Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below. L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

Coloured covers / Couverture de couleur		Coloured pages / Pages de couleur
Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
Cover title missing / Le titre de couverture manque		Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
 Coloured maps /	Ĺ	Pages detached / Pages détachées
 Cartes géographiques en couleur	\square	Showthrough / Transparence
Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)	\square	Quality of print varies / Qualité inégale de l'impression
Coloured plates and/or illustrations / Planches et/ou illustrations en couleur		Includes supplementary materials / Comprend du matériel supplémentaire
Bound with other material / Relié avec d'autres documents		F
Only edition available / Seule édition disponible Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.
marge intérieure.		ele numensees.

Additional comments / Commentaires supplémentaires: THE MANITOBA AND WEST CANADA

LANCET

A Journal of Medicane, Surgery, Physiology, Chemistry, Materia Medica and Scientific News, being the journal of the Winnipeg and Manitoba Medical Associations.

Published Monthly. Subscription \$1 per annum in advance.

ORIGINAL ARTICLES: Intra-Nasal Sarcoma. Vaginal Hysterectomy.

SELECTED ARTICLES: Lord Lister. Quackery. Case of Corrosive Poisoning. The Treatment of Post-Nasal Catarrh. Treatment of Hydrocele.

ricacine or right occie

Vol. 5.

CONTENTS

EDITORIAL. Holding Inquests. Manitoba Ignored. A French Compliment.

MISCELLANEOUS: A Winnipeg Episode. Method of Infusing Saline Solution.

WINNIPEG, OCTOBER, 1897.

LIBRARY TABLE.

PERSONAL.

PHARMACEUTICAL: Medicines of the Swampee Indians of the North. A Physician's Views on Pharniacy. How to Create Friendly Relations Between Pharmacist and Physician.

Furniture Polishes.

No. 6.

ORIGINAL ARTICLES

INTRA-NASAL SARCOMA, WITH RE-PORT OF A CASE

By Harvey Smith, M.D., Ophthalmic Surgeon, Winnipeg Hospital.

In view of the rarity of intra-nast. sarcoma, and the unsatisfactory results of treatment, I desire to place on record a case of round-celled sarcoma of the nasal passage, in which a cure has apparently been effected.

This assumption is based on the fact that although 21 months have clapsed since the growth was removed last, there has been no recurrence. It is admitted that primary nasal sarcoma, when promptly and thoroughly removed, is not as likely to recur as when situated elsewhere.

The conclusion which Bosworth draws from an analysis of 42 cases reported up to 1889 is that "sarcoma of the nose apparently does not possess the same malignant tendencies as it does when situated in other localities."

In the literature of this subject appearing subsequent to Bosworth's tabulation. 21 cases are referred to in which operative treatment was employed. In ten of these no recurrence was noted during the time they were under observation. Only one of the cases, however, was followed for more than a year; it is therefore probable that had observations been made for a longer period, the number of cures reported would be lessened.

The case herewith reported is of special interest with regard to treatment, two different methods having been employed. The one operation by use of the snare and curette, the other toxic, viz.: the injection into' the growth of Coley's Toxins of Erysipelas and Prodigiosus.

CASE REPORT.

Mrs. S., age 49, farmer's wife, presented herself for examination on July 9, 1895, complaining of nasal obstructon on the right side, impaired sense of smell, occasional nose bleed difficult to arrest, pain over the side of the face and head, impairment of the general health, loss of weight and appetite, and a constant sense of fatigue.

The foregoing symptoms have come on during the last two months, and are attributed to a severe "cold" in the head.

In appearance the patient is emaciated and poorly nourished, facial expression is drawn and anxious, muscles soft and flabby, skin dry and harsh. She is free from organic or functional disease, and gives a negative family and personal history.

Externally the nose presents no ab-

normal features, but upon examination the right nostril is found completely filled with a pinkish grey mass, in shape and consistency resembling a mucous polypus.

No superficial blood vessels are visible. Upon touching the growth with a probe, bleeding is easily produced. The left nasal passage is normal.

Owing to an irritable pharynx, a clear view of the posterior nares is unobtainable, but on introducing the finger into the naso-pharynx, the right posterior nares, is found completely occluded.

Tenderness on pressure exists to a marked extent over the right antrum and side of the face.

The light from a transilluminating lamp shows dark over this area, but can be clearly seen over the left side.

From the clinical evidence obtained up to this point, I considered the case to be one of intra-nasal sarcoma, and upon removing specimens of the growth and submitting them for examination to Drs. C. F. Martin, of Montreal, and Gorden Bell, of Winnipeg, they were reported to be round-celled sarcoma.

Removal of the neoplasm was accomplished by use of the cold wire snare and the curette. Owing to the copious hemorrhage which followed the operation. several sittings were required before the entire growth could be extirpated, and free nasal respiration on the affected side restored. Strips of antiseptic gauze packed into the nasal cavity after each operation sufficed to keep all tendency to hemorrhage under control. The sarcomatous mass had its origin from the floor and outer side of the nose below the level of the inferior turbinated body, and midway between the anterior and posterior nares.

On July 20th patient was sent home, with directions to use a spray in the nose, and return for further treatment, should there be any sign of recurrence.

On August 12th she again visited me, complaining of a return of the former symptoms. I found, upon making an examination, that the growth had recurred, and, if anything, was larger than when first observed. Removal was a second time accomplished without difficulty, the site of and parts in the region of the growth being freely curretted, but within two weeks it had returned.

Considering the outlook almost hopeless, a radical operation, having in view the resection of the bony structures in the vicinity of the growth, was suggested, but refused. As a last resort, a supply of Coley's Toxins of Erysipelas and Prodigiosus was obtained and treatment commenced by injections of the toxins into the substance of the growth. In all eight were administered, the first two of two minims each, the third of three minims. and from these no reaction was obtained With five minims very severe reaction resulted. Within an hour from the time the injection was given the patient was seized with severe chill almost amounting to rigor, followed by vomiting, diarrhea, headache and temperature which reached 104. The next day an eruption appeared on the upper lip and about the alae of the nose, consisting of raised patches of pale reddish hue, which later on became confluent and brawny, a feeling of warmth and tingling being complained of over the affected area. Within three days the systematic disturbance had subsided, and in the course of a week the eruption had disappeared. Four more injections of five minims each were given at intervals of from two to three weeks, the reaction after each dose being severe, and similar to that already described, with the exception that there was no eruption. The use of the toxins had apparently no effect in retarding the progress of the growth, which was removed as found necessary in the intervals between injections.

On the 15th of February, 1896, seven weeks since the patient was seen last, she came in to see me, and upon examining the nose it was found quite free, not the slightest trace of the growth being visible. She stated that there had been no obstruction since the last operation, which was performed eight weeks previously. Her general health was excellent, the appetite had returned, she had gained ten pounds in weight, and was able to attend to her domestic duties without being tatigued.

Up to two months ago, when I last examined her, there was no recurrence.

The factor in treatment to which recovery must be attributed, is difficult to determine, but in view of the recurrences of the neoplasm subsequent to the administration of the toxins, and the failure of Coley's method, as indicated by the unfavorable reports which have appeared from time to time in the medical press, I am disposed to consider the result obtained in the above mentioned case to be due to the operative measures employed.

Whether the cure is radical remains to be seen, but having had the case under observation for a longer period than a majority of those reported up to date. I think it may be safely recorded as one in which result of treatment has been permanent.

[COMMUNICATED]

VAGINAL HYSTERECTOMY: A RE-VIEW OF SIXTY-SIX CONSECU-TIVE CASES

By Charles Gilbert Davis, M.D., Chicago, Ill.

Whatever adds to the health of woman tends directly to increase the happiness of the human race. On her physical condition hangs the destiny of nations. The truthfulness of this assertion is instinctively recognized by the medical world. Hence, volumes have been written, and a controversial warfare has been waged for centuries in an endeavor to elucidate her diseases and relieve her suffering. So bitter have been these conflicts in regard to the pathology of her ailments and their treatment, that the pelvic cavity may well be called the battle-ground of medical science.

Every generation, every decade, sees new triumphs in the direction of truth. The last quarter of a century has witnessed a revolution in the surgery relating to the pelvic region. While general

surgical methods have made a very decided advance, it must be conceded that some of the greatest triumphs have been achieved by improved operative measures employed to relieve many of the various pathologic conditions of the uterus and the adnexa. In the ablation of the uterus, ovaries and tubes much controversy has existed and still continues as to whether the abdominal or vaginal route afford the best results for equal conditions. The discussion, pro and con, has been extensive for the last three years and has augmented to the extent of many volumes. As with all subjects of like natur, there are a few salient points upon which the question hinges. My own observations are made after having witnessed these operations performed by some of the most skilled gynecologists of Europe, and then verifying their methods by personal ex-I am satisfied that each of perience. these methods has its sphere of usefulness, and the broad-minded unprejudiced surgeon will not be slow in making the application. The general of an army who relies at all times and under all circumstances on a single plan of battle, will ultimately meet a most inglorious defeat. The successful man knows that frequently, on the instant, it becomes necessary for him to change his method of opera-Taking all things into considertion. tion. I am satisfied that for most pelvic operations the vaginal route offers by far the best results. With the statistics that we now have, I should regard it as unsurgical and unwise in the extreme to perform any operation on the pelvic viscera abdominally, when there are no logical reasons or indications why the same could not be done by the vaginal method. There are growths, solid and cystic, of the tubes, ovaries and uterus, which we find impossible to remove per vaginam, but even here, in many instances, when the uterus has to be removed. I believe the percentage of deaths will be less if we begin or finish the operation through the vacina.

The question as to the advisability of

allowing the uterus to remain when it becomes necessary to remove both ovaries, seems to me to have but little argument in its favor. We know full well that in a majority of instances the inflamed conditions that lead to the necessity of most of these operations have their incipiency in the lining membrane and other tissues of the uterus. If then we stop at the removal of the ovaries we leave behind the real centre of disease as the nidus or hatching place of diseased germs, which are liable to prove disastrous in the future. In my opinion, much nonsensical argument has been wasted on this subject. The uterus is simply serviceable in the process of child-bearing. After the ovarian ablation, its usefulness as an organ terminates and it becomes a superfluous and foreign body. I have no sympathy for the sentimentality that weeps over the removal of a permanently diseased uterus. It is far better to make these operations thorough, speedy and complete, than to remove a portion and leave the remainder to cause years of suffering or perhaps necessitate the ordeal of another operation.

I have never removed a uterus for which I felt regret. I have allowed several to remain that I am sure ought to have been removed. I have never known vaginal hysterectomy to be followed by hernia. The vaginal vault seems as strong or stronger than when occupied by the weighty and diseased organ. The sexual function in the mature woman is certainly not immediately diminished. I know of several instances where the removal of the diseased organ has caused an augmentation of the sexual sensibility. As a rule it is therefore safe to say, when we have to remove the ovaries, remove also the uterus, and do it per vaginam. The operation may be divided into three stages : 1. The cervix is encircled by an incision and the entire organ is denuded anteriorly and posteriorly, as far as practicable : 2. the uterine arteries are clamped and the uterus is enucleated, or if that is impractical, it is removed by morcellation :

the ovarian arteries are secured and the uterus, together with tubes and ovaries, is cut away.

The technique of the operation I have described in my article in the Journal of Feb. 8, 1896, where I reported the first twenty-two cases of this series.

After observing the German method of operating with ligatures and then witnessing the operation with clamps by Pean, I have not hesitated to adopt the latter method and have never deviated from it.

In my sixty-six cases I have never had occasion to tie a single ligature. Only once has hemorrhage followed the removal of the clamps at the expiration of forty-eight hours. This was from the right uterine artery, and was easily clasped by a clamp which was allowed to remain on forty-eight hours longer. {n another case hemorrhage occurred during a dressing on the eighth day, caused probably by too great distension of the vagina with speculum by the nurse. It was not severe and vielded to hot douches. In another case an intestinal fistula manifested itself on the ninth day. This continued for about six weeks and then healed spontaneously. I am satisfied that many accidents of hernia, fistula, secondary hemorrhage, etc., are caused by unnecessary distension of the vaginal walls with dressings. Now, after the removal of the clamps, I never allow a speculum to be inserted until the wound is entirely The cavity is douched once healed daily, taking care not to allow the fluid to enter the abdominal cavity, and the month of the vagina is distended lightly with two fingers and the parts dusted with powdered iodoform, and a small strip of gauze inserted to the depth of two inches. The external genitalia are again dusted with the powdered iodoform and a strip of gauze folded over the parts. A "T" bandage is adjusted and the dressing is An early evacuation of the complete. bowels expedites the progress of the case. This is usually done by an enema the day following the removal of the forceps. Menstrual storms are certainly modified by an early and prolonged administration of ovarian extract. The patient usually makes rapid recovery. There certainly is no other capital operation known for women to which we may so conscientiously and truthfully after our treatment apply the term "cure." There is not a day or a week that by letter or conversation 1 do not hear expressions of gratitude for complete relief from suffering following the operation.

How often we all have been chagrined and disappointed by the opposite expressions that so frequently come to us after having done our best to relieve the patient by removing a tube, an ovary, or both, through the abdominal route. In many of these cases the removal of diseased structures was not complete and disease still lingered. If I should formulate the rules indicating the operation of vaginal hysterectomy, they would be somewhat as follows :—

1. In all cases of malignant uterus where the disease has not advanced too far in the pelvic walls,

2. In naturely developed women where we determine to remove both ovaries and tubes.

3. In removal of one ovary when also the uterus shows evidence of long standlog inflammatory action.

4. In all cases nearing the menopause suffering from chronic painfel displacement.

5. In all cases of fibroid not to exceed the size of a child's head and involving seriously the integrity of the uterine walls.

6. In double pyosalpinx and in single if interus is badly diseased.

7. Whenever from any cause, specific or otherwise, the uterus has been chronically diseased, has long resisted other treatment and proved a centre of serious rellex symptoms.

It is not infrequently the case that we begin a vaginal hysterectomy, and, owing to adhesions or other causes, are compelled to abahdon this method and finish the operation through the abdomen. But it is certainly not detrimental to have made this beginning. In fact, whenever we perform abdominal hysterectomy the most rational procedure is to begin or terminate the operation by clamping the utering arteries and removing the cervix through the vagina. Twice I have attempted the vaginal operation and been compelled to open the abdomen. In one case the entire pelvic viscera were cemented in a mass of chronic inflammation. I removed a greater portion of the mass with the uterus per vaginam and ruptured the bladder, which I subsequently closed by producing occlusion of the vagina. Again, I attempted to remove a myoma the size of a child's head through the vagina. I took away by morcellation the cervix and greater portion of the body of the uterus and clamped the uterine arteries, but the hemorrhage from above became so profuse that I was compelled to finish through the abdomen. I only had to ligate the ovarian arteries, dissect the anterior and posterior flaps, and then close the opening into the vagina with catignt sutures. The clanus remained, as usual. forty-eight hours. Neither of these cases is numbered in series of vaginal hysterectomies, this Both recovered. In these sixty-six cases there was but one death.

No alcohol was allowed to any of these patients before, during or following the operations. My experience during the last twenty years, both with and without alcohol, leads me to believe that when other anesthetics are available surgical cases do far better without its administration. Hypnotic suggestion was used in most of these cases as an aid to the anesthesia of chloroform and ether. I regard suggestion as one of the most powerful fortifiers of the nervous system, and I strongly believe there is no one single thing more calculated to insure the successful termination of a surgical operation than the employment of suggestion as the patient passes into the sleep of anesthesia. It is interesting to note that in the case of the one death occurring in this series, and the other cases of postoperative accident no suggestion was employed. Every surgeon should be thoroughly impressed with the fact that faith, hope, expectancy and belief, when aroused by suggestion, are most powerful aids to insure his patient against collapse and death. With this clearly before him and a determination to observe every minutia and care, he is in the best possible way to operate successfully.

240 Wabash avenue.

VICARIOUS MENSTRUATION FROM A FACIAL NAEVUS.

The September number of the Archives of Paediatrics publishes the following case which came under Dr. Bloom's observation : The patient was a young girl whom the author saw when she was a child, at which time he had been consulted about the advisability of removing a vascular naevus from her face, and he had advised waiting. She was brought to the author in March, 1897. The nacyus was on the right side of the face, extending down on the nose and involving the upper lip. It was an ordinary vascular naevus such as is frequently seen, but not quite so dark in color as many, with a liberal distribution of dilated blood-vessels. No inconvenience had resulted from the nacyus until just before the 236 of March, when suddenly, without injury or undue rubbing, the place began to bleed. It was apparently vicarious menstruction in a sixteen-year-old girl. The bleeding began two days after the appearance of the menses, and lasted until the menstruation stopped. Then it stopped suddenly. For two weeks there was no further bleeding; then for a period of two days the naevus again bled. During this time a small teatlike projection appeared on the check at about the point at which the bleeding bad occurred, and another smaller one on the nose, showing where the bleeding had occurred. The fluid discharged was blood, dark in color and thick.

The author ligatured the small teat-like

projection, which looked much like a nipple and contained several sore spots. No difficulty was experienced in passing a ligature around it; this was firmly tied, and in five days the projection dropped off. Another and larger projection appeared at the site of the original one. Dr. Bloom considers the case interesting, because vicarious menstruation from a nacyus in any situation is extremely rare

DANGER IN POSTAGE STAMPS.

One of the newest diseases is the post age stamp tongue." The credit of dis covering it is due to a London physician. It appears that the mucilage itself is injurious, and that, further, it is an excellent cultivating medium for germs of the worst character. In the ailment called "postage stamp tongue" the latter becomes sore and covered with red spots. A bad sore throat is likely to follow if great care is not taken. Apart from the specific disease of the tongue, any contagious disease may be acquired through the medium of mucilage. Never lick a postage stamp with your tongue. It shows a great lack of cleanliness and hygienic knowledge.---Exchange.

TOO LATE.

An English woman recently, met with sudden death during a visit to St. Petersburg, and at the request of relatives in London the body was immediately for warded to England. When the casket, a magnificent affair, arrived at its destination, the lid was removed to give the sorrowing relatives a final look at the departed. But instead of the emaciated remains of an aged woman, the portly corpse of a Russian general, covered with decorations and in the full glory of a state uniform. met the gaze of the mourners. Frantic messages were at once dispatched to the Russian capital, and in response to one of them the following message was received : "English lady buvied yesterday with military honors. Please keep the general."

SELECTED ARTICLES

LORD LISTER

The foundation stone of the Nurses' flome to be erected in connection with the Montreal General Hospital was laid by Lord Lister, Sept. 2nd. After he had performed the function he spoke of the interest with which he had listened to the president's remarks concerning the intimate relations that had existed between the General Hospital and the Medical School. Some people, he said, imagined that a hospital should be simply for the curing of disease, and that the teaching clement was of small importance. There could not be a greater mistake, not only because the teaching practically of medicine was of vital importance, but because in direct proportion to the eminence and efficiency of a hospital school was the efficiency of the hospital. Where a hospital existed unconnected with a medical school, the tendency too often was that the medical officers, unstimulated by publie criticism were apt to lapse into a condition of careless indifference, in spite of their success and of the importance of their noble calling. Where a great medical school was associated with a hospital there was perpetually upon those working in it the eye of public criticism, and the stimulus of emulation. He had the pleasure on the previous day of going through the hospital. Some parts of the eld portions, no doubt, had lower ceilings than would be thought suitable at the present day; but what was wanted was bot so much a very lofty ceiling as ample space between the beds. There might be an atmosphere extending to the sky, but if the beds were put close together, there would be insalubrity. In those wards of the hospital which had the lowest ceilings, the arrangement of the beds was such that there had been ensured ample provision of cubic space for the patients. He had been told that, excellent as the hospital was and had shown itself in the treatment of disease, there was not satisfactory accommodation for the nursing staff. Undoubtedly, it was of the utmost importance that there should be such accommodation as that home would provide. He touched on the women who acted as nurses when he was a student, and said that an immense improvement had taken place since then, thanks to the noble example and teaching of Florence Nightingale, and to the efforts of many others. When going through the hospitals he had beer asked to take stock of the nurses. He did so bastily, and, as far as he could judge they were a healthy, able, amiable and loyal He was sure that in their new staff. home the nurses would have accommodytion commensurate with their value. Addressing himself more particularly to the nurses, he spoke of the extreme gratification that he experienced last year when being shown over one of the largest hospitals in Liverpool, by the nurses presenting him with an address, stating that his humble endeavors had done much in the way of alleviating the work of narses. He was pleased to think that he had been in any way instrumental in this direction. He had been informed that the nursing staff did not confine their efforts to the hospital, but that there was a liberal arrangement made by the hospital authorities by which the nurses might be sent out in the town generally ; and where the circumstances of the family were such that they could not pay the nurse properly, the funds were contributed by the hosvital to aid in the payment of the nurses. That seemed to him a most noble idea. and he could not but think that if it could be extended, not only to all parts of the city, but to the remote outlying parts of the country, it would be a most valuable thing for Canada. Her Excellency Lady Aberdeen had this matter much at heart, and he was sure that if her idea of the Victorian Order of Nurses could be carried out, with due regard to the efficient training of the nurses, and also to the efficiency of their supervision, the matter would commend itself to all medical men. -The Gazette, Montreal.

We call special attention to Lord Lister's closing remark, "With that due regard to the efficient training of the nurses, and to the efficiency of their supervision," "this necessarily under competent medical men," the matter would commend itself to all medical men. Of this there can be little doubt but the scheme, as at first propounded, had neither of these essential qualifications,—Ed.

QUACKERY

It is a good sign when the lay press begins to discuss the subject of quackery. The attached editorial from the Pendleton Tribune, is much in point, and the profession of Eastern Oregon is to be congratulated upon having a periodical published in that section whose editor is sound upon this important subject. The article is as follows :--

Devils, Not Doctors .- There is a growing tendency among a certain class of the sick and decrepit, the lame, the halt and the blind to seek relief from their ills through the agency of a class of parasites styling themselves doctors. One of the reasons for this tendency lies in the fact that most people love to be humbugged. They will spend time and money and go to almost any extremity in order to get themselves humbugged. They seem to feel that they are not fully equipped for the struggle of life or qualified to mingle with their peers until they have been humbugged, and the larger number of degrees they take in humbuggery the more glorilied they become, and many never stop their gullish career until they are glorified into eternity.

Another explanation of the fact that ailing people are so easily victimized by these pretenders in the medical profession is that they have been educated, through the distribution of seductive literature that flows out to them through the mails and confronts them almost at every turn. Newspapers all over the land and almost without exception have aided in poisoning the minds of ailing people against the legitimate and deserving votaries of the medical profession, and are largely responsible for the existence of an army of frauds who thrive upon the weakness of that large class of unfortunates who suffer from physical ills. And the seditions matter that finds its way into every home in the land through the columns of the press not only teaches the theory that the legitimate practitioners of medicine are not to be trusted, but so works upon the credulity of the young and inexperienced that they gradually become confirmed in the belief that they suffer from some disease that in reality does not exist.

So thoroughly have these unhealthy ideas become instilled into the mind of suffering humanity that an army of these professional confidence men are thriving and growing rich at the expense of the poor in mind and body. These unprincipled adventurers have only to announce their arrival to insure a harvest. They plunder the needy of their scanty savings and magnify the disorder of the patient in accordance with the size of his purse. The class of doctors (?) of whom we speak are cold-blooded, pitiless, mercenary villians and frauds who are worse than the meanest of confidence men whose offenses end when the plunder is secured These imposters not only impoverish the pockets of their confiding victims, but rob them of a competency of health. These depraved beings are men without conscience, devoid of feeling, have no conception of moral responsibility, no sympathy with or for their deluded victims. and would put a deadly blight upon the fairest flower for the sake of gain.

Think of these human hyenas thriving upon a community where there are intelligent and legitimate practitioners. Compare these villains with the home physician of recognized and acknowledged ability and integrity ; with men who live among us ; who look to the future ; who jealously guard reputation ; who are sensible of their heavy responsibilities ; who are proud of their chosen profession, and devote their lives to the advancement of the most important of all sciences. The quack profession is well represented in the state prisons of this country, but there are others—hundreds of them breathing the air of freedom who ought to be in the pen, or, better still, in hades, for they are devils instead of c .tors.— Medical Sentinel.

CASE OF CORROSIVE POISONING

The following case, which came under the observation of Dr. J. C. Brown, of Smethport, Pennsylvania, is published in the September number of the Buffalo Medical Journal :--

The patient was a strong, robust man, thirty-two years old. When the author saw him, on April 27th, he had an anxious expression and was unable to speak above a whisper; he had little or no pain. On examining his mouth the author found the mucous membrane falling in shreds from every part of the buccal cavity and pharnyx, except about an inch of the anterior part of the tongue and about the same area of the anterior part of the roof of the mouth.

The patient stated that on the day before he had found a bottle containing what he supposed to be whisky, and drank the contents. He immediately felt a burning sensation in the mouth and throat and became intensely sick at the stomach; he went into a barn, where he remained until the next morning; he had vomited and retched nearly all the remainder of that day and night, and had been unable to swallow anything after he had taken the contents of the bottle.

Judging from the condition of the mouth, the author assumed that the substance must have caused a great deal of destruction of mucous membrane in the stomach, supposing the patient had swallowed the contents of the bottle, which the author somewhat doubted, as the symptoms did not indicate that the condition extended into the stomach.

The author ordered a lotion containing tannic acid. glycerine, and listerine, also an antiseptic solution to use with an atomizer. Milk and white of egg alternated with Armour's extract of beef were ordered in enemata, once in four or five hours ; rubbing with alcohol was also ordered. Two days afterwards the author found that the patient, at the suggestion of his mother, had swallowed two teaspoonfuls of kerosenc oil, which produced a good deal of nausea and vomiting ; otherwise he was in about the same condition. The eroded portions of the mouth had turned somewhat dark from the lotion, the temperature ranged between 99 deg. and 102 deg. F., and the pulse between 80 and 120; there was some spitting of a purulent substance mixed with This condition lasted until May blood. 7th, when profuse hemorrhages occurred, the patient vomiting nearly a pint of blood every half hour, according to the nurses. Dr. Brown gave him a hypodermic injection of a quarter of a grain of morphine sulphate and a thirtieth of a grain of strychnine nitrate, which seemed to control the hemorrhage very well. Another hypodermic was given about five hours afterward; there was much hemorrhage during the day. Toward evening of the same day the patient vomited what at first sight appeared to be a blood-clot. but after washing it the author found it to be the mucous membrane and submucous tissue of the aesophagus and stomach. This, he states, was afterward examined by Dr. H. U. Williams, pathologist to the University of Buffalo, who found that it contained also a part of the muscular coat of the aesophagus. The aesophageal portion was in perfect shape with the exception of a few small holes which might have been made in the effort to expel it. The stomach portion was somewhat torn in strips, due perhaps to a more pronounced effect of the corrosive agent. The whole was about sixteen inches long. It can be seen in the museum of the University of Buffalo.

After the vomiting of this membrane, the author goes on to say, the hemorrhage was very profuse for thirty-six hours, and then stopped entirely. Three days afterward the patient was allowed to

swallow, and chicken soup, milk, and milk and brandy were given in small quantities, which were gradually increased until May 15th, when he took about a quart of milk in twenty-feur hours, some toast, and one or two raw eggs. During this time enemata of milk and extract of beef were given, which, with the exception of one or two, were well retained. He continued in this condition until May 30th, when the author found that the food was not being digested, that it simply passed on into the intestines, where it remained for a time and then passed per rect:m in about the same condition in which the patient took it. The man was allowed food by the mouth because he craved it and retained it without distress. and, as death would inevitably be the result, the author thought he might as well be indulged. On the 30th of May contraction had taken place to within three or four inches of the stomach ; afterward the whole length of the acsophagus was contracted. On the 1st of June he vomited shreds of a brownish substance, looking like portions of the cast, with a very foul odor. This continued for two or three days, and was followed by a yellowish substance even more foul smelling than the other. The patient remained in this condition, gradually getting weaker and vomiting and retching a great deal, until he died on the 24th of June.

Corrosive poisoning, says the author, is not an uncommon occurrence, but it is interesting to note that life may be proionged, as in the present instance, for an unusual period after the ingestion of a corrosive powerful enough to destroy the mucous lining of the entire aesophagus and a part at least of the stomach ; also that it is possible to take such a large amount of material into the stomach without distress afterward is remarkable.

A quack of the name of Thomaso, though fortified with the usual bogus American diploma, was fined £20 last week at a London Police Court, under the apothecaries act, for practising medicine. —Lancet.

THE TREATMENT OF POST-NASAL CATARRH

By Walter Wells, M.D., Washington.

While catarrh of the naso-pharmyx receives scant notice from European authors, and is treated by them as though it were always secondary to diseases of the nose, or of the lower pharnys, in this country it is given a more prominent poition in text books on diseases of the nose and throat, and is treated of as an independent disease in the same rank with rhinitis, pharyngitis, and laryngitis. This is, indeed, quite as it should be ; for besides that it is with us, at least, the most frequent of catarrhal affections of the upper air passages and is the most pronounced in the amount of symptoms and in the distress it causes the patient, it has a better claim to consideration as an independent disease by reason of modifications ir, the mucous membrane in this region. We have situated here a collection of adenoid tissue, under the name of the pharyngeal tonsil or tonsil of Luschka : we have the openings of the Eustachian tubes and their prominences, and we have the so-called fossae of Rosenmuller. It is not necessary that we discuss whether the naso-pharynx serves, primarily, the digestive or the respiratory functions. We are willing to admit, on the one hand, that the secretion of the mucous glands in this region is useful in lubricating the lower pharynx to promote deglutition, and, on the other hand, it appears to us that the recent experiments of Freudenthal show that this part contributes a great deal more moisture to the inspired air than was formerly thought : in fact, the major part, А simple, convenient division of post-nasal catarrhs is into those acompanied with hypersecretion, and those attended with formation of crusts. The latter is the kind to which attention has generally been attracted, and especially the question of the so-called bursa pharyngea, which most modern writers think has been given too much prominence by Thornwaldt and his followers.

It is to the first mentioned variety or stage of post-nasal cartrrh, marked by an abnormal formation and discharge of succous, that we will confine our remarks in this paper. This is the kind of catarrh which is properly named if we have regard for the etymological origin of the word, and this is further the kind which might most properly be styled the American disease, because of its proportionately greater frequency in this country as compared to other countries.

The accumulation of mucus seen so often in the cavum is at times partly derived from the nasal cavities, but it would be manifestly wrong, considering the mucous glands situated here, to say that the nose was the only or even the chief source. For without doubt we can have a condition of inflammation of the uase-pharyngeal mucous membrane with general engorgement and congestion of vessels and glands and consequent abnormal secretions of mucus. We will see the mucus especially abundant in the crypts of the pharyngeal tonsil and about the situation of the Eustachian tubes. It runs down the posterior wall of the pharynx, causing the patient to be constantly hawking and clearing the throat. Besides the real annoying symptoms, and besides the real evil consequences to the cars, larynx, and lower respiratory tract, the patient has also always many imaginary ills,

It seems strange in view of this and of the great prevalence of the affection that more has not been attempted in the way of giving relief. Of course, whenever nasal stenosis co-exists, this, first of all, should be overcome, as this alone may be accountable for the post-nasal catarrh. Prophylactic measures and constitutional treatment are not generally to be slighted. but we wish here only to make some observations on the local treatment. There is but little variety in the way the postnasal catarrh is treated all over the world, viz., cleaning of the post-nasal space by an antiseptic alkaline irirgation or spray followed by the application of astringents. The lead and zinc salts, alum, nitrate of

silver, tannin and iodine preparation in solution or powder are those most in vogue. Morrell Mackenzie liked a preparation of eucalyptus gum. Meyjes, of Amsterdam, has recommended ichthyol one-half per cent. solution. Nitrate of "I er is of all of these, in my opinion, the lost serviceable in that kind of catarrh under discussion, applied by means of cotton swab in one or two per cent, solution. But it must be admitted that the results are at the best unsatisfactory and «he patient often returns to us day after day with but little change. It is for this reason that we must admit into out pharmacopceia any new drug which empirically or theoretically seems to promise good results. The excellent success which I have seen reported from the administration internally of Tannigen in intestinal catarrh by Meyer, of Marburg, Kunkler, Escherich and others, led me to anticipate that it would be a suitable agent for local use in post-nasal catarrh. It is the observation of Escherich that Tannigen was not applicable to that form of intestinal catarrh attended with watery projectile stools, but in that of a true catarrhal nature, when there was hypersecretion of mucus, it proved of inestimable value. Tannigen is an acetic acid ester of tannin, discovered by Professor Meyer. It is a yellowish-grey powder. tasteless and odorless, insoluble in water, but readily in alkaline solution. It will be found much more elegant than tannin and much less irritating. The latter is an important qualification, for most of the astringents in the strength in which they are employed when applied to the sensitive mucous membrane of the nasal tract, prove irritating, causing the patient to sneeze

This is especially true of sozo-iodol zinc which is so highly endorsed by Prof. Moritz Schmidt. Tannigen, I have observed, will not produce this effect even when undiluted. A recital of the cases in which I have made trial of this agent would possess too few points of interest to be given in detail. It is, therefore, only to be said that Tannigen, in all cases in which it has been used, proved highly beneficial in relieving the engorged and codematous state of the mucous membrane, and in markedly influencing for the better the most distressing symptom, the abnormal secretion of mucus. It was employed by me both in solution and in powder form, always preceded by thorough cleansing of the post-nasal space by an antiseptic alkaline spray. As a solution I used a three per cent, strength in five per cent, of phosphate of sodium. As an insufflation I recommended the following :—

Tannigen4 drachms.Bism. carb.3 drachms.Pulv. amyli2 drachms.

Parenthetically, I may remark that in using a combination of Europhen and Tannigen as insufflation after canterization in the nose it has appeared to me that the reaction is of shorter duration than that which usually occurs, The same combination is effective in cases of epistaxis, both for the purpose of locating the point of crossion and of controlling the hemorrhage. In those cases of post-nasal catarrh in which there is such extreme irritability of the pharynx and contraction of the palate as to prevent the application of the powder by way of the throat, rather than aggravate the irritability by the employment of a palate retractor. I prefer to trust to reaching by insufflation through the anterior nares. Applications ought to be made not less often than once daily, and if the patient can himself assist by using a spray in a manner to reach the post-nasal space, in the solution above mentioned, once or twice during the day, the result will be hastened ; at any rate he should irrigate the part thoroughly by some alkaline wash .- Medical Bulletin, April, 1897.

LINSEED OIL FOR CORNS.

Prof. Bilslik says. Linseed oil is a good thing for corns. A piece of lint damped with the oil should be wrapped round the part and kept constantly applied. It gives great relief where the corn is soft, and is not long in eradicating it.

THE TREATMENT OF HYDROCELE WITH CARBOLIC ACID WATER.

What appears to be both a simple and an effective method of dealing with hydrocele, says the Lancet for August 7th, has been practised for the last two years by Dr. Pilate and Dr. Vissemans in the Orleans Military Hospital. It consists in the washing out of the cavity of the tunica vaginalis-after evacuation, of course -with a weak solution of carbolic acid. The surface is first cleaned with soap and brush and then washed with a solution of bichloride of mercury. The trocar is then inserted, and after the scrous fluid has carbolic-acid been drawn off warm water of the strength of three per cent., which has been previously boiled, is injected. This is allowed to come out, and is seen to be turbid, containing fibrinous The washing out is repeated flocculi. four or five times until the liquid emerges from the cannula ouite clear. The instrument is then withdrawn and the puncture closed in the usual way, a suspensory bandage being put on. Owing to the anesthetic effect of the carbolic acid the patient feels no pain. Some further eflusion into the sac usually occurs in four or five days, bu tthis soon subsides and the patient can resume his ordinary work. He is advised, however, to continue to wear the suspensory bandage for a time. This treatment has proved quite satisfactory, but is recommended only in simple cases occurring in young subjects.

ICHTHYOL IN INSECT STINGS.

Dr. W. Ottinger tells of his lack of success with ammonia, but says that he has found ichthyol an admirable remedy. He has tried it in numerous cases of the stings of flies, gnats, bees, and wasps, and has found that it quickly and surely causes the phenomena of inflammation to subside. He attributes its effect to its vasoconstrictor action. It is best to apply it pure in a pretty thick layer, but it may be used in the form of an ointment.— Munchener Med, Woch.

THE LANCET

HOLDING INQUESTS.

The rareness of the event, holding an inquest in the Province of Manitoba, justities special mention. We, with many others, devoutly hope that it heralds a different line of action on the part of the authorities than has hitherto prevailed. The inquest alluded to was held on the body of a young Englishman who was fatally asphyxiated by coal gas while asleep in the room of a city hotel. This was the second case in the same house fatally ending from a like cause within a iew weeks, so that the authorities could not well pass it over. That the jury considered blame attached to others, their verdict shows. Numbers of people have niet with violent deaths in this city and province in the last twenty-five years, but, in consequence of the apparent cause of death being evident, no inquiry was deemed necessary. A scaffolding may fall and unfortunate mechanics hurled to their death. It does not require a Solomon to conclude that they were killed by the giving away of the planks on which they trusted their lives. But, was no one culpable for the careless fixing of this scaffolding? A man wanders from a bar-room and is found frozen to death without a cent in his pocket. Another is found laying on the road shot dead, with a gun lying near him, one barrel discharged ; others have met with violent deaths under railway trains. The causes of death are all in evidence, but it is only by the coroner's inquest that it is elicited whether blame attached to any person or persons for the death. We are supposed to be governed by English law. But an infant cannot be buried in the United Kingdom, who dies an unnatural death, without the indispensable inquest. No law officer has the power to burke this inquiry, and the score of economy, which

dictates it here, is, we believe, deserving of the very strongest condemnation. If English law prevails, it is against the law, and it robs the public of one of the greatest safeguards against crime and culpable A coroner's inquest has negligence. numberless times uncarthed strange and unthought of facts, that have routed the previous theories of the causes of death, though apparently they were plain. It is not sufficient to satisfy any one man, or even a number of men, on a cursory inquiry as to the cause of the loss of that which is easily taken, but which no mortal can give. The cause and the minutest details surrounding the violent death should be thoroughly investigated, and this investigation is due to the public, and no paltry cloak of economy, or self-sufficient judgment, should be allowed to thwart a legal process enacted for the welfare and protection of citizens at large. We have repeatedly called attention in these columns to the culpable neglect of holding an inquest in all cases of unnatural death. Serious injury to the publie is perpetrated in every instance where, on a perfunctory inquiry, the dead are placed out of sight. It is simply an encouragement to crime. We trust that the profession will seriously consider the subject, and refuse to take the position of coroner saddled with the restriction that an inquest held, unless sanctioned by the legal department of the government, will be at the coroner's expense. An honored position mentioned in the Charter of Athelstan to Beverly Ann, 925, and according to Sir Thomas Smith, who wrote in 1853, deriving the name from crowner or coromator, because the subject of every death by violence is accounted to touch the Crown, has fallen into disuse, we may almost add contempt, under the action of the Local Legislature of Manitoba. Let the law be carried out as intended, and a paltry, dangerous and fatal economy departed from.

MANITOBA IGNORED

On reading the admirable and eloquent address of Dr. Roddick, the President of the British Medical Association, at the Montreal meeting, Manitobans must be struck, when perusing his remarks, under the heading of "Health Resorts," that the Province of Manitoba has no mention from him. We can understand his dwelling largely and vigorously on the innumerable advantages of Eastern Canada, but it is a matter of surprise that he should entirely ignore Manitoba, and travel on to the district of Alberta, some hundreds of miles to the northwest of this province. We do not contend that he in any way exaggerates the advantages of a residence in either Eastern Canada, or the Northwest Territories. But, we in Manitoba lav claim to at least equal advantages to be found in our own province, either under the heading of climatic consideration, health resorts, or as a land of promise to those seeking a new home. Lakes, large and small hills, and sheltered valleys, and broad rivers, which are but little known, are to be found in Manitoba, and the traveller who forms his opinion of the configuration of the entire province by the broad plains of wheat fields which greet the eye as he looks out of the windows of the Canadian Pacific railway carriages on his way to the golden west, would make a great mistake. Before forming an opinion, let the traveller take a trip over the branch lines of the Northern Pacific, Manitoba & Northwestern, and C. P. R., when he will be in a position to judge of Manitoba's attractions other than her unrivalled soil.

A FRENCH COMPLIMENT

The invitation given to the British Medical Association, at their late meeting in Montreal, to hold their next assembling in 1898, in the City of Winnipeg was a very French compliment. It would be a great stretch of imagination to believe that an association which has never before held a meeting outside the British Isles could be induced to cross the

Atlantic two consecutive years. It was unreasonable to ask it. It was absurd to expect that the invitation could be complied with. The annual meeting of the British Medical Association is looked forward to by thousands of medical men as the kernel of their holiday. But how few could cross the Atlantic and take a long inland journey to reach the point of meeting, the small number that were able to attend from across the water at the late gathering would indicate. In fact, with a very few brilliant exceptions, the alumni of the profession in Great Britain were conspicuous by their absence. But the Aegis of the great and honored Lister shed a lustre over the assemblage which compensated for the absence of many lesser lights of the profession. An invitation is not always a compliment, and we cannot help thinking in the present instance it would have been wiser to have postponed it until some future time. though no doubt it will be laid before the Council of the Association and be courtcously acknowledge but necessarily declined.

OVERCROWDED MEDICAL PRO-FESSION IN GREAT BRITAIN.

Medical men are not so well off in Great Britain now as they were thirty or forty years ago. Among the causes of this state of things are, it is urged: (1) Increased competition; (2) the enormous growth of the out-patient departments of hospitals, and the increase in the number of special hospitals; (3) the great increase in the sale of patent medicines; (4) the liberty allowed quacks and other unqualified practitioners; and (5) the extensive prescribing by chemists and druggists. In 1878 there was one medical practitioner to every 1,645 persons in England and Wales; now there is one practitioner to every 1,451 only. The number of hospitals and dispensaries in England and Wales was 755, with a medical staff of 3.377, in 1878; in 1893, the hospitals and dispensaries numbered 928, and the medical staff 4.454 .- The Nation.

MISCELLANEOUS

A WINNIPEG EPISODE

About two years ago a well-known individual died at the General Hospital, The man was an Englishman well-connected in Manchester ; he died in rather suspicious circumstances, and, a kindhearted citizen undertook the expenses of his burial, giving directions for the same to a prominent undertaker. The body was supposed to have been taken from the morgue, where two others were lying, to the undertaker's establishment, The juneral party assembled, and it so happened that a lady and her daughter were passing through Winnipeg on their way to England, and when at the hotel read of the death and date of the funeral, which they determined to attend, being intimate friends of the deceased's family. On their their arirval, the coffin lid was taken off for a farewell look. The lady and her daughter could not recognize the remains, and put the question to a medical man, present, "Could it be So and So ?" He assured them that it was. The lid was about to be replaced, when a Scotch iriend arrived, and, after looking at the dead man, exclaimed, "Why, this is not -----, that I swear." There was general consternation at this, and the medical man offered to go up to the hospital and make inquiries, and asked the funeral party to follow. The latter got there before the doctor, and on nearing the morgue they heard a female voice screaming, "That is not my Charley. What have you done with my Charley ?"On inquiry, it was found that Charley was in the coffin, and the remains intended for the funeral were still in the morgue. A substitution was made, and the cortege on the move, when the woman rushed out, saying, "That man has on Charley's new suit I sent to have him dressed in." So the corpse had to be taken back, garments undressed and clothed in his own, by which time the lady and her daughter had enough of the funeral rites and drove back to their hotel.

CALOMEL N THE TREATMENT OF SNAKE BITES, AND CORROS-IVE SUBLIMATE FOR THEIR PREVENTION.

Dr. Corislano d'Utra, of Brazil (Bulletin de therapeutique : Progres medical. August 28th), says that persons suffering with snake bites may be cured in all cases b ytaking three doses, two hours apart, of thirty grains of calomel in an ounce of lemon juice. He further declares that whoever will carry about his person a bag containing from seventy-five to three hundred grains of corrosive sublimate need have no fear of serpents. They will thee from him ,and, if by chance he is bitten, the bite will be harmless !

METHOD OF INFUSING SALINE SOLUTION.

Graduated glass infusion jars of one. thousand cubic centimetres capacity, made according to Dr. Kelly's designs, are used as reservoirs for the solution. The bottles are connected by five feet of rubber tubing to a long, slender infusion needle. the calibre of which is two millimetres in diameter, similar to an aspirating needle. The entire apparatus is sterilized and kept in a sterile envelope and is available for use at any moment. Before giving the infusion the breast is carefully disinfected, especially well in its dependent area. It is then grasped with one hand and lifted well up from the thorax, while the needle, with the fluid flowing from it, quietly thrust beneath the gland. is Usually, simple elevation of the reservoir is sufficient to force the fluid into the loose cellular tissue, and the breast quickly begins to distend until even a flabby and atrophied organ will reach the size of the puerperal breast, and in a few instances I have seen the fluid shoot from the rubber when the breast is quite tense. The needle is quickly withdrawn and the puncture is closed with rubber tissue or adhesive plaster. If the fluid does not flow. by its own pressure it can be effectually forced in by stuffing the tube. The hands and tube are well anointed with

vaseline ; the upper portion of the tube is tightly pinched, and from this point down the tube is gently stripped between the fingers of the other hand, driving the column of fluid ahead into the tissue. The lower portion is then pinched between the fingers and the upper is released, allowing the water to fill the collapsed intermediary portion of the tube. Seven hundred cubic centimetres of solution may be injected under each breast. If care is observed in the cleansing of the breasts and the injection of the fluid no untoward results will follow, which certainly cannot be said of the infusion into the radial artery or vein,-American Journal of Obstetrics.

We have great pleasure in announcing to the profession that Dr. Munro, of Kamloops, and Dr. Procter, of Belmout, have decided to give, conjointly, a gold medal to the gentleman who comes out first at the next final examinations for the degrees of M.D. and C.M.

"Er-I suppose, Doctor, there is some chance of saving him ?"

"Absolutely none; he will die whether operated upon or not."

"Well, what are you doing it for, then?" "For \$350."—Life.

LIBRARY TABLE.

Deformities Corrected (illustrated), by D. La Ferte, M. D., Howard Street, Detroit.

Modern Treatment of Diseases of the Skin, by J. H. Duncan, A. M., M. D., Greater New York.

Lithemia as an Etiological Factor in Disease, and the Use of Alkalithia in the Treatment of the Same, by A. B. Conklin, M. D.

Medical and Surgical Gynecology, by R. W. Garratt, M. A., M. D., Professor of Obstetrics and Gynecology, Queen's University, and Gynecologist to the Kingston General Hospital. J. A. Carveth & Co., Medical Publishers, Toronto.

A work of 400 pages, profusely illustrated, opening with the development and anatomy of the female organs of generation, ending with diseases of the breast. and containing between these subjects a graphic description of all the various medical and surgical diseases peculiar to women, with their appropriate treatment. To the libraries of the practising gynecologist and the general practitioner, Dr. Garratt's work will be a valuable addition. The author has abstained from all unnecessary verbiage and technical explanations, and as far as it is consonant with intelligent consideration of the subject has been as laconic in his description of symptoms, diagnosis, and treatment as the greatest lover of brevity can desire. The illutrations are excellent, the printing is equally deserving of commendation. and as a text book of medical and surgical gynecology, as now practised, we know of no other containing a similar amount of information given in as few words.

PERSONAL.

Dr. Bell will soon take possession of the Bacteriological building erected by the local government on the Medical College grounds.

Drs. Chown, Jones, Smith and O'Donnell have returned from an eastern trip.including attendance at the meeting of the British Medical Association. Dr. Chown has announced his intention of, for the future, giving up general practice and confining himself altogether to surgical work. In this, Dr. Chown abandons a large and lucrative practice, the onerous duties of which have lately become somewhat irksome to him. We have little doubt that in the specialty he has now decided to devote himself to, that he will attain as great success as he has enjoyed in the past, which we heartily wish him.

Dr. Good is still on the continent of Europe, but is expected to return early in November.

PHARMACEUTICAL

SOME MEDICINES OF THE SWAMPEE INDIANS OF THE NORTH*

By C. Flexon, Winnipeg, Man,

At a late hour during the close of last week, a most interesting gentleman, a stranger to me, hearing that I had been appointed a delegate to this meeting, called to see if a brief record of his experience among the Swampee Indians of the North, with whom he had lived for six years, would be acceptable to me. I thanked Mr. Strath-for such is his name -and he thercupon furnished the following particulars of some of the drugs prescribed by him in his capacity of medical officer at Norway House, about 400 miles due north of Winnipeg. The conversation which I had with him was unfortunately but too short, as it was extremely fascinating. He has evidently been a close observer of those people. Apart from speaking their language fluently. I should say a pretty accurate knowledge has been gained by him of the strength and the weakness of the Cree mind. As a student of Greek and Hbrew, he has a remarkably high opinion of the Cree language. For beauty and perfection, he says, it cannot be surpassed, and to hear him talk of the poetry and eloquence of some of the native sermons which he has heard, has somewhat destroyed my confidence in the language in which we are conversing on this occasion and which we are conceited enough to suppose to be the best in the world.

A large number of the diseases common among the white people are just as common among the Indians, and while many of the drugs used by them are well known to us, the manner of using them is certainly different. In the treatment of worms, for instance, Male Shield Fern, the Aspidium of the U. S. Pharmacopeia ; Filix Mas, of the Ph. Br., is given as a strong infusion, combined with Senna and Wild Indigo. The latter article, by the way, is used as an antiseptic, and has excellent drying properties in the treatment oí eczema humidum, or "weeping eczema," One of the commonest drugs with them, and which is to be seen hanging up to dry in every wigwam or tepee. is the Wekas or Sweet Flag-the Calanus of the Pharmacopoeia. It is considered a specific in all throat troubles, with the exception of diphtheria, which is unknown to them. In cases of pharyneitis and tonsilitis it is used externally and internally. The rhizome is chewed and the saliva allowed to wash the throat. Poultices are made by mixing the powder with boiling water. It is a curious fact that the Indians are not only ignorant of gargles, but of the act of gargling, and Mr. Strath has been amused time and again in his efforts to get a Cree to gargle.. This drug is carried about by the natives in the winter time as a tonic, and is chewed because of its stimulating properties by the Indians as tobacco is chewed by the white-or should we say more correctly, by the civilized man. Most of their medicines are in the form of infusions. Very little is known about the salts, and it was with the geratest difficulty that the officer could persuade a patient to take Epsom salts, in consequence of a deep-rooted suspicion that the magnesium sulphate will produce inflammation of the bowels. Pills, no matter how strong, are swallowed ad libitum. Podophyllum Peltatum, or Mandrake, is taken in doses of 20 grains. Carui Fructus, or the common Caraway, is indigencus to this country and is the common remedy for colic, a complaint perhaps more frequent and more stubborn than with us.

Another indigenous plant and one which grows in that latitude in great profusion is the Caulophyllum, or the Blue Cohosh, also known by the name of Pappoose Root, Sqauw Root or Blueberry Root. It is used very largely in obstetrics and all female complaints. In doses of 30 to 60 grains the powdered rhizome is given to produce abortion; but the Crees have a powder which they mix with the Co-

^{*}Presented to the scientific section of the American Pharmaceutical Association.

hosh, and when thus administered Mr. Strath has known more than one instance where a three-mouths' foctus has been expelled from the uterus without ensuing danger to the mother. He even goes so far as to say that abortion procured in this manner precludes all possibility of future conception. This powder they never allowed Mr. Strath co see, and in spite of his offer of \$50 for a small sample, the secret has been kept profoundly sacred. Menstruation at the age of 11 years is the rule, and he considers it a remarkable fact in a cold country, where the thermometer often registers 50 degrees below zero.

Ladies' Slipper, the Cypripedium of the Pharmacopeia, imported from the tribes to the south, is chiefly used in rheumatism in very large doses. It is also used in the treatment of epilepsy; but this disease is of rare occurrence.

As an aromatic stimulant Hedeoma, or Pennyroyal, is as much used by the Cree women, and in a similar manner, as by our own people.

Plantago, or Plantain, is used commonly as a hemostatic, and is chewed by the doctor and applied as a paste to the bleeding surface. This drug is also their remedy for toothache. It is not put in the aching tooth, but is swallowed. Some of you will be surprised to hear that the Indians suffer very much from their teeth, and that my informant has practised a great deal of dentistry during his residence with them.

Juniper is used in three forms. The berries are stewed and caten as a diurctic. The leaves are dried and dusted over indolent sores, healing them with wonderful rapidity, and the root infused is administered in cases of gravel. Though Bright's disease is rare, gravel is very common and most of the old men die of it. Hydrangea is used with Juniper and with great success.

Spearmint, Sarsaparilla and Dandelion are taken for the same complaints as we ourselves take them.

Hemlock Spruce is much thought of. The inner bark of the tree, freshly pecled, is mixed with equal parts of Poplar and Black Birch to make a decoction. In the process of boiling, an oil is taken from the surface. This oil is mixed in the proportion of two drams to a quart of water, which quantity is drunk in the course of two or three days, as an abortive medicine.

We must no longer pride ourselves on the nursery toilet powders which we present to our customers in such a variety of charming packages. To the Indian, whose untitored mind, as Pope says, sees God in clouds and hears him in the wind, must we go for the most agreeable and most absorbent article of the kind yet introduced, a sample of which I have with me. It is nothing but the rotten interior of the Hemlock Spruce, lacking perhaps the extreme fineness which could only be obtained by modern methods and machinery.

We now come to Willow Bark, which is used as a hemostatic in the form of infusion. It is the belief of the Indian that bleeding should be arrested at once. He has an awful fear of death from loss of blood, and an Indian has been seen to faint whilst watching another having his finger amputated.

Regarding Salicin, "the important constituent of Willow Bark," the Cree is ineredulous as to its source. He cannot understand how a white powder can be toade from a bark, and it is entirely without faith that he is occasionally induced to take this remedy or the salicylates for rheumatism.

The belief that fever can only be cured by vomiting it up has a strong hold on the Cree mind, and he therefore swallows the strongest remedies by taking what we would consider more than a maximum dose of Veratrum Viride, or the Green Hellebore of the Pharmacopoeia; but this powerful drug has another use, instory of which will, to say the least, be news to some of the genilemen present. The rootlets and the rhizome are powdered between two stones, and as such is taken as a snuff to reduce hernia. The modus operandi is thus: The patient, naked, of course, is elevated to a horizontal position. He then takes a good pinch of the snuff and during the violent sneezing which follows, a companion standing ready at the side, plunges back the rupture with his fist, and if it is not a case of strangulation, the treatment is sufficient. To undo matters, so to speak, the patient is advised to cat all the pork he can. Mr. Strath is of the opinion that hernia is common with the tribe in consequence of the abundance of grease consumed by them, and he ventures to say that eight out of ten Crees are ruptured.

Skin diseases of all kinds are there, and are treated with an ointment made of equal quantities of gunpowder and lard.

Sturgeon oil is used in the place of Cod Liver Oil and is clarified till it becomes the color of Tincture of Capsicum. In one onuce doses, which are considered large, it acts as a cathartic.

An infusion of wild raspberry leaves combined with willow bark is an excellent remedy for cholera infantum, if promptly administered, but there are a great many deaths from diarrhoea. In that latitude, and in ail degrees north of 54, a very large raspberry grows which is called the "headberry" by the Indians : its botanical name is Rubus arcticus. The berry is found at the head of the stein, two feet in height.

Rumex, or Yellow Dock, is well known and used extensively as a laxative and for poultices. In any critical case of illness, the medicine man of the tribe is called in and is required to say whether or not the patient will recover. This skillful fakir has a powder resembling pulverized Rhei in appearance. This he places on the surface of a saucerful of water. The powder in a moment or two spreads out into says either to the east or to the west. If to the former point of the compass, the victim will die ; if to the latter, which invariably happens recovery is promised. It is write likely that a promise of such a nature materially helps the patient by buoying him up, and by inspiring him with hope. So much for one feature of Indian superstition.

Indian revenue or rather that of the

Northern Crees in particular, is, if true, of the most shocking chaarcter. It is said if a Cree wishes to punish another severely, he does it by disfiguring him for life, by introducing an almost tasteless compound into his tea or tobacco-generally into his tea, which he drinks strong and in great quantities. This vile compound is made up of 27 vegetable and animal drugs. The victim feels no ill effects at the time of taking it, but in the course of two or three months the skin begins to peel, a rash breaks out and spreads over the entire body. Subsequently the skin gradually darkens to black, and on the exposed parts hair grows so thickly as to give the unhappy Indian the appearance of a baboon. He never recovers. There is no romance about this, I am assured for there are at least half a dozen cases of the kind to be found in the country at this day.

Their most fatal poison is the wild carrot. These Indians have a fashion of boasting among themselves of their ability of poisoning enemies at various distances. Just imagine an Indian polishing of an enemy at a distance of five miles by a wild carrot !

A PHYSICIAN'S VIEWS ON PHAR-MACY.

Dr. Adolph Koenig says in the Pittsburg Medical Review : "The very fact that pharmacy exists is evidence of our inability to master everything pertaining to medicine and surgery within the limits of an ordinary lifetime. The progress of the sciences, for which the latter half of the nineteenth century will forever be celebrated, may be referred with absolute certainty to the separation of the various sciences into cpecialties, and a division of labor in the study of these different branches. No medical man can be an expert surgeon, general physics, ophthalmologist. laryngologist, gynecologist. neurologist, or other 'olgist' at one and the same time, let alone a pharmacist. In the early times of medical empiricism, however, when superstition rather than

scientific truth was the foundation on which the teratment of disease rested, one individual was capable of assuming the duties of both apothecary and physician. The gradual evolution of the healing science brought about the separation of the pharmacist from the physician and surgeon, and these latter into a number of specialists to which reference has already been made. It is a lamentable fact, however, that there are some, in the practice of medicine as well as in pharmacy, who fail to recognize the limitations of their abilities. We have thus physicians who attempt to combine the practice of medicine and pharmacy, and it is notorious that to some pharmacists counter prescribing has a great fascination. In both instances the best interests of the sick are not served. When it is remembered that it is within but very few years that any restrictions were placed on the practice of these two callings in this country, the wonder is that the conditions are as good * as in this case. The modern education of the pharmacist fits him in chemistry, botany, pharmacy proper, materia medica, microscopy, etc., together with some knowledge of anatomy, physilology, pathology and therapeutics. Such knowledge gives him a sense of the responsibility resting upon his shoulders which, without the knowledge, it would be impossible for him to possess. Such knowledge makes his calling one that is more than a mere business, for strict business principles looking to the greatest financial gain are incompatible with the welfare of the sick and are in conflict, therefore, with the conscientious principles of an honest, educated pharmacist.'

HOW TO CREATE FRIENDLY RE-LATIONS BETWEEN PHARMA-CIST AND PHYSICIAN.

Maurice P. Gould discusses this subject in the National Druggist. After pointing out the varying nature of the obstacles in the path leading to success in business, which must be overcome by individual judgment, he touches on the fundamental principles of the matter ; especially mentioning the importance of securing the good will and support of the doctor. "It is important," he writes "that you impress upon the physician that you want his business. To accomplish this, call on him not less than every other week. Every week is better. Study each physician ; his personal traits, leisure hours and busy time. If he is busy, leave at once. If at leisure, pass a friendly greeting, A۶ soon as an opportunity comes, speak of the new preparations, which will show you are wide awake and progressive. (This is always interesting to a doctor.) Tell him who makes them, where they are from, what they are for. In fact, give him all information concerning them in your possession. Leave prescription blanks with him. They cost very little, and though he may have already some from another pharmacist, yours may be the ones at hand when he is about to write a prescription. Study the arts of the best drummers who call on you, and practice them on the doctor and all your customers. Depart before the call begins to drag, for visiting is somewhat like banqueting, if quit while yet there is a trifle of hunger, the next course comes with greater relish. Follow up the visit regularly with some form of attractive printed matter written in plain, forcible, dignified language. Such circulars nailed weekly have been tried in several of the larger cities. A drug store in Kansas City sent out 150 a week for four months under the head of "Short Talks to Physicians" to every doctor in town. Since then drugs stores in Denver, Des Moines. Memphis, Salt Lake City and elsewhere. have issued practically the same circulars. These circulars should be short and to the point, mentioning not only new preparations, but stating the points of superiority of your prescriptica department-and entire store-such as the checking of prescriptions by a second man, the mixture of ointments; the use of high grade chemicals, your exactness in compounding prescriptions and scores of other suggestions that crowd up in the mind of a

pharmacist who is full of his business. One of the vital essentials of successful advertising is that it shall contain originality and individuality. It is not enough to go to the physician, or to send advertising matter to him. Write and press him to come to your store at any and all times to suit his convenience. Keep every nook and corner of the store in a condition ready to undergo lite closest eye of your most partcular doctor-customer. Treat him royally when he comes. If he seems interested, show him the store, upstairs and down, in and out, before the case and behind. Frankness breeds confidence. See that the physicians meet and know personally all of your prescription men. Accommodate the doctor by any legitimate means within your power. It is well to make it plain to every physician that you aim to, and will carry in stock any particular kind of drug he may want to prescribe, if he will inform you of his preferences. What if he is overly particular (another name for cranky) if you gain his trade, and with it that of his patients, and you can well afford to 'put yourself out' to please him. All these different phases go to make up a successful business."

Bed-bugs are difficult to exterminate, on account of their habits of concealment. Kerosene has been found useful, and the cheapness of the article, combined with its harmless character, recommends it for general use. By macerating a few pieces of alkanet root in benzine or kerosene, a liquid is obtained of an attractive red color, which may be flavored with cassia oil or a combination of cassia oil and citronella oil, as desired. This is put up for sale in 8 oz. and 16 oz. bottles fitted with sprinkler tops and appropriately Corrosive sublimate applied in labeled. watery solution, as is often done, is worthless. Oily compounds are most effective, as they penetrate the breathing pores. choking and poisonig the bugs at one A satisfactory all-round inoperation. secticide for insects of this class could

doubtless be prepared by making a solution of camphor in strong carbolic acid, the resulting liquid to be introduced into all crevices by injecting with small syringes or oil cans. Similar combinations of camphor and turpentine will suggest themselves to those interested.

(Extracts from American Druggist and Druggists' Circular.

FURNITURE POLISHES AND CREAMS.

The amount of these preparations used annually is very considerable, and, with a little effort, there is no reason why the druggist should not be able to command at least a portion of this trade.

The polishes most generally sold vary widely in their composition and utility, and it is difficult to devise a formula for, any one polish to give uniform satisfaction. Formulas are, therefore, given for a number of polishes and creams, any one of which produces a tolerably good article.

Perhaps the most widely-known and generally used of furniture polishes is the one commonly designated as

"CHEMICAL " POLISH.

Linseed oil40	parts
Alcohol	parts
Vinegar	parts
Antimony chloride 2	parts
Ammonium chloride.	•

Spirits of camphor, as 1 part

Place the oil in a large bottle, and add successively the antimony chloride, the spirits of camphor, the vnegar and the alcohol, part by part, and with constant shaking : when thoroughly incorporated add the sal ammoniae.

This, perhaps, as an "all around" polish gives better satisfaction than any other. The following simpler formula has, however, during the trial of some four years proven very satisfactory. It is sometimes sold as

Mix the linseed oil and the turpentine :

dissolve the antimony terchloride in the alcohol, and add to the oil and turpentine little by little, shaking after each addition.

AN ACID POLISH.

Mix the oil with the r⁺¹ ol; then add the acid with constant sing. As a renovating polish the re is widely used. It should be shaken up before being used.

Pastes and creams, on account of their cleanliness and case of application, are coming to be quite generally used. The formula given below produces an article that will compare more than favorably with any now in the market :—

FURNITURE CREAM.

White soap $\dots 2\frac{1}{2}$	
Spirits turpentine	ozs.
White wax	ozs.
Water 110	ozs.
Carbonate potash 1	oz.

Place the soap in a water-bath with a portion of the water, and melt by a gentle heat, adding the remaining water as fast as absorbed. Now add the wax and increase the heat until it melts. Reduce the heat and add the turpentine gradually, stirring until all is thoroughly incorporated. This produces an elegant article, which sells rapidly and gives even satisfaction. It should b put up in 1½ or 2ounce ointment jars, properly labeled,

PERFUME FOR THE BREATH.

A. S., Ohio.—Liquorice extract forms an excellent basis for mouth perfumes, as any essential oil can readly be combined with it. A simple formula is :—

Lignorice extract, in powder ...2 ounces Oil of cloves1 dr. Oil of cinnamon10 drops

Rub the oils thoroughly with the extract, and then form into a stiff mass. Make this into either small pellets or sticks. When the pill form is adopted, it is common to coat with silver leaf.

A more complicated formula is :
Oil of peppermint3 drops
Oil of lemon2 drops
Oil of neroli2 drops
Oil of cinnamon2 drops
Cloves4 grs.
Cardomom8 grs.
Vanilla12 grs.
Orris root15 grs.
Mace
Sugar
Liquorice extract
Mucilage of gum arabic, a sufficient quantity.

A mixture of oils of peppermint and spearmint with a little oil of cloves would, we think, make a good perfume for the purpose.

MANGE CURE FOR DOGS.

		Parts.
Potassium st	Iphide	
Tar	• • • • • • • • • • • • • • • • • • • •	
Glycerine		
Soft soap .		350
Heat gently	and mix well	

Heat gently and mix well.

Two tablespoonfuls of this is mixed with a pint of warm water and the animal washed with the solution, which is allowed to dry on the skin. Two days after a washing with soap and water is given and the solution applied as before ; the treatment being continued in this way as long as necessary.

The height and velocity of a flock of ducks, obtained incidentally by triangulation, during observations on clouds made by officers of the Blue Hill Observatory, Mass., was as follows : Height, 958 feet ; velocity, 47-8 miles an hour.

·····

In incoercible vomiting or pregnancy apply the continuous current, placing the positive pole on the clavicle, between the two branches of the sterno-cleido-mastoid, and the negative pole over the umbilicus. (Gazette des Hospitaux, in Med. Record, August 24, 1895.) Use a current of ten or fifteen milliamperes for from fifteen to thirty minutes. This method succeeded in five cases in which vomiting was so intense as to render provoked abortion almost imperative.

A VEST POCKET CARBONATING APPARATUS.

An English firm (Reed, Campbell & Co., Broad Street avenue, London, E. C.) is putting up carbon dioxide in small sheet steel capsules under a pressure of 60 atmospheres. One of these capsules is placed in a specially constructed stopper affixed to an ordinary soda water bottle, and when this is closed the gas is released from the capsule and the water contained in the bottle is converted into a good sparkling beverage.

CEMENT FOR WEDGWOOD MORTAR.

O. L. P., Louisiana,—We have seen it stated that wedgwood ware may be cemented by applying a mixture of gutta percha and shellac, melted together, which is used while hot.

A cement for porcelain and marble
which might be available in this case is :
Lime1 oz.
White of egg
Plaster of Paris
Water1 oz.

Triturate the lime with the white of an egg to a smooth paste, add the water, then stir in the plaster and apply quickly.

We are in doubt whether any cement has been devised which will prove entirely satisfactory for mortars, especially when large. We would be glad if any reader who has had experience in the matter would favor us with information.

ROOT BEER EXTRACT.

C. M. T., Connecticut.—The so-called root beer extract is made in a variety of ways. As a typical formula we give the following :—

Sassafras	1 oz.
Wild cherry bark	d oz.
Pimento	1 oz.
Wintergreen	1 oz.
Hops	ł oz.
Coriander seed	
Description 1.1 1.1 / 1.1 1.1	· · · · ·

Percolate with diluted alcohol until 10 ounces of tineture are obtained.

The extract is added to plain cubonated water when drawn in the proportion of half a teaspoonful, more or less, to an ordinary glass; or it may of course be mixed with the water in the fountain before carbonating in like proportion—say 1 onunce to the gallon.

We desire to call the attention of Pharmacists to Messrs. Richard & Co's advortisement. This firm is prepared to supply chemists with all the advertized wines and spirits to include alcohol, on the most favorable terms.

Every medical man should be a member of a medical society. He will never know how great a man he is till some one praises him in a discussion, nor how small a man till some pompous fellow-member takes him to task; but all these frictions serve but to round and smooth a busy life, and no one can do without it who desires to be a physician in the highest acceptancy, and not a man who doctors.—Atlantic Medical Weekly.

NO MEDICAL EXPERT TESTI-MONY NEEDED.

Mrs. Kelly—Yis, Mrs. Casey, me hoosband lift home two wakes ago, an' Oi haven't sane him sinst.

Mrs. Casey—An' phat made him do that, Mrs. Killy?

Mrs. Kelly—Faith, the doctor says he thinks he run away in a fit of timporary sanity.—Harper's Bazaar.

PHOSPHATE OF SODIUM IN MOR-PHINE HABIT.

M. J. Luys reports the case of a physician who had been accustomed to take about seven grains of morphine daily. Small doses of sodium phosphate were given subcutaneously (with glycerine and water), and as they were gradually increased the morphine was progressively diminished. In two months the morphine was discontinued entirely, and then the doses of sodium phosphate were progresively diminished, and finally stopped altogether in two weeks more. There remained no desire for the morphine.

Manitoba Medical College

WINNIPEG

IN AFFILIATION WITH THE UNIVERSITY OF MANITORA.

Established 1883.

Incorporated 1884.

J. WILFRED GOOD, M.D., Dean,

W. A. B. HUTTON, M.D., Registrar.

Two First Year Scholarships of the value of \$50 and \$50 are open for competition at the close of each first session. Two Second Year Scholarships, value \$50 and \$50, are offered for competition at the end of the second year.

Two Third Year Scholarships, value \$50 and 50, are offered for competition at the end of the third year. The University Silver Medal will be awarded to the student obtaining highest marks in M.D. Examination,

and a University Foreize Medal to the student taking second place. The total Collegiate fees amount to \$35 including energistration for students taking the four year course, payable if desired in four annual instalments of \$75 each. Graduates in Arts taking their work in three years will be required to pay \$270 or \$60 each year. All codege fees must be paid in advance to the Registrar on or before December 15th, Hospital Tickets for the Winninge General Hospital are ten dollars for each session.

Hospital Teckets for the Winnipeg General Hospital are ten donars for each session. Maternity tickets \$500. Tickets must be paid at commencement of the session. The University frees are payable so days before each examination to the Registrar, Mr. Pithlado. Each yearly examination, \$1. M.D. Degree, \$10; C.M. Degree, \$15. Ad Eundem, \$5. Good board may be had in convenient parts of the city at \$5 per week. Board and room from \$1 to \$8. The Board of Directors of the Winnipeg General and St. Boniface Hospitals appoint four Manitoba University graduates as Resident House Physicians and Surgeons. Clinicall Clerks, Dressers and Post Morteon Clerks, are appointed by the attending Physicians and Surgeons. For further wartiendars address For further particulars address

W. A. B. HUTTON, M.D.

155 Mayfair Avenue, Fort Rouge, Registrar.

Professors and Lecturers.

J. WILLEGE GOOD, M.B., Toronto ; L.R.C.P. Edinburgh ; Member of the Medical Staff of the Winnipeg Genera Hospital ; Ophtahnic and Aural Surgeon to St. Boniface Hospital, Professor of Clinical Surgery, and Lecturer on Ophthalmology and Otology.

- J. R. JONES, M.B., Toronto (L.R.C.P., London : Member of the Medical Staff of the Winnipeg General Hospital, Professor of Principles and Practice of Medicine, and Clinical Medicine.
- R. JOUNSTONE BLANCHARD, M.B., C.M., Edin University; Member of the Medical Staff, Winnipeg General Hospital. Professor of Surgery and Clinical Surgery.
- H. H. Chows, B.A. M.D., Queen's Univ.; L.R.C.P., London. Member of the Medical Staff of the Winnipeg General Hospital. Professor of Clinical Surgery.

- "ENKAS S. MACDONELL, P.A., M.D., C.M., McGill. Member of the Medical Staff, Winnipeg General Hospital. Professor of Surgical Anatomy.
- R. M. SIMISON, M.D., C.M., University Manitoba; L.R.C.P., Edin.; L.R.C.S., Edin.; L.F.P. & S. Glasgow; F.R.G.S., London,

Member of the Medical Staff, Winnipeg General Hospital, Professor of Principles and Practice of Medicine,

W. J. NEUSON, M.D., C.M., Member of the Medical Staff of the Winnipeg General Hospital, Profe sor of Auatomy,

- E. S. POPRAM, M.A., Victoria ; M.D., C.M., Univ, Man. Member of the Medical Staff, Winnipeg Gen. Hospital. Professor of Obstetrics.
- E. W. MONTGOMERY, B.A., M.D., C.M., Univ. Man. Member of the Medical Staff, Winnipeg General Hospital Professor of Physiology.
- S. GRAY, M.D., C.M. McGill : Member of the Medical Staff, Winnipeg General Hospital, Professor of Diseases of Women and Children.
- W. A. B. HUTTON, M.D., C.M., Univ. Man. Lecturer Pharmaceutical Association. Professor of Chemistry, General and Practical.
- J. O. TODD, M.D., C.M., University of Manitoba. Professor of Surgery,

Demonstrator of Anatomy.

GORDON BELL, B.A., Toronto Univ.; M.D., C.M., Univ. Man. Professor of Bacteriology, Pathology and Histology.

W. S. ENGLAND, M.D., C. M., McGill ; Member of the Medical Staff, Winnipeg General Hospital, Demonstrator of Anatomy,

- J. A. MCARTHUR, M.D., C.M., McGill. Professor of Medical Jurisprudence and Toxicology.
- JAMES PATTERSON, M.D., C.M., McGill ; Member of the Medical Staff, Winnipeg General Hospital, Emeritus Professor of Hygiene,
- A. HOLMES SIMPSON, M.D., C.M., University of Manitoba. Professor of Materia Medica and Therapeutics,
- J. H. O'DONNELL, M.D., Victoria ; M.D., C.M., Trinity. Consulting Physician to the Winnipeg Gen. Hospital. Professor of Sanitary Science.
- ALEX CAMPBELL, ESG., Member Ont, College of Pharmacy. Licentiate Man. Phar. Association. Lecturer on Pharmacy.