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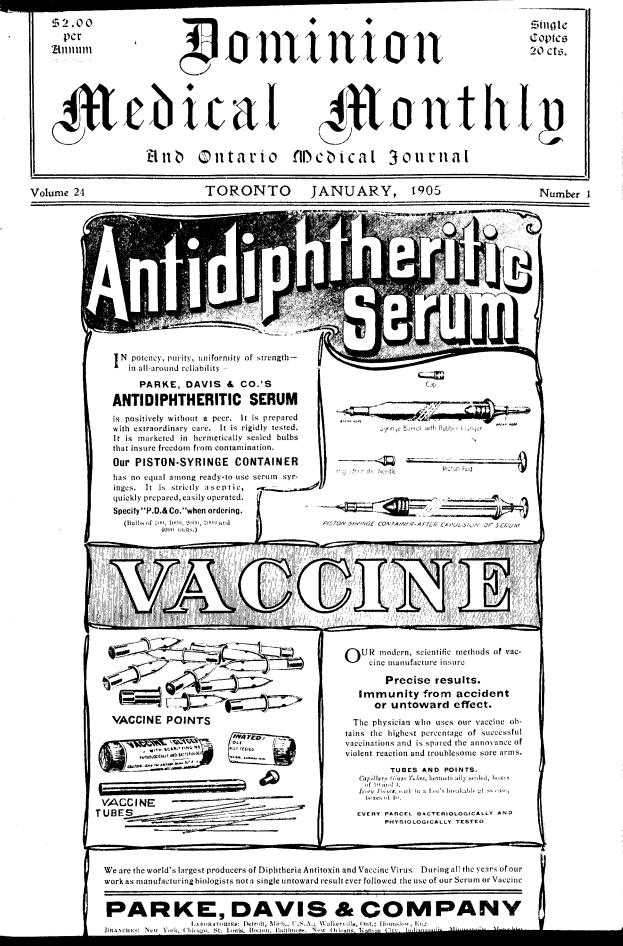
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Dominion Medical Monthly

And Ontario Medical Journal

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Original Articles.

REPORT OF A CASE OF FRACTURE OF BASE OF SKULL WITH MIDDLE MENINGEAL HEMORRHAGE BETWEEN DURA MATER AND THE SKULL.*

BY EDGAR BRANDON, M.D.C.M. Resident House Surgeon Toronto General Hospital.

Extravasation of blood within the skull necessarily occurs in all cases of injuries of the head accompanied by laceration of the brain, and in many in which the skull is fractured without wound of its contents. This is due to the great vascularity of the parts within the skull, the large sinuses, the numerous arteries that ramify both within the bones and at the base of the brain, and the close vascular network spread over the surface of the organ. The hemorrhage may be due to fracture, in which the fissure tears across one of the meningeal arteries, or a fragment of bone wounding a sinus. In many cases the inner table only has been fractured, and the middle meningeal artery is thus torn as it lies in a groove in the bone.

Hemorrhage may occur in four situations: (1) Between the dura mater and the skull, when it proceeds from a wounded middle meningeal artery, or, more rarely, from a sinus; (2) in

^{*}Read at the regular monthly meeting of the Post-Graduates' Society of Toronto.

the subdural space: (3) in the subarachnoid space and in the meshes of the pia mater on the surface of the brain; (4) in the substance of the brain or in the ventricles.

As the time at our disposal will not permit us to take up a discussion of the points in connection with these four situations, and as the case we present to-night comes under the first classification, we shall, therefore, confine ourselves to that form of hemorrhage which takes place between the dura mater and the skull proceeding from a wounded middle meningeal artery.

Now, extravasation of blood between the dura mater and the skull is much less common than that due to injury or laceration of the cortex, which is by far the commonest, but has the distinctive feature that when it does occur the quantity is often quite large. However, even here the quantity is not very large in the great majority of cases, but, as we shall see later on, the case we are about to present quite exceeds any amount recorded, so far as we have been able to ascertain.

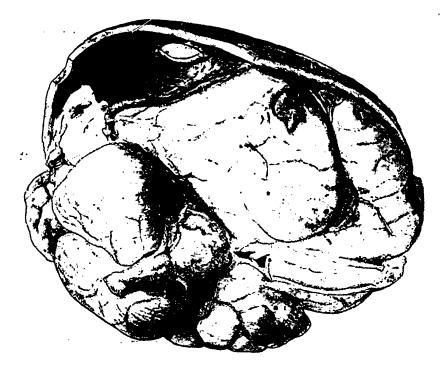
Symptoms.—The only certain definite symptom of extravasation of blood is gradually increasing paralysis and insensibility, erding in coma within twenty-four hours of the injury. In a typical case there are three distinct stages, viz.: (I) Concussion following the injury; (2) a temporary return to consciousness and a continuance of the same for a time; (3) coma gradually supervening.

As accessory signs the following may be mentioned: (a) Paralysis, often preceded by twitching of the muscles, if the clot be over or close to the motor area; (b) certain eye symptoms, such as passive congestion of the eyeball, pareses of some of the ocular muscles and protopsis, with dilated pupil, all due to pressure of the clot on the cavernous sinus, when the extravasation extends to the base of the brain; (c) where a fissure exists in the bone, blood may filter through into the temporal region and produce a marked bulging or fulness there.

The amount of concussion or stunning varies, depending upon the severity of the cause, ranging from a slight momentary giddiness and confusion of thought to the most profound insensibility. The period of consciousness is generally of short duration, often only an hour or an hour and a half, sometimes, even, much shorter, the concussion rapidly passing into compression almost without an interval, depending upon the amount of, and the rapidity in which the blood is extravasated. The following case will illustrate.

The patient, J. B. H., was brought into the Toronto General Hospital, Tuesday, December 18th, 1903, at 11.30 a.m., by the police ambulance, with an incomplete history of having been injured by the street railway the day before. A complete history of injuries was not ascertained till a few hours before his death.

He was examined hurriedly by Dr. McCauley and myself while waiting to be admitted. We found that the left arm was completely paralyzed, but that there was an incomplete paralysis of the left leg, inasmuch as he was able to move the leg and knee



Specimen of brain in skull-cap showing depressed brain, separated dura mater, trephine openings and hemorrhage into right temporo-sphenoidal lobe.

slightly, and as he resisted Dr. McCauley in his manipulation of the leg. His eyes were closed and the breathing was stertorous. There was inequality of the pupils.

He was sent up to the ward and I examined him about twelve o'clock. The patient was a heavy set, well-nourished man about five feet ten inches in height, weighing about 190 pounds, iron grey whiskers and hair. He lay with eyes closed and breathing in a stertorous manner. He had no control of the left arm whatever; lifted from the bed it fell back limp and useless. There appeared to be very slight movement in left toot, but otherwise he had no control. Patient was conscious, as when I asked him to move his right arm he did so without any difficulty. He was also able to move the right leg without any difficulty when asked to do so. Asked to squeeze my hand with his right, he did so, exerting a fair amount of force. He was unable to open his eyes, having no control of his eyelids. The pupil of the right eye was dilated, not fully, but reacted to light. The pupil of the left eye was contracted down to a very fine pin point size, but also reacted to light. There was no hemorrhage from the ears, nose or mouth.

He spoke in a mumbling, non-fully articulated way, and at times it was very difficult to understand him, showing that his speech centre was evidently affected. The patient, when asked to put out his tongue, did so. It did not protrude markedly to any one side, but on retracting was drawn over to the right side.

Patient seemed quite conscious of all that was going on about him, and answered questions put to him, though his answers were sometimes unintelligible. He also inquired as to why I did certain things, such as the testing of his pupils. I examined him for bruises, and found one in the left anterior tibial surface about three or four inches from the foot. He also had a bruise on the lower lip in the centre, wedge-shaped in character, with apex at the alveolus, which he told me was due to his injury. There were also scratch marks on his cheek and nose. I examined him for signs of a fracture, but made out none. A bruised area was afterwards disclosed upon the right temporal region, extending backwards and downwards to tip of the mastoid. Otherwise patient had no evidence of injury.

I drew off the urine, with the result of only a few ounces, which, on examination, I found to be normal.

His temperature per axilla was normal, pulse 70, respiration 30. He was given croton oil followed by mag. sulph, one-half ounce every hour for seven doses, without effect, when croton oil was repeated, followed by mag. sulph., which was effectual. During day took nourishment and swallowed without any great difficulty.

Temperature at 7.30 p.m., 100 deg., pulse 90, respiration 28. What little movement there was in the left foot had disappeared, and at 8 p.m. the nurse had made the observation: "Had very little difficulty in swallowing, knew all that was said to him; during night was uneasy, moaning, and throwing the bed clothes off."

Next morning. December 10th, his condition had not improved. He was still as conscious as previously, but his respirations were more rapid, heavy and sonorous, about 36 per minute, his pulse 90, temperature 101 deg. During the day his condition did not improve, and the next day he was worse, temperature 102 deg.; pulse 106, weak and intermittent; respiration. 44, heavy, difficult and stertorous. In the afternoon he had involuntary movements of urine and feces, was unconscious, markedly cyanosed, breathing stertorously and with marked rattle in throat, head inclined to right side, pulse very weak and Dr. Baines, who had charge of him, advised me to thready. bleed him, which I did, taking away some eight or ten ounces with difficulty. Stimulants, strychnia, digitalis and ether were used with the result that the cyanosis somewhat lessened.

I may say that during the afternoon his wife was present, and she gave us the complete history, which we heard for the first time. She stated that his waggon was struck by the street car and he was pitched out. We have since, however, learned from the inquest, etc., that he was found with his heels in the waggon and his head on the pavement. He was assisted to his feet, and he stood at his horse's head and quieted it while his effects were being gotten together. She also stated that he walked from King Street to Bloor Street, a distance of some miles, went to his home and undressed himself, and retired. During the night the paralysis came on.

Dr. Fotheringham, passing through the ward, saw him and thought he should be seen by a surgeon. Dr. Peters being in the building, I asked him to see him, and after examining him and hearing his history, above related, he thought there was evidence of meningeal hemorrhage and advised trephining. I consulted with Dr. Baines, who concurred. Dr. Peters operated upon him at 6.40. He cut a horse-shoe flap over the right temporal region, disclosing considerable sub-aponeurotic hemorrhage, with clotting. The trephine was then introduced over the upper right rolandic area, and the bottom being removed, clotted blood was discovered. Dr. Peters put in his finger, but could not find the dura mater. He began pulling out the clotted material, and again was dissatisfied with the result. A further trephining was done an inch and a half below and behind the right parietal eminence, again disclosing cletted material. After a time the clotted material, weighing eight or ten ounces, was removed, and resulted from the following condition: The dura

mater was seen to be separated from the calvarium and the hemorrhage coming from the anterior division of the middle meningeal artery had separated the dura and gradually increasing in quantity, had pressed and crushed the brain substance before it downward, forward and backward. Oozing could be seen from the wounded artery, which was controlled with ease.

The compressed brain did not expand, and remained in the condition which we see in the specimen. The wound was packed with iodoform gauze and the patient removed to the ward. During the operation, which was done without anesthetics, the patient showed slight signs of reaction, but his respirations became more and more labored and stertorous, his pulse throughout the operation was very difficult to get, and the result was that he died half an hour after he was removed to the ward.

J. B. H. (P. M.)-Nutrition good, rigor mortis well marked, post-mortem staining on dependent parts. Inspection: Slight bluish discoloration about the chin, no ebrasion; scratch marks are visible on nose, cheek and ear of the right side. There is a bluish discoloration in front of the left ear, also some fulness in right side of neck from angle of the jaw to the mastoid portion of the temporal hone, gradually tapering as it descends into the soft tissues of the neck. Bluish discoloration noted over this swelling. Noted a crescent-shaped incised wound in scalp extending from two inches above and one inch in front of the occipital protuberance. Middle of right arm, bluish discoloration one and three-quarter inches by one and one-half inches. Front of right elbow, venesection mark. Outer side of right knee, an Another abrasion is noted at upper and abrasion is noted. inner aspect of left leg two and one-half inches in length. There is also an abrasion, size of a twenty-cent piece, at outer side of head of fibula of left leg.

Head.—On removing scalp there was found some dark effused blood, especially well-marked at the sight of swelling previously described. Also noticed two trephine wounds. Noted a fracture extending from parietal eminence downward and forward three inches, this just below the swelling previously described. On removing skull cap, dura is seen to be depressed one and one-half inches from the inner table in the right side, extending from a point midway between the glabella and occiput to the petrous portion of the temporal bone in its vertical axis, and in its transverse axis from a point one and one-half inches above centre of Reid's base line to the occipital pole. Removing brain, hemorrhage is noted below the temporal sphenoidal lobe in front and right side. Hemorrhage in the pia-arachnoid into the frontal lobes. Slight hemorrhage on under surface of right frontal lobe along the course of the olfactory nerve.

Base of Skull.—There is a fracture from the parietal eminence extending downwards, outwards and forwards, crossing the lateral sinus back of the fossa sigmoidea and turns inwards and passes forwards, ending in fossa one-quarter inch to foramen lacerum posticum.

Section.—On section, anterior abdominal wall three inches in thickness, two inches of which was fat.

Omentum.—Shows a large amount of yellow fat, overlies the liver and front of stomach.

Peritoneum.-Normal.

Plcura.—Right: Firm old adhesions behind, in front and below. Left: similar adhesions in front, above, below and behind; diaphragmatic adhesions.

Pericardium.—Slight adliesion between the pericardium and pleura on right side; contains bloody colored serum, one-half ounce in amount. Heart weight, 13 ounces. Surface of heart shows small clot plugging a small vessel at the auriculo-ventricular septum. Right side is engorged; pulmonary artery, muscle firm, slightly paler than normal; patchy atheroma of aorta. Coronary arteries—orifices free; fairly well-marked sclerosis of coronary vessels.

Lungs.—Right: weight, 29 ounces; anteriorly fairly wellmarked emphysema; well-marked hypostatic pneumonia with edema, stage of splenization, friable. Left: weight, 21 ounces; hypostatic congestion and edema, very friable.

Spleen.-Normal, weight 21/2 ounces.

Kidneys.—Right: $6\frac{1}{2}$ ounces; large amount of perirenal fat, capsule slightly adherent; kidney substance pale, cortex narrowed, ureter norme' Left: $6\frac{1}{4}$ ounces, otherwise same as right.

Pancreas.—Normal.

Intestines.—Normal; mesentery diffuse lipomatosis.

Stomach.-Lining shows some chronic congestion.

Liver.— $53\frac{1}{2}$ ounces, pale, friable and fatty.

Gall-bladder.-Passages free; normal.

The mechanism of meningeal extravasation is very interesting to note, and has given rise to much discussion. It is very evident, from experiments performed, that there must be a separation of the dura from the skull, due to fracture or violence applied, and that the extravasation is consequent on that separa-

I may here quote from Sir Charles Bell's "Surgical tion. Observations" (London, 1816) : "It is extraordinary that any one who has ever raised the skull cap in dissection and felt the strength of the universal adhesions of the dura mater to the lower surface of the bone, could for an instant believe that the arteria meningea media has power of throwing out its blood to the effect of tearing up these adhesions from the entire half of Here, to substantiate his statements that the the cranium." dura mater is first of all separated from the skull and that the extravasation is consequent upon that separation, he goes on to describe the following experiments: "Strike the skull of the subject with a heavy mallet; on dissecting you find the dura mater to be shaken from the skull at the part struck. Repeat the experiment on another subject and inject the head minutely with size injection and you will find a clot of the injection lying betwixt the skull and the dura mater at the part struck and having an exact resemblance to the coagulum found after violent blows on the head." This would apparently appear to be conclusive, but to carry it further in cases of fracture, such as occurred in this case, there are also, apart from the blow or injury which must necessarily have been received to produce a fracture, certain alterations in form of the skull accompanying the blows which tend to lessen the attachments of the dura, there always being a certain amount of play bebetween the edges of a fracture sufficient to lessen a certain small amount of the dura from the skull.

The dura mater being separated from the skull to a certain extent, how does it come about that such a very large surface of the dura is separated? Simply that the blood is poured out in sufficient force and in ever-increasing amount to strip the membrane from the bone, because it is very difficult to conceive that that membrane can be shaken from the base of the skull by a blow in the parietal region, and yet meningeal hemorrhage often extends as far as the cavernous sinus. Once the blood is forced in it acts on the principle of the hydraulic press.

The hydraulic or hydrostatic press depends upon the equal transmission of fluid pressure, viz., "that the pressure exerted anywhere upon a mass of fluid is transmitted undiminished in all directions, and acts with equal intensity upon all equal surfaces and in directions at right angles to these surfaces." Thus by a simple hydraulic press a large weight was supported through the column of water by a much smaller weight and in inverse proportions to the ratio of their areas. This, in turn, gives rise to the hydrostatic paradox in which, by decreasing the

smaller area indefinitely and increasing the larger area indefinitely, any force, however small, applied to the smaller area may, by transmission of pressure through the fluid, be made to support upon the greater area any weight, however large. Now, here we had the heart pumping blood through the artery into a closed cavity, and as the cavity enlarged so did the force increase.

Now, taking the pressure in an artery to be two pounds to the square inch, when four square inches of dura are separated we have a pressure of eight pounds pressing against it; when it is separated for three square inches in each direction, or nine square inches, the pressure equals eighteen pounds. The area of dura mater stripped off in this case we have just cited was measured and found to be five inches long antero-nosteriorly, one and five-eighth inches in its greatest transverse diameter, and a greatest vertical diameter of one and one-eighth inches. This is approximately estimated to be about twelve square We should, therefore, estimate that there was a force inches. of twenty-four pounds exerted against the brain. The only resistance against this was the adhesion of the dura mater to the skull and the blood pressure in the capillaries of the brain sub-It is, therefore, not very surprising that we get such stance. very marked effects from the force exerted by the escaping blood, and it is no great wonder, indeed, that the brain, so soft and delicate and so easily injured, becomes compressed into a small space and fails to expand when that pressure is removed.

There are a few further points of interest that I should like to draw attention to in regard to this case, points which are very remarkable and very extraordinary, indeed, when one considers the case in all its details:

I. The remarkably slight amount of concussion. After the accident he was found with his feet at the top of the waggon box and his head on the pavement. He was in somewhat dazed condition when assisted to his feet, but was able to go to his horse's head and quiet him while his effects were being gotten together. He subsequently was able to walk from King to Bloor Streets, a distance of about one and one-quarter miles, and after reaching his home to undress and retire.

2. The remarkably slow onset of symptoms and the great length of time elapsing before coma supervened. As we have stated, he was injured during the afternoon and walked home, during the night the paralysis on the left side came on. When brought into the hospital at twelve the next day he was still conscious of everything. Coma did not set in for a few days and not till a few hours before his death. The interval of consciousness in most cases is variable, but seldom extends beyond an hour and a half. Ericksen describes a case that did not become unconscious for three and one-quarter hours. Treves states that an interval of two or three days may elapse before compression symptoms set in. In this case, however, consciousness lasted for between two and three days after the accident, though the paralysis came on some eight or ten hours after the accident. The explanation may be found in that either extravasation was very slow and the adhesions between the dura and the skull very strong, or that the hemorrhage ceased and was lighted up again by subsequent exertion, such as the long walk he took. Mr. Towers, in the *Lancet* for August, 1903, describes a case in which compression symptoms did not come on for fifty hours after the accident, but this he explained by the fact that the patient struggled violently with an attendant in endeavoring to get out of bed, and so restarted hemorrhage, which had stopped.

3. Large amount of clot. The quantity seldom exceeds four ounces; five and one-half ounces was the most Ericksen had seen. In this particular case I measured eight ounces myself, and there was considerable removed subsequently, so that there was at least ten ounces of clot removed. As shown in the drawing, a cavity was left between the brain and the skull almost large enough to hold one's fist.

In conclusion, I should like to briefly review the case, and at the same time dwell upon the great importance and value of getting a complete history of every case that comes to one. This unfortunate man was sent into us with the supposition that he had an apopleptic seizure during the night previously to his admittance. No one came with him but the ambulance men, and they knew nothing more about him than that he had some slight accident, and had gone home apparently little the worse of the accident. We never heard what really had happened to him till a few hours before his death, when his wife gave us the details previously given. It is needless to say that, had he been trephined shortly after being admitted, his chances for recovery would have been very much better, indeed. With a complete history, the case was very typical of meningeal hemorrhage. He had the initial slight amount of concussion, with the interval of consciousness lasting for some days, the gradual onset of compression signs while still conscious of everything, and coma, with death supervening in spite of all that had been done to save him.

WOOD ALCOHOL.

BY J. S. SPRAGUE, M.D., STIRLING, ONT. Examiner in Materia Medica, College of Physicians and Surgeons

"Poisoning by Wood Alcohol—Cases of Death and Blindness from Columbian Spirits and other Methylated Preparations." Such is the title of an address presented by Dr. Buller, of Montreal, and Dr. Casey Wood, of Chicago, before the fifty-fifth annual session of the American Medical Association, in the section of ophthalmology. The reprint from the Journal of the American Medical Association was sent to me in consideration of assistance given the above distinguished men in framing material for address and report.

In all some seventy-two cases are reported of total blindness and death, Dr. Buller furnishing some five or six cases, attributable to the use of wood alcohol or one of its many preparations, of which Jamaica ginger, Florida water, lemon essence, etc., afford but few illustrations. That deaths are so frequent from its use is attributable to laws against the use of grain alcohol, and such states in the United States which have prohibition, and other laws in opposition to the sale of alcoholic stimulants, have the greatest death rate. In one of the cases reported, Jamaica ginger, lemon essence, and "Peruna," occasioned a spree, with the results: blindness and death.

The reprint contains thirty-five pages, which is worthy of the interest of every M.D., in fact, of the interest of everyone.

I submit from page 24 the following (although the whole address should be read very carefully by every M.D., who should convey to his newspaper much of the information therein contained in regard to the deadly methyl alcohol):

TOTAL NUMBER OF METHYL ALCOHOL VICTIMS.

From Dr. Buller's tables of published histories we have a wellauthenticated list of fifty-four cases of methyl alcohol amblyopia, to say nothing of the deaths that are incidentally mentioned, of which no particular record was made. As the proportion of deaths to survivals with blindness is a fairly constant one, and reading the reports intended to describe blindness only, we may put down forty as the minimum number of published deaths.

Reference has already been made to the experience of Dr. Moulton with deaths from wood alcohol on Indian reservations. DOMINION MEDICAL MONTHLY

Other ophthalmologists tell the same story about these "strictly preserved" localities. One observer, who has reported several cases of methyl alcohol amaurosis, says regarding them: "Almost the first question I ask an amblyopic patient from a reservation is, What have you been drinking? The answer almost invariably is, Columbian spirits, Jamaica ginger, or something of that sort. It is no trouble to find the deleterious effects of methyl alcohol among these people. As for Indians, they will drink anything they think has alcohol in it, even red ink."

Nor is the consumption of methylated compounds as a substitute for ethylic alcohol confined to Indian reservations. Whereever men in any walk of life are deprived of a chance of indulging in the usual forms of ethylated beverages, they are very likely to drink some tempting form of methylated mixture. Assistant Surgeon X. writes me: "The temptation of the men of this post is particularly great, as we are over ten miles from the nearest saloon. At the time the deaths occurred the men, having consumed all their grain alcohol, had to have something to 'sober up 'on, so they got hold of Columbian spirits and drank it, hardly knowing or caring what they were taking." Perhaps if the United States Army had been supplied with a properly regulated canteen, where light wines and good beer were sold, these soldiers would have "sobered up " on non-poisonous drinks and not on wood alcohol!

The list of previously unrecorded cases of blindness, so far as Dr. Wood has been able to collect them, includes 89 well-authenticated cases from the drinking of methylated liquids. Absorption of the fumes is responsible for ten instances of amblyopia, while the deaths (without history of previous blindness) number 82. Altogether, then, we have 153 instances of blindness and at least 122 cases of death from methyl alcohol poisoning during the past few years—275 in all.

Our reasons for believing that these figures by no means complete the roll of serious intoxication from this poison we have already pointed out. How many cases of death and blindness (or both combined) have resulted from methylated preparations since the comparatively recent introduction of Columbian spirits is a matter of conjecture; probably 400 instances.

Since this article went to press, the newspapers report the deaths of twenty-five persons in a certain district in New York city from drinking whiskey which contained wood alcohol and which was purchased in a saloon. The newspaper account continues: "The police to-night arrested Rudolph Fritsche, the proprietor, and closed the place. A chemical analysis of the stomach

of one of the victims, who died of acute gastritis, showed the presence of wood alcohol, which also was found in a bottle of whiskey purchased at the saloon."

COMMERCIAL FORMS OF METHYL ALCOHOL.

Although that nauseous and vile-smelling fluid is still purchasable as wood alcohol, wood spirit, pyroligneous spirit, wood naphtha and methylated spirit, its place in commerce has been almost altogether taken by the deodorized variety, of which "Columbian spirits" is easily the best known and most widely used. There are many other forms of this fluid on the market, such as " colonial spirits," " union spirits," " eagle spirits," etc., in the United States. "Green wood spirits" (mostly used for fuel) and " standard wood spirits " (a more thoroughly deodorized article) are largely sold in Canada, and intended for the came purposes as the American Columbian spirits. The deodorized fluids all have the same volatile, agreeable, vinous odor, and the pungent, biting taste, as pure ethyl alcohol, and it is often difficult for the average individual to distinguish them from grain alcohol. It is, therefore, quite easy to understand how the thirsty one, unaware of the danger to life and eyesight, might indulge in a drink of the methylated product. Manufacturers of all sorts of alcoholic potions have not been slow to take advantage of this fact; indeed, there is hardly a "liniment," an "essence," an "extract," or a "bitters "-hardly any nostrum or concoction, medical or domestic, in whose preparation alcohol is employed—that has not been, or is not now, adulterated with this poison. We have, within the past few months, had several proprietary remedies, suspected to have produced blindness, carefully analyzed; they all contained wood alcohol.

As stated on the highly ornate labels of the bottles intended for retail consumption, one form of methylated "spirits" is highly recommended for "bathing, burning, and cleaning." Among the uses specified are: "Bathing and sponging the sick; making liniments; rubbing for rheumatism, bedsores, etc.; veterinary uses, where alcohol is required; Turkish bath cabinets; burning under chafing dishes and in spirit lamps; removing oil and grease from b:ass and wood-work." In all these instances ample opportunity is afforded for absorption of the poison.

A few instances—there are hundreds of others—of the use of "leodorized" wood spirit as an adulterant of or substitute for grain alcohol may be given :

In the 1903 report of Dr. R. O. Brooks, state chemist of New Jersey, it is shown that from four to eight samples of paregoric $\frac{3}{3}$

and from four to eleven samples of ginger contained wood alcohol—a fact that would seem to indicate that drug adulteration with wood alcohol is still practised to a considerable extent.

Scoville* reported that he found two out of six commercial liniments containing wood spirit; also the same poison in several brands of witch hazel.

Dr. Allen Greenwood, of Boston, found quite recently that two of his patients had been furnished tinctures whose menstruum was "Columbian spirits." The druggist, on being called to account, stated that many tinctures are now being made with "spirits" of this kind!

The president of the New York Board of Health ordered, in 1902, an examination of the ingredients in the Jamaica ginger and spirits of ammonia sold by druggists throughout the city. The official chemist found that 40 out of 215 drug stores were substituting wood alcohol for grain spirits. Warrants were issued for these offenders.

Dr. Warren, the pure food commissioner of the State of Pennsylvania, reports that to Feb. 5th, 1904, he had collected and examined 1,000 samples of cheap whiskey from all parts of the state. Over 95 per cent. of the samples contained varying quantities (some as high as 75 per cent.) of wood alcohol. He believes that 5,000 cases will be found in the state, and is determined to prosecute them.

In 1902, E. L. Patch, of Stoneham, Mass., reported to the American Pharmaceutical Association that he found wood spirits in 40 out of 225 samples of spirit of camphor.

Without further multiplying examples of this brazen attempt at wholesale poisoning, we finally present a recent report of the dairy and food department of the State of Minnesota, who condemned and pronounced illegal, because of their containing wood alcohol, samples of lemon "extract" from all parts of the state. These poisonous products were put up and sold by wholesale manufacturers of (?) respectable standing in Chicago, St. Paul, Minneapolis, Duluth, and Milwaukee. In addition to this list they also found four cases in which methyl alcohol was used in the manufacture of Jamaica ginger, two cases of vanilla extract, one of pineapple, and two of strawberry.

TOXICITY OF METHYL ALCOHOL.

While a study of the cases reported in this article must undoubtedly establish the fact that the majority of those who imbibe a moderate quantity—say two or three ounces—of wood alcohol

^{*}Mass. Pharm. Assn., 1897.

or its equivalent of methylated liquids, escape permanent damage, *i.e.*, most persons are, to some extent, immune to serious poisoning by small quantities of methyl alcohol, this is by no means true of larger quantities; nor does it, by any means, prove the immunity of every person from poisoning by very small quantities. Until the experiment has been made, nobody can be assured of safety to eyesight from the ingestion of much smaller amounts of the poison. There are many well-authenticated instances in which the drinking of a couple of teaspoonfuls of wood spirits was followed by blindness.

The intoxication of persons from inhalation of the fumes of methylated alcohol is another example of poisoning by small quantities of the intoxicant, because the actual bulk of liquid so absorbed by the lungs and skin must be comparatively small.

The cumulative quality of methylism has been referred to by several writers. This matter will be further discussed in speaking of the pathology of the subject. Meantime our investigations undoubtedly demonstrate that in many instances no marked poisonous symptoms were noticed until twenty-four hours or longer, after the last of a number of doses (usually small "drinks") had been taken. Unlike most poisonous agents that are responsible for acute symptoms, these may not much disturb the patient for a relatively long interval after the ingestion of the poison. Indeed, it may be set down as a rule that, except in persons exhibiting an idiosyncrasy against wood alcohol, or unless a large dose of the poison is drunk within a few hours, not only may the severe abdominal symptoms, the cardiac and nervous collapse and the blindness be postponed, but even the fatal termination has, in some instances, been delayed for several days.

This information, derived from the histories just published, demonstrate the fact that there is danger, albeit an unknown degree of danger, to life and eyesight attending the ingestion of *any* amount of wood alcohol. Moreover, while the acute, unmistakable symptoms of the ordinary forms of intoxication enable us to recognize them at once, there can be no doubt but that much smaller quantities, taken into the system, as methylated quack remedies, adulterated foodstuffs (Jamaica ginger, "lemon extract," essences), or the secret dram drinking of bay rum, cologne water, etc., may, in persons not immune, injure the digestion and permanently damage the vision.

There are very few poisons that more distinctly exhibit the selective character of the intoxication than wood alcohol. It has again and again been demonstrated that a minority of those who imbibe methylated fluids suffer no permanent damage from them. In other words, many people are practically immune to moderate doses of methyl alcohol. In most cases where small doses are taken, serious intoxication means that there is in the poisoned individual an idiosyncrasy against this agent. It is owing to this fact that in times past many perfectly sincere observers asserted, and interested parties loudly proclaimed, the innocence of methyl alcohol. During the trial of the Baltimore suits against Gilbert & Co. a dramatic incident occurred, based on this belief. A chemist drank a quantity of methylated spirits in open court. Of course, we now know that, although this was a dangerous act, the chances were greatly in favor of the witness, especially if at the time his stomach were full of food, or if he took an emetic shortly after the draught of wood alcohol.

Prof. W. A. Puckner, in the *Western Druggist* for December, 1897, wrote:

"The only constituent of wood alcohol likely to be present in sufficient amount to be poisonous is acetone, and, since methyl alcohol is comparatively free from this, the preparations now in the market are presumably also free from the poisonous properties ascribed to wood alcohol."

Supporting this proposition, he took internally single 30 c.c. doses of a commercial wood alcohol containing about 0.5 per cent. of acetone, and experienced no unpleasant results therefrom.

"Further doses of 15 c.c. taken at intervals of thirty minutes until 90 c.c. had been drunk, left the body temperature normal, at first somewhat accelerating, later slightly depressing, the pulse, *i.c.*, producing the characteristic effects of ethyl alcohol."

On the other hand, Dr. Reid Hunt,* of Johns Hopkins, showed that, in experimenting on dogs, the latter were all killed by doses of Columbian spirits and other fluids containing methyl alcohol, while animals survived the same and larger quantities of ethyl alcohol and pure acetone.

In considering the actual poisonous agent in the methyl alcohol of commerce, one must not forget the secondary organic compounds formed in the intestines and in the blood. It is quite likely that these play an important rôle in the damage inflicted on the system.

Those interested in this subject had better write to Dr. Buller for the address, or read my article in The Daily Star, Toronto, which, at length, with notes, deals with this subject, and cites several cases.

^{*}Toxicity of Methyl Alcohol, 1903.

Selected Article.

THE BRADSHAW LECTURE ON THE TREATMENT OF ENTERIC FEVER.*

By F. FOORD CAIGER, M.D. (LOND.), F.R.C.P. (LOND.) Medical Superintendent South-Western Fever Hospital, Stockwell.

Mr. President and Gentlemen,—My first duty is to express my grateful appreciation of the honor which the President has done me in deputing me to deliver this lecture. In my choice of a subject I have been suided by the President's wish that it should be one more or less identified with my daily work, and I have, therefore, selected the treatment of enteric fever as seemingly not inappropriate.

During recent years a great deal has been said, and still more written, as to the treatment of typhoid fever, and that by some of the most eminent members of our profession. It is not unnatural, therefore, that I should feel some diffidence in bringing the subject before you on this occasion; and yet, when one reflects that our case-mortality to-day remains at a height of more than 15 per cent., and that in this country alone some five or six thousand persons annually die from the disease, I feel that it is not, perhaps, without some justification that I venture to recall your attention to the important question of its treatment. To attempt to deal at all exhaustively within the time at my disposal with a subject as wide as that of the treatment of enteric fever would be manifestly impracticable, for, in addition to a discussion of numerous measures of a directly remedial character, it would involve the careful consideration of various points of no less importance in connection with the dietary and the nursing of the ca. e. Moreover, the subject is one which has, perhaps, offered a wider field for discussion and been a source of greater difference of medical opinion than in the case of any other disease. I propose, therefore, to confine my remarks entirely to the field of therapeutics, with special reference to various measures which, as the result

^{*}Delivered at the Royal College of Physicians of London on Nov. 15th, 1904.

of my experience, I have come to regard as worthy of some confidence.

From a therapeutic point of view, it may be stated broadly that the treatment of a case of enteric fever will probably be conducted on one of two well-recognized lines—an active remedial method, or a passive, or so-called expectant, method, each of which has its firm adherents. But whether we favor the exhibition of remedies having for their object a direct interference with the natural course of the disease or whether, as is so much the fashion to-day, we adopt an expectant attitude and are content to restrict our efforts to combatting individual symptoms in the event of their assuming a threatening aspect, and to relieving any complications which may arise during the course of the illness, the fact must never be forgotten that the treatment of enteric fever is not merely a matter of therapeutics, but implies the general management of the case.

Now, it may be asserted generally that our management of any case of serious illness is likely to be successful in proportion as it is adapted to the special circumstances which characterize that attack, due regard being given not only to the underlying morbid process, of which certain of the symptoms are the recognized expression, but also to the personal factor which in some instances contributes so largely to the general aspect of the case; and to this rule enteric fever is no exception. Experience clearly indicates that what is best for one patient may not necessarily be so for another, and that the best results will be achieved, not by a slavish adherence to any particular method of treatment, to the exclusion of others, but by the adoption of such measures as seem best adapted to the idiosyncrasy of the individual patient and the particular type of his attack.

The methods of treating enteric fever by means of remedies which are assumed to be capable of exerting a direct controlling influence over the natural course of the disease may be appropriately referred to as either (I) specific, (2) antipyretic, or (3) antiseptic, according to their conception and to the nature of the agents employed, and they may conveniently be discussed under these headings.

I. First, as to specific treatment. The remarkable success which has attended the treatment of diphtheria by the injection of antitoxic serum, and in less degree that of tetanus, not unnaturally encouraged the hope that a curative serum might be prepared which would prove equally efficacious in the case of typhoid fever. But, unfortunately, such favorable anticipations have not been realized. In the case of the two former diseases, the serum of the horse, which has been successfully immunized against these infections, is found to be highly antitoxic, besides possessing some anti-bacterial power. In the case of typhoid fever, however, the serum of a horse, after repeated inoculations with the virus, though possessed of anti-bacterial properties, as in the case of diphtheria and tetanus, is found to be practically devoid of any antitoxic value, and consequently useless as a curative serum. Until a serum can be produced which is antitoxic, in addition to containing anti-bacterial substances, it would seem that all attempts to confer a specific passive immunity in enteric fever must, as in the case of cholera, apparently be doomed to failure. It should be mentioned, however, that Chantemesse claims to have produced a serum with which a remarkable success in the treatment of enteric fever is said to have been achieved. Speaking at the Seventh French Medical Congress, held last month in Pavis, he stated that of 545 cases of the disease which had been treated in his wards at the 29th Bastion, between April 1st, 1901, and Oct. 1st, 1904, only 22 proved fatal, representing a mortality of 4 per cent. Planté and Foucauld, with the same remedy, were reported in January, 1903, to have treated at the Marine Hospital of St. Mandrier, 151 cases with 13 deaths, a mortality of 8.7 per cent. The two series together comprise 606 cases, with a fatality of 5 per cent., a success which is really phenomenal.

As to the nature of this serum there is at present some uncertainty. For its preparation a horse is immunized by repeated inoculation with toxic products of the typhoid bacillus obtained by special methods of cultivation. The serum eventually acquires curative properties, but the process is a slow one, requiring a good many months for its accomplishment. Chantemesse states that the serum retains its properties unimpaired by keeping, an observation which suggests that its mode of action is not a bactericidal one. On the other hand, the fact that its injection is often followed by definite, though not prolonged, constitutional disturbance, and the very remarkable fact, as stated by Chantemesse, that the more seriously ill the patient is, and the more advanced the disease, the smaller should be the injection, seems hardly compatible with the action of a serum which is merely antitoxic. It has been suggested by Dr. A. E. Wright that its curative properties may be explained on the assumption that an active immunity is conferred on the patient as a result of the transference from the horse of unneutralized bacterial poisons, which act as vaccines when introduced into the human organism. It is to be regretted that more precise information as to the

exact nature of Chantemesse's serum is not forthcoming, since its success in practice is apparently very striking. Any inference as to the efficacy of the serum, however, is unfortunately weakened by the fact that various other remedies, such as baths, packs, and cold effusions, were used in these cases, in addition to serum therapy, whenever their employment appeared to be indicated.

The beneficial influence which it is claimed may be exerted on the progress of the disease by previous inocalation with attenuated cultures of the typhoid bacillus, which material, it may be observed, is not a serum, though often wrongly so called, but a vaccine, assuredly possesses some claim on our confidence. By this method, undertaken primarily as a protective measure, an active immunity is conferred, at any rate for a time, and we are therefore prepared to believe that a certain amount of controlling influence might be exerted on the course of the disease, even though it may have failed to avert infection. The procedure, which was initiated by Dr. Wright when professor of pathology at the Army Medical College at Netley, consists of the inoculation of sterile cultures of the typoid bacillus which have been attenuated by exposure to heat. The process is analogous to the anti-cholera inoculations successfully practised in India by Haffkine and more recently on an extensive scale against plague. It is interesting to note that the work in each instance has for its prototype the world-renowned antirabic inoculations of Pasteur, who to some extent, however, must be regarded as having been working in the dark, since the specific infecting agent of rabies has not even yet been determined. The immediate effect of the inoculation, as Wright has been careful to point out, is to induce a temporary lowering of resistance. This "negative phase," as he terms it, corresponds with a diminution of the bactericidal power of the blood, and until it has passed off the subject is apparently not only more susceptible to enteric fever but the attack is likely to be more severe if con-Under the system of dosage which it has so far been tracted. customary to employ this period of heightened susceptibility has appeared to last for from one to two weeks, but with improved methods of administration, founded on exhaustive experimentation and confirmed by riper experience, Wright has shown that it may be very substantially reduced.

The success attendant on Wright's method of anti-typhoid inoculation has been a source of considerable difference of opinion amongst those who have had practical experience of its use. Although the inoculations have been carried out on an extensive scale, more especially amongst the British troops in India and in South Africa during the recent war, the difficulties in the compilation of accurate records, the impossibility in many instances of getting data which are strictly comparable, and the unsatisfactory conditions under which the inoculations were so often performed, have tended to impair materially the authority of the published results. When, however, the numbers comprising any statistical record are large and the separate groups contained in it are comparatively numerous, such fallacies certainly tend to exert less influence, and the inference carried becomes proportionally stronger. This, of course, holds good in respect to the statistics of anti-typhoid inoculation.

If we refer to the records dealing with inoculation among the British regiments serving in India as published in the Army Medical Reports, we find that amongst 15,384 men inoculated during the years 1800 to 1001 in various parts of the Indian Empire, the incidence of enteric fever was 0.8 per cent. as against 1.5 in the uninoculated, and amongst the 2,260 attacks comprised in the series, the case mortality in the inoculated was 15.6 per cent., as against 26.6 per cent. in those who had not undergone the treatment. Again, the combinea results in a variety of military hospitals in South Africa as furnished in a report by Dr. R. W. Dodgson, the special commissioner appointed to inquire into their working, show that in respect to 4,138 cases of enteric fever, the case mortality amongst the inoculated was 8.2 per cent., whereas it was 15.1 in those who were not inoculated. In this instance the reduction in mortality was almost 50 per cent., and in the case of the staffs of three of the hospitals -viz., Nos. 8, 9, and 10-general hospitals-located in Bloemfontein during the epidemic of 1900, the reduction obtained was nearly a three-fold one, but in this instance the number of attacks, viz, 109, was but small. An investigation as to the value of Wright's method of anti-typhoid inoculation was undertaken by the College of Physicians last year at the request of the War Office, and a special committee of the College was appointed to inquire into it. Careful examination of the whole of the evidence available has tended to show that not only is a considerable degree of protection conferred by the inoculation, but that it is a'so capable of exercising a mitigating influence upon the severity of attack. Further investigations are now being undertaken with the object of effecting an improvement in the vaccine and of extending our knowledge as to the best and most appropriate dosage, and encouraging as the results up to date undoubtedly are, it may be confidently expected that with additional light on these points still better results may be looked for in the future.

2. Next, as to the antipyretic method of treatment. On the assumption that pyrexia is the most important factor in a case of enteric fever, the exhibition of remedies which have the power of reducing the body heat has been very extensively employed. Although certainly less practised in this country than on the continent, the method has received the support of some of our most distinguished clinicians. An antipyretic effect may be brought about either by drugs or the direct application of cold to the surface by means of cold baths, packs, sponging, etc., or by a combination of both.

Of the various drugs which are recognized as possessing antipyretic power, such as sulphate of quinine, antipyrin, antifebrin, phenacetin, salicylates of sodium and quinine, resorcin, kairin, and thallin, even digitalis and veratria, the best for the purpose is undoubtedly quinine. Not only does quinine possess a marked antiseptic influence over living cultures of the typhoid bacillus, as was experimentally demonstrated by Eberth, but its administration is not attended with the depressant influence on the heart, in some instances leading to dangerous collapse, which antipyrin, in common with the other tar products I have named, is prone to exert. Nor is it, except when given in excessive doses, productive of the mental confusion, delirium, and vomiting which so often attend the use of the salicylates. Quinine, moreover, in addition to its value as a cardiac tonic, is believed not to exert any inhibitory influence on the elimination of toxins from the system, as is said to occur with the drugs of the antipyrin class. If quinine be given with the object of lowering the temperature, it must be administered in large doses—from fifteen to twenty grains or more, preferably, twice in the twenty-four hours; or, better still, according to the method recommended by Bouchard, which is to give four doses of seven and a half grains, repeated at intervals of a quarter of an hour in the evening of every third day during the first fortnight of the fever. In any case it is a favorable sign if the administration of the drug be followed by a marked fall of temperature. It should be remembered that the full physiological effect of quinine as an antipyretic is not reached until after the expiration of four or five hours, and occasionally even eight. The time of its administration, therefore, should be regulated accordingly. By giving large doses of quinine at the times when the temperature naturally tends to remit the pyrexia can sometimes be made to assume an intermittent course, resembling that so characteristic of normal defervescence. It is very problematical, however, whether an effect produced under such obviously artificial conditions possesses any advantages over

a pyrexia of less variable range, provided it be moderate in degree.

For my own part I do not favor the use of antipyretic drugs -at any rate, in antipyretic doses—in cases of moderate fever, as I firmly believe such pyrexia to be a natural element of defence against bacterial invasion, and that in proportion as one is successful in stifling what appears to be a reactive pyrexia by means of a powerful antipyretic drug, one is acting the part of a very questionable friend in tying the hands of one who is striving to defend himself against an antagonist who has already secured an In cases, however, in which the pyrexia becomes advantage. excessive and in itself represents an additional element of danger by reason of its damaging effect on the cardiac muscle and the central nervous system, vigorous antipyretic measures are certainly indicated, as in these circumstances the symptom pyrexia calls for prompt repression. For its accomplishment I much prefer the direct application of cold to the surface, supplemented, if necessary, by a dose of sulphate of quinine, but to this I shall have occasion to refer again when speaking of symptomatic treatment.

Of the various methods of treating enteric fever by means of cold application to the surface, or, to speak more correctly, by the abstraction of heat or refrigeration, there can, I think be no doubt that the most effective by far is the repeated employment of the cold bath, a form of treatment strenuously advocated some forty years ago by Brand, of Stettin. This, with slight modifications at the hands of his numerous followers, has been very widely employed on the continent, in America, and elsewhere; and, it must be admitted, with signal success. Treatment by means of frequent cold bathing had been extensively practised by James Currie, of Liverpool, some seventy or eighty years previously, though subsequently it fell into disuse. Currie's methods were undoubtedly somewhat crude and apparently more exacting, although the same principle was involved. He placed his patients in a wooden tub and buckets of cold water were poured over them, a procedure which is hardly in accordance with our views as to the proper way of dealing with a case of enteric fever at the present day. But even in Currie's time, as Collie has pointed out, a cold bath treatment was no new thing, since the records show authentic evidence of its employment by the ancients. Asclepiades, for instance, was in the habit of sending his fever patients to bathe in the springs of Catillia, where they apparently derived great benefit.

It is claimed that the cold-bath treatment, when properly

carried out, effects a mitigation of the general symptoms of the disease (some of which, though recognized as normal accompaniments of enteric fever, are averted altogether) and a reduction of the case mortality by a half or even two-thirds. This contention is supported by published results. Thus in the Prussian army the case mortality was reduced from 25 per cent. to 8 per cent. by means of the cold bath. Jurgensen effected a reduction from 15.4 per cent. to 3.1 per cent. Drasche, of Vienna, brought down his hospital mortality from 16.2 per cent. to 9.3 per cent.; Tripier and Bouveret, of Lyons, reduced their mortality from 25 per cent. to 7.5 per cent. Osler, of Ba'timore, lowered the death-rate from 21.8 per cent. to 7.4 per cent. Thompson, of New York, reduced his mortality from 19 per cent. to 7 per cent.; Hare, of Brisbane, from 14.8 per cent. to 7.5 per cent. The general experience, then, would show that the fatality from enteric fever can be brought down to somewhere about 7 per cent. by a thorough application of the cold-bath treatment. Hare's record is particularly interesting. For a period of ten years all cases of enteric fever admitted into the General Hospital at Brisbane were treated with the cold bath. They numbered 1,002, and the results were compared with those obtained in a consecutive series of 1,828 cases received into the hospital during the four and a half years immediately preceding its adoption. The case mortality in the two series was, as I have stated. 14.8 and 7.5, respectively. The record is of particular value, since for a period of seventeen months before and three years after, the coldbath treatment was introduced, both the management of the wards and the care of the patients were under the personal supervision of Dr. Hare himself.

It was particularly insisted upon by Brand that to procure the full benefit of the treatment, it must be commenced at an early stage of the disease. Brand maintained that if the treatment were commenced by the fourth day and continued throughout the attack according to his instructions, not only would the pyrexia be kept at a lower level, but the intestinal lesion would be held in check, the affected follicles in these circumstances not proceeding to ulceration, and consequently the occurrence of both hemorrhage and perforation would be averted. If, on the other hand, the baths were not commenced until a later stage of the illness, the occurrence of actual ulceration could not be avoided, although the course of the illness generally would be favorably influenced in proportion as the treatment was early adopted. Brand's instructions were that the bath should be given every three hours whenever the rectal temperature registered 102.2 degrees or over, and that the temperature should be taken again half an hour after the bath, when a fall of about two degrees might usually be expected.

In this country the use of the cold bath has been mainly restricted to the combating of hyperpyrexia in special cases. As a systematic method of treating enteric fever it has received comparatively little support, although it has been recommended by such high authorities as Sir William Broadbent and Dr. W. Cayley. Professor Osler, who is a firm supporter of the coldbath treatment, strikes the right note when he stars that he regards it as "not so much special and antipyretic, as tonic and roborant," and were one to supplement this criticism by claiming for it in addition a powerful eliminative agent, one would probably not be overestimating its virtues. Although Brand claimed for the cold bath that its action was essentially protective against a high temperature the fact that he enjoined more or less continuous friction of the skin throughout the period of the patient's immersion suggests that he was probably alive to its action as an eliminant. It is by no means improbable that it is to its salutary influence on the nutrition of the skin and to its power of maintaining the excretory activity of both the skin and kidneys that the cold bath mainly owes its marked superiority over all other therapeutic procedures of which the primary aim is refrigeration.

(To be continued in February issue.)

Clinical Department.

A Case of Fracture of the Surgical Neck of the Humerus in an Octogenarian. PHILIP E. HILL, M.R.C.S. (ENG.), Surgeon to the Crickhowell Workhouse Infirmary, England, in *The Lancet*.

A man, aged eighty years, was admitted into the Crickhowell workhouse infirmary on October 20th, 1904, suffering from a fracture of the surgical neck of the right humerus. On examination the arm was found to be swollen considerably, with ecchymosis extending from the shoulder to the wrist, and the patient was in great pain. Some days prior to his admission he had been seen by a medical man, who had placed a pad in the axilla and strapped the arm to the side. Coaptation having been effected, a pyramidal pad with its base upwards was placed in the axilla and two splints were applied, an angular one to the inner side of the arm, and an outer one extending from the shoulder to the elbow. The arm and chest were then bandaged together and the hand and wrist were enveloped in a sling. The patient was placed on a water bed and necessarily kept there during the whole of the treatment. Unfortunately, at the end of six weeks he died from cardiac failure induced by the excessively low temperature which prevailed at the time. I made a postmortem examination of the limb in order to ascertain what amount of repair, if any, had taken place. I found that the fractured ends were accurately adjusted and that firm, bony union had been accomplished, a result hardly anticipated in a man where the reparative processes are presumably deficient in consequence of the vital powers being exhausted by age and debility, as evidenced by the fact that from the first there was incontinence of urine and feces.

A Case of Surgical Emphysema in Pulmonary Tuberculosis. R. D. ATTWOOD, M.R.C.S. (ENG.), L.R.C.P. (1000), Assistant Medical Officer, Southwark Union Infirmary, England, in *The Lancet*.

A man, aged thirty-eight years, was admitted into the Southwark union infirmary in June, 1904, with extensive phthisis of the right lung. On Nov. 12th his face was noticed to be extremely swollen; on examination he was found to have surgical emphysema of the face and right side of the chest. The emphysema spread to the left side of the chest and abdominal wall. The patient died on Nov. 18th. At the post-mortem examination it was found that the larynx and trachea were normal. There was no pneumothorax. The right lung contained many areas of consolidation and several small cavities. Near the right apex was a small cavity over which the lung was adherent to the chest wall, and which communicated with the parietes by a small opening in the third intercostal space.

A Case of Enteric Fever Due to Eating Oysters. JOSEPH CLOUGH, M.R.C.S. (ENG.), L.R.C.P. (LOND.), ENGLAND, in The Lancet.

The patient was a boy, aged four years, who, about the middle of August, went for a two hours' sail at Scarborough. He was very sea-sick and vomited violently. On landing he ate two oysters from a street stall without any vinegar on them. Seven days afterwards he fell ill, and fourteen days afterwards he had distinct enteric fever spots. For the first three weeks of his illness he progressed favorably, but at the end of the fourth week his abdomen became swollen and painful, and he suffered from vomiting, tendency to general coldness, and feeble circulation. During the first half of the fifth week he was sleepless and delirious, his temperature varied from 102.5 deg. to 103.5 deg. F., and there was diarrhea, some motions being passed in bed involuntarily. I ordered him chicken broth with plasmon in it, and castor oil in doses of about a teaspoonful, after which he immediately began to improve. His temperature did not become normal till the end of the seventh week of the illness. The boy is now as strong as ever.

Records of Swallowed Safety-Pins. ARTHUR DEVOF, M.D., of Seattle, Wash., in *American Medi ine.*

Richard B., a red five years, swallowed an open safety-pin one and a half inches long at 8 o'clock a.m., September 4th, 1904. At 11 o'clock a.m., three hours later, by aid of the roentgen ray, the pin was observed in the esophagus just above the upper border of the sternum. The boy was soon chloroformed and the pin pushed down into the stomach. His parents refused to submit to a gastrotomy for its immediate recovery. September 7th, at 1 p.m., the pin not having passed the bowels nor produced any symptom of distress, the patient was given stewed dried prunes to eat of freely. At 6 o'clock a.m., September 8th, the pin passed readily, along with a mass of partially digested prune skins notably visible.

This pin might have passed naturally into the stomach by the aid of some suitable effort at swallowing food or drink. Nothing of the kind was tried.

The safety-pin, a notable household and nursery convenience, made with bent wire, a spring temper, and a sharp point, is acquiring something of a record in medical literature for passing in open form through the alimentary canal in children. Once started, point backward, and it cannot start otherwise, this formidable looking affair seems to pass with unexpected readiness through the whole digestive tract, reappearing in a more or less corroded and damaged plight, the child meantime having presented few, if any, symptoms of distress from its presence. One, two, three, four, twenty, or even sixty days have been known to elapse between the ingress and the egress of the pin, the longer periods giving ample time, one would think, for the setting up of irritation by its presence in children aged nine months to four or five years.

Safety-pins are in such common and familiar use that it is well for all to know that they have been occasionally swallowed in open form, and, the habits and impulses of parents and children remaining as in the past, such accidents are bound to occur from time to time in the future.

Now, the mechanism of an open safety-pin is such that if placed in a vitalized muscular canal, like the alimentary tract, it must advance, if at all, "like a crab, backward." dragging the point and hood of the pin by a safe motion, which gives small chance to pierce the tissues. This is true especially of the esophagus and the small intestine, the canals of which are not wide enough to permit an end-to-end turning of a one-and-a-half or two-inch pin in its course. It is true that the larger spaces of the stomach and large intestine offer better opportunity for the tumbling process, but a careful study of the open safety-pin will show that it must soon right itself and advance in accordance with its name in true safety form. *i.e.*, backward, eye or loop leading, point and hood following, the advancing loop affording a resting place for prune skins or other undigested shreds, thus assisting the progress of the pin.

Within the past two years, 1902 and 1903, the Medical World of Philadelphia has placed upon record quite a number of cases of children of various ages who have swallowed open safetypins, and who have successfully and safely passed the same after varying intervals of time. Within the past month two cases have come to my personal knowledge in this city.

If I were to be given a choice for my child to swallow a safety-pin open at the usual angle or a common straight pin, I should consider the straight pin the more dangerous of the two.

Instantaneous Cure of Erysipelas. W. B. TAYLOR, M.D., Dexter, Ga., in American Journal of Dermatology.

In studying erysipelas I found in reading after Prof. Anders, of Philadelphia, in his text-book on practice, edition 1902, where he says a knowledge of the microbic nature has led to the local application of numerous antiseptic remedies, and it is along this line that the greatest advances in the treatment of the disease are to be expected. This led me to believe that we had some drug at our command that would dissolve out the sebaceous matter of the skin and penetrate the deep layers and superficial lymph vessels, the habitat of the streptococcus, and kill them.

In studying further into the subject, I concluded that creolin, being a saponified coal tar creosote, was worthy of a trial.

My first opportunity to use this remedy was some months after my study of the subject from an antiseptic standpoint, in May, 1903. My first case was a married lady, about thirty-three years of age, who gave a history of several previous attacks. Examination showed small wounds on both feet, evidently the point of infection. The disease had spread far above both knees, with intense, burning pain. I at once painted undiluted creolin over the affected area and waited three minutes and washed off same with plain water. The effect was instantaneous. The lady was cured, the skin resuming its natural appearance, with no damage done by the creolin.

I had the opportunity to use it in four other cases—two small children, one young adult female and one aged gentleman (sixtyfive years old), with same results as in first case.

If this treatment shall prove a success in the hands of the medical profession, thereby saving many lives from complications which are liable to follow erysipelas, I shall feel gratefully rewarded.

Hoping to hear results from any physician who has an opportunity and wishes to test the efficacy of creolin in the treatment of erysipelas.

DOMINION MEDICAL MONTHLY

A Case of Hemorrhagic Typhoid. J. R. DURHAM, M.D., F. F.M.C., Warren, Pa., in *J.A.M.A*.

History.—J. O., aged twenty-eight, single, occupation woolsman, was admitted to the hospital on the evening of Sept. 3rd, 1903, with a history of having been ill one week, and of coming from a camp where typhoid fever was present. Temperature, 104.6; pulse, 94; respiration, 34; urinary analysis negative.

Course of the Disease.—The next morning the temperature was 105; pulse, 100; respiration, 42; considerable bronchial cough, severe headache and delirium. The pulse becoming weaker, he was placed on strychnia, gr. 1-60 every four hours, while the nervous symptoms and pyrexia were treated by the ice-bag to the head and ice-water sponges every two hours.

September 5.—Temperature ranged from 102 to 105; pulse from 90 to 100; respiration varied between 40 at 8 a.m., 22 at 2 p.m., and back to 40 at 6 p.m.; abdominal symptoms were now more pronounced, there being considerable tympanitis and diarrhea; for these turpentine stupes and turpentine inunctions were used, with salol and betanaphtholate internally and later turpentine enulsion; large quantities of gas were expelled. The next night s'rowed no change in his condition, except that there was circulatory depression during the sponges, for which he was given a half ounce of whisky before the treatment.

September 6.—The temperature remained through the day at 105, pulse from 95 to 104 and weaker, respirations 28 to 36. Ice-water enemas were given every three hours, while strychnia was given hypodermically every four hours in dose of 1-40 gr.; the rectal tube was also used with good results.

Between this date and September 10, the patient continued to be desperately ill; the heart showed some intermittence, so nitroglycerin, gr. 1-200, was added to his strychnia; the other symptoms were the same.

September 11.—Temperature from 102.2 to 104, pulse from 88 to 94, better quality; respirations from 22 to 32; cold packs were used at this point, being better borne by the patient. There was considerable cough and some congestion of the bases of the lungs.

September 13.—Temperature falling very slightly, the pulse lower and of fair quality; respirations still from 28 to 36.

September 14.—Temperature from 101.8 to 103.6, pulse from 92 to 94, respirations from 28 to 44. This was the eighteenth day of the disease. Hemorrhages from the gums and mucous membrane of the mouth now made their appearance,

and also under the skin wherever the hypodermic needle was used.

September 15.—There was a continuous hemorrhage from the rectum, the urine also being quite red; a slight oozing of the blood was next noticed from the skin of the nose; ergotol in 10 minim doses was given hypodermically every four hours, and 15-grain doses of calcium chlorid by the mouth every five hours. Besides this, a mouth wash of adrenalin chlorid, 1 to 4,000, was used and with good effect.

September 17.—The temperature ranged from 100 to 101.6, respirations from 22 to 30, pulse from 98 to 106; after an enema at 2 p.m., he expelled a great deal of gas and dark blood, while the urine was almost black. Protein, gr. 15 every three hours, was added to the treatment at this point.

September 18.—Temperature, 100 to 103.6; respirations from 22 to 28. The bleeding from the mouth was much better, but a severe hemorrhage from the bowels occurred at 5 a.m., there being three pints of fresh blood expelled; bladder hemorrhage same. Morphin, gr. 1/4, was given at once, as well as ergot. $M_{X,i}$, and the administration subcutaneously of 700 c.c. of normal salt solution. After the use of the morphia the respiration dropped as low as from 14 to 18 a minute and no fresh hemorrhages appeared.

September 20.—Urine began to clear up; pulse became as low as 78; temperature, 99.8; respirations from 15 to 18. About this time two superficial abscesses appeared on the nates, but with antiseptic dressings they soon healed.

Between September 21 and October 4, the patient made steady progress, his bedside record being discontinued on the latter date. He was discharged from the institution October 21, after having been under treatment for fifty-five days. His convalescence was marked by a bradycardia, the pulse running as low as 48 beats per minute. The diet throughout consisted of broths, peptonized preparations and malted milk.

Remarks.—The symptoms which required the closest scrutiny were the diarrhea and tympanitis, the heart's action and the hemorrhages, the character of the latter making it an unusual clinical feature.

This patient lost in all about six pints of blood, which illustrates the point to which attention has been called by other clinicians, that a surprising amount of blood may be lost and yet recovery follow. Acute Appendicitis Occurring on the Eight Day of a Typhoid Fever; Operation; Recovery. GEO. HERBERT WILLIAMS, M.D., M.R.C.S. (ENG.), L.R.C.P. (EDIN.), of Fishkill-on-Hudson, N.Y., Visiting Surgeon to Highland Hospital, Matteawan, N.Y., in Medical Record.

On June 8th, 1904, 1 was called to see Miss D. F., a wellnourished girl. She gave a history of having been sick for four days previously. The patient complained of severe headache and neckache, the pulse was 110, and the temperature 102 deg. The bowels were constipated, the tongue was coated, and one or two suspicious spots were to be seen on the right side of the abdomen. The patient was given twenty one-tenth grain doses of calomel at fifteen minute intervals, followed in two hours by an aperient. Then two grains of bisulphate of quinine every two hours. A strict milk diet was enjoined. At my morning visit the following day, the temperature had fallen to 100 deg., several movements of the bowels had been obtained; the pulse was 02. Headache and bachache were unrelieved. Ouinine On June 10th the temperature was 101 deg., was continued. the other symptoms were the same.

On June 11th, the temperature was 100 deg., and a few additional spots were found on the abdomen. The patient still complained of severe headache and backache. On June 13th, the temperature was 103 deg. On examining the abdomen, the spots were still evident, and two or three more were present on the lower part of the chest. For the first time the patient complained of pain in the right side of abdomen, and pressure over McBurney's point elicited a good deal of distress. I advised that the patient be removed to Highland Hospital for more careful observation. On her arrival, the temperature had risen to 103.4 deg. Medicine and diet were continued as before, and an ice-bag was applied over the appendiceal region. During the next three days the temperature varied between 102 and 103.4 deg., there was increased pain on pressure over McBurney's point, a slight increase in number of spots. The patient had an anxious and distressed look, but retained her flesh well. The pulse was rapid, but of fairly good volume. On the twelfth day of the fever, at my evening visit, I found the temperature 103.4 deg., more pain on pressure, and some decided rigidity of the right rectus muscle. I advised operating. With the assistance of my colleagues, Drs. Doughty and McClintock, the operation was done on the thirteenth day of the fever. After the peritoneum was incised and the cecum drawn up and out of

the wound, the appendix presented itself, standing up in the wound like an inflated rubber finger cot. It was quite congested and enlarged in calibre, and about four and a half inches long. The omentum was sutured and the appendix amputated, the wound being closed in the usual manner. The appendix was carefully examined, and cut up on a director; the mucous coat was soft and broken down, and the outer two inches contained a considerable amount of pus. The operation was done on the afternoon of June 16th, and the temperature during the night fell to 100 deg., and at my morning visit on June 17th, at 9 o'clock, it was 98.2 deg. During that day it rose again, and at 5 o'clock on the morning of June 18th it was again 103 deg. Going up during the day, it reached 104 deg. at 5 p.m. From this time on, there was a more or less regular typhoid run of fever, with its usual symptoms. Quinine was given every four hours, and strychnine sulphate (1-50 gr.) every four hours. Surgically, nothing of interest occurred, the superficial stitches were removed on the seventh day, and a good, strong, healthy wound was found. On the twenty-fifth day the temperature went twice to the normal point, and after that, during convalescence, did not vary much.

I have thought the case worthy of record, as I have never before seen or known of the two diseases occurring together, and I think the coincidence must be very rare.

Why the temperature went to subnormal even for a few hours, the day after the operation, I am at a loss to understand, unless it was that the appendix was so large an additional focus of infection, and its removal so relieved the system that the fall occurred for a short time.

The patient left the hospital on July 20th, entirely recovered.

Therapeutics.

Julius Ullman, M.D., Buffalo, speaks of Enuresis: the treatment of enuresis (N. Y. M. J. and P. M. J.) as hygienic, physical, and suggestive, physical or mechanical. For the first, out-door life, nutritious food, avoidance of condiments, tea, coffee and alcohol; no liquids before retiring; empty bladder; child should be awakened once during the night to empty bladder. Under the second heading: error to employ corporal punishment; it is imperative to gain the confidence of the patient. Under third heading: massage; the rectum is emptied and massage is applied to sphincter vesica by index finger, the child lying in lithotomy position. This should be done one-half to one minute; deep, circular massage, two or three minutes, should be done over the hypogastric region. Resistant abduction and adduction, with child on back, with flexed knees, done from the knees; about two minutes. Standing against wall, patient may be instructed to cross and recross legs slowly for five minutes. The patient may be taken over the knees of the operator and his lumbar and sacral regions are sharply tapped frequently by the operator. Electricity, also, is useful. No drug is a specific. Trosseau was the first to advocate belladonna. Ergot has been beneficial in some cases. Holt uses a solution of atropine, one grain to two ounces of water; five drops at four, seven, and ten p.m.

Acute General Suppurative Peritonitis: The treatment of acute general suppurative peritonitis, according to Levings (*The Clinical Review*), as the result of appendiceal perforation, has, until the last year, been most unsatisfactory. It might be said, without fear of exaggeration, that until the past two years nearly all of these cases terminated fatally, but during the last year, or year and a half, a number of surgeons have reported a series of cases the majority ot which have recovered under what might be called a new method of treatment. During the past ten months, ending with December, Levings has had ten of these cases, with nine recoveries. Free and unrestricted drainage of the entire abdomen is the important part of the treatment, which is accomplished by placing large drainage tubes at the bottom of the pelvis, and putting the patient in a sitting posture as soon as put to bed. Every succeeding three or four hours, for two or three days, an antiseptic fluid is used for flushing, the patient being in the recumbent position during flushing.

Nickel Bromide in Epilepsy: Some fourteen years ago, at the City Asylum for the Insane, at Ward's Island. New York, nickel bromide was tried for epilepsy, but with negative results. Reports from French sources leads us to judge that it is coming into favor again in that country.

Diet in Diabetes Mellitus: Thomas B. Futcher, in Maryland Medical Journal for October, 1904, gives the diet used at Johns Hopkins in diabetes mellitus, which is a modification of Noörden:

Breakfast, 7.30 a.m.—200 c.c (6 ounces) of tea or coffee, without sugar or cream; 150 grams (5 ounces) of beefsteak, mutton chops, or boiled ham; one or two eggs, with plenty of butter, pepper, and salt; 30 grams (1 ounce) of butter, with steak and eggs.

Lunch, 12.30 p.m.—200 grams (6 ounces) cold roast beef; 60 grams (2 ounces) celery, fresh cucumbers, or tomatoes, with vinegar, olive oil, pepper and salt to taste; 20 c.c. (5 drams) whiskey, with 400 c.c (13 ounces) of water; 60 c.c. (2 ounces) coffee, without milk or sugar.

Dinner, 6 p.m.—200 c.c. (6 ounces) clear bouillon; 250 grams (8 ounces) roast beef; 20 grams (5 drams) butter; 80 grams (2 ounces) green salad, with 10 grams. $(2\frac{1}{2}$ drams) vinegar, and 20 grams (5 drams) olive oil, or 3 tablespoonfuls of some well-cooked green vegetable; 3 sardines *a i huile*; 20 c.c. (5 drams) whiskey, with 400 c.c. (13 ounces) water.

Supper, 9 p.m.—2 eggs (raw or cooked); 400 c c. (13 ounces) water.

In the report of the Medical and Chirurgilent Ophthalmia: cal Faculty of Maryland, in the Maryland

Medical Journal for October, 1904, Dr. H. O. Reik, in a paper entitled ' Recent Advances in Ophthalmology and Otology," refers to the report of Dr. Miles Standish, of Boston, a very excellent report made recently, and which was based on experience in the isolation wards of the Massachusetts Eye and Ear Infirmary. He had made careful observation on a large number of cases of ophthalmia neonatorism and of gonorrheal conjunctivitis in the adult. It was demonstrated that protargol was to be preferred to silver nitrate in the treatment of these affections. Its application produces no pain. Solutions of 20 to 25 per cent. may be employed by the physician, while weaker solutions—2 to 5 per cent.—may be entrusted to the patient for frequent use. Dr. Standish strongly opposes the application of cold to eyes in these conditions, as it has a tendency to weaken the resisting power of the cornea and to favor ulceration in that tissue, the serious complication of these diseases to be dreaded. Great care should be used in cleansing such eyes; swabbing with cotton-tipped probes often abraids the epithelial coat.

John Johnson Kyle, Indianapolis, during Acetozone for Suppur- the past year has had a great deal of exation in the Lower Air Passages: perience with a solution of acetone in inorganic oil used in a nebulizer or atomizer for the treatment of various pathological conditions of the trachea and lower air passages. In *The Therapeutic Gazette*, November, 1904, he says there is a certain technical point to be observed in the administration of the acetone inhalant: The acetozone inhalant must be administered only for a few moments at a time, or until symptoms of irritation are manifest, a minute or two being sufficient, allowing the patient to rest for two or three hours before another administration. The formula for the solution he uses is as follows:

B.	Acetezone Crystals 0.5 gramme.
	Chloretone Crystals
	Refined bland mineral oil

Eczema: Lassar says (*Dermatologische Zeitschrift*, Berlin, 1904): The first indication is, in the case of any existing eczema, to enquire carefully into its original character. We need often to search for a long time ere we discover the actual cause of the constant recurrence of the cutaneous inflammation. The main indication for special treatment is to preserve the irritated parts from special harm. Moist treatment, when indicated, consists of a bath with bran and a bland, never a medicated, soap, or fomentation with

chamomile flowers. Affected parts are then to be wrapped three times a day for a half hour in compresses moistened with J in 1,000 watery solution of sulphate of zinc. Directly on the moist follows the dry treatment, the free application of a simple dusting powder, such as a fine, pure talc. If itching, use I to 2 per cent. solution of carbolic acid. If burning, add to above $\frac{1}{2}$ to I per cent. of menthol. This procedure will, in time, render the skin dry, when its smoothness can be restored by using a paste of oxide of zinc, 60, and olive oil, 40 parts, thickly smeared on, dusted over with talc. on the trunk and a light bandage on the limbs. In the morning the face is best cleansed with olive oil. The crusted eczema of the face in children can be rapidly cured if managed as follows: It must be carefully cleansed, oiled over, then washed gently. Then thickly smear with a salve of olei rusci, sulphuris sublimate, aa grammes 15; vaselini, saponis domestici, aa grammes 30; cretæ albal, grammes 10; M., powder and bandage. Finally the X-rays, cautiously used, are of great value.

An Acid Tonic:

Ŗ.	Tinct. ferri chloridi.	f <u>5</u> viii.
	Acidi sulphuric dil	1 317.
	Glycerole pepsin	f Žviii.
	Aquæ	f 3ii.
	Olei Menthae pip	mγ.

M. Sig.: 15 to 25 minims well diluted or dropped in capsules after each meal.—*Dana*.

Epllepsy: The average daily dose of bromides, for a person above fourteen years, is 60 grains. The best adjuvant by all odds is glycero-phosphate of soda, 30 grains daily. The standard prescription is:

M. Sig.; One drachm twice a day in water, a.m. and p.m., six days in seven.—*Dana*.

Ulcers and Burns: Martin J. Schuh, M.D., New York, in the International Journal of Surgery, tells of the effective treatment of ulcers and burns by zinc dioxide. Its efficacy is most marked in ulcer resulting from varicose veins, the average time required to cure these being three weeks. A

10 per cent. ointment was used and the dressing changed three times daily. It is rapidly effective also in syphilitic ulceration of the leg. In the treatment of burns, brilliant results are said to be obtained by a 10 per cent. ointment.

Jones, in The Lancet, Aug. 6, 1904, says: D.T.'s: The great motor restlessness so often seen in alcoholic cases, and caused by painful visual and aural hallucinations, is best controlled by hyoscine in doses of from 1-120 to 1-60 of a grain administered hypodermically. Sulphonal or trional (20 grains twice a day) are useful.

Dr. Alvis Marti has been recently attempt-Whooping Cough: ing to cure whooping cough by an entirely new treatment. Children with this disease sit for three-quarters of an hour in the midst of camphor and naphthalin vapor. He claims mild cases are entirely cured in from three to four weeks. the more severe cases from four to six weeks.

The employment of formaldehyd in acute Acute Tonsilitis: tonsilitis has produced good results in the hands of A. C. Jordan (Bull. Gen. de Therap.). He employs a I to 4 per cent. in glycerin in making his applications. This causes some pain for several hours, but is not unbearable. Eating and drinking should be prohibited for some hours after each application.

Opotherapy in Typhoid:

Chantemesse (Press Medicale) reports 523 cases of typhoid fever treated with antityphoid serum, with 22 deaths, a mortality of 4 per cent. The usual mortality is 18 to 20 per cent. Anti-

typhoid serum differs in this respect from diphtheria antitoxin, as the more aggravated the symptoms of typhoid, the feebler should be the dose.

Bergey, in American Medicine, classifies the Serum-therapy: sera: The antitoxic-two in general usethe diphtheria and tetanus antitoxines (the last is inefficient); the bactericidal immune sera-typhoid, dysentery, tuberculosisin first two results have been disappointing; the immune sera which are not bactericidal-pneumococcus, the staphylococcus, and the streptococcus. Their therapeutic success is still in experimental stage.

Society Reports--Notes of Interest.

Paget's Disease of the Mr. A. Hopewell-Smith reported a case of Paget's disease of the gum, probably the first occasion where this disease has been noticed as affecting the oral tissues.

Stenosis of the Lower
Portion of the
Esophagus:According to Dr. Sippy, before the Chicago
Medical Society, there have been only
seventy-five to eighty cases of stenosis of
the lower portion of the esophagus reported.

Internal Secretions, Present Status: Dr. Wm. H. Thomson, before the New York Academy of Medicine, states there is no doubt that the pancreas has much to do with diabetes. When the entire gland is destroyed, the disease develops in its severest form. If one-quarter of the gland is left the disease will not develop.

Congenital Atresia Hymenalls: nineteen years of age, and the other in a white girl of twenty-one years. Neither patient had any vicarious menstruation.

The Schott Method: Before the Philadelphia County Medical Society, in November last, Dr. Jas. M. Anders, after pointing out that confusion reigned in the minds of many physicians as to what were the suitable cases for the Schott method of treating chronic cardiovascular affections, stated that the method was especially valuable in arteriosclerosis with embarrassed heart action, most gratifying in cases of angina pectoris, and in the large group of cases arising from neurasthenic disturbances. He set down the contraindications as follows: I. Fever. 2. Advanced arteriosclerosis. 3. Far-advanced myocarditis. 4. The closing stage of chronic valvulitis, with extreme dilatation of the chambers. 5. Aneurysms of the aorta or its larger trunks, except in the incipient stage. 6. Any case in which the blood pressure was lowered by the balneological treatment. 7. Cases in which tenometric figure as low as 65 or 60 mm. of mercury was found. 8. Cases in which chronic bronchitis and asthma were well marked.

In October last, Dr. James D. Voorhees The Use of the Modified Champetier do Ribes' Balloon: making stronger pains, and producing dilatation of the cervix, this rubber bag is more valuable than anything else. His present deductions are taken from a series of 200 deliveries in private practice and 4,272 at the Sloane Maternity.

Pleurisies: In the section on medicine at the last meeting of the British Medical Association, Dr. William Osler said that, clinically, three great groups of pleurisies may be recognized: (a) Pyogenic; (b) the metapneumonic, and (c) the tuberculous. In the absence of pneumonia or sepsis, the existence of an exudate is suspicious of tuberculosis; and for the past twenty-five years evidence has been accumulating that all cases of simple sero-fibrinous pleurisy are tuberculous.

The Dangers of the X-Ray: Dr. Milton Franklin stated before the New York County Medical Association that a recent canvass of the practitioners employing the X-rays has failed to reveal a single serious result during recent times from the employment of the X-ray. Dr. Wm. B. Coley said at the same meeting that a great danger in treating malignant growths was necrobiosis of the tumor and its transference to other parts of the body.

Duodenal Ulcer: Mr. Mayo Robson stated before the Medical Society of London that he has operated on thirty cases of Juodenal ulcer, about four of which were for perforation. He considers the leading symptoms are pain coming

on one hour before a meal, relieved by taking of food, and pain in the small hours of the morning. Then there was often distinct tenderness in the region of the gall-bladder and rigidity of the right rectus muscle. There could be no doubt about the remarkable benefit by the operation of gastro-jejunostomy. At the same meeting, W. McAdam Eccles stated, by way of differentiation between gastric and duodenal ulcer, that in the former a solid meal at once induced pain, but a draught of hot fluid would relieve pain. In duodenal ulcer, on the other hand, both a solid meal and a draught of fluid would cause pain some hours after ingestion. Associate with this melena, and a diagnosis of duodenal ulcer is justifiable.

The Prevention Appendicitis: opinion was that more than 50 per cent. of the cases of appendicitis not operated on, recurred. Foreign bodies in the appendix, including fecal concretions, probably caused 10 per cent. of cases.

Gall Stone Disease: In 1,000 operations for gall-stone disease. Charles H. Mayo reported for W. J. Mayo and himself before the Southern Surgical and Gynecological Association, in December last, that there had been 50 deaths— 5 per cent. mortality—960 were cases of benign disease; 40 were malignant cases. The mortality in the latter was 22.5 per cent.; the mortality in the former 4.2 per cent.

Cirrhosis of the Liver: Dr. James K. Crook gave the following statistics of deaths from cirrhosis of the liver, compiled from the records of the New York Board of Health, at a November meeting of the Medical Association of the Greater City of New York: Under I year, 9; under 5 years, 11; from 5 to 10 years, 11; from 10 to 15 years, 9; from 15 to 25 years, 553; from 25 to 35 years, 1,061; from 35 to 45 years, 1,196; from 45 to 55 years, 959; from 55 to 65 years, 565; from 65 to 75 years, 140; from 75 to 85 years, 14.

Physician's Library.

The receipt of the *First Report of the Wellcome Research Laboratorics* at the Gordon Memorial College, Khartoum, is hereby acknowledged. The report is a handsome volume, beautifully illustrated, and was compiled by the Director, Andrew Balfour, M.D., B.Sc., M.R.C.P. (Edin.), D.P.H. (Camb.)

The J. J. Taylor Physicians' Pocket Account Book. We have pleasure in acknowledging the receipt of a copy of this neat, handy account book. It is arranged by Dr. J. J. Taylor and published by the Medical Council, 4105 Walnut Street, Philadelphia. There are a number of valuable business suggestions incorporated therein.

How to Study Literature, a copy of which has been kindly sent us for notice in these pages by Hinds, Noble & Eldredge, Publishers, 31, 33, 35 West 15th Street, New York, is a neat little work, and will be found of much practical value. The author is Benjamin A. Heydrick, A.B. (Harv.), Professor of English Literature, State Normal School, Wildersville, Pa. This is the third exlition, revised and enlarged, a fact which speaks for itself. The price is 75 cents, postpaid.

Diet in Health and Disease. By JULIUS FRIEDENWALD, M.D., Clinical Professor of Diseases of the Stomach in the College of Physicians and Surgeons, Baltimore; and JOHN RUHRAH, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Octavo volume of 689 pages. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Canadian agents: J. A. Carveth & Co., Lmited, 434 Yonge Street, Toronto. Cloth, \$4.00 net.

This latest work on diet is practical and comprehensive, prepared to meet the needs of the general practitioner, medical student, hospital interne, and trained nurse. It contains a full account of food stuffs, their uses and chemical compositions. Dietetic management in all diseases in which diet plays a part in treatment is carefully considered, the articles on diet in diseases of the digestive organs containing numerous diet lists and explicit instructions for administering. The feeding of infants and children, of patients before and after anesthesia and surgical operations, and the latest methods for feeding after gastrointestinal operations have never before been discussed with such practical detail. The subject of rectal enemata is given completely, with recipes and full instructions as to technic. Diet is considered in its relations to age, occupation, and environment; and the beneficial results from the rest cure have been accorded prominent consideration. There is also a section on food adulteration and the resultant diseases. Withal, this is a work well worthy the reputation of its authors, and we most cheerfully recommend it.

Blood-Pressure; as Affecting Heart, Brain, Kidneys and General Circulation. A Practical Consideration of Theory and Treatment. By LOUIS FANGERES BISHOP, A.M., M.D., Physician to the Lincoln Hospital, New York, etc. New York: E. B. Treat & Co.

This small book records the observations of its author who for fifteen years past has been paying special attention to the question of the vital relations of the physics of the circulation, a subject of much interest and importance, treated of in an interesting manner.

The Surgery of the Diseases of the Appendix Vermiformis and Their Complications. By WILLIAM HENRY BAULE, F.R.C.S., Surgeon to St. Thomas' Hospital; formerly surgeon to the Royal Free Hospital; Hunterian Professor of Surgery at the Royal College of Surgeons of England, etc.; and EDRED M. CORNER, M.B.B.C., F.R.C.S., Surgeon in Charge of Out-patients to St. Thomas' Hospital, and Assistant Surgeon to the Great Ormond Street Hospital for Sick Children; Erasmus Wilson Lecturer at the Royal College of Surgeons, etc. Chicago: W. T. Keener & Co. Price, \$2.50.

It seems to be becoming the fashion to issue books on one subject alone, and it is not a bad one in some instances, such as the present, where the literature on the subject is so wide, varied, and extensive. In addition, in this book will be found sections on acute abdominal disease, carcinoma, tubercle, and other diseases of the appendix, life insurance, etc., which, as they have not taken any part in other books on appendicitis, thereby adds much to its value.

Ophthalmology is a new medical journal devoted to this special subject, which we have been asked to place on our exchange list. It is issued from Milwaukee, under the management of Dr. H. V. Wurdmann, of that city. It gives splendid promise of being a useful and important journal.

American Journal of Nursing. We have recently been privileged to add to our exchange list the American Journal of Nursing, a monthly magazine devoted to the interests of the trained nurse and the official organ of many well-known nurses' societies in the United States. The December issue is a very handsome production, nicely illustrated, containing good matter, and would not be out of place in the physician's reading-room. We notice that the Canadian collaborator is Miss Snively, of the Toronto General Hospital Training School for Nurses, which will be sure to commend the journal to the Canadian nurse fraternity.

Dominion Medical Monthly

And Ontario Medical Journal

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COMMENT FROM MONTH TO MONTH.

The medical profession of Halifax and Nova Scotia are already getting matters into ship-shape for a monster meeting of the Canadian Medical Association there from the 22nd to the 25th of August next. Mr. Francis Caird, of the Royal Infirmary of Edinburgh, has promised to come and deliver the address in surgery. Dr. Howard A. Kelly, of Johns Hopkins, Baltimore, will deliver the address in gynecology. Dr. J. W. Stirling, of Montreal, will deliver an address in ophthalmology. In addition to these there are to be addresses in medicine and pathology, which is certainly an attractive nucleus of what promises to be a very fine programme and a very successful meeting. The success following in the footsteps of the Canadian Medical Association will be sure to make the Maritime men enthusiastic in its cause for 1905. Between three and four hundred medical men are a lot to get together in a country where distance is a great contributing factor in deterring men from being present at these annual meetings; and our

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friends in the East, now that they have taken upon themselves the work of organization for 1905, will most surely deserve the loyal support of those of the West. We are satisfied from the hint we have had of entertainment, that the 1905 meeting will be one of great enjoyment and be as truly profitable as it will be pleasurable. Let our readers make up their minds early that they will go to Halifax in earnest next August.

Anent our criticism of the "commission business" in Canadian medicine, or rather, to be quite correct, the lack of such in Canadian medicine, we notice from our contemporary, *The Canadian Journal of Medicine and Surgery*, as well as from the responsible columns of a leading society paper, that there is or has been a "commission business" of a rather inferior character carried on in connection with one of the proprietary schools of the city. This order of commission seems to be a mighty poor specimen, and Dr. MacCallum, when he turned it down, did culy an act which an honorable man would do. We are loth to believe that any man is amongst us who would give back 10 per cent. of his fees to a girls' college in order to hold the business of such institution. It is scarcely necessary to say anything of such an institution, or the authorities thereof, who would ask for this. It would certainly not be a charitable institution.

The year 1904 has been chased into history. It cannot be said that it has been remarkable for any important, specific, medical achievement in the annals of medicine, although, no doubt, there has been much painstaking, active medical work. True, the British Commission for the investigation of cancer was organized, but it has accomplished nothing; but the time is short. Researches have been made into the mysteries of immunity; good work has been done in the matter of the care of the consumptive patient; Sajous has studied the internal secretions to some advantage; yeast has been rehabilitated in the therapeutic

world to some extent. In surgery we are yet watching experimental renal decapsulation. In Toronto, Ontario, and Canada, the most noticeable item is the impetus given to the idea of a large hospital in connection with Toronto University Medical Faculty.

Last year the doctor loomed large in politics. The reason is not far to seek; there have been so many general elections. Of course he has a right to be there the same as any other citizen, but politics have ruined many a man's practice; and it is easier to get into politics than it is to get into practice. Politics is never a very clean game, and most doctors who have been in it or who are in it would be better had they never had anything to do with it. A man must, however, take upon himself the duties of citizenship, and if his natural bent lies in this direction, if he has a taste for public life, and assumes the trust without the "graft" idea buzzing in his bonnet, he should be upheld and supported by both those within and without the profession who desire to see clean men in public life to-day. But too often, probably, the profession looks askance at the doctor-politician, in many cases without just cause. His motives are impugned, probably justly, probably unjustly. No doubt all classes of the community should be represented in the legislature, and the doctor ought to be a very important member of that body. Their number is not at any times large when they get into parliament, and wherever one appears in the political race, we think he ought to have the earnest support of the profession to which he belongs.

Some one has recently been recommending that all bread be delivered in a paper bag. The idea is a good one, but we are afraid that public sentiment is scarcely educated up to that mark yet. Another good, if not better, thing would be the prohibition of fruits and berries in open shop windows in summertime, catching all the dust and dirt blowing off the street on a windy day. Still another matter ought to receive attention at the hands of the health authorities: the prohibition of chunks of ice on the sideDOMINION MEDICAL MONTHLY

walk, etc. This mark for dogs lies often for hours where the man with the tongs has slung it. When you buy vegetables from your huckster he will carry same into your cellar; but the autocratic ice man comes along and "slings it," perhaps on the sidewalk, perhaps "bang" against your back-door, perhaps over your high-board fence. It is bad enough to get ice which you trust is pure, but you don't want it deposited where animals can monkey with it.

In medical circles in Toronto the last week of 1904 may be called "Osler" week. On the afternoon of Tuesday, the 27th of December. Dean and Mrs. Reeve were "at home" in the Medical Buildings, and many of the profession of Toronto and their wives, called to meet Dr. Osler. On the evening of the 28th, Professor McPhedran was "at home" in his handsome residence on Bloor Street, where over two hundred physicians gathered to wish a Happy New Year to Professor McPhedran and his distinguished guest. On the following afternoon Professor Osler formally opened the new home of the Ontario Medical Library Association in Queen's Park, and, of course, made some practical remarks. Then he was dined by the Canadian Club and the Trinity Old Boys' Association. Such homage would be sufficient to turn the head of an ordinary man, but Osler's head never revolves; it always goes straight forwards and continues to mount upward. All wish him God-speed in his new home.

According to the Medical News, there is a good chance of further lustre being shed on Canadian medicine. Dr. Lewellys Francis Barker is likely to become Professor Osler's successor at Johns Hopkins. It states that the Baltimore Sun writes that the trustees of Johns Hopkins strongly favor the appointment of Dr. Barker, who is Professor of Anatomy in the Rush Medical College of the University of Chicago. Dr. Barker is yet a young man, being only thirty-seven years of age, but in the space of his short life he has had an exceedingly brilliant career.

News Items.

CANADIAN.

DR. GLEN CAMPBELL, Vancouver, is visiting in Montreal.

DR. HOPKINS, formerly of Grand Valley, has located at Toronto Junction.

DR. BREFFNEY O'REILLY has returned to Toronto after a trip across the Pacific Ocean.

DR. D. A. SHIRRES, Montreal, went to the Pan-American Medical Congress at Panama.

DR. J. COLVILLE has left Bowmanville for Chatham, having bought out a medical practice there.

DR. HENRY PIGEON, Peterboro', died suddenly on the 7th of December at the age of sixty-five years.

SIR GEORGE A. DRUMMOND has been elected President of the Montreal League for the Prevention of Tuberculosis.

DR. MURRAY MCFERLANE has moved to 18 Carlton Street, the residence formerly occupied by Dr. Uzziel Ogden.

DR. S. R. RICHARDSON, of Eglinton, has received the provincial appointment of associate coroner for the County of York.

DR. REIVE, who has been assisting in the General Hospital, Toronto, for some time, has gone to Huntsville, where he will spend the winter as assistant in the hospital there.

DR. MACKENZIE is visiting in Trenton, having left Rossland a few days ago. He will devote the rest of the winter to hospital work in Montreal, having left his practice in Rossland in charge of his nephew, who has just graduated from McGill University, Montreal. DR. C. J. FAGAN, Provincial Health Officer of British Columbia, has been conferring with the Health Board of Vancouver regarding the health of that city.

DR. P. H. BRYCE, senior medical officer of the Department of Inland Revenue at Ottawa, has been in Victoria and Vancouver investigating the reports that diseased immigrants were gaining access to Canada from the United States by way of the ports of Puget Sound.

TORONTO GENERAL HOSPITAL STATISTICS.—The total numter of patients treated in the Toronto General Hospital during the past hospital year numbered 3,875. There were 2,191 males and 1,634 females. On the 31st of December, 1904, there were 276 patients in the wards.

DR. WOLFERSTAN THOMAS, of Montreal, a son of the late general manager of the Molsons Bank, has left Liverpool for the Amazon to investigate yellow and malarial fevers on behalf of the Association of Liverpool Merchants, headed by Sir Alfred Jones, formed for the investigation of tropical diseases.

DR. LABERGE, the Health Officer of Montreal, considers the smallpox statistics for the last few years a fine illustration of the saying, "An ounce of prevention is worth a pound of cure." In 1885 the great epidemic carried off 3,164 people; in 1886 there were only ten deaths. From 1886 to 1896 not a death was reported. In 1897 there were twelve deaths; two in 1898; none in 1899; ten in 1900; two in 1901; ten in 1902; and in 1903 only

ARMY MEDICAL CORPS.—A militia general order states that, for the purpose of promotion, the officers of the permanent active militia army medical corps and officers of the militia army medical corps will be considered as belonging to two distinct branches, and promotion will take place upon the same principle as that in a regiment or corps. Promotions subject to the necessary qualifications will take place as follows: After one year's service, as lieutenant, to be captain; after four years' service as captain, to be major. After ten years' service as major, regimental officers may be given the rank of honorary lieutenant-colonel and their period of service extended, or they may be transferred to the reserve of medical officers or the retired list, as the case may be, two.

HAMILTON HEALTH OFFICER'S REPORT .--- An interesting feature of the meeting of the Board of Health was the annual report of Dr. Walter Langrill, Medical Health Officer. There were 705 cases of infectious diseases reported to the department during the year. Out of 180 cases of diphtheria there were 14 deaths. The total number of deaths recorded, not including 58 still births, was 848. Tuberculosis was the cause of 60 more deaths than all other communicable diseases combined, and nearly 11 per cent. of the total mortality. The milk samples analyzed in the year were considered satisfactory. A resolution was passed with reference to the handling of meat on the market. as follows: "That the Board of Health should control the sale and delivery; that, for the sake of cleanliness and health, the meat waggons should be lined with metal, and thoroughly washed after each day's use; that the meat must be covered with a clean cloth while standing on the market or being carted through the city streets; that every meat waggon on the market should be numbered, for the convenience of the inspector."

NOTRE DAME HOSPITAL, MONTREAL.—Dr. Lachapelle submitted the superintendent's report, which, amongst other things, stated that the number of patients admitted to the hospital during the year ended June 30th. 1904, was 2,226, of which 1.313 were men and 913 women; 2,109 were Roman Catholics and 117 Protestants: 1,851 Canadians and 375 foreigners. Of these, 2,226 patients, 1,919 were discharged cured or improved. 166 left the hospital unimproved or recognized incurables, and 156 died at the hospital. The average stay of each patient in the hospital was eighteen days. In the outdoor services, 20,458 consultations were given. In the pharmacy, 26,000 prescriptions were made up. The ambulances were called 1,437 times. Each patient costs the hospital \$1.09 a day.

HON. DR. SULLIVAN HAS RESIGNED FROM QUEEN'S COLLEGE. —Hon. Dr. Sullivan has resigned his position as Professor of Surgery in Queen's College. It is just fifty years ago since Dr. Sullivan entered the medical school here, at the time of its foundation, he being one of the first students. Ever since he has been connected with it as tutor, lecturer, and professor. His jubilee will be formally celebrated next spring, during the college convocation week. He will be honored by being appointed honorary Professor of Surgery and being given the degree of LL.D., for his long and faithful service at Queen's. Dr. Sullivan has had a varied and brilliant career. He was Kingston's leading

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surgeon for many years. In 1885 he served as Purveyor-General during the North-West Rebellion, and was thanked by Parliament for the splendid service he performed. Hon. Dr. Sullivan is the representative for this district in the Senate.

ONTARIO MEDICAL Association.—The annual meeting of the Ontario Medical Association will be held in Toronto, June the 6th, 7th, and 8th next, nuder the presidency of Dr. Wm. Burt, of Paris. Strong committees on papers and on arrangements have been appointed under the chairmanship respectively of Dr. A. Primrose and Mr. I. H. Cameron. A considerable number of papers are already promised, and in addition the Committee is pleased to announce that they have received word from Dr. Albert Ochsner, of Chicago, accepting the invitation of the Association to present a paper in surgery. The personnel of the two local committees is as follows: Committee on Papers and Business-Dr. A. Primrose, Chairman; Dr. N. A. Powell, Dr. J. F. W. Ross, Dr. A. A. Macdonald, Dr. Allan Baines, Dr. R. D. Rudolf, Dr. W. B. Thistle, Dr. R. A. Pyne, Dr. Clarence Starr, Dr. J. M. MacCallum, Dr. W. H. Ellis, Dr. N. H. Beemer, Dr. Price Brown. Committee on Arrangements-Mr. I. H. Cameron, Chairman; Dr. R. A. Reeve, Dr. A. H. Wright, Dr. G. A. Peters, Dr. J. A. Temple, Dr. W. J. Wagner, Dr. H. C. Scadding, Dr. H. T. Machell, Dr. Chas. Sheard, Dr. W. P. Caven, Dr. A. McPhedran, Dr. H. C. Parsons, Dr. B. L. Riordan, Dr. P. L. Scott, Dr. W. Goldie, Dr. G. B. Smith, Dr H. J. Hamilton. The executive officers of the Association are: President, Dr. W. Burt, Paris. Vice-Presidents, Dr. J. L. Davison, Toronto; Dr. George Hodge, London; Dr. Edw. Ryan, Kingston; Dr. T. H. Middlebro, Owen Sound. Secretary, Dr. Charles P. Lusk, 99 Bloor Street West, Toronto. Assistant Secretary, Dr. Samuel Johnston. 169 Carlton Street, Toronto. Treasurer, Dr. F. Fenton, 75 Bloor Street East, Toronto. Chairman, Committee on Papers and Business, Dr. A. Primrose, 100 College Street, Toronto. Chairman, Committee on Arrangements, Mr. I. H. Cameron, Sherbourne Street, cor. Gerrard Street, Toronto.

DEATHS IN ONTARIO IN NOVEMBER, 1904.—The returns for November are not so complete as those received a year ago, as several municipalities failed to report and the number of deaths recorded are much less. The deaths, as reported in November, 1903, were 2.081, and for the same period this year are 1,910, from a reporting population of 1,900,100, but the death-rate per 1,000 remains practically the same, being 12.1 per cent. and 12

per cent. The decrease in the number of cases and deaths of infectious diseases is the most interesting feature of the returns. The total number of cases reported for November this year is 856, and deaths 225, while for the same month in 1903, as may be seen by the table below, 1.062 cases and 259 deaths were reported, which is a case decrease of nearly 20 per cent., and in deaths 13 per cent.

Disgase.	1904.		1903.	
	CASES.	DEATHS.	Cases.	DEATHS.
Smallpox Scarlet Fever Diphtheria. Measles. Whooping Cough Typhoid Fever. Consumption.	2 205 316 12 23 171 127	0 8 45 1 1 43 127	5 276 476 29 30 109 137	0 9 64 5 14 30 137
	856	225	1062	259

UNITED STATES.

PURGING BATTLE CREEK.—In an effort to clean out the abortionists, whose work has made Battle Creek notorious, the Physicians' Business Association has ascertained that thirty-two unregistered practitioners were plying their trade in the city. Warrants have been sworn out for these irregulars, and seven were issued on the first day.

DOCTOR'S BILL, \$126,000.—Dr. L. C. H. E. Ziegler, in the Probate Court of Chicago, recently filed a bill of particulars as to claims made by him against the estate of Mrs. Harriet G. McVicker, who died recently in California. Mrs. McVicker was the widow of the theatrical manager, J. H. McVicker. Dr. Ziegler's claim in full amounts to \$126,000, the bill including copies of contracts which Ziegler says existed between himself and Mrs. McVicker. The first contract provides that after the death of Mrs. McVicker the sum of \$100,000 shall be paid to Dr. Ziegler as soon as possible. This money, according to the contract, was to be given for services as medical adviser.

"PHYSICIAN" OR "DOCTOR."-The Society of Medical Jurisprudence, of New York, at its last meeting took action leading toward the stricter and more exact use of words, which ought to be commended by all people interested in good English. Hereafter the society is to designate its medical members as "physicians," and not as " doctors."

ROCKEFELLER LABORATORY BEGUN.-The corner-stone of the first building of the Rockefeller Institute, in New York, was laid December 3rd, by Dr. Simon Flexner, chairman of the governing board of the institution. This building will have a frontage of one hundred feet and will be five stories high. The estimated cost is \$325,000. A small hospital will be built near it within the next two years.

OUNCK ADVERTISEMENTS BARRED .--- The Boston Herald announces that it will hereafter exclude from its columns all advertisements of patent medicines and venereal quacks. It is to be hoped that the support which this course will receive from decentminded folk will encourage other journals, religious and secular, to do the same. There is far too much of this filthy stuff in our newspapers.

DOCTORS AWARDED LIBERAL FEES.—From the first account of the executors of the estate of the late William L. Elkins, of Philadelphia, it appears that the estate represents a valuation of nearly \$32,000,000. Among the payments made were the following for medical attendance: Dr. Louis A. Duhring, \$25,000; Dr. J. William White, \$1,750: Dr. Alfred Stengel, \$1,100; Dr. W. L. McCandless, \$440; Dr. W. W. Keen, \$150.

CONDEMNATION OF THE DIVISION OF FEES .- At a recent meeting of the Council of the Chicago Medical Society, Dr. Arthur Dean Bevan offered the following resolution which is to be voted on at a subsequent meeting and then, if adopted, to be incorporated as an amendment to the Constitution: "Any member who is guilty of giving or receiving a commission, or of entering into any arrangement for the division of a fee for professional services, which arrangement is not known and fully understood by the patient or party by whom such fee is paid, shall be guilty of unprofessional conduct."

OFFICE BUILDING TO REPLACE DR. OSLER'S HOUSE.—Dr. William Osler has sold his residence for 55,000. It is a twostory and attic house of colonial design and occupies a lot $59 \times$ 100 feet in the very heart of the city. It was purchased by him about fifteen years ago for \$40,000. Possession will be given next May, when Dr. Osler will leave for England. The purchaser will build an apartment house on the property, and the first and second floors will be arranged for physicians' and dentists' offices.

ALMA SANITARIUM, ALMA, MICH.—Dr. Raymond C. Turck has been appointed Medical Superintendent and Manager of the Alma Springs Sanitarium, one of the most delightful institutions of its character in America. He will be assisted in his work by Dr. Harry John Thompson, who for the past two years has been medical superintendent of the Hudson Sanitarium at Hudson, Wisconsin. Dr. Turck has had a splendid training for the work he has been appointed to administer, and the Alma Sanitarium will be sure to be found in the very front rank under his management.

TRIBUTE TO DR. WELCIL—A medical society was recently formed in Philadelphia in honor of Dr. William M. Welch. The first meeting was held at Dr. Welch's residence on December 19th, and twenty-five names were enrolled. The society is composed of ex-resident physicians and some of the present resident physicians of the Municipal Hospital. Dr. Welch was for many years physician in charge of this institution, being appointed in 1870 and serving continuously until 1903. At the meeting Dr. Welch was presented with a loving cup. An informal banquet followed.

THE PNEUMONIA COMMISSION.— The commission organized under the authority of the Department of Health of New York City to investigate pneumonia has secured the co-operation of hospitals in Baltimore, Washington, Chicago, St. Louis, Kansas City. San Francisco, Buffalo, Helena, Minneapolis, Denver, and twenty other cities equally scattered, and in Montreal, Canada. These hospitals will carry on the field work and will report on specially prepared blanks. The laboratory work will be carried on in Boston, Philadelphia, Saranac Lake, and at three laboratories in New York City. Twenty thousand cases will be studied in the six months which began November 1st. The central laboratory will be at the headquarters of the Department of Health of New York City. The commission will study the occurrence and virulence of the pneumococcus and the organisms related to or resembling this in the human mouth in health and disease: the evidence of variation in virulence of the pneumococcus; the occurrence of the pneumococcus in children's hospitals, homes, and asylums, with a study of the bacteria of mouths before and after an outbreak of pneumonia; the vitality of the pneumococcus under various conditions; the study of mouth disinfection and the study of the air in public places, especially in reference to its dust content. The first six months of this year showed a death rate of 10.6 per cent. of the total number of deaths due to pneumonia. The same period in 1903 showed a death rate of 16.5 per cent. due to this cause. The commission will probably make an examination of subway workers and surface car men with the object of ascertaining the effects of these employments on the health of these men.

THE testimonial to Dr. Osler, which was inaugurated some time ago, has grown in importance. About \$10,000 has already been raised, and it is hoped that the fund will reach \$100,000, or more. It is planned that the testimonial shall take the form of a building, to be erected in Battimore, to become the receptacle of the library of the Medical and Chirurgical Faculty of Maryland, and to be the home of the various medical bodies affiliated with the faculty, with, perhaps, one or more national medical bodies, if they can be secured.

BRITISH AND FOREIGN.

THE Nobel prize for medicine, it is reported, will this year be awarded to Dr. Robert Koch. He has been presented with a portrait bust and a festschrift on the occasion of his sixtieth birthday.

THE oldest medical works in existence are those of the Chinese, and date back to nearly 3,000 years B.C. Then, as now, they divided their subjects under the captions of healing, cooling, refreshing, and temperate. They have everything divided into classes, and their prescriptions are classified under seven headings, as follows: (1) The great prescription; (2) the little prescription; (3) the slow prescription; (4) the quick prescrip.

tion; (5) the odd prescription; (6) the even prescription; (7) the double prescription. These are applied under four special circumstances and conditions, which in their turn are classified. Fire is an agent in which they have great faith, as also they have in mineral waters.

MANY MEDICAL JOURNALS IN GERMANY.—The number of medical journals in Germany is extraordinarily large, and still on the increase. At the end of 1903 there were 230, and ten more were added in the nine months following.

PROFESSOR WILLIAM JAPP SINCLAIR, of the Victoria University, of Manchester, England, has received the decoration of knighthood. Sir William was present at the Vancouver meeting of the Canadian Medical Association, and was chairman of the section of obstetrics and gynecology when the British Medical Association met in Montreal in 1897.

THE VALUE OF MEDICAL TRAINING.—Sir Conan Doyle, who graduated in medicine and practised for a time before devoting his talents exclusively to the writing of stories, states that there was a time when a young man who was going to do anything in the world was passed mechanically through the bar. He says: "I believe the time will come when the similar young man will be passed through medicine, because I know no other means by which he could get to the fundamental and absolute facts of life. The mere fact that in his training a man has to undergo so searching an ordeal in the most critical years of his life, and pays such enormous attention to detail, is in itself evidence that he receives a splendid training. I have always said that for a man who has mastered 'Gray's Anatomy' life has no future terrors. If our young army officers had five years' study in the same sense that the young medical man has five years' study, we should become the terror of Europe."

EFFECTS OF COMPULSORY VACCINATION IN MADRAS, 1874 TO IG04.—According to Public Health and Marine Hospital Service Reports, some interesting data are furnished by a report of the returns of deaths from smallpox in Madras for the last thirty years. In 1874 the deaths numbered 819. During the succeeding ten years the numbers varied from 196 to as many as 4,064. The latter number of deaths from the disease occurred in 1884, and apparently resulted in Government making vaccination compulsory in the city. The compulsory order went into effect on June 1st, 1884. From that time the diminution in the number of deaths from smallpox has been extraordinary. In 1886 only one death occurred; in 1895 but three deaths were recorded; in 1903 seven. In only three years has the number exceeded one hundred, *i.e.*, 1897, 1898, and 1901. For the rest the yearly deaths have been enumerated in tens, where before 1884 they were counted in hundreds and even thousands. This seems to me favorable testimony as to the efficiency of compulsory vaccination in populated areas.

Correspondence.

MY MEDICAL CREED.

To the Editor of DOMINION MEDICAL MONTHLY :

I. I believe the sons of physicians make the best physicians, and the sons of clergymen the best lawyers, authors, and poets.

2. I believe the schoolmaster, provided he has reached the age of sound judgment and is recognized as a suitable judge, should be able to notice in the pupil such virtues as are essential for the medical profession.

3. I believe that an early age should be selected, provided the pupil evince an adaptability or genius for our art. He should possess marked discernment, a sound judgment, a character of mildness, boldness, and full of sympathy; he should be studious, patient, inventive, and resourceful.

4. I believe the student should have thorough training in the Latin, Greek, and English classics, in fact, should not be allowed to matriculate in medicine except he possess the B.A. or B Sc. degree, or proceed in his medical course unless he combine an arts or science course with medicine, and obtain either of the degrees when he graduates as M.D.

5. I believe that each province or state should have its university, and it alone be allowed to grant degrees, although one or two well-endowed colleges should be permitted to be federated and to teach similar courses, if the state or provincial university be not centrally located and in a city not affording hospital advantages of the highest order.

6. I believe that if four hundred of the universities in the U. S. would cease to exist, the remaining number, eighty-four,

would be more honored, and higher education and university degrees more prized. (Think of the U. S. having three hundred more universities than the rest of the world! *Vide*: The Peerless Atlas of the World.)

7. I believe our medical colleges should not admit the sons of saloon keepers, whiskey sellers, fakirs, licentious or immoral persons, however rich; and that the sons of esteemed and regularly graduated practitioners should be allowed free tuition and every encouragement.

8. I believe every graduate, at graduation, should be made to sign papers, agreeing under penalties not to practise quackery, and to conform his practice to the principles of medical ethics.

9. I believe that those who have acquired great wealth in the disposal of sour beer, pork, lard, or oil, or by lucky ventures in stocks or mines, and wishing to "honor" their name in educational interests, would endow a hall or college in connection with the state university, they would not less honor their names, and it would advance the interests of education much better than to establish a "John Q. Smiths University."

10. I believe it advisable, that a thorough set of addresses relating to medical ethics, medical fees, collection agencies, stock speculations, protective associations, the obligations and duties of court witnesses, medical journalism, quackery, etc., should be given during the last year at college to medical students.

11. I do not believe it advisable, but rather condemnable, except in a very few instances, that we advise any young man to study medicine.

12. I do believe that medical men have more power for good, and really do more good, than the resident clergymen. I believe, also, that if "these leaders of faithful souls and guides of those who travel to the skies" (*i.e.*, the preachers), were better educated and not so many of them the possessors of purchased degrees from Central University (?), Indianapolis, or National University, Chicago, we would respect them better, and they would better advance every progressive movement—even religion.

13. I believe we will never notice the testimonial for a whiskey compound from a Governor or Colonel of the Carolinas, for . each is capable by smell and by taste to tell the presence of a leather-headed carpet tack in ten gallons of Bourbon—certainly not when such competent judges exist and know the flavor of mint juleps. The "Reverend Doctor" is not "in it" of late years, as he is evidently buying it *straight* from the next county, or has been reading Box's "Exposition." 14. I believe that nine-tenths of medical journal advertisements dishonor such journals and medical progress, equally as much as would bills announcing the circus, horse races, auction sales, or hockey matches disgrace the inner walls of our churches.

> "Vice is a monster of such frightful mien That to be hated, needs but to be seen; But seen too oft, familiar to the face, We first endure, then pity, then embrace."

Quis inter nos dubitas. But as these, as pointed paragraphs, are "thoughts of things which thoughts but tenderly touch," each worthy of a full page endorsement or article, we ease our cacoethes scribendi.

15. I believe that the "*Hon.*" title which many assume, and which wrongfully, it seems, is given to many, would look better if not attached to names recommending "Swamp Vine Tonic," "Peruna," etc., in our newspapers. The name of Admrial Schley (!) in public print, announcing the virtues of "Peruna," is a sad reflection on medical education in the U. S., and I hope no British admiral or officer will ever so disgrace himself or his country by such insults.

JAMES S. SPRAGUE, M.D.

Stirling, Ont.

Obituaries.

A. S. KIRKLAND, M.D., COLLINGWOOD.

Dr. Kirkland was one of the most widely known men of the county of Simcoe. Born in Islay, Argyleshire, Scotland, in 1844, he was only in his sixtieth year. He came to Canada when a child with his parents, who settled in the township of Mariposa, Victoria county, a few miles from the town of Lindsay. On attaining school age he entered the home public school, from which he passed to Toronto School of Medicine, whence he graduated with the degree of M.D. in 1867. On completing his course in college he turned his attention to finding a location to enter upon the practice of his profession. He chose the village of Nottawa, and in 1868 opened his first office there. A year later he moved to Mount Forest, where his brother William had

settled the year previous. Leaving there in the following year, he returned to this county and opened an office at Duntroon, where he practised successfully until a few years ago, when he moved to Greemore, coming to Collingwood about six years ago.

In 1878 he married Emma, the oldest daughter of the late Henry Watson, who, with a family of two daughters and four sons, survive him. One daughter is Mrs. W. B. Fryer, who resides on Pine Street, and the other, Miss Maude, is a valued and popular member of the teaching staff of the town public schools. The eldest son, Mr. H. S. Kirkland, lives in Winnipeg, where he occupies a responsible position in the Western office of Messrs. Telfer Bros. The other boys, L'alton, Norman, and Murray, are at home.

The deceased was known for his force of character and geniality. He was strong in his convictions, and never swerved from doing that which he believed to be his duty. In politics he was a staunch Conservative, and during the strife of 1893, when the great split occurred in his party and the McCarthyites arose, he stuck to his political party, believing that the policy and party of Sir John A. Macdonald was good enough for him and the best for the country. For many years he occupied the important position of President of the West Simcoe Conservative Association; indeed, it was only at the convention here on the Ist inst. that he relinquished that office and passed the reins over to a younger man. At the same convention he attempted to speak, but was overcome owing to weakness, but before taking his seat he made the nomination which resulted in Mr. James S. Duff being again the candidate for the approaching elections. As a slight recognition of his long and faithful services, he was elected honorary president of the association, an office which has not been filled for many years. While always taking an active interest in the work of the riding association, he never missed an opportunity of assisting the affairs of the local association, of which he was one of the few life members.

Outside of politics, he was an ardent and enthusiastic Orangeman, being an honored and valued member of the Primary Lodge, and also of Preceptory No. 384, Royal Black Knights of Ireland. For many years he also took an active interest in municipal affairs in the township of Nottawasaga. In 1879 he was first elected to the reeveship, which office he held with marked ability for eight or nine years, when he met defeat at the hands of his old-time opponent, Dr. L. McAllister, the present clerk of the township. On being defeated he retired from the arena and did not again seek office.

In religion the deceased was a member of the Presbyteriar Church, the church of his fathers.

Besides his wife and family, he leaves one sister, Mrs. McLauchlan, of Egremont township, county of Grey, and four brothers, Hugh and Duncan, who live on the homestead in Mariposa township, John, in Woodville, and William in Mount Forest. Mr. George Leach, of Duntroon, is a brother-in-law.

The funeral service took place at the Presbyterian cemetery. The funeral service was conducted by his pastor, Rev. J. A. Cranston, M.A., and the remains were borne to their last resting place by six old friends of the deceased. Mr. James S. Duff, M.P.P., John Mackay, of Creemore, W. T. Allan, G. W. Bruce, W. A. Hogg, and W. Fryer.

W. E. SITZER, M.D.

Dr. W. E. Sitzer died at his home at Ida, Mich. He had suffered for some time from inflammatory rheumatism, which caused heart failure. Milton was his home until he graduated from Trinity College, Toronto, twelve years ago, when he went to Ida. He had a large practice there and was very popular.

HENRY PIGEON, M.D.

Dr. Henry Pigeon, Peterboro', died very suddenly on Dec. 7th. at his home, Charlotte Street. He had been ill since Saturday, Dec. 3rd, from a cold, but gradually improved until the morning of his death. About eleven o'clock he retired for a sleep, but shortly before one o'clock his heart became violently affected, and death resulted. Dr. Pigeon was born in Gloucestershire. England, and had been practising in Peterboro' for upwards of twenty-one years. Dr. Pigeon was twice married, and is survived by a widow, four sons, and one daughter.