Council of the College of Physicians and Surgeons, Ontario, T. H. Holmes, Esq., M.D., of Chatham, as a gentleman duly qualified to act as one of the examiners for the said College.

A motion was carried suspending the resolution adopted at the Strathroy meeting concerning life assurance examinations until other associations have been communicated with, and the Medical Council induced, if possible, to take some action or express some opinion upon the subject.

A paper was read by Dr. Eugene Smith of Detroit, on Catarrhal Ophthalmia and Granular Lids; one by Dr. Murphy of Chatham, on Strangulated Hernia, with notes of three cases which occurred in his own practice, and upon which he had operated successfully. Dr. Beemer of Wyoming, read a paper on Anæmia; and Dr. Tye of Thamesville, one on Diphtheria. Each essayist received the hearty thanks of the association, and the papers elicited remarks from most of the members present.

Dr. Shirley, of Detroit, introduced a patient suffering from Menier's disease, and made some observations upon its pathology and treatment which were acquiesced in by Dr. Smith, who had also examined the patient.

By request an insufflator was exhibited by Dr. Shirley, for the application of impalpable powders to the pharynx in diphtheria, which gave rise to a prolonged discussion upon the pathology and treatment of that disease, the majority agreeing with the general treatment indicated in Dr. Tye's paper.

An explanation was given by one of the members regarding a circular addressed to his patients, which on motion was considered satisfactory.

Dr. Bray agreed to introduce a subject for discussion, and Dr. Samson to prepare a paper for the next meeting. Dr. Coventry and Johnstone promised to prepare papers for the Sarnia meeting.

The association, which, with a short intermission, had been in session for nine hours, then adjourned, to meet in Windsor on the first Wednesday in May next.

In the evening the medical fraternity of Chatham entertained the members of the association at a sumptuous dinner in the Rankin House, when a couple of hours were spent in pleasant social intercourse. The meeting altogether was most successful and enjoyable.

Miscellaneous.

THE ROYAL COMMITTEE ON VIVISECTION.— This Committee after taking a great body of evidence conclude, on grounds which they state at length, that it would not be reasonable, even if it were possible, to prevent experimentation on living animals. They refer to the whole history of medicine as pregnant with examples of benefits to humanity derived from such experiment. They quote, as illustrations, Harvey's great discovery of the circulation of the blood, the discovery of the action of the lacteal and lymphatic system of vessels, and the discovery of the compound function of the spinal nerves. These lie at the foundation of our present knowledge of the laws of natural life. Harvey's discovery, almost wholly due to vivisections, is the foundation of all our knowledge of the treatment of the diseases of the heart and blood-vessels, and in surgery bridges the intervals between the old practice of searing stumps with red-hot irons and the present use of the carbolized ligature. A great mass of similar and hardly less unimportant facts is furnished in the evidence. At present, investigations by experimentation are in progress, some under the auspices of Government, having relation to cholera, consumption, pyæmia, typhoid fever, sheep-pox, snake bite, and the use of disinfectants. Experiments such as these have resulted, and are likely to result in the mitigation, or possibly even the removal of some of the severest scourges which afflict the human race. Demonstrations in medical schools they hold to be necessary and permissible under the existing conditions, viz., that they be performed under anæsthetics. Adopting then, in all respects, the principles of the well-known resolutions of the physiologists assembled at the British Association in 1871, they propose to give them legislative force by the enactment of a law which would vest in the Secretary of State the power of granting licences to persons desirous of performing experiments on living animals. These licences would be revocable on proof of abuse, but the revocation should be subject to appeal to a judge of the Supreme Court, aided by three competent assessors.

THE ABORTION BILL.—The bill to amend the criminal law relating to the crime of abortion introduced by Mr. J. H. Cameron is as follows :

1. Any person, who by the use of any medicine, drug, noxious thing, instruments, or other means whatsoever, unlawfully and wilfully attempts to procure the miscarriage of any woman, whether pregnant or not, either intending to cause her death, or with the knowledge that by such use he may cause her death, and death ensues to such woman from such use of such medicine, drug, noxious thing, instrument, or other means, shall be guilty of murder.

2. Any person, who by the use of any medicine, drug, noxious thing, instrument, or other means whatever, unlawfully attempts to procure the miscarriage of any woman, whether pregnant or not, not intending to cause death, nor considering it likely that such use will cause death, and death ensues to such woman from such use of such medicine, drug, noxious thing, instrument, or other means, shall be guilty of manslaughter.

3. Any person who shall knowingly advertise, print, publish, distribute, or circulate, or cause to be advertised, printed, published, distributed, or circulated, any pamphlet, printed paper, book, newspaper, notice, advertisement or reference, containing words or language, giving or conveying any notice, hint, or reference to any person, or to the name of any person, whether real or fictitious, from whom, or to any warehouse, shop or office where any poison, drug, mixture, preparation, medicine, noxious thing, instrument, or means whatever, or any direction, advice, information or knowledge may be obtained, for the purpose or with the object or intent of causing or producing the miscarriage of any woman pregnant with child, shall be guilty of a misdemeanor, and on conviction shall be liable to be imprisoned in any common gaol or prison for a period not exceeding one year, with or without hard labour.

DR. GROSS, in his recent "History of American Medical Literature," uses the following language in regard to theses :

"There is a species of medical literature peculiar to medical pupils, which, unfortunately, as I conceive, found its way into the New

World from the Old, at the very commencement of the organization of our first medical school. I allude to what are called medical theses, or inaugural dissertations, the bugbear of the student and the nuisance of the professor. Of this variety of medical literature our colleges have huge piles, especially the older and more popular ones; for every spring, in the Ides of March, large additions are made to their archives, usually badly written, not unfrequently ungrammatical, generally devoid of scientific information, and of no use to anybody, for it is not too much to say that not one in fifty affords the slightest evidence of competency, proficiency, or ability in the candidate for graduation. Often, indeed, they are not even composed by him; and occasionally, as I know from personal observation, they are plagiarized or copied, it may be verbatim, from such books as are within his reach, if not actually from the works of his preceptors. Happily, for the credit of the schools, few of these productions find their way into print. In the early history of medical teaching in this country the theses were generally written in Latin, as is still the case in some of the schools of Europe; and it was the custom, for a time at least, for the more prominent students to defend them publicly on commencement day. * * It would be well if, on the birthday of American Independence, a bonfire could be made of this trash, as it exists, without exception, in all our medical schools; and it is devoutly to be wished that the regulation which prescribes the presentation of the inaugural dissertation were abolished.—*St. Louis Record.*

INVERSION OF THE UTERUS.—On the 14th inst., a married woman in the West end of the city being in labour, was attended by a midwife. The child was born at half-past six p.m., and the placenta not coming away readily, the midwife made traction on the cord and felt "a large hard lump" come away, followed by flooding, but it is not stated how long after the birth of the child this took place. A medical man was called about midnight, and found the uterus completely inverted and flaccid, with the placenta attached to the fundus and the woman apparently dying from hemorrhage and shock. Stimulants were given, the placenta detached and the uterus partly returned, when the woman died.

AN INTERNATIONAL MEDICAL CONFERENCE.—We have received the following communication from Dr. David, Secretary to the Dominion Medical Association: "At the meeting of the Canada Medical Association, held at Niagara, in August, 1874, it was suggested that a Conference between the sister society, the American Medical Association and our own would be attended with great advantages were it possible to be obtained, and resolutions to that effect were duly proposed and carried, and at the last meeting of the American Medical Association held in Louisville, the resolutions passed by the Canada Medical Association were read and unanimously approved of, and the following gentlemen: Drs. S. D. Gross, Philadelphia, Pa.; I. T. Hogden, St. Louis, Mo.; Austin Flint, sen., New York City; W. Walling, Louisville, Ky.; L. C. Lane, San Francisco, Cal.; Wm. Johnston, Jackson, Miss.; Wm. Brodie, Detroit, Mich.; J. M. Toner, Washington, D.C.; F. D. Cunningham, Richmond, Va.; E. Andrews, Chicago, Ill.; W. B. Atkinson, Philadelphia, Pa.; D. J. Bowditch, Boston, Mass. and Robert J. Bartholover, Cincinnati, Ohio, were named as a Committee of Conference 'to meet a like number from the Canada Medical Association at such time and place as may be agreed upon by the joint Committee of the Associations.' At the meeting of the Canada Medical Association held at Halifax, N.S. last August, the communication of the above having been read, the following gentlemen were named as its representatives at the Conference, Drs. Grant, Ottawa; Hingston, Montreal; Hodder, Toronto; Botsford, St. John, N.B.; Thorburn, Toronto; Farrel, Halifax, N.S.; Fulton, Toronto; F. W. Campbell, Montreal; Atherton, Fredericton, N.B.; Howard, Montreal; Robillard, Montreal; Parker, Halifax, N.S., and David, Montreal. As it was found impossible to adopt the idea of Professor Gross, the President, to hold the meeting at Saratoga, in September next, it has been decided that the Conference take place in Philadelphia, on Monday, 5th June, and we trust all the members will faithfully attend."

CARBOLIZED CATGUT LIGATURE.—The following is the method of preparing this ligature. The material is really a part of the peritoneum of the sheep, with some fibres of unstriped muscle. This having been properly cut into lengths and sizes for ligatures, might be simply dried and used, or used fresh, but in either of these conditions it is slippery, hard to tie, and when tied apt to stretch, and the knot to slip. Mr. Lister, anxious to procure a ligature which should melt away and be absorbed

without acting as a foreign body in the wound, and looking to the somewhat unsatisfactory experiences of Astley Cooper and others, found that by a special preparation this catgut was so altered as to become a firm and useful ligature. It is suspended in an emulsion of oil and water, during the first few days it becomes dull and opaque, but then a remarkable change occurs: it becomes clear, bright and hard and capable of being tied without stretching and slipping. In order to attain this changed condition it is necessary to keep it suspended in the emulsion for about two months, the bottom of the vessel being so arranged that the water, as it separates from the oil, falls down clear of the suspended catgut. It will be ready in two months, but it goes on improving if kept in the emulsion for a much longer period. In order to make a very fine emulsion the water was mixed with something which the oil would take from it—say spirits of wine—and the water was thus left suspended amongst the oil in very minute drops. Mr. Lister wished to have an antiseptic ligature, and he found that carbolic acid had the requisite properties for forming along with water and oil the required fine emulsion. Hence the *carbolyzed* catgut ligature.—*Medical Times and Gazette.*

DEATH OF M. ANDRAL.—This celebrated physician and pathologist died on Feb. 13, aged 79. The following passage is from M. DeRause's notice of his death. "Among the masters whom the generations who have succeeded each other from 1825 to our own day have learned to appreciate, to love and to respect, M. Andral has occupied the first rank, and even those who have come on to the scene since his retirement from active life have none the less undergone the influence by a kind of tradition, if not directly through himself, which he has never ceased to exercise. This influence has not remained limited to the men and the things of our country. M. Andral was at the head of the French school at an epoch when this school had no rival, and when Paris was the general resort of all foreigners who were desirous of perfecting and completing their studies and of discovering new horizons. Thus was the authority of his teachings promptly conveyed to the schools of other countries, and we have no fear in saying that a universal homage, without any distinction of nationality, will be rendered to the memory of him who will remain one of the greatest medical glories of the age."

The primary and final examinations of the College of Physicians and Surgeons of Ontario commence April 4th. There are 108 candidates.

The following extract is from an editorial in the January number of the *St. Louis Clinical Record*:—On the most trivial pretext the physician is commanded by the authority of the State, which he dare not disobey, to leave his business, to leave his patient, whose life may be the price of some pettifogger's whim, and dance attendance upon some court of justice (?) while it suits the lawyer's pleasure, and this without compensation! For the fees to which he is legally entitled are generally quietly pocketed by the gentlemanly clerk who issues the subpoenas, with equal grace, cheerfulness and alacrity. That a man's ideas and opinions are his property, as much so as goods and chattels or real estate, is now pretty well recognized; our laws relating to patents and copy-right are based upon the fact. The State has no more right to call for a physician's opinion without offering him due compensation for it, than it has a right to his house and land or his books and instruments. This practice of wholesale robbery has gone about far enough, and the matter ought to be tested before the courts. By right of eminent domain the State may confiscate private property when the public need is great enough to overshadow private right, but only on condition that a just and proper compensation is given. On the same principle, a physician's opinion, based on years of study and careful observation, should be had when the needs of justice demand it, but a compensation should be allowed him in some degree proportionate to the tax made upon his time, and in some way thus repay him for his previous study and application. [So say we.]

FISTULA IN ANO.—Prof. D. Hayes Agnew, makes the following valuable observations: "Very important offices have been attributed to fistulae. They have been thought to be the means of discharging from the system various morbid materials, especially in cases of phthisis pulmonalis. I have never seen any such salutary effect exerted by them in disease of the lungs or in any other disease, and the only question which I ask myself is whether the patient's general health is good enough to warrant the operation. Neither have I ever observed any bad effects follow its performance in cases of pulmonary disease."—*Louisville Med. News*.

THE BLEACHING OF BONES AND IVORY has been rapidly and successfully carried out at the museum of the *Jardin des Plantes*, by immersing the articles in spirits of turpentine, taking care that they are kept a short distance from the bottom. When treated in this manner and exposed to sunlight, a few days, it is said, suffice to free bones from fat and disagreeable odor, and render them beautifully white. Woods of different kinds may also be bleached in this manner. The necessity of keeping the articles from touching the bottom of the vessel is on account of an acid substance which collects at the bottom of this fluid, and is capable of attacking the substance being bleached.—*New York Med. Record*.

—
AN OUTBREAK OF ENTERIC FEVER AT THE VILLAGE OF NUNNEY, SOMERSETSHIRE.—The following are the inferences to be drawn from Dr. Ballard's report on the subject:—1. That the fever in Nunney was enteric. 2. That it was brought into the village from a distant place by an individual whose evacuations, and those also of others attacked in the same and the adjoining house, found their way into the Nunney brook at the upper part of the village. 3. That the fever spread in the village in consequence of the villagers habitually drinking the water of the brook thus contaminated, which water was still further polluted with the sewage of the village itself, containing, if not the actual excrement of the sick, yet certainly matters washed out of their soiled linen, and also more or less of their liquid evacuations. 4. That at the time of my visit, actual excrement from cases of enteric fever was finding its way into the brook at a hamlet only half a mile from the village of Nunney. The explanation above given of the origin and spread of fever in Nunney is confirmed by the sudden reduction in the number of fresh cases of the fever on the expiration of the week ending October 5. The causes of pollution of the water of the brook pointed out in the course of this report were still operating, but on and after September 24th, water from an unpolluted source was brought in carts into the village daily for the use of the inhabitants. It could scarcely be expected that the brook water

should at once have fallen entirely into disuse ; that none of it should have been used by any one in the village. Such changes are never to be effected suddenly. The result observed was just such and such only as I looked for. From eight to thirteen fresh cases had been coming under observation weekly for a period of five weeks ; but in the week following the twelfth day from the introduction of unpolluted water the weekly number of cases fell to five, and in the next week to one.—*Medical Times and Gazette.*

DEATH OF ANOTHER LADY FROM CHLORAL.—Another death is reported from the reckless taking of chloral privately. In this case the victim was a lady of about thirty-five, who resided with her step-father at Exeter. She had, it is said, been in the habit for two years past of taking chloral “to soothe pains in the stomach,” and had been repeatedly found lying on the floor in an unconscious state from its effects. The preparation she usually took was that known as “Hunter’s solution of chloral,” which has been ascertained to contain twenty-five grains of chloral to the drachm, and each bottle contained 300 grains. It is calculated that the deceased took 125 grains within two hours. It is futile to caution those who are in the habit of taking sedative narcotic preparations of the risk of doing so except under medical supervision : the only plan likely to succeed is to place heavy restrictions on their sale.

THE LONGEVITY OF BRAIN-WORKERS.—By *George M. Beard, A.M., M.D.*—*Separate Pamphlet.*—Dr. Beard assigns as the cause of the exceptional longevity of great brain-workers :—
1. That great men usually come from healthy, long-lived ancestors. 2. That a good constitution usually accompanies a good brain. 3. That great men who are permanently successful have a correspondingly greater will than common, and force of will is a potent element in determining longevity. The one requisite of great success is “*grit.*” 4. Great men work more easily than ordinary men. 5. Great brain-workers have not all been rich nor all been poor. The majority have been most of the time surrounded with at least moderate comforts.

THE Health Officer’s Report of the city of Oakland, for the year 1875, informs us that Oakland is a city of about 25,006 inhabitants, situate on San Francisco bay, with a rainfall of about 21 inches, a minimum temperature of 30°, a death rate of 13½ per 1000 ; the unavoidable being 9 per 1000. The birth-rate was about 21 per 1000, showing a slight decrease for the last three years. During the last year 205 children were born of U. S. parentage, 84 of mixed, and 235 of foreign ; but the report shows that while more children are born of foreign parentage, a greater number of those born of U. S. parentage survive the first year.

Unlike some pretentious cities we know of, it has an active Board of Health composed of medical men, of which Geo. E. Sherman, M.D., is health officer, and C. S. Kittridge, M.D., is secretary ; and what is more interesting to eastern cities, it has an excess of 2648 adult males. *Verbum sat.*

PROFESSIONAL MUSCULAR ATROPHY.—Dr. E. Onimus, in a short article with this title, says : Activity of muscles determines the development and energy of muscular fibres, and the general law is that the more a muscle works the larger and the more powerful it gets. This law, however, has its limits, and I have just observed a certain number of cases in which the exaggerated work of certain muscular groups, far from producing hypertrophy, induced, on the contrary, a condition of considerable atrophy.

These cases are observed only in individuals who, through the nature of their trade or work, are obliged to contract the same muscles constantly. Through excess of activity, irritation of the muscular fibres supervenes. Thus, in a man employed in a draper’s establishment, and whose business was to replace the unfolded goods on their shelves, there supervened, little by little, a most remarkable atrophy of the deltoid muscles of both sides. And, indeed, it was these muscles which were constantly actively employed in performing this special work.

In a workman employed in a tannery, who was every day for eleven hours at work, and always felt aching and fatigued after his day’s labor, there likewise supervened marked muscular atrophy, confined to certain muscles. In

order to prepare the skins, he had to perform with both arms a forward and a backward movement, which necessitated especially the action of the muscles of the shoulder, so that these were the first to be affected, and are at present almost completely atrophied. The wasting away is almost the same in both arms, as both were in action during the man's work, whereas, in respect to the legs, the right one alone was obliged to support the whole weight of the body. Consequently, with the lower limbs, the right leg is the only one that has wasted; it is one-half smaller than the other, and the affected muscles are those the action of which was the most constant, such as the rectus femoris, vastus externus, and vastus internus.

In the beginning, the patients complain especially of prostration, of weakness even in the morning on getting out of bed. They feel—particularly at the outset of the disease—intense, darting, intermittent pains. Before atrophy is well marked, there always exists more or less temporary contraction of the muscles.

When wasting has once begun, it follows a most rapid course if the patient continues to fatigue his muscles.

Almost always this affection is mistaken for progressive muscular atrophy, but it differs from it in its course and in a great many of the symptoms. 1st. The muscles which are the first to be affected are generally the largest ones, and particularly those in the neighborhood of the shoulder-joint. 2nd. The pain and cramps at the outset are also a distinctive sign. 3rd. These cases of wasting amend rather rapidly under the influence of rest and the use of constant and continuous electric currents.

Recently I observed one case which it was most difficult to differentiate from progressive muscular atrophy, as the atrophied muscles were the same as those which are the first affected in this latter affection. They were the muscles of the thenar eminence, and chiefly the abductor pollicis. The patient was an enameller, who had to hold an object all day between his thumb and index-finger. He first got cramps in the thumb, which suggested the idea of scrivener's palsy, then tremor of the thumb, on account of the fibrillar contractions, and lastly, atrophy. Under the influence of treatment there was a

rapid amendment, which showed that the case was really one of professional muscular atrophy, and not commencing progressive muscular atrophy.—*Monthly Abstract.*

RUPTURE OF HEART.—Dr. R. E. Van Giesen, of Greenpoint, presented to the New York Pathological Society, a heart showing rupture of the left ventricle. The history of the case was interesting as affording a premonitory stage. It was, briefly, as follows: A man sixty-five years of age, was seized with sudden vertigo on November 23rd, after suffering from severe grief for the loss of a near friend. Two days after, Dr. Van Giesen saw him; he was then having an attack of nausea and vomiting, accompanied with pain in the chest. Previous to this he never had been sick during his life. During the evening of the day in which the doctor saw him he was very comfortable, and continued so till one o'clock in the morning. At that time, while urinating, he sprang from his bed and dropped dead. The autopsy was made thirty-three hours after death. All the viscera, with the exception of the heart and aorta, were healthy, with the exception of the liver, which was fatty, and extended up to the border of the third rib. The pericardium was half filled with fluid blood. The right ventricle was very thin, and at a point near the septum there was a rupture about an inch in length. From a superficial examination it would seem as if the wall of the heart had undergone fatty degeneration. It was referred to the Microscopical Committee for report. In answer to the question of Dr. Van Giesen as to what was the cause of the preliminary trouble, Dr. Delafield said that cases occur in which the rupture is gradual and oblique. In cases of such a class there are premonitory symptoms, but in the case presented there were no evidences of such a condition. Dr. Van Giesen said that when engaged in the naval service he saw, personally, the death, from cardiac rupture, of Ripley, a distinguished gunner. While Ripley, in asking for a chew of tobacco, reached out his hand, he dropped dead. At the autopsy, the rupture was found on the anterior surface of the ventricle. The wall of the ventricle was as thin as tissue-paper. The pericardium was completely filled with coagulated blood, forming a perfect cast of the heart and pericardium.

SICKNESS OF PREGNANCY.

Pass the finger into the os and slightly dilate it till the puckered edge is smooth. This will not bring on premature labour. Judging by three cases in which this plan proved successful, after all other means of treatment had failed, the os will be found patent, puckered, and dilatable. This means of cure was accidentally found out in a case which was so serious as to appear to necessitate the induction of premature labour. The os was slightly dilated by the finger in the manner described, but nothing further was done at the time. The sickness ceased at once, and the patient went to the full term of pregnancy.—Dr. E. Copeman, in *British Med. Journal*.

RUPTURE OF THE KIDNEY.—A boy was caught between the wheels of a waggon and received a severe crushing of the abdomen. There were no signs to indicate any special lesion. Death occurred in twenty-four hours. At the autopsy there was found to be rupture of one of the kidneys.

Births, Marriages, and Deaths.

BIRTHS.

On March 2nd, at Angus, Ont., the wife of F. L. Nesbitt, M.D., of a son.

At Guelph, on the 6th inst, the wife of Dr. Harkin, of a son.

At Ottawa, on Saturday, 11th inst., at No. 185 Rideau Street, the wife of Dr. Clarence R. Church, of a son.

MARRIAGES.

On Saturday, March 4th, at the residence of the bride's father, by the Rev. John Fletcher, M.A., Hugh Spears, Esq., M.D., Toronto, to Constance N., youngest daughter of Col. Norris, 12th Battalion, LL.D., county of York.

DEATHS.

At Brantford, on Wednesday, the 15th inst., Caroline, widow of the late Dr. Alfred Digby, aged 77 years.

At Lambton Mills, on Saturday, the 26th ult., Elinor, the beloved wife of Thomas Beatty, M.D., aged 49 years.

At London, Ont., on Thursday, March 2nd, Ellen Lane, youngest and beloved daughter of Henry Going, M.D., and grand-daughter of the late Ven. Archdeacon Brough, aged 18 years and 4 months.



BURRINGTON'S DR. WADSWORTH'S UTERINE ELEVATOR.

The most simple and practical of any Stem Pessary ever invented; made of India Rubber *without lead*, unirritating, of easy application, and unfaillingly keeps the womb in its natural position. The first-class physicians in Providence, and eminent practitioners in almost every State, highly recommend it.

A pamphlet describing it, and testimonials of distinguished physicians, also Price List, sent on application.

H. H. BURRINGTON, Sole Proprietor,

PROVIDENCE, R. I.

Also for sale by dealers in Surgical Instruments generally. Beware of similar articles sold on the great reputation of above.

BOVINE AND HUMANIZED VIRUS.

BEAUGENCY STOCK.

IVORY POINTS, in quantities less than 1 doz., each	\$0 20	CAPILLARY TUBES, each	\$2 00
PACKAGES OF ONE DOZEN	2 00	CRUSTS, each	1 50

ARTIFICIAL CRUSTS,

Made by gathering the EIGHTH DAY LYMPH in a watch-glass, and evaporating to dryness,

\$3.00 to \$5.00 EACH, ACCORDING TO SIZE.

This form of Crust is always reliable and will keep for several weeks, even in moderately warm weather, and each crust will vaccinate from 25 to 50 PERSONS.

JOHN BUTLER, M.D., L.R.C.P., Ed.; and L.R.C.S.I.,

98 Lafayette Avenue, BROOKLYN, N. Y.

A NEW MEDICINE.

Seven Springs Iron & Alum Mass.

PREPARED BY

LANDRUM & LITCHFIELD,

ABINGDON, VIRGINIA.

This valuable preparation is the solid substance of SEVEN MINERAL SPRINGS in Washington county, Va., and is reduced to a "Mass" by evaporation. The following analysis, made by Prof. J. W. Mallet, finds it to consist chiefly of IRON, ALUMINA, MAGNESIA, GLAUBER SALTS, and LIME.

Analysis by Prof. J. W. Mallet, of the University of Virginia.

The Mass appears as a stiff dough, or soft solid, of light gray color, and marked acid reaction to test-paper. The contents of several bottles having been thoroughly mixed, the following composition was found for the mixture in 100 parts:

<table border="0" style="width: 100%;"> <tr><td>Aluminum Sulphate.....</td><td style="text-align: right;">15.215</td></tr> <tr><td>Ferrie sulphate (per-sulphate iron).....</td><td style="text-align: right;">4.628</td></tr> <tr><td>Ferrous sulphate (proto-sulphate iron).....</td><td style="text-align: right;">.412</td></tr> <tr><td>Nickel sulphate.....</td><td style="text-align: right;">.162</td></tr> <tr><td>Cobalt sulphate.....</td><td style="text-align: right;">.014</td></tr> <tr><td>Manganese sulphate.....</td><td style="text-align: right;">.257</td></tr> <tr><td>Copper sulphate.....</td><td style="text-align: right;">.008</td></tr> <tr><td>Zinc sulphate.....</td><td style="text-align: right;">.301</td></tr> <tr><td>Magnesium sulphate.....</td><td style="text-align: right;">16.006</td></tr> <tr><td>Srortium sulphate.....</td><td style="text-align: right;">trace.</td></tr> <tr><td>Calcium sulphate.....</td><td style="text-align: right;">17.538</td></tr> </table>	Aluminum Sulphate.....	15.215	Ferrie sulphate (per-sulphate iron).....	4.628	Ferrous sulphate (proto-sulphate iron).....	.412	Nickel sulphate.....	.162	Cobalt sulphate.....	.014	Manganese sulphate.....	.257	Copper sulphate.....	.008	Zinc sulphate.....	.301	Magnesium sulphate.....	16.006	Srortium sulphate.....	trace.	Calcium sulphate.....	17.538	<table border="0" style="width: 100%;"> <tr><td>Potassium sulphate.....</td><td style="text-align: right;">.060</td></tr> <tr><td>Sodium sulphate.....</td><td style="text-align: right;">.226</td></tr> <tr><td>Lithium sulphate.....</td><td style="text-align: right;">.019</td></tr> <tr><td>Ammonium sulphate.....</td><td style="text-align: right;">.022</td></tr> <tr><td>Sodium chloride.....</td><td style="text-align: right;">.328</td></tr> <tr><td>Calcium fluoride.....</td><td style="text-align: right;">trace.</td></tr> <tr><td>Calcium phosphate.....</td><td style="text-align: right;">trace.</td></tr> <tr><td>Silica.....</td><td style="text-align: right;">1.504</td></tr> <tr><td>Organic matter.....</td><td style="text-align: right;">.123</td></tr> <tr><td>Water.....</td><td style="text-align: right;">42.938</td></tr> <tr><td style="border-top: 1px solid black;"></td><td style="text-align: right; border-top: 1px solid black;">99.769</td></tr> </table>	Potassium sulphate.....	.060	Sodium sulphate.....	.226	Lithium sulphate.....	.019	Ammonium sulphate.....	.022	Sodium chloride.....	.328	Calcium fluoride.....	trace.	Calcium phosphate.....	trace.	Silica.....	1.504	Organic matter.....	.123	Water.....	42.938		99.769
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A CARD TO THE MEDICAL PROFESSION.

We, the physicians of Abingdon, Washington county, Virginia, having tested the merits of the "IRON AND ALUM MASS," as made from the "SEVEN SPRINGS" in this county, believe it to be a most excellent "medicine," and is a valuable contribution to "*Materia Medica*." It is a remedy which combines Tonic, Alterative, Diuretic, and Antiperiodic properties, to such a degree as to deserve more than a mere mention at our hands.

We have used this "Mass" in a number of cases, especially in chronic cases, and it has proved satisfactory in almost every instance. We deem it unnecessary to mention in detail the different classes of diseases in which this medicine is applicable, as the analysis itself will indicate its application. There is, however, more virtue in the combination than is at first glance suggested. We therefore take pleasure in recommending this "Mass," (and water from these springs) to the favorable consideration of the medical profession, feeling assured that it will prove satisfactory.

Respectfully,

W. F. BARR, M.D.,
WM. WHITE, M.D.,
M. Y. HEISKELL, M.D.

R. J. PRESTON, M.D.,
H. M. GRANT, M.D.,
E. M. CAMPBELL, M.D.

HOME TESTIMONY—FROM AN EXPERIENCED PHYSICIAN.

I have been using the "Seven Springs Iron and Alum Mass" in my practice, and find it a most excellent remedy for Chronic Bronchitis and Throat Affections, Torpid Liver and Kidney Affections, Chronic Diarrhoea and Constipation, Dyspepsia, Nervous and Sick Headache, and in the treatment of some of the diseases peculiar to females I have found it to be very valuable; Leucorrhoea, Amenorrhoea, Dysmenorrhoea, Menorrhagia, Anaemia, Chlorosis, Chorea, diseases following Intermittent Fever, and in all cases in which it is desired to improve the impoverished condition of the blood. I know of no other remedy which combines more happily Tonic, Alterative, and Diuretic properties.

W. F. BARR, M.D., ABINGDON, VA.

This "Mass" is sold by some of the leading Druggists in cities and towns, but in order that Physicians and others may have a better opportunity for procuring it, we will mail to their address six packages on receipt of \$5, or for a less number \$1 per package. All orders entrusted to us will be attended to promptly. The usual discount to the trade.

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VALENTINE'S MEAT JUICE.

This dietetic, first offered to the Medical Profession of the United States in 1871, has, in the meantime, been fully tested by them, and through them it has acquired its present position. We desire to submit brief extracts from the testimonials of some of these well-known medical gentlemen for the consideration of the profession in Canada. Any further evidence of the value of the Meat Juice than is contained in this summary of results from its use will appear unnecessary.

The Meat Juice is a liquid extract, from which all fat, fibre, and other matter, not readily assimilable, have been excluded. It can be prepared (with cold water) in an instant, at the bedside of the sick, in travelling, or whenever concentrated nourishment is urgently demanded.

Our Circular—Book—with extended reports, and the recommendations and directions of the practice of the United States, will be forwarded by us, when requested. To the trade we will send our price-letter when advised. The Meat Juice may be obtained in any of the cities of the United States, and in Montreal and Toronto.

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TESTIMONIALS.

I prescribe Valentine's Meat Juice daily, and like it better than any preparation of the sort I ever used.

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Valentine's Meat Juice is the best preparation for invalids that I have seen.

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For convenience of administration, extent of application, and reliability as to nutritive and restorative powers the Meat Juice is invaluable.

H. BLACK, Blacksburg, Va.

I have found Valentine's Meat Juice all that is claimed for it.

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I give Valentine's Meat Juice the preference over all other preparations which have come under my notice.

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As a concentrated food, I can hardly speak too highly of the Meat Juice. We have not found a single case in which it was not beneficial, and in which it did not agree with the stomach.

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Valentine's Meat Juice is digestible, extremely nutritious, and contains a large amount of nutrient material, in small bulk.

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Valentine's Meat Juice has been tried and found to be of superior quality and flavor, and far more acceptable to the palate than other preparations of this nature heretofore furnished by the Department.

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The Meat Juice affords opportunity to administer nutriment to the very large class in our Insane Asylums who refuse food in bulk. It is the "*multum in parvo*" that exactly meets the case.

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As an easily digested, concentrated, rapid blood-making, and agreeable nutrient, Valentine's Meat Juice is, in my opinion, superior to any of the various preparations of meat in the market, and I may say that my experience with them during the past fifteen years—in both military and civil practice—has been considerable.

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Antim. Pot. Tart.....	0 08		Morph. Mur	4 75	" Ipecac	0 60		
Argent. Nit	1 30		" Sulph	4 75	" Scilla	0 35		
Bala. Copalb	1 25		Mist. Sennae Co	0 25	" " Co.....	0 40		
Bismuth, Carb	0 30		Ol. Crotae, Tig	0 25	" Tolut	0 40		
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Cinchon, Mur	0 70		Opium	0 60	" Camp. Co.....	0 35		
Collodion	1 00		" Pulv	0 75	" Cardam. Co.....	0 40		
Emp. Belladon	0 90		Pepsin (Morson's)	1 00	" Catechu	0 35		
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" Conioe	0 19		Podophyllin	0 65	" Ferri Perchlor	0 35		
" Gentian	0 07		Potass. Acet.	0 60	" Gent. Co.....	0 35		
" Hyosciam	0 20		" Bicarb	0 32	" Hyosciam	0 40		
" Nuc. Vom	0 75		" Bitart	0 40	" Iodl	1 00		
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" Valerian	0 25		" Nitrat	0 15	" Nuc. Vom	0 45		
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