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TYPHOID IN ITS RELATION TO MILK SUPPLIES.

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IT is unnecessary to offer any confirmatory evidence of a fact so well established as the communicability of typhoid fever through the medium of milk. The following instance may, however, throw some light on the modes by which milk may be contaminated, the liability to infection through this source, and the possible spread of the disease by the ordinary channels of distribution.

During four days of the summer of 1899 there were reported to the Health Department of Toronto, five cases of typhoid fever, three of which were on the same street; all residents of the same district, and all obtaining their milk supplies from the same dairy. An investigation was at once made as to the condition of the premises, and the health of the occupants, not only in the city, but on the four farms from which the milk was procured. As a result a number of alterations and repairs were ordered to the dairy, and certain regulations imposed as to the cleansing of ordinary receptacles and the separation and sterilization of bottles returned from infected houses.

Some of these requirements were fulfilled, though without the constant presence of an inspector it was obviously impossible to insure a thorough compliance, more particularly in regard to sterilization and cleansing of utensils and bottles.

Six more cases were reported during the succeeding month, and more stringent precautions were enjoined, but, at this stage, as well as the preceding, the origin of the outbreak was open to doubt, inasmuch as nearly all the cases were on the same sewer area, while in other parts of the city, largely supplied by the dairy in question, there was only one reported case. It was also noticed that in the affected districts there were numerous cases on the routes of other milkmen. These circumstances pointed to a local cause, other than infected milk, and though the authorities did not relax their efforts to require all that the law permitted, or their authority could command, they felt that the position was exceedingly uncertain.

During the next month there was a comparative lull, but, towards the close, there occurred a number of cases in various parts of the city remote from the first district. It was therefore decided to require the removal of the dairy from the original premises to a new location, a block or so distant, and the complete abandonment of the old implements and bottles. After considerable legal trouble this was accomplished, with the result of bringing about an entire disappearance of the disease among the customers of the dairy. Two cases developed a few days after the change, but at that time they were doubtless in the incubative stage.

For the three months there were twenty-one cases reported from this milk route, and, by a careful house-to-house inspection, and a search in the wards of the city hospitals, there were discovered twelve unreported cases, making thirty-three in all, from a route on which the daily consumption of milk was about one hundred and four gallons, distributed among some three hundred and fourteen customers. If other city dairies had been affected in like degree there would have been during the three months 4,147 cases of typhoid fever. As a matter of fact there were only 139 reported cases, including those from the dairy in question.

The initial source of infection remains undiscovered, though much time and thought were bestowed on the enquiry. It appears to have operated discontinuously, and have been connected with the premises, utensils, or bottles, as proved by the disappearance of its effects when the change was made.

The fact that cases of typhoid fever are not always reported to the department interfered very much with the investigation for not only was the full extent of the outbreak in this way concealed but it so happened that the original case was not thus made known, nor was that which first occurred outside the district. Another bar to decided action was realized from the peculiar requirements of sec. 10 of the Municipal By-Law. The existence of infection in milk can be but seldom definitely demonstrated, but such proof is presumably required before the authorities can proceed. The milk dealer invariably falls back on this view of the case, and holds his legal position invulnerable so long as it is not proved that the suspected liquid contains "any matter or thing liable to produce disease." In any case he has only to fear the revocation of the permit of the Health Department, while, in Toronto, the annual license of the Police Commission seemingly remains in force. This confliction of authority gives rise to much uncertainty, and a justifiable unwillingness to open up a legal question which in other quarters has proved very troublesome.

It may be said that ineffectual attempts were made to isolate the bacillus typhosus from the milk. When one reflects that, of over one

hundred gallons daily only one bottle may be infected, this result is not surprising.

In one of the months above referred to, and in the same affected district, there occurred nine cases of typhoid among the patrons of a small dairy, who, for the most part, went for the milk themselves, carried it in their own vessels, and only purchased it occasionally. The first three cases were not reported to the department, the first noticed being that of the attack of the proprietor, who was sent to hospital, and the dairy thoroughly inspected, and placed under special regulations, with the effect of terminating the outbreak. The actual source of infection could not be definitely traced, but it was probably to be attributed to contaminated vessels or utensils in the dairy.

Another instance was furnished by a dairy outside the city limits, in which the milk—some forty-four gallons daily—was produced by seventeen cows, which were kept on the premises, and pastured near by. Three cases of typhoid were reported during three days, and three others developed five days later. The dairy was visited immediately after the first report, and was not found in good condition. The most marked features were the absence of a sufficient supply of water, owing to the pump having become dry. There was also a very roughly constructed, pitless, and foul privy near the milk house, the latter being floored with rough boards bearing evidence of the transfer of much mud from the surrounding paths, no doubt including that from the privy. The removal of this closet to a distant location, the dressing of the site with lime, the deepening of the well, the thorough cleansing and lime washing of the milk house, and the sterilization of vessels and bottles, were ordered with good effect, as no more cases occurred.

It seems likely that the excrementitious matter in the open privy was the most likely cause of the trouble, though none of the inmates of the dairyman's house, or any of his employees, were suffering from any intestinal affection. It is, however, quite possible that a privy so easy of access might have been used by some perambulatory typhoid case. The transfer of germs by the feet of persons passing from the privy to the milk house, or by means of flies, which were numerous, might thus be easily accounted for.

One of the most interesting cases was that of a small dairy located in the sparsely populated confines of the city. This enterprise commenced with the keeping of one cow so that milk might be furnished for a family of eight young children. But ultimately three cows were added, and milk was furnished to some seventeen families in the neighborhood. Four of the latter were on the same day reported as having typhoid, and

a visit revealed the fact that there was another case of this class, besides five of the children of the milkwoman's family. All these cases were within a radius of two hundred feet.

On one side of a narrow house was a milk shed less than six feet square, containing a wash-tub with water, on which floated a tin dish-pan containing the supply of milk. Many flies thronged the little room, and some were observed sipping the milk. On the other side of the yard was a little structure, supposed to be a dry-earth closet, but which was full of semi-liquid matter which soaked the floor. Here were also countless flies indulging in an unlimited supply of typhoid excrement. Between the milk shed and the closet there was free intercourse so that flies could vary their diet, or perform any necessary ablutions.

Further investigations were, of course, made, and other possible modes of communicating disease revealed, but that mentioned was undoubtedly amply sufficient. The cows were ordered to be at once taken to the country, and the dairy was instantly closed, and so maintained until proper facilities were provided. There was, fortunately, no further development of the disease.

It is very difficult to trace out definitely the modes by which milk becomes infected, but I have little doubt that the use of unsterilized bottles is one of the most common, and perhaps even not second to this is the part played by flies, which are always abundant around dairies, particularly where there are privies, and when horses are kept on the premises.

OVARIAN EXTRACTS IN THERAPEUTICS.

Dr. Lucien Picqué claims that the treatment of nervous and physical disorders following operations on the female organs of generation (ovaries) by means of ovarian extract is founded rather on an ingenious theory of insufficiency of ovarian secretion in the system than demonstrated facts. While not entirely opposing this explanation for the nutritive and nervous disturbances following such operations he points out that similar disturbances may follow extra-genital operations, and may occur even in the male. He finds after studying 41 cases that the disturbances may be distributed under four classes: 1. hysteria; 2. post-operative psychoses; 3. neurasthenia, with hysteria; 4. neurasthenia, with post-operative psychoses.

He inclines to the belief that not the lack of ovarian secretion as the irregularities or suppression of the menstrual flow may be responsible for the disturbances, and finds that cases of hysterectomy, nephropexy, amputation of the breasts and even exsection of the shoulder in the male may be followed by similar symptoms. Hence, before resorting to ovarian therapeutics, he claims that the nerve specialist ought to be consulted first, in order to establish the proper diagnosis.—*The Post Graduate*.

TUMOR OF HAIR.

Weighing 1 lb. 7 oz. two feet in length, removed from the stomach of a woman, with recovery.

By HERBERT A. BRUCE, M.D., F.R.C.S., Eng.

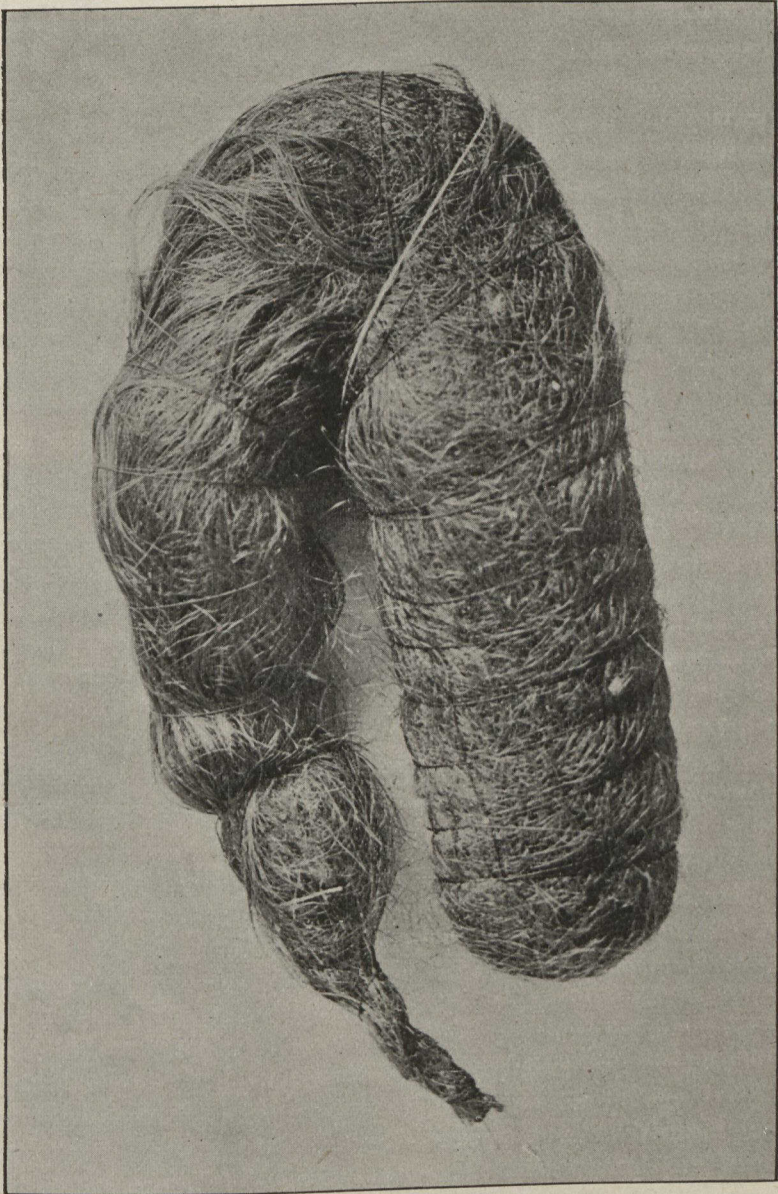
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MRS. G. B. age 26, married six years, two children. A lump was noticed in the abdomen by the attending physician, two months previous to birth of last child. He thought it a twin pregnancy. The patient had no symptoms in connection with this lump. After parturition the lump was found to be unconnected with the uterus or any of the pelvic organs. The doctor then thought it was a displaced spleen. Different consultants were of the same opinion, or that it might be malignant disease of the stomach, omentum or kidney. On examination a lump could be felt and seen in the upper part of the abdomen, about 12 inches in length, the left border being slightly convex and the right somewhat irregular, but with a deep notch or sulcus in it. The lump was about 5 inches in width. It could be lifted forward and moved from side to side freely and downwards also to a less extent, until the lower end reached 3 inches below the umbilicus. It could be pushed up under the ribs on the left side, until it was almost out of reach. It seemed to be anchored somewhere behind the lower left costal cartilages. It felt very hard. No special discomfort was caused the patient by moving it about. There were absolutely no symptoms present apart from the patient's knowledge of the lump. She was never nauseated and had a good appetite. She was a little thinner than usual, but not more so than she had been after the birth of her first child. Dr. H. B. Anderson made an examination of her blood for me, and reported it normal, with no evidence of leukaemia. Three days before the operation she ate most of a chicken, stating that she did so because she knew she would not get solid food for some time after. When I examined her I thought I could make out splenic dullness, and while not being able to deny that the lump might be spleen, did not think it conformed quite to the shape of the spleen, and advised an exploratory operation. This I did at St. John's Hospital, on the 24th of July last, assisted by Dr. R. J. Wilson and Dr. Ross. Chloroform was given by Dr. Hendrick. On opening the abdomen in the middle line, the spleen and kidneys were found in their normal positions, but there was a large mass free in the stomach. On the anterior wall of the stomach, a greyish white area about the size of a ten-cent piece was seen. I could make out the mass to be lying free in the stomach and extending through the pylorus. It could now be made out to consist of a couple of limbs

meeting below at an acute angle and this could be bent like a joint. The portion extending through the pyloric end of the stomach, felt as if jointed. In fact it felt very much like an arm with the elbow below and wrist joint at pylorus. The stomach was brought outside the abdomen, and an incision made into it between 4 and 5 inches in length, midway between the curvatures. After removing the mass of hair, the opening in the stomach was closed by a continuous suture of catgut for the mucous membrane, and a continuous suture of silk for muscular and peritoneal coats, and outside this a row of Lembert's sutures. The after treatment was as follows:—8 oz. of hot salt solution every two hours. Nutrient enemata every six hours for first two days. Then salt solution discontinued, and nutrient given twice daily for two days, and then once daily for a week. Twenty-three hours after the operation sips of hot water were given by the mouth, gradually increased until in six hours two ounces of hot water were given. This was repeated every hour. Forty-eight hours after the operation the patient was given 1 oz. of milk and $\frac{1}{2}$ oz. lime water every hour. This was gradually increased until two days later the patient was taking 3 oz. of milk and 1 oz. lime water every two hours. Albumen water and barley water were added to the milk diet. For first 4 days after the operation $\frac{1}{30}$ gr. strychnine was given hypodermically every 4 hours. The patient only vomited once after the operation. She sat up in bed on the 16th day, walked about the room on the 18th day, and left the hospital very well on the 20th day. She was then taking ordinary light diet.

On examining the tumor, it was found to consist entirely of hair twisted and intimately woven together, of a brownish color, and exactly the same shade as that of the patient. Single hairs were dissected out 10 and 12 inches in length. The mass measures 24 inches in length. The large end which lay at the cardiac end of the stomach is $6\frac{3}{4}$ inches in circumference. From this it gradually enlarges until at the angle it measures $8\frac{3}{4}$ inches in circumference. From the angle it gradually tapers until 15 inches from large end it is $3\frac{1}{2}$ inches in circumference, and $19\frac{1}{2}$ inches from large end it measures $1\frac{1}{2}$ inches in circumference. The latter part extended through the pylorus and into the duodenum to the extent of 6 inches. The latter $4\frac{1}{2}$ inches consisted of only a couple of dozen hairs and was covered with faecal matter.

I think I am right in considering this case rare, if not unique. Hair balls are sometimes found in the stomachs of ruminants, and I have a specimen of a ball of hair found in the stomach of a cow, and kindly loaned me by Dr. Smith of the Ontario Veterinary College. This is an average size, and weighs only 6 ozs. He tells me these are found in cows,



A TUMOR OF HAIR.

Weight 1 lb. 7 oz., two feet in length, removed from a Woman's Stomach (Bruce).

pigs, and sheep, and then usually in young animals, from licking one another. These balls have been found in the manger, having been brought up in the process of rumination, and dropped out of the mouth. These masses are called bezoars, or, if composed entirely of hair, trichobezoars.

My patient declares she has never swallowed her hair, and I would not consider her hysterical. There is no doubt, of course, that she did swallow this hair.

Her temperature never reached 100 after the operation, and was normal after the first three days. Pulse went up to 120 immediately after the operation, but in 24 hours was 110, and in three days was 80, and remained about this until she left the hospital. One of the most interesting and remarkable features of the case was the entire absence of symptoms pointing to any disturbance in the stomach. It is now three months since the operation, and she is enjoying the best of health.

In the Medical News of February 16th, 1901, Dr. Nathan Jacobson, of Syracuse, reports a case very similar to mine. His patient was a girl, eleven years of age. Unlike my case, she had evidences of gastric disturbance for about a year before the operation, such as the vomiting of frothy mucous, and had a considerable amount of colicky pains in the stomach. The photograph of the hair mass removed, which he calls a hair-cast, shows it to be very similar in shape to the one I am presenting. It is smaller, however, weighing 15 oz. His patient admitted that she had been in the habit of biting off the ends of her hair, from the earliest years of her life. At first she thinks she did it simply because she was nervous, but later she rather liked the tickling sensation produced by the hair in its transit to the stomach.

Dr. Jacobson, in reviewing the literature, finds 19 authentic cases where the patients have swallowed a sufficient quantity of hair to create within the stomach a hair-tumor. Only one of these was a male. Dr. W. G. Brewster, in the Boston Medical and Surgical Journal, reports a case in which an accumulation of hair became lodged in the small intestines, and produced intestinal obstruction. The patient, a girl of ten, survived the operation of enterotomy only five hours. The youngest patient was 10, the oldest 34. None of these patients were insane, and but few sufficiently nervous to be described as hysterical. In nearly every instance the habit of hair-swallowing was of years' continuance. In one case it had existed for 13 years, in another 15, 17 in a third, and 22 in a fourth. The stomach became gradually accustomed to the presence of the foreign body, and in many instances tolerated it without the slightest rebellion.

The largest mass of hair removed from the stomach, on record, is one weighing 5 lbs. 3 oz. Of the 19 cases, 10 were discovered post-mortem, and 9 upon the operating table. It is surprising that the discovery of the hair-cast was very unexpected. In not a single case had a correct diagnosis been made, and no physician or surgeon surmised that he had to deal with a foreign body in the stomach. As a rule the diagnosis was splenic or omental tumor, movable kidney, or faecal or other impaction in the transverse colon. As a rule the hairs had simply been bitten off the ends of braids or flowing locks, but in other instances hairs of great length were found. One woman was said to have pulled the hair out of the back of her head whenever she became nervous, rolling it up into a ball and swallowing it, while another deliberately swallowed her combings night and morning.

Croup.

The preparations of lobelia are very valuable from a therapeutic point of view. A few days ago I treated a very bad case of croup, in a child fourteen months old, with acetic emetic tincture every fifteen minutes, and the emetic powder on a larded cloth applied to the throat and chest. The father said he could hear the child's efforts at respiration at the stable, which was fifty feet at the rear of the house, the windows of the house being closed. After a few doses of the acetic emetic tincture the child was relieved, and made a good recovery.—*Ec. Review.*

An Ointment for Psoriasis.

Morgenstern (*Therapie der Gegenwart*, 1901, No. 6; *Fortschritte der Medicin*, August 15th) recommends this formula:

℞ Salicylic acid	2 parts;
Precipitated sulphur	10 "
Zinc oxide	} of each 19 "
Starch,	
Vaseline	50 "

M.

Sage in Hyperidrosis.

Infusion of sage is again recommended for the treatment of hyperidrosis in tuberculous subjects as well as those suffering from leukæmia, rheumatic polyarthritis and typhoid fever; in thirty-eight cases where it was tried there were only two failures. Steep forty-five grains of sage leaves in half a pint of water and let the patient take a cupful in the morning, one during the course of the day, and still another before retiring at night—or the tincture of the leaves may be given in twenty-drop doses in the morning, and from twenty to forty drops at night. *Salvia officinalis* has a proper place in the front ranks of anti-sudorific remedies.—*Medical Week.*

BUBONIC PLAGUE AND CHINESE IMMIGRATION.

BY A. C. LAMBERT, M. D., C. M. (TRIN.)

Late Surgeon R.M.S. "Empress of China."

WITH another serious outbreak of Bubonic Plague in Hong Kong this year, and with every prospect of a repetition of the same next summer it is very essential, in view of the increasing tide of Chinese immigration to Canada, that the profession and public understand thoroughly the extreme danger which menaces them of having, sooner or later, to wrestle with the disease on their own shores, as their sister Colonies of Australia and the Cape have already been forced to do.

It is not with the intention of questioning the present methods employed by the Canadian Government at their Western Quarantine station at William's Head, Vancouver Island, that I have ventured to discuss this subject. Nothing could be more thorough and effectual than the superheated steam and formaldehyde disinfectors, which constitute, with bichloride baths for the passengers, the principal appliances in use at William's Head; and no one could be more painstaking and energetic in the discharge of his sometimes not altogether pleasant duties, than is Dr. Watt, Inspector of Quarantines for British Columbia and Superintendent of the above station. The procedures are rational enough and undoubtedly accomplish the work required of them, i. e. the destruction of all forms of bacterial and parasitic life, but it is my contention that all this disinfection and fumigation are employed at the wrong end—at Canadian ports instead of at ports of departure in China or Japan. And it is this application of excellent methods at the wrong end which constitutes, to my mind, the weak point in our armor of quarantine, through which the plague is going to strike us. And why?

Before answering this natural query, perhaps a very brief resumé of the several epidemics of plague in South China might be of interest. There have been three serious epidemics of plague in Hong Kong, Canton and the surrounding districts. The first was in 1894, the second in 1896 and the third during the present year 1901. During the intervals between these severe epidemics plague has not been entirely absent from South China, although the number of cases occurring yearly has varied considerably. When not epidemic, it is practically endemic.

Plague is not diminishing in Hong Kong and its vicinity, owing to various causes, some of them perhaps errors of judgement on the part of Colonial Administrators, others natural but difficult to remedy, such as the emigration of rats from destroyed buildings to others in the vicinity; or the ever-spreading Chinese population, which is beginning to break from

the confines of the native quarter and over-flow into districts hitherto occupied by Europeans only; of the presence but some hundred miles distant of that huge Celestial rabbit-warren, Canton, with its easy connection by water with Hong Kong and the resultant large and lucrative trade, difficult enough to supervise and impossible to abolish, without signing the death warrant of Hong Kong as a trade centre. With all these causes severally and collectively reacting against any scheme of sanitary reform, bubonic plague is gradually but certainly gathering the whole of this ill-fated colony into its grasp, and is beginning to take its toll of victims from the ranks of Europeans and non-Chinese residents, as remorselessly as it does from the natives. Houses, hotels and places of business in every quarter of the colony are being closed by the authorities on account of cases occurring therein, while hundreds of natives are leaving the colony in fear.

With this state of affairs on shore, our Canadian Steamship Companies are filling their steerages as full as they can legally be filled with Chinese emigrants drawn solely from the towns in which plague is raging most virulently. To give them their due, the above companies do endeavor to prevent any sick or suspiciously unhealthy person from travelling on their ships, and to this end institute a searching examination, often two or three times repeated after intervals of a few hours, of all native passengers and sailors. The examination is conducted by medical men resident in the colony and having much experience in tropical disorders. The passengers and crew are usually under medical observation for about twenty-four hours before the vessel departs on her voyage and no shore liberty is allowed from the time the inspection begins.

This method certainly reduces the chances of infectious diseases breaking out on board the vessel during the voyage, but the reduction is very slight. Should any infected persons in whom the period of incubation was not completed before the vessel sailed, and were therefore passed as healthy by the examining physicians, be on board, it is almost a dead certainty that the case or cases will develop before the vessel leaves her last Japanese port, and the resultant detention and disinfection will take place in that country, and by the time she reaches Canadian shores all danger will be over; and, as the Japanese are very thorough in their methods of disinfection, she could proceed without further detention provided no further cases had developed en route as it would be at least ten days, and generally more, since she left the last port to proceed on her 4,000 miles across the Pacific Ocean. This is not a case in which danger menaces the Canadian community.

Let us, however, take a suppositious, but not at all unlikely case. We will suppose that amongst the crowd of some three hundred odd

Chinese coolies on board our vessel, that there is one of them who has experienced the not uncommon misfortune of losing, a few days since, one of his nearest relatives by the plague. With the true instincts of the economical Chinaman, he purloins his deceased relative's clothing, irrespective of the fact that it is infected with plague bacilli, and, without a thought of disinfection, packs it away with its accompaniment of dirt and live stock among his own garments to be used if necessity arise during the voyage. All goes along merrily, Providence is kind, and the steamer passes safely through the ordeal of inspection at every Japanese port where she touches and at last commences her long run across the Pacific to Vancouver. Our Chinese friend has hitherto had no desire to test the usefulness of his relative's plague-stricken garments until a cold and wet south-easterly gale, catching the ship when about ten days out from Vancouver, compels him to adopt all the garments in his limited store, in order to keep both dry and warm. On go the infected ones with the rest. What follows may be imagined. There are many ways by which the bacillus pestis can gain entrance into our friend's system; he may have a slight catarrhal bronchitis—a suitable soil; a recent vaccination (compulsory by law) would form an excellent entrance; cuts or abrasions might be the cause; not forgetting the probability of fleas and pediculi swarming in the borrowed clothing, than which it would appear there are few more deadly transmitters.

On arrival at William's Head two days later, the incubation period not being yet over, our friend being then in good health is passed by the inspector as "all right" and after undergoing a thorough washing and scrubbing and having had his clothes and baggage disinfected, proceeds to his destination somewhere in Canada.

It is quite within the bounds of possibility that should the patient landed in some inland town or village, the disease, particularly if it should assume the pneumonia form with absence of external glandular enlargement, will not be properly diagnosed, there being nothing to put the practitioner attending on his guard. Isolation will in such an event most likely be omitted, and here we have the seed implanted for a future epidemic.

By disinfecting the baggage, clothing and persons of all Chinese steerage passengers and Chinese members of the crew twenty-four hours before the steamer leaves Hong Kong, and by subjecting them all to a searching medical examination and forbidding all intercourse on their part with the shore after the disinfection and examination are completed, together with a thorough disinfection of the steerages and their latrines, etc., with bichloride of mercury solution 1 in 800, and a repainting of

the same before being used by the passengers, we are almost certain of preventing the possible occurrence detailed above. Should no case of plague occur on board the steamer during the voyage her passengers will be landed in Canada to all intents and purposes as though they had put in 21 days quarantine after disinfection. The time spent over the voyage from Hong Kong to Vancouver is never, with the fast steamers, less than three weeks.

There is no epidemic of bubonic plague in any port except Hong Kong with the two exceptions of Amoy and Kobe. As regards the first place ships trading to Vancouver do not call there except occasionally during the tea season, and then shore leave is usually forbidden for crews and passengers alike. Osaka, a large manufacturing town several miles from Kobe, has had a few cases of plague but so well have the Japanese kept it in hand that it has never spread and ships passing through Kobe are not in much danger. Neither Shanghai, Nagasaki nor Yokohama have yet been visited by the plague, and as these and the before mentioned are the usual ports of call for trans-pacific steamers. it shows that, after once leaving Hong Kong, little danger of contracting the disease is present in the way ports. As regards taking on fresh consignments of Chinese passengers at ports other than Canton it is a fact, probably well known to you all, that no Chinese, except the Cantonese, ever come to America, and *they* never take passage from any place except Hong Kong.

Just a word concerning the facilities for carrying out the disinfection in Hong Kong and other eastern ports. The American government is already ahead of us in this matter. Learning by the painful experience of a few cases in San Francisco Chinatown, the U. S. government now compels all steamers trading from Hong Kong or Japan to American ports to put their native crews and passengers through a course of disinfection before leaving the foreign port. To this end there has been established in every large port in China and Japan suitable disinfecting stations having in operation the latest steam and formaldehyde disinfectors, as well as bathing conveniences. These stations are under the supervision of Medical Officers of the U. S. Marine Hospital Board, who see that the work is carried out properly and who furnish the necessary certificates on its completion. The stations themselves are usually in the hands of limited companies or private individuals, who use them as a commercial enterprise and are as ready to disinfect the personel of one ship as of another.

Under these circumstances it would not be difficult for the Canadian Government to compel all vessels from infected Chinese or Japanese ports, or in fact from *all* Chinese and Japanese ports, irrespective of

infection and time of year, to disinfect their native crews and passengers before embarkation. Suitable medical men resident in various ports, could be engaged to superintend the disinfection and furnish the certificates.

Should a case of infectious disease break out on board a vessel after all the precautions had been taken, then the quarantine station of William's Head would be called into requisition. On the other hand should no infectious case occur we would feel secure, in that we knew how unlikely it was that any case could creep in after the manner of the one in my argument. Canada is now the only one of His Majesty's great colonies which has not been visited by the plague. Let us hope she may never be; but it will require infinite care and much strategy to keep it out.

THE DANGERS OF CONTAGION IN TUBERCULOUS DISEASES OF THE THROAT

By DR. B. C. BELL, Brantford, Ont.

TUBERCULOSIS of the throat in advanced diagnosed cases presents the same dangers of contagion as the same disease in the lungs because almost always at such a stage the lungs are also considerably involved. These dangers, now so well known, are not for me to discuss. I will therefore confine myself to the consideration of a few special points which arise in connection with throat involvement.

As to individual susceptibility, predisposing causes are identical with those which favor active growth of the tubercle bacillus in other situations, always in low states of vitality, but added to this is a factor which beyond question has a direct and powerful localizing effect, viz., the catarrhal conditions found in so many noses and throats in the inhabitants of this country.

Statistics for Ontario show the number of deaths from tuberculosis considerably greater among females than among males, while statistics on laryngeal tuberculosis in other countries, there being none available for Ontario, give the proportion of deaths of males and females as about 3 to 2. In my own cases, which however have been too few from which to state a relationship, the greater number has been in females.

The majority of cases occur between the ages of 21 and 30.

Regarding local conditions, the sputa of patients with tuberculous throat diseases rarely contain the specific bacillus before ulceration has

taken place. This fact argues for the contention of some authorities that tuberculous laryngitis probably has its origin in an exactly similar manner to a tuberculous focus in a bone or joint i. e. locating there after entering elsewhere, and is not a direct inoculation, and further the throat of a pulmonary tuberculous patient may be constantly harboring bacilli without the disease developing there.

A qualification of the above statement must be made concerning the fauces and tonsils since here auto-inoculation probably does occur, but the disease is so rare in these parts, and in the pharynx, constituting only from $\frac{1}{2}$ of 1 per cent. to 1 per cent. of all tuberculous patients, as to be inconsiderable seeing that tuberculous laryngitis occurs in from 25 per cent. to 30 per cent. of all tuberculous patients.

When ulceration has taken place, the secretion is a thick, tenacious, semi-opaque, ropy mucus, containing few pus corpuscles, and difficult to dislodge, which possibly causes more violent coughing than takes place when the lungs alone are involved, with the consequent danger of greater expulsion and dissemination of particles and bacilli through the air, although this tendency to violent coughing is largely counteracted by the great pain it causes.

The question whether tuberculous disease of the throat is ever primary or not has been the subject of much discussion, but it is now pretty generally conceded that it may be primary, although in the vast majority of cases it is secondary to pulmonary tuberculosis. The practical bearing of this point on the subject lies in the fact that such a case might easily escape diagnosis for a time, and none of the precautions against the spread of the disease that are usual in pulmonary tuberculosis instituted. This is really not much of a danger in purely primary cases, because they are very rare. But cases quite as dangerous to the public, for the same reason, are very common, for time and again have I seen patients applying for a relief from a sore throat, which on examination proved to be tuberculous, and advanced even to various stages of ulceration, further examination revealing slight pulmonary involvement, which was never suspected by the patient.

By way of summing up, I would emphasize two points, first, the localizing effect of catarrhal conditions of the upper air passages—second, that while in many cases of tuberculous diseases of the throat the danger of contagion is identical with that in pulmonary tuberculosis, yet only too often there is the earlier danger of dissemination of the bacillus before the trouble has been diagnosed.

DIAGNOSIS OF SMALL POX FROM ERYTHEMA MUTIFORME.*

By A. DALTON SMITH, M.D., C.M., Mitchell, Ont.

THE subject of this short paper may seem to many to be a matter of small importance, but in view of the present widespread prevalence of small-pox of a type so mild as to be readily mistaken for diseases of a much less serious character, anything which can add to our present knowledge in regard to the differential diagnosis of small-pox from other diseases becomes of interest and of value. Of course the public, and the provincial health authorities also, expect every physician, whether he has ever seen a case of small-pox or not, to be able to diagnose the disease at sight. And the difficulties to be met with are apparent, at least to the physicians who have never had any personal experience with this disease.

The chief difficulty during the present prevalence of small-pox seems to be to differentiate it from chicken-pox, which disease seems also to have been widely prevalent of late.

A case, however, occurring in my own practice indicates a difficulty from another direction and which, up to the time of my own case, I had seen no mention of in the literature on the subject.

On Sunday, April 21st, 1901, I was called to the outskirts of the town to see a boy aged 10 years, one of a large family. The history given was that two weeks before he had been slightly ill with what was thought to be a stomach disturbance, with a slight skin eruption which disappeared in three or four days, the boy after this being better and about the streets, though he did not return to school. For a couple of days before I saw him he had not been so well. The patient I saw was very ill—pulse 140, temperature $104\frac{1}{2}$ degrees, throat inflamed, severe pains in the back and limbs, and great prostration. The legs on inspection showed a condition which I regarded as erythema nodosum, but the condition was much more severe than I had ever seen in a case of erythema nodosum. The next day, Monday, the general symptoms were no better and in addition I noticed some small spots on the face. On Tuesday I did not see the patient till very late in the evening. The general symptoms were but little improved, but the lesions on the face at once attracted special attention and on examination I found similar lesions scattered over the backs of the hands and on the lower forearm, and also a similar eruption, only smaller and in an earlier stage of development, scattered over the abdomen but none on the back. The erup-

*Read before the Huron County Medical Association.

tion was papular, varying in size from a pin head to a large shot, exceedingly hard and "shotty" on passing the hand over them, the older lesions already showing evidences of becoming vesicular. At this visit I was also asked to see a younger brother, also very ill and feverish, with a profuse rash just beginning to appear, pretty generally over the body. The situation was perplexing. I ordered the rest of the children sent out of the house and said I would return in the morning. The following morning the lesions on the older boy were still developing; the older ones on the face were now well formed vesicles, some of them showing a very distinct small black speck in the centre, but with no distinct umbilication. The eruption on the body corresponded exactly with the classical description of small-pox and also exactly corresponded with the lesions present in the one case of small pox I had hitherto had the opportunity of seeing. I decided to have counsel and at once drove down for my confrere, Dr. Hurlburt, knowing he had had some experience in small-pox. On examining the case he quite agreed with me that it was not possible to say that these lesions were not those of small-pox. The younger boy's eruption corresponded to that of a scarlet fever. I at once reported the cases to the Health Officer, Dr. Armstrong, and asked him to placard the house for scarlet fever. I also asked him to see the cases, which he did, sharing the opinion of Dr. Hurlburt and myself as to the suspicious character of the eruption. During Tuesday and Wednesday there was no change. Thursday morning the older vesicles were beginning to shrink and the appearance on the dorsal surface of the foot and lower part of the legs of an eruption which was purely vesicular in character, made me practically sure of what I had before regarded as possible, viz., that the case was one of erythema multiforme. The vesicles on the face and forearms from this time on slowly retrograded, drying up and exfoliating, leaving no pock marks.

The inflammatory nodes on the leg grew gradually larger, till coalescing, they became continuous over almost the whole of the anterior surface of the legs. Fluctuation indicating the presence of fluid, I made several large openings in each leg turning out the contents consisting of badly formed blood-clot. Already in some places having the appearance of a commencing degeneration into pus, but on this point I cannot speak positively, as I did not examine with the microscope, and the presence of pus in cases of erythema nodosum is, I believe, not usual.

Rapid improvement followed, the boy making a good recovery. The trouble in the case of the younger boy proved to be scarlet fever.

Though I had seen no reference in medical literature to a similar case previous to this time, strange to say about three weeks later I saw

in *American Medicine* a reference to a paper published in *The Scottish Med. & Surg. Journal* of April, 1901, by Dr. Norman Walker, describing a case in which the diagnosis between smallpox and erythema multiforme was very difficult. The same case was referred to in an editorial note in *American Medicine* as the only recorded case in which such a diagnosis had been difficult to make.

TWO CASES OF EXTRA-UTERINE GESTATION, OPERATION, RECOVERY.

By H. C. WRINGH, M.D., Port Errington, B.C., and Dr. BOLTON, Port Simpson, B.C.

CASE No. 1.

THE patient, an Indian woman, aged about twenty-five, had had one child about three years before. She was working at a place about eight miles from a doctor when the rupture occurred, so was not under immediate observation.

History.

July 7th, 1900.—A small tumor was discovered in the pelvis to the right of the median line. Patient thought she was pregnant. July 16th.—Patient's husband came for medicine saying his wife had had a hæmorrhage which they believed to be due to a miscarriage. It had been attended with a good deal of shock. July 25th.—Symptoms of cystitis were complained of. Micturition painful. Temperature normal. July 27th.—Medicine was given to relieve bladder symptoms. Shortly after this the patient went away to the native village and was not seen by the doctor for about seven months. March 11th, 1901.—Patient again presented herself at the office saying she had now been ten months pregnant. She gave history of normal progress of later months of pregnancy, the foetal movements having continued until pains, simulating labor pains, had occurred about one month ago. Since that time she had felt no movement. Subjective symptoms being so unreliable in the case of Indian patients, it was thought she was probably mistaken as to the date of conception, and she was advised to await progress.

One month later, labor not having come on, a careful bi-manual examination was made and it was found that the tumor (which resembled an ordinary pregnant uterus at term) was entirely free from the uterus, and was easily movable upwards from pubes. A diagnosis of abnormal pregnancy was made, but circumstances prevented operation being performed until some weeks later.

Operation.

July 26th.—A four-inch incision was made in the median line, below the umbilicus. The tumor was found apparently free in the abdominal cavity. On exploration, however, adhesions were found to be holding it below and posteriorly, so it was decided to incise the sac and evacuate its contents before trying to remove the sac itself. A small incision was carefully made in the sac wall, but as it was found there was a quantity of offensive, grumous matter inside with the foetus, it was thought best to attempt to remove the tumor entire. The abdominal incision therefore was extended about one inch above the umbilicus. The principal attachment of the tumor was to the right corner of the uterus. It was attached by a pedicle about three inches long. The Fallopian tube and ovary were included in the pedicle, but were about one inch apart. Between them, in the pedicle, were some three or four large vessels which had evidently carried the main blood supply to the tumor and its contents. The ovary was somewhat longer than usual, but otherwise appeared about normal. It was situated about midway between the tumor and the uterus. The fimbriated extremity of the tube was lost in the wall of the sac. The pedicle was tied off by divided ligature and was cut off as close as possible to the uterus as in an ordinary salpingo-oophorectomy. The only other adhesions of any moment were to the omentum. From this source, a large number of small and medium-sized vessels communicated with the sac wall. These were ligatured and cut off after the tumor had been turned out of the peritoneal cavity.

A small cyst was found growing on the left fimbriated extremity. Otherwise it and the left ovary were apparently normal. There were no adhesions about them or the uterus. The cyst was ligatured and removed.

As the hemorrhage seemed completely arrested and there had been no escape of the contents of the sac into the peritoneal cavity, the abdominal incision was closed without drainage.

Post-operative Condition.

The maximum temperature was 99.7°, and was registered on the second evening after the operation. Previous to the operation the temperature had always been normal when examined. The recovery was uneventful up to the time of writing, the eighteenth day after operation.

The tumor consisted of sac and contents. The sac was composed of two layers. The outer layer was living tissue, about one thirty-second of an inch in thickness, but not very tough. It represented, presumably, the thickened, hypertrophied peritoneum of the broad ligament, and was nourished directly from the maternal system. The inner layer was dead

tissue consisting of placenta and membrane. Only one layer could be demonstrated in the membrane. This could easily be detached from the outer layer of sac, but the placenta was firmly adherent to it (the sac). The placenta was irregularly oblong in shape and variable in thickness, the umbilical cord arising from its edge.

The sac-contents comprised the foetus with its cord, and a small amount of semi-fluid, pultaceous matter. This semi-fluid material represented the vernix caseosa, the hair and epidermis of the foetus which had become macerated and largely detached, and the unabsorbed residue of the liquor amnii. This material was slightly offensive as above noted. The foetus had evidently lived to full term and was in a very fair state of preservation.

Remarks.

In connection with this case it might be noted that many authorities, when referring to secondary operation for abdominal gestation going to term, advise that the sac, if not already adherent to the anterior abdominal wall, be stitched thereto and the foetus removed. The placenta, if it can be readily detached, may also be removed at the time of operation, or it may be left to come away through a drainage opening left for that purpose if too firmly adherent. Pending the extrusion of the placenta and the final obliteration of the sac by granulation, the cavity is to be frequently irrigated with mild antiseptic solution.

The writers of leading articles on this subject in the British Medical Journal for July 12th, and the Kingston Medical Quarterly for July, both of the current year, are evidently in harmony with these views.

This mode of treatment is doubtless based upon the supposition that the adhesions of the placenta (or of the sac external to it) to adjacent viscera will be so extensive that their entire removal at once is out of the question. And probably in many cases this is the actual condition. But the experience of this case at least, suggests the wisdom of first ascertaining the extent of the adhesions of the sac before deciding that it must be allowed to remain within the abdominal cavity, the patient thereby being subjected to increased risks of infection—both immediately, from the opening of the sac, and secondarily, from the more tedious convalescence.

CASE NO. II.

Another Indian woman, aged about twenty-six. Married six years. Gave history of gonorrhœal infections previous to marriage. Primipara. Last menstruation was in April of present year.

On July 20th she came to the office for treatment for uterine hæmorrhage. Said that she had had an abortion three weeks previous. At the time the attack had come on suddenly and had been characterized by

pain and tenderness. The pain was referred to right groin. There had been hæmorrhage ever since. She was badly constipated and was given cathartic and uterine astringents. Next day she had another attack of faintness and the pain in the right side became more severe.

Examination revealed a tense tumor lying to the right and in front of uterus. It could be felt as a bulging mass in the vagina and was palpable above the pubes, extending a little to the left of the median line. This, with the above history, made the diagnosis practically assured, and operation was advised. But both the woman and most of her friends were opposed to this, so local and general sedatives were given but with very little relief. Consent being finally obtained, the operation was performed on Aug. 6th—eleven days after that of Case No. 1.

Operation.

Incision in the median line, three inches at first but afterwards extended to about four. The omentum was found to be firmly adherent to the anterior part of tumor and had to be separated. The adhesions about the tumor in every direction were fairly strong and had to be separated before the pedicle, or even the uterus, could be reached. Blood seemed to have escaped into these adhesions, or else they themselves consisted of partially organized blood clot, for a quantity of clot came away during the process of separation, the tumor itself being left unbroken. Part of the Fallopian tube was removed with the tumor. The ovary on that side was afterwards removed by itself.

On the left side the tube was found distended with fluid, its fimbriae having become agglutinated so that it terminated in a blind end. It was removed. A cyst about as large as a hazel nut on the left ovary was also removed, but the ovary left in situ. The abdominal incision was closed without drainage.

The Specimen.

The tumor, which was rather larger than a goose egg, seemed to consist of organized clot. On cutting into it, some clear fluid escaped, and a cavity, about one inch in diameter, was found a little to one side of its centre. The cavity was lined with a smooth, shining membrane (arunion?), by a prolongation of which it held suspended within itself an oval, pink, fleshy body about three quarters of an inch in length. This was evidently the foetus but it had perished before any distinctive members had developed.

Post-operative Condition.

The subsequent history is of no special interest. Up to the time of writing—the seventh day after operation—the temperature had been up only to 100.3°. In all other respects she was making excellent progress towards recovery.

RELATIONS OF HYPERCHLORHYDRIA TO "BILIOUS ATTACKS," SOME FORMS OF ECZEMA, GOUT, AND MUSCULAR RHEUMATISM.—PRELIMINARY REPORT.*

BY GRAHAM CHAMBERS, B.A., M.B., TORONTO.

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HYPERACIDITY of the stomach is a common disturbance of secretion. The frequency of its occurrence is very difficult to determine, as there is no doubt that a moderate excessive secretion of hydrochloric acid may take place without producing subjective symptoms. I have on several occasions examined the gastric contents of patients with apparently normal digestion and found excess of hydrochloric acid, although in some of them there was a history of "bilious attacks," which were probably attacks of acute hyperacidity. It seems to me, therefore, that the gastric distress which is present in cases of hyperacidity is more or less due to the hyperesthesia of the mucous membrane of the stomach as well as to the excessive acid contents. This opinion is supported by the fact that in many cases of hyperchlorhydria pain comes on in a few minutes after the ingestion of food of any form. The commingling of these two neuroses—hyperchlorhydria and hyperesthesia gastrica—makes an investigation into the relations of the former to "bilious attacks," eczema, muscular rheumatism and gout a very difficult one, as I can not help but think that a general irritable condition of the gastric nerves must produce some changes in the sympathetic and cerebrospinal centers, which would no doubt lead or tend to lead to diseases in other organs. The investigation is also difficult because even if we find hyperchlorhydria associated with diseases of some other organ we have still to determine which was diseased primarily, or whether both pathologic conditions were not secondary to a disease in some other organ of the body, such as uremia, uraemia, nicotin poisoning, neurasthenia, etc.

My attention was first called to the subject about two years ago. I observed the internal treatment, both dietetic and medicinal, which I was accustomed to use in cases of hyperchlorhydria, was approximately the same as that which I was using in some forms of acute eczema and in both cases it gave very satisfactory results. I then determined to investigate the relations of these two diseases and latterly I have intended the research to the whole subject-matter of my paper.

Before I give results of my observations, I wish to discuss and offer some suggestions as to how hyperchlorhydria may cause disease in other

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organs of the body. We know that the amount of blood in the portal system increases during the process of digestion. I think I am safe in stating that the more active the secretion of the stomach and intestines the greater the inflow of blood to the gastro-intestinal area. All the blood which enters the portal system must pass through the liver and hence the hyperemia of the stomach which occurs in hyperchlorhydria would tend to produce active congestion of the liver. The same pathologic condition might also be produced by the absorption of the toxic substances, the products of the disturbed digestion, produced by the hyperchlorhydria. Thus we know that an excessive acid secretion interferes with the digestion of starch and does not interfere with at least some form of fermentation. I have frequently observed considerable quantity of yeasts in gastric contents with normal hydrochloric acidity or even hyperacidity. I do not think that the secretion of hydrochloric acid bore any causal relation to the presence of yeast, as the growth of the latter no doubt resulted from the retention of food. If yeast can grow in the presence of HCl, then it is probable that the latter will not have any deterrent action affecting the growth of some other forms of germs in presence of a suitable pabulum, and in all cases substances with variable degrees of toxicity would be produced and gain admittance to the portal circulation. Fermentation and putrefaction in the intestines are of frequent occurrence in cases of hyperchlorhydria and probably result from the inflowing of the highly acid chyme containing large quantities of unchanged starch. The toxic substance thus produced would also be carried to the liver. We should also remember that these poisonous chemical bodies may not only cause active congestion of the liver but, changed or unchanged in constitution, pass on into the general circulation to produce disease in other organs. If active congestion of the liver results from the absorption of toxic substance from the stomach and intestines as well as from an excessive inflow of blood to the portal circulation, we have still to discuss the effects of pathologic hyperemia of the liver on the system in general. We know that the liver has varied and complex functions. It is at the same time a digestive, an excretory and assimilative organ, and it would be quite natural for these functions to be disturbed by an excessive inflow of blood laden with toxic substances or even with an excess of food products. Defective metabolism might lead to an excess of urates in the blood and I believe that this is the case in hyperchlorhydria.

HYPERCHLORHYDRIA AND "BILIOUS ATTACKS."

When a patient complains of such subjective symptoms as headache, nausea, pain and discomfort in the region of the stomach, acid eructations,

bitter taste in the mouth, disinclination to work, the diagnosis of bilious attacks is frequently made, particularly if the symptoms follow excessive eating or drinking. According to my experience, these attacks are very frequent in cases of chronic hyperchlorhydria, although they are not infrequent in patients who do not give a history of chronic indigestion. With the object of determining the activity of the secretion of HCl in this condition I produced emesis in a patient with the above symptoms one hour and a half after partaking of a breakfast of three pieces of toast and a cup of coffee and examined the vomit. The total acidity and free HCl were 72 and 32 respectively, showing the presence of hyperchlorhydria. The patient had suffered from severe similar attacks previously, but they were of short duration, and in the intervals he had fairly good digestion. I think, therefore, that this was a case of acute hyperchlorhydria due to irritation of food which he had eaten a day or two previously, or an exacerbation of a mild form of hyperchlorhydria.

RELATIONS OF HYPERCHLORHYDRIA AND SOME FORMS OF ECZEMA.

That hyperacidity of the stomach bears some casual relation to some types of eczema I have no doubt. I am equally confident that there are cases of eczema occurring in persons with normal digestions. According to my experience symptoms of indigestion are of frequent occurrence in eczema, and are usually of the character that indicates hyperchlorhydria. In addition, I have examined the gastric contents of six cases of eczema with symptoms of dyspepsia; in five of these there was an excess of HCl in the gastric contents, the remaining case having normal acidity. Moreover, the internal treatment of acute irritable eczema which usually gives me the best results is about the same as that which I find most successful in cases of hyperchlorhydria.

I am unable to say in what manner the eczema is produced by the hyperchlorhydria, but I have some data which point to an excess of uric acid in with blood as the direct causative agent, and I have suggested in a previous part of my paper that the hyperchlorhydria may be the cause of the uraemia. However, I shall content myself for the present by reporting short clinical histories of some cases in practice which appear to indicate a relationship between these diseases.

Case 1.—H. M., aged 42, market gardener, consulted me in the spring of 1900 on account of an eruption on his face, forearms, backs of hands, and fingers. His previous health had been fairly good, although he had suffered considerably from indigestion for two years before he came to me. He complained of heartburn, heaviness and slight pain after eating. His tongue was heavily coated and his bowels were constipated. The appetite was fairly good. The eruption on account of which he sought

advice began two weeks previously on the backs of the hands: it then extended to the fingers and forearms, and lastly to the face. The rash had all the characters of acute vesicular eczema. I gave the patient a test breakfast and an analysis of the gastric contents revealed the presence of hyperchlorhydria. The patient was treated as follows: a mixture of black wash and calamin lotion was applied to the eczematous patches and the diet and internal medicine were the same as those indicated in hyperchlorhydria. Under this treatment he made a rapid and complete recovery from both the eczema and indigestion.

Case 2.—A. B., physician, for twenty years has had eczema and for as long as he can remember has suffered at times from indigestion. The eczema began on the scalp and those parts of the face covered with beard. The first attack extended to nearly every part of the surface of body. The eczematous patches were red and scaling, and occasionally moist. When he was a boy if he ate pickles, lemons, or other acid substances he suffered from heartburn, but of late years the indigestion has been at times much more severe in character. When I examined the patient last autumn, I found that the scalp, neck, trunk, and popliteal spaces were the seats of the eczematous patches. A few of the diseased areas were moist, but most of them were dry and scaly. The patches on the trunk were of various sizes with well-defined borders and had all the objective signs of seborrheic eczema or seborrhea corporis, but the subjective symptoms were somewhat more severe than those which are generally present in cases of seborrheic eczema.

As the patient was suffering considerably from indigestion I gave him a test breakfast and analyzed the gastric contents. The total acidity and free HCl were 120 and 73 respectively; mucus slightly increased; digestion of starch very poor. The patient was therefore given an internal treatment suitable for hyperchlorhydria and an external treatment suitable for seborrheic eczema. We found that the lesions were very irritable. A mild resorcin and sulphur ointment, usually so effective in seborrheic eczema, was not tolerated: but an ointment containing 8 grains of ammoniated mercury and one drachm of zinc oxid to an ounce of cold cream appeared to be soothing to the affected parts. Under this treatment a rapid improvement in the condition of the patient took place and two months later the rash had completely disappeared. I am of the opinion, therefore, that this was a case of seborrheic eczema aggravated by the irritable condition of the stomach.

Case 3.—S. W., male, aged 27, came to see me on June 10, 1901. He told me that he had suffered from eczema of the face for over two years. On inquiring I also ascertained that he frequently suffered from heartburn, pain after eating, belching and other symptoms of indigestion. His

face and ears were nearly covered with red scaly patches and his left cheek was considerably swollen. He also suffered from seborrhea of the scalp and alopecia furfuracea. I considered this a case of seborrheic eczema aggravated by hyperchlorhydria and prescribed accordingly. The rapid disappearance of the edema and the marked improvement in the scaly patches appear to support my diagnosis.

Case 4.—A woman, aged 50, came to see me in December, 1900, complaining of an eruption on the backs of her hands. She was full-blooded and had had her menopause about three years previously. She said that she had had indigestion for years, but the symptoms, discomfort after eating, belching, acid eructations, did not worry her very much as her appetite was fair and her general health was good. An examination of the lesions convinced me that it was a case of acute weeping eczema, and analysis of the gastric contents revealed the presence of hyperchlorhydria. The stomach was not displaced. I estimated the quantity of uric acid passed in a day to be 12.5 grains. I tried Garrod's test for uric acid in the blood and obtained a positive result.

The treatment of this patient was very similar to Case 1. A mixture of black wash and calamin lotion was at first applied to hands. When the parts became dry I used Lassar's paste. Internally I gave an alkaline mixture and a light non-irritating diet.

Case 5.—A. T., female, aged 40, came to my skin clinic at St. Michael's Hospital, June 5. She complained of an eruption on her thighs and face. She stated that the rash began on her thighs two years previously and about the same time she also began to suffer from indigestion—pain after eating, acid eructations, etc. Her digestion had improved of late, but the eruption was still on her thighs and had recently extended to her face.

An examination of the patient revealed the presence of scaly, eczematous patches on the thighs and an edematous erythematous eczema on the face. The blood was tested for uric acid by means of the thread-test and a marked deposit of uric acid crystals was obtained. The patient was given a mixture of potassium bicarbonate, sodium salicylate, tincture of nux vomica and fluid extract of cascara sagrada aromatica before meals and a diet of bread, butter, milk and rice. In five days the eczema had completely disappeared from her face and in two weeks had nearly disappeared from her thighs. I then ordered a weak tar ointment, which in a few days effected a cure.

RELATIONS OF HYPERCHLORHYDRIA AND GOUT.

Disorders of the digestive system are of frequent occurrence in gout. All writers on the subject agree that excessive eating and drinking are

important etiologic factors. They also agree that gout frequently gives rise to indigestion. "Acidity" is a common symptom in gouty subjects, and it has hitherto been held that the acid in the gastric contents was usually due to organic acids and not to hydrochloric acid. I believe that a thorough investigation of the subject would prove that this opinion is incorrect. We know that a similar erroneous idea was until recently held with regard to all cases of gastric indigestion. Deficiency and not excess of gastric secretion was said to be usually present in cases of dyspepsia. Even so distinguished a writer as Lauder Brunton, in his article in Clifford Allbutt's "System of Medicine," holds the same view. I know that this opinion is incorrect with regard to the dyspeptics in Toronto. During the last three years I must have examined the gastric contents of at least 300 patients and hyperchlorhydria was much more frequently present than hypochlorhydria.

The investigation of the relations of hyperchlorhydria to gout is somewhat difficult in this country, as according to my experience podagra is uncommon, while irregular gout is very common, but difficult to diagnose, particularly when not preceded by a history of gout in the foot. I have only examined the gastric contents of one patient with a history of regular gout, and he had marked hyperchlorhydria; but the subjective symptoms, referred to the stomach, which have been described to me by gouty patients, and which are generally held to be characteristic of the disease, are very similar to those of hyperchlorhydria. Again the etiologies resemble each other in some particulars. We know that excessive eating and daily use of alcoholic liquors in those who lead sedentary lives dispose to gout and these are the same habits which are active agents in the production of hyperchlorhydria and hyperesthetic gastritis. It seems to me, therefore, that the relation between the two diseases is a subject worthy of investigation. If uratemia is shown to be present in cases of hyperchlorhydria then at least one important factor in the etiology of gout will have been determined.

RELATION OF HYPERCHLORHYDRIA AND MUSCULAR RHEUMATISM.

We know very little about the etiology of muscular rheumatism. Exposure to cold is no doubt a contributing factor. Clinical experience teaches us that muscular rheumatism and gout are in some way related. It is probable, therefore, that patients with muscular rheumatism may suffer from a mild degree of uratemia.

In regard to relations of hyperchlorhydria and muscular rheumatism, I have observed that they are frequently associated, but whether the muscular rheumatism is the result of the hyperchlorhydria, I am at the present unable to say.

THE USE OF MASSAGE, EARLY MOVEMENTS, AND POSTURE IN THE TREATMENT OF RECENT FRACTURES.*

BY DR. SIR WILLIAM H. BENNETT, F. R. C. S. (Eng.)

A PROLONGED experience of the use of the combined methods of massage, early movements, and rational posture in the treatment of ordinary fractures coming under notice almost daily in hospital work, leads the author to the following conclusions :

1. When managed with ordinary discretion and with average dexterity the result of the method is undoubtedly advantageous, inasmuch as the time elapsing before the patient is able to resume his ordinary vocation is diminished by at least one-third, partly by the increased rapidity of union which ensues and to a great extent by the avoidance of the waste of time which occurs in correcting the stiffness and pain which so often follow upon the discontinuance of splints, in the majority of cases treated by means of the classical method of prolonged splinting, etc.

2. The advantages resulting from early passive movements—an essential precursor of which is massage—are especially noteworthy, a fact which was fully elicited in an inquiry made by the present writer in connection with a communication read at the meeting of the British Medical Association at Ipswich in 1900, the evidence obtained proving conclusively that early passive movements is followed by a correspondingly early return in the ordinary vocation of the patient.

3. The benefit of the method is remarkably demonstrated in fractures in which the chances of union are practically *nil*—*e. g.* intra-capsular fracture of the neck of the thigh-bone—the indications being to obtain the best use in the damaged limb by insuring free movement and by preventing the wasting of muscles concerned ; in such cases massage and passive movements are indicated at once.

4. The danger of thrombosis and embolism feared by some surgeons does not exist more than in fractures treated by prolonged splinting. Cases of embolism may have occurred in the course of treatment upon the lines under consideration, but the writer, whose experience of the method is probably larger than that of any other surgeon in this country, [England] has met with no such case, although he has seen three instances of embolism (one fatal) in fractures managed by prolonged splinting. Thrombosis and embolism will from time to time occur in fractures however treated, a fact of which any surgeon of large experience must be painfully aware.

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5. The method is not suited to those who lack discretion or who are defective in dexterity—a remark which applies with equal force to the majority of surgical methods; to such the classical treatment by prolonged splinting, whatever its disadvantages may be, is better adapted.

6. The principal disabilities attaching to the union of fractures in faulty positions, unless the displacement be gross or of the rotary kind are avoidable by the use of massage and early movements, by which adhesions around the fracture are avoided.

7. The method is not to be regarded as a substitute for treatment by splints on the one hand or by operative measures on the other, but should be used as a rational adjunct to each.

PRACTICAL SUGGESTIONS AS TO DIET AND TREATMENT OF GASTRIC FERMENTATION.*

ELSNER, of Syracuse, N. Y., states in the *International Medical Magazine* for July, 1901, that the larger number of cases of fermentation with gastric catarrh are due to misuse or abuse of the stomach and associated organs of digestion. No treatment can be efficacious which does not emphasize the prime importance of living under proper hygienic conditions with the regulation of the diet, interdicting spirits of all kinds including malt liquors; also change of scene to a climate where the patient finds it possible to exercise freely in the open air, where he engages, if able, in out-of-door sports. Unless there are contraindications, baths are to be taken daily. The bath, though the patient be plethoric, without arteriosclerosis, may be used to stimulate the "skin heart," thus relieving the patient by eliminating worn out material and stimulating circulation. In many of these cases the gastric catarrh is materially aggravated by a cardiac insufficiency, due to a sluggish and poorly nourished myocardium. The temperature of the bath must be regulated by the idiosyncrasies and condition of the patient. Living under such changed and favorable conditions, with a determination on the part of the patient to assist (for these unfortunates know their weaknesses), will be sufficient, without the aid of many drugs to effect a cure, if the mucosa and submucous tissues are not yet materially changed. Dr. Elsner's preference, if drugs are used, is for the bitter tonics, with a full dose of Carlsbad salt early in the morning. The intestinal tract must be kept open, for daily movements are necessary.

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Lavage is always used when there is free morning emesis of mucous or where diet and the above suggestions fail to relieve. The intragastric spray is rarely needed, though occasionally a weak nitrate of silver solution (1:5000) has seemed to improve the symptoms in cases with thickened mucosa. The menthol spray has been used for its sedative effect, where vomiting and pyrosis were annoying and rebellious.

Intragastric electricity has been disappointing. When it has proved of value the benefit has been considered due to psychic effect.

The author has used both galvanism and faradism—the latter oftener than the former. Faradism with high tension, long, fine wire, and rapid interruptions.

So-called antiseptic drugs without strict attention to diet and hygiene have given only indifferent results. The author's preference remains for the bismuth salts with benzonaphthol. With these he always gives small doses of belladonna and strychnine, or nux vomica.

Favorite formulæ are :

℞ Bismuth subnitrat̄is, 0.3 ;
 Bismuth salicylat̄is, 0.3 ;
 Pulv. ipecacuanhæ, 0.01 ;
 Benzonaphthol, 0.3.

S.: One such powder directly after each meal.

Or,

℞ Tinct. belladonnæ, 5.0 ;
 Tinct. capsici, 1.5 ;
 Tinct. gentian comp., 32.0 ;
 Aquæ puræ, q. s. ad 128.0.

The diet during early days of treatment : Interdict starches, sweets and cereals. Equal parts of milk with lime water in small quantities given at intervals of two hours, if stomach is irritable. Barley water salted : animal broths and broiled scraped beef may be added after slight improvement ; overbaked toast with liquids taken with spoon. Later a mixed diet, including beef once daily, also eggs, milk, vegetables, Phillip's cocoa, coffee, and fruit for breakfast. Every case is a separate study. The outlining of a suitable diet requires time, patience, and considerable experimentation. There are no set rules.

Believing that the majority of cases of fermentation with gastric catarrh are due ultimately to motor insufficiency, active exercise is advised : as horseback riding, golfing, cycling, and walking, according to the age and condition of the individual patient. Massage and " Zimmer Gymnastik " after the method of Schreiber lead to material improvement. The nervous symptoms, often in the ascendancy, can be relieved by giv-

ing the patient agreeable occupation. Make the heart light by keeping the brain active. For well selected cases, where fermentation is excessive, belching of gas annoying, constipation depressing with pressure symptoms, the following formula is suggested :

℞ Strychnia sulphat, 0.06 ;
 Fl. extract belladonnæ, 0.6 .
 Aquæ lauricerasi, 50.0 ;
 Tinct. gelsemii, 12.0 ;
 Aquæ puræ, ad 128.0 ;
 S. ; Teaspoonful before each meal.

THE PRESENT STATE OF OUR KNOWLEDGE OF AUTOINTOXICATION.*

By DR. JOSEPH KOVACS, Senior Assistant at the Principal Clinic of Budapest.

IT is generally known that Bouchard was the first to call the attention of physicians to the fact that under certain circumstances the urine contains some toxic constituents, and from this fact he has drawn the conclusion that these toxic matters must be circulated in the blood, where they are also formed. French and Italian physicians investigated the question with the greatest accuracy, and endeavoured to explain these phenomena on chemical grounds. This elucidated the fact that not only during the normal process of digestion, but also in certain pathological conditions, various chemical substances are formed in the stomach and intestines (phenol, streptotoxin, volatile fatty acids, alkapton), which bodies, when injected into the bloodstream of the animal experimented upon, gave rise to very striking and characteristic constitutional symptoms.

These phenomena are similar to those of poisoning, and, on account of the poison being in the organism itself, the group of symptoms thus arising received the name of "autointoxication."

Later on it was elucidated that the toxic matters which have such a deleterious effect upon the tissues of the organism, can be also formed in other parts of the organism. Especially is this true regarding the intermediary and final products of metabolism (aceton, diacetic acid, lactic acid, oxybutyric acid, and amylobutyric acid). The last-mentioned source of autointoxication, being formed by the metabolism going on in the tissues themselves, the pathological symptoms arising therefrom were given the

* *Medical Press and Circular.*

name *histogenetic* or *interstitial* autointoxication. This much therefore is certain that among the different phases of metabolism chemical substances are produced, which have a deleterious effect upon the organism by virtue of their chemical toxicity.

Now the only question remaining undecided is what may be the cause of the fact that the toxic materials, permanently present in the organism, are in one case active and in another absolutely inactive. The explanation may be: first, that these chemical products being very changeable, are decomposed, and later on unite with other products of metabolism and in such a way they are harmless; secondly, that the organism has under its command certain bodies that defend, it which hold the enemy in check, and so these poisons are eliminated from the organism.

It is evident, however, from the preceding that whilst demonstrating the chemical ground of autointoxication no light had been thrown on the dimly lighted territory of pathology.

In the first Internal Clinic of Budapest, Korányi Sandor initiated extensive investigations for the determination of the osmotic relation of sick and healthy men (1893). From these investigations it became clear that the molecular concentration of the normal blood is strikingly constant (0.56), and so we were justified in supposing that the functions of single organs are best carried on by this physical state of the blood. On the contrary, it was evident that in diseases in the course of which auto-intoxication occurred in its most striking form, the osmotic pressure of the blood was increased to the highest point.

Particularly we found this great physiological alteration of blood in the various forms of nephritis, also in several cases in the course of the development of uræmia. Similar results have been afforded by investigations carried on on chlorotic patients. These led me to the conviction that the physical alteration of the blood of chlorotic patients was very closely related to that taking place in nephritis, and at the same time, under the influence of these diseases, symptoms very much resembling the *uraemic* signs of nephritis have set in. In a contribution, published at a corresponding period, I described the results of my investigation on this subject, calling attention to the fact that the characteristic symptoms of anæmia and chlorosis can be traced back to autointoxication.

On the other hand, nothing was more natural under such circumstances than to suppose that the autointoxication stands in a close relation to the changed physical alterations of the blood and of the juices of the organism, and acting on this supposition we have laid the foundation of the further study of autointoxication. For in order to decide

this question more accurately I made some further investigations, in which I took into consideration the osmotic relations as well. I injected the urine of chlorotics (having a low molecular concentration) and the urine of patients suffering from heart disease (possessing a high molecular concentration) into hares. Similarly I used in several cases hæmoglobi-nuric urine. With the urine of chlorotics I could not produce any abnormal symptoms on hares, but, on the contrary, with the urine of patients suffering from heart disease I observed the wellknown symptoms of autointoxication. Furthermore, it was striking that from hæmoglobi-nuric urine I succeeded more easily and rapidly in producing the symptoms of intoxication.

I am, therefore, justified in concluding from these experiments that the osmotic pressure undoubtedly has some connection with the urotoxicity, but I had to keep in view that other factors must also play some *role* in this matter. For instance, among the constituents of the hæmoglobinuric urine the potassium salts prevailed; therefore, I believe that these salts have a great influence upon the degree of urotoxicity. The results of my numerous investigations closely tallied with the experimental results Korányi Sandor attained on uræmic patients. In some of his cases too the osmotic pressure was proved to be very high, but there were also others that showed the reverse.

My investigations, with regard to urotoxicity, I had to then abandon owing to many calls on my time in other directions, but later on, in 1900, I again commenced to deal with this question. This time I could carry out my experiments far more easily. The starting-point of these last investigations was that there exists some connection between osmotic pressure and the urotoxicity of the urine. For my experience I used hares and mice; I injected the urine of pneumonic (in an unchanged condition) and the urine of pneumonics and others previously rendered isotonic, together with isotonic salt solution, and finally isotonic salt solution, together with unchanged pneumonic urine. By these experiments I hoped to be able to prove undoubtedly the efficacy or inefficacy of the osmotic pressure. The result attained on mice I cannot put forward as trustworthy, because most of the animals suffered severely from the injections, although this much is certain, that under the injections of salt solution none of the animals died, whilst fifteen to thirty minutes after the injection of unchanged urine of pneumonics all the animals died. It is important also to note that the urine of pneumonics after the crisis proved to be much more toxic than during the course of the illness.

The fluid injected into the animals was equal to a third part of their weight.

And now, after reviewing my experimental data, whilst searching for the active agents of urotoxicity, and supposing these urotoxic agents (evacuated in and extracted from the urine) to be circulating in tissue fluids, my conclusion is justified, that the osmotic pressure, as well as the chemical constitution of these agents have some influence upon the production of auto-intoxication. It must be remembered, however, that there are also other active agents, such as potassium salts, and no doubt others as yet unknown. Besides the supposition is that these agents can support each other in their effects; *my experimental data at least seem to prove this cooperation. It seems sure that each of the above-mentioned components aids in the production of auto-intoxication.* What cannot be demonstrated is what share they respectively take in the phenomenon.

The efficacy of the osmotic pressure is proved by the experimental fact that the red blood corpuscles seem to be extraordinarily sensitive to osmotic pressure.

I think the following case is a very instructive one, rendering good service in the explanation of this nebulous question.

Two months ago a patient was admitted into our hospital with the following symptoms:—On the first two days headache, uncontrollable vomiting, great prostration, the pupils were contracted and reacted very sluggishly; respiration normal; pulse beat 90; temperature tending to subnormal. Partly on account of these symptoms, partly by means of exclusion, we thought we had to deal with uræmia. The examination of the urine did not verify this supposition ($\frac{1}{2}$ per cent. albumen, kidney epithelium being present, but without cylinders). Examination of the blood demonstrated, that the freezing point had sunk to 0.72. Patient was soporous, and later on comatose. On a second examination of blood and urine the results were similar; therefore, we thought it necessary to administer an enema of physiological salt solution; this was followed by striking improvement, which lasted forty days; then periostitis has set in, and also pneumonia with endocarditis and fever (39 and 40° C.). During the feverish condition albuminuria was present just as at the time of the admission of the patient. Fourteen or fifteen days after the onset of the fever the patient died. The autopsy showed no nephritis, but parenchymatous degeneration of the kidney; evidently it was a case of *uræmic intoxication with an expressed clinical image, with uræmic blood without nephritis.* It is impossible not to observe here the connection between the high osmotic pressure and the expressed pathological image of auto-intoxication; and although this case cannot be used for the decision of the question as to whether the matters, kept back on account of the renal insufficiency, poisoned the organism by reason of their

osmototoxicity or by their chemical effect; yet the supposition can almost be excluded that chemical or biological toxins that had accumulated to an extent corresponding to this high molecular concentration, would be able to cause the intoxication of the organism. It can be more easily understood, that here not a single, but different protoplasmic poisons were acting, among which the excessive osmotic pressure must certainly have a certain role, and this can with facility be brought in accordance with the above-mentioned experimental facts.

Posner and Vertun sought the source of urotoxicity and autointoxication almost purely in the osmotic pressure, this being gathered from their communication published in 1890 in the *Berliner Klinische Wochenschrift*. The Paris School, and especially the pupils of Bouchard, described the result of their investigations in the same year, and they likewise apply the name of "l'osmototoxicité" to the toxic effect of the osmotic pressure.

The autointoxication, therefore, which during the last decade constituted the most diligently cultivated part of pathology started at first from our Clinic, and being carried on also at other clinics it gained a new foundation by showing the existence and action of autointoxication, without, however, the older hypotheses being cast off. There are in progress, however, still more recent investigations from which, as seems indicated, we can expect further light to be thrown on this very occult question: I mean the searching after toxic matter, which are the products of internal secretion.

TREATMENT OF ACUTE INSANITY IN GENERAL HOSPITALS.*

BY DANIEL R. BROWER, M.D., LL.D., OF CHICAGO, ILL.

AS we look back over the history of medicine, we marvel at the wonderful advancement in psychiatry. In nothing else has the century just closed shown such mighty strides, and it is with commendable pride that we, as Americans, can claim that here the insane were first elevated from the position of victims of diabolic possession to the dignity of sufferers from disease; that here their hospitalization first began. In the year 1752 Pennsylvania provided accommodations for the insane in a hospital where other patients were admitted, but to Virginia belongs the credit of having organized the first hospital for the insane, and I had the special privilege of taking a somewhat active part in the celebration of its centennial, November 10, 1873.

* American Medicine.

It was twenty years after this Virginia hospital was established that Philip Pinel became physician to the insane of Bicetre, and, striking off their chains, placed them under hospital care, and twenty-three years afterwards William Tuke opened the York Retreat.

The progress in these early days was very slow. The Eastern Lunatic Asylum of Virginia did not become a hospital until Dr. J. M. Galt became its superintendent in the year 1841. In France so late as 1834 the insane were incarcerated in cages.

The great work cannot stop; advancement must continue. The foundations were laid by Pinel, Tuke, Esquirol, Chiarruggi and Galt, and upon these foundations a mighty structure, as is the hospital for the insane of to-day, has been built. But it needs much to make it a perfect edifice, and we, their successors, must see that the construction is continued on scientific lines, and in harmony with the spirit of the age. As commendable as are the methods of yesterday and to-day, they must be improved, for progress is the order everywhere in medicine and surgery.

The defects in our palatial public institutions of to-day are :

(1) That they are most of them too large, considering that they contain both acute and chronic cases. It is physically impossible for the medical superintendent to individualize the work; he must intrust a great part of the medical care and treatment to his subordinates.

(2) They are too far from the homes of many of the patients.

(3) The admission to these hospitals is by cumbersome, antiquated and unscientific methods, often subjecting the patient to a severe ordeal that sometimes does serious damage, physically and mentally, and diminishes proportionately their chances of recovery.

(4) In some of the commonwealths of this great nation, noticeably in the State of Illinois, these noble institutions have been degraded to the position of political machines, their organization used to carry elections, to defray campaign expenses, and to reward those who have rendered some special party service.

In the language of Dr. George F. Keen, "The politician threatens to strangle scientific investigation, dethrone official integrity and dwarf the efforts of a generous and sympathetic public when it honestly strives to alleviate the distress of its fellowmen."

In the presence of these objections, delay is frequently experienced in inducing the family to place the unfortunate member promptly under hospital treatment, and thereby the prognosis is made unfavorable.

Many of the acute cases can be well cared for in the general hospital. For twenty years past I have had under care and treatment, in a general hospital, cases of acute insanity, and a reasonable number recover.

Since the organization of the Neurological Clinic at the Cook County Hospital, five years ago, scarcely a clinic has been held without one or more cases of insanity being shown, drawn from the general wards of the hospital. The work that is being done in these wards can be done in the wards of any one of the hospitals that are now to be found in every enterprising city all over the country. To do it will require some financial support from the counties, but the county authorities can well afford to be liberal in the effort of dealing with insanity in its earliest stages, when the chances of cure are so much greater. The New York Lunacy Commission estimates that the ultimate average charge for every patient admitted to a state hospital who is not discharged recovered or improved, amounts to about \$6,000.

The admission for the insane to these wards of the general hospital should be free as for other patients. There is no scientific reason why a case of brain disease causing insanity should be compelled to pass through the court, and a disease of the same organ producing hemiplegia should not. Of course, I know that there are in some cases important property interests involved. So there may be in a hemiplegia with aphasia, and, as a rule, these interests can wait, for, in my judgment, no patient should be retained in the general hospital beyond six months, unless well on the road to recovery, and if at the expiration of that time the patient is not improved, he can be sent to the special hospital by the ordinary court proceeding.

I think care should be exercised in the selection of cases for general hospital treatment; indeed, I would limit it to the primary curable conditions. Mania, melancholia, and stuporous insanity; the *secondary insanity*, the *psychic degeneracies*, and the *arrests of development* should be excluded.

I am very grateful to have received yesterday from Dr. Herdman, the distinguished Professor of Nervous diseases of the University of Michigan, a copy of an act that became a law in Michigan, May 25, 1901: "To provide for the construction and equipping of a psychopathic ward upon the hospital grounds of the University of Michigan, and to appropriate the sum of \$50,000 therefor." Here is a step in the right direction, and we hope that this influential and scientific association may endorse, and by their mighty power initiate all over the land such an agency for the cure of insanity.

CURRENT MEDICAL LITERATURE.

Conducted by A. J. McKenzie B. A., M. B.

TREATMENT OF NEURASTHENIA.

IN the section of Psychological Medicine of the 69th Annual Meeting of the British Medical Association, A. T. Schofield M.D., Physician to the Freidenheim Hospital, London discussed "Some conditions of success in the treatment of Neurasthenia" (British Medical Journal, October 26th, p. 1236.) While recognizing the distinction ordinarily and correctly made between true neurasthenia, nerve irritation or exhaustion, dependent upon external causes or physical lesions within, and neuromimesis with its distinct mental element, the writer discusses the treatment of functional nerve cases generally under the headings, personality, diagnosis, treatment and details.

Dr. Schofield believes firmly in the existence of the sub-conscious mind, and ascribes neuromimetic diseases to perversions of this sub-conscious mind, bridging over as it does the gap between the conscious mind, whose derangements cause the mental obliquities or insanity and which is a necessary element in malingering, and on the other hand, the nervous system with the nervous diseases having a true physical basis.

The personality of the physician should always be marked by sympathy, patience, perseverance, firmness and tact. Sympathy need not be manifest for "the quick unconscious relation of one mind to another when in harmony" given rise to a real sympathy which is always felt when it exists in the physician for the sufferer, giving a confidence in his skill and a restful feeling of being understood that is almost an assurance of a cure. It is necessary to this mental condition in the physician that he dismiss absolutely the idea of malingering, and remember that a disease of the imagination is not an imaginary disease, for even pain in its last analysis is a mental rather than a physical fact. Patience depends on sympathy and presupposes an appreciation of the suffering caused by these functional nerve diseases, while perseverance means patience in the face of the difficulties resulting from the despondence of the patient and the scepticism of relatives: but it is repaid by the confidence inspired in the mind of the patient. Intelligent firmness in essentials, flexibility and leniency in unimportant matters means the possession of tact, itself a most important element in any course of treatment. "Tact is the unconscious mental touch, as necessary in these conditions as the educated touch to

the surgeon in others." "Symptoms must be regarded in the light of their importance to the patient, honesty in considering only the patient's interests must be the guide of every action, and care must be taken that apparently insignificant details do not invalidate the general result.

As for diagnosis we first decide whether mind or body plays the chief part in the disease; then following Charcot's distinction we differentiate diseases of the conscious from those of the unconscious mind, and before deciding definitely on treatment we must carefully eliminate such as are not in possession of a sound conscious mind, for where mental balance is disturbed no rapid or permanent cure can be predicted and many forms of treatment are contra-indicated. Having gone so far the division into neurasthenic and neuromimetic conditions remains and is often rendered difficult by the fact that they may be co-existent or associated with real physical lesions. In pure neurasthenia we must differentiate nerve exhaustion and nerve irritation.

The best method of cure will be that attended with the least trouble and expense for the patient, whether rest, change, drugs or other therapeutic agents are used; cast-iron rules should be avoided and the method adapted to the particular case. Tentative or experimental systems of treatment may be adopted but the aspect to the patient must be definite. Generally speaking, such cases cannot be treated successfully at home, so homes and nurses must be provided. The requirements of the former will be tact, patience and a suitability to the whimsical requirements of the patient, while the retreat chosen should be quiet, healthful, and with a dietary unlimited in range. Suggestion has its place but it is best used indirectly, that is through the medium of the remedial agents made use of by encouraging the patient and instilling worthy motives and so making the sub-conscious mind itself undo the mischief it has wrought.

A NEW OPERATION FOR HYDROCELE.

DR. LONGUET in "Le Progrès Medical" under the heading "Surgical Technique" describes an operative treatment for hydrocele, varicocele, and allied affections consisting in the so-called extra-serous transposition of the testicle and having as its salient features: 1st. The transposition of the testicle outside its serous sheath and its normal location. 2nd. In the utilization of this serous sheath to enclose the cord so that the tunica vaginalis becomes perifunicular rather than peritesticular. 3rd. The absence of the tendency to hæmorrhage as there is no sub-serous decortication. Five different forms of procedure have been used by this surgeon which are described as internal, external, high, low, and

trans-septal; of these the first is the most suitable for the treatment of hydrocele. A general anaesthetic is not required if the operator is facile and expeditious.

The procedure in the internal transposition is described in three stages. 1st. The opening of the tunica vaginalis for evacuation of the contents of the hydrocele—an incision about 4 to 5 centimetres long over the testicle. 2nd. The temporary luxation of the testicle and the ensheathing of the cord by a serous ring of which the secreting surface is turned towards the exterior and fixed by a suture overcast. 3rd. The transposition of the testicle replacing it in a cellular space enlarged artificially to receive it and finally the suture of the cutaneous wound.

The indications for this operation according to the author, are hydrocele, hematocele, testicular ectopia and varicocele; he quotes in support of it seventy-five successful operations for the first class of case. Three cases of ectopia of the testicle were unsuccessful on account of shortness of the cord, this he regards as a contra-indication; three operations for varicocele gave relief and a cure whose permanence will be decided by time.

POLITICAL ASSASSINS.

IN the Philadelphia Medical Journal, October 26th, Mills under the title "Political Assassinations in some of their relations to Psychiatry and Legal Medicine" makes an investigation of fifteen historical cases of political assassinations beginning with that of Henry III, of France, in 1589, up to the present, with particular reference to the recent crime in the United States. He divides the perpetrators of these deeds into four classes: (1) sane conspirators; (2) assassins clearly recognizable as insane; (3) degenerates who are not insane; and (4) degenerates of doubtful insanity, including among the first, Booth, who shot Lincoln, among the second, Guiteau, and in the third and fourth classes Charlotte Corday, Santo, the assassin of Carnot, and Bressi, who shot King Humbert.

The writer makes a clear distinction between degeneracy and insanity. The degenerate is one who has been reduced to a type lower than the standard normal individual and he generally bears certain bodily landmarks called stigmata, while on the mental side he evidences a general want of harmony between volition and instincts, and the varying stages of mental weakness down to idiocy. Insanity on the other hand should be diagnosed by a study of the physical state and the mental symptoms presented. Youthful degenerates later in life not infrequently become insane, with systematized delusions, still later passing into dementia, and in this connection it is interesting to note the immature years of the assassins here mentioned, ranging as they do from twenty to thirty-

five years with but one over forty; and in the older insanity was clearly marked.

Assassins clearly recognized as insane are frequently to be classed under the type 'paranoia political,' having as their distinctive feature a delusion of a mission, political social or religious, with a monomania of self-importance. The writer does not classify Czolgosz, but the inference is that he belongs to the class of degenerates and that though direct evidence of conspiracy has not been adduced he was doubtless the dupe, conscious or otherwise, of the leaders of the Anarchistic party.

AUTO-INTOXICATION IN EPILEPSY.

HEBOLD AND BRATZ have carried out a series of experiments in order to clear up the doubt which still exists with regard to the part played by auto-intoxication in the pathogenesis of epilepsy, and publish their results, together with some critical remarks in the *Deut. med. Woch.*, No. 36, 1901. They injected the urine and blood of epileptics into dogs and white mice. The dogs received from 2 to 10 c.cm. of urine obtained (1) immediately after the epileptic fit, and (2) one hour after the fit. The patients from whom the urine was obtained were selected because they were suffering from forms of epilepsy which strongly suggested a gastro-intestinal or other forms of auto-intoxication. In no case were convulsions produced in the dog. The blood was obtained by wet cupping and by venesection, and was defibrinated at once, so that within 5 or 10 minutes 10 c.cm. could be injected subcutaneously. In one case the motor centres had been destroyed, so that a scar taking its place the dog was in a favorable condition for the onset of an epileptic attack. All these experiments, too, were negative. Two animals, a dog and a bitch, were fed on milk and alcohol in increasing doses, and kept in one kennel. The bitch gave birth after eleven weeks to a litter of puppies, who all appeared healthy, and these puppies were treated by subcutaneous injections of urine and blood, but without effect. They aimed at producing an alcoholic hereditary taint. They had as little success with white mice, although they found that mice were more suitable experiment animals, since, by way of a control experiment, they produced convulsions which preceded coma and death by injections of carbaminat of ammonia. One case only produced anything approaching a positive result. An elderly spinster, who suffered from occasional epileptic attacks, was suffering from migraine, furred tongue, constipation, and vomiting, after a pause of $1\frac{1}{2}$ year in her fits. They applied a wet cup, and the blood obtained thus, when injected into a mouse in doses of 1.6 c.cm. produced twitchings after $\frac{1}{4}$ hour. These twitchings reappeared after 1 hour

and the mouse died 30 hours after the injection. A second mouse died after 18 hours, but without twitchings or convulsions. They conclude that their experiments fail to show any connection between the toxicity of the juices of the body and the occurrence of epilepsy, and although they do not put aside the possibility that certain forms of epilepsy may be due to auto-intoxication, they cannot support this theory until future experiments give them different results. They detail all the important self-poisoning theories, from Alt's simple explanation of epilepsy as a gastro-intestinal disturbance producing a poison which irritates the brain cells, to Binswanger and Jolly's theory of a secondary "toxæmic epilepsy."—*British Medical Journal*.

NOURISHMENT BY TRANSFUSED BLOOD.

BIER (Munch. Med. Woch. No. 15, 1901), has made a series of experiments to determine the value of transfusion of blood as a therapeutic agent. He used defibrinated sheep's blood, injecting it into a superficial vein in amounts up to 20 c.c. By agglutination and solution of the foreign corpuscles transitory hyperæmias and serous exudations appeared, resulting in some cases in dyspnoea, cough, fever and albuminuria, to be followed by signs of increased metabolism as hunger, thirst, etc. He used this method of treatment in seven cases of tuberculosis and these exhibited a markedly favorable result in increased weight, improvement in appetite and in strength and general condition.

ROYAL ARMY MEDICAL CORPS.

THE October number of the Practitioner, London, Eng., has a pungent editorial criticism of Mr. Broderick's scheme for the re-organization of the Royal Army Medical Corps, the text of which may be found in the *British Medical Journal*, October 5th, p. 1025. It is pointed out that while the central idea in the scheme is the creation of an Advisory Board to advise the Secretary of State and supervise the R. A. M. C., theoretically an excellent addition, their value is nullified by the fact that the Secretary of State need not take their advice. "The Board in fact will be in exactly the same position as the Chorus in the old Greek tragedies which consisted of a group of respectable elderly gentlemen, who benevolently gave counsel and "presented Reports" to Kings and Queens, and if this advice was distasteful the Chorus were told to keep it to themselves. The Monarch might be represented as saying:—"What right have you with such advice to bore us?" The Board replies, "Sir, I'm the Chorus." Only to be crushed by the reply, "Sir, you're very indecorous."

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EDITORIAL.

AN IMPORTANT DECISION.

A REMARKABLE decision, involving the rights of medical practitioners to collect fees for professional services rendered hospital patients, was rendered by Judge Morson in Toronto recently. The case was one wherein a leading surgeon of the city sued to recover \$33 in payment for an operation for appendicitis performed in St. Michael's Hospital. The patient, who was described in court "as a robust, rosy-looking fellow, of fine physique," was engaged with his brother as a farm laborer. He was restored to perfect health as the result of the operation but felt under no obligation to pay for the treatment. In giving his decision in favor of the patient the Judge delivered himself as follows in reference to hospital attendance:—"The public has a right to assume that the treatment is free. These institutions are supported by public charity, donations, grants, etc., and therefore the presumption is, at least so far as the public wards are concerned, that all treatment is to be free. The *right* to pay depending upon *ability* to pay is not recognized in law. If patients have to pay then it is not a public institution. Doctors on the staff cannot recover unless they first notify the patient of the rules and regulations of the hospital."

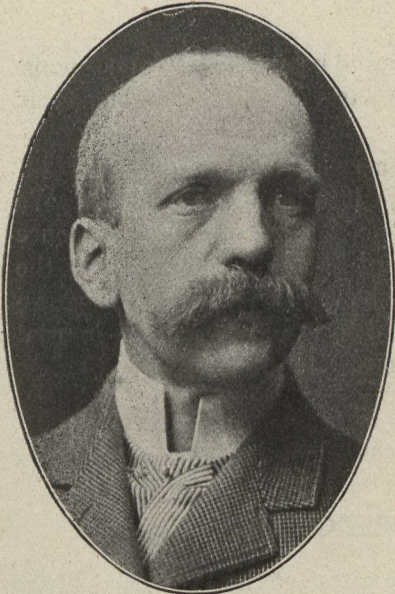
According to this ruling of the Court, the way is opened for hospital abuse to even a greater extent than has previously obtained. A wealthy patient, if he is sufficiently mean, may enter a public ward and obtain free medical service.

The remedy, however, lies in the hands of the profession and it remains to be seen if they will continue to be imposed upon. Public hospitals could not exist without the disinterested support which they receive from the medical staff and the latter would certainly be justified in standing together and refusing their services to any institution that will countenance such abuses. If they fail to do so they are false to themselves, the interests of the profession and to the community at large. The medical

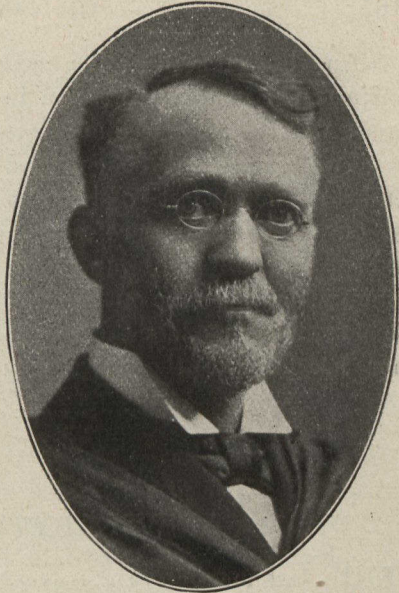
profession assumes a large, and many believe, an unnecessary responsibility, in giving gratuitous services to the poor, but when those who are able to pay can *legally* obtain free treatment in the same way, it is certainly time that some concerted action was taken. When the State is so willing to spend public funds in establishing laboratories where free examinations are made, isolation hospitals for the free treatment of contagious diseases, to vaccinate free of charge, to provide accommodation in our general hospitals for the free treatment of all persons, entirely without reference to the ability of those seeking these services to pay for them, to the detriment of the interests of the medical profession, it is surely time that medical men should stand up for their rights and insist that provision be made from the public funds to pay for medical attendance not only on paupers, but on those able to pay, whom the present system is attempting to pauperize. When the public begin to claim *as a right* the charitable medical services that have been so freely rendered, it is in order for doctors to consider why they should bear without recompense or thanks the burden of treating paupers, and others willing to be classed as paupers, in order to escape their financial obligations.

THE CANADA LANCET.

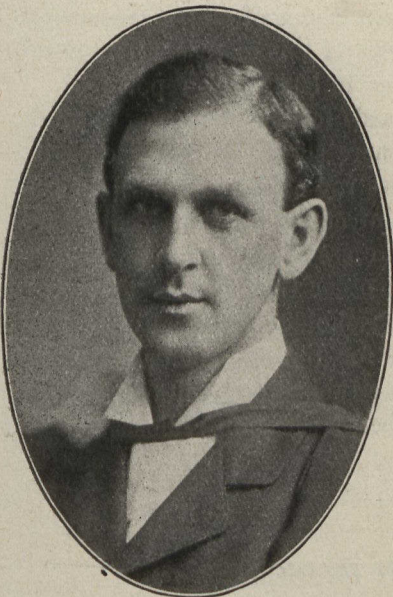
WE have pleasure in announcing to our readers that THE CANADA LANCET is now under the control of The Ontario Publishing Company—the publishers of Canada's only literary journal, *The Canadian Magazine*. The management have instituted a progressive policy, having in view the issuing of a journal that will creditably represent Canadian medicine in all its interests. The columns of THE LANCET will be open at all times to the publication of anything that has for its object the advancement of Canadian medicine and the good of the Canadian profession without reference to school affiliations, proprietary dictation or other local or personal interests. The journal will be devoted to the service of the medical profession in general, whose confidence it hopes to merit and whose hearty support it hopes to obtain. The management is absolutely free, and proposes to remain free, from the influence, dictation or control of manufacturing, advertising, and other commercial interests. It is confidently felt that the time in our national evolution has come when an independent medical journal, placed on the broadest basis possible, will be cordially received and supported by the profession.



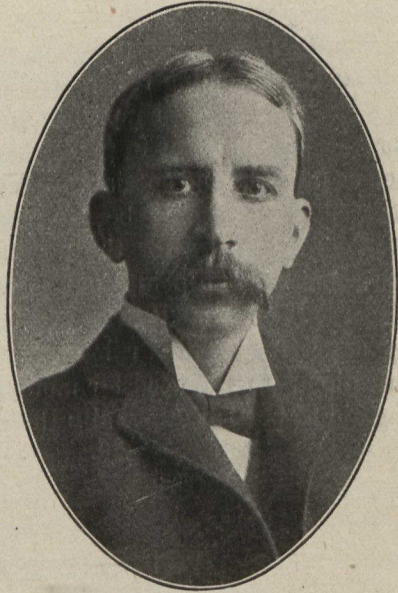
J. F. W. ROSS
President Toronto Clinical Society.



N. A. POWELL,
President Ontario Medical Association.



F. N. G. STARR,
President Toronto Medical Society.



R. D. RUDOLF,
President Toronto Pathological Society.

SOME NEWLY-ELECTED PRESIDENTS.

An editorial staff of live, active workers is being chosen from among leading men in the profession in various parts of the Dominion; their names will be announced at a later date.

The journal will be enlarged and otherwise improved and it is intended at the earliest possible date to make it original throughout. We ask our friends in the profession to watch us and give us their influence and support only in-so-far as we follow out faithfully and honestly the policy which we have outlined. We will be pleased to receive suggestions from our readers, the adoption of which would make the journal more acceptable to them or in any way increase its usefulness.

PREVENTION OF TUBERCULOSIS.

THE last meeting of the executive committee of the Provincial Board of Health dealt especially with the prevention of tuberculosis. Naturally Dr. Koch's recent paper at the London Congress was a theme for special consideration. Notwithstanding his views in reference to the non-communicability of bovine tuberculosis to the human subject, the Board very wisely, we think, urged the continuance of all the precautions previously recommended in the prophylaxis of this disease. The Board repeats the following recommendation given in last year's report:—

(1) The need of supplying isolated wards for con-sumptives in public institutions; (2) that in private families there should be as much isolation as possible, and special care taken to destroy expectorations; (3) that vacated rooms should be thoroughly disinfected; (4) that local boards should make rules for the notification of cases of consumption, while at the same time it points out it is not in order that houses should be placarded, but that Boards may assist householders, especially the poor, by supplying printed rules and directions for limiting the dangers from infection; (5) the need for municipalities establishing sanitarium for giving aid to persons, especially the poor, affected with tuberculosis.

NO BORDER-LINE IN MEDICINE.

THE following editorial comment in *The Philadelphia Medical Journal*, we are pleased to believe, expresses the good feeling of the medical profession in the United States towards the Canadian profession and

people, and we are pleased to publish it as an effectual antidote to an editorial in the *Detroit Medical Journal* which we commented upon in our October number.

“International prejudice is never more inappropriately shown or more ungraciously expressed than when it resents the good offices of foreign friends in a time of need. The fact that one of President McKinley’s nurses happened to be a citizen of Canada probably did not suggest in the remotest degree to the vast majority of American people a thought of criticism. The prejudice is too microscopically small to be worth even now a moment’s notice were it not that it unfortunately found expression in an American medical journal—the last place in which it should have been seen. We print elsewhere the dignified reply of the *CANADA LANCET*, and we assure our Canadian contemporary that we are in full accord with the sentiments which it has itself expressed. The American medical profession, moreover, does not regard the Canadian medical profession as “alien.” The science of medicine is too cosmopolitan, and the relations between the United States and Canada are too many and close, to tolerate the exhibition of such a petty sectional spirit—a spirit, however, which only harms him by whom it is expressed.”

MADE IN GERMANY

ANOTHER startling discovery is announced from the Fatherland. This time, Professor Frederick Loeffler proposes the injection of either mosquito poison or the blood of patients suffering from malaria as a cure for cancer. The observation that cancer is very infrequent in malarious regions in the tropics lead the professor to conclude that malarial poison must be antagonistic to the development of these tumors, hence his idea is heralded as an epoch-making discovery in the lay press. Probably the ten days’ wonder he has created will afford self-justification for the publication of such vaporings. Moreover, he has offered an opportunity for some one of his fellow-countrymen to come forward with an elaborate dissertation to show that Professor Loeffler was hasty and ill-considered in his conclusions and possibly, even to prove in passing, that malarial blood and mosquito poison really predispose to cancer. In the discussion that must necessarily follow who knows how many German savants may emerge from an obscurity that might otherwise have continued to envelop them and gain for a short period the public attention. If this end does not justify the means we fail to see why the

learned Professor did not remain silent until he was in possession of some experimental data to warrant him in placing his cure before the public. The publication of such hasty and unproven methods of treatment of pathological conditions in which the people at large take so much interest, followed as it almost invariably is by humiliating failure, discredits not only those immediately concerned, but, what is more unfortunate, brings undeserved odium on the profession in general. The Germans have been the greatest offenders in this respect for some time past and the notoriety which they are gaining will do much to undermine the credit and confidence which they deserve for many contributions of inestimable value to modern scientific medicine.

A LESSON TO CHRISTIAN SCIENTISTS.

SOME months ago, the death of a child while under the treatment of a Christian Scientist for diphtheria, was made a subject for investigation by a Coroner's Court in Toronto. The jury brought in a verdict condemning Christian Science and declaring the child's father culpably negligent in not having provided medical attendance. This led to a charge of manslaughter being laid against the father. The case came up for trial before Chief Justice Falconbridge, at the recent Court of Assizes in Toronto, and resulted in a verdict of guilty. His Lordship in charging the jury, held that an adult might use his judgment in having medical attendance, but that in the case of a child it was different. Here the law draws the line and steps in for the child's protection. As there was no question as to the good intentions and sincerity of the accused in this case, he was dismissed without further punishment. The verdict, however, cannot fail to have a salutary effect and will meet with general approval. While the mass of believers in Christian Science probably hold the doctrines in good faith, they are too often the mere dupes of schemers who exploit them for the basest mercenary objects. These professional, pray-for-hire healers are the real criminals who deserve punishment and for whom efficient legislation should be procured. So long as their peculiar creed affects none but themselves, there is no cause for complaint, but when their practices sacrifice the lives of helpless children or endanger the public health, as they do in cases of contagious diseases, they deserve no toleration. That the community are in no mood to countenance their whims, is well shown by the case in question, as well as in several others which have recently been inquired into. The authorities are to be commended for the vigorous manner in which they are dealing with them.

EDITORIAL NOTES.

The Medical Faculty of Bishop's College opened its session on Oct. 1st with an introductory lecture by Dr. F. W. Campbell, the Dean. The attendance was such as might be expected in a college which thirty-one years ago began with eleven teachers and now has forty. The Dean pointed out to the students the arduous and toilsome profession they had chosen, but assured them that in it, if faithful, they would find that which was pleasant and agreeable, morally and intellectually it was a profession which could not be over-rated.

The dates originally decided upon for the meeting of the American Medico-Psychological Association having been found to conflict with the meeting of the American Medical Association at Saratoga, the date has been changed to June 17th to 21st, 1902. Dr. Burgess, of the Verdun Hospital for the Insane, is Chairman of the committee of arrangements. The meeting takes place in Montreal.

A Toronto Jury in an investigation into the death of a young woman suffering from goitre, under osteopathic treatment brought in the following verdict:—

"We find that the deceased came to her death in the rooms of H. C. Jaquith and Flora A. Frederick, in the Confederation Life Building, in this city, on Oct. 30, 1901, by suffocation from blood in the windpipe and lungs, caused by goitre. In view of the evidence and medical testimony submitted, we attach no responsibility to any person or persons. We believe that the course of treatment pursued by the persons in this case, Herbert Jaquith and Flora Frederick, under the name of osteopaths, is unskilful and dangerous, and we are of opinion that strict laws should be enacted which would put an end to this dangerous practice, and others of a kindred nature, which we have reason to believe are far too numerous in this city."

We believe that the verdict, setting forth as it does the dangers to which persons are exposed under treatment by unqualified and ignorant pretenders, is particularly timely and we trust it will not pass unheeded by the authorities competent to deal with the matter. Even if such investigations do not immediately lead to the enactment of laws for the public protection, they serve a good purpose in educating the community to the dangers to which they are exposed.

The Queen's Medical College had a successful opening on October 2nd, Justice Macienuan presided in the absence of Principal Grant who was still very ill. Among the others present were Rev. Dr. Barclay, Montreal; Drs. Fowler, Gassett, Ryan, Anglin, Mundell, Connell, Ross, Ford, Sullivan of Kingston; Dr. Gardner of New York and Dr. McPherson of Toronto. Dr. Sullivan, who made the speech of the occasion, referred to the progress of the medical college and its founder: "If Dr. Stewart did not found the institution, he took the credit anyway—and who dared deny it? When he stalked down street with his

Scotch tartan around him, the people knew that trouble was brewing. In every assize court and any other court he figured as plaintiff or defendant. 'Twas said he was crossed in love, that he had fought a duel, and was the best snipe-shot in the city. Well, in those old days, Dr. Stewart used to grind his class instead of teaching them. He always started with an examination, sitting at table with an old coat, and four wax candles before him." "It looked more like an Irish wake," exclaimed the doctor, while the audience roared."

There is probably no "cure" so absurd and fantastic as not to attract many seekers for health, who are intellectually incapable of seeing wherein the real merit of the system exists. The "Nudity cure" is one of the latest and most amusing crazes. It is thus described by a French journal:

"There is a village in Austria, near the Adriatic, where the Nudity cure is practised. The debilitated neurasthenics, the tired, etc., can go there and, in the costume of Adam, expose there individuals to the air, the sun's rays, or the rain. Thickets are carefully arranged so as to cut off all view of the patients; a hat and short trunks only are allowed; the sexes are separated. Baths, massage, gymnastics, and games are indulged in, and a strict vegetarian diet completes the treatment.—*Gaz. Hopitaux.*

The inefficiency of the usual methods of dealing with internal hemorrhage by the physician are well appreciated. The use of gelatine gives promise of better results. *The Medical Press and Circular* states that:

"Grunow's experiments still confirm the opinion that gelatine, when subcutaneously injected, is a powerful styptic. His injection is two grammes of gelatine in a hundred grammes of a physiological solution of common salt injected into the thigh, side of the thorax, or abdominal wall. This treatment has been in his hands most efficacious in many cases of internal hemorrhage. The gelatine appears to rapidly act as a powerful agent in producing coagulation of the blood, and thus arresting the general diapedesis. There is one weak point in his experiments that militates against its success which he frankly admits. He tells us that some of his cases required a combination of drugs to effect the hamostatic action."

The method requires care and is not entirely free from danger, as shown by the occurrence of two cases of tetanus in patients undergoing this treatment in Guy's Hospital.

The following are the officers of the Trinity Medical Society for the ensuing year: *Honorary President*: Dr Charles Sheard; *President*: W. T. Williams; *1st Vice-President*: J. H. Kidd; *2nd Vice-President*: A. J. Fraleigh; *3rd Vice-President*: G. H. Carlisle; *Secretary*: L. G. Allwood; *Representatives*: Toronto General Hospital, Dr. J. Martin; St. Michaels Hospital, Dr. Charles Elliott; Sick Children's Hospital, Dr. W. H. Lowry; Isolation Hospital, J. B. Coleridge. This society of the undergraduates holds its meetings every two weeks, the inaugural meeting for this session on November 6th being an exceedingly good one.

Only 81 cases of typhoid fever have been reported to the Toronto Board of Health up to November 1st of this year, the lowest record in ten years. In October only 16 cases were reported. When it is known

that as many as 156 cases of this disease have been reported during the corresponding month in other years it will be appreciated how satisfactory the present health of the city is.

Other contagious cases numbered during October: diphtheria, 71; scarlet fever, 69: last year they were: diphtheria, 106; scarlet fever, 37. The deaths from contagious diseases in the city last month were: scarlet fever, 6; diphtheria, 15; whooping cough, 3; typhoid, 5; tuberculosis, 33. Considering the above statistics, it is readily understood why the citizens of Toronto congratulate themselves and point to the Health Department as the one model branch of the City administration. If other branches were administered with equal energy, ability and general efficiency, the City Council would find their duties more agreeable.

We are pleased to publish in this issue of THE LANCET a reply from Dr. McPhedran to Dr. Oille's letter referring to the absence of an Ontario representative at the recent Tuberculosis Congress in London. While the Ontario profession may be slower than some others in matters such as Dr. Oille mentions, we doubt if any country in the world is more advanced as to legislation governing tuberculosis and to making provision for sanatoria for the treatment of persons suffering from the disease.

We are sure that Dr. Oille had no intention of reflecting personally on Prof. McPhedran but rather felt that one so able to do honor the Ontario profession should have been accredited in some representative way to the congress. The interest which he has always taken in promoting the campaign against tuberculosis and in educating the public in this province on the subject of prevention of the disease qualified him in a peculiar manner to represent us on that occasion and we believe the burden of Dr. Oille's complaint is that an opportunity was lost in not having him do so.

The Swedish Parliament has voted the sum of 850,000 kroner for the establishment of a public sanatorium for lung diseases in South Sweden. Two other sanatoria, one for Central, the other for North Sweden, have been established with the help of the fund of 2,200,000 kroner presented by the nation to King Oscar on the occasion of his jubilee not long ago. For all three sanatoria the state has provided the site and the timber required for the buildings.

Queen Sophia takes a special interest in the provision of sanatoria for lung diseases in Sweden, and it was at her wish that the national gift to the King was applied for this purpose.

The officers for the year of the Post Graduates' Medical Society have been elected at a meeting at the General Hospital as follows:—Hon. President, Dr. J. T. Fotheringham; Hon. Vice-President, Dr. Goldie; President, Dr. F. A. Cleland; Vice-President, Dr. J. Chisholm; Secretary-Treasurer, Dr. J. H. Brent; Committee, Drs. O'Brien and Currie. Dr. A. C. Macdougall presided at the meeting.

SOCIETY REPORTS.

SOUTHERN MANITOBA MEDICAL ASSOCIATION.

A LARGE meeting of the medical men of Southern Manitoba was held at Napinka on Oct. 9th for the purpose of organizing an association in that district. Among those present were Drs. B. J. McConnell, of Morden; J. A. McDonald, of Brandon; George Riddell, of Crystal City; F. L. Schaffner, of Boissevain, and Drs. Longheed, Hughes, McEown and Lamont, of the Glenboro line, and Drs. Davidson, Byers, Knight, Alexander, McDonald and Casselman, of the Deloraine line.

Dr. Schaffner, who had taken an active part in arranging the meeting, occupied the chair. After a discussion and full consideration of the matter it was resolved that an association be formed to include the three southern lines of railway west of Winnipeg and the Pipestone branch. The following officers were then elected: Dr. B. J. McConnell, Morden, president; F. L. Schaffner, Boissevain, vice-president; T. J. Lamont, Treherne, secretary-treasurer. Executive council: Dr. Riddell, Crystal City; Dr. Longheed, Glenboro; Dr. McEown, Hartney, Dr. Brown, Carman, and Dr. Cleghorn, Baldur.

After the business part of the meeting was disposed of the members of the association dined at the Russel House, a very pleasant evening being spent. The profession of Southern Manitoba are to be congratulated in this evidence of their public spirit and progressiveness.

TORONTO MEDICAL SOCIETY.

THE opening address of the Toronto Medical Society was delivered by the President, Dr. F. N. G. Starr. He dealt in a most interesting manner with the fathers of medicine in Toronto, under the title of "The Passing of the Surgeon." He outlined the careers of Dr. James Macaulay, Grant Powell, Christopher Widmer, Peter Deihl, John Rolph, William Beaumont, Charles Gwynne, E. M. Hodder, James De La Hooke and others who did so much for our profession in the early days and whose names are now scarcely known to many of the younger generation of physicians. H. H. Wright, Norman Bethune, Thos. Aikins, James Ross, John Fulton, Lachlin McFarlane and Frederick Strange belong to a later period and their memories are still green. Dr. Starr's address was illustrated with excellent photographs of these old surgeons, displayed by means of a lantern. Too little attention has heretofore been given in Toronto to the history of medical education in the province and in devoting an evening to reviewing the careers of those to whom we owe so much Dr. Starr has set an example which we hope may have many followers.

PERSONAL.

Dr. H. Softly (Trinity '98) has begun practice at Maxwell, Ont.

Dr. Thos. M. Williamson (Trinity '92), of Saginaw City, Mich., has been spending a holiday in Toronto and other parts of Ontario.

Dr. Alex. J. Mackenzie, late of the resident medical staff, Toronto General Hospital, has been appointed physician to Upper Canada College.

Dr. J. J. McKenna, for the past two years resident physician to St. Michael's Hospital, has opened an office on Church St., Toronto.

Dr. R. R. Bensley, for some years demonstrator in embryology and histology Toronto University, has accepted a similar appointment in the University of Chicago.

Dr. Harvey Clare, of the Orillia Asylum, has been made assistant physician at the Brockville Asylum. Dr. Wilson has been transferred from Brockville to London.

Dr. G. A. Schmidt and Dr. Turnbull, late of the resident medical staff of the Toronto General Hospital, leave shortly to spend a year in post graduate study in Europe.

Among the recent deaths among the profession were Dr. H. W. Bain, of Prince Albert, N.W.T.; Dr. Charles de Martigny, Montreal; and Truman W. Duncombe, of St. Thomas.

Dr. G. A. Charlton, McGill College, Montreal, and Dr. P. G. Wooley, Johns Hopkins University, Baltimore, have been appointed Fellows in Pathology in McGill University Medical Faculty.

Three Nova Scotia medical men, Dr. E. E. Bisset, of Port Morien, Dr. W. P. Terman, of Sidney, and Dr. Dugald Stewart, of Bridgewater, have recently suffered from attacks of typhoid. All have recovered.

The following gentlemen have been elected to the Senate of the University of Toronto by acclamation: Dr. W. H. B. Aikens, Mr. I. H. Cameron, Dr. Adam H. Wright and Dr. James M. McCallum.

Dr. Victor A. Hart and Dr. Fred J. Hart (Trinity '94) who have been practising for a number of years in Sault Ste. Marie, Mich., are returning to their native land and taking up practice at Barrie, Ont.

Dr. F. W. Marlow, late house physician to St. Michael's Hospital, Toronto, has left for Europe where he will spend a year in post-graduate study. During his absence Dr. Marlow will act as London correspondent to THE CANADA LANCET.

Dr. Gow (Toronto '98), formerly a resident physician in the Sick Children's and General Hospitals, Toronto, and lately on the resident staff of the Johns Hopkins Hospital, Baltimore, is visiting friends in Toronto.

The many friends of Dr. James Third, Professor of Medicine in Queen's University, will be pleased to learn that he has quite recovered from the attack of multiple neuritis from which he suffered during the past winter, and has resumed his professional duties.

Dr. G. E. DeWitt, of Wolfville, N.S., read a valuable paper on "Fresh Air in the Treatment of Consumption" before the Maritime Medical Association last July. It is printed in the October *Maritime Medical News*. Dr. DeWitt thinks the value of fresh air should be taught in the public schools.

Dr. J. M. Jory, of St. Catharines, Ont., will have the sympathy of his professional brethren in the sudden death of his wife, on October 13th. The deceased lady was a daughter of Dr. S. P. Ford, of Norwood, Ont., the Conservative candidate for East Peterboro in the coming elections for the Legislative Assembly.

Dr. H. G. Barrie (Trinity '98), the popular Y.M.C.A. representative with the Royal Canadian Regiment in South Africa, was married recently in Yokohama to Miss Macdonald, daughter of the late Senator John Macdonald, of Toronto. Dr. Barrie is at present engaged in medical missionary work in China.

The following have recently been elected to office in the Quebec College of Physicians and Surgeons: President, Dr. Lachapelle, Montreal; Vice-presidents, Dr. Vallee, Quebec, and Dr. Crail, Montreal; Registrar, Dr. Marsolais, Montreal; Treasurer, Dr. Jobin, Quebec; Secretaries, Dr. McDonald, Montreal, and Dr. Paquin, Quebec.

CORRESPONDENCE.

To the Editor of THE CANADA LANCET.

DEAR SIR,—Dr. Oille's letter in your last issue calls for a brief reply. I can scarcely believe that the Doctor would have made his uncalled for and unjust strictures had he been possessed of the facts. My visit to London was timed so that I could avail myself of the opportunity of being present at the Congress, many of whose sessions I attended with much pleasure and not a little profit. I was not commissioned to represent anyone. Being there as a private member I had no special message to give that was not communicated over and over again in many of the papers read. As a silent member I was in good company, among whom were many of the most distinguished men there. Had the papers and discussions been restricted to those who had something of importance to communicate, not a few of those who took part in the proceedings

would also have maintained a golden silence and the results of the Congress would not have suffered materially thereby.

As to the Faculty of Medicine of the University of Toronto not having sent a representative the criticism is even more unjust. So far as I am aware no other similar institution had representatives present. A few delegates registered as members of Universities without having been expressly delegated, and I might have done so likewise had it occurred to me that such was desirable. I might also have offered some remarks in a few of the discussions, or even prepared a paper, had I thought that by so doing the University and the Faculty of Medicine would have been saved animadversion, or their reputation materially advanced.

I may furthermore point out that there are important congresses and meetings being held from time to time, such as the British Association for the Advancement of Science, the International Congress of Physiology, etc., at which it would be both pleasant and profitable for the Faculty to be represented, but the expense of sending delegates would, I fear, be more than it can well bear. Of course if any friends can see their way clear to provide the wherewithal, the Faculty will be delighted to send the delegates, and will see to it, too, that they do their part in "upholding the standing and authority of this centre of Medical Science."

Hoping that this brief statement will suffice to exonerate both the University and the Faculty, as well as myself, in the minds of your readers and also in that of Dr. Oille.

Yours sincerely,
A. MCPHEDRAN.

Toronto,
1st November, 1901.

BOOK REVIEWS.

PENROSE'S DISEASES OF WOMEN.

A text book of Diseases of Women. By Charles B. Penrose, M.D., Ph D., formerly Professor of Gynecology in the University of Pennsylvania. Fourth Edition Revised. Octavia volume of 539 pages, handsomely illustrated. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, \$3.75 net. Toronto: J. A. Carveth & Co.

Regularly every year a new edition of this excellent text book, is called for, and although it is distinctly a text book, it appears to be in as great favor with physicians as with students. The new edition has been carefully revised, much new matter has been added, and a number of new original illustrations have been introduced. In its revised form this volume continues to be an admirable exposition of the present status of gynecologic practice in this country.

The author's methods of dealing with displacements and lacerations are excellent. He attaches much importance to the proper restoration of the perineum in all cases; and the treatment of the subinvolution so generally present. The method of amputating the cervix is clearly stated. From an operative point of view, this is an important section of the work.

Cervical catarrh is handled in a specially interesting manner. Much attention is given to the general and local treatment of the condition, good tonics should be given, and the bowels well regulated. He deprecates the use of too strong astringents: he recommends one or two grains chloride of zinc to the ounce, pure carbolic acid is often useful. One of the best local applications is Churchill's tincture of iodine, or two parts tincture of iodine and one part carbolic acid.

Under the treatment of gonorrhoea in women, the author remarks that when the disease has extended into the cervical canal or endometrium it may be necessary to curette it thoroughly and then apply pure carbolic acid.

In closing the opening after abdominal operations, he recommends through-and-through sutures. Many would differ from this practice.

J. F.

MANUAL OF THE DISEASES OF THE EYE FOR STUDENTS AND GENERAL PRACTITIONERS.

By Charles H. May, M.D., New York.

Perhaps the most striking feature of this book, is the great amount the author says, in so small a compass. The second revised addition has been enlarged, but the added matter is all very useful, and the new plates especially the colored, add very much, not only to the appearance of the book; but will prove a help to the student. The work is up to date and practical throughout.

C. TROW.

VECKI'S SEXUAL IMPOTENCE.

The Pathology and Treatment of Sexual Impotence. By Victor G. Vecki, M. D. Third Edition, Revised and Enlarged. 12mo, 329 pages. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, \$2.00 net. Canadian Agents, J. A. Carveth & Co., Toronto.

The reading part of the Medical profession of America and England has passed judgment on this monograph. The whole subject of sexual impotence and its treatment is discussed by the author in an exhaustive and thoroughly scientific manner. The former edition was exhausted in less than two years. In this edition the book has been thoroughly revised, and new matter has been added, especially to the portion dealing with treatment.

Although no one denies that the sexual function is of the very greatest consequence to the individual as well as to society in general, yet the subject of impotence has but seldom been treated in this country in the truly scientific spirit that its preeminent importance deserves, and this

volume will come to many as a revelation of the possibilities of therapeutics in this important field. The author ventures to assert that in many cases it is a better deed to restore to an impotent man the power so precious to every individual, than to preserve a dangerously sick person from death, for in many cases death is preferable to impotence.

It is a well-written, scientific work, and can be recommended as a scholarly treatise on its subject. A.

JOHNNIE COURTEAU, AND OTHER POEMS.

By William Henry Drummond, author of "the Habitant," illustrated by F. S. Coburn, New York: G. P. Putnam's & Sons.

In his new volume of dialect poems Dr. Drummond displays the same delightful combination of humor and pathos which has won so much popularity for "The Habitant." In this collection, as in the other, he gives us a few of the types of French Canadian character who, talking English with their irresistibly funny pronunciation, can inspire us with affection as well as amuse us. It is by his sympathetic insight into the life and people of French Canada that Dr. Drummond is able to do this. Johnnie Courteau is a rough hunter who is tamed by marriage with a shrewd managing little Canadian girl into a sober and industrious "marie." Fader O'Hara, the good care, illustrates perfectly the relation between people and priest. And so on, in nearly every poem we get the kindly view of the French Canadian, seen at his best, simple, hospitable, amusingly boastful. It is really the voice of the "Canadian" asking his English-speaking fellow countrymen to understand him and be friendly. It is not Dr. Drummond's fault if the two branches of the race do not appreciate each the other. C.

BERGEY'S PRINCIPLES OF HYGIENE.

The Principles of Hygiene: A practical Manual for Students, Physicians, and Health Officers. By D. H. Bergey, A.M., M.D., First Assistant, Laboratory of Hygiene. University of Pennsylvania. Octavo volume of 495 pages, illustrated. Philadelphia and London: W. B. Saunders & Company, 1901. Cloth, \$3.00 net. J. A. Carveth & Co., Toronto.

This book is intended to meet the needs of students of medicine in the acquirements of a knowledge of those principles upon which modern hygienic practices are based, and to aid physicians and Health officers in familiarizing themselves with the advances made in hygiene and sanitation in recent years. The book is based on the most recent discoveries, and represents the practical advances made in the science of hygiene up to date.

The chapter on school hygiene is of more than passing interest. The site, drainage, structure of walls, cubic space and floor space, relation of window space to cubic space, lighting, the position of blackboards, ventilation, heating, closets, sewage, desks, seats, defects in school-buildings, are carefully considered. Medical inspection is urged. It is pointed out that no one can render such effective service in the above matters as a competent physician. In all these matters the advice of a medical authority in hygiene should be taken. This will no doubt soon be the rule, especially in large cities.

The germ theory of disease is well handled. The doctrine of immunity is clearly stated, and the method of the spread of diseases due to micro-organisms. Disinfection is discussed in a satisfactory manner. Much interesting information is given on the spread of disease by mosquitoes and rats. The value of vaccination is given as capable of lessening the death rate at least five times among those who take smallpox, while a very small percentage of those properly vaccinated contract the disease at all

J. F.

MANUAL OF CHEMISTRY.

A Guide to Lectures and Laboratory Work for Beginners in Chemistry. A text-book specially adapted for Students of Medicine, Pharmacy and Dentistry. By W. Simon, Ph. D., M.D., Professor of Chemistry in the College of Physicians and Surgeons of Baltimore, in the Maryland College of Pharmacy, and in the Baltimore College of Dental Surgery. Seventh Edition. Lea Brothers & Co., Philadelphia and New York, 1901.

Simon's Chemistry is one of the few works published on the subject which is specially written for students in medicine and kindred professions. The author has attempted with a considerable degree of success to incorporate in one volume the whole subject of medical chemistry, inorganic, organic and physiological. In keeping with the object of the work he places in the foreground all facts which are of interest to the physician, pharmacist and dentist, and excludes or passes over lightly those parts of the subject which have not a direct bearing on medical science. Thus in the section on chemical physics, the spectroscope, polariscope, and the theory of electrolysis are clearly described; and in the part of the work devoted to inorganic and organic chemistry particular attention is given to the chemistry of those compounds which are used in medicine.

In that part of the Manual devoted to the consideration of the non-metals, metals, and their combinations, we regret to see that the author does not make use of the periodic classification of the elements, an aid which most teachers of chemistry consider of great value in studying the subject.

The extensive subject of organic chemistry is necessarily considered in an incomplete form; but, we think, the text contains sufficient matter to give a student a clear insight into this important branch of chemical science.

The last—the seventh—edition, the sections on physiological chemistry have been considerably enlarged by the addition of much new matter. This, no doubt will be appreciated by the profession as the brevity of this part of the work in former edition was considered a deficit.

We recommend the book to the student and general practitioner as a volume of moderate size, yet containing almost all that is important for them to know in chemistry.

G. C.

LOCKWOOD'S PRACTICE OF MEDICINE.

A Manual of the Practice of Medicine. By George Roe Lockwood, M.D., Professor of Practice in the Woman's Medical College of the New York Infirmary. Second Edition, Revised and Enlarged. Octavo volume of 847 pages, with 79 illustrations and 20 full-page plates. Philadelphia and London: W. B. Saunders & Company, 1901. Cloth, \$4.00 net. Toronto: J. A. Carveth & Co.

The new edition of this work (1901) has been brought up to date. One needs only to read the chapter on malaria to be aware that the author has made use of the latest research.

The work admirably fills the position for which it is intended—a place between the insufficient "Compend" and the often more than sufficient "System of Medicine."

Among the numerous works on Practice this one is worthy of a place. The description of diseases and their treatment given are terse and clear, and the work gives in a most concise manner the points essential to treatment usually enumerated in the most elaborate works.

L. B.

A MANUAL OF SYPHILIS AND VENEREAL DISEASES.

By James Nevins Hyde, A. M., M. D., Professor of Skin, Genito-Urinary, and Venereal Diseases, Rush Medical College, Chicago. Second Edition, revised and enlarged, with 58 Illustration in the Text, and 19 full-page Lithographic Plates. Price, \$4.00 net. Philadelphia: W. B. Saunders & Co., 1900. J. A. Carveth & Co., Toronto, Canadian Agents.

The publication of the second edition of this work will be welcomed by all who take an interest—as all practitioners must—in the recognition and treatment of syphilis and venereal diseases. The first 278 pages are devoted to the discussion of the manifestations of syphilis in the various tissues and organs and its appropriate treatment. Acquired syphilis is first dealt with in a general way and then syphilis of the skin, hair, mouth and tongue, respiratory tract bones, muscles, joints, alimentary tract, nervous system, ocular apparatus, etc., are treated in separate articles devoted to them. Hereditary syphilis in its multiform manifestations is then taken up.

The second part of the work—303 pages in all, discusses first the subject of chancroid, disorders not invariably venereal as balanitis, phimosis, paraphimosis, herpes progeneralis, hypochondriasis. Then acute urethritis, chronic urethritis, epididymitis, prostatitis, vesiculitis, cystitis, pyelitis, gonorrhoeal rheumatism, stricture of the urethra and gonorrhoea in women, etc., are fully dealt with and their proper treatment indicated. The illustrations are well chosen and beautifully executed and the whole work is a credit to the bookmaker's art. The volume can be recommended as a full, safe and altogether satisfactory guide to the matters with which it deals. One cannot commend it too highly.

H. B. A.

PROGRESSIVE MEDICINE.

VOL. III. SEPT. 1901.

Diseases of the Thorax and its Viscera, including Heart, Lungs and Vessels. Dermatology and Syphilis. Diseases of the Nervous System, Obstetrics. Lea Bros. & Co., Philadelphia and New York.

To those medically inclined rather than surgically, this volume is a feast of good things.

The first named topics are treated of by William Ewart, F.R.C.P. of St. George's Hospital, London—with all the erudition and thoroughness which is so characteristic of his work.

Dermatology and Syphilis is from the hands of Gottheil of New York, most modern and useful, with many excellent illustrations.

Diseases of the Nervous System, by Spiller of Philadelphia, are handled in an interesting style. Particularly he refers to Babinsky's sign, pp. 244-6, a topic still of great interest to the general practitioner as well as to the Neurologist.

Norris, of the University of Pennsylvania gives an excellent 100 pages on Obstetrical subjects, full of clinical value, such as "Care of the Teeth in Pregnancy," "Management of Pregnancy" and "Labour complicated by Cardiac Disease," Hemorrhage, the Surgery of Obstetrics, and etc.

The volume seems to the reviewer to be better even than usual.

J. T. F.

MODERN SURGERY.—GENERAL AND OPERATIVE.

By John Chalmers Dacosta, M. D., Prof. of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College; Surgeon to the Philadelphia Hospital and to St. Joseph's Hospital, Philadelphia. With 493 illustrations. Third Edition; revised and enlarged. Philadelphia and London: W. B. Saunders & Co. Canadian Agents, J. A. Carveth & Co., Toronto, Ont.

In this age of "text-book making" this work will surely hold its own. Its preface tells us that "the work seeks to stand between the

complete but cumbrous text-book and the incomplete but concentrated compend" and a perusal of the book shows that the author has pretty thoroughly lived up to this ideal. In a one volume work of 1100 pages, which seeks to cover the whole vast subject of surgery, undue concentration and suppression is necessary; therefore our author wisely omits the more thoroughly specialized branches, to the benefit of those diseases and injuries met with in the daily routine of surgical work. The book is not only a compilation of the best that has been written in recent years but in addition the author has drawn largely on his own experience. He has been wise, too, we think, in placing a chapter in bacteriology at the forefront of his book.

One of the most interesting chapters is that upon "Diseases and Injuries of the Abdomen." This is on the whole a well written section, showing considerable originality and independence of thought. In the paragraph on appendicitis for instance, it is refreshing to note how thoroughly the author opposes the very radical opinions of many of his countrymen, in the matter of operation. Altogether it is a work to be commended to student and general practitioner.

G. A. B.

PUBLISHERS' DEPARTMENT.

Prof. Schweitzer at Detroit.

Prof. H. Schweitzer, Secretary of the American branch of the Society of Chemical Industry of London, recently visited Detroit and was much impressed with the Parke, Davis & Co. plant, especially with the biological department. He was also impressed with the circulating library for employees, the emergency hospital, and the general treatment employees received.

The professor was asked why such plants are not established in the old world. He said:

"The reason is that in the countries of Europe every druggist is a manufacturer. He compounds his own medicines in the back room of his store. He has his own laboratory, and there he experiments. Here it is different. If the druggists of the old world could have walked through the plant that I walked through to day, they would no doubt have become discouraged for they would realize that they could never hope to learn in a lifetime what is learned in that institution every hour."

Similar to the Effect of Sunlight.

The physiological-chemistry of antikamnia, in disease, exhibits analgetic, antiperiodic, antipyretic and antiseptic functions. Its antiperiodic tendency is similar to the effect of sunlight, though differently expressed. However with antikamnia this latter function is materially aided when

combined with other well-known drugs, such as quinine and the milder laxatives. The ideal combination I have in mind may be obtained in "laxative antikamnia and quinine tablets." To reduce fever, quiet pain, and at the same time administer a gentle tonic-laxative is to accomplish a great deal with a single tablet. Among the many diseases and affections which call for such a combination, I might mention la grippe, influenza, coryza, coughs and colds, chills and fever, and dengue with its general discomfort and great debility. These tablets administered in doses of one or two and repeated every one or two hours are a perfect antiperiodic in malaria, and a perfect reconstituent tonic—an expression of solar life, light and energy in malarial anaemia.—L. P. Hammond, A. B., M. D., in *The Medicus*.

A Clinical Report on Gude's Pepto-Mangan.

There may still be some doubt whether manganese is a normal constant constituent of the human blood or of any of the tissues of the body writes Samuel Wolfe, A. M., M. D., Physician to Philadelphia Hospital. It may not have been positively determined whether iron, when given in an inorganic compound or in pure metallic form, is absorbed by the mucous membrane of the stomach or intestinal canal, or whether it accomplishes its curative work by some occult process of stimulation of that membrane, by virtue of which it takes up with greater readiness the nutritive portions of food substances which are presented to it at the same time; or whether it plays a chemical role in changing the contents of the alimentary canal, so that what eventually passes into the circulation is more fitted to maintain high standards of nutrition or will prove less deleterious to the processes of life.

My observations with Pepto-Mangan are such as can be easily confirmed by any physician, since they were all made in private practice, and rest on bedside and office notes. I have used the preparation to a considerable extent ever since it was first brought to my notice, which I think was about two years ago. Owing to some specially good results obtained, I was led to the series of recorded observations on which this paper is based. They extend over four months of time, and embrace about fifty cases.

In one series of twenty-three cases the patients were all married women, ranging from the ages of twenty-two to seventy, who were more or less anæmic from various causes. In all but five the results were decidedly satisfactory, and of these one failed to report the second time, so that the result is not known. The other four were cases of advanced organic disease, in which no therapeutic procedure could have given decided results. In nine of the twenty-three cases the results might be classed as brilliant. In all of the others I am convinced that no other preparation of iron could have done more.
