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WINNIPEG, CANADA

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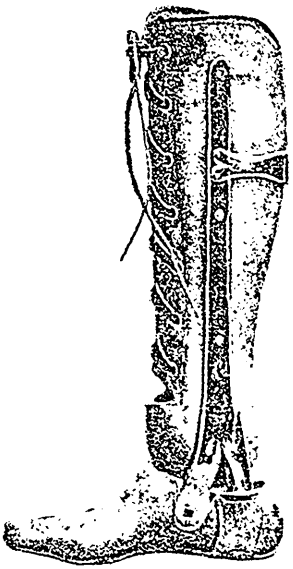

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WINNIPEG

Western Canada Medical Journal

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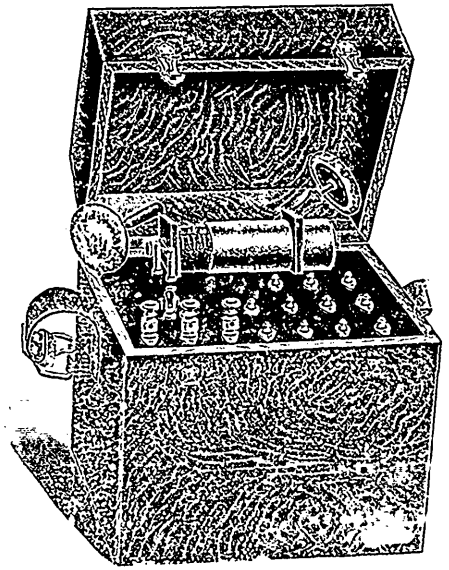

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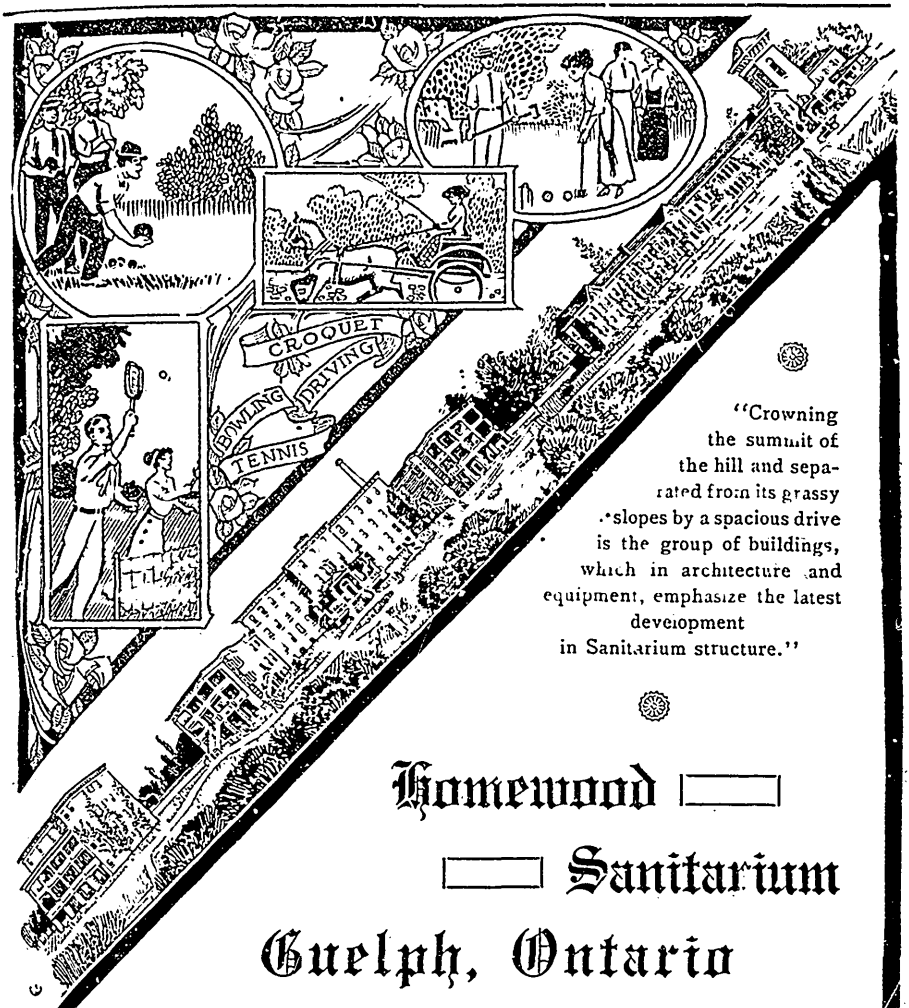

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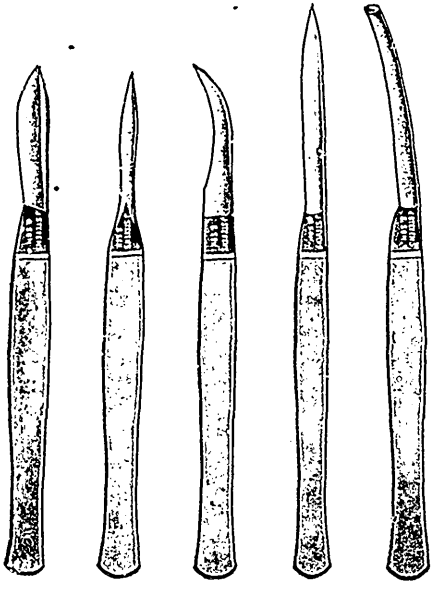

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MEDICAL JOURNAL

VOL. IV SEPTEMBER, 1910 No. 9

EDITORIAL

How Can Western Men Best Guard Their Interests?

At first glance the heading for this editorial may appear mercenary but we have good authority that "he that looketh not after his own house hath denied the faith and is worse than an infidel." It goes without saying that if we do not guard our personal interests those of our profession will soon be neglected also.

One constantly hears demands for reform in the West and complaints of mismanagements of the medical affairs—the abuse of medical charity taking away legitimate work from medical men—the club abuse—the lack of true fraternity—the allowing the qualified charlatan to advertise himself by his thousand and one methods while the chief time of the colleges seems to be taken up pursuing the quack—the complaints of the way the political medicos work to get everything under their control to the detriment of the welfare of the public and the profession—all this one hears from men of all schools.

The way the East arranges matters as if the West were not qualified to look after its interests, is not the complaint of the medical profession alone and even did the East desire to deal absolutely fairly with the West, it would be impossible—dissatisfaction would always result. Why? Because the peculiar interests of the West are antagonistic to certain Eastern interests. The long break occasioned by the rocky barrenness of the north shores of Lakes Huron and Superior and the expense of linking up this break places the West much out of touch with the East.

For true satisfaction to reign the West must first arrange matters and then, if the subject is one of national importance, the Western delegates can carry the result of Western decisions to a general conference. Not in medicine only, but in every calling does one find the same desire for management of affairs peculiarly western. If we do not look after our own business, the assumption is we are not qualified—and certainly this is the present attitude. This may explain why patients are constantly going East or to the States to be treated, while in the West are many splendid men—surgeons and physicians—the equal of any. It is certainly evident we of the West better be up and doing. Let us resolve to unite and stand for something medically. If we do not, is it any wonder that we have no influence or force in medical affairs? Let us drop all parochialism and narrow-mindedness and consider only how best to attain the welfare of the individual and a high standard for the profession. What is needed to get this reform? What has even been needed to get any reform for the good of the mass? What has accomplished reform in spite of seemingly insurmountable obstacles? History gives the answer: simply the united effort of a determined few whose enthusiasm later fires others with the result that soon the majority are awake demanding their rights and getting them. What does Smiles tell us—"They who are the most persistent and work in truest spirit will invariably be most successful. Success treads on the heels of every right effort." Before we start, we ask ourselves—Is there need for reform? Do the abuses we have mentioned really exist? Is there truly a great disparity in the incomes of the medical men—not through more and better work of some which of course is understandable, but simply from this medico political "pull." If such a state of affairs has existed and will exist unless stopped, surely it is time we asserted ourselves and put a stop to conditions detrimental to the individual, to the health of the people and to the reputation of our profession.

How? By Union. Let us note the benefits obtained from Union.

(1) Take the scientific side—Research. By encouragement and wisely directed effort this power could be utilized for the benefit of the western profession. This, indeed, was one of the chief reasons for the establishment of this journal, to link together the western profession that we might make some use for the general good of the innumerable scientific observations of private practitioners in the West with its peculiar climatic and other conditions By our united effort we could endeavor to better any conditions which might retard any such means of improving our knowledge

(2) A strong union would enable us to insist not only on a certain length of time for medical study, but that the whole of that time should be in every sense Educative.

(3) There is the hospital question. Union would enable us to demand that the experience to be gained in the hospitals should be the privilege not only of the few in favor with so-called "powers," but of the many.

(4) Most important. The control of medical education would not be in the hands of a few and those who indirectly benefit from their position, as it is at present. This last, indeed, is one of the greatest causes of this demand for reform in medical affairs. Teachers in the schools should get salaries that make private practice unnecessary. Private practice should be forbidden. The students would then get proper attention and their real education not treated as of secondary importance. Let our professors be professors not tradesmen, considering how much can financially be made out of the post. "Lack of tone" is spoken of—of that truly elevating influence which means so much to the after-life of the man. How is it possible for such influence to be wielded where mercenary interests are predominant! Above all, do the students need the guidance of men of experience and ideals if in after-life they are still to endeavor to aim at the best. Those who have made their way in the West have had a hard struggle to keep before them certain ideals implanted in the years of their tuition and yet, perhaps, of all callings the followers of Hypocrates have need of such. However, struggles give strength and prepare us, who have gone

through them, to be determined to have a progressive union to rectify many errors which at present exist. A union which shall give us strength to advance with the advancement of the times. We can easier than older places set in their ways. While for great issues we must ever co-operate with the East—the Empire—in fact the world, still, western medical affairs must be arranged by ourselves and to the satisfaction of the general profession. The only way we shall be allowed to do this is by asserting ourselves through the strength of a Western Union. Let us make our opinions worth hearing and to do this we must stand out, and when opposed remember, the men respected to-day were laughed at yesterday. In our profession particularly so. Let the Strong Minority dare for a time to be outvoted, laughed at, misunderstood, condemned. Persistent effort for a good cause wins out invariably. Emerson says: "Talleyrand's question is ever the main one. Not is he rich? Has he this or that faculty? Is he of the establishment? But, Is he anybody? .Does he stand for something?" Let us, then, in the West, stand for something—for the control of our own affairs except where for the good of the whole co-operation with the East is needed. While loyal to the Canadian Medical Association, let us have the credit of managing our western affairs ourselves and submit to no dictation from the East on points better known to us and affecting our particular interests. What has the East ever done for the specific advancement of medicine in the West? Nothing. Time we moved. By our Western Union we can insist on a certain standard—certain tariff of fees—and especially can we look after a very serious matter which has had disastrous results in the Old World—that of the control of medical charity, for while the interests of the sick poor must be considered, the constant abuse of charity to the detriment of the medical profession will become serious. This matter in some foreign countries is attracting the attention of the government. There is also the question of specialists and consultants, and provident agencies. But, possibly, greatest of all would be that by strong union really effectual work could be done in preventive medicine for the benefit of

Public Health. The question of Infant Mortality and a pure milk supply, etc., can only by strong combined effort receive the attention it ought. The municipal authorities need the voice of a strong force to make them realize their duties in this respect, as too many interests are opposed to the carrying out of real reform for the public health. These matters call for our attention or as a profession we lose in reputation, for the health of the public speaks for the success or failure of our work. We shall also lose as individuals by such neglect and lead a life of constant dissatisfaction. But we have a new country and all before us—only hindrances, apathy and the antipathy of the few. If we prove ourselves open and fair-minded with definite opinions of our own, then only can we be of any account and have influence professionally, politically and individually. For this we need publicity. That was another reason for the publication of this journal. To ventilate freely all conditions detrimental to the best interests of our western profession and try to find a remedy.

More is needed—an organization which shall voice the opinions and needs of the West fearlessly. The cause of much apathy is that active-minded and interested men refuse absolutely to submit to the control of an authority in the selection of which they had no voice.

To gain these points cited—points so vital to our individual as well as professional welfare—it is imperative we form a union—a **Western Canada Association**—for if we do not assert our western individuality, little wonder the East considers us of no importance when considering matters affecting the whole profession. Little wonder the general public follow suit and go East or to the States when they want anything good, as they think, medically. Now is our opportunity to unite and assert ourselves, and the sooner we do it, the better.

ORIGINAL COMMUNICATIONS

A NEW OPERATION FOR THE CURE OF DETACHMENT OF THE RETINA.*

By Dr. Leopold Müller, Privatdocent, Vienna..

Detachment of the retina has always been considered an incurable disease. It is to be deplored that it destroys the eyesight in one or both eyes of many people at the best time of life and that it threatens and worries those individuals who are highly myopic and have a tendency tc retinal detachment and learn their danger from friends, physicians or popular books. The most frequent cases of retinal detachmentwhich I endeavor to cure occur in hight myopia.

My operation is performed on the posterior segment of the eyeball, a new field. Until now, puncture of the sclera has been made in the anterior segment only. The operation is similar to no other method. Before describing it I will first consider the previous customary treatment of retinal detachment and then mention the circumstances which suggested to me the operation. The previous theories which tried to explain the cause of retinal detachment did not agree with the facts, whereas my theory did not ignore the principles of our known facts. I expect to discuss at the close of this article a theory of retinal detachment but only because my experience with the operation appears to throw light on this vexed problem.

The medicinal treatment of detachment consists of sweating, mercurialization, the use of a pressure eye bandage and rest in bed (Samelsohn (2)). Hortsmann (3) concludes that the best results are obtained by the present methods.

A part of this treatment is not at all clear to me. It is

* Münchener Medizinische Wochenschrift, No 23, June 9, 1903.
Presented by Dr. R. G. Montgommery, Winnipeg.

true that by sweating a collection of serous fluid is absorbed. In one case of typical retinal detachment with a floating retina and the tension normal, I saw after fourteen days of sweating, a complete absorption of the subretinal serum. However, after the retina became reattached, a small sarcoma was seen which required enucleation.

Even when bandaged rest of the eyes is not obtained and it seems to me a hardship to keep such patients in bed. The use of the pressure bandage is absurd. Will it elect to act only on the fluid under the retina? No one has been convinced that the pressure bandage exerts a favorable influence on this fluid. Indeed we know that the eyeball becomes soft under the pressure bandage and that the volume of the vitreous lessens. Hortsmann insisted that the prognosis of detachment is bad when the eyeball is soft. After one reads the instructive article by Hortsmann one is impressed by the fact how few cases are cured and they spontaneously, and that the condition of the eye is made worse after the treatment of Samelsohn. I for my part permit with sweating, mercury and iodide of sodium only a light occlusive bandage, avoiding violent or sudden movements and reject the pressure bandage as uncertain and directly injurious.

To the rage of the medical treatment was added the injection of iodine or Lugols solution into the vitreous (Schöler (4)) which was found by other physicians to be pernicious. Schöler himself afterwards discarded it.

Of the operative methods of treatment are the scleral puncture, the method of Deutschmann to be discussed later, the transfixion of the retina as with gold wire through the sclera and choroid with other precedures which have only historical interest.

Horstmann stated that the emptying of the subretinal fluid by puncture always hastens the extension of the detachment. I have also had this experience and gave up the puncture because it was injurious. What happens from this puncture and afterwards? The subretinal space is evacuated and the eyeball contracts. Naturally it refills again quickly and does it not by an increase of the volume of the vitreous

but by an increase of the subretinal fluid. The improvement which rarely occurs is but temporary. The eyeball is not altered or the cause of the detachment affected by evacuation of the subretinal fluid. The explanation of detachment, first suggested by Raehlmann (5), as due to diffusion of fluid through the retina while true theoretically is not supported by facts.

We come now to consider the treatment of detachment by Deutschmann's (6) method which was published in 1895. In the medical reports of Fuchs' Clinic I published three cases operated upon during the vacation period of 1893 or 1894 in which the vitreous of rabbit's eyes was transplanted into human eye with retinal detachment. The experiments were undertaken with the supposition that the volume of the vitreous is diminished in detachment. I was so discouraged by my experience in these three cases that I had no desire to repeat the experiment after Deutschmann's publication. I was convinced that the vitreous of the eyes with detachment is a Noli me tangere. The second novelty of Deutschmann, the incision through the vitreous, did not encourage me to try it as he has abandoned it in favor of vitreous transplantation. Furthermore, the vitreous incision seems to be Quixotic. In many cases of high myopia the vitreous is fluid. Patients who have detachment state that it is preceded by subjective symptoms of floating vitreous opacities. In the fresh state of an enucleated eye with retinal detachment, the entire central portion of the vitreous after the eye was opened flowed out like water and only a very small amount of vitreous-like substance remained and adhered to the ciliary part of the retina. Stellwag (7) had already shown that fluidity of the vitreous is only possible by the breaking down of its network. Deutschmann refers to Stellwag as the first who described fibrillary degeneration of the vitreous. Stellwag insisted that the degeneration is not found in the low grades of detachment. This agrees with the opinion of Nordenson (8). And even in old advanced cases of detachment, the retina rests very lightly without movement on normal vitreous; the rest of the vitreous has fibrill-

ary degeneration. (Stiel). A fibrous union of the retina to the vitreous has not been observed.

No one has moreover confirmed the results of Deutschmann. He himself said that others could not be induced to try it on account of the risk.

Until now, detachment of the retina is considered incurable except in those cases which recover of themselves as the late Horstmann has stated.

Through what circumstances did I arrive at the method to be described below?

The first factor to be considered is the temporary resection of the outer orbital wall which convinced me that in this way was the posterior segment of the globe in the primary position freely exposed. I did this three times to remove orbittal tumors and once for resection of the optic nerve sheath in a case of optic neuritis.

In the patient on whom I operated, the diagnosis of gumma of the brain was made. The patient suffered from general symptoms, swollen papilla, but with no focal symptoms. For months he suffered from severe headache. With the ophthalmoscope the left papilla was pale while the right was still very considerably swollen.

I exposed the right optic nerve by temporary resection after Krönlein and removed from its sheath a quadilateral piece 5 mm. long by 2-3 mm. wide. The nerve sheath behind the globe was uncommonly tense and swollen; and, when I punctured it with a knife, a fine stream of a clear fluid spurted out in a nearly horizontal direction.

The patient was free of headache for several months afterwards that I observed him. Also, the vision of the right eye improved from counting fingers to fingers at 4 m., while the left eye continued with light perception. The patient was seen three years later at the eye clinic at Breslau. Professor Uthoff kindly sent me word that the vision of the right eye was perception of light while the left eye was blind. Both papillae were pale. Headaches do not occur.

The second factor to be considered is the danger from loss of vitreous. This is inclined to occur when the eyeball

is very much rotated. I was convinced of this fact during the extraction of a piece of cartridge cap and also on other occasions when removing foreign bodies from the vitreous. On the other hand, I saw that the vitreous did not escape during the operation when the eye remained in the primary position. This fact was illustrated during the extraction of two pieces of shot where I made a temporary resection of the lower lid in order not to drag on the eyeball.

In both cases the shot were accurately located with the aid of the Roentgen rays. They lay at the bottom of the vitreous chamber at its deepest portion near the equator of the globe. It is the general opinion that under these circumstances with the foreign body behind the lens, it is not well to operate for its removal.

I incised the lower lid to the orbital edge and separated by a horizontal incision the inner as well as the outer part of the lid close to its insertion to the orbital margin. In this way I exposed the place where I expected to penetrate the globe without it being necessary to roll the eye much. I incised the outer layer of the sclera and introduced two sutures. The middle of each suture was drawn out in a loop. After cutting through the sclera the choroid did not bulge at all. This was incised, also the retina. In the first of the two cases, the vitreous appeared now in the wound. The piece of shot was seen suspended in it and was extracted with the aid of a small double pointed hook without losing a drop of vitreous. The scleral wound was closed by the suture already in place. Later I sutured the resected lid.

In the second case, I proceeded in like manner. After the incision of the choroid and retina a small quantity of dark fluid blood flowed out and in it was the foreign body. The foreign body and blood were located between the retina and vitreous. Of the vitreous as little was lost as in the first case. In this patient the eye 18 months after the operation is the only useful one; in the other, a shot kernel perforated the macula and led to a high degree of amblyopia. The eye today is free from irritation and the vitreous perfectly clear. A retinal detachment has not occurred.

The third factor to be considered in this study is how to avoid injury of the choroid when a portion of the sclera is removed. On corpse's eyes I found that it was easy to do. As a result of this experience I found it practicable in many cases to remove a large flap of the sclera, to suture the edges of the wound and adapt the eyeball to the contracted vitreous volume. When I removed a piece of the sclera from the outer half of the globe between the equator and the insertion of the external rectus I learned:

1. That the stretching and tension of the choroid, as it occurs in high myopia, cease
2. That the stretching and tension of the retina ceases.
3. That the contracted eyeball would usually become filled with vitreous of the normal amount.

The complete operation is divided into three parts:

1. Preliminary operation on the orbital wall.
2. Exposure of the eyeball.
3. The principal operation on the eyeball.

The preliminary operation is a temporary resection of the outer orbital wall after Krönlein (S. Czermaks Operation Chre. page 379) with the slight difference added, that one does not find it necessary to resect the temporal orbital edge to the anterior extremity of the infraorbital fissure; one stops a little in front of it.

I do the preliminary operation in the following manner:

(a) The skin incision is made 3-4 mm. in front of the outer orbital edge, from the upper edge of the malar bone to the zygomatic frontal suture, then 1½ cm. further arched backwards along the temporal ridge of the frontal bone. To the lower end of this incision I connect under an angle a second 1½ cm. long along the upper edge of the zygoma.

(b) Along the line of the incision of the orbital edge in the same direction as the skin incision the periosteum is incised.

(c) By means of an elevator the periosteum is raised from the temporal orbital wall.

(d) A little above the zygomatic frontal suture one chisels through the temporal edge of the bone and then

arched downwards through the temporal orbital wall to a point, a short millimeter in front of the anterior end of the infraorbital fissure. Secondly, one chisels through the base of the frontal process of the malar bone directly backwards to the lower end of the first bone incision.

The separated piece of bone is pushed outwards.

II. To expose the eyeball as far back as the equator the equator the orbital periosteum, as far as it is freed, is divided vertically and the external ractus appears;—about 5 mm. behind the insertion of the rectus 2 sutures are tied around the muscle and the muscle is then cut through between the knots. The assistant, with the aid of a two-prong sharp hook holding back the bone, catches the posterior thread in the hook, leaving the other thread lying forward on the globe. The insertion of the inferior oblique is now exposed. The anterior third of its insertion is divided which with its muscle fibre is pushed to one side.

The principal operation on the globe.

(a) 1-2 mm. behind the insertion of the external rectus, with a small beilied very sharp scalpel a short incision in the outer 2-3 of the sclera is made. 8-10 mm. further backwards a second incision of the same depth in made parallel to this. One is careful, that this incision is made in front of the vortex vein. The piece of sclera between both incisions is removed. A fine, but trustworthy silk suture is introduced through the distal edges of the two incisions (the posterior edge of the posterior incision, the anterior edge of the anterior incision. The needle is inserted only as deep as the incision is made.

In like manner incise and suture above and below the first suture with an interval of about 3 mm. Five sutures are inserted and all are separated by a small piece of sclera. The upper and lower ends of the flap of sclera to be removed terminate in a point 4 mm. above the upper and 4 mm. below the lower thread.

(b) The silk sutures between their insertions are drawn out in loops and arranged in order together with the ends of the threads to which they belong.

(c) One deepens (the narcosis must now not be too superficial) one of the lowest or middle posterior incisions through the whole thickness of the sclera. When in most cases more or less of a yellowish green fluid, the supra-choroidal serum, flows out. In like manner one deepens, being careful, the lowest anterior incision. Through the first opening, a small straight scissors, in which both blades are not only blunt, but have well rounded ends, are introduced. One cuts downwards, then downwards and forwards to about 4 mm. below the lowest suture. In like manner one cuts through the anterior opening so that both incisions are united below. The flap is raised and the sclera cut through along the line of the insertions of the sutures removing a flap which ends about 4 mm. above the uppermost suture in a point. One needs to be careful that the sutures are not cut.

(d) The ends of the threads of each suture are twisted together and the loops removed by drawing on the ends of the threads. The threads now rest on the choroid, which is level and nowhere bleeding in a space of 8-10 mm. wide and about 20 mm. long.

(e) The choroid is penetrated with a knife near the lower angle of the wound. The subretinal serum now flows out. Both edges of the sclera are drawn together by moderate traction on the first of the threads to be tied. The choroid slides smoothly under the sclera. It draws together like a collapsing balloon from which the gas has escaped. All the sutures are tied closing the scleral opening.

(f) The divided external rectus is united. The incision in the orbital periosteum is closed, and the separated flap of bone is replaced. Above and below where the orbital edge was chiselled through a periosteum suture is placed to hold the bone flap in proper position. The skin is sutured. The parts are bandaged in such a way that the pressure is made along the outside of the orbit; strong pressure directly in front of the eye should be avoided. Before one begins to resect the sclera all hemorrhage should be stopped. No hemorrhage occurs when the vortex vein is avoided. In one case in which this complication occurred the vein was wounded

between the choroid and sclera. It bled very little. I thought that after closing the sclera, as above, that the bleeding would stop and after the scleral wound was closed no hemorrhage was seen but as a matter of fact the hemorrhage continued and made its way into the vitreous. It did not vitiate the result, and the blood was absorbed in about a month. The detachment in this case is completely cured.

From the above description of the operation the flap of sclera removed was 8-10 mm. wide and 20 mm. long. The operation is somewhat difficult and it is necessary not to injure the choroid. The subretinal fluid escapes through an incision to an amount which is necessary for the contracted globe. The remainder of the subretinal fluid was absorbed later as I was able to observe with the ophthalmoscope. It is certainly fatal when the globe collapses. The anterior chamber was in no case abnormally deep after the above operation.

The duration of the operation was about ¾ of an hour, once only ½ and hour.

It is important that the operation be done with the usual antiseptic precautions.

I have now operated by the above methods on 7 cases, 4 in Vienna and 3 in the German University Clinic of Prague. To Professor Czermak I wish to express my obligation for his kindly attentions. Of the 4 cases in my private clinic here in Vienna, the first was done February 13, 1902. The case was examined with the ophthalmoscope before the operation and afterwards by Drs. Salzmann and Hanke as well as myself.

The first eye I operated upon had a high degree of retinal detachment inward and below for four years. Above and outwards the retina was level. The cloudy vitreous contained numerous floating bodies. The detached retina floated briskly. The cause of the detachment was high grade myopia. The eye had a doubtful perception of light.

To-day the retina is everywhere attached and the success of the operation is complete. With the pupil dilated one readily sees a change of color made by the scleral scar, and

an elevation of the choroid in the form of a vertical very narrow streak. Floating bodies in the vitreous are smaller and much less. The vision has improved only to counting fingers. The field of vision for movements of the hand is normal. The patient sees better when he first wakes up in the morning but only for a few minutes (Fatigue of the retina).

The second case was operated upon May 19, 1902. The detachment was very extensive and was located below, inwards and upwards. Above, the retina was normal and the patient could count fingers in the lower part of the field. The retina floated so high that the papilla could not be seen. The vitreous contained numerous fine opacities and looked very hazy. The detachment had existed two years and occurred spontaneously. The patient was very myopic. A rent in the retina as in the first case was not visible.

The patient was dismissed three weeks after the operation. At this time was left only a slight detachment in the form of a bubble in the region of the macula. Elsewhere the retina was attached. The patient counted fingers at the periphery on all sides. The vitreous seemed as cloudy as before the operation.

Four weeks later the retina was attached at the macula and the case appeared completely healed. The floating opacities of the vitreous were much less. The patient could count fingers at 3-4 m. He resumed work in the field and in the forest (wood picker). He continued at his work until the following winter. In January 1903 he again presented himself on account of failing vision. I recognized a beginning opacity of the lens. No posterior synechiae. Anterior chamber of normal depth. Tension of the eye, normal. Field for light and movements of the hand, normal. The red reflex from the fundus can be seen in all directions. The cloudiness of the lens increased rapidly and became strongly buish white. The patient remains for treatment of cataract.

The third case occurred in the right eye of a young man. The left eye was hypermetropic (4 D) and very amblyopic. In the right he had 9 D. and as he thought normal vision. I

treated the patient for one year by rest in bed and bandaging both eyes. In the beginning, the detachment, which was situated outwards and below, became smaller but soon relapsed. On the 28th of June, 1902, one year after the occurrence of the detachment I operated on the patient. At that time the retina floated above the level of the horizontal meridian of the eye and the detachment extended far sideways, inwards and outwards. The patient could count fingers only from below; in the other parts of the field he had no perception of light. A rent in the retina was not seen. The tension of the eyeball, as in the earlier cases, was diminished. In this case the blood from the vortex vein appeared after the operation in the vitreous and had the shape largely of a wide rope which extended from the wound across the posterior chamber behind the lens. In the beginning it had a red color. Soon after the operation the reattached retina could be seen through the dilated pupil only above and below the band like opacity.

The vitreous hemorrhage is now largely absorbed and it forms a transparent very delicate membrane behind the lens. Close to the wound it is very glistening and white. The retina lies completely attached and I consider the case as healed. The patient is now 3-4 D. hypermetropic instead of 9 D. Myopic. He counts fingers at 3 m. The visual field was normal except a central scotoma for red and green for objects less than 5 mm. square. Blue and yellow are not recognized at all. Red and green perception was uncertain near the scotoma with objects of 4 mm. square.

This central scotoma is probably the cause of the lowered central acuity of vision, and is due probably to the vitreous opacities. The patient can read easily with a magnifying glass of 25 D. with the right eye.

These three cases certainly do not warrant a general conclusion but at least suggest that neither the duration nor the degree of detachment are a contraindication to my operation. When the detachment has continued more than a year only a low degree of vision may be expected. Detachment

in the region of the macula does not permit restitution of the macula funceiton after the reattachment of the retina.

In the fourth case the detachment of the retina occurred below and extended upwards nearly to the level of the horizontal meridian. Nothing could be seen of the papilla. A part of the staphyloma could be made out. The retina did not however float. It was intensely white and tense from secondary degeneration. Floating bodies occurred in the vitreous. Tension of the eyeball was lowered. The other eye was myopic more than 20 D. In this eye, only movements of the hand were perceived in the lower part of the field. Since the operation, the detachment is not entirely cured but has improved so much that he has only a slight defect in his visual field above. He counts fingers below, outwards and inwards as well as in front. In this case, the secondary shrinkage of the retina was an obstacle to its reattachment. This must be considered in the prognosis but is not a contra-indication for the operation. I expect to describe at length a report from the clinic of Prof. Czermak the other three cases described here.

The hitherto not well-known or recognized fact, which I showed by my operation, that the yellow or greenish yellow serous fluid which is found between the choroid and the retina in most cases is also found in the supra- choroidal space, induces me to consider the theories of retinal detachment. Their number increases.

Leber (9), of whose theory notwithstanding the objections which from the beginning were raised against it, ex-explains the detachment of the retina in the following way:

The vitreous shrinks. A rent in the retina previously existed and through this the fluid entered from the vitreous beneath the retina. The objections to this were collected by Schmidt-Rimpler (10). I can, however, add the following:

The collection of greenish yellow, thin serous fluid is, according to Leber, to pass under the retina. How is it to pass under the choroid? Secondly, the healing accomplished by my operation harmonizes with this theory in cases where the vitreous is shrunken only so far as the contracted space

made by the wound. Another argument against Leber's theory is the spontaneous healing of the retinal detachment.

According to the theory of Raehlmann, the retinal detachment arises likewise from the vitreous. He says that in the vitreous a diffusible material is developed which incites a diffusion through the retina and the physical effect of the presence of the fluid beneath punctures a mechanical separation of the retina. The objections to this theory are numerous. Schmidt-Rimpler asked how room is created for the collection of the subretinal fluid. The theory does not explain the beginning of retinal detachment. It is also strange according to this theory, how the detachment of the retina can be circumscribed. Finally, in no way is the healing through my operation or the presence of an albuminous fluid on the outerside of the choroid explained.

Another theory, the oldest of all, is the secretion theory which explains the detachment as a separation of the retina by a choroidal exudate. One objection raised against this theory was that an exudation beneath the choroid implies an increase in the tension of the eyeball. However, we find usually the tension lowered in detachment of the retina. Schmidt-Rimpler, however, called attention to the fact that intraocular hemorrhage could occur without an increase of the tension of the eyeball.

Gräfe (2), who believed that hemorrhage was the cause of many cases of retinal detachment, was unable to find this as a cause in other cases, and asserted positively, that there was not an inflammatory exudate in retinal detachment. From what has been said, that the separation of the retina may be due to a pushing-off of the retina from the choroid by an exudate under the retina following choroiditis, is untenable. My opinion of the origin of detachment of the retina is as follows:

I. The retina is detached in cases of primary detachment of the choroid.

II. The cause of the pressure is:

1. An inflammatory exudation with choroiditis.
2. Hemorrhage.

3. A transudation, caused by,

(a) Blood stagnation in the choroid, which is to be considered as preceding an acute circumscribed atrophy of the choroid and this is connected with the stretching of the choroid.

(b) Compression of the choroidal vessels.

(c) Disease of the blood.

In group a we include retinal detachment in eyes which do not show a stretching of the choroid.

Group 3 a contains the most interesting cases where the obstruction is the cause of detachment. It is self-evident that the globe with moderate myopia previously hypermetropic, can be a globe with the choroid and retina well stretched.

In group b 3 belongs the serous detachment with swollen choroid.

In group 3 c the detachment was due to Bright's Disease, etc. This theory appears to me to answer all the known facts.

I have only to consider further, group 3 a. Although the detachment occurs suddenly the rapid effusion of fluid in a short time is not strange when one recalls the great abundance of choroidal vessels.

Would it be proper in high degrees of Myopia to suggest this operation in order to prevent disease of the fundus? I believe with Salzman that the stretching of the choroid is the cause of the changes which lower the vision of the myopic eye. Of course, if one should operate in such cases one should diminish the volume of the vitreous by a puncture, before the threads are tied. The operation for the improvement of the vision by the removal of the lens does not appear so promising because it is followed occasionally by retinal detachment and the increase of myopia is not influenced.

MEDICAL THOUGHTS, FACTS, FADS AND FOIBLES.

By James S. Sprague, M.D., Perth, Ont.

Ex-Examiner College of Physicians and Surgeons, Ontario.

Crafty men contemn studies, simple men admire them; for they teach not their own use; but that is a wisdom, won by observation. Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider, said Francis Bacon (1561-1625).

"The Carnegie Foundation for the Advancement of Teaching. Medical Education in the United States and Canada, Bulletin Number Four," Price 17 cents, is on my desk and has been but carelessly reviewed as the report is very elaborate, and is represented by 346 pages. However, a brief, yet sufficient study of the report is very convincing that Medical Education in the United States is, and for many years has been, in a most deplorable and wretched condition and that of the 155 Medical Schools or Colleges, so called, not more than ten of them are worthy of the name, or doing the work that this age and the public demand. Our own Schools, on page 325, are classified as one "as bad as anything to be found on this side of the line." Two are classified as "feeble" and two as "excellent" and two as representing "a distinct effort towards higher ideals." In this manner are our eight Medical Schools intimately and very unintimately connected with provincial and other well-known and well-endowed Universities. Of the city of Chicago, of whose Medical Society is our Dr. Hugh Alexander Ferguson, the report states it "is in respect to Medical Education the plague spot of the country." Certainly it is, for of the 15 Medical Colleges, but three or four are considered worthy of mention. Two schools including a College of Osteopathy "prepare candidates for the Illinois State Board Examinations in unmistakable contravention of the law and the State Board rules" and yet nearly 3000 medical students are present. The re-

port says (page 217) "An efficient and intelligent administration of the law would thus reduce in short order the Medical Schools of Chicago to three, Rush, Northwestern, and the College of Physicians and Surgeons," the report further adds, "At both Northwestern and the College of Physicians and Surgeons the inequality and incapacity of the present student body are frankly conceded." These schools (three in number) "satisfy the law," "they satisfy the aspirations of their faculties in varying degrees." In an August (1910) copy of "Chicago Examiner," the names were given of 150 graduates of "Jenner Medical College," "a night school, occupying three upper floors of a business-house. An independent institution." This school (Jenner) is stated (on page 211) to be "An out-and-out commercial enterprise," "The instruction is plainly a quiz-compend drill aimed at the written examinations set by the state board of Illinois." It may be stated that all schools forming integral parts of State or Provincial or well-established Universities are doing good work. The word "University" has very frequently been misapplied and been frequently applied to a half respectable college or concern, but one fact is, of the 155 United States Medical Schools. Very few of those styled "stock companies," "night schools," "quiz" or osteopathic schools can continue "business" when these reports of the said Commission become known by M.D.'s and our legislators.

Is it not lamentable to the intelligence of this period, that there should be allowed to exist eight osteopathic colleges which, the report says, "fairly reek with commercialism," whose "catalogues are a mass of hysterical exaggerations." These schools now enroll 1,300 students, "who pay $200,000 in fees annually." That the name osteopathy should be named by the Commission is not pleasant, that it should be tolerated in our midst—is unbecoming to us M.D.'s.—That legislation in behalf of its being recognized by our Provinces would disgrace our legislative halls and the honorable name of Medicine and a disgrace to our civilization. That osteopathy may become recognized by Ontario laws, and that its graduates may find their names in our Medical

Registers is beyond intelligent belief. Our Medical Journals should discuss this subject of osteopathy as freely as did 'Canada Lancet," giving in its April number a full report of its requests for incorporation. The Medical Boards as Boards of Health of the United States must have low ideals of their profession to have the name "osteopathy" with the D.O. graduates named in their registers. It is certain no announcement or register of any Provincial College of Physicians and Surgeons shall disgrace or blot its reports or pages with Osteopathy, Chiropractics, or fake concerns, or fly-by-night, or disgraceful cults in Medicine. I am of opinion that every M.D. who believes or should be made to believe he owes a duty to his profession, should read this Bulletin, I, too, believe every University, College, High School Professor or Teacher, every Minister of the Gospel, every Legislator, every member of our Provincial Medical Boards, in fact every intelligent man and patriot should not only read, but study these reports and tell his neighbor about all false doctrines and the conditions as they exist in our Medical Schools and those of the United States, not forgetting to mention that in Canada we have Medical Colleges not eclipsed by any in the world, and that the Medical College of our Western Provinces is pronounced as superior and that those to be organized and directly and intimately attached to our great Universities—thoroughly provincial in endowment and control, will serve legitimately and honestly the public, and that their graduates will honor, not disgrace the land of their birth. We urge every reader of this paper to write at once for "Medical Education in United States and Canada," Bulletin Number Four, 576 Fifth Avenue, New York, N. Y.

To those who are, and should be profoundly interested in such and allied studies, a careful reading of these reports, Dr. Albutt's masterly address in the July issue of this valued Journal and the address, "Vocation or Avocation," by Dr. Geo. M. Gould, Philadelphia, not forgetting the Montreal address, Supt. 17, 1902, "Chauvinism," by Dr. Wm. Osler. As Alice in Wonderland says, "the time has come for us to talk of other things," and those things or subjects are those

which refer to such as Medical Education, our Medical Colleges, Dominion Registration, the denouncement of Osteopathy, Quackery, Fakirism, Emmanuel Movements and other delusions aimed at the destruction of our profession. For we have enough specialists and professors who, protected by lordly incomes and salaries, care little whither the profession is drifting or what evils beset it, while the minority among us—comprised of hard-working and observant country and town doctors are clamorous in the maintainance of our profession's honor and integrity. To the country doctor he gives this eulogism: "The family or general physician is still in the majority and he is the backbone of the profession, and the hope of curing our pitiful professional scoliosis resest with the true orthopædist." Of the majority of country doctors of our Dominion it can be truthfully said—Quales neque candidores terra tulit, and if "Medicus in omne aevum nobilis" is correct, our Medical Colleges must require B.A. or B.G. matriculation requirements; must require five years of undergraduate work in Medicine; and the Alma Mater must be the Provincial University with which our schools form an integral part, and not least our Examining Boards—not Boards of Health (so erroneously termed by several States) but Colleges of Physicians and Surgeons must be able to spot the "quiz" instructed applicants, and to denounce Chiropractics, Osteopathy, and others of the ilk.

DAIRY REFORM IN MOVING PICTURES.

While some of the moving pictures are teaching crime others are teaching practical ethics by showing the value of clean milk. The moving picture has been used for some little time in surgical instruction, and in a more popular way in giving information about industrial operations. More recently it has been enlisted in the cause of hygiene and sanitation. A representation of "The Filthy Fly," given under the auspices of the American Civic Association, has attracted much attention and has doubtless impressed many persons

on whom the written word would have had no effect. Now we are informed by "The Journal of the American Medical Association" (Chicago, August 13) that moving-picture playlet illustrative of the damages of impure milk is in preparation. We read:

"Camera men have been snapping unhygienic farms to this end. The first scene represents the son of an old-fashioned, bacteria-despising farmer returning to the old homestead with his wife and little boy. The filthy cow-barns, the open pails of milk receptive to dust and flies are depicted with unsparing realism. The son, who has imbibed wholesome education in hygiene protests passionately against the old order, but in vain, whereupon the young couple pack their trunks, leaving the old farmer in tears over the deserted baby-carriage of his grandson. The rural scene is then changed to an urban one. The formerly happy home of the old farmer's son is grievously distrest because of the baby's illness. The family doctor shakes his head and, pointing to the milk-bottle, indicates plainly the cause of the illness. The grief-stricken son writes to his father (letter flashed on screen), who comes in haste, and finds, to his great anguish, that the bad milk has come from his own farm. Emotional climax! The play, however, ends happily: the farmer's barns are shown repainted and wonderfully refurbished, the cows washed, the dairymen in white suits presiding over now impeccably sanitary functions. The little patient? Evidently the family doctor has done something more than shake his head; for, miracoulously restored to health, the little boy, held by his repentant grandparents, watches with interest the hygienic proceedings. Such a representation might amuse the highly intellectual, but it should certainly be of value in reaching that part of the community which would take it seriously and which would be impressed by the scientific lessons embodied in it."

TUBERCULOUS ARTICULAR RHEUMATISM.

A joint affection which resembles rheumatic polyarthritis in may respects was first described by Poncet, of Lyons, under the name of "tuberculous arthritic rheumatism." This condition is, according to E. Melchior, much more common than is usually believed, and is important from a practical point of view on account of the fact that it is nearly always confused with true rheumatism (Berl. klin. Woch., March 14, 1910). The course is, however, less acute than the ordinary rheumatic polyarthritis; the fever is less marked, the pains are not so acute, and there is no accompanying sweating. The affection does not respond to salicylates. In a few cases perfect restitutio ad integrum occurs, but as a rule the joints affected remain permanently stiffened. There are two forms of this tuberculous affection—a subacute and a fulminating form. The latter form offers a very bad prognosis as to life. In these cases it would appear that a rapid miliary tuberculosis runs its course with prominent joint symptoms, and the fatal termination takes place so rapidly that the older observers regarded the disease as an acute miliary tuberculosis complicating acute rheumatism. The author, however, shows that there is no real rheumatic joint affection. He cites a number of cases in which the supposed rheumatic nature could be disproved. In turning to the subacute form, he shows that an affetcion which was regarded as rheumatic can be shown to be tuberculous. The patient showed all the signs of a rheumatic affection of the knee, and in the course of time an effusion was all that was left. The injected into guinea-pigs, however, produced tuberculosis. In other cases, however, the fluid from the joints failed to produce tuberculosis in guinea-pigs. The author finds it difficult to explain why some cases yield fluid which is infective and others fluid which does not produce tuberculosis. Elbe reported a case of a young girl who was suffering from this affection. Several joints were affected. A small piece of the mucosa of the knee was excised, and this revealed numerous tubercles and giant cells. The fluid, however, did not produce tuberculosis

in guinea-pigs. It is possible that the synovial membrane was no longer harboring tubercle bacilli, but that a simple inflammation was all that remained from the primary tuberculous affection. Connected with the affection is the occurrence of acute miliary tuberculosis after operative procedures are undertaken on tuberculous joints. The author deals with a case of a young woman who had suffered from a tuberculosis of the lower jaw, and who had undergone the operation of the removal of the bone. After the operation the temperature rose on various days, and the joints swelled and became painful. In this case he was able to decide that the joint affection was tuberculous by means of a blood examination. Treating the blood with antiformin, he was able to demonstrate the presence of tubercle bacilli. This method of examining such cases may prove to be of value in future.

EFFECT OF AIR BATHS ON THE BLOOD.

Wilh. Dan. Lenkei (Pest. med. chir. Presse, Novefber 20th, 1910) gives the result of investigations as to the effect of air baths on the number of blood corpuscles, the haemoglobin contents, and the viscosity of the blood. The change in the number of blood cells was noted in 20 cases, including cases of chlorosis, anaemia, neurasthenia, and vitium cordis, the observations being made before, at the end of, and half an hour after, the end of air baths of half to an hour's duration at a temperature of 16 to 20° C. Three cases of chlorosis and anaemia respectively were kept under observation in order to find what permanent effect the air baths had upon the haemoglobin contents when no other treatment was given. The viscosity of the blood was tested by means of Hess's viscosimeter in 22 cases similar to those detailed above, but including also cases of arterio-sclerosis and cardiac neurosis. The baths were given at a temperature of 9 to 25° C., and lasted for from half an hour to two hours in the different cases. The following were among the results obtained: (1) In each of 12 cases in which lukewarm baths, and in 6 out of

8 cases in which cool baths, were given, the number of corpuscles increased, and the mean increase being about 7.4 per cent.; in half of them the number diminished more or less during the half hour after the end of the bath, but in half it continued slightly to increase, and in 95 per cent. of them at the end of the time the number was from 25,000 to 399,000 more than at the beginning, the mean increase being 3.9 per cent. (2) The increase in the number of corpuscles was greater in those cases in which the surface body temperature only fell from 1 to 2° during the bath. (3) The increase at the end of the bath was greater when lukewarm than when cool baths were given, but the decrease in the next half hour was also greater, so that half an hour after the end of the lukewarm water bath the mean increase was 4.1 per cent., as compared with 3.6 per cent. after the cool bath. (4) In 2 cases in which no other treatment was adopted the number of corpuscles several days after the last bath still showed an increase of 300,000 and 370,000 respectively. (5) In the 3 cases kept under observation, and only treated by air baths, the haemoglobin contents were increased from 13 to 20 per cent. (6) The number of leucocytes increased in the majority of the cases, the mean increase being 9.8 per cent. (7) In the majority of the cases the viscosity of the blood was slightly increased (6.7 per cent. on an average) at the end of the baths, but there was no considerable change except in isolated cases; in 2 cases the viscosity remained unchanged, and in 2 slightly diminished. (8) The increase in viscosity was greater after cold baths than after cool or lukewarm ones. Definite conclusions cannot be based upon so small a number of cases, but it seems clear that (9) air baths lead to an increase in the number of erythrocytes and in the haemoglobin contents in cases of anaemia and chlorosis. (10) Air baths are suited for the exercise and regulation of the affected functions in case of circulatory disturbance. (11) Cold air baths and cool ones at from 14 to 16° C., by increasing the viscosity of the blood should theoretically encumber the circulatory organs, and are therefore not indicated in cases in which an increase of work leads to failure of compensation.

SPECIFIC DIAGNOSIS OF TUBERCULOSIS IN CHILDHOOD.

Engel (Wien. med. Klin., Nos. 10 and 11, 1910) discusses the (specific) diagnosis and treatment of tuberculosis in childhood. The characteristic point about tuberculosis in children is that there is always a stage in which the disease is confined to the lymph glands, and at this stage it is often impossible to recognize it clinically; such cases are the very frequent cases of "occult tuberculosis" in childhood. Occult tuberculosis is, however, usually only in a very limited sense latent. The younger the child the greater the probability that the disease will sooner or later—often as a result of irritation due to traumatism or an infectious disease—spread beyond the lymphatic system. In the first year of life the protective power of the lymph glands is especially small. In making a diagnosis it has to be decided, first, whether any tuberculous area exists in the body; next to locate the tuberculous area and decide as to its extent and progressivity; and, finally, to differentiate between tuberculous and non-tuberculous affections. V. Pirquet's cutaneous tuberculin test is the most convenient method of deciding whether or not a tuberculous focus is present. The ophthalmo-reaction is not free from danger in children, and the frequent observations of the temperature needed after injection of tuberculin make the method by injections inconvenient in practice. The cutaneous reaction is, however, a disadvantage, in that it gives no indications as to whether the tuberculosis is quiescent or progressive, limited or widespread; and, since occult tuberculosis is very common, and may in any case be the cause of the positive reaction, it is not safe to say that any particular symptom is due to tubercle simply because a positive reaction has been obtained. This objection hardly applies to infants, in whom tuberculosis is almost identical with progressive tuberculosis. With regard to the site, the extent, and the progressive nature of a progressive lesion, observations on the results of injections of tuberculin will give considerble information. The points to be especially noted are: (1) The

amount of the initial dose, large enough to give rise to fever; (2) the speed with which the reactions disappears if the dose is repeated with daily intervals; (3) the speed with which tolerance for larger doses of tuberculin can be acquired. The first point is the one of least importance; many children—especially scrofulous children—react very strongly to an initial dose, but quickly become tolerant of it. The reaction to excessive doses is of chief value. If the tuberculous affection be well localized, especially if it be of the glands or bones, the reaction will cease after the second or third injection, when a high initial dose (not under 0.001 gram) is given. In more widespread processes, which are, however, either fairly well localized or only slowly advancing, reaction becomes more gradually less, and does not disappear until after the fourth, fifth, or sixth injection, with an initial dose of between 0.0005 and 0.001 gram. In more extensive and progressive forms and almost always in tuberculosis of the lungs, even with a minimal initial dose, reaction continues to occur after each injection. The acquired tolerance to increasing doses varies similarly according to the nature of the case. In cases in the first group a dose of 1 gram may be toleratede even after four or five weeks, in cases of the second six or ten weeks is needed, and in those of the third tolerance is often acquired very slowly, and often the initial dose can never be much increased. The necessary observations can obviously only be made for patients inside the hospital. The verification of the nature of doubtless processes—as, for instance, a glandular swelling, an abscess, a lung area, etc.—is often possible, even though the mere presence of a positive reaction does not necessarily clear up the diagnosis. If the lesion is accessible, the presence or absence of a local reaction is decisive. If the organ affected is inaccessible, the process is more complicated, but a comparison of the sensitiveness to tuberculin as compared with the sensitiveness to be expected if the lesion in question were tuberculous, will often give the required information. Thus, in thin, weak, pale children examination will often show impaired resonance over the right apex, with harsh, prolonged expiration, and a suspicion of

incipient pthisis is aroused; v. Pirquet's cutaneous reaction is positive, showing that a tuberculous area exists, but if the sensitiveness to tuberculin injections is low instead of very marked, as in lung tuberculosis, the conclusion would be that the lung was unaffected, but that a small area of occult tuberculosis was the cause of the cutaneous reaction. The use of tuberculin is not always to be recommended. In cases of extensive pthisis the reaction is so strong that it should be, as a rule, avoided, and a search for the bacilli in the sputum should be made; sputum can be obtained, if necessary, by emptying the stomach to obtain a specimen of sputum which has been swallowed. Tuberculin injections are contraindicated in meningitis in which, however, tubercle bacilli can usually be demonstrated in the cerebro-spinal fluid on lumbar puncture. Other methods available in making a diagnosis are Uhlenhuth's antiformin method, sytological examination of the serum, etc. With regard to treatment specific cures are especially easy to carry out in childhood, because in the typical localized form the sensitiveness to tuberculin is low. Only the slowly advancing cases of pthisis are suitable for specific treatment, and in acute pthisis it is contraindicated

REVIEW.

The Physician's Business Journal, which has for its sole object the material and financial improvement of the profession, carefully and ethically considered, has been issued. Editor, Dr. Thatcher, 310 Bulletin Building, Philadelphia. Success in any profession depends largely on the carrying out of certain business principles. To know one's work is not sufficient nowadays. While the healing art is one of the most noble of professions, still, while it is our source of livelihood, it does not do to neglect the business side of our work, or a very meagre living is the result. As every other calling is studying seriously the science of success, it certainly seems well that our profession has at last a Journal devoted to that side of our work. We think it was much needed and wish it every success.

CHILDREN'S LIVES SACRIFICED TO IGNORANCE.

It is a curious fact that, although we are willing to spend large sums of money to find the causes of mysterious diseases such as cancer, we do not exert ourselves to save life in ways that are quite obvious. Infant mortality, always large, has not been materially decreased of recent years, and yet we have the necessary knowledge to cut it down to a very small minimum. Why do we not act upon this knowledge? The reason, according to Dr. L. T. Royster, or Norfolk, Va., writing in "The Journal of the American Medical Association" (Chicago, August 20), is simply because a knowledge of the means of preventing infant mortality has not been sufficiently disseminated among the people. He goes on:

"If this is true, and I am thoroughly convinced that it is true, the question resolves itself into the best means of distributing such information as will aid in this campaign, to all people of all classes and conditions of life, showing them what are the causes of mortality, the results of bad management, and how best to apply the knowledge of the means of prevention to the accomplishment of the desired end."

Starting with the medical profession itself, Dr. Royster asserts that courses on pediatrics are at present far from adequate, the subject being generally treated as an unimportant side branch. As a result "many doctors are either too ignorant or too lazy to attend properly to the needs of infants during the first year of life"; and consequently "they turn these helpless creatures, especially the artificially fed ones, over to a nurse who may or may not know anything about their care." They may even do worse than this, and recommend an ignorant mother to use some patent food or condensed milk without knowing or trying to find out whether the food is suited to the particular case in hand. These doctors seem to the writer to be little short of criminals, as their negligence results in the loss of many infant lives that might easily have been saved. "Such men as these are either unwilling to admit that they do not know how to feed infants

or they are afraid of losing a few dollars by referring the case to someone competent to take charge."

How may these ignorant or careless practitioners be reached? Through the parents, says Dr. Royster. When they understand these things, as they will in a remarkably short time, if properly instructed, they will demand more attention to their children on the part of the physician, who will be compelled either to study for himself or to seek aid from those better informed. Of course the key to the whole situation is the instruction of the mother. We read:

"It is not an uncommon occurrence for a mother to state that she has had seven or eight children and that she has raised only one or two, the rest dying in infancy.... Nor is this to be wondered at. Many a woman becomes a wife and subsequently a mother without having had instruction in any of the many difficulties with which she is to be confronted, with the natural consequence that she is soon surrounded by a galaxy of sympathizing and self-opinionated neighbors who are pouring into their open ears a detailed account of miraculous cures effected by this or that remedy, which she receives and uses with an avidity born of desperation and bred of the ignorance of which she is the unfortunate heir. As the natural result of this the stricken mother has the misfortune to see her offspring wilt in her arms, where she invariably keeps it, until at last the physician may be called only in time in most cases to sign the death certificate. The influence of 'grannies' is gradually passing, at least, among the better classes of society, and yet their superstitions are still apparent in many of the so-called home remedies in common use. The fear of fresh air for the well, to say nothing of the sick infant (especially those sick with eruptive diseases) is still so prevalent as to make us involuntarily ask the question whether the value of fresh air has even begun to be appreciated by most people; while the methods of feeding and handling which are generally practiced are so obviously indicative of ignorance that we might well imagine we are dealing with mothers just from the African jungle rather than in the heart of American civilization."

The success of the movement for the prevention of tuberculosis by a campaign of popular education has been so satisfactory that there is no reason why the same methods should not be used to keep our babies from dying by the thousand. As before noted, the mother is the first person to be reached. Much may be done by popular lectures and magazine articles; but after all, Dr. Royster admits, the majority of mothers never see a magazine or hear a lecture, and must be reached through other channels. He suggests that the well-conducted dispensary and milk-depot is an efficient aid, since it is attractive to the classes that we desire to reach, and since instruction and advice given therein can be followed up in the home by a competent visiting nurse. Among other necessary features of the campaign, he mentions the regulation by-laws of working-hours for the prospective mother and for the mother who is nursing her babe, and the enlistment of the public school in the fight. He says:

"Hygiene is taught in the school in a general way, hygiene of the home and public hygiene, but the hygiene of early life, that which bears directly on the life and health of the infant, is neglected. The girls of our schools to-day are not only the mothers of a short generation hence, but many are the 'little mothers' of the poor at present. Why should they not be taught the care of the child and the general principles of feeding? The only reason is that its importance has not been sufficiently recognized. Some effort has been made in this direction in the playgrounds under the teaching of the caretakers there employed; but this instruction has not been taken directly into the schools. We all know the powerful influence of whatever is taught in the schools and the rapidity with which the pupil carries the lesson into the home and how reflexly the parent is influenced by the child's knowledge. Why should such an opportunity as is here afforded to spread information regarding the care of the infant be allowed to pass? This is especially important among the foreign element which grasps with such remarkable avidity anything which looks like improvement and suggests the acquirement of American civilization."

The signs of the times, Dr. Royster concludes, already point to better conditions, and one of the most hopeful of them is the attitude of the press, which, he says, is fully alive to the importance of the issue and bids fair to aid most effectively in fighting it out.

LANE'S CONCEPTION OF CHRONIC CONSTIPATION AND ITS MANAGEMENT.

By A. B. Cooke, M.D., of Nashville, Tenn.

In his monograph entitled "The Operative Treatment of Chronic Constipation," Mr. Lane first defines the scope of the treatise by stating that the term, chronic constipation, as he employs it, includes all those conditions which are "the consequences of the accumulation of material in the intestinal tract for a period sufficiently in excess of the normal to produce on the one hand alteration in the gastro-intestinal tract and in other viscera, and on the other hand toxic changes from absorption." The fact is emphasized that while constipation is usually marked by infrequent hard stools, there may be a daily evacuation, and in exceptional cases the motions are loose and frequent.

The two chief pathologic factors in the production of chronic constipation, according to the author, are enteroptosis and acquired mesenteries or adhesions, the latter resulting not from inflammation, but being developed to oppose the displacement of viscera, the tendency to which exists whenever the erect posture of the trunk is assumed. The displacement and fixation of the several portions of the colon in faulty positions result primarily in defective drainage, and secondarily in auto-intoxication and pathologic changes both in the gut itself and in the other abdominal viscera.

After describing these changes in detail, the author proceeds to discuss their immediate and remote effects, advancing the idea that in many cases diseases of the appendix, gall-

bladder, stomach, duodenum, pancreas, kidneys, ovaries, etc., must be regarded as sequellae of chronic constipation. In addition the phenomena resulting from toxic absorption are graphically described and the importance of their recognition stressed.

With reference to treatment Lane states that "in no circumstances should operative interference be contemplated till the surgeon has satisfied himself that every means of treatment has failed, whether medical or mechanical." The surgery indicted depends upon the conditions present. In mild cases in which non-operative measures have failed, division of the adhesions and constricting bands may be effective. Severer cases call for more radical surgery consisting either in dividing the ileum and anastomosing it with the sigmoid or upper rectum, thus short-circuiting the fecal current, or, when pain is a prominent factor in the case, removal of the colon in addition.

The writer of the paper, after personal observation of Lane's work, regards his conception of the nature and management of the malady with much favor and thinks it entitled to serious consideration at the hands of the profession.

MULTIPLE ADENOMATA.

By Geo. W. Combs, M.D., of Indianapolis, Ind.

An adenoma is the result of an increase in number and a crowding together of elongated and enlarged secreting follicles. It is an exaggeration of epithelial cells. This epithelium is prone to penetrate the basement membrane. When it does so and reaches the muscularis and other sub-mucous tissues it is malignant. Irritation causes the transformation from the benign to the malignant. This irritation may be through the normal function of the bowel, that caused by parasites, or as a result or surgical removal singly. Surgical disturbance is situ of a benign adenoma, a widening experience shows, will be followed by malignancy.

A case was reported in which occurred the malignant degeneration without surgical interference. This does not necessarily show an inherent tendency of benign adenomata to malignancy, but the adenomata, through the factor of irritation, predisposes the patient to cancer. In the case to which reference is made above, one or more of the adenomata low down in the rectum had undergone the malignant transformation. On account of the extent of involvement and the extreme exhaustion of the patient, extirpation of carcinoma was deemed inadvisable, but a left colostomy was made reaching a portion of the sigmoid above the growth limit. The tenesmus and diarrhoea were at once relieved and the patient made comfortable until the carcinoma reached the cutaneous margin. Through the colostomy lavage was administered, the solutions being normal salt, Boracic Acid and Sodium Salicylate. The adenomata between the colostomy wound and the carcinoma, through functional rest of the bowel and cleanliness, disappeared.

If degeneration has not taken place a coloctomy right or left, high enough to get above the growth limit, is advised and through this soothing and cleansing solutions used, rather than the removal of the whole bowel promixalward above the high limit of growth. The latter is a very serious operation for the strong and one in which the mortality will necessarily run high in these patients, as they present themselves usually late in the disease.

After malignant transformation has taken place, it would seem useless to remove the malignant portion unless the entire bowel involved may be removed at the same time.

CORRESPONDENCE

Editor, Western Canada Medical Journal.

Dear Sir,—The second annual meeting of the American Association of Clinical Research will be held in Boston on September 28 and 29, 1910.

Some very valuable contributions on Researches in Medicine and Surgery, in Prophylactic and Anaphylactic Medicine, in Mental Medicine, in Radiotherapeutics, in Metabolism, etc., are promised. There will also be a public meeting.

Please publish this information in the earliest issue of your Journal.

The cause of the Association, to secure the true facts and principles of medicine and to advance medicine on the basis of truth and not of whim, is the cause of every true physician. Every physician is most cordially invited to become a member. Your support and that of your friends will be highly appreciated. Applications and programme will be forwarded on request.

Fraternally yours,

JAMES KRAUSS, Sec'y.

Wanted: Specimens of Nervous System From Fatal Cases of Poliomyelitis.

To the Editor:—I should be greatly indebted to you for any assistance that you could render me through the columns of your Journal in enabling us to secure specimens of the nervous system from fatal cases of epidemic poliomyelitis, a disease which is widely prevalent throughout the United States and Canada at present. We should like to obtain portions of the spinal cord and, by preference, of the lumbar or cervical enlargement removed as soon after death as possible, and preserved in plenty of pure glycerin, Squibb's or Merck's

or Kahlbaum's. These specimens are to be used for experimental purposes; they can be sent by express at our expense, or by mail addressed to me at the Rockefeller Institute, Sixty-sixth Street and Avenue A., New York City.

SIMON FLEXNER.

Anglo-American Medical Association of Berlin Employs Permanent Secretary.

To the Editor:—For the benefit of those who wish to do medical work in Berlin, the Anglo-American Medical Association has employed a permanent secretary who, on request, will furnish information concerning the medical courses obtainable here, the approximate cost, etc. Letters should be addressed to the secretary of the Anglo-American Medical Association, 105 B Friedrichstrasse, Berlin, Germany.

H. O. BRUGGEMAN, President, Berlin.

VITAL STATISTICS

Winnipeg, August, 1910.

Disease.	Cases.	Deaths.
Typhoid Fever	121	3
Scarlet Fever	31	1
Diphtheria	18	2
Measles	28	..
Tuberculosis	19	7
Whooping Cough	4	1
Chicken Pox	1	..
	222	14

38 of the typhoid cases originated from points outside the city.

EXTRACTS.

ONE REASON WHY THERE ARE SO MANY QUACKS.

By Dr. Frederick Van Eeden.

When I lectured in a city of the Middle West before an audience of university students and reminded them of the errors of official science and the danger in entirely denying the cures of quacks, instead of investigating them, a doctor stood up, white with indignation, and said in a tremulous voice, "Sir, you are trying to make quacks of all of them."

This sort of emotional opposition is raised to its highest pitch when one dares to maintain that suggestion may have influence on disease generally called organic, physical, or anatomical. The case of the coughing boy will not make the conservative doctor angry. He will only say, "That was but a nervous trouble; I also have seen such cases and cures." But when it comes to curing an inflammation of the eye, an ulcer of the leg, or malaria, or pneumonia—this is downright heresy.

If we admit that the trouble of the boy was entirely nervous, had he therefore no right to be helped in the only way that could help him? There are thousands of patients who, like this boy, can be helped only by suggestive treatment. And because the medical profession considers this treatment below its dignity, who can blame the patients when they go to quacks? And who can blame the quacks when they eagerly make use of the advantage given them by scientific prejudice, and practice the treatment that cure, though they do not know how or why? The heaviest responsibility falls upon the men who ought to know better—the dogmatists among men of science—and it is nothing but dogmatic superstition to deny, *a priori*, the cure of organic diseases by suggestion.

It can be safely maintained that where there is any chance at all of cure, that chance may be increased by the use of suggestion (psychotherapy).

THE NEW ITALIAN MEDICAL ACT.

A translation of the Italian Medical Act, published by La semaine médicale (No. 31, p. cxxii), adds some details additional to those mentioned in our summary of its provisions in relation to foreign practitioners. The Act establishes provincial registers for the Orders of the medical profession, veterinary surgeons and pharmacists, and prohibits practice in these departments to all unregistered persons. Each registered person must pay an annual fee of £1, and each Order is empowered to elect a provincial council consisting of five or seven members, according to the number of the registered persons in each Order in the province. Each council elects a president and a representative of each of the three Orders elected by and from among the presidents will have a seat on the Supreme Council of Health. The provincial council will have the duty not only of keeping a register, but of maintaining discipline, settling disputes between registered persons or registered persons and their clients, but decisions of the councillors are to be subject to appeal to a general assembly of the Order, and this again to appeal to the Supreme Council of Health. Foreigners enjoying civil rights end possessing diplomas giving them the right to practice in countries which offer reciprocity of an equal kind to Italians are eligible for registration, but a further exception is made in favor of those practitioners who have paid rates and taxes for the last three years, they being allowed to continue to practice amongst foreign residents.

The complicated relations which have been shown to exist in the apparently simple process of blood-clotting have provided the subject of much research. In spite of the care with which the various stages in the process have been followed, and the various factors defined and named, it can hardly be said that we have as yet a very harmonious picture of the whole. In all the higher animals the same degree of complexity obtains as in the case of man, but in invertebrate animals there is, as might be expected, a simpler state of

matters. Leo Loeb has recently, in the "Biochemische Zeitschrift," published the results of some observations on the blood of crustaceans. He finds that the coagulation of the plasma is caused by the direct action of blood coagulins or tissue coagulins, which can be extracted directly from the muscles or the blood corpuscles. They are dependent only on the presence of salts. It has been denied that there is any difference between the coagulin derived from the tissues and that derived from the blood, the former being really due to admixture with blood; but it can be shown that the two substances differ chemically, although they bear a very close resemblance to each other. That both are of considerable importance in the formation of fibrin is a matter of general agreement. In certain invertebrates it can be shown that the so-called primary coagulation can take place without the formation of fibrin, and that it is really a process of cell agglutination which is caused by changes in the constitution of the cytoplasm, possibly with the aid of certain colloid substances produced by the cells. A similar change in the cells with consequent agglutination precedes the true coagulation common to both vertebrates and invertebrates, and these changes lead in the case of crustacea, and probably also in vertebrates, to the separation of blood coagulin. This formation of cell fibrin in invertebrates is the phylogenetic antecedent of thrombosis.—Br. Med. Journ.

MARRIAGES.

At the Church of St. Michael and All Angels, Chemainas, B. C., August 24th—Miss Sarah Jeanette Howards, daughter of the late Major Arthur Lockhart Howard, to Dr. Frederick James Buller.

MEDICAL NEWS

The Bureau of Public Health of Saskatchewan has issued a very instructive pamphlet on Infant Feeding for general distribution.

The following are the regulations governing hospitals in the Province of Saskatchewan:—

In these Regulations, unless the context otherwise requires, the expression:

"Commissioner" means the Commissioner of Public Health established by the Act respecting the Public Health, chap. 8, 1909.

"Hospital" means any hospital in the Province receiving aid from the Government of Saskatchewan.

All hospitals receiving aid from the Government or Saskatchewan shall be subject to the following regulations:

All plans and specifications for the building of, or addition to hospitals, or alterations in hospitals shall, before such work is begun, be submitted to the Commissioner of Public Health for approval.

Every hospital building over two stories in height shall be of fireproof construction.

In every hospital each room, occupied or to be occupied by patients, shall be of such dimensions as to give each patient not less than 800 cubic feet of air space; every room shall have at least one window connecting with the external air for every two beds. Provision shall be made to secure to each patient at least 2,400 cubic feet of fresh air per hour either by artificial or natural ventilation. If such ventilation is secured by an artificial system, then such additional provisions shall be made for natural ventilation through windows as the commissioner may direct.

The building shall have the floor of the cellar or basement properly cemented and watertight. The halls of each floor shall be open to the external air with suitable windows

or doors and shall have no room or other obstruction at the end; said halls and the building as a whole shall be provided with suitable and adequate fire escapes, stairways, inclines or exits.

There shall be provided in connection with each hospital a suitable separate building, approved by the commissioner, to be used for the isolation of cases of contagious, infectious, epidemic, or communicable diseases, other than smallpox.

There shall be provided in each hospital a suitable room or rooms for the proper care and protection and preservation of the dead pending their removal.

There shall be kept in each hospital a complete record of all cases admitted, giving date of admission, name, address, age, occupation, residence, name and address of friend or relative, disease, result of treatment; a copy of this report shall be sent semi-annually with the financial statement to the Commissioner of Public Health.

A report shall be sent to the commissioner at the end of every month giving a complete list of all patients admitted during each month; this list shall include the name, age, nationality, residence, length of time in Saskatchewan, and disease of each patient admitted.

At the same time a report containing a list of those who have been discharged during the month shall be sent in to the commissioner, giving the name and number of patient, name of disease, nature of treatment and result, whether cured, improved, unimproved, or died.

All cases of an actively contagious or infectious nature as smallpox, chickenpox, diphtheria, scarlet fever, mumps, measles, German measles, impetigo contagiosa, epidemic cerebro-spinal meningitis, glanders, rabies and any other disease which may now or at any future time be classified by the commissioner as an actively communicable disease, shall be reported immediately to the local medical health officer as soon after admission as diagnosed.

On each Friday a weekly report shall be sent by hospitals to the local medical health officer giving the name,

number, and address of all patients admitted suffering from typhoid fever, pulmonary tuberculosis, and trachoma.

Hospitals shall make provision for the care and treatment of maternity cases, to the extent of one-tenth of the total authorized bed capacity of same.

Hospitals shall admit cases of pulmonary tuberculosis, or consumption, to the private wards where patients are able to pay for same; and shall provide separate rooms or a building for non-paying patients to the extent of one-tenth of the total authorized bed capacity of the hospital.

All hospitals shall employ at least two duly qualified trained nurses whose qualifications shall be subject to the approval of the commissioner. There shall at all times be, at least, one duly qualified nurse on duty.

No training school for nurses shall be established or conducted in connection with any hospital receiving government aid in this Province unless there be (1) at least four resident registered medical practitioners within an area of one mile of said hospital; (2) that the hospital has an authorized bed capacity for at least thirty patients; and (3) a monthly average of twenty patients.

Hospitals conducting such training schools are required to furnish the commissioner with full particulars of such course in training, showing the educational standard and age required for admission, length of course, outline of studies, qualifications for graduation, and any other information required by the commissioner.

Accounts and reports shall be kept and returns made in a manner approved by the commissioner. The semi-annual financial report for grant shall be in duplicate.

The general management and conduct of hospitals, and all by-laws and regulations thereof, shall be at all times subject to the approval of the commissioner.

The commissioner may, with the approval of the minister, stop the grant of any hospital for such period as he may decide for noncompliance with any of the above-mentioned regulations.

Fort George has now a building for a sanatarium and Surgery with eight private rooms.

The Provincial Executive of British Columbia passed an order-in-council bringing the General Public Hospital at Chase under the Hospital Act.

Doctors are said to be wanted at the following places: In Alberta at Barons and at Cowley; in Saskatchewan at Candahar, at Elbow, at Fairlight and at Jansen.

The standard of certified milk as legally defined by the Inland Revenue Department is: Certified milk—milk sold as certified milk shall comply with the following requirements:—

(a) It shall be taken from cows semi-annually subjected to the tuberculosis test and found without reaction.

(b) It shall contain not more than 10,000 bacteria per cubic centimeter from June to September and not more than 5000 bacteria per cubic centimeter from October to May inclusive.

(c) It shall be free from blood, pus or disease-producing organisms.

(d) It shall be free from disagreeable odor or taste.

(e) It shall have undergone no pasteurizing or sterilization and be free from chemical preservatives.

(f) It shall have been cooled to 45 degrees, within half an hour after milking and kept at that temperature until delivered to the consumer.

(g) It shall contain 12 to 13 per cent. of milk solids of which at least 3-5 per cent. is fat.

(h) It shall be from a farm whose herd is inspected monthly by the veterinarian and whose employees are examined monthly by a physician.

The analysis made by the Department shows that the standard of purity is increasing every year and greater attention is being paid to sanitary requirements.

The British Medical Association is calling for registration of nurses and the establishment of a Central Nursing Council.

The International Exposition of Social Hygiene it to be held in Rome 1911 under the presidency of Professor Baccelli. The exposition will be in connection with the International Congress on Tuberculosis.

The second International Congress on Alimentary Hygiene will be held at Brussels under the patronage of the King of the Belgians from October 4th to 8th. Communications may be presented in French, English, German, Italian or Spanish; the official reports of the Congress will be in French. The General Secretary is M. E. Gragnard, 3 Rue de Louvane, Brussels.

Hamilton's tribute to the memory of the late King will be the erection of a sick children's hospital to be known as the King Edward Hospital.

The by-law for the building of the Isolation Haspital for Victoria has been passed and the building it to be opened soon.

Lieutenant-Gouverneur Paterson at a Canadian Club luncheon made the suggestion that every public official in British Columbia should have a knowledge of First Aid.

Every teacher in British Columbia will soon hold a First Aid Certificate.

The British Board of Trade makes it compulsory for every master mariner to hold a First Aid Certificate.

Every employee of the Victoria State Railway, Australia, is trained to First Aid methods and appliances are carried on every train and at all divisional points elaborately equipped hospital trains are in readiness.

The Sanatarium at Tranquille, B. C., is to be formally opened on the 14th.

The International Hospital Record describes an invention for summoning nurses. It is done by means of a button which on being pressed lights a lamp in the nurses' station. The time of the call is automatically registered. This signal system is to the patient what wireless telegraphy is to the modern ship.

The Paris Academy has been investigating the use of coloring matter in food.

Dr. David Walsh suggested the erection of a pantheon in Hyde Park for the reception of the busts and statues of those who have led the way in the progress of medical science and the saving of human life as a worthy memorial to the late King.

All over the world the Jews tend to shortness of stature. This is said to be influenced by environment. Statistical studies show that the shortest Jews are tailors, Cobblers and factory workers, while carpenters and housepainters are somewhat taller and merchants and clerks are taller still. In spite of poor physique the Jews evince a marvellous vitality. The tenement sections in New York with lowest death rates are those with Jewish population and the Jews to a considerable degree seem to be unsusceptible to tuberculosis. Some scientists see in this another illustration of the great law of natural selection in the theory that for ages the struggle for existence among the Jews has been so terrible that the weaker strains were eliminated.

The necessity of an emergency hospital at Duncans, B. C., having been brought before the provincial secretary he has promised a subscription of $1000 from the government towards the building, which is to cost about $5000. The King's Daughters Circle has already raised about $2500 for the purpose.

The Rock Bay Hospital, B. C., was completely burned; fortunately there was no loss of life. The hospital was built 1905, furnished by the Victoria Order of Nurses and operated by the Columbian Coast Mission. This will be a great loss to the camps along the Coast.

Dr. Carscallen, of Winnipeg, is building a Sanatarium as the foundation of a hydropathic institution on the lines of Dr. Kellog's at Battle Creek.

PERSONALS

Dr. S. E. Moore from New York, formerly anaesthetist and gynaecologist of the Belle View Allied Hospital, New York City, has entered into partnership with Dr. D. S. Johnson of Winnipeg.

Dr. Thomson, of Regina, has been elected school trustee of Regina.

The Chicago Medical Society has just chosen as its president for the ensuing term Dr. Alexander Hugh Ferguson, the eminent surgeon.

Dr. Staples, of Treherne, has sold his practice to Dr. Dundas, of Rathwell. Dr. Staples will practice in Winnipeg.

Dr. Shipley, of Calgary, has returned and will resume practice.

Dr. Williams, of Ladysmith, B. C., has removed to Merritt.

Dr. Thompson has resigned from Tranquille Sanatarium and is succeeded by Dr. D. W. Davis, of Montreal.

Dr. and Mrs. Smith of Calgary, have been visiting the East.

Dr. and Mrs. Crawford, of Calgary, have returned from a visit to the East.

Dr. McKenzie, of Rossland, B. C., is visiting the Coast.

OBITUARY

Dr. James Cowan, a pioneer of the Portage Plains and a pioneer physicians of Manitoba, died September 1st at his residence, Portage la Prairie. Dr. Cowan was born in Tyrone, Ireland, in 1831 and received his education there. Later he came to Canada. He first practiced in Harrison, Ont., and in 1871 came to Manitoba. Dr. Cowan always took an active interest in political affairs and served as coroner for the province for a number of years and was for seven years a member of the Legislature.

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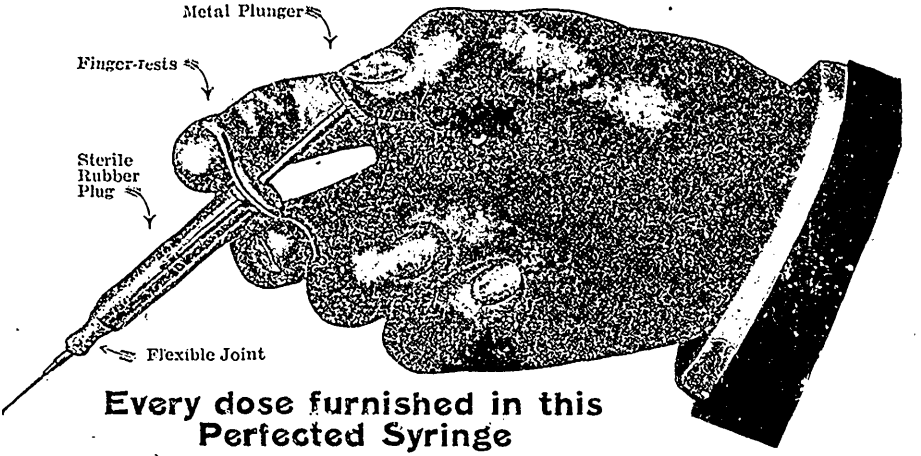

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Synopsis of Canadian North-West Homestead Regulations.

Any even numbered section of Dominion lands in Manitoba, Saskatchewan and Alberta, excepting 8 and 26, not reserved, may be homesteaded by any person who is the sole head of a family, or any male over 18 years of age, to the extent of one-quarter section of 160 acres more or less.

Application for entry must be made in person by the applicant at a Dominion Land Agency or Sub-Agency for the district in which the land is situate. Entry by proxy may, however, be made at an Agency on certain conditions by the father, mother, son, daughter, brother or sister of an intending homesteader.

DUTIES:

(1) At least six months' residence upon and cultivation of the land in each year for three years.

(2) A homesteader may, if he so desires, perform the required residence duties by living on farming land owned solely by him, not less than eighty (80) acres in extent, in the vicinity of his homestead. Joint ownership in land will not meet this requirement.

(3) A homesteader intending to perform his residence duties in accordance with the above while living with parents or on farming lands owned by himself must notify the Agent for the district of such intention.

Six months' notice in writing must be given to the Commissioner of Dominion Lands at Ottawa, of intention to apply for patent.

W. W. CORY,

Deputy of the Minister of the Interior

N.B.—Unauthorized publication of this advertisement will not be paid for.

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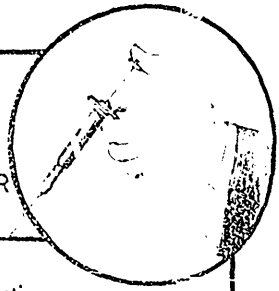

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