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ON A FATAL CASE OF ACUTE PERITONITIS

DUE TO ESCAPE OF THE CONTENTS OF THE GALL-BLADDER AND PARTIAL EXTRUSION OF A MEDIUM-SIZED GALLSTONE.

By JAMES BELL, M.D.,
Surgeon to the Montreal General Hospital; Associate Professor of Clinical Surgery, McGill University.

On the 22nd instant I was called to see, in consultation with Dr. F. E. Thompson, a young woman who was said to be dying. On my arrival I found that she had just expired. Enquiry elicited the following history. Mary D., æt. 27, masseuse, a native of France, was admitted to the Montreal General Hospital on the 14th of July, under care of Dr. Wilkins, suffering from acute peritonitis. She had been taken suddenly ill three days before admission with severe pain in the right hypochondrium. The symptoms were most marked, throughout, in the region of the liver, and careful examination of the cæcum and pelvic organs failed to discover anything abnormal. The patient stated that she had been subject to attacks of severe pain in the right hypochondrium from childhood. She had had, on an average, three or four such attacks every year, and each attack lasted usually three or four days. The last one prior to the present illness was about the 1st of May last. For a month past she had suffered from digestive disturbances. On the 19th of July she was removed from the hospital, contrary to advice, by her husband, who was a *masseur* and a "water-cure" crank. He proceeded with wet pack and massage treatment until the

morning of the 22nd, when he found that she was dying, and Dr. Thompson and I were hastily summoned. Under the circumstances the Coroner was notified, and ordered an inquest. At the autopsy was found a general acute peritonitis, of greatest intensity around the liver and extending through the diaphragm to the pleura on the right side. On the under surface of the liver were thick layers of lymph. The gall-bladder was contracted and contained no fluid. Near its apex a gall-stone, as large as an ordinary marble, lay half extruded through an opening in its walls. This, which was clearly the origin of the peritonitis, had probably been brought about by localized gangrene or ulceration, from pressure, and an inflammatory condition of the lining membrane of the gall-bladder. (Experiments upon animals and cases of rupture of the gall-bladder in health have shown that normal bile has little, if any, tendency to set up peritonitis.) The history of this case appeals to the profession in a most striking manner for a more careful and thoughtful consideration of two common and generally recognized pathological conditions, viz.: gall-stones and acute peritonitis. Hundreds of men and women (more women than men) are going through life, on the advice of their physicians, suffering more or less from symptoms which can be diagnosed as due to the existence of gall-stones. They are, for the most part, taught to believe that surgical interference for the relief of such conditions is fraught with great danger, and that while life is tolerable operation is not to be recommended. They are advised also (tacitly at least) that, while they may suffer severely at times, or perhaps be more or less incapacitated all the time, the presence of gall-stones does not directly menace life. The foregoing case illustrates one mode in which gall-stones may be the direct cause of death, and probably much more frequently than we have hitherto suspected. Many fatal cases of acute peritonitis, which in the past have been styled "idiopathic," etc., or attributed to "cold," and in which the cavity of the abdomen has not been examined, either before or after death, have probably been due to ulceration or other changes in the gall-bladder or cystic duct, in connection with gall-stones. A case which made a deep impression upon

my mind many years ago was that of a healthy man, aged about 50 years, who was seized with biliary colic for the third or fourth time in as many years. The symptoms were relieved by morphia, but the attack did not pass off, and at the end of twenty-four hours the pain ceased, but the patient fell into a collapsed condition and died in eight or ten hours, with symptoms of perforative peritonitis. The abdomen was not opened. That gall-stones frequently find their way into the intestinal tract by other routes than through the bile ducts is attested by the numerous reported cases of intestinal obstruction due to gall-stones. (Mr. A. W. Mayo-Robson, in the *British Medical Journal*, July 16th, 1892, states that there are now over 100 on record.) Such a case came under my own observation in May, 1890. A woman, aged 68, who had been in poor health for many years, suffering from obscure abdominal pains and digestive disturbances, suffered for a couple of weeks from anorexia and a subfebrile temperature, when she suddenly began to vomit. The vomited matter soon became stercoraceous and all the symptoms of complete obstruction developed. Operation was recommended, but neither the patient nor her friends would listen to the proposal. After several days, during which enemata were freely employed, the obstruction was overcome, and a large gall-stone, measuring a little more than an inch and a quarter in diameter, came away with the evacuation. This was undoubtedly the cause of the obstruction, the site of which we could not determine, although we suspected the ileo-cæcal valve. It is obviously impossible that a gall-stone of this size should find its way into the intestines by the natural channels, and that such stones do find their way into the bowel, instead of escaping into the peritonial cavity, would seem to be entirely accidental. It follows, then, that in every case of gall-stone, diagnosed or strongly suspected, the question of surgical treatment should be fully considered. It goes without saying, of course, that not every case should be subjected to operation, for the reason that it frequently happens that spontaneous cure results from the passage of one or more gall-stones through the biliary ducts and the intestinal canal. In the case here reported cholecystotomy,

at any time prior to the onset of the peritonitis, should have saved this young woman's life and restored her to perfect health. Even after the peritonitis had become established a timely cholecystectomy would have been quite as promising an operation as the removal of the appendix in a similar case of appendicitis. As a matter of fact, surgical treatment of the gall-bladder and cystic-duct has been extremely satisfactory in its results. It is only in the few exceptional cases, in which the common duct is involved, that operation is difficult and dangerous. Of 278 cases of surgical interference with the gall-bladder on account of gall-stones or distension from obstruction, 36 (13 per cent.) were fatal. In more than half of these cases stones were found in some part of the biliary passages. (Quoted from Dr. Ivanhoff in *London Lancet*, April 30th, 1892, and reproduced by Dr. F. J. Shepherd in *Retrospect of Surgery*, MONTREAL MEDICAL JOURNAL, July, 1892.) Mr. A. W. Mayo-Robson (Leeds), in an article entitled "Cholecystotomy for Gall-stones performed on the strength of Symptoms without Physical Signs," and published in the *London Lancet*, January 10th, 1891, enumerates the serious complications which may arise from the presence of gall stones, and states his conclusions concerning the treatment of this condition as follows: "(1) Exhaustion from repeated attacks of pain; (2) fatal collapse from acute agony; (3) fatal jaundice; (4) dropsy of the gall-bladder; (5) empyema of the gall-bladder; (6) abscess of liver; (7) local peritonitis; (8) perforation of the gall-bladder or ducts, causing abscess, peritonitis, septicæmia, intestinal obstruction or hæmorrhage." "Bearing in mind the dangers of cholelithiasis, and knowing with what little risk the operation of cholecystotomy can be performed, if done carefully and with due precautions, I have no hesitation in recommending operation whenever there are repeated attacks of biliary colic, apparently due to gall-stones, which do not yield to a definite course, not necessarily very prolonged, of medical treatment."

With reference to the second condition one may ask, What is the attitude of the medical practitioner, to-day, towards acute peritonitis? Speaking generally, his practice is some such

routine as the following. A few hours or days of expectancy, during which an attempt (generally futile) is made to discover its origin; next a course of medicinal treatment, consisting of saline purgation, administration of opium, with counter-irritation over the abdomen, or perhaps calomel in small doses, with or without sufficient opium to control pain; and, finally, when fatal collapse is impending, a resort to surgical treatment. Surely this order should be reversed? We no longer believe that peritonitis occurs spontaneously, and, in fact, in the great majority of cases we find on section that it is due to some condition which could not have been remedied by other than surgical means, as in the case here reported. To postpone the consideration of surgical treatment is in most cases to make it of no avail, while such postponement can never in any way improve the patient's chances when operation is finally resorted to. The question of operative treatment should be decided in every case *by the surgeon, at the very onset of the illness*, and before medical treatment, which in these cases is but a "leap in the dark," is begun. It is now universally admitted that a carefully performed exploratory operation upon the abdomen is in itself free from danger, and if the surgeon does not succeed in removing the source of the disease, the operation will at least enable the physician to pursue the further treatment of the case intelligently. In the vast majority of cases, however, the conditions will be found to call for surgical treatment, the success or failure of which will depend largely upon whether it is resorted to early or late.

A CASE OF SCLEROSIS OF THE STOMACH, COMPLICATED BY TUBERCULOUS PERITONITIS.

By Stanley S. Cornell, M.D., Athens, Ont.

Sala B., aged 67 years, a gentleman, married. General appearance anæmic, and hands and face œdematous. Height 5 feet 9 inches; slim and stooping. Total abstinence from alcoholic liquors; continuous indulgence during the past eighteen years in hot pepper-draughts, peppered pickles, and proprietary nostrums. Residence healthful. Had measles, whooping-cough, smallpox, inflammation of the bowels, and typhoid fever thirty years ago. From these affections the patient believes he has made uninterrupted recoveries.

Family History—Paternal grandfather's age and cause of death unknown. Paternal grandmother died at 79 years, disease unknown. Maternal grandfather died at 79 years, disease unknown. Maternal grandmother died at 74 years, of "dysentery." Father died at 66 years, of "consumption." Mother died at 42 years, of "palpitation of the heart." Two sisters died at 66 and 79 years respectively, of "consumption"; and a third died at 73 years, of "stomach trouble." One brother died at 76 years, of "putrid sore throat"; and another brother died at 58 years, of "erysipelas."

The symptoms about to be described are but exaggerated types of experiences that have been undergone during the past fifteen years.

Symptoms—For the last two months the symptoms have exhibited stomachal distress. It was at first found necessary to abstain from most meats, especially pork. Loss of appetite next developed, associated with restless and sleepless nights. Food has been spat up during the last three weeks, it having been observed that cabbage and beef eaten one week before had come away wholly undigested. The appetite demands but little food, after the ingestion of which, "pressure in the stomach" is felt, and continues for about half an hour. This symptom is relieved by the "belching of wind." A solution of bicarbonate of soda produces stomachal oppression, followed by the eructation of a

"sour steam," the chemical reaction between acid and alkali being appreciable by the "fizzing extending to the upper part of the head" (coronal suture). All eructations, solid or liquid, are sour and frothy. The eructative act brings thick, ropy mucus, this being absent when water has been partaken of freely. The breath is at times somewhat offensive. Constipation is characteristic, fæcal movements occurring every second day; this condition sometimes obtains till the supervention of diarrhœa, after which relief is experienced. Formerly distension of the abdomen has been present, and been relieved only by the passage of gases from the rectum; now eructations render the bloating less.

The stomachal region has been the seat of tenderness upon pressure, although at the present this is not so pronounced. Palpation of the epigastric region shows slight resistance to deep pressure, but no definite condition of the tissues can be elicited. Vertigo has been a symptom for two months past, and has been observed chiefly in the morning upon rising. The taste is offensive. Two days ago, œdema of the face, dorsal regions of the hands and feet, and legs developed.

General Physical Examination.—The sclerotics are yellowish-brown in color; an arcus senilis exists. The pharyngeal mucous membrane is hyperæmic and relaxed, and the tonsils are enlarged. The tongue is protruded tremulously, and covered with a whitish-yellow fur, ruffled in patches. There are no physical signs referable to the thyroid gland. The lungs are normal; but, as is observed in many aged people, the vesicular murmur is extraordinarily loud in all regional divisions of the thorax, and approximates the bronchial respiration in pitch. Physical signs of aortic obstruction are present. It is to be noted that the murmur indicating this condition is audible with greater intensity over the carotid arteries. The area of superficial cardiac dulness is enlarged one inch to the left of the left nipple. The radial arteries are thick and firm, but not atheromatous. The pulse is of medium volume, low tension, and normal rhythm; it registers 59 beats each minute. The temperature is normal. The skin is dry and flaky; the muscles

relaxed and small. The left hepatic lobe returns physical signs of increased size; but the dulness and flatness associated with the enlarged areas occupied by this lobe and the left heart render a distinction from splenic hypertrophy very difficult. The urine is voided once during the night, and is occasionally dark-red in color, and leaves a stinging sensation in the urethra when voided; chemical examination reveals no abnormal characters pertaining to the urine. The knee, the eye, and cremaster reflexes are present. The physical signs relating to the abdomen are normal except in this: the gastric tympanitic percussion-note is conveyed to the umbilicus; palpation, deeply performed, renders appreciable an indefinable resistance to the finger over the epigastric region midway between the cartilages of the seventh rib.

Treatment.—$\frac{1}{30}$ gr. of sulphate of strychnine and 1 m. of fluid extract of digitalis given before meals, and pepsin and hydrochloric acid after meals. Irrigation of the stomach with hot water, by the siphon-tube, employed every morning before breakfast.

March 14th, 1892.—The treatment by digitalis and strychnine was continued till the disappearance of œdema of the face, hands, legs and feet, five days after it was begun. Pepsin, hydrochloric acid, calumba, and ipecac were administered, and the use of the tube maintained. Failure in strength and loss of appetite progressed rapidly, the countenance assuming a paler appearance and the flesh falling away.

During this treatment the stomachal symptoms remained unchanged, eructations of gas and sour tastes in the mouth occurring as frequently as at any time before. The first treatments by the siphon were productive of discomfort; latterly relief has been obtained. The matters brought away by the tube have possessed a strong, sour odor, and have usually displayed a finely ground, muddy, gray material tenaciously adherent to the bottom of the chamber-vessel, and lying beneath a superimposed froth and liquid. It has been observed that the later effects of irrigation are a freer passage of gas by the rectum, a more active movement of the bowels, and a temporary lessening of the sense of weight in the stomach.

March 21*st.*—The absorptive power of the stomach has been tested, and shows the presence of iodine in the saliva within fourteen minutes after the patient had swallowed a solution of iodide of potash.

The patient's ejection from the stomach has of late shown some alteration in colour, reddish masses, consisting of finely granular matter, held together by sticky mucus, appearing here and there, elevated above the surface of the grayish, muddy mass. The treatment by irrigation of the stomach is continued. The dietary is composed of crumbed toast in gruel.

Microscopical examination of the Ejecta.—(1) The muddy material was mounted, and presented starch-granules and fat-globules in perfect form; in addition, there appear iodine-stains in various quadrangular shapes and deep blue in colour. They have been produced by the action of the acid gastric juice and starchy contents of the stomach upon the iodide of potash given the evening previous to the microscopical examination. (2) The reddish matter was mounted, and presented old-gold-coloured patches that simulated thick layers of red blood-corpuscles much compressed, and isolated masses of blackish and reddish pigment. Both mountings contained pear-shaped, triangular, and quadrangular cells, and numerous rod-shaped bacilli.

The presence in the stomachal contents of unbroken starch-granules indicates, of itself, loss of digestive power, whether brought about by vitiated gastric juice or by obliteration of the peptic glands—(*Mills*, "Animal Physiology," page 311, art., Starch).

March 24*th.*—Physical signs relating to the epigastric region, the patient being free from tympanitic distension of the abdomen: The epigastric region is the seat of a tumour, which begins $2\frac{1}{2}$ inches below the xiphoid appendix and extends to a point within a quarter of an inch of the upper border of the navel. The measurements of the tumour are the following: transverse, $3\frac{3}{8}$ inches; vertical, $2\frac{1}{8}$ inches. Pulsation of the abdominal aorta elevates, but does not expand the tumour, and deep inspiration produces depression to the extent of three-eighths of an inch. On deep inspiration the percussion-note is tympanitic; on deep expiration

it is dull. The form of the tumour is circular, and pressure induces pain. Deep palpation reveals a hard ridge passing vertically from right to left $1\frac{3}{8}$ in., and taking origin in the upper border of the enlargement. From the lower third of the right border of the tumour a less prominent ridge passes to the left and downward two inches. Both ridges become lost in a thick, nodular mass which forms a part of the whole enlargement. There is absence of firm texture between the tumour and the inferior cartilaginous margins of the 8th, 9th and 10th right and left ribs, and in these situations the percussion-note is high-pitched and tympanitic.

March 31*st*.—The introduction of the siphon to-day was met by a gush of muco-purulent matter. All through the day this material has been brought up at intervals by hawking and by expectoration.

The thermometer has been employed many times, but I have observed no rise of temperature above the normal since my first examination of the case. I am informed by the patient's wife—a lady of intelligence—that there occurs every second afternoon a slight fever, the signs of which are thirst, dryness of the tongue, flushing and increased heat of the skin, and restlessness. Expectoration brings mucus and muco-pus, the breath continues offensive, and anorexia is pronounced. The patient is much depressed, all voluntary movement being feeble and the voice low and husky. Death is apparently imminent.

April 2*nd*.—The patient still spits large quantities of muco-pus, experiences a burning pain in the epigastrium, and is worried by constant hiccough occurring in prolonged, feeble, inspiratory squeals. The bowels are obstinately constipated, the respirations slow and long-drawn, the pulse feeble and slow, and the mind clear and active.

The symptoms described as pertaining to an apparently speedy death continued from March 31st till April 10th. Fever developed every afternoon, the nights were spent in restless changes, and at times palpitation of the heart lent much to the discomfort. Hiccough was almost constantly present during these days. The treatment given promoted comfort and sustained vitality. Baths

were employed every second day, warm water was injected into the stomach twice a day by the syphon, and half a cupful of strained oatmeal gruel was administered during each period of twenty-four hours. On April 11th the bowels were freely moved by an enema, hardened fæcal masses coming away.

From April 12th to May 28th I rely upon the statements of the patient's wife concerning the progress of the case. The patient had fever every day. The quantity of food was gradually increased, cornmeal and milk being used. The bowels were moved by enema every second day, and upon the intervening days stomachal irrigation was carried out with the rubber-tube. Nutritive enemata were given twice a day till April 27th, when rectal irritability rendered their further use impossible. The general condition of the patient permitted him to sit bolstered up in bed, then to walk a short distance when supported by the arm, then to sit in a chair for a short time. One significant symptom has been observable: four ounces of buttermilk impart to the stomach a sense of over-fulness.

The improvement occurring between May 28th and June 20th was remarkable. Much of the patient's colour returned, and many surface-depressions partially filled—evidences of increased nutritional power. Mental activity continued uninterrupted, and matters pertaining to complex business-relation were discussed with wisdom. The small quantity of buttermilk taken each day was reduced to a tablespoonful to avoid the sense of crowding that so steadily developed. Deep palpation of the epigastric region gave no pain. The psychical effect of a return of flesh and strength gave the patient great hope of recovery. But there occurred no change in the objective features of the case. The increase of adipose tissue rendered the gastric tumour less perceptible, although its constant characters—nodosity and induration—were detected with deepest touch. Slight puffiness of the dorsal surfaces of the feet, near the origin of the toes, redeveloped, and large quantities of bile were brought away by the tube from time to time.

June 27th.—The patient was again seen to-day. Emaciation and anæmia—the skin presenting a yellowish-white appearance

—have progressed rapidly. A small quantity of bile and pus has been spat up since the 20th inst. The pulse is small in volume, and the voice weak and husky. While the distress incident to systemic weakness is marked, ease of stomachal sensations has been procured by the morning use of irrigation—a procedure most difficult because of obstruction to the passage of the tube. The physical signs in the epigastric region are these: an ovoid tumour, nodular and hard, exists, its highest level being between the cartilages of the ninth ribs; its lowest left border just skirting a line a little to the left of, and parallel with, the navel, and its lowest right border passing to the right and somewhat below it. The percussion-note over the region occupied by the swollen mass is tympanitic, but low in pitch. I cannot understand why this should be, unless it indicate a stomach contracted in one situation and dilated in another. Yet the note does not possess the high pitch characteristic of gastric resonance, nor does it ascend: it is situated in an area limited by the navel below, and passing upward an inch and a half.

July 1*st*.—The general conditions pertaining to the patient are as before. The tumefied mass in the epigastric region has enlarged, and occupies fields advanced to the right and left of the navel. The abdomen below the epigastrium is retracted, and the note upon forcible percussion is dull. Palpation reveals no condition that should render a note dull over the entire belly.

July 6*th*.—The patient died at midnight.

Post-mortem Examination of the Stomach and Omentum Majus.—It must be explained at the outset that a post-mortem examination in the country is usually curtailed by the expressed desire of relatives that there shall be little mutilation of the body, a wish usually respected when witnesses sensitive to each stroke of the knife observe proceedings. This will account for the meagreness of my report.

An incision was made through the tissues from the xiphoid appendix to the umbilicus. The hand, introduced within the abdominal cavity, encountered a shreddy, granular, and closely adhering omentum. This was elevated, when numberless yellowish-red tubercles were seen in various degrees of irregularity.

The omental tissue was threaded and beady, small peritoneal investments passing in different directions, hemmed by connective tissue frames in some situations, and lying free in others. Further traction brought ulcerated omentum, honey-combed, and attached to the spleen and pancreas, all being bound in one resisting, nodular mass. The transverse colon, in its middle and left two-thirds, was drawn transversely above the adherent organs. Its coats were normal and it was free from distension. The relation of the colon to the "tumour" heretofore described accounts for the low-pitched tympanitic percussion-note detailed in the later stages of the patient's illness. As tuberculous infiltration of the omentum progressed, contracting tissue caused ascent of the colon. Only that part of the omentum majus passing from the stomach to the colon was examined. The spleen and pancreas were normal in size and consistence. The stomach was felt high up in the interval between the fifth and sixth ribs, firmly bound to the omentum along the lesser curvature. Its length is 6⅝ in., and depth 3 in. The serous coat is firm, thickened, and darkly congested, and lies closely adherent to the entire external surface of the stomach. A nodule the size of a filbert is situated in that portion of the lesser curvature half-way between the œsophageal and pyloric orifices; its outer surface is smooth and of a dark-blue colour—probably epithelial in character—and its internal structure is fibrous. The fundus is soft and easily folded upon itself; its outer surface is traversed by large veins which abruptly terminate at the middle third of the stomach. From the termination of the fundus to the gastro-duodenal junction great thickening and increased firmness exist. The stomachal capacity is four ounces. Upon loosening a ligature thrown about the œsophagus a small quantity of muco-bilius matter, dark-red in colour, escaped. The stomach-walls in section reveal normal thickness of the fundus, from the margin of which increasing thickness and resistance are encountered till near the pylorus, where the anterior wall is five-eighths of an inch in breadth. Microscopically, no distinction can be made between muscular and mucous elements, for all are blended in one dense mass of fibrous tissue. This tissue is not so dense,

neither is it as firm, as that encountered in scirrhous cancer, its components being thrown more loosely together. The mucous membrane of the fundus is involved in slight fibrotic changes, and this condition is traceable to the body of the stomach, where dark, irregular, rugous elevations, covered with slimy muco-bile, exist. At the middle of the interior of the stomach the mucous membrane rises slantingly in a broad oak-leaf-shaped prominence, 4 inches broad by $3\frac{1}{2}$ inches long, grayish in colour, surrounding the walls and passing through the pylorus. From the termination of the fundus to the beginning of this elevation the rugæ are blackish-red in colour, the mucous membrane is inseparably adherent, and beneath it the submucous tissue has developed into hardened fibrous material. Upon the posterior wall of the stomach, an inch and a half from the pyloric valve, is observed an ulcer $\frac{7}{8}$ in. in diameter, having rounded edges rising $\frac{1}{15}$ in., its base being dense fibrous tissue. The detection of this ulcer renders perceptible the origin of the pus spat up during the latter part of the patient's illness. The pyloric valve is marked by a slightly elevated, hard, puckered mucous membrane, dark-red in colour. The pyloric orifice nicely admits a match.

From the physical evidences existent, the process of fibroid degeneration originated in the mucous membrane, for here the greatest degree of induration was present. The liver tissue was dark, but not unusually firm, and presented the conditions of passive congestion. The right kidney was enucleated; its capsule was strongly adherent, and necessitated removal by tearing. On vertical section, three areas of hyperplastic connective-tissue were found in the medulla.

ON TWO CASES OF EXCISION OF THE ASTRAGALUS FOR INJURY.

By Francis J. Shepherd, M.D.
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The astragalus is not very frequently removed except in the course of the operation of excision of the ankle or for correcting the deformity in the severer forms of club-foot. The two cases narrated below have many points of interest. In both, injury necessitated the operation; in one case the traumatism caused dislocation with fracture, and in the other dislocation alone. Both cases resisted all efforts at reduction. In one case this was apparently due to the fact that the tendon of the *tibialis posticus* had in some way become tightly stretched over the outer surface of the astragalus and thus prevented its reduction. The case of fracture, which afterwards became compound, resulted from jumping off a train whilst in motion, and within the last few years I have seen several cases which were due to the same cause, though in all these cases the fracture was simple. The patients recovered with useful feet but stiff ankle-joints, and with some deformity. In the cases of excision the result was much better, and the patient could move about with more freedom and less limping, although there was more shortening. In the case of fracture, there was also dislocation of the anterior fragment. The character of the fracture was of interest. The astragalus was broken into three pieces, the central portion corresponding to the part covered by the lower articular surface of the tibia. The anterior portion was formed by the head and the posterior by the projecting portion of astragalus which is grooved for the tendon of the flexor longus hallucis muscle.

Case I—*Dislocation of the Astragalus, with fracture of the inner and outer malleoli of the ankle-joint.*—M. G., aged 25, a pedlar, was admitted into hospital July 10th, 1886, with the following history. On 27th May last fell out of a waggon and caught left foot in wheel; in this way twisted ankle. On being released, found foot out of place and could not walk. Twelve hours after accident, was seen by Dr. H. Stevenson of Wake-

field, Que., who, after getting foot in position, placed it in a box splint; there was great swelling. After sixteen days the foot was examined under chloroform and an attempt made to reduce the displacement, but without result. The foot was again put in box splint, in which it remained till a day or two before entrance into hospital, when it was put up in a glue bandage.

Present condition.—Patient, a small-sized, wiry-looking man, was placed under ether and examined; the foot was strongly everted, and there was a dislocation of the astragalus downwards and forwards; internal malleolus very prominent and skin red, and a small opening over it communicating with the bare bone; tendo-Achillis contracted; fibula fractured 3 inches from lower extremity, and united at an obtuse angle; a considerable slough had formed on heel. After attempting, unsuccessfully, to reduce the displacement, the tendo-Achillis was cut and another unsuccessful attempt at reduction made. An incision was now made from the internal malleolus forwards to the base of the first metatarsal bone, 2½ inches long. The joint was exposed and the following condition found. The tip of the internal malleolus was broken off and ununited, the astragalus was thrown forward and separated completely from the tibia and fibula, with the exception of the internal ligament, which was attached to the broken portion of the internal malleolus. Lying between the tibia and fibula, and tightly stretched over the outer side of the astragalus, was the tendon of the tibialis posticus muscle (the anticus was in its place). This had been one of the causes of the failure of efforts at reduction, as the tendon held the bone in place. The tendon was cut, but reduction was still unsuccessfully attempted; so the astragalus was freed from its remaining ligamentous attachments and removed, also the fractured portion of the internal malleolus and the end of the fibula. The foot now came into position, and was dressed with a pad of sublimated jute and a rectangular splint placed on outer side. There was considerable oozing for twenty-four hours.

A small pocket of pus formed at inner side some ten days after the operation; this was opened. The slough on the heel gave considerable trouble; and from that time patient went on

well, though for some time pus continued to burrow up the leg, which had to be freely incised. By the beginning of September the foot was doing well.

Early in October he commenced to move about on crutches, and could put his toes to the ground. He was discharged on Oct. 10th with all the wounds healed with the exception of an ulcer on the heel the size of a 25-cent piece.

I saw the patient in January 1887. He had a suitable boot made, and could walk about and attend to his business comfortably. The ulcer on the heel had completely closed. There was about two inches of shortening.*

CASE II—*Dislocation with Fracture of the Left Astragalus and Compound Comminuted Fracture of Right Tibia and Fibula.*—J. C., aged 22, brakeman, was admitted into the Montreal General Hospital August 8th, 1886, suffering from severe injuries to both legs. He gave the following account of the accident. Whilst "braking" on a freight train, which was going at the rate of between 30 and 40 miles an hour, patient was standing on the top of the last car; the train swept round a curve and threw him off his balance, so to save himself he jumped and landed on his feet. He was picked up and taken to a doctor, who applied temporary dressings to his injured legs and sent him into Montreal to hospital, where he came under my care.

On entrance his condition, taken from the case report by the house surgeon, Dr. Birkett, was as follows: "Upon the right leg, opposite the upper portion of lower third of tibia, a transverse, irregular wound is seen, 2½ inches long, communicating with fractured bone. On examining still further the tibia is found to be splintered into several pieces, whilst the fibula is fractured about its middle third. Pulsations felt both in dorsalis pedis and posterior tibial arteries. Considerable amount of oozing from the wound. On examining the left leg it is found to be much swollen, very painful and tender. The foot is strongly

* This patient was presented to the meeting of the Canadian Medical Association, in Montreal, September 1891, and at that time had a most useful foot, and could walk with very slight limp.

inverted and fixed. Half an inch below and in front of the external malleolus a sharp prominence of bone is felt, over which the skin is tightly stretched. This apparently is a fractured portion of the astragalus which is dislocated outwards. The circulation in foot is good."

The compound fracture of the tibia was treated in the usual way with iodoform and jute pad after thorough irrigation with 1–2000 of bichloride, and, after a few days, put up in plaster-of-Paris, a window being left opposite the wound. The loose pieces of bone had previously been removed, and the wound granulated rapidly with but little suppuration, and there was good union of the bones with about two inches shortening.

At the present time the condition of the left foot interests us more and bears directly on the subject now engaging our attention. The patient was placed under ether and reduction of the displaced fragments of the astragalus attempted, but without result, so, considering the general condition of the patient and the other injuries, no further attempt at reduction was made, the foot being put up in a splint and kept at rest. On the 4th of September, the general condition of the patient being favourable, the left foot was again examined. On removing the dressings it was found that the skin over the projecting portion had sloughed, and that the broken bone projected through an ulcer about the size of a 25-cent piece. It was at once decided to remove the astragalus; so the patient being placed under ether, an incision was made from the external malleolus downwards and forwards for some two inches, and through this incision the three portions into which the astragalus was broken were easily removed. The anterior and posterior portions were quite free, whilst the central fragment, which corresponded to the portion covered by the lower end of the tibia, was attached to the inner malleolus by the internal lateral ligament, and there was no fracture of either malleoli. The wound was stuffed with sticky iodoform gauze and covered with a jute pad, a back splint being applied.

The progress of the case was most satisfactory, the wound having completely healed by November 14th and motion of foot

good. Patient was going about the ward on crutches by 18th January, and was discharged from hospital on Feb. 5th, 1887, with good union of right leg and excellent motion of right foot. He walked well without a limp, the shortening (two inches) being the same in both legs. We could not have told by his gait that he had suffered from such a severe accident. I have heard of him several times since, and he is gate-keeper on one of the railway crossings. I am told that he walks without fatigue and without any limp. In this case removal of the bone was necessitated by the character of the fracture, for had the parts been left, the anterior and posterior fragments would surely have necrosed and led to greater trouble. The result of the case was in every way satisfactory.

A CASE OF PUERPERAL INFECTION FOLLOWED BY MULTIPLE ABSCESSES.

By John A. Hutchinson, M.D.

In the editorial column of the July issue of this journal the following occurs :

"Fochier of Lyons observed that in cases of severe puerperal infection, when multiple abscesses formed, the patients recovered more frequently than when such was not the case. This led him to endeavor to produce such abscesses artificially, hoping by those means to favorably influence the course of the disease. He experimented with various substances and finally employed spirits of turpentine. This he injects into the subcutaneous tissue, preferably about the upper part of the extremities. The irritation thus produced seems to offer a suitable nidus for the pathogenic microbes, and they concentrate their action at these points and so relieve the general system."

I therefore report the following case, which to my mind appears to corroborate the above conclusions.

On May 29th, 1892, I attended Mrs. H., aged 22, who was confined of her first child. Nothing unusual worthy of note occurred at the time of labor. Full antiseptic precautions were observed. The placenta came easily away. There was a small rupture of the perineum, which was sutured at the time. On

the fifth day after labor the patient had a chill, followed by a temperature of 104°, pulse rapid, and other symptoms indicative of puerperal fever. For the next week the temperature fluctuated from 100° to 105°, and on one occasion registered 105½° in the axilla. At this time a swelling, with fluctuation, developed in the left wrist. Dr. Wm. Gardner, who saw the case, advised free evacuation of the contained pus, and this was accordingly done. About the same time another abscess formed over the abdomen and was treated in the same way. From this time onwards the patient gradually recovered, and in a couple of weeks more was out of bed. The treatment generally adopted, such as quinine, stimulants, fresh air, and a thorough antiseptic washing out of the uterus, was followed, but there was no abatement of dangerous symptoms until the abscesses formed and were evacuated. In this case no means were taken to artificially produce the abscesses, but it seems to me to be a reasonable and proper scientific method to adopt in such cases.

A CASE OF ZOSTER-OPHTHALMICUS.*

By F. Buller, M. D.,
Professor of Ophthalmology and Otology, McGill University; Ophthalmic and Aural Surgeon to the Montreal General Hospital.

On March 8, 1892, there came to me a naturally robust man, aged 41. Had an attack of influenza two years ago, which left great impairment of hearing in right ear, and has never felt quite himself since. He is a grocer, and in the habit of taking stimulants and using tobacco rather freely. Two weeks previously the left eye became inflamed, with severe pain in and about the eye. The pain was most severe at night, and, as far as he can tell, the condition is about the same as it was two weeks ago. There is moderate ciliary injection, some lachrymation, and vision is greatly impaired by a superficial ulceration over the pupillary area. The appearance of this ulcer is quite peculiar. Over the lower half of the pupillary area there was a superficial ulceration, with no surrounding infiltration, and extending up from this three little ulcerating

* Read before the Medico-Chirurgical Society of Montreal.

grooves, each surmounted by a rounded ulcerating infiltration (dendritic ulcer). The diagnosis was herpetic keratitis, although there was no herpetic eruption anywhere else.

The patient had the peculiar heavy breath and coated tongue we so commonly meet with in painful affections of the eye. His appetite was poor and spirits much depressed. I ordered him hot water in the morning, a tonic of pepsine, nitro-muriatic acid, and small doses of quinine. Locally, atropine and warm fomentation. There was little change for some ten days, but the digestive functions having improved, I put him on increasing doses of arsenic. About the 20th of March I substituted pilocarpine for atropine and used hot water instillations on the ulcer twice daily. Had to abandon the arsenic after ten days, with very little improvement in the ocular condition, because the stomach became irritable and appetite failed. He was ordered bismuth before meals and pepsine and hydrochloric acid after. Under this treatment the eye greatly improved. On April 11th he came, saying he had had severe pains in the left arm for two or three nights, and woke up this morning with a rash on the arm. This is a typical herpetic rash, extending from half way up the arm all down the forearm and ending on the thenar eminence. It follows closely the course of the musculo-cutaneous nerve. The rash gradually faded, and after about ten days was represented by the red spots or stains which always follow zoster eruptions, some of them depressed scars. The eye steadily improved under the treatment last mentioned, and he returned home about the 22nd of April with the eye almost well. At the time of the rash on the arm, occurred also two small spots like catarrhal herpes near the outer extremity of each eyebrow. Apart from this, the usual law of asymmetry of herpes zoster was conspicuous, the left eye and left arm being the parts affected. It is unusual to find such a combination as this case presents in zoster ophthalmicus.

Hospital Reports.

MONTREAL GENERAL HOSPITAL.

Surgical Cases Under the Care of Dr. Shepherd.

(Reported by Dr. W. D. Smith, House Surgeon.)

I.—*Double Gonorrhœal Orchitis.*

J. S., aged 21, a carpenter, was admitted to the hospital April 27th, 1890, under Dr. Shepherd's care, suffering from an inflamed and painful testicle.

History.—He was a well-built, healthy-looking young Scotchman, of temperate habits. He had had scarlatina and measles, but apart from these he had never been sick, and enjoyed good health. His father, mother, six brothers and one sister were living and well. There was no history of tubercle in the family. Five months before admission he had gonorrhœa, which was treated with injections and internal medication, the discharge and pain ceasing after a couple of weeks' treatment. He continued quite well, apparently, until April 26th, when his right testicle became hot, painful and swollen. It continued getting worse, and on the second day a doctor gave him a lotion for it, and advised rest in bed. The following day he entered the hospital, with his testicle swollen to twice its normal size, quite firm, hot and tender. The epididymus, as well as the spermatic cord, was swollen and tender. He was put to bed, with the testicle elevated, cold lead lotion applied on lint, and given calomel, one grain, with five of Dover's powder, three times a day. On the third day after admission the pain was excessively severe, so the tunica albuginea was punctured with a narrow-bladed knife, and the patient experienced much relief. The calomel was discontinued on May 5th, the patient's gums being slightly affected, and the cold applications changed to hot lead and opium fomentations every four hours.

Under this treatment the testicle gradually decreased in size, becoming less painful, until May 15th, when it was slightly larger than normal, but quite hard still. During this time his temperature was irregular, ranging from 99° to 102°.

On May 16th he complained very much of pain above the pubes and in the right inguinal region. Leeches were applied, followed by hot lead and opium fomentations. His temperature, which was down nearly to normal for a week previous, varied from 99° to 100° until the 24th of May; the pain in the inguinal region remaining during this time and then disappear ing. The severity of the pain was variable; some days it was very severe, while at others it was nearly absent. The right testicle was of normal size and painless.

On May 27th the left testicle became hot, painful and swollen. An ice-bag was applied, testicle elevated, and calomel, two grains, with five of Dover's powder, given three times a day. The following day the testicle was very much more swollen and excessively painful. He was given one grain of opium three times a day in addition to the calomel and Dover's.

On June 5th all medicines were stopped. Testicles were of normal size and painless. With the exception of some tenderness over the lower zone of the abdomen, the patient felt quite well. On June 10th his right testicle became swollen again, but this disappeared in three days on the application of an ice-bag.

The pain and tenderness over the lower zone of the abdomen continued until the 14th day of July, when it disappeared entirely. There was slightly diminished resonance on percussion in both apices, but no other physical signs of disease.

Most of the time while in hospital his diet consisted largely of milk. He suffered very much from constipation, requiring purgatives most of the time and very frequently enemas.

The patient left the hospital on the 19th of July, free from pain, but weak and anæmic. There still remained some inflammatory thickening of the right epididymus and spermatic cord. He was seen a week later, and his general condition was very much improved; he had had no return of the symptoms.

II.—*Pyelo-Nephrosis consequent on old standing neglected Stricture; Death.*

D. H., aged 33, suffering from retention of urine, applied to

the outdoor department of the General Hospital for relief on June 28th, 1890. It was found impossible to pass a catheter, even after the administration of an anæsthetic. He was then aspirated above the pubes, and part of the urine, some thirty ounces, removed. He was afterwards admitted to the wards under Dr. Shepherd's care.

History.—The patient was a well-built, unmarried Scotchman, an upholsterer. He was intemperate and irregular in his habits. He had measles when young and gonorrhœa fourteen years ago. Apart from these his general health had always been very good. Shortly after having the gonorrhœa he began to have difficulty in micturating, the stream gradually diminishing in size. He had used very strong astringent injections, and thinks they had something to do with causing the stricture.

In 1878 he had suppression of urine, and had to be aspirated, as no instrument could be passed. At that time he remained at rest in bed for three weeks, and was pretty free from his complaint for a year. But, owing to his intemperate habits, he again experienced difficulty in micturating, and from 1882-84 he was unable to fully empty his bladder. It seemed to fill and flow over at times. Micturition was frequent, accompanied with scalding sensation along the course of the urethra and end of penis. In 1886 the stream passed was no larger than a knitting-needle, and frequently there were two or more streams. That same year external urethrotomy was performed in Glasgow, and for two years he was free from the complaint. After that the stream again became diminished in size, and he had to strain while micturating Micturition was very frequent, and the amount passed each time was small. He had no instruments passed for over two years after being operated upon. On admission there were no physical signs of disease in any other part of his body.

Dr. Shepherd succeeded in passing a small catgut bougie, and then sounds to a number 7. He was put to bed and given twenty-five grains of quinine. That evening he had a slight chill. On July 1st he was given twenty-five grains of quinine, and two hours afterwards sounds up to number 12 were

passed, and no chill followed. After this he felt quite well, and was able to pass his urine quite freely. He left the hospital on July 4th.

He was readmitted to the hospital on July 21st, complaining of frequency of micturition, which was accompanied with pain and the passage of blood. He was quite well for twelve days after leaving the hospital (July 16th), when micturition became frequent, having to pass urine every two hours, and every hour the following day. This was accompanied by pain along the course of the urethra and point of the penis. With the last urine passed for a couple of days before admission he noticed small clots of blood, the urine itself being of a dark-brown and muddy appearance. During these two days he had some pain about the right lumbar region. Shortly after admission he suffered very much from constant pain in the region of the right kidney. These pains were subject to exacerbations, the pain darting down the course of the ureter and into the right testicle. Owing to the severity of the pain it was impossible to palpate the right side of the abdomen. His urine was of a dark-brownish color, containing pus and blood-cells in abundance. He was given morphia, gr. $\frac{1}{4}$, hypodermically, three or four times during the twenty-four hours, for the pain, and hot fomentations were applied to his abdomen and over the kidneys. He was also given Ext. Ergot. fl. ʒi three times a day. The amount of blood gradually diminished in quantity, disappearing entirely about the 1st of August. The amount of pus gradually increased in quantity. The quantity of urine passed varied from 48 to 80 ounces in the twenty-four hours. His temperature on admission was 99½°, but was never very high; on July 28th it was 102°, after that it gradually subsided, and became subnormal on the 6th of August, and remained so until his death on August 12th. His appetite was poor throughout; the only nourishment he took was some milk. His pulse varied from 80 to 100, and his respirations were about 20 to the minute. He became very weak, and was fed by enemata of beef-tea and brandy.

The autopsy showed pyelo-nephrosis of the right kidney, hydro-nephrosis of the left, thickening and dilatation of both ureters and cystitis.

Remarks.—This case illustrates well the course of events which result from the neglect of stricture. As a rule the patient is of intemperate habits, and as long as he can make water at all refuses to be treated, only applying for relief when there is an absolute stoppage to the flow of urine. There is no disease so easily treated as stricture if taken in time and treated continuously. It is one of the most difficult things possible to make a patient suffering from stricture believe that he has a disease which needs constant treatment, and to impress upon him the necessity, even if he is passing a fair stream, of the occasional passage of an instrument. He returns usually when retention has taken place, and every time the difficulties of passing instruments increase, till finally, if he has not extravasation of urine, with possibly permanent fistulæ, his kidney becomes damaged, and he dies of surgical kidney.

III.—*Rupture of the Tendon of the Quadriceps Extensor Muscle treated by Plaster-of-Paris Bandage.*

M. W., a widow, aged 41, was brought into the hospital by the ambulance on the morning of June 11th. She had a fall the evening before, and thought she had fractured her patella.

History.—Five years ago she slipped and fell on the ice, fracturing her left patella, and was unable to walk with it for eighteen months. Her health has been good apart from this.

The evening before coming in she slipped and fell down a couple of steps while going out of the house. As she fell she heard a distinct snapping sound, and her leg immediately doubled up beneath her and remained flexed on the thigh. She managed to get back into the house, and found she was unable to extend her leg except to a slight degree.

Condition on Admission.—She was a healthy-looking and intelligent woman. There were no physical signs of disease in the heart, lungs or elsewhere. Her right knee was painful and swollen, with the leg flexed upon the thigh. She was able to extend it partially. The patella was intact and in its proper position. Immediately above it, at the attachment of the tendon of the quadriceps extensor, was a marked depression, where

the tendon had ruptured. The left patella, which had been fractured five years before, was united by fibrous tissue. The two fragments were about an inch and a-half apart.

The right leg was extended while it was bandaged with a flannel bandage. the bandage being applied in the form of a figure of eight about the knee-joint. It was then put up in plaster-of-Paris, with the heel well elevated. At the end of six weeks the plaster was removed, good union was found to have taken place, and a posterior leather splint, reaching from the upper third of the thigh to half way between the ankle and knee, was applied. She was then allowed up on crutches.

She left the hospital on the 30th of July, still wearing the splint, and going about without the aid of crutches. Since then she has reported herself perfectly well.

IV.—*Strangulated Inguinal Hernia; Radical Cure; Recovery after a somewhat prolonged attack of Mania coming on a month after Operation.*

J. T., aged 44, was brought into the hospital at noon on May 2nd, 1890, from the docks, where he was found suffering intense pain and vomiting caused by the descent of an old inguinal hernia.

History.—He was an Englishman, and had always worked about paper factories, very frequently having to lift heavy bundles of paper, etc. He was a man of intemperate habits. He had gonorrhœa when a young man, inflammation of the bowels six or seven years ago, and intermittent fever a year later. Twelve years ago, while lifting a heavy bundle of paper, he ruptured himself, and was obliged to wear a truss ever afterwards. The bowel had frequently descended, owing to a defective truss, but he had succeeded in reducing it himself, until last February, when on two occasions he had to have it reduced by a doctor, without an anæsthetic. For four days previous to his admission he had been drinking heavily, and was still under the influence of liquor when brought in. He thought it had occurred between eight and nine that morning, but had no recollection as to how it was brought about.

Condition on Admission.—A large inguinal hernia on the right side was found, filling the scrotum. It was firm, hard and resisting, with a dull note on percussion, excepting just over the external abdominal ring, where there was a faint approach to a tympanitic note. The perineum and greater portion of the scrotum was of a dark-purplish color, as though he had received a blow or had been kicked. Taxis was applied, but failed to reduce it, both before and after ether was given. It was therefore decided to operate.

Operation.—After the parts had been shaved and thoroughly washed, an incision two and a-half inches long was made in the direction of the hernia. The different coverings were carefully cut through, and on opening the hernial sac a large mass of omentum presented, with about six inches of intestine lying beneath it. The latter was very much congested and of a dark-purplish color. That portion lying within the internal ring was very much constricted. At first it was thought that portion of the bowel would have to be resected, but it was finally decided to return it to the abdominal cavity as it was, which was done, as well as a portion of the omentum. It was impossible to return a large portion of the omentum, about half a pound. It was therefore ligatured with catgut in several places and cut away, the remaining stump being returned through the internal ring. The sac, which was adherent to the scrotum and canal in several places, was dissected away and excised. Poupart's ligament and the conjoined tendon were brought together with a couple of strong silk sutures. The remains of the hernial sac were included in these sutures. The edges of the wound were brought together with silkworm gut sutures. A small rubber drainage tube was used, and the wound was painted with iodoform paint, then dressed with washed gauze and absorbent cotton.

The first four days succeeding the operation the patient was very restless and extremely thirsty, but was allowed nothing but small quantities of lukewarm water, until the third day, when he was given half a pint each of milk and lime-water. This quantity was gradually increased and some beef-tea added on the fifth day. He was still very restless, sleeping very little

and suffering much from a cough and expectoration of viscid mucus, for which he was given small doses of morphia. On May 7th he was given half an ounce of magnesium sulphate, followed by an enema of soap and water, which caused a free evacuation of the bowels, and patient felt easier and rested better afterwards. On May 13th his bowels acted voluntarily, without the aid of any medicine. The wound was dressed every three or four days, and the patient was doing nicely until the 10th of May, when he had an attack of diarrhœa, lasting a couple of days. At this time a small slough came away from the lower end of the wound. His temperature was irregular, ranging from 99° to 101°.

He remained quite well then until June 4th, when he had some scalding pain along the urethra, with frequent and difficult micturition. The urine was deficient in quantity, twenty-five to thirty ounces in the twenty-four hours, and contained a small quantity of albumen, but no casts. This condition lasted one week and then disappeared. The silk ligatures from the omentum came away through the small opening caused by the slough on the 16th of June. About this time he became very drowsy and stupid, with nocturnal delirium.

His condition gradually got worse, and he became delirious by day as well as at night. He would start suddenly and get out of bed, but when spoken to was quite rational, and would say he did not know why he got up and appeared to know nothing about what he had been doing. This condition lasted about a week, when he became violent at times, and had to be tied down. At the same time he was subject to illusions and delusions. He became very restless, noisy and sleepless. His appetite was poor, and he would not take anything in the way of nourishment unless the nurse fed him. He was very much emaciated and had a haggard appearance. On July 7th he refused all nourishment for three days, and was then fed by a rubber tube introduced into his pharnyx through the nose. On July 14th he became quite rational, appetite improved, and he continued to gain rapidly until his exit from the hospital on August 13th.

When he left the wound was all healed with the exception of a minute sinus at its lower end.

Remarks.—It is difficult to account for the occurrence of the mania in this case, coming on as it did so long after operation. It was not due to iodoform, for but little of this was used after the first dressing. The condition of the bowel was such that it was returned with hesitation, but, as events tured out, it apparently recovered completely.

V.—*Abscess in Right Lumbar Region; Operation with Resulting Fœcal Fistula; Primary Affection probably Appendicitis; Recovery.*

Geo. H. O., a machinist, aged 40, was admitted to the Hospital on June 16th, 1890, supposed to be suffering from typhlitis or some inflammation in the neighborhood of the appendix.

History.—The patient was a married man with a family, and had always enjoyed good health, never having been sick, with the exception of the measles. He was very regular in his habits, and temperate; as far as he knew his family history was good.

Three weeks before admission he felt tired and out of sorts, but continued working for a week, when he was seized one morning with a severe pain in the region of the umbilicus. He remained at his work that day until noon, but the pain became so severe that he had to go to bed and remain there. The pain was so severe that he lay with his thighs flexed on his abdomen and had to have morphine hypodermically, as well as hot fomentations. The pain soon spread to the right iliac fossa and lumbar region and remained there. His bowels, which were quite regular before the attack, became constipated, and he had no passage for four days, but with the aid of enemata acted regularly until his admission.

The second day of the attack he had a severe fit of vomiting, the vomited matter coming up without any effort, the last being dark and foul smelling. The patient thinks it contained fæces.

Condition on Admission.—Patient appeared to be well

nourished, but looked a very sick man, although he complained of no severe pain. His tongue was coated with a yellowish white fur, appetite was very poor. Heart and lungs presented no physical signs of disease, urine was normal. His abdomen was distended and prominent, the prominence being chiefly towards the right side, which was of a dusky red color, evidently caused by the local applications. The right lumbar region was found on palpation, to be firmer, more resisting and tender on pressure and dull on percussion. The muscular resistance over the whole abdomen was very well marked. Over the umbilical region the note was tympanitic as was also that over the left side. Dr. Shepherd on seeing him noticed fullness of the right side and thought he could get fluctuation in the right lumbar region, and advised immediate operation. The right inguinal region was not involved in the disease, nor was there any mass to be felt there.

Operation.—An aspirating needle was introduced into the right side and pus found. He was then etherized and an incision two inches long made in the right side, beginning just below the last rib. The abdominal muscles were cut through and an aspirating needle again introduced, followed by the escape of pus. A director was then pushed through the tissues followed by a pair of artery forceps, and the opening enlarged, letting out a considerable quantity of foul pus which had a fæcal odor. The opening was enlarged by cutting the anterior margin of the quadratus lumborum muscle, and several septa in abscess cavity were broken down. The cavity, which extended up beneath the liver and beyond the median line, was washed out with boiled water at 110° temperature. The limits or the origin of the abscess were not made out at the operation. A couple of large rubber drainage tubes were used and the wound dressed with iodoform, washed gauze, and a jute pad.

From the time of the operation until the 3rd or 4th of July, the discharge from the wound was profuse and contained fæces; some days the quantity of fæces was large. All this time it was dressed and irrigated with a solution of boracic acid twice a day. On the second day his bowels were moved freely by an

enema of soap and water. His diet consisted chiefly of milk, beef tea and broths. His temperature varied from 99° to 101° until the 5th of July, after that it was normal throughout. On July 11th, the discharge being small in amount and containing no fæces, he was allowed to sit up in a chair. The last tube was removed on August 1st, and he was allowed to walk about the wards. He left the Hospital on August 12th with the wound completely healed with the exception of a sinus through which a small quantity of watery pus escapes.

Patient seen a year later and was in perfect health; sinus had closed soon after leaving the hospital.

Remarks.—The origin of this abscess was doubtless an inflamed and perforated appendix, probably grangrenous with grangrene of the ascending colon, which led to a fæcal fistula. Although the case in its onset somewhat resembled appendicitis, yet the physical examination revealed no lesion or tenderness of the right iliac region, the tenderness and fullness being distinctly confined to the right lumbar region posterior to the colon. In this case probably the appendix was curled up behind the cæcum and ran up for some distance behind the ascending colon, as cases are on record of this structure reaching almost up to the liver.

Condensed Reports of Medical Cases under the Care of Dr. Finley.

Reported by James Henderson, M.D., House Physician.

Sunstroke treated by Cold Bath, followed by Temporary Mania.

A. McG., æt. 51, labourer, of intemperate habits, was brought to hospital by friends at 2 p.m., July 27, 1892, complaining of headache, weakness and fever. Temperature in axilla 106⅗°, and body burning hot. When seen in ward he was very restless, comatose, breathing rapid and stertorous, body rigid, with limbs extended. Was put in bath, temperature 78°, at

2.25 p.m.	Temperature	106½°	(axilla).	Pulse	160.
2.37 "	"	105⅘°	(rectum).	"	140.
2.47 "	"	103⅖°	"	"	120.
2.56 "	"	100⅘°	"	"	100.

Was removed after 29 minutes, during which time temperature of bath was reduced by ice to 62°F. While in bath breathing became slow and quiet, rigid extension passed off, and limbs became flexed, but unconsciousness remained. Some urine drawn off was found normal. At 4 p.m., temperature 100°, pulse 80, and respirations 24. Began to recover consciousness at 6 p.m., and 38 ounces of urine was drawn from bladder; became quiet before 8 p.m., and slept fairly well all night, the temperature not rising above 100½° again.

July 28.—Remained quiet and still most of the day, became restless in the afternoon; was noticed by nurse to be queer. At 7 p m. became more restless, insisting on getting out of bed. At midnight, given chloral and bromide āā grs. x, repeated at 2 a.m., but was restless and troublesome all night. Next morning he was found to be suffering from acute mania, and had to be removed to an isolated room. Here he remained in an active, busy delirium, with delusions, for 36 hours, not resting for a moment, although given three doses of chloral and bromide āā grs. xx, and at night sulfonal grs. xxx.

On the evening of July 30 he was induced to lie down, and soon went to sleep, and for the next 36 hours lay quietly sleeping, dozing or awake without attempting to rise. Has since been rational and quiet, and complains only of slight pain and lightness in the head.

Cases of sunstroke are comparatively rare in Montreal, but the weather for several days had been extremely hot and oppressive. The well-known action of the cold bath in reducing high temperatures was satisfactorily shown, and to it the man undoubtedly owes his life. Various forms of mental disturbance are known to follow sunstroke, and may even be permanent, but fortunately they proved only transient in this case.

Typhoid Fever, with Copious Eruption.

John W., aged 21, iron-roller, entered hospital July 22, '92. Was found to be in thirteenth day of an attack of typhoid fever. During first twelve days remained at home in bed part of the time, but up every day, and was twice at Montreal Dispensary.

Suffered from headache, weakness, diarrhœa and loss of appetite.

On entrance.—Had ruddy complexion, not extremely emaciated; lies comfortably in bed; tongue thickly coated; abdomen distended, but nowhere acutely tender; bowels somewhat constipated. Temperature 101°; pulse 80; respirations 24. Had a rose-red papular rash consisting of slightly raised, lenticular, uniform spots, averaging 2½ mm. in diameter, fading on pressure, and not appreciated by light palpation with the finger. This rash was abundant on abdomen, chest, back and buttocks; less abundant, but numerous, on forehead, arms and legs.

Several spots were marked, and were found to persist from three to five days, and a few fresh spots came out on areas of skin which were previously clear.

The disease ran a mild course, and the patient is now convalescent.

The case is of interest from the great number of spots present, and in their position on the face and limbs as well as the trunk. It also illustrates the fact that, unlike typhus, there is no relation between the copiousness of the eruption and the severity of the disease.

Hysteria in a Male; Spontaneous Hypnotism with Analgesia.

John S., aged 34, grocer, was brought in the ambulance to the hospital July 28, 1892, in an unconscious condition.

Examination.—Lay on his back in bed with arms and legs extended; eyes open, pupils somewhat dilated but equal, and reacted slowly to light; breathing quiet and easy; pulse 70; temperature 97°. No evidence of injury or paralysis of any part; no spasms or convulsions; legs were stiff and could not be bent at times. and he was quite anæsthetic all over body; urine drawn off was found to be normal in colour and to contain neither albumen nor sugar. Recovered consciousness (?) in about two hours; seemed quite rational, noticed surroundings, smiled, but could not move limbs nor speak, and remained deeply anæsthetic all over, no response being made when pins were driven into any part of the body. The corneal reflex was, how-

ever, preserved. Three hours after this patient recovered power of speech and of moving his limbs. Slept soundly during following night, and next morning was still anæsthetic to painful sensations in legs and arms; some parts of the body were sensitive. Tactile sensation good all over, while that of heat and cold was indifferently marked in legs.

History.—Uses liquor very moderately. Had first fit when 15 years old; lay in an unconscious and stiff condition for seven hours. Has had about seven since then, lasting usually a shorter time, but presenting the same features as the present. No neurotic history, and no history of epileptic attacks.

On admission, the patient's condition closely resembled one in the hypnotic state. The absence of paralysis, of albuminuria, and the dilated pupils at once led to an exclusion respectively of apoplexy, uræmia, and opium poisoning. The peculiar fixed and intelligent look, with speechlessness, in a patient lying quietly in bed, and without any evident disturbance of the various functions, was at once suggestive of hysteria, and this was confirmed by the sensory symptoms. Analgesia is the most frequent and marked sensory disturbance in hysteria, next comes the loss of the sense of heat and cold, and the tactile sense is usually preserved. It will be observed that in this patient the sensory symptoms presented these characteristics. It is now well recognized that hysteria is by no means an uncommon affection in the male, and it not unfrequently presents itself in the more marked forms.

Reviews and Notices of Books.

Annual of the Universal Medical Sciences. Edited by CHAS. E. SAJOUS and seventy Associate Editors. Five volumes. The F. A. Davis Co., Philadelphia, New York, Chicago and London. 1892.

This most useful Annual is as good a friend as ever, and as yet shows no sign of deterioration. It enables the busy man to keep abreast of medical progress in all its branches. It is well illustrated, and many of the editors write able monographs on the subjects over which they preside. No less than 2,166 journals and monographs are referred to. The Annual promises better things in the future, and does not intend to rest on its laurels. We do not see how any one who continues to be a student of medicine could do without it. We should like to see the references to the various journals placed in conjunction with the abstracts and not merely referred to by numbers, which have to be taken from a special list.

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Pelvic Inflammation in Women: a Pathological Study. By William Warren Potter, M.D., Buffalo, N.Y. (Reprinted from the American Gynecological Journal, December, 1891.)

Hepatic Abscess; report of a case, with remarks upon the Amœba Coli. By Wm. A. Edwards, M.D., and James S. Waterman, M.D. San Diego., Cal. (Reprint from Pacific Medical Journal, March, 1892.)

Hysteromyomectomy, with a report of four cases. By Hunter Robb, M.D., Associate in Gynecology to the Johns Hopkins Hospital. (From the Johns Hopkins Hospital Bulletin, No. 23, June, 1892.)

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, June 10th, 1892.

F. J. SHEPHERD, M.D., IN THE CHAIR.

Compound Fracture of the Skull.—DR. SHEPHERD exhibited a child who had received a severe compound fracture of the skull. On the 27th of April last, while driving with her parents, the horse shied and the three were thrown out of the carriage, and the child disappeared down an open man-hole of the sewer. She fell a distance of fifteen feet to the bottom, striking her head against a ladder in the descent. Dr. Elder saw her and sent her to the hospital, where Dr. Shepherd examined her within half an hour after the receipt of the injury. There was found a large wound extending from a point just in front of the ear down to the eyebrow, and a large piece of skin was punched out; there was a depressed comminuted fracture of the skull, and some of the brain matter was oozing out. Two pieces of bone, about the size of a twenty-five cent piece, were removed, and the wound thoroughly cleansed; the torn dura mater was sewed with a continuous catgut suture, and the skin wound brought together as well as possible. The child made a rapid recovery, and has never had a symptom of paralysis; her speech has been unaffected and her mental condition unimpaired; in no way is she now different to what she was before the accident occurred.

Miliary Tuberculosis.—DR. FINLEY exhibited the organs from a case in which there were vast numbers of tubercles. They were seen throughout the lungs, liver, kidneys and spleen, and a few along the arteries at the base of the brain. In addition there were in the lungs several caseous nodules, situated in the lower lobes, and were probably the foci of the general disease, as the miliary tubercles in the neighborhood were larger and older than in the other portions of the lung.

DR. WILKINS saw the patient thirty-six hours before death. He was a man of thirty, and had been brought into the hospital

in a delirious condition, with a history of having been ailing for two weeks with headache and diarrhœa. On examination there was tenderness and marked gurgling in the abdomen. Temperature, 101°; pulse, 120; respirations, 24. Although the temperature was lower than that usually seen in typhoid fever, Dr. Wilkins thought that the case might be one of those with low temperature spoken of by Dr. Atkinson at the recent meeting of the Association of American Physicians at Washington. He therefore thought that the cold bath could do no harm, provided friction was used, and ordered a bath for ten minutes, which the patient strongly resisted. Next day a rigidity of the neck, which had been previously noted, had become more marked. Temperature, 101°; pulse, 124; respirations, 20. No bath given. Patient died on the third day.

Dr. Finley had seen the patient once, and found him profoundly prostrated and sweating profusely. The case was very anomalous, and he was unable to make a diagnosis. The respirations were never above normal, which is unusual when the lungs are so much involved.

Angina Pectoris, Acute Aortitis and Stenosis of Coronary Arteries.—Dr. Finley exhibited the specimens for Dr. Ross. The subject was a large-framed, muscular man, aged 33, with slight œdema about the ankles. The heart was enlarged and flabby, weighing 415 grammes. The wall of the left ventricle was three-eighths of an inch thick, pale and somewhat soft, its cavity dilated, and measured 4½ inches in length, and the mitral orifice 4 inches. At the root of the aorta, extending above the valves for about 1 inch, the intima was much thickened and gelatinous-looking, and was sharply divided from the rest of the ascending aorta, which was healthy, by an irregular line. The orifice of the right coronary artery was greatly contracted, and the left was also considerably smaller than usual, whilst the vessels themselves were normal beyond the contracted orifice. The descending aorta presented a few gelatinous raised plaques. With the exception of two old infarcts in the spleen, the other organs were healthy. Microscopically the intima of the aorta was much thickened by an infiltration of small round cells, and

there were also irregular patches of small round cells in the media. The striæ of the heart muscle were indistinct, and the fibres granular but not fatty. The liver showed slight pigmentation about the central vein. The small vessels of this organ and of the kidney were normal.

Dr. Ross said that the patient had been sent into the hospital to try and find relief for the very severe pain that he was suffering, the character of the pain being that of angina. The attacks had commenced some weeks previously, and were becoming very frequent. The pain always commenced in the bend of the left elbow, ran up the arm and thence to the heart, where it became very intense. The first attempt to relieve the patient was with nitrite of amyl, and was at first perfectly satisfactory, and he took great quantities of the drug for the relief of the very frequent paroxysms. Potassium iodide was then given in increasing doses without any result whatever. On examination the heart appeared perfectly sound and free from valvular disease. The diagnosis had been angina pectoris, and it was naturally supposed that this was due to disease of the coronary arteries, and the autopsy confirmed this opinion. There was found a stenosis of the inlets only, the walls of the rest of the arteries being perfectly free from atheromatous changes. Dr. Ross went on to say that he had noticed that some cases of severe angina are decidedly relieved by potassium iodide, while in others it has no effect whatever. When the anginoid symptoms occur in a person with valvular disease of the heart the relief produced by the iodide is very marked, while persons free from a valvular lesion seem not susceptible to its action. Lately he had been asked to see an elderly lady who was suffering from severe angina, accompanied by a distinct aortic murmur. She had been taking arsenic for some time and tablets of nitro-glycerine. He had suggested that this was a case for iodide, and she has been completely relieved by its administration.

Dr. McConnell asked if in the last case mentioned by Dr. Ross there had been any general arterial sclerosis.

Dr. Ross replied that she had hard radials, but there was no

albuminuria and no definite appearance of a general arterial sclerosis.

Aneurism of the Descending Thoracic Aorta.—DR. HAMILTON exhibited an aneurism of the descending thoracic aorta which had burst into the œsophagus immediately behind the pericardium, about the level of the sixth vertebra. The stomach was found full of clotted blood. The vertebræ were not eroded and no signs of a left-sided pleurisy found. The man had for several weeks been complaining of dyspeptic symptoms, loss of appetite and difficulty of swallowing. No history of localized pain could be obtained. On the day of his death he had taken a slight dinner, and returned to his office, where he was found shortly after on the floor dead and covered with blood.

Mitral Stenosis.—DR. FINLEY exhibited a typical specimen of mitral stenosis, showing the funnel-shaped opening, with much hypertrophy and dilatation of left auricle.

DR. ROSS said that the patient had been admitted to the hospital suffering from old spinal degenerative changes. When first seen in March last there were signs of a cardiac lesion, a loud presystolic murmur, accompanied by a thrill, and it was diagnosed as a distinct mitral stenosis unaccompanied by any other lesion. Dr. Ross did not see the patient again until the end of April, when there was no murmur whatever to be heard, though repeatedly examined, and he (Dr. Ross) was under the impression that the former diagnosis had been incorrect, but the specimen shows that it was right. The case emphasizes the fact that the cardiac murmur disappeared altogether under the increasing weakening contractile force of the heart, and was not audible for many weeks before the man's death, and during that time no lesion could be recognized, except, perhaps, on careful percussion a slight enlargement might have been made out.

DR. MCCONNELL thought that in such a marked condition of mitral stenosis one would expect to find the pulse at the wrist almost imperceptible, and that this fact would help the diagnosis.

DR. ROSS did not think that any stress could be laid on the weakness of the pulse alone.

Chlorosis in a Male.—DR. JOHNSTON gave some notes on the

examination of the blood of a man who was intensely anæmic, with a sub-icteroid hue. The number of red and white corpuscles were found to be normal, but the hæmaglobin was reduced one-third. The case was one of pure chlorosis, which is quite a rare condition in a man. The man had been ailing for a year and a half, and had suffered severely from hæmorrhoids. After using ten Bland's pills daily for a week, the hæmoglobin rose from 30 to 55 per cent., and at the end of the second week it was over 70 per cent., when he was lost sight of. He was a day laborer, and his occupation offered no clue as to the cause of the chlorosis.

A Case of Imposture.—Dr. Wilkins said that three weeks ago a man had been brought into the General Hospital suffering from tetanic spasms of the head and neck. A history of having cut his foot with broken glass, two or three weeks before, was given. On examination there was found a good deal of stiffness of the neck and a spasmodic action of the muscles of the face and slightly of those of the arm. A scar was found on the foot which he stated had been cut. Though the appearance was peculiar, the condition was thought to be tetanus, and carbolic acid $\mathfrak{m}\frac{1}{2}$ every two hours was ordered, and under this treatment the spasms seemed to improve. Next day a consultation of surgeons was held, when it was suggested that if the spasms were not relieved a part of the foot should be amputated. This produced a marked improvement. Becoming dissatisfied with the hospital, he was removed to a private hospital, where the spasms were of a different character. He was later on removed to his boarding-house, where he behaved in a peculiar manner. Dr. Finley saw him, and asked for Dr. Shepherd in consultation, who thought that it was a case of imposition. Next day the man disappeared and has not been heard of since.

Selections.

Craniectomy for Double Optic Neuritis with Microcephaly. (By Shalders Miller, F.R.C.S.) —The case here reported was one presenting such severe symptoms, and the treatment was so promptly followed by relief, that early publication may perhaps be justified without waiting for the further improvement which may reasonably be looked for. The patient was a boy, eight months old, microcephalic and exhibiting double optic neuritis; the resulting blindness being the cause of his parents seeking treatment for him at the Western Ophthalmic Hospital. The spine and limbs were almost constantly extended and rigid, the thumbs were strongly adducted and the fingers firmly flexed over them; the legs also were tightly adducted, the right being crossed in front of the left. There was consequently much trouble in washing the child properly. The genital organs were somewhat peculiar, the penis being very small and retracted, so that only empty foreskin presented, but there was no phimosis; the right testicle was absent from the scrotum and canal, while the left was just outside the external abdominal ring. The urine was never projected in a stream, but dribbled away. There was very marked nystagmus and convergent squint, and the eyeballs were deeply drawn into the orbits, giving the child an aged and pained expression. Ophthalmoscopically there appeared severe optic neuritis and atrophy in both eyes, with some patches of choroidal pigment in the right. Though the pupils were dilated with atropine, the nystagmus prevented the possibility of making anything like an exact drawing of the fundus oculi. Vision was manifestly reduced to a mere perception of a strong light; the eyes never resting on any object. Swallowing was generally easy, but the child's attention had to be excited by moving the bottle-nipple about between the lips before sucking movements were initiated. When the legs happened not to be firmly extended, the knee-jerk was readily produced. The facial bones were well developed, the lower middle incisors were well through the gums, and all the cranial sutures were completely ossified, no trace of

a fontanelle being detectable. The mother stated that there was no soft space on the head at birth. The child had been born with the aid of forceps, which had not in any way marked the head or face. The coronal edge of the frontal bone was thick and raised above the parietals, and the left parietal bone was distinctly flatter than the right. All bony eminences on the cranium were but slightly marked, and the forehead was receding. The circumference around the upper margins of the orbits and the occipital protuberance was 15⅝ inches, which is about the average measurement for a child of four months, that is, half the age of this child. The frontal eminences were only one inch from centre to centre; the forehead therefore was extremely narrow. The child was very strongly built, very restless, cried a good deal, was constipated habitually, but seldom sick. It displayed very little intellectual activity.

On March 21st, 1892, the head was shaved, and an antiseptic dressing put on. On the evening of this day the child was very nearly asphyxiated owing to ataxic deglutition. On the next day a linear craniectomy was performed. The chloroform was skilfully administered by my friend, Dr. Hulbert of Windsor. This was no easy task, as the child's pulse was ordinarily irregular in force, and shortly after the operation was begun pulsation at the wrist quite ceased, but was restored by applying a large hot antiseptic sponge to the head, as recommended by Mr. Victor Horsley, and inflating the chest with oxygen from one of Brin's cylinders. This proceeding had to be repeated once or twice, but as more and more bone was removed the pulse continuously improved till, at the end of the operation, it was strong and perfectly regular in force and rhythm. The length of the bony excision was a little over three inches, beginning in front at the inner side of the left frontal eminence, and extending backwards parallel to the sagittal suture. The opening was one-half inch wide, and from each end of its outer edge a short branch cut was made with gouge forceps, so as to leave the outer boundary of the bone wound in the form of a projecting flap unsupported at its two ends, thus allowing of some subsequent eversion by the brain pressure. The periosteum

was removed from the whole area of the intended bone wound before using the trephine with which the osseous section was commenced, all the rest of the bone being cut away with forceps. The hæmorrhage was very slight, being mainly venous oozing from the dura mater, as that was separated from the superjacent bone. No vessels were tied. The scalp was replaced, and fixed with seven or eight silver sutures. The child made an uninterrupted recovery, union of the scalp taking place throughout by first intention. The temperature, taken always in the rectum, never exceeded 100° F., reaching that on only three occasions, and was promptly reduced by incising the upper front gums; the corresponding teeth at once appeared, and grew freely. The child took each night a powder containing hydarg, c. cretâ gr. j, sodii bicarb. gr. ij, and sodii bromid. gr. ij. The spastic condition of the limbs diminished from the time of the operation, and it was observable that on the day after there was no spasm at all in the right arm and hand, while a little remained for three or four days in the left. In a week both testicles were well down in the scrotum, the penis had emerged from its concealment, and the urine was projected in a vigorous stream. Some of the sutures were removed on the eighth day, and the others, one or two daily, till the eleventh day, when the child left the hospital completely healed. During this time the sight appreciably improved, the child noticing a hand in a good light; all nystagmus and squint disappeared, the eyeballs came forward in the orbits, and the little patient assumed the natural expression of a baby. Sucking and swallowing were prompt and spontaneous. Five weeks after the operation, the circumference of the head, at the same level as before, had increased to 16 inches exactly, that is to say, a gain of three-eighths of an inch, but the distance between the centres of the frontal eminences had increased by nearly half an inch. A few days later still the child was able to stand, holding on by its hands to the upright bars of a nursery fender. The vision had further improved, as evidenced by the child's following with its eyes any distinct objects moving about, and the intelligence had so increased that the little patient laughed like any other baby

when played with and talked to after the manner of mothers and nurses. The child was seen again on May 18th, 1892. The vision then was apparently still more acute, the intellectual activity greater, and the general health excellent.—*Brit. Med. Journal*, July 23, 1892.

Venomous Snakes of the United States.—In the *Trans. Southern Surg. and Gynæcolog. Association*, 1891, Dr. Barringer, of the University of Virginia, presents an interesting article upon this subject. Among the many privileges which this great country enjoys is that it is comparatively free from poisonous snakes. Nine-tenths of our snakes are destitute of fangs and poison-bags. Their bite is dangerous only in proportion to the toxic effects of the whiskey given to the patient by alarmed friends. Among the poisonous snakes, the rattlesnake, the copperhead and the water-moccasin have established a reputation for deadliness of venom which is unquestioned. The first of these three is sluggish, the second extremely agile, the third malicious. The venomous qualities of the *elaps fulvius* are, on the contrary, not generally recognized. This beautiful little snake, commonly known as the harlequin snake, bead snake, or coral snake, is the sole American representative of the *cobra* family, and is found from Virginia to Texas. It is from 16 to 20 inches long, of a blue-black color, with brick-red and yellow bands, and its tail barred with yellow. It is gentle and will often bear handling without biting. Weir Mitchell has stated that it is not poisonous, but it has fangs, and Dr. Barringer reports a case where a man died in eighteen hours from its bite. Our poisonous snakes, apart from the *elaps*, have pits between the eye and nostril, and one or more of the ventral plates behind the anus undivided. As secondary marks we may note the elliptical vertical pupil, the triangular head, narrow neck and blunt tail. Healthy snake venom contains no bacteria. Dr. Barringer finds death in less than 10 per cent. of rattlesnake, and 1 per cent. of copperhead bites. He has not learned of any deaths from the moccasin snake-bite. The best protector against snakes is the hog. The bear, being the foe of

the hog, is the patron of the snake. In case of snake bite apply a tourniquet, cut open the wounds till they bleed, and suck or cup them. Inject a 10 per cent. solution of potassium permanganate or a strong solution of liquor potassæ into the wound. Give whiskey freely, and keep the nervous centres working with hypodermics of $\frac{1}{30}$ to $\frac{1}{20}$ grain of strychnia. Loosen tourniquet periodically to prevent gangrene. Such loosenings admit the venom little by little into the system, and this must be met again by alcohol and strychnia. After 5 per cent. of snake-bites chronic septicæmia with nerve disorders occurs, because of the presence of septic bacteria in the saliva of the snake left from its food. These germs flourish in the mouth mucus of the snake, which is so abundant in the copperhead as to give it the popular name of the "cotton-mouth" snake.

The moral of it all is: Spend your vacations in districts, such as the Adirondacks, which are too far north for snakes, or else wear protective leggings.—*Maryland Med. Journal.*

Apples as Medicine.—Chemically, the apple is composed of vegetable fibre, albumen, sugar, gum, chlorophyl, malic acid, gallic acid, lime, and much water. Furthermore, the German analysts say that the apple contains a larger percentage of phosphorus than any other fruit or vegetable. The phosphorus is admirably adapted for renewing the essential nervous matter, lecithin, of the brain and spinal cord. It is, perhaps, for the same reason, rudely understood, that old Scandinavian traditions represent the apple as the food of the gods, who, when they felt themselves to be growing feeble and infirm, resorted to this fruit for renewing their powers of mind and body. Also, the acids of the apple are of signal use for men of sedentery habits, whose livers are sluggish in action, those acids serving to eliminate from the body noxious matters, which, if retained, would make the brain heavy and dull, or bring about jaundice or skin eruptions and other allied troubles. Some such an experience must have led to our custom of taking apple sauce with roast pork, rich goose, and like dishes. The malic acid of ripe apples, either raw or cooked, will neutralize any excess of

chalky matter engendered by eating too much meat. It is also the fact that such fresh fruits as the apple, the pear, and the plum, when taken ripe and without sugar, diminish acidity in the stomach rather than provoke it. Their vegetable sauces and juices are converted into alkaline carbonates, which tend to counteract acidity.—*Medical Age.*

Microbes Found in Patients Having Small-pox.—This was the subject of a very interesting communication to the Société Médicale des Hôpitaux by M. Le Dentu, surgeon of the first class in the naval service. The doctor is attached to the Ecole du Service de Santé, in the navy at Bordeaux, and has long been engaged in experiments in microbiology. His conclusions are given as follows in the *Gazette Hebdomadaire:*

1. In small-pox death seems due most frequently to the general development of the streptococus in the organization.

2. The streptococus is found in the viscera, sometimes in an uncombined state and sometimes associated with rare colonies of other microbes—most frequently with the staphylococus.

3. When the system is under the influence of small-pox the streptococus acquires great virulence.

4. Small-pox, however light it may be, will always be a very grave affection if it be developed in a system already occupied by the streptococus.

5. As treatment, the system must be preserved from invasion of the streptococcus.

In twelve autopsies on cases that died of small-pox, streptococcus were found eleven times in the culture. In the living subject M. Le Dentu was able to discover, by means of puncture of the liver, the presence of streptococcus in two cases of confluent small-pox. He has observed that the colonies of streptococcus become more numerous as death approaches. In conclusion, M. Le Dentu suggests a limit to the conclusions that might be drawn from the facts given, and thinks that it may be found in cases in which the streptococcus infects only a particular locality in the system.—*The Sanitarian.*

Poisoning by Bromoform.—A case of bromoform poisoning is reported by W. B. Platt as occurring in a patient treated at the Garrett Dispensary for Children in Baltimore. The case was a three-months old baby, strong and fat. He was suffering from pertussis, and was given a mixture containing 2 minims of Merck's bromoform and 10 minims of whiskey in each drachm. This was made up with equal parts of syrup and water. Fifteen days later the poisoning occurred. All went well until the last dose in the bottle was taken, which was not quite one teaspoonful. Half an hour after taking it the child was noticed to be weak in his limbs, and rapidly became limp and unconscious. Treatment was instituted one hour after the dose was taken. The stomach and intestines were washed out. Ammonia was given and cold cloths applied to head without restoring consciousness, although respirations and pulse improved. A sheet was then dipped into hot water and wrapped about the thorax and upper abdomen, with almost instant effect, and within three-quarters of an hour from the beginning of the treatment the child had quite recovered. It is impossible to say whether it was the cumulative effect of the drug, or whether the mother had given too large a dose; or, again, it may have been that the bromoform had separated from the mixture, and in this way too much had been given.—*Times and Register.*

New Method of Searching for Tubercle Bacilli BY M. SOLLES.—The tissue for examination is cut into small pieces; these are placed for twelve hours in absolute alcohol, then in ether, and finally in collodion. Sections are cut, which are stained by the following:

1st. Distilled water,	100.	2nd. Distilled water,	100.
Prussian blue,	1.	Gelatine,	1.
Oxalic acid,	0.20.		

Mix these two solutions. The colouring solution penetrates the tissues and stains all the anatomical elements except the bacilli. The author has by this method demonstrated the existence of the spores of the tubercle bacilli; further, he has observed that the microbe is *leucophagous*—that is, that it destroys the leucocytes.—*Repertoire de Pharm.*

Illumination of the Stomach.—Renvers (*Münch. med. Woch.*, April 12, 1892) recently demonstrated to the Berlin Medical Society an apparatus which consists of a small Edison lamp fixed to the end of a bougie and covered by a small glass case filled with water. The electric current is obtained from a battery of twenty cells. If the stomach is full of blood, illumination is impossible; but if it is quite full of water when the lamp is passed into the stomach, an illuminated area is seen which corresponds exactly to the limits of the organ. The apparatus can only be used in the erect posture, when the greater curvature is usually seen a little below the level of the umbilicus. Abnormal dilatation of the stomach can be readily detected, and a case of carcinoma of the organ has been diagnosed by the use of this apparatus, the diagnosis being confirmed by post-mortem examination. The tumour appeared as a dark spot in the light field.

Mechanical Treatment of Chronic Constipation.—Dr. Feilchenfeld of Berlin believes that by means of a forcible and equal compression of the abdomen considerable improvement may be obtained in cases of constipation, particularly when the intestine is meteorised. The compression first reduces the volume of intestines and then excites the intestinal muscles to vigorous contraction. Possibly this compression stimulates the nervous plexus in the muscular coats. On this account Feilchenfeld has employed the following method in constipation accompanied by meteorism and relaxation of the walls of the intestines. A cushion is made containing three or four pounds of shot spread evenly between layers of wadding; it is so adapted to the shape of the abdomen that it exercises an equal and vigorous pressure. These cushions are placed on the abdomen morning or evening, or even during the whole night, and held in place by tapes. Usually an hour or an hour and a half of this application suffices to bring about a motion of the bowels. During the past year fifteen patients have been treated in this way, all of whom are cured. It is enough to employ it for half an hour before rising in order to obtain an excellent

result. In some cases of constipation with hæmorrhoids, without tympanites, regular action of the bowels was obtained. No doubt the pressure on the abdomen has a beneficial action on the turgid veins of the intestine.—*Jour. de Méd. et de Chir.*

Gum-Lancing.—Dr. H. C. Wood, in a letter to the *University Medical Magazine*, expresses his hearty concurrence with a recent editorial in the *Dental Cosmos*, in which the editor, Dr. E. C. Kirk, criticises the condemnation of gum-lancing by Forchheimer in his book on "Diseases of the Mouth in Children," as a therapeutic measure for the relief of various conditions. Clinically, Dr. Wood is absolutely sure that he has seen convulsions, sick stomach, great restlessness, fever, and various other functional disturbances in young children, immediately cured by the use of the gum-lancing, after failure of various other well-directed measures for relief. Theoretically, he is in accord with Dr. Kirk in believing that Forchheimer absolutely misses the point of the matter by his failure to understand that the good achieved is not due to the local blood-letting or to the relief of the inflammation of the gum, but to the removal of the backward pressure upon an extraordinarily sensitive, and, at such times, congested nerve-pulp. As was long ago pointed out by Dr. J. W. White, at the period of eruption the roots of the teeth are yet incomplete. "Instead of the conical termination and minute foramen which characterize a perfected tooth, the aperture is nearly as large as the root itself, and thus when the sensitive pulp, composed of connective tissue, blood-vessels and nerves, is in a condition of irritation because of the morbid activity of the process of dentition—augmented vascular and nervous action—there may be produced a hyperæmia sufficient, possibly, to cause the protrusion of a part of the mass from the incomplete aperture of the root, giving abundant cause for extreme constitutional disturbance." Dr. Wood has seen a seemingly incurable epilepsy in an adult permanently cured by the removal of a persistent milk or first dentition tooth. Amaurosis and various other conditions in the adult are well-known to be the result of irritation of the trigeminal nerve by

faulty teeth. How much more evil is to be expected from tooth irritation in the child! Whatever the theory in the matter may be, he is positive that gum-lancing is a most important therapeutic measure. It is essential, however, that it should be thorough, and with the object of dividing the dense tissues that bind down the teeth.—*Boston Med. and Surg. Journal.*

Laparotomy Under Cocaine. (By Emory Lamphear, M.D., Ph.D., Kansas City, Mo.)—When admitted the patient was *in extremis*—cadaverous, weight less than 80 pounds, and at the gate of death from starvation. Upon the evening of admission the abdomen was carefully scrubbed and shaved and a pad of moist bichloride gauze applied. On the following day a gastrostomy under local anæsthesia from cocaine was performed. One-half drachm of a 4 per cent. solution was injected in eight places into the subcutanuous areolar tissue along the proposed line of incision. As soon as the analgesic effect was established the usual operation was made, and without any pain or even sense of discomfort on the part of the patient. The only disagreeable symptom was a slight nausea when the left lobe of the liver was turned up to allow the stomach to be drawn up into the wound. The operation lasted twenty-two minutes.

How much longer the operation might have been prolonged without discomfort to the patient is a question of interest. But as a large number of the abdominal operations can be made within twenty minutes, it is not so important as might at first be supposed. Besides the fact that the primary depressant effect of a general anæsthetic was avoided by the use of cocaine, there were two other points of much importance in this case, viz.: the absence of vomiting that nearly always follows chloroform or ether, and especially the *absence of shock.* There was a total absence of anything like shock, and if this be found to be a general rule an immense gain may be made in sewing up stab or even gunshot wounds of the intestine (as well as in other numerous abdominal operations), by the use of local instead of general anæsthesia.—*New England Med. Monthly*, June, 1892.

Treatment of Chancroids with Phimosis —Cordier recommends the following treatment of chancroids concealed beneath a phimosis, congenital or acquired :—(1) Wash out beneath the prepuce with a solution of boracic acid ; (2) inject a saturated solution of chloride of zinc (50 parts of zinc chloride in 40 of distilled water) beneath the prepuce, and allow it to remain at least one minute, but not more than two ; (3) wash with boracic solution and circumcise. By this method union by first intention is obtained.—*Lyon Médicale.*

Fehling's Solution with Glycerine.—The use of glycerine to preserve Fehling's solution is not a novelty, and has been already recommended by various authorities. M. Rossel has again brought up the subject in a communication made to the Société Clinique de Berne ; he replaces all the tartrate of potash and soda by glycerine according to the following formula :

Sulphate of copper (pure),	34 gr. 56.
Glycerine (pure),	150
Caustic potash,	130
Distilled water, q.s., to make	1000 c.c.

We thus obtain a liquid, 1 c.c. of which corresponds to 5 milligrammes of glucose, and which is stable in proportion as the glycerin and the potash are pure.—*Bull. de la Soc. de Pharm de Bordeaux.*

Salt as a Preservative.—On the 3rd of July, 1890, near Hermannstadt, in Transylvania, after an earthquake, the shaft of a disused salt mine suddenly became filled with brine to within 20 metres of its mouth. On the surface several corpses were floating supported by the planks and beams which had formerly supported the walls of the mine. Of these, six were brought to the surface and were found to be intact. One was the body of a man who had committed suicide by jumping into the mine three years before. The others were the bodies of soldiers who had fallen in a battle on Feb. 4th, 1849, during the fight for the independence of Hungary. As

the ground was deeply frozen at that time 300 bodies were thrown into this mine which had not been used since 1824. The bodies were in excellent preservation, and, except the loss of the hair and eyeballs resembled anatomical subjects preserved in alcohol. The skin was intact, the mucous membranes colored, and the viscera unchanged, the aorta still being perfectly elastic, and the course of the wounds could be studied without difficulty. The tissues and the viscera were filled with little saline concretions. H. Koenig, who performed the autopsies proposes to use this water instead of the more costly alcohol for preserving anatomical specimens. The water contains, besides the chloride of sodium, the chlorides of magnesium, potassium and calcium, the iodide of sodium and the sulphates of soda and calcium.— *Wien Med. Blaetter.*

Treatment of Insomnia.—Collins (*Journal of Nervous and Mental Diseases*, July, 1892) says, in summing up a paper on this subject: Without entering into detail in respect to each case treated, it seems that the following conclusions can be drawn:

1. Chloralamid is a safe and one of the most reliable hypnotics.

2. It is not ordinarily followed by distressing after-symptoms, particularly headache.

3. It is especially valuable as a hypnotic where pain is a prominent factor, but not violent.

4. In cases of insomnia, where there is excessive activity of the brain, it is also useful.

5. On account of its stimulating activity on the respiratory function, it is the hypnotic *par excellence* in nervous exhaustion, associated with an asthenic condition of respiration and symptom complex indirectly dependent on this, brought about by defective oxidation and the formation of unstable chemical compounds in the system.

6. On account of its very slight action in depressing the circulation, it can be given in diseases associated with a weak heart, with greater safety than most of the other hypnotics, not excepting chloral itself.

7. It is conveniently administered in the shape of an elixir, and this overcomes the need of dissolving it.

8. Its dose is from one to three scruples, administered one hour before sleep is desired, and this should not be repeated within two hours, for occasionally the action of the drug is delayed.

In contrast with sulfonal, there is much to be said in favour of each. Sulfonal is also an excellent hypnotic, and has, as is noted by Francisco, when taken in two-scruple doses, an action in strengthening the systole and increasing the tone of the vessels in general. But this action on the vessels is not continuous, and after a variable length of time it is followed by a dilatation and lessening of the elasticity of the vessels, first on the cerebral and then on the peripheral. And here, probably, is the explanation of the tendency for sulfonal sleep to go over into the next day, when it loses some of the characters of natural and tranquil sleep which are attendants of the sleep produced by smaller doses. Sulfonal, when given in moderate doses, however, does not cause any injurious effects on the circulation, respiration, appetite, digestion, temperature, or on the general health.

Evidences of Heredity. (By Wm. C. Krauss, M.D.)—Neurologists in the practice of their specialty are perhaps able to produce stronger evidences to the support of the theory of heredity than any other class of professional men. That the nervous system is intimately associated with this process of transmission, no one will deny, and some observers go so far as to classify such affections as tuberculosis, cancer, etc., among the neuroses, because of their hereditary transmissibility. I have lately had occasion to observe a family in which heredity played such an important rôle that I think the case worthy of being recorded.

Having been called to see a child suffering with cerebro-spinal meningitis, I learnt that the mother, who possessed a very small head, had lost three children previously with cramps, and, furthermore, that all had enormously developed heads. The child

in question was also macrocephalic, and this led me to make a thorough investigation The father, a tailor, aged 36 years, although in good health, has been annoyed much of late with lung difficulty, which I surmise is of tubercular origin. The apex of the right lung shows signs of beginning consolidation, with moist crepitant râles, and the respiration is broncho-vesicular in character. Of his parents and grandparents he knows but little, having immigrated to this country when quite young. The mother's parents are still living and healthy. Out of a family of eleven children, six died with "cramps," one of croup, and four are living. The mother's history is as follows:

Age, 27; height, 4 feet 11 inches; weight, 110 lbs.; complexion, fair: hair, brown; disposition, petulant and fractious; intelligence is much below mediocre. Early history; She had considerable trouble at dentition, otherwise has always been in the best of health; menstruated when 13 years old, and married at 19. Her present appearance is at once conspicuous, owing to the small size and slope of her head. The face, rather broad, offers nothing unusual. The two sides are symmetrical, the eyes, ears, lips, cheeks and nose are well developed, and perform their various functions without any disturbance. The forehead is elongated, somewhat triangular in shape. The head is moderately large just above the neck, then tapers cephalad, becoming pyramidal—a malformation sometimes called oxycephalus or sugar-loaf head. This anomaly, generally met with in idiots, epileptics, etc., is due to a premature union of the parietal with the temporal and occipital bones. The measurements taken a few days ago are as follows: Circumference, 48 centimetres; occipito-frontal, diameter, 14; bitemporal, 13; biparietal, 13; occipito-mental, 20½; sub-occipito bregmatic, 16. With the exception of the head, the rest of her person does not deviate from the normal. Married in 1884, she has given birth to five children.

The first child, a boy, was born March 25, 1884, after a comparatively easy labour. The child's head was exceedingly small as compared with the rest of the body, and as a member of the family remarked, it was "no larger than an apple." Otherwise the child was well developed, nursed well, slept well, until the

latter part of June, when its head began to increase rapidly in size. In July, 1885, it was taken with convulsions, and died twenty-four hours later.

The second child, a boy, was born March 25, 1886, after another easy labour. Its head was also very small, otherwise it was well developed, and was in good health until the first appearances of dentition, when the head began to grow rapidly in size, terminating in hydrocephalus. In February, 1887, it was seized with convulsions, vomiting, head thrown backward, and, three days before death, became unconscious. It died February 13, 1887. The physician's diagnosis was "hydrocephalus with cerebro-spinal meningitis."

The third baby, a boy, was born September 3, 1887. The labour lasted but two hours, and the child appeared well developed except its head, which was likewise very small. About dentition time the head became macrocephalic, and in April, 1891, it died, exhibiting all the symptoms of a basilar meningitis. The circumference of the head after death was 64 centimetres. Although 3½ years old, he could neither walk, talk, nor sit alone, and showed unmistakable signs of arrested cerebral development.

The fourth child, a girl, had a history similar to its predecessors; microcephalus at birth, becoming hydrocephalic at dentition, and dying in convulsions on May 2, 1891.

The fifth child, a girl, was born August 5. 1890. Its head was even smaller than any of the preceding children, and remained so. In February she began to emaciate, her body and extremities being reduced to a mere skeleton. In June, 1891, she died with cramps.

None of these children appear to have had enlargement of the bones, joints or glands, and the lungs seemed to have been in good condition. To review the case briefly, then, we have here a family of five children, microcephalic at birth, dying in convulsions before dentition, or else becoming hydrocephalic at this time and dying of meningitis, probably tubercular in character, later on. The father of this family has a history of tuberculosis; the mother, a microcephalus, offers symptoms of cerebral degeneracy. To my mind a soil more fertile for the propagation

of neuropathic and physchopathic tendencies cannot exist. Being convinced of this fact, I informed the parents whose home had been made desolate by the mysterious but all-wise treatment of nature, and counselled them to live henceforth, if not a virtuous, then a sterile life.—*Journal of Nervous and Mental Disease*, July, 1892.

Why Must we Sleep?—The theories of sleep are manifold. In this age of insomnia, when the consumption of hypnotics is phenomenal, a consideration of the cause of sleep is a step toward the intelligent treatment of insomnia. Dr. M. Emanuel Rosenbaum of Berlin has recently published a work on "A New Theory of Sleep," and an interesting *resumé* of his opinions appears in the *British Medical Journal*, June 25, 1892. Dr. Rosenbaum, with Germanic thoroughness, quotes the views of philosophers from Alkmaon, who lived 2,500 years ago, down to Dr. Preyer, who seems to be the latest authority on the nature of sleep. Most of these opinions are guesses pretty wide of the mark, and it is only within a few years that we have arrived at any real additions to our knowledge on the physiology of sleep. A state of intermittent repose is probably common to all organized beings. The acacia, which folds its primate leaves at sunset, may be said to sleep. This condition is, of course, more distinct in animals, which possess a nervous system. Sleep seems to involve, to a certain extent, the spinal cord as well as the brain. Goltz succeeded in removing almost the whole cerebrum of a dog, and keeping it alive for fifty-one days. He found that in this animal alternations of rest and unrest succeeded one another; before the time of feeding the dog was restless, when fed he became quiet and fell asleep. He could be waked by touching any part of his body. Dr. Rosenbaum tells us that pigeons deprived of their hemispheres appear to fall asleep periodically. It was long a subject of discussion whether, during sleep, there was more or less blood in the brain than in the waking condition; but it is now generally admitted that during sleep a portion of the blood deserts the brain, being probably replaced by the arachnoid fluid. In cases in which a portion of

the skull has been removed, or in the trephined animal, the brain is observed to sink during sleep.

Congestion of the brain carried to a certain degree causes stupor; but what distinguishes stupor from ordinary sleep is the lightness with which the individual passes from the somnolent into the waking state. We cannot get rid of the effect of cerebral congestion, or rouse ourselves when under the effects of a narcotic; but we drop asleep in a moment, and a touch or a word in the ear can at once recall us from the realm of Morpheus to that of waking reality. What is the nature of this mysterious change which daily affects us, and which we have ceased to wonder at, because the riddle has so often baffled us? To dispel our ignorance Dr. Rosenbaum presents us with a new theory. He observes that all organized tissues in active function have alternations of energy and rest. The heart, which keeps beating while life lasts, has its pauses, during which it repairs its waste. Vital action does not run on till its materials are exhausted; but there comes a period when it stops to renew its power, and then it begins again. Dr. Rosenbaum observes that the brain remains in function during the waking state, and repairs its losses during sleep. Sleep is owing to the used-up material in the nerve tissues being replaced by watery fluid. The greater the watery contents in the nerve tissues, the less is the irritability, until there is absolute loss of function. This increase of watery contents follows the chemical changes of nerve substance which take place during and after nervous activity. This water which replaces the nerve substance is expired through the lungs in the form of aqueous vapour principally during sleep. The absorption of the water into the venous current happens according to the laws of diffusion, and is dependent upon the volume and thickness of the blood, its relation to the solids, and the rapidity of the circulation. The giving off of these vapours through the lungs is dependent upon the laws of diffusion of gases, the pressure of the air, and the amount of water it already contains. Dreaming and sleep walking are dependent upon the unequal quantity of watery fluid in different parts of the brain.

Dr. Rosenbaum seeks confirmation of his views by the observation that people are more disposed to sleep when the air is saturated with moisture, and that children who sleep a great deal have more water in the tissues of the brain. He cites the observations of Schiff and Harless that the excitability of nerves is diminished by an increased absorption of water into their substance, and seeks to show that in the diseases in which there is a marked tendency to lethargy or coma the nervous substance becomes softer and more watery in consistence. Here it may be observed that loss of function might be expected to follow the replacement of the normal material by any other element, whether fluid or solid, and that, in fact, we have a tendency to sleep or increasing stupor with hardening of the brain when the fluid which replaces shrinkage is deposited under the membranes on the outside of the nervous substance.

Dr. Rosenbaum's theory does not help us to explain hypnotic sleep or hibernation, and, in spite of his laboured arguments about the nature of the changes and decompositions in the organism, his theory lacks proof. Dr. Rosenbaum even ventures to answer the celebrated question of Molière: Why does opium cause sleep? It is because it acts upon the respiratory centres, and thus diminishes the number and depth of the respirations. This causes œdema of the brain and increase of its watery contents. We may ask, Why does opium act upon the respiratory centres? and unless Dr. Rosenbaum can answer this he will have to fall back upon the famous "explanation": "Quia est in eo virtus dormitiva cujus est natura sensus assoupire."

After all, science can scarcely explain the why of anything. It merely points out the order in which natural processes occur. Preyer holds that sleep is caused by the products of decomposition, lactic acid and creatin, taking up the oxygen in the blood. The functions of the grey matter of the cortex cannot be exercised without a plenteous supply of arterial blood any more than the zinc and copper of a voltaic pile will evolve electricity without the sulphuric acid. Thus the blood conveys a stimulus or imparts a capacity to the nerve tissues during waking, while during sleep it has a separate and distinct function—that of

repairing waste. Apparently these two processes cannot go on in the brain at once, or at least only to a degree too limited to prevent a speedy exhaustion of the vital powers if sleep be withheld. There is a striking disparity in the time required for sleep by different persons. Some men, like the Emperor Akbar, St. Francis Xavier, and General Eliot, the defender of Gibraltar, could do with as little as four hours' sleep, while other men need ten hours or even half the twenty-four. But all must sleep. A cruel form of capital punishment in China consists in artificially keeping the culprit awake till he dies from exhaustion.—*Medical Age.*

Tetanus Due to Puncture of a Hypodermic Needle.—Lieutenant H. B., aged 24, single, consulted me on October 12th, 1891. He complained of slight pains in the limbs, head and back, and a feeling of general *malaise.* He had contracted syphilis five months before, and was still under treatment for that affection. Temperature was normal and pulse 80; there was slight stiffness of the muscles of the neck. The next morning there was increased pain and stiffness about the neck, and also the lower jaw and abdomen, difficulty in protruding the tongue, and slight "risus sardonicus." The temperature was 98.6°, pulse 104. He denied the existence of a wound or sore anywhere. He was ordered full doses of chloral hydrate and morphine. Towards evening all the symptoms were more developed. The temperature was 98.4°, and the pulse 104. On October 14th the tetanic convulsions were very frequent and there was marked opisthotonos. The temperature was 98.1°, and the pulse 98. On October 15th the temperature was 99.3°, and the pulse 112. I received a letter from a friend of the patient stating that he (the patient) was in the habit of injecting morphine hypodermically. I found a small suppurating sore near the right shoulder; the patient admitted that this was due to the puncture of the hypodermic needle. On October 16th the spasms were less frequent; the temperature was 98°, and the pulse 120 and feeble. On the following day there was great difficulty in swallowing. Spasms

were very frequent, the temperature was 98.1°, and the pulse 100. On October 18th, at 4 A.M., a severe laryngeal spasm came on, and, as death was imminent, I at once performed tracheotomy; this gave instant relief. Later in the day, however, convulsions again became severe, and at 5P.M. the patient died apperently from cardiac and diaphragmatic spasm.

In the absence of any history of a wound I was at first puzzled as to what was the cause of the tetanus, but the patient admitted afterwards that he was in the habit of taking morphine hypodermically; he was ashamed to do so until questioned. The wound near the shoulder was inflamed and suppurating, and about the size of a threepenny piece. I do not know of any previous case published of tetanus due to the puncture of a hypodermic needle; for this reason I think it is worth recording; it should impress upon us the necessity of the most scrupulous cleanliness in the performance of even such a simple operation as this. Another peculiarity about the case was the remarkably low temperature, subnormal during the greater part of the illness.—*Cecil A. P. Osburne in British Medical Journal.*

Oatmeal Pyrosis.—The author of the *Asclepiad*, Dr. Benjamin W. Richardson, says in a recent number of that publication:—

"An obstinate case of pyrosis came under my care some years ago, and resisted all forms of medical treatment. The dietary of this patient, an orderly and temperate man, seemed to call for little supervision; in fact, I never remember to have had under my care any one who was simpler or more methodical in the way of feeding and drinking. I recommended him to leave off tea, and he obeyed, but with no beneficial result. Coffee was withdrawn, with no better result. The patient was an abstainer from alcohol and did not smoke, so reforms were not called for in those directions. For a time he left me and consulted another physician, I believe more than one, but after a few months he returned, complaining of the continuance of the symptoms that so oppressed him. He really suffered acutely. Each morning, between breakfast-time and luncheon-time, the

water-brash came on. The quantity of fluid ejected from his stomach was considerable, and the ejection was preceded by a sense of sinking at the heart and faintness which sometimes alarmed him. By the free discharge of the fluid from the stomach he was invariably relieved, and rarely had any return of symptoms until the following day.

"The story of the repetition of the attack, always at the same time or about the same hour, was so peculiar and so often repeated, I could not fail at last to attribute it to something taken at breakfast; and finally I began to suspect that a dish of oatmeal porridge might be the enemy. He had taken this for breakfast for many years, and had never thought it injurious, and when I named my suspicion he was incredulous. However, he took the advice to leave off oatmeal 'on trial,' and from the day of leaving it off had no return of his symptoms. Six months later he ventured the oatmeal diet again, and in a week was as bad as ever. Once more he left it off, and once more was completely cured. This was observation on a patient; but, for experiment's sake, I tried the effect of oatmeal diet on myself, with the result of setting up in a few weeks as decided an attack of pyrosis as could be observed or felt. In my own case I found that barley-water, repeated for a time, produced the same result. After making these observations I continued to inquire, in all instances of pyrosis I have since met with, whether oatmeal formed a part of the dietary of those affected; and I have found so many corroborative experiences, I am led to think there is no more frequent cause of pyrosis than oatmeal or a similar fermentative food."

The Local Examination of Unmarried Women.—Commenting favourably on the excellent article of Dr. Coe (*Med. and Surg. Reporter*), the editor of *Gaillard's Medical Journal* says: "In the discussion of a recent able paper of Dr. A. Jacobus on amenorrhœa before the Northwestern Medical and Surgical Society, the consensus of opinion seemed to be that local treatment was unavailing in most cases, and several able observers inveighed against the too common practice

of vaginal examination of young girls. The writer's personal observation may serve to enforce this view. He has occasion to treat a large number of young lady teachers. Recently two of these have consulted him who have been treated by 'lady physicians.' It appears from their statement that many of their friends have been subjected like themselves to tri-weekly applications of tampons, iodine, pessaries, etc. In both cases there was no organic disease requiring local treatment. One had become a utero-maniac, whose chief symptom was vomiting and loss of appetite. Placing her under strict surveillance in the hospital and giving her daily cold ablutions, with tonics and absolute abstention from local treatment, restored the stomach. She gained flesh and went to work. But her utero-mania had been so firmly established that she applied at a dispensary, where the young gynæcologists treat her anteflexure secundem artem (?). The other case was found to be suffering from constipative anæmia and neurasthenia. Being a woman of great will power she has abandoned all thought of local treatment, and is now gaining health and strength under the rain-bath, and daily ablutions, aloes and mast pills, and good diet. It is our duty to save these young girls the mortification and annoyance, and absolute injury of a vaginal examination unless found absolutely necessary, after failure of other treatment. To our colleague of the gentler sex this duty is quite as imperative, and their attention to it is the more necessary, since they may regard the moral effect less pronounced, and many of them deem themselves specially adapted to this class of practice among young women."—*Medical Record.*

New Method of Examining Specimens of Blood.—A method of making permanent preparations of blood has recently been described by Dr. R. Muir in the *Journal of Anatomy*, which promises to be of great use in clinical investigation. The specimens thus prepared can be preserved indefinitely, and compared with others obtained from the same patient at subsequent periods. The method is quite simple. The films are prepared on cover-glasses in the usual way, and, before they

have time to dry, are placed in a saturated aqueous solution of corrosive sublimate (to which a little common salt may be added) for half an hour. The corrosive sublimate is then washed away with a three-quarter per cent solution of common salt, and the film is further hardened by a few minutes immersion in methylated spirit, and then the absolute alcohol. The specimen can then be stained by the ordinary reagents, very good results being given by double staining with eosine and hæmatoxyline, the red corpuscles being stained by the eosine, while the nuclei of the leucocytes are prominently revealed by the hæmatoxyline. —*Lancet.*

A New Method of Extracting Foreign Bodies FROM THE EXTERNAL AUDITORY CANAL.—Humbert, in a case in which a child had pushed a porcelain button into its ear, and in which all efforts to extract it by means of injections and forceps had failed, made use of the following method. He obtained some inspissated Venice turpentine and melted it; he then dipped the end of a match into the melted turpentine and placed it against the button in the ear. The turpentine adhered strongly to the foreign body, which was then easily extracted. —*Rev. Méd de la Suisse Romande.*

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CHOLERA.

"Will we have cholera in Canada this year?" is the question asked on all sides. The present epidemic, which is now raging in Russia and to a lesser extent in France, had its origin at Askabad in Persia. From this point it has spread along the lines of travel east and west. It has advanced into Russia from the Caspian Sea by two routes,—from Astrakhan, at the mouth of the Volga, it has been carried up the great river by the steamboat traffic; and from Baku, along the line of the Trancaucasian Railway. The disease has passed the natural barrier of the Caucasus just as the month before (June) it passed the Caspian Sea—along the trade route. It is feared that the infection may spread into Southern Russia and the Black Sea ports. In view of this, Bulgaria has established quarantine stations at Varna and Bourgas, and Turkey, at the Black Sea mouth of the Bosphorus. A correspondent of the *Standard* who visited the last-named station lately has given an account of the arrangements made, which is far from reassuring. The International Sanitary Board recently decreed that floating hospitals were to be organised for the treatment of persons attacked by cholera, and requested the Turkish Admiralty to furnish two vessels, but this the Admiralty has not done, and so far no provision has been made for the treatment of cholera cases should they arise. Astrakhan, at the mouth of the Volga, is in a lamentable condition. The town is under martial law because of riots which have broken out on account of rumours of patients being buried alive. Very elaborate precautions have

been taken, at least on paper, to prevent the further spread of the epidemic along the railroads, which have been the principal channels by which it was transported from Persia.

In the suburbs of Paris there has been an outbreak of a severe and fatal diarrhœal disease which at first was called *cholerine*, but which has proved to be true Asiatic cholera. The water supply is very defective, much of it being obtained from the Seine, and as three-fourths of the drainage from Paris is discharged into the river, such water must greatly facilitate the spread of the disease. We are also informed that, in part, Paris still clings to the old system of privy pits instead of a proper system of drainage.

The following order has been issued in Great Britain to prevent the importation of rags from infected ports: "Whereas cases of an infectious disease alleged to be cholera now exist in certain parts of France, and it is expedient that regulations should be made with reference to ships having on board bales of rags from that country, now therefore we, the Local Government Board, do by this our order and in exercise of the power conferred on us by section 130 of the Public Health Act, 1889, by section 113 of the Public Health (London) Act, 1891, and every other power enabling us in this behalf, make the following regulations and declare that they shall be enforced and executed by the authority or authorities specified: 1. From and after July 12th, 1892, and until we shall by order otherwise direct, no rags from France shall be delivered overside, except for the purpose of export, nor landed in any part or place in England or Wales. 2. If any rags shall be delivered overside or landed in contravention of this order, they shall, unless forthwith exported, be destroyed by the person having control over the same, with such precautions as may be directed by the medical officer of health or the sanitary authority within whose jurisdiction or district the same may be found. 3. All masters of ships, consignees, and other persons having control over any rags prohibited under this order from being delivered over-side, except for the purpose of export, or landed, are required to obey these regulations. 4. All officers of customs are empowered to pre-

vent the delivery overside or landing of rags in contravention of this order. 5. It shall be the duty of the sanitary authority to take proceedings against masters of ships, consignees or other persons having control over any rags, who shall wilfully neglect or refuse to obey or carry out, or shall obstruct the execution of any of these regulations."

This order is also applied to rags imported from all ports of the Black Sea and the Sea of Azov, and also from all ports of Turkey in Asia.

In the face of these and other precautions observed in Great Britain, what steps have been taken in Canada? Practically, none. We are threatened with cholera from the East and small-pox from the West. The Minister of Agriculture reports against improvements at the Grosse Isle quarantine station on the ground that they cost money. Our local Health Committee spend their time and energies in squabbling over the appointment of a sanitary inspector instead of giving full power to the city medical officer to enforce the law and carry out reforms which are urgently needed.

In answer to the question with which we started, we must admit that our principal reliance is in the lateness of the season, as before an epidemic could obtain a foothold it would be checked by cold weather and frost. However, this should not lull us to sleep in fancied security, because the comma bacillus is not killed by cold, but only reduced inert for the time being, to awake into fresh vitality with the return of warm weather. Sanitary authorities everywhere should remove all causes tending to pollute air, food or water.

THE NEW MEDICAL BILL.

We are glad to say that the recent amended Medical Bill was defeated in the Legislative Council. It was framed on mediæval lines, and not suited to the requirements of a modern scientific medical education. One of its chief features was the multiplying excessively of the already too numerous lectures. This may be in keeping with the spirit of the French-Canadian

medical education, but is not that of any other people who desire their sons to be in the fore front of modern medical science. What is wanted is fewer didactic lectures and more demonstrations and laboratory work, and this is the tendency of medical education everywhere else. Only in this Province of Quebec, which is keeping up its reputation for being at the tail-end of the procession in many matters, is it thought advisable to increase the number of lectures in order to improve medical education. Both abroad and elsewhere on this continent all advance is being made by lessening the number of lectures and increasing the practical work. In mediæval times, when the text-books were scarce or non-existent, all teaching was by lectures, from which elaborate notes were taken by the student; but these days are past, and yet the majority of the College of Physicians do not seem to have found it out.

Another prominent feature of the bill was the compulsory examination clause, whereby all individuals, whether graduates of reputable universities or not, would be obliged to pass a professional examination before being allowed to practice. With this feature of the bill we have not so much fault to find, but still it was taking away certain rights from the universities which had always existed, and was not advanced for the purpose of improving the status of the profession, but for the sake of reducing the number of licentiates. It was a protective measure, in which those that were in wanted to keep the others out. The racial and language difficulty again comes in here. Unless there was an English and French board the scheme would not work satisfactorily, at any rate for the English minority, which would again have to go to the wall where eighteen out of twenty of the examiners would be French, and educated in quite a different school of thought and science. The principle is correct if it was applied to Canada as a whole, so that a man by going up for examination could obtain a license to practise throughout the Dominion, but when applied piecemeal to the various provinces it is a failure, and becomes in the end a fight between the general profession and the medical schools.

THE PRELIMINARY EXAMINATION OF THE COLLEGE OF PHYSICIANS AND SURGEONS.

Grave scandals have crept into this examination. We are informed on the best authority that examination papers have been freely bought and sold at the doors of the examination hall, and that for the modest sum of twenty-five dollars a candidate could not only get the papers but the answers to them. Now, this state of affairs should not be tolerated, for with a little care in the printing, as in university examinations, the papers could never be obtained before examination.

In addition to the above scandal we are told that many candidates are in the habit of bringing books into the examinations and consulting them quite freely when in difficulty. Again, there are many personations, some individuals making it a practice of passing these examinations, for a consideration, in the name of weak candidates. In the last examination the number of personators exceeded the number of legitimate candidates, and on the examiner saying he knew there were individuals there personating others, ordered them to leave the room on pain of legal prosecution, the majority got up and went out. So much was this examination in the hands of personators, that at the triennial meeting the examination was declared null and void and another ordered to take place. Such scandals are not pleasant subjects to expose, but if we want an improvement they should be publicly denounced, and reforms should be undertaken without delay if we do not wish to become the laughing-stock of our neighbors.

THE COLLEGE OF PHYSICIANS AND SURGEONS OF THE PROVINCE OF QUEBEC AND THE ENGLISH REPRESENTATION.

Our readers will notice that at the triennial meeting of the above College for the election of Governors, etc., held last month, the English-speaking contingent on the Board is gradually becoming smaller, and were it not for the representation from the two English universities, which is regulated by law, it

would be veritably reduced to a corporal's guard. We are sure that it will be a surprise to the English-speaking members of the profession to hear that the district of Montreal has only one English-speaking representative, and that the city of Montreal has not a single one. The only active medical society in the province, the Medico-Chirurgical Society of Montreal, has not a single representative in the College of Physicians. This society, which comprises amongst its members the most scientific, advanced and best men in the profession in this province, is totally unrepresented. Of course, the English-speaking minority is quite helpless in the hands of the French, and trusts entirely to their sense of fairness, justice and generosity for representation; but the minority has trusted to a broken reed. There is always much talk of how generously the English minority is treated by the French-Canadians, but this is chiefly in political and after dinner speeches. "Let brotherly love continue" is always the text, but this must sooner or later end if the brotherly love is always on one side, or consists of words, not deeds. When we come to hard facts it must be admitted that the English-speaking members of the profession are not getting fair-play. In the Canadian Medical Association, where the English-speaking are largely in the majority, the French have always been fairly treated in the way of representation, although they contribute little to the work of the association. The minority will not always be so complacent, but sooner or later will demand justice in such a way that it cannot be denied. Time will show how long the policy of "might is right" will prevail amongst a profession which is supposed to be composed of educated, scientific men, above national and other prejudices.

THE KEELEY FRAUD.

At last we have in our neighborhood two institutes on the Keeley model for curing inebriates by the use of the so-called bichloride of gold method. Time and again the Keeley remedies have been analyzed and no trace of gold discovered; doubtless it all found its way into Keeley's pocket. The rem-

edies consist of the old-time favorites, belladonna and strychnia. Keeley having sold out his secret to many individuals in the States, after making a fortune at Dwight, Ill., has gone to seek fame and to try and sell his remedy in Great Britain, the price for exclusive use being only £150,000. And yet he claims to be a philanthropist and to be working solely for the good of humanity. The Church and clergy endorse him, as they did Perkins' Tractors, and speak of his so-called cure as "the glory of the nineteenth century." Keeley at first claimed no relapses, now he says that he cures 95 per cent; but the directors of insane asylums state that they get many of the so-called Keeley cures in their institutions, others die, and a great number relapse. It is the same with all forms of quackery. At first everybody is cured by the remedy, then there are a few failures, and finally it is found that nobody is cured. And so the various frauds

> "In turn appear to make the vulgar stare,
> Till the swoll'n bubble bursts—and all is air."

The reasons Keeley gives for keeping his remedy secret are amusing. "We could not hand it over to the doctors, because they would not handle it properly. I look upon my cure as belonging to the women and children of the country. If I gave out the formula the quacks would destroy it in a very short time," etc. Now, the regular profession can have nothing to do with this remedy until its formula is disclosed by Dr. Keeley, and then it can be scientifically tested in the proper way by competent men. As it is, we advise all honorable physicians to have nothing to do with any such system of quackery by which the public are deluded and robbed. The very man who wrote a brilliant article in a prominent review on the subject of the greatness of Keeley and his cure, saying he was one of the cured and would never relapse, died a few weeks after in a drunken debauch. Such is the testimony by which this fraud is supported; but to the end of time human credulity will exist, and therefore quackery will always flourish.

COD LIVER OIL.

The Parliament of Newfoundland has at last had its attention directed to the importance of improving the methods of obtaining cod liver oil. The following extract, from the report of the proceedings of the Newfoundland Parliament in the Halifax *Morning Chronicle*, shows what steps are being taken, and that there is no reason why Newfoundland oil should not be just as valuable as the Norwegian product:—

"Acting on the instructions given by Mr. Nielsen, superintendent of our fisheries, some of our people are introducing the Norwegian method of manufacturing cod liver oil used for medicinal purposes. It is well known that Norwegian cod liver oil brings everywhere the highest price in the markets, being preferred to every other. This is entirely owing to the superior skill and care exercised in its manufacture. The first and most important point with them is to select fat and healthy livers, which are of a whitish hue, diseased livers being greenish and lean ones red; and to reject all that are not up to a high standard. Great cleanliness is observed throughout the whole process. The livers are first put into tanks and carefully washed in warm water; then they are allowed to drip over an open wire. They are then placed in high, round vessels or kettles, surrounded by steam at a pressure never exceeding five pounds. By this process the livers boil very slowly or rather simmer for eight hours, after which the oil is dipped out and filtered twice through cotton, and put in large tin vessels tightly soldered. The oil is now clear and white and appears quite pure. The process, however, does not end here. The oil is shipped to Christiana where it undergoes a chemical treatment which frees it from the microscopic globules of blood and from stearine. It is finally filtered through paper and is ready for the market. From the residue a kind of brown oil, of inferior quality, is made, and from the dregs a fertilizing compost."

—We regret to learn of the death, at the age of 42, of Dr. J. B. Berthelot, Professor of Anatomy at Laval University. Deceased was the son of Judge Berthelot.

AMERICAN DERMATOLOGICAL ASSOCIATION.

The sixteenth annual meeting of the American Dermatological Association will be held at the Pequot House, New London, Conn., Sept. 13th, 14th and 15th, 1892. The following papers will be read:—

1. Iodine and Carbolic Acid in the Treatment of Skin Diseases—Dr. C. W. Cutler.
2. Additional Note on the Treatment of Erysipelas based upon a Second Series of Fifty Cases—Dr. C. W. Allen.
3. A Suggestion for Operative Procedure on Erectile Naevi over Fontanelles, etc —Dr. S. Sherwell.
4. How Should Dermatology be Taught?—Dr. G. H. Fox.
5. A Somewhat Unusual Case of Lupus Ulceration of the Nose—Dr. H. W. Stelwagon.
6. Lupus Vulgaris following Exposure to Tuberculous Sputa—Dr. W. T. Corlett.
7. Notes on the Treatment of Lupus Erythematosus—Dr. J. Zeisler.

Discussion on Alopecia Areata:

Are there two forms of alopecia areata; one parasitic and one neuropathic?

Is there sufficient evidence to prove the contagious nature of the Disease?

What is the comparative value of carbolic acid, and of other topical remedies?

Will epilation of the margin of the patch prevent its spread?

What circumstances influence the prognosis of the disease?

8. Alopecia Prematura; its most frequent cause—Dr. G. T. Elliot.
9. Cases of Favus Contagion from the the Lower Animals—Dr. S. Sherwell.
10. Some Observations on the Growth of Achorion Schoenleinii in America—Dr. L. Heitzmann.
11. Morphœa Atrophica—Dr. R. W. Taylor.
12. Psorospermosis—Dr. M. B. Hartzell.
13. Report of a Case of Adenoma Sebaceum, with Microscopic Drawings—Dr. J. A. Fordyce
14. Concomitance and Sequence in Skin Eruptions, and the influence of one dermatosis upon another—Dr. C. W. Allen,
15. The Cicatrices of Syphilis—Dr. J. N. Hyde.
16. An Unusual Case of Syphilis—Dr. B. Morison.
17. An Exaggerated Case of Impetigo Contagiosa—Dr. G. T. Elliot.
18. Notes on a Recent Visit to the Leper Hospital at Havana; Leprosy in Charleston, etc.—Dr. W. T. Corlett.
19. Notes on the Use of Thilanin—Dr. G. H. Fox.

CANADIAN MEDICAL ASSOCIATION.

The twenty-fifth annual meeting of this Association will be held in Ottawa on 21st, 22nd and 23rd September, under the presidency of Dr. John L. Bray, of Chatham, Ont. The following is a partial programme :—

Address in Medicine—Dr. J. E. Graham, Toronto.
"The Treatment of Pulmonary Tuberculosis"—
Address in Surgery, "Observations on the Progress of Surgery in our own Day"—Dr. Donald Maclean, Detroit, Mich.
Gastro-Enterostomy—Dr. L. McFarlane, Toronto.
Chronic Bright's Disease—Dr. McPhedran, Toronto.
Uric Acid in Children—Dr. A. D. Blackader, Montreal.
Intussusception and its Treatment by Operation—Dr. F. J. Shepherd, Montreal.
Biological Analysis of Some Canadian Water Supplies—Dr. Wyatt Johnston.
Prostatectomy—Dr. Geo. E. Armstrong, Montreal.
Unrepaired Laceration of the Cervix the most Common Cause of Epithelioma of the Cervix Uteri—Dr. Lapthorn Smith, Montreal.
Treatment of Abortion—Dr. K. N. Fenwick, Kingston.
Hemorrhage in the New-born—Dr. F. A. L. Lockhart, Montreal.

Papers have also been promised by Dr. Mullin (Hamilton), Drs. James Bell, T. Johnson Alloway, F. Finley and J. Stewart.

—The Mississippi Valley Medical Association will hold its eighteenth annual session at Cincinnati on Wednesday, Thursday and Friday, October 12th, 13th and 14th, 1892. An excellent programme, containing the best names in the Valley and covering the entire field of medicine, will be presented. An address on Surgery will be delivered by Dr. Hunter McGuire, of Richmond, V., President of the American Medical Association. An address on Medicine will be made by Dr. Hobart A. Hare, Professor of Therapeutics and Clinical Medicine, Jefferson Medical College, Philadelphia.

American Public Health Association.—The twentieth annual meeting of this Association will be held at the City of Mexico, Mexico, November 29, 30, and December 1, 2, 1892. Members and representatives from all parts of the United States

and Canada have already expressed their intention of attending this meeting, not only because it will probably be the largest and most important ever held, but also to enjoy the pleasures and delights of an excursion trip to the "Egypt of America." The Secretary has recently been in Mexico, and made full arrangements to secure a large and successful meeting. The Mexican Government has interested itself in the work, thereby assuring the success of the meeting. All the details are in the hands of federal officers of the Republic of Mexico. The general government has requested every State to send delegates. Invitations have also been extended to Central and South America. The session will continue four days, and owing to the expected large number of papers the Association will, probably, for the first time, do its work in sections. Prominent sanitarians and scientists from the United States, Canada, Mexico and the Central and South American Republics will take an active part in the meeting.

—Sir Daniel Wilson, President of Toronto University, died on Saturday afternoon, Aug. 6th. It created no surprise, as it was generally expected, Sir Daniel having been at the point of death for some time past. He was born in Edinburgh on Jan. 5th, 1810, and received his education at the university of that city. His loss will be sincerely mourned throughout Canada.

Medical Items.

—Pravaz, the inventor of the hypodermic syringe, died recently at Lyons.

—Dr. James S. Green, President of the New Jersey State Medical Society, died at Elizabeth on July 2nd.

—Fischel, a distinguished psychiatrist, died at Prague on June 4, at the age of seventy-nine.

—Biermer, the distinguished German clinician, died recently at Breslau, at the age of 65. It was he that announced pernicious anæmia as a distinct disease.

—Frederick Le Gros Clark, F.R.C.S., F.R.S., formerly President of the Royal College of Surgeons, and Surgeon to St. Thomas's Hospital, died on the 19th July last, aged 81.

University of Pennsylvania.—Dr. Tyson has resigned the position of Dean, and Dr. John Marshall has been chosen to succeed him.

—Old doctor—"No, sir. I never have a patient die on my hands—never." Young doctor—"How do you manage it?" Old doctor—"When I find a man is going to die I get him to call in a specialist."—*Life.*

University of Vienna.—Otto Bergmeister has been elected Professor Extraordinary of Ophthalmology; Josef Englisch, Prof. Extraordinary of Surgery; Ferdinand Hochstetter, Prof. Extraordinary of Anatomy; Alexander Kolisko and Richard Paltauf, Professors Extraordinary of Pathological Anatomy.

Four at a Birth.—A Philadelphia woman recently went to visit a friend, and there gave birth to four girls. The press dispatch which conveyed the information also states that the father, who was breakfasting at the time, became greatly excited when the news was broken to him.

Scarlet Fever in London.—For some weeks there has been an epidemic of scarlet fever in London. Although the number

of cases reported has been large. the general death-rate has not been higher than usual. It was estimated that nearly three thousand cases were under treatment.

VISCERAL PHLEBOTOMY.—George Harley, of London, Eng. (*Med. News*, July 23, '92), recommends in inflammation of any of the internal viscera to withdraw blood directly from the organ by means of a trocar of the size of a No. 2 or 3 catheter. He says the operation is easy of performance and is without danger. In two cases of inflammation of the liver marked benefit was obtained by this method.

PREPARATION OF IODOFORM SPONGES.—The following is the method of Haug (*Nouv. Rem.*) : Small, soft, cleansed sponges are immersed for five days in water to which five per cent. of hydrochloric acid has been added; after which they are thoroughly washed in an abundance of water, and dried. They are then placed in a 7½ per cent. ethereal solution of iodoform; the ether is allowed to evoporate, which being completed, the sponges are preserved in well-stoppered bottles.

DEATH OF THE HON. JOHN ROBSON.—Mr. Robson, the Premier of British Columbia, died recently in London from pyæmia. While driving in a hansom cab, about ten days before, he had accidentally jammed his finger in the door and bruised it severely. A physician examined it, but did not consider the accident a serious one. The finger did not heal well, however, and when medical advice was sought again the patient was found to be suffering from pyæmia, and died in spite of amputation of the finger.

THE APOTHECARY'S OATH.—A correspondent of the *Medical News* writes: "While reading Boas's 'History of Medicine,' I found the following oath, as taken by the apothecaries of the 13th century: 'To honour, esteem, and serve the doctors of medicine, . . . to speak no evil, ... and to do everything which may contribute to the honour, reputation, embellishment and majesty of medicine.' Is there a 19th century apothecary that would show his allegiance to and dependence upon the

medical profession as did these men of old? Where has progress shown itself along this line? What cares the druggist for the doctor to-day when he has the quack to back him?"

—"It was heart failure," say the doctors, and they say it so often that we put on our thinking caps. One business man after another falls out of sight, and when we ask what the trouble was the reply is sure to be "heart failure!" A great deal of worry, a habit of constant hurry, keeping at high tension year after year—that's what's the matter. We sleep with one eye open, talk business in our dreams, swallow a whole meal—soup, entrees, roast and dessert—with one gulp, and then when we hover about the fifties, the heart gets disgusted at its treatment and closes up the concern.—*Ex.*

ANTISEPTIC TREATMENT OF GONORRHŒA.—Wattier, in the *Journal de Médicine et de Chirurgie Pratiques*, recommends the following as an injection for gonorrhœa: Hydrarg. bichlor. 1; antypirin 100; distilled water 10,000. The patient should use this three or four times a day, preferably after micturition, and the fluid should be retained in the urethra as long as possible, at least half an hour. It is better to use the injection lukewarm. He does not know whether the antipyrin acts as an antiseptic or whether it gives greater strength to the sublimate when mixed with it. He also says that solutions of 1 in 10,000 of sublimate are still caustic, while those of half that strength are inert, but when mixed with antipyrin good results are obtained.

KEELEY TAXED AS A LIQUOR DEALER.—The revenue department has made a ruling on Dr. Keeley, of gold-cure fame, who furnishes whiskey to his patients by the dram and by the bottle. He is considered by the United States Government as a retail dealer in liquor and liable to the regular Government tax. The Kansas City collector notified the St. Joseph Keeley Institute of this fact, and they referred the matter to their headquarters at Dwight, Ill. The Keeley company at once made a vigorous protest to the department at Washington against being classed with saloon-keepers. Uncle Sam's rules, however, are

inflexible, and the protest referred to brought a letter from Commissioner Mason, in which he explains that matter very plainly. The Keeley people objected to the declaration under oath that they are retail liquor dealers. Commissioner Mason says that every druggist who sells whiskey or other spirits not combined with drugs, though he furnishes the spirits on a physician's prescription, and for medicinal use only, is required to pay special tax as a retail liquor dealer.—*St. Louis Daily Globe-Democrat.*

EARLY RISING NOT ALWAYS A VIRTUE.—This subject is discussed by *Harper's Bazar* in the following manner: "Thousands of people have no choice whatever about their hour of rising in the morning. Later or earlier, that hour is fixed for them by the requirements of the office, the shop, or the class-room; by the time-table of the railroad; by the arbitration of their employers or the necessities of their employés. But in the cases manifold where personal liberty is enjoyed, it should not be thoughtlessly restricted simply because of the domestic tradition that early rising deserves praise and late rising blame. Breakfast may often be a movable feast without materially disturbing the routine of an orderly housekeeping day. Invalids, mothers whose rest has been broken by teething babies, and, above all, rapidly growing children, should have their sleep out. Nature demands this, and violence is done to her when sleepy people are rudely aroused from their beds. Early to bed is the single safe prescription to insure early to rise. We need to repeat it over and over to our hurrying, anxious, toiling American men and women—Rest, rest, and again, rest. Do not think time ill spent that is spent in repairing the ravages of our well-nigh incessant activity."

—Dr. Nathan Woodhull Condict, who belonged to the coterie of distinguished physicians that flourished in New York a generation ago, died on June 27th, at his home in Morristown, N.J, at the advanced age of 83 years. He was born in Morristown, and was the son of that eminent physician and statesman, Dr. Lewis Condict, who was one of the originators of the United States Pharmacopœia, one of the commission to fix the boun-

daries between the States of New York and New Jersey, and a distinguished Whig congressman for many years in the days of Henry Clay. Dr. Nathan Condict was graduated from Princeton College in the Class of 1828, studied medicine at Dr. Willoughby's school at Fairfield, N.Y., with Asa Gray, the botanist, and was afterwards graduated from the College of Physicians and Surgeons in New York city. He practised in New York for a long time with much success, and contributed frequently to current medical literature. For a number of years he was associated with the late Dr. David Meredith Reese, and among his intimate friends were such men as John W. Francis, Abraham Du Bois, Valentine Mott, Willard and Parker.—*Boston Med. and Surg. Journal.*

A PRESCRIPTION FOR YOUNG PHYSICIANS.—According to the *British Medical Journal*, a distinguished Vienna professor gives the following prescription to all young physicians who call to take leave of him before embarking on their professional career. ℞ Veritatis, humanitatis, fidelitatis, āā infinitum. Misce. Ft. elixir vitæ. Signa: To be used constantly throughout life. It is easy, perhaps, for most men to start with a good stock of this spiritual elixir, but the difficulty is to find an apothecary who can dispense the prescription when the supply has run out.—*N. Y. Medical Journal.*

—Dr. Charles G. Davies of Chicago, who has sent a large number of invalids to Eddy, New Mexico, during the past year, writes to Mr. G. O. Shields of that city: "I must say that, without exception, every patient that I have sent to that delightful country has made wonderful improvement. I am delighted with what your climate has done for them, and shall certainly send you a large colony next winter." The Pecos Valley, of which Eddy is the principal town, is attracting the attention of physicians everywhere, as having the most perfect climate to be found on this continent, for persons suffering from lung or throat troubles, catarrh, asthma, rheumatism, etc.