Western Canada Medical Journal

A MONTHLY JOURNAL OF MEDICINE SURGERY AND ALLIED SCIENCES

WINNIPEG, CANADA

VOL. IV MAY, 1910 NO. 5

SUBSCRIPTION -TWO DOLLARS A YEAR

Western Canada Medical Journal

GEORGE OSBORNE HUGHES, M.D. Editor — J. T. WHYTE, M.D. L.R.C.P., M.R.C.S., Eng. Business Manager

Commonwealth Block, Winnipeg, Man.

Published on the Fifteenth of Each Month

Vol. IV — MAY, 1910 — No. 5

INDEX TO CONTENTS

Continued on page III

INDEX TO CONTENTS

Continued from page I

NOTICES

Subscription price Two Dollars per annum in advance, postpaid. Single Copies 25 Cents.

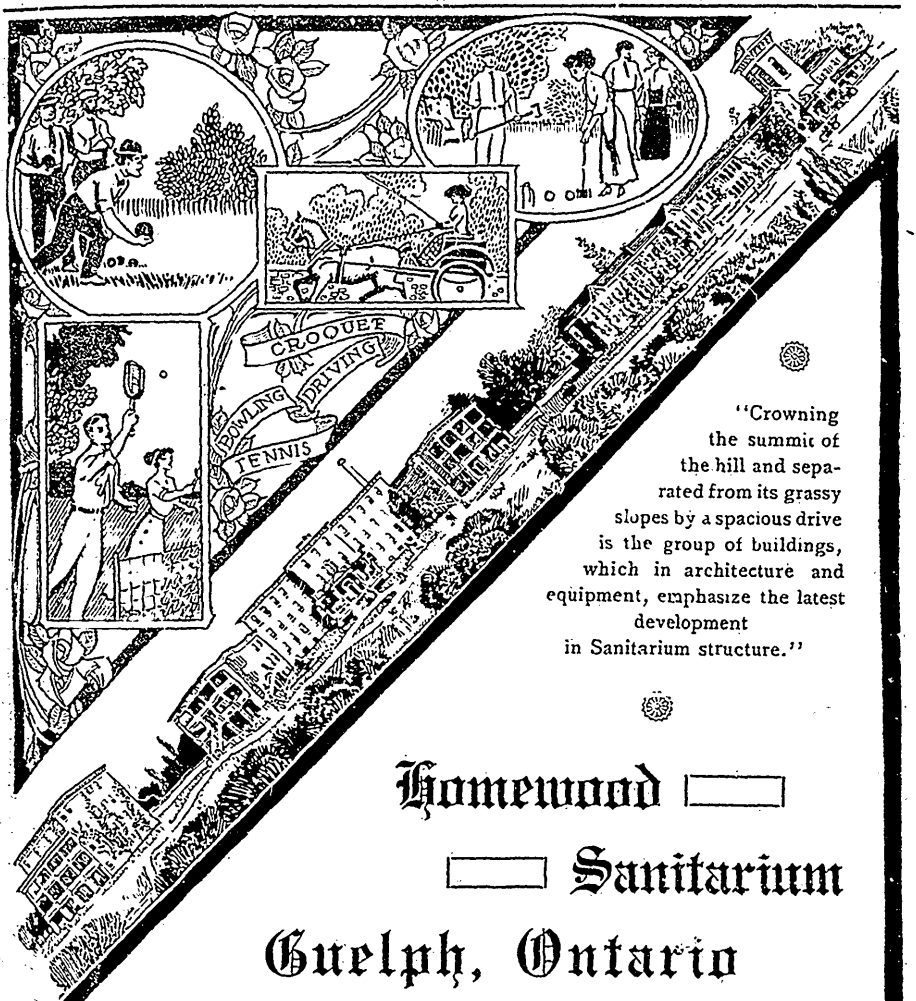
Advertising rates to be had on application.

Remittances at the risk of the sender, unless made by Registered Letter, Cheque, Express Order or Postal Order.

Subscribers not receiving their Journal regularly would confer a favor by reporting such to the "Business Manager."

Original Articles, Letters and Reports should be addressed to "The Editor," Commonwealth Block, Winnipeg.

All Business Correspondence should be addressed to "The Business Manager," Canada Life Block, Winnipeg.



"Crowning the summit of the hill and separated from its grassy slopes by a spacious drive is the group of buildings, which in architecture and equipment, emphasize the latest development in Sanitarium structure."

Homewood Sanitarium
Guelph, Ontario

For Mental and Nervous Diseases

A limited number of habit cases received in separate departments.
Separate hydrotherapeutic plant for ladies and gentlemen.
Modern medical and surgical equipment.
Beautiful lawns and well wooded grounds.
Recreation according to season.
Conducted on strictly ethical principles.
Situated 48 miles west of Toronto on Grand Trunk and Canadian Pacific Railroads. — 38 hours run to Toronto.

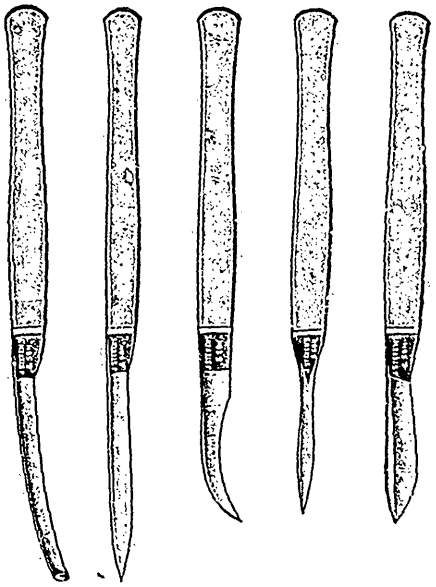
For particulars and booklet apply to Dr. A. T. Hobbs, Med. Supt.

STEVENS' ENGLISH KNIVES

For over seventy years our knives have been used with every satisfaction to the operator.

We have always used the highest grade steel procurable and inspected each instrument as to its temper and finish before putting it on the market; for this reason, we GUARANTEE EVERY blade.

Six sizes of Scalpels Nos. one to six. Regular price 35 cents



Syme's Abscess Sharp Bistonry Tenotomy Blunt Bistonry Regular price $1.00 each

Special Prices, any pattern 65c. each cash.

This price is to introduce our knives into every hospital and surgeon's office in the North West, realizing they will require no further recommendation after once being used. Please mention this Journal when ordering.

STEVENS & SON,

396, Notre Dame Ave.

WINNIPEG.

WESTERN CANADA
MEDICAL JOURNAL

VOL. IV. MAY, 1910 No. 5

ORIGINAL COMMUNICATIONS

EXOPHTHALMIC GOITRE.

a) The Thyroid Theory. b) The Surgical Treatment of the Affection.

By Aimé Paul Heineck, Chicago, Ill.
Adjunct Professor of Surgery, University of Illinois, Surgeon to the Cook County Hospital, Etc.

The Thyroid Theory.

Though it has not been demonstrated beyond scientific contradiction, that in the thyroid gland is to be found the sole primary cause of the disease, we are believers in the thyroid theory, because:

1. There is present some structural alteration of the thyroid body in all cases of exophthalmic goitre. This applies to the secondary as well as the primary forms of this disease. Most of the recent observers have come to the conclusion that the histology of the thyroid gland in primary Grave's diesease is in many respects specific. "We must not conclude that because we cannot detect any enlargement of the thyroid body, that, therefore, the gland is not diseased; it always is."[1]

2. Because exophthalmic goitre is the direct opposite of myxedema in symptomatology, in pathology and in therapeutical indications.

3. Because the symptom-complex of this affection can, to a certain degree, be determined by the ingestion of large doses of thyroid gland substance, or of its various preparations.

4. Because all medical or surgical measures which tend to decrease the functional activity, or to lessen the volume of the gland, also tend to lessen the severity of the symptoms, or to arrest them. Schultze[2] says: "Clinically it makes no difference whether the secretion of the gland is increased, or altered, or is altered chemically as the result of changes in the blood, in the alimentary canal, or in the central nervous system, the fact remains that the removal of the growing gland does away with the symptoms, and upon failure to remove the diseased gland depends the failure of the cure." Incidentally, we may say that the surest and most efficacious way of reducing the volume of the thyroid body is by removing a portion of it.

5. Because in the cases which we[3] have collected and which we report, recovery from the disease, in rapidity and in completeness, has been in proportion to the extent of gland tissue removed, short of its entirety.

6. In those cases in which, after operation, the symptoms recurred, recurrence was associated with, and seemed to be dependent upon, hypertrophic changes in the remaining portion of the thyroid gland. Recovery could be secured by a secondary operation, and was secured in those cases that submitted to a secondary operation.

7. Because the symptom-complex of this affection finds its most satisfactory and its most consistent explanation by considering the condition a general toxemia, the result of quantitative or of qualitative changes, or of both, in the secretion of the thyroid gland. The tachycardia, the mental changes, the sweating, the prostration, the increase of body temperature, the diarrhoea, are all symptoms that we find in other intoxications. It is perfectly possible for a gland to show a great hyper-activity without actual enlargement, as, for example, the salivary gland in the state of salivation.

The anatomical changes noted in the primary and secondary forms of this disease are unlike; so unlike that they of themselves make imperative the classification of the disease into primary and secondary forms. In the secondary cases,

we agree with Dean Lewis[4] when he says that the goitre in the secondary forms does not differ in structure from the simple or parenchymatous, or other goitre, upon which Basedow's symptom-complex have not been grafted. Exophthalmic goitre has been observed in simple goitre, in fetal adnemota, in cysts, and in carcinoma of the thyroid gland. (Bloodgood, Ehrhardt). It has been thought that small tumors of the thyroid gland, the seat of secondary Grave's disease, act as irritant causing an over-activity of the gland, much as a foreign body in the eye will produce an excessive secretion of tears, and the removal of this source of irritation by operation has been followed by a complete relief of the symptoms.

In the primary form of Grave's disease, definite pathological changes are constantly present in the thyroid gland. Kocher and Reinbach, Brissaud and Langhans have denied the above statement, but the existence of these changes have been confirmed by so many competent observers that their occurrence can no longer be contested. (Greenfield,[5] Askanazy, Soupault,[6] Haemig, Aubarsch, McCallum[7] and Ehrhardt). In 28 primary cases of ophthalmic goitre, McCallum found changes present in the thyroid gland in each instance, although all the glands and all parts of the same gland were not equally involved in all of the cases. It is well to bear in mind that changes may occur in one portion of a gland and not in another. Dean Lewis examined the thyroid gland in four cases of primary exophthalmic goitre, and his findings agree with those of Greenfield, Edmunds, McCallum, etc. What are these changes, considered as constant and as almost as characteristic?

1. Changes in the follicles which are increased in number and which are also changed in size and form. Instead of appearing round or square, when examined microscopically, they appear branched and stellate. Dr. Rodocanachy[8] noted an increase in the number of the alveoli, proliferation of the epithelium anc changes in its character. There is presented the appearance of a gland which is working at high pressure.

We find an increase in the secretory tissue, for the number of the alveoli is increased and the epithelial cells, themselves, instead of being cuboidal, are columnar. Dean Lewis[4] says: "It seems as if the proliferating epithelium following the lines of least resistance, had grown into the follicle. The connective tissue of the follicle is also invaginated so that in many sections the invaginated epithelium with its connective tissue stalk resembles an intestinal villus." In other parts of the gland, the follicles are unusually small. Many of the follicles contain desquamated epithelial cells. The secreting area of the vesicles is increased by the ingrowths from their walls.

2. Changes in the character of the epithelial cells. The cells are changed from the cuboidal to the cylindrical, columnar type. The epithelial proliferation may be so great that alteration of the shape of the cells results from mechanical pressure. (Edmunds.) Many of the cells are in the state of fatty degeneration (Virchow).

3. Qualitative and quantitative changes in the colloid. The colliod is greatly diminished in amount; it may be absent. This change, however, has also been noticed in the thyroid gland of patients dying from other diseases. Some of the vesicles, instead of containing colloid, are filled with cells. Is this disappearance of colloid due to lessened secretion, or does it result from more active removal by the lymphatics? That is still an unsettled question.

4. Increase in vaccularity. The blood vessels are distended and are increased in size; the friability of their walls has been noted and commented upon by many operators. (Kummel, Kocher, Mayo).[10] This friability increases the liability to primary and secondary hemorrhages. In this, as in all other active hyperplasia, the enlargement of the nutrient arteries is very evident. No adequate idea of the vascularity of the gland is gained from inspection of the specimen after death, but at operation it is found to be extraordinarily rich in widely distended vessels. This is especially noticeable in the veins.

5. Changes in the connective tissue. There is an increase in the amount of connective tissue. In some cases this increase in connective tissue causes a lobulated appearance in the tumor. The fibrous septa of the gland may show some thickening at a comparative early date. All the above mentioned histo-anatomical changes may exist in small foci and not through the entire gland. Probably this explains why, in some instances, they have escaped the observation of investigators.

The Contrast Existing Between Exophthalmic Goitre and Myxedema.

The thyroid gland is an organ essential to the integrity of the human organism. In the absence of accessory thyroid gland or glands, the spontaneous or gradual arrest of function of this body, or its total destruction by disease, or its ablation, by the surgeon, will almost, if not invariably, be followed by myxedema, either acute or chronic in type. Post-operative tetany and myxedema are identical, as far as their etiology is concerned; one condition often develops into the other. (Von Eiselsberg).[9] Tetany, it would seem, according to the latest researches, is a condition of parathyroid insufficiency (Mayo,[10] Rochester, Minnesota). To avoid removing all the glandulae parathyroidae of the thyroid glands, save the posterior capsule of the thyroid gland. The saving of this posterior fibrous capsule also thereby lessens the liability of injury to the recurrent laryngeal nerves.

The development of impending myxedema can be prevented; its manifestations controlled either by the successful transplantation of thyroid tissue in another part of the body, or by continual injections of thyroid (Vassale), or by prolonged feeding of thyroid gland tissue. (Lanz, Canter).[11]

The above facts are accepted as proofs that myxoedema is a disease due to insufficiency, or to absence, of normally functionating thyroid tissue in the system; as ample grounds for consideration of myxoedema among the diseases of the thyroid gland.

The demonstration of the fact that in exophthalmic goitre we have a disease which is the diametrical opposite of myxoedema in symptomatology, pathology, and therapeutical indications, will aid to give credence to the thyroid theory. Let us consider the evidence that contracts the two diseases.

As to the Essential Symptoms.

Exophthalmic Goitre.

1. Enlargement of the thyroid gland (almost always present).

2. Exophthalmos (a cardinal symptom).

3. Frequent presence of other ocular symptoms, as Von Graefe's, Dalrymple's, Stellwag's, Jellinek and Rosin's, Gifford's,[12] etc. Eye symptoms are of great diagnostic value, chiefly by way of confirmation. Gifford's sign is an involntary resistance to eversion of the upper lid.

4. Excitable and mobile pulse, palpitation, tachycardia. Permanent tachycardia is more commonly met in exophthlmic goitre than in any other affection.

5. Exophthalmic goitre (cardinal symptom). Murray noticed tremor in 111 cases out of 120. The tremor in this condition is rapid and vibratory, there being as many as 8 to 10 vibrations per second.

6. Agitation, insomnia, irritibility, excitability. A peculiar mental condition of nervousness is a common symptom in exophthalmic goitre.

7. More or less profuse perspiration. Skin fine, soft, moist and warm. Feel better in cold weather. Diarrhoea frequent.

8. Typical myxoedema may supervene on the subsidence of an equally typical exophthalmic goitre.

Myxoedema.

1. Atrophy or absence of the thyroid gland (is mentioned in all the reported cases).

2. Recession of the eye-ball not uncommon. In cases not consecutive to exophthalmic goitre, exophthalmos is never present.

3. Absence of ocular symptoms.

4. Sluggish heart action. Brachycardia, a common symptom.

5. Myxoedema Tremor—absent, except in its rare occurrence in tetany.

6. Apathy, somnolence, dullness of apprehension and of perception.

7. Absence of perspiration even in the warmest weather. Myxoedematous skin. Patients always feel cold. Constipation common.

8. Myxoedema never precedes exophthalmic goitre.

As to Pathology.

Exophthalmic Goitre.

Glandular hyperplasia, increase in number of follicles.

Myxoedema.

Follicles are markedly diminished in number; may be absent. In cases where gland is not absent, there is noticed a progressive glandular atrophy.

As to Therapeutical Indications.

Exophthalmic Goitre.

The ingestion of thyroid preparations is almost always harmful. It aggravates the symptoms.

All measures which tend to lessen or diminish the amount of thyroid secretion are followed by improvement.

Myxoedema.

The continual ingestion of thyroid preparations is positively curative.

Implantation of gland tissue, if the latter maintains its integrity, is curative.

The symptom-complex of this affection can, to a certain degree, be determined by the ingestion of large doses of thyroid gland substance or of its various preparations. Our knowledge of the physiological action of thyroid gland sub-

stance, or of its preparations, is still limited. Tachycardia and increased metabolism constantly result from their ingestion. Toxic doses will cause such symptoms as rise of temperature, insomnia, agitation, polyuria, albuminuria, complete paraplegia, etc., etc. These symptoms we also frequently meet in cases of exophthalmic goitre. The fact that the symptom-complex of this affection can be experimentally determined, produced by the ingestion of thyroid preparations, is no longer contested. In our opinion it forms another important link in the chain of evidence supporting the thyroid theory.

Cunningham administered daily by mouth to a rabbit, one gramme of thyroid extract; it caused exophthalmos. Lawford has reported one case of exophthalmos due to thyroid feeding. Edmunds[14] found that feeding dogs and monkeys large amounts of thyroid substance could bring on exophthalmos, tachycardia, loss of weight and wasting. Murray obtained similar results. Nothaft[15] reports a case of a patient who took 1000 5 grain tablets extract in five weeks. He developed all the symptoms of exophthalmic goitre; upon cessation of the drug all the symptoms promptly disappeared, with the exception of the struma and exophthalmos, which persisted for six months and then gradually disappeared. Doyen performed a partial thyroidectomy in a case of exophthalmic goitre, cure resulted. For some reason or other, the patient took some tablets of thyroid extract, the symptoms of exophthalmic goitre recurred. With suppression of the drug, the symptoms subsided. Beclare[16] observed the development of the symptom-complex of this affection in a myxoedematous woman, who had taken at the beginning of the treatment 92 grammes of thyroid extract in 11 days. The drug was discontinued, the symptoms disappeared.

A critical analysis of the voluminous literature of the subject has convinced me that the following conclusions are justified:

1. Thyroid gland substance, or any of its preparations, should never be administered in the treatment of exophthalmic goitre. Their use in that disease is irrational, and it is almost

invariably attended by an aggravation of symptoms. Their use invariably increases the dangers of operative interference. (Kocher).[17]

2. As a therapeutic agent in the treatment of exophthalmic goitre, thymus gland substance and its various preparations are useless. Their use is, at times, attended by an aggravation of symptoms. They cannot be considered curative agents.

3. Parathyroid extract as a curative agent of exophthalmic goitre has no efficacy (J. J. Walsh).[18] McCallum says that the alterations noticed in the glandulae parathyroidae do not seem to be constant or sufficiently extensive to support the idea that the parathyroids have anything to do with the development of the disease known as exophthalmic goitre.

4. The medicinal treatment of the disease which we are considering is, the use of belladonna being excepted, in reality, largely symptomatic. For the anaemia, arsenic has been given; for the restlessness, the bromides; for the tachycardia, digitalis, strophantus, etc. All these agents are palliative, not one has ever proven to be curative.

5. All symptoms of medical treatment of this affection, be they hygienic, dietetic, medicinal, organotherapic or electrical in nature, are unsatisfactory, are disappointing. Their comparative powerlessness has induced surgical endeavors to cure the disease. There is not any form of medicinal treatment which has been successful with sufficient frequency to carry conviction of its worth.

6. Serum therapy of exophthalmic goitre* is as yet in an experimental state. The results attending the use of "thyroidectin" are not invariably satisfactory. Miller,[19] Quine,[19] Billings[19] and others have had failures attending its employment. Their use is not devoid of dangers.

---

*By serum therapy of exophthalmic goitre is meant the employment of either (a) the serum of thyroidectomized animals, or (b) the serum of animals treated with increasing doses of thyroid extract, or (c) milk, in the dried or liquid form, of thyroidectomized goats. With the use of these different sera, authors report failures and successes.

7. It is now demonstrated to be a fact that all operative measures which tend to lessen the secretory activity of the thyroid gland, or to diminish the amount of thyroid gland tissue present in the organism, are of value in the treatment of exophthalmic goitre. That method must be chosen which at the time seems to be the least dangerous without sacrificing chances of success. In Jones'[20] case caustics were injected into the gland to induce necrosis of a part of the paranchyma. This procedure is not to be recommended, owing to its inherent dangers. In this case, however, Jones obtained a cure. Ollier[21] injected Tr. Iodi into the thyroid gland. He obtained a permanent, almost complete cure.

a. Intra glandular injections are unsafe in exophthalmic goitre. There is the danger of sepsis, of injecting the irritant agent into the blood vessels, of provoking alarming hemorrhage into the gland (alarming through the compression that it may exert upon the respiratory passages).

b. The ligation of the thyroidal arteries in this disease was first recommended in 1886 by Woffler. It has been practiced by operators of such eminence as Roux,[22] Rydigier, Kocher, etc. It is now used only as a preliminary or as an accessory step to partial thyroidectomy.

The ligation of the four thyroid arteries is liable to determine gangrene of the thyroid gland, is liable to induce thyroid insufficiency. This has occurred to such an authority as Kocher. Rydigier and Trendelenburg have each had cases of acute tetany follow ligation of the four vessels. Hence it is not to be performed. Kocher does not do it any more as he fears the cachexia strumipriva may follow its performance. The objections to ligation of two or three of the thyroid arteries as a routine treatment of exophthalmic goitre are the following:

1. *It is a procedure often difficult of execution, the hypertrophied* thyroid gland having altered the anatomical relations of the part; the infiltration of the tissues also adds to the technical difficulties. The ligation of the vessels is especially difficult in the retroclavicular and retrosternal varieties of goitre.

2. Owing to the greatly increased vascularity of the organ branches of the thyroid arteries are liable to be mistaken for the trunks of the vessels.

3. It does not secure as complete nor as permanent mitigation of the symptoms as partial thyroidectomy and it is, we believe, equally as difficult to perform. Litigation of the inferior thyroida is just about as serious a matter as thyroidectomy. Dressman states that improvement is slower after ligature of vessels than after operative treatment on the gland. Mikuliez was of the opinion that ligature was more difficult, more dangerous and less efficacious than resection of the struma.

c. Exthyropexy for exophthalmic goitre has been performed with varying results. This operation has been termed "unfinished partial thyroidectomy."

d. In the absence of accessory or aberrant thyroid bodies, total thyroidectomy is very liable to be followed by cachexia strumpriva. This explains why the operation is no longer performed by those that know. Kocher reported 70% of cachexia strumpriva in 34 cases of total excision of the thyroid gland. Post-operative myxoedema can always be controlled by the administration of thyroid extract.

e. Partial thyroidectomy is as yet the most satisfactory operation for performance in all cases of exophthalmic goitre, be they primary or secondary in type. Kocher, as a result of his enormous experience, believes that we can say that thyroidectomy can be performed without danger, provided the heart is sound, careful hemostasis is obtained and the wound drained. In cases that survive the operation, it is invariably attended by marked alleviation of symptoms, in many instances by complete and permanent cure. Kocher is of the opinion that partial resection and ligature of the vessels is the most rational procedure. He first ligates the two superior thyroid arteries. This, in his opinion, is easy of execution and makes the subsequent work easier. He then ligates one inferior thyroid artery before extirpating the gland. No more thyroid tissue need be left in situ than is present in the

normal organism; that is from 30 to 60 grammes. The surgeons that have, for the cure of this disease, removed the largest quantity of thyroid tissue short of its entirety, are those that have obtained the very best results, both from the standpoint of the number of recoveries as well as from the standpoint of completeness of recoveries. If not enough gland tissue is removed, the maximal benefits are not derived from the operation, as in Ehrich's[23] and other cases. Friedheim (Hamburg)[24] is of the opinion that in the cases in which only an improvement has been noted, there is still too much glandular tissue. A small amount of glandular tissue is all that is required to maintain the ordinary nutrition of the body. If too much is removed, thyroid insufficiency may develop. When the thyroid gland is not totally removed, the possibility of post-operative myxoedema can be said not to exist. Kocher met it only once in 1,000 operations for goitre. In this case he removed half the gland, the remaining half atrophied. The symptoms disappeared following the administration of thyroid extract.

8. The secondary forms of exophthalmic goitre, when subjected to partial thyroidectomy, almost invariably recover from the operation and from the disease.

9. Operators disagree as to the most suitable anaesthesia for these cases. All the anaesthetic agents have their partisans. Fatalities have occurred with all of them. Local anaesthetics have the disadvantage of not completely abolishing the perception of pain. General anaesthetics have the disadvantage of increasing the cardiac insufficiency, and of frequently being followed by cough which may induce secondary hemorrhage, by vomiting which may soil and infect the dressings on the wound. Kocher recommends local anaesthesia. The Mayos (Rochester, Minn.) employ general ether anaesthesia in almost all their cases. They are very partial to the use of ether as a general anaesthetic in these cases. Kummell uses oxygen-chloroform. Kurt, Schultze and Riedel[25] have seen an acute bronchitis follow operations for exophthalmic goitre in which only local anaesthesia had been employed.

Ries (Chicago) employs scopalamine morphine anaesthesia. According to Prof. Fenger, the degeneration of the heart muscle will account for some of the sudden deaths; while the absorption of thyroid, shock, anaemia and general nerve exhaustion will account for most of the other deaths that are not due to the anaesthetic.

10. The dangers of partial thyroidectomy in exophthalmic goitre are either avoidable such as infection and hemorrhage, or unavoidable, such as "acute thyroidism." The latter, also called "thyroid fever," is liable to occur after the observance of all precautions now known to us. We do not yet know how to prevent nor how to cure "acute thyoidism." It is not always fatal. Free drainage of the operative wound is our most serviceable weapon for combating this complication. The nature of the anaesthetic, and that of the operation, seems to have little influence in its production. All Basedow's patients seem very sensitive to surgical operations. In the fatal cases of acute thyroidism, there has been a sudden rise of temperature to 105-106° F., a very rapid pulse, extreme excitability and restlessness with great anxiety and distress, profuse sweating and finally collapse and death from heart failure. The most reasonable explanation of this series of symptoms is a sudden poisoning of the entire system by an excessive absorption of thyroid juice suddenly produced during the operation. "In operations on these cases (exophthalmic goitre) there are certain inherent dangers that no amount of cleverness can avert."—Mayo.

11. There is no doubt that the mortality is greater in bad cases than when the symptoms are slighter and the patient in better condition. Early operations give the best results. They give a lower percentage of deaths and a very much higher percentage of cures. Exophthalmic goitre tends to diminish vital resistance and to exhaust the nerve centre, hence operate before the patient's vitality has been lowered by chronic thyroid intoxication. Kocher lays great stress on the avoidance of the development in all cases of goitre of what he calls the "thyroid heart." This, he asserts, can be

acquired either by waiting too long for surgical intervention, or by an excessive iodine or thyroid extract therapy. He assures us that the prognosis in Basedow's disease will be much better in the future, if the operation is done early.

12. Operative points:

a. It is well to prepare patients for some time, to observe them and to better estimate their ability to withstand operation. Before operation all cases should be examined with the laryngeal mirror, so as to determine if one or both laryngeal nerves are compressed by the thyroid growth. This will save you much post-operative concern.

b. Place the patient in the inverted (reversed Trendelenburg) position. Put a round pillow beneath neck so as to give better access to the goitre. Maintain neck in that position. The most rigid aseptic precautions should be observed to avoid infections, mediastinitis, deep phlegmon of neck, thrombopphlebitis, septicemia, etc.

c. Kocher's transverse-convex incision allows of a complete exposure of both lobes. From a cosmetic standpoint it is the best as the usual neckwear will hide the scar. If it is necessary to make a section of the sterno-thyroid and sterno-hyoid, the Mayos advise that this be high, so as to preserve the nerve supply to these structures. After removal of the tumor, divided muscular structures must be sutured. After completion of operation, cutaneous wound must be sutured accurately. Drain through an opening made below this wound. Drainage is essential in these cases.

d. Hemostasis must be perfect. Do not depend on temporary compression to arrest bleeding. It is deceptive. If possible, tie the bleeding vessels. It is preferable to leaving clamps in position—clamps interfere with healing of wound. Nurses should be instructed to watch for the first symptoms of secondary hemorrhage.

e. Tissue shuld be left at the poles of the gland, preferably about the inferior thyroid arteries, so as to reduce the risk of injuring the recurrent laryngeal nerves.

f. Drainage is of the utmost importance. Post-operatively: Wound should be drained freely.

1. To remove what primary secretion is present. Although at the time of operation the bleeding may be stopped absolutely there is always considerable oozing afterwards into the large cavity of the neck which it is impossible to obliterate by sponge pressure. This clot may cause interference with union, may cause pressure upon the trachea.

2. To remove what contents of the gland have been expressed into the wound during the operation. A certain amount of the toxic secretion of the gland being allowed to accumulate slowly in a wound that is closed will often cause such symptoms as may prove fatal in an otherwise successful case.

g. Swab mucus away from throat. There is always after operation in these cases a hypersecretion of mucus giving rise to troublesome coughing. This is one reason why the bleeding points should be well secured for avoidance of secondary hemorrhage.

h. Post-operatively. Keep patient physically, mentally and emotionally quiet.

13. Recovery from all symptoms is neither immediate nor simultaneous. The first symptom to subside is the tachycardia. The tremor and the nervous and physical symptoms also disappear quickly.

The total disapearance of menstrual disturbances is of good prognostic omen. It takes months for the entire beneficience of the operation to become manifest. In many cases the improvement is slow in becoming apparent. The exophthalmos is the last symptom to disappear. Albert Kocher says that a total disappearance of exophthalmos can only be expected in those cases in which the operation is performed early. Eye symptoms disappear in the majority of cases quickly and completely irrespective of persistence or disappearance of exophthalmos. The longer the period of observation after the operation, the better appear the results.

14. When, after a partial thyroidectomy, the symptoms recur, the recurrence is most frequently associated with a hypertrophy of the remaining portion of the gland. Removal of a portion of this will bring about a cure.

15. Partial thyroidectomy is indicated:

1. In all cases of Secondary Exophthalmic Goitre.

2. In all cases of Primary Exophthalmic Goitre:

a. When, after three months of well conducted, appropriate, medical treatment, the patient's condition is not markedly improved.

b. When the goitre compresses or distorts the trachea, or the esophagus, or both. Long continued dyspnea is very liable to beget pulmonary emphysema.

c. When tachycardia is marked. Long continued and excessive tachycardia is very liable to beget organic heart changes.

d. When exophthalmos is so marked as to prevent complete closure of the lids during sleep. Kocher and others report cases where patients lost their eyesight through ulceration of the cornea, secondary to marked exophthalmos.

e. If the patient is losing strength.

f. In all acute cases that seem like sudden intoxication of the body by thyroid, even when no marked enlargement of the thyroid body can be demonstrated.

16. Surgical treatment of exophthalmic goitre is justified by theory and by facts.

1. Campbell, Harry, F.R.C.P., British Medical Journal, 1902, Vol. 11, p. 1420.

2. Schultze, Kurt, Mitteilung, A. D. Grezgebiete der Med. mar Chir., Jena, 1906, Sechzehnter Bd., p. 161.

3. Reineck, Aimé Paul, Surgery, Gynecology and Obstetrics, 1907, Vol. V, p. 623.

4. Lewis, Dean, Surgery, Gyn. and Obs., Chicago, 1906, Vol. LV, p. 476.

5. Greenfield, British Med. Journ., 1893, Vol. II, p. 1261.

6. Soupault, Gaz. Hebdom. de Med. et de Chir., Paris, 1897, Vol. II, p. 664.

7. McCallum, W. C., Trans. Am. Phys. Phil., 1905, Vol. XX, p. 272.

8. Rodocanachy, Lancet, Lond., 1897. Vol. II, p. 911.

9. Von Eiselsberg, in Von Bergman System of Practical Surgery, Phil., 1904. Vol. II, p. 357.

10. Mayo, C. H., Surg. Gyn. and Obs., Chicago, July, 1907, p. 30.

11. Canter, Dr. Charles, Annales de la Soc. Med. Chir. de Liege, 1894, Vol. XXXII, p. 12.

12. Gifford, Ophthalmic Record, Chicago, June, 1906, Vol. XV, p. 249.

13. Starr, M. Allen, Loomis & Thompson, System of Practical Med., Val. II, p. 683.

14. Edmunds, Walter, Brit. Med. Journ., Oct. 1905.

15. Northaft, Centralbl. für innere Med., Leipzig, 1898, Vol. XIX, p. 353.

16. Béclère, Gazette des Hopitaux, Paris, 1894, Vol. LXVII, p. 1114.

17. Kocher, Wiesbaden, 1891.

18. Walsh, J. J., Amer. Med., Phil., 1905. ....

19. Miller, Ill. Med. Jour., Springfield, Ill., 1907, p. 253.
Quine, Ill. Med. Jour., Springfield, Ill., 1907, p. 27.
Billings, Ill. Med. Jour., Springfield, Ill., 1907, p. 260.

20. Jones, Brit. Med. Jour., Dec. 10, 1874.

21. Ollier, 1877, cited by Fraser, Edin. Med. Jour., 1887, Vol. XXXIII, p. 347.

22. Roux, Festscrhift Kocher, Wiesbaden, 1891.

23. Erich, Beiträge zur klin. Chir., 1900, Vol. XXVIII, p. 126.

24. Friedheim, Arch. für klin. Chir., 1905, Vol. LXXVII, p. 917.

25. Riedel, cited by Wette, Arch. f. klin. Chir., 1892, Vol. XLIV, p. 496.

THE AFTER CARE ASSOCIATION FOR BEFRIENDING PERSONS DISCHARGED FROM ASYLUMS FOR THE INSANE.

By Robert Jones, M.D., F.R.C.S. (Eng.), Superintendent of Claybury Asylum.

History.

Inaugurated in 1897 in the house of the late Sir John Bucknill (Mr. Justice Bucknill's father) and started by the late and venerated Rev. Henry Hawkins, chaplain of Colney Hatch Asylum, the Association is a national one, for it helps when it can, cases from all parts, although London alone could more than supply it with cases, as one in every ten persons discharged from the London Asylums is friendless, and the friends of another one out of ten are too poor to afford help. There is, however, at the disposal of the London Asylums, the "Queen Adelaide Fund," which, in the discretion of the Committee, may provide a money gift as a small charity to needy patients upon their discharge recovered.

Help for those discharged "not recovered" from the Asylums is acknowledged as desirable by the state, for by statute the Lunacy Act, 1890, Section 55, enacts that committees of asylums for the insane are empowered to make a weekly grant equal in amount to the cost of maintenance in the asylum to patients, upon their provisional discharge on probation, i. e., those who have not fully recovered. This power is frequently exercised for a period, usually, of about four weeks. This grant, however, does not apply to those who have been absolutely discharged "recovered" from the asylum.

(It may be explained here that there are practically three methods of discharge from lunatic asylums. (1) Recovered

—for whom "after care" is needed and it is for some of these that the Queen Adelaide Fund is eligible. (2) On probation or trial "not recovered" and these may obtain the money for about four weeks referred to above. (3) Not recovered and not on probation nor trial, when friends request the care of those insane and who may thus, by the Lunacy Act, 1890, Section 79, be given to their charge.)

The Association has never been in debt and possibly this may be a demerit, but its funds are very inadequate to support the numerous cases—all deserving—that appeal for help. It has had the direct patronage of H.R.H. Princess Christian, and the personal help and pleading of the Archbishop of Canterbury, of Cardinal Manning, the Earl of Meath, the late Lord Shaftesbury, the late Sir Andrew Clarke, Sir William Church, and the great Dr. Hack Tuke, also for the last twenty years it has had the experienced assistance of Mr. Thornhill Roxby as organizing Secretary.

It is the only Society which exists for the housing and for finding occupation for those who have been discharged from the asylums as recovered. Unfortunately, unless brought prominently forward, such a society makes no appeal to public benevolence, owing to unjustifiable prejudice against mental illness, but in spite of being a society unlikely to achieve popularity, it has, since its establishment, relieved very many cases. The Society was founded by practical men as the outcome of an undoubted practical want.

Objects.

The object of the After Care Association is to find suitable cottage homes in healthy country districts where convalescent patients are boarded, and where they gradually become rehabilitated to domestic life and home duties, after a compulsory residence of varying duration in asylums. The finding of these homes entails considerable enquiry and careful inspection. But the "After Care" not only finds homes, but also situations suitable to the capabilities of those they help, and it also supplies clothing where necessary, or may

give money grants, but, as patients who have long remained in asylums are probably somewhat incapable of obtaining the full advantage of money when left to themselves, this form of help is only a subsidiary and occasional form of assistance.

"After Care" in Other Countries.

1. In several cantons of Switzerland such an institution exists.

2. In France, but only for the department of the Seine, there is such a society and a home for patients discharged from asylums, the home being under a religious sisterhood. The good work there done is recognized by the state, which contributes towards its support.

3. In Germany the Duchy of Hesse has had such an institution for 25 years.

4. The American Medico-Psychological Association, and the American Neurological Society are strongly recommending such a society for America.

Reasons for Supporting the Association.

It affords help to those against whom popular prejudice is unjustifiably pronounced, for there are many temperate, well-conducted women—both young and middle-aged, single and widowed—who have broken down through sheer stress of work, domestic trouble, penury, privation or poverty, and who have no friends, no relatives and no homes. Again, both men and women of education and refinement, members of professions and literary vocations, governesses, teachers and many such like, who, from no fault of their own, have sunk from their former positions in society through advancing age, competition, disappointment and failure and need help. These find their way into the pauper asylums, and, unlike a hospital where cases of bodily illness are treated and for whom the situation is often kept open, the uncertainty of the duration of illness in mental cases finds the victims shut out from

earing a living and with their situations filled upon their recovery and discharge. Not only are they shut out, but, owing to acts whilst their insanity was developing, a return to their former neighborhood and position is not only uncomfortable but often impossible. Many of these have to begin life again and truly such people not only need, but are most appreciative of sympathy and kindness.

2. The Association is a bridge over the gulf between the asylum and the outside world. It tests their fitness for living outside and thus enables them to make a fresh start in life.

3. It prevents relapses because many—women especially—return to poor homes where deprivation and want cause them to break down again, and the Association helps to confirm good health by restoring confidence in themselves and building them up before going home.

4. Long residence in asylums has deprived many of situations and friends, and if no such homes as the "After Care" existed, the only alternative upon recovery is the workhouse—a most undesirable and hopeless place into which to launch a convalescent—for an indignity is felt by the respectable and a feeling of degradation is engendered by compulsory association with low characters, which often leads to a relapse. It is only too well known that association with the ordinary inmates of a workhouse does not improve the self-respect and self-control of honest people, least of all of "mental" convalescents.

5. The discharge of friendless cases from asylums is known to be postponed from month to month when there is no home and no friends to send them to. Therefore it is to the advantage of the public and the pocket of the ratepayer—a strong appeal now-o-days—that the work of the After Care Association should be expanded.

6. A voluntary association does much more than state-aid to encourage benevolence in the affluent and thrift, self-respect and self-control in the recipient of help.

Further Programme for the After Care Association, if Well Endowed.

1. It could look after the family when a patient enters the asylum so as to preserve the home for the patient on discharge, thus preventing the anxiety experienced in regard to possible dependence leading to pauperism, when the home, as often is the case, is broken up.

2. By placing patients in family care, it would educate and familiarize the public with the causes and phases of insanity and would help to engender a "hygienic conscience" in the people.

3. It would teach the public the elements of "First Aid" in mental cases and help to break down prejudice and the stigma which attaches to the mentally afflicted.

4. Such an arrangement would permit of cases being discharged earlier from mental hospitals and asylums and would result in economy of public funds.

5. It would also do more than any amount of theoretical advice in regard to carrying out the laws of health and would greatly supplement the teaching of "Hygiene and Temperance."

Reasons for its Existence.

1. Hospitals for bodily diseases have convalescent homes to bridge over a time of bodily exhaustion and impaired health, and there are societies for looking after the discharged criminal, but the society affording relief for the most piteous and hopeless affliction that can affect humanity is languishing for support.

2. The number of insane persons in England and Wales officially notified by the Commissions in Lunacy to the Lord Chancellor, in their report issued in 1905 as a Blue Book, was 119,829, or 1 in 280 of the population. Of these 109,277 were pauper lunatics, the larger proportion, 59,097, being females, belonging mostly to the working classes, but in the case of

many women of the middle and educated classes for the reasons already given, a helping hand would be very greatly appreciated.

The employment or vocation of these women is representative of most occupations. In the year 1904 there were admitted into the London County Asylums 450 domestic servants and other occupations connected with household duties. On December 31st 1904 there were resident in the London County Asylum 16,987 patients of whom 9,824 were females. The percentage of women who recovered in 1904 was 39.48% of the admissions for the year, many of these friendless and homeless.

CONCERNING DIRT.

By Nictitans.

"Martin, if dirt was trumps, what hands, you would hold!"
—(Lamb's Suppers.

Some such reflection as this passes through the mind of every school doctor and every knowledgable person who investigates the children of some of our elementary schools. Custom cannot stale the horror of the grossness of the dirt, nor familiarity breed contempt in the breast of the onlooker; but alas! how different the attitude of the dirty one.

To the school doctor the subject of dirt is not a matter for reflection merely; he is actively engaged in combating it, for it is wedded to his arch enemy, disease. He speedily finds that his work is essentially a branch of education, a necessary part of a liberal education, if you please; and he becomes an apostle of cleanliness. Day in and day out, at every school and in every class-room, he becomes a teacher of the prime necessity of cleanliness—clean bodies, clean hair, clean mouths, clean clothes, clean class-rooms, clean air, and, by no means least, a powerful, if only indirect, teacher of the necessity for clean homes,

In this article I wish to outline some of the conditions incident on dirt which have come within my particular view in school work; to remark on school and home conditions which affect cleanliness; and to suggest the powerful influence that modern school work may bring to bear upon the rising generation for the betterment of the general habits of the communtiy.

Just before school medical inspection began to exert any influence on London schools I examined the children of thirty public elementary chools in the Hackney division of London The children ranged from seven to thirteen years of age. The schools were subsequently classified, as I judged the general

situation of the region, the housing and the condition of the children favorable to their well-being. Thirteen schools were found in which the children reached a fair average of cleanliness, three schools were above average, and fourteen below.

The eye conditions of these children worked out as follows:—

Cleanliness.	Cases of Disease.	Percentage.
Above average	19 in 2,174	0.873
Average	134 in 9,463	1.416
Below average	197 in 10,256	1. 92
Totals	350 in 21,893	1.608

The "clean" schools were situated in the north of Hackney, where good housing and many open spaces are found; the "dirty" schools in Hoxton, Haggerston, and Bethnal Green, where are miles of mean streets crowded with humanity. The schools above the average of cleanliness had an incidence of disease of about one-half that found for the schools below the average cleanliness; yet it must be remembered that no one of the best schools was without some dirty and ill-kept children, for in every part of London is found some "slum" street which breeds its quota of dirtiness.

If we look into the eye conditions which make up the 350 cases found in these schools, we shall have a fair idea of how dirt influences their causation.

Conjunctivitis accounted for 37 cases.

Phlyctenular conjunctivitis, being associated with nasal catarrh, septic teeth, bad feeding, and general malnutrition, accounted for 53 cases.

Blepharitis, almost exclusively a dirt disease, accounted for no less than 260 cases, or, roughly, 75 per cent.

I have said blepharitis is almost exclusively a dirt disease. I think the description is justified. It is true that its acute onset is often associated with measles or other exanthem, and that its chronic form is almost always associated with some error of refraction, some visual defect in the eye, that tires the eyes and inflames the lids, but the fact remains

that this sort of eye disease is not seen amongst clean folk, except in its most elementary form. In other words, cleanliness keeps down its manifestation, but dirt increases it. Cleanliness reduces the microbe that set up the ulceration of the irritated eyelids, dirt increases their number and fosters their activity. The final effect of this simple disease is disgusting in the extreme; the subject is permanently disfigured by red, flabby, lashless eyelids. No wonder Jacob loved not Leah with her "tender" eyes!

Now I will give you some much more delicate indications of the influence of dirt on the susceptibility to disease. Everyone knows the rôle of micro-organisms, and in particular the action of micrococci and bacilli in the production of disease. The succeeding notes will show how far cleanliness and dirt affect the number of these organisms about the eyes of children, and consequently their chances of eye infection.

The conjunctiva frequently harbors microbic parasites. These I collected by suitable means, and incubated in the usual bacteriological manner. Two schools were selected, one situated in the north of London, newly built, well-situated, amid comfortable dwellings, filled with clean and well-cared-for scholars; the other, situated in the densely-populated district of Bethnal Green, an old building, within a district of poor cottages, "model" dwellings, and workshops, and filled with ill-kept scholars. The one school was above the average of cleanliness, the other was below the average. The head teachers selected groups of children as their average scholars who presented clean, healthy conjunctivae. In each school fifty children were examined, twenty-five boys and twenty-five girls. They were chosen of ages of five, seven, nine, eleven, and thirteen years, of each five children. The weather on several days preceding the inoculations had been wet in the extreme, so that one common source of conjunctival infection in towns, street dust, was entirely absent.

Of the 100 conjunctivae examined 23 were sterile. Of the 50 "dirty" children only 3 were sterile; of the 50 "clean" children 20 were sterile. The totals of the colonies of organ-

isms grown in all cases show very well the difference in the incidence of micro-organisms in dirt and cleanliness. "Dirty" group 789 colonies; "clean" group 262 colonies.

Twenty-eight different varieties or organisms were distinguished, in most cases they were common parasites; diphtheroid organisms were found 36 times, and staphylococci, pus organisms of the mildest virulence, 43 times. Some pathogenic organisms were found, and these almost exclusively amongst the "dirty" group, thus: The Bacillus Koch-Weeks, the cause of epidemic muco-purulent catarrh, was found in one; the Bacillus Morax-Axenfeld, the cause of angular conjunctivitis, in three; the pneumococcus in one and streptococci in four.

These examples are eloquent of the effect of dirt on disease; but before we leave the subject let me give you one more example in which two indicators of dirt and ill-condition are compared together.

"Follicular conjunctivitis" is to the conjunctiva what enlarged tonsils and adenoids are to the throat and nose. All three conditions indicate some general lack of health. Seeking to discover the variations in the incidence and size of these lymph follicles in the conjunctiva, I made a systematic examination of over 1,000 children in a fair average London school, noting at the same time the visual acuity of each and both eyes, and also in the girls the condition of the hair on the head, of whom 80 per cent. had nits in their hair.

I found that the incidence of the lymph follicles in boys and girls agreed from the ages of three years to nine years, but from then the girls increased over the boys by 30 per cent. This sudden and continued excess among the girls was inexplicable until I chanced to place alongside the charts the curve of the incidents of nits in the girls' heads; then it was seen that the curve of incidence of the nits was similar to that of the follicles in the girls. There is a fair average level between the ages of four and nine years, then a sudden rise of 20 per cent. in the tenth year, followed by a slow decline in subsequent years. Inquiries amongst the teachers showed that

about the age of ten the girls were expected by their mothers, most of whom were working women, to take their share in the home duties. With this responsibility came the liberty to look after their own toilets and the like, hence the increase of the nits, an indication of neglect of the person, and with this an increase in the lymphatic structures as indicative of diminished good health. When personal pride comes in as a factor the person becomes cleaner, the curve of nits falls, and with better cleanliness and health the curve of the follicles also declines. Let it be clearly understood my suggestion is that these two conditions are dependent upon a common cause, dirt or lack of care of the body, and not that nits cause conjunctivitis or vice versa.

Fighting Dirt.

So much for my main thesis. Dirt is a foe just as much as the full blown manifestation of disease. So it is dirt we have to combat. To this end the recent progress of medical inspection of school children has been an inestimable boon. The visits of the school doctor and the school nurse have awakened an interest and intelligent judgment on the subject that has already borne much good fruit.

Dirt reigns rampant upon the shoulders of three giants: Ignorance, Indolence, and Poverty.

That people should be ignorant of the dangers of dirt, and even of the state of dirt in which they and their children repose, is not to be wondered at. Cleanliness is essentially a modern virtue. It may have blossomel in well-favored communities in the past, but never to the degree and extent found to-day. Within but a few generations of our own the fashionable beauty was not ashamed to carry a back-scratcher wherewith to relieve her body from the torment of the hosts that overran her bejewelled person; in fact, she dallied deliciously with the instrument in public, for was it not fashioned delicately, and enriched with gems? What was an apparently normal state formerly is now an indictable offense in the school world! Is there no progress, oh ye pessimists?

Ignorance must be dispelled. People do not know what

dirt is until with the eyes of intelligence they regard it apart from themselves. I remember a cultured young lady bringing me a head-louse which she had found on her comb during toilet operations, she showed it to me as a curious natural history specimen, all unaware of its significance! The nimble flea she would doubtless have known and crushed with vindictive anger and disgust, but of this creature she was ignorant. With the poor there is less of this sort of ignorance, but more of a kind that asserts that it is a state of nature, the "weakness" or the "strength" of the child, as occasion may suggest, "breeds the thing"!

Next to these, poverty is the giant upholder of dirt. It costs money to be clean. Water, soap, towels, and heat are not the gifts of the gods, but of the strong, right arm of the worker, and without these prime necessities of cleanliness, or the chance to get them, dirt cannot be vanquished.

Man is not necessarily a dirty animal. Circumstances may make him so, but in my experience the opportunity for cleanliness is eagerly seized. In South Africa I saw on more than one occasion groups of negroes washing their bodies at the river banks, not merely bathing on a warm day, but diligently cleaning themselves. In many parts of the Transvaal water is precious and hard to come by, so the Dopper Boer was by circumstances not a frequent and liberal user of water; but when in charge of a company of them as prisoners-of-war on a transport ship, I found they seized the opportunity for washing with eagerness, the deck of the ship was alternately a vast bath-house and a busy laundry.

It was not long ago that the epithet of the "great unwashed" was hurled at our own poor. And so they are. But whose fault is it that they are unwashed? Can they wash and be clean in cramped, over-crowded quarters, in regions where bathing facilities are conspicuous by their absence? How can a family living in a single room bathe their bodies? Decency forbids them to be decently clean! There is a sense of delicacy common to the people which is a thing to be fostered. In one of our great provincial cities, where courts

abound, there were formerly common privies for a whole court, with the result that the younger woman suffered habitual constipation; they would not, and then they could not, use the common 'privy.

Again, to wash and be clean is easy and pleasant in a well-appointed bath-room, where taps labelled "hot" and "cold" gush forth their sparkling fluid to a turn of the wrist. But how can you wash children in the cold, and when there is no warm water and good soap to remove the dirt? I can remember the lack of interest the bath presented when encamped upon the high veldt, when the water gathered ice upon its surface, and a keen cold wind blew through any crevice of a thin canvas screen. It was better to be warm than clean! If cleanliness be next to Godliness, why has not each church its bath-house attached, with its doors as freely open to the poor as the door of the house of prayer? Is the baptistry dead?

Lastly, an enlightened Board of Education should foster, not hinder, the spread of cleanliness amongst the children of whom it is the official guardian. The present-day cloak-rooms of schools are an abomination, a general exchange for the livestock of the child community. How can a hard-working mother keep her children clean when her child is compelled to hang its outdoor clothes side by side, nay, fold on fold, with those of a dirty and verminous child? Is it fair to handicap the best endeavours in this way? In some schools the clothes are hung on pegs on the walls of the staircases and landings, exposed to the dust and dirt, and the repeated contacts of the stair traffic. How can clothes be clean under such conditions? If the school cannot directly help cleanliness, at least let it not spread dirt.

In one instance I know of, the superior educational authority placed a direct handicap on an effort to attain cleanliness. By a co-operation of the local health and education authorities, verminous children were sent to the public washhouses during school hours (the time when alone arrangements could be made certain) for a very necessary cleansing. But the superior authority disallowed the mark for attendance at

school. To the credit of the local authority, let it be said, they preferred to lose the mark for attendance than forego the cleansing of the children.

The influence of the teacher, the nurse, and the doctor is not limited to the children immediately under their care. The influence spreads far and wide. Remembering this, we should endeavour to direct it along lines that will ultimately promote public order and cleanliness.

The street pavements, those excellently ordered ways of modern life, are defiled hourly by the inconsiderate spitting of men who were recently school children. Let anyone examine the footways where workmen congregate during the dinner hour, their state will disgust his. Time was when the street was the common kennel into which every manner of filth was pitched irrespective of the risk to the passer-by; now such an offense is at the peril of the doer. May the time soon come when spitting will be no less an offense.

It is a sad thing to note that the ancient Hebrew law-giver had to give specific directions to the man on his conduct when he passed the bounds of camp in response to nature's call, when the very dog has an instinct that needs no teaching. A pity it is that the law-giver did not lengthen the decalogue by one more "Thou shalt not——"

> "Thou shalt not spit, or cast refuse upon, or in any way defile a public place; for he that defileth the city, the habitation of his brethren, shall not go unpunished."

Public opinion, backed by the occasional wholesale stimulus of a smart fine at the hands of a wideawake magistrate, will do much to lessen the evil; but those who control the training of children can do must by engendering such a habit of mind as will induce a decent habit of body.

In conclusion, let me add that we doctors say these things in no spirit of harsh criticism; we do not yearn to pluck out the mote from our brother's eye, not regarding the beam that is in our own eye. Rather, in the spirit of the friend of John Gilpin, we exclaim:

> "But let me scrape the dirt away
> That hangs upon your face."
>
> —From "The Englishman."

EDITORIAL

The Canada Medical Act.

The chief reason for the publication of the Western Canada Medical Journal four years ago was to help forward the *movement of a high medical standard in* the West and Dominion Registration. Speaking from personal knowledge and experience of the standards in many different countries and the effect of restrictions in registration and differences in standard of education on the real welfare of the race, one would consider that the ideal will be reached when we have World Registration. No doubt the future will see that, but at present the nearest seems Colonel Laurie's Bill proposing British Empire Registration. But, as before argued, one must work from the parts to the whole. The best of everything is reached by stages—hence as first step to Dominion Registration we urged Western Registration with a high standard. If there had honestly seemed any possibility of attaining Dominion Registration quicker and easier, then certainly it would have been preferable. But there seemed and seems no possibility because of the diverse interests that have to be appeased before Dominion Registration can be accomplished—also by the hindrance caused by not going about the matter in a truly constitutional way—**that is through the Councils.** Our Councils are either our head authorities or nonentities, and judging from the active interest taken in the matter by the Western Councils they are not nonentities. Western Canada is getting populated so rapidly that it is the duty of the medical guardians to see that properly qualified assistance is present for the demand and also to see to the strict enforcement of Public Health laws—a matter of vital import to the permanent prosperity of the

West, though at present not appreciated either by the public or Legislature. One thing is obvious—the desire of the Western Medical Profession for a high standard of qualification for registration. Another point is also clear and that is that few medical men in the West are likely to go East to practice after settling in the West. "Westward the course of Empire takes its way." Charity begins first at home—and what we in the West have to consider in this Act and its amendments are the Western interests, not those of any particular clique—a fair and square deal to every member of the profession in the West, and to make sure that in every decision regarding medical matters in the Dominion, the West is allowed to have some say.

A copy of the original Canada Medical Act and the proposed amendments have been received. Continuing the discussion of the matter begun in last month's issue one would point out that these amendments were passed by a Committee of the Canadian Medical Association—the western representatives on that committee being Dr. Blanchard (Winnipeg) and Dr. Tunstall (Vancouver)—only one of whom is on the council of his respective College of Physicians and Surgeons—note that the western representation for this most vital decision was two, and only one a member of the council of our highest tribunal—the College of Physicians and Surgeons of each province.

What we want is Dominion Registration. Let us consider the proposed Act and its amendments as the terms affect the West.

(1) The Council is to be made up of three members elected by the Governor-General.

(2) Each province is to have two members and when over fifteen hundred (1,500) medical men are in a province—three members on the Council.

(3) Each Medical College has to be represented by one member.

(4) The Homoepathics have three representatives.

Let us work this out. We may conclude that the Western Medical Profession at present numbers 1,600, while Ontario alone has 4,000, so that the Governor-General will probably elect two from the East and one from the West.

That there are six homoepathic medical men in the West and that in their case the East will have two representatives to one in the West.

Nova Scotia has one Medical College, Quebec two, Ontario three. Six Colleges altogether. While Manitoba has a Medical College which is a private corporation, affiliated with the University. Manitoba would thus have only one. This gives the East ten representatives and the West three—10 to 3. The provinces of Prince Edward Island, New Brunswick, Nova Scotia, Manitoba, Saskatchewan, Alberta, British Columbia will have two representatives each while Ontario and Quebec will have three each. Consequently the East will have twelve (12)—the West will have eight (8). That is in the sum total the East will have twenty-two (22) to the West's eleven (11)—that is two to one. This is what we are told is equal representation. When Western Federation was arranged no favors were given except to Manitoba, and these were because practically the Council of Physicians and Surgeons had no powers, because it had abdicated its rights in favor of the Manitoba University, the Medical Department of which is controlled by the Manitoba Medical College—a private corporation—(for the benefit of which a representative of convocation on the University objects most strenuously to the giving back to the Council of the Manitoba College of Physicians and Surgeons the rights which would never have been given up if the welfare of the profession as a whole had been considered). It is to the credit of the members of the late University Commission that they unanimously recommend the return of those rights to the College of Physicians and Surgeons, and it is only in the interest of the Medical College that they will be withheld, if withheld at all.

We are told often that in every phase of life we must work out our own salvation. The West, realizing this, set to

work vigorously to work out Western Medical Salvation by means of one standard, and that a high one, and one registration for the West, giving a square deal to all provinces. At the Banff Conference, Ontario sent a representative requesting that Ontario take part in this Western Federation. One thing is clear, that at present the West cannot be left alone. It is still considered to be under the charge of the East. The East says Saskatchewan and British Columbia are not in sympathy with anything but Dominion Registration. It is highly probable that we who live and work in the West, and are in constant touch with the profession of the West, know better the desires of the West than a few at headquarters in the East. Not content with general knowledge, we have made extensive enquiry and find that Western Federation and a Western Canada Medical Association are greatly desired by Western men. There is a motto, "Let sleeping dogs lie." It would have been better had the Western Federation been allowed to go through—Dominion Registration would assuredly have followed as soon as it possibly could. As one authority in the West writes: "The history of the Canada Medical Act and Western Federation points out the difficulty of reconciling the differences of Eastern and Western Provinces in one organization primarily and the comparative ease with which two widely separated territories might unite in harmony when the time came for Con-federation." This puts in a nutshell the sentiment expressed throughout the West.

Note also that a quorum is eleven. Headquarters will presumably be Ottawa. To get a quorum there will consequently never be any need for a Western representative to be present. As arranged so far all business can be done without a Western vote. The time occupied and distance to travel will be factors often likely to prevent the attendance of Western representatives.

Examinations are to be held only where there are Medical Colleges—consequently all Western men taking exams must come to Winnipeg—no other centre being provided for.

These are points it would be well to seriously consider. British Columbia Medical Council should be thanked by the Western men for being alive to the interests of the profession in the West as shown by their request for time to consider the Act and its amendments. Saskatchewan College of Physicians and Surgeons was too newly formed to be able to commit itself, but there is no doubt that the desire of the men on that Council is to consider the welfare of the profession they represent, and though in full accord with a Dominion Registration under a Board representing the Profession through the Councils, they are not ready to give over their rights to an independent Board primarily responsible to the Canadian Medical Association which has taken upon itself the framing of the Act and its amendments.

All of which proves we better after all look after our own salvation and the affairs of our own house by securing Western Federation. We can then turn our attention to Dominion.

CORRESPONDENCE

GREATER BRITAIN AND THE ANNUAL MEETING, 1910.

Sir,—The Colonial Reception Committee is particularly desirous of bringing the Annual Meeting, to be held in London in July next, to the notice of all medical practitioners residing in the dominions beyond the seas, as affording them an unusual opportunity of visiting London both for the scientific purposes of the meeting and also for social intercourse with their fellow-practitioners throughout the Empire.

The Colonial Reception Committee, in conjunction with the Colonial Committee of the Central Council, desires, through the medium of this journal, to extend a very cordial invitation personally to all medical practitioners in the colonies, and assures them of a hearty welcome to the Annual Meeting and to the capital of the Empire.

Great efforts are being made by these two committees to arrange such entertainments as it is hoped will meet with the approval of their colonial brethren, and so add to the success of the meeting of 1910.

We are, etc.,

Edmund Owen, Chairman Colonial Reception Committee.
Donald Armour, Hon. Sec., Colonial Reception Committee.

429 Strand, W. C., Jan. 3rd.

Editor Western Canada Medical Journal.

Dear Sir,—I would be pleased to see in your columns a discussion of the following incident from the standpoint of medical ethics, bearing on the patient, consultant and attendant. I have attended the patient for a period of over 18 years, our relations always appearing the most friendly. About 8 weeks ago he took an attack of La Grippe accompanied by Neuralgia and followed by Otitis Media (suppurative). After an illness of about 6 weeks he appeared practically convalescent, but after moving about the house an attack of Gallstone came on which had lasted about eleven days the patient then being much better, but on account of what he and friends thought was unusual weakness, without consulting me, they arranged to have a doctor from an adjoining town see him. They then informed me that they had called in another doctor and asked me if I would meet him. I remarked that I scarcely considered it necessary as the patient was much better, but would meet the consultant when the train arrived.

I went to meet the train, but failing to see the doctor arrive, concluded he had not come and went home to luncheon. Within about fifteen minutes of the time the consultant's return train was due I received a phone from my patient's house that the consultant wa:

there. I made all possible haste but when I arrived found the consultant had seen the patient, changed all the medicines, arranged to have a nurse of his selection placed in charge and taken his departure for the train. I hastened to the station, met the consultant, asked his opinion of the case. He confirmed my diagnosis and intimated that he considered the case going satisfactorily, but possibly there might be a necessity for operative treatment. He then boarded the train but on second thought got off and remarked that he had left some prescriptions at the drug store which I was to see and use my own judgment regarding. I saw the prescriptions and explained to patient and his wife that they were practically the same as I had been giving and the consultant was satisfied that my diagnosis was correct. Patient's wife remarked that was what he told us. Later I learned that patient's wife phoned consultant asking him about the prescriptions he was to leave at the drug store and he told her to have them made up and administered. This was done and at my next visit I enquired who was to direct the nurse when she arrived, patient's wife told me the consultant's medicines were to be given as he prescribed them and I told her unless I was free to use my own judgment I could not continue in attendance on the case and asked them to decide. She said the patient would do so, and I have heard nothing further from them.

Yours truly,

INQUIRER.

Ethics of Consultation.

By Salford Division: That the following principles dealing with the ethics of medical consultation be approved:

(a) When a patient who has not previously been seen in consultation calls on a consultant at his rooms without introduction from a general practitioner, inquiry should be made in every case as to whether the patient is under the care of any practitioner.

(b) If it is ascertained that the patient is not under the care of another practitioner, there is nothing ethically wrong in the consultant prescribing at his rooms for the patient; but it is inadvisable for any practitioner who wishes recognition as a consultant to attend any patient at the patient's own home except in co-operation with a general practitioner.

(c) If it is ascertained that the patient is under the care of another practitioner, it is the duty of the consultant to use every endeavor to persuade the patient to allow him to communicate with the attending practitioner, but should the patient refuse this permission, the consultant has the right to make an examination and to express an opinion, but not to undertake the treatment of the case. B.M.J.

EXTRACTS.

The Use of Paper Bottles in the Delivery of Milk would be a step in the right direction—cleanliness and prevention. We now get butter and ice cream delivered in paper boxes; eggs in cellular boxes; oysters in paper boxes, and cold meats. Paper wrappers for loaves are used by some bakers. Milk, however, so susceptible to contamination, is delivered in vehicles which the day before may have carried milk to a scarlet fever, typhoid or diphtheretic person.

The single service container as exemplified in the paper bottle and the abolition of milk cans and glass bottles would bring milk for direct consumption from the udder to the mouth, from the teat to the tongue. And they could be made educators by being labelled with pertinent facts.

The United States Department of Agriculture in Bulletin No. 46 says: The ideal package for milk carriage and delivery is one that would be light, clean, safe, and could be used only once and then destroyed.

Dr. Ernest Wende, Health Commissioner of Buffalo, says: The abolition of the existing milk cans and bottles, and the adoption of the single service paper containers for direct consumption—no pasteurized, sterilized or certified milk can compete with the raw milk from the healthy udder. This close tie between cow and consumer must not be severed by manipulations that are deleterious and by cans and bottles that are unsanitary.

All food for man's consumption must be handled with the greatest care and intelligence in order to prevent sickness and disease in the human being; and it is inconceivable how prone we are to go along year after year knowing that articles of food, particularly milk and bread, these essentials of daily life, are handled in the primitive way of our grandfathers. May the day speedily come when milk is delivered in the single service container and bread likewise.

—Dominion Medical Monthly.

McGill University Faculty of Medicine.

The new buildings which are being erected for the accommodation of the Medical Faculty, and to replace those which were destroyed by fire three years ago, are now approaching completion, and will, it is hoped, be ready for occupation in the early summer. The Medical Faculty has therefore decided, with the sanction and approval of the Principal and the Governors of the University, to hold the next Annual Convocation, for the conferring of degrees in Medicine in the new building and to arrange for the formal opening ceremonies at the same time; and to further signalize the event by carrying out a long contemplated plan for the reunion of all her graduates. His Excellency the Governor-General has consented to be present, and a provisional programme has been arranged, a copy of which is appended. All graduates are cordially invited to be present.

Canadian Medical Association.

For the 43rd annual meeting of the Canadian Medical Association in Toronto, on the 1st, 2nd, 3rd and 4th of June, transportation arrangements are in force on the Standard Certificate plan, with the exception of British Columbia, where the regular summer tourist will prevail. All intending delegates should consult with their ticket agents when purchasing first-class transportation to Toronto, as to rates, dates of sale of tickets, and time limits and routes. For these purposes the Association and the Canadian Dental Association are coupled; and fare will be single for going and returning if three hundred are present at the two conventions holding Standard Convention Certificates, between Halifax and other Eastern points and Laggan and Coleman, B.C. The first general session will be held on the afternoon of the first day, when the President-elect, Dr. Adam H. Wright, Toronto, will be installed in office and the opening ceremonies will take place. Following this there will be the report of the Milk Commission by the Chairman thereof, Dr. Chas. J. Hastings, Toronto, and addresses by Dr. Evans, of Chicago; Dr. North, of New York, and others. On the evening of the first day, Dr. Herringham, London, England, will deliver the address in Medicine, which will be followed by the discussion on Do-

minion Registration. The sections which have exceptional programmes will meet in the forenoons. On the afternoon of the second day (Thursday) there will be an excursion to Niagara Falls and a dinner at the Clifton House. The address in Surgery will be delivered Friday afternoon by Dr. Murphy, of Chicago, followed by a symposium on exophthalmic goitre, and at 5,30 p.m. the annual meeting of the Canadian Medical Protective Association will take place. Friday evening the address in Obstetrics, By Dr. Henry Coe, of New York, followed by a symposium on the psycho-neuroses. A general session will be held Saturday forenoon, and about eleven an excursion will be taken to Guelph to visit the Ontario Government institution in the Royal City.

The Canadian Association for the Prevention of Tuberculosis.

The year 1909 will be marked in the calender as a red letter year in the history of the crusade against consumption. The movement received a great impulse from the congress of distinguished physicians which was held in Washington, U.S., in the autumn of 1908 to consider the further measures to be taken to stamp out this dreadful enemy to the life and happiness of mankind.

Canada in common with the rest of North America, perhaps we should say the whole civilized world, has participated in the renewed and increased activity which resulted from the deliberations of the congress.

Never since the organization of the Canadian Association for the Prevention of Tuberculosis has there been such activity displayed in Canada in this fight for life. Older branch associations have been reinvigorated, new associations have been formed which are showing in many cases a vigorous activity. Several new institutions for the relief and treatment of consumptives have been opened and the demand for our literature has been larger than ever. Take it all in all 1909 was a year of great progress in the work of the Association.

The The Tenth Annual Meeting will be held in Montreal on the 7th of June next and preparations are being made to make this one of the best, if not the best meeting in the history of the Association.

MEDICAL NEWS

Chancellor Jones, of New Brunswick University, has accepted the appointment to the commission charged with the selection of a University site. Dr. Pritchard of the Carnegie foundation is unable to act. Professor Weldon of Dalhousie University has gone to British Columbia to act as member of the commission to select a site for the Provincial University. The Provinces now represented on the tribunal are New Brunswick, Nova Scotia, Quebec, Ontario and Saskatchewan.

The tenth annual meeting of the Canadian Association for the Prevention of Tuberculosis will be held in Montreal on the 7th of June 1910.

The British Columbia Government is considering an advantageous site for the border line isolation hospital to be erected somewhere in the vicinity of Phoenix for the use of that city, Greenwood, Grand Forks, the Mother Lodge and other centres. Another hospital will probably be located near Kamloops, while it is probable a site may be chosen in the dry belt upon which the government may establish an institution for the treatment of advanced cases of tuberculosis.

There has been an epidemic of scarlet fever in Regina. The large infant mortality in many Western towns is causing comment. A motion by Alderman Wright requesting the Regina City Council to establish a city nursery passed unanimously.

Dr. Crichton, Seattle's Commissioner of Health, claims that the milk supply of that city is purer than that of any other city in the world, except Stockholm, Sweden, and a few Scandinavian cities. The milk inspectors of Scandinavia must be certified veterinaries and graduates of dairying colleges. The health of the cattle comes under their jurisdiction. The inspectors superintend the handling of the milk till it reaches the wholesalers. They also visit the wholesalers and retailers and even the home of the consumer. It is realized everywhere that impurity in milk bears directly upon the high death rate of infants and affects greatly the health of the public.

A substantial and attractive hospital is to be built at Prince Rupert, B. C.

Preparations are being made in Vancouver for a Crematory in the Mountain View Cemetery. The Vancouver authorities are going into the advisability of such before granting the necessary permission.

A case at present before the British Columbia court is testing the powers of the recently passed Medical Act. George Evans, styling himself chirapractic, is being sued for practicing medicine without being duly registered. Mr. Stuart Livingstone is prosecuting for the Medical Council and Sir Charles Tupper is retained for the defence. The case is considered an important test one and is being watched with interest. An adjournment was ordered.

The Nurses' Club, Victoria, B. C., have condemned the present isolation institution as unsanitary and recommended a new building be erected without delay.

The request of Vancouver for an isolation hospital on the military reservation has been granted. A site will now be chosen subject to the approval of the military officer commanding the district.

At an important meeting held regarding aid for the Sanitarium for Tuberculosis at Tranquille, B. C., the argument was advanced that as it was a national scourge it required national attention and that the work was one for the Government rather than for societies and municipalities. A resolution was passed to the effect that all citizens ought to give whatever aid they could for the institution and the Dominion Government should come forward with a grant, while it was well within the duties of the Provincial Administration to take over the care of the patients at the Sanitarium and assume the expense of its upkeep.

The Royal Commission appointed to decide the question of the British Columbia University are as follows: Dr. Weldon, Dalhousie; Canon Duthie, Laval; Dr. Skelton, Queens; Principal Murray, Saskatchewan; Dr. Pritchett, New York, President of the Carnegie endowment establishment.

A Law Requiring Dentists to Be Physicians was passed by the last legislature of the State of Virginia. By the provisions of the new law all dentists to receive licenses must first pass the Medical Examining Board and then the Dental Board.

An International Exhibition will be held in Dresden from May to October, 1911, under the directorship of K. A. Ligner and Dr. Renk, director of the Central Office for Care of the Public Health, in Dresden. The general secretary for the scientific department is Dr. Weber, member of the Imperial Board of Health of Berlin. The exhibition will be divided into five sections, under the headings of scientific, historical, popular, sports, and industry.

Dr. Thatcher, of Philadelphia, Pa., is bringing out a journal that should be of great value to the profession at large. He calls it "The Physicians' Business Journal. The first issue comes out this month.

NOTICES

The American Proctologic Society holds its 12th Annual Meeting at St. Louis, Mo., June 6th and 7th, making the Planter's Hotel their headquarters. The annual address of the President, Dr. Dwight H. Murray, Syracuse, N. Y.,—subject, Undergraduate Proctology—will be delivered at 2 p.m. June 6th. There are many interesting papers, as, The use of Quinine and Urea Hydrochloride as a Local Anaesthetic in Ano-Rectal Surgery, by Louis I. Hinchman, Detroit, Mich.; Skin Manifestation of Amebrosis, by John I. Jelks, Memphis, Tenn.; Pain and its Significance in Rectal Condition, by I. Coles Brick, Philadelphia, Pa.;A Brief Review of American Proctologic Society from its Organization to Date, by Lewis H. Adler, jr., Philadelphia, Pa., etc. The profession is cordially invited to attend all the meetings.

Officers of the Society are: President, Dwight H. Murray, M.D., Syracuse, N. Y.; Vice-President, T. Chittendan Hill, M.D., Boston, Mass.; Secretary-Treasurer, Lewis H. Adler, jr., M.D., Philadelphia, Pa.; Chairman of Executive, George B. Evans, M.D., Dayton, Ohio.

The Annual Meeting of the American Medical Editors' Association will be held at the Planter's Hotel, St. Louis, Mo., on Saturday June 4th and Monday June 6th. The officers of the Association are: President, W. A. Young, M.D., Managing Editor Canadian Journal of Medicine and Surgery, Toronto, Ont., First Vice-President, W. A. Jones, M.D., Editor Journal of the Minnesota State Medical Society and Northwestern Lancet, Minneapolis, Minn.; Second Vice-President, M. M. S. Johnstone, M.D., Associate Editor Woman's Medical Journal, Chicago, Ill.; Secretary-Treasurer, Joseph MacDonald, jr., M.D., Managing Editor of the American Journal of Surgery, New York, N. Y.

A magnificent programme has been arranged covering matters of vital importance and interest to every medical editor and associate editor in the United States. I trust you will leave no stone unturned to be with us on this occasion.

PERSONALS

Dr. J. T. Cooper who recently sold out his practice at Swan Lake, Man., to Dr. Tisdale, has located at Scott, Sask.

Dr. and Mrs. Harrison, of Edmonton, have been visiting Vancouver and Victoria.

Dr. H. G. McKid, of Calgary, Chief Surgeon of the C.P.R. Western division has been visiting Moose Jaw to confer with representatives from Regina, Outlook, Indian Head, Weyburn and other points regarding the work for the coming summer.

Dr. George A. B. Hall has been appointed Medical Health Officer for Victoria at a salary of $200 per month. He is to devote all his time to civic health duties.

Dr. Porter is conducting an anti-tuberculosis campaign

throughout Canada under the auspices of the Dominion Government. He has gone to Victoria and on his return will lecture in various cities.

The City Council of Victoria has decided to appoint a Medical Health Officer for the city who will devote himself entirely to corporation work. Dr. H. Robertson, the Medical Health Officer, has sent in his resignation.

Dr. and Mrs. Hogle, of Nanaimo, have settled in Vancouver. They have just returned from their six months' trip abroad.

Dr. William Howard Dickson, of Phoenix, B. C., has been appointed Medical Health Officer.

Dr. Hartrick Harrison, of Atlin, B. C., has been appointed resident physician for the district of Atlin.

Dr. Seymour, Commissioner of Public Health, has been to Maple Creek to superintend the action being taken for the control of smallpox cases.

Dr. Welch, of Okotcks, is giving up his practice there and will probably settle in Calgary.

VITAL STATISTICS

Winnipeg, April, 1910.

Diseases	No. of Cases.	Deaths
Typhoid Fever	4	..
Scarlet Fever	49	6
Diphtheria	16	..
Measles	145	..
Tuberculosis	26	17
Mumps	4	..
Erysipelas	3	..
Whooping Cough	4	3
Chicken Pox	4	..
	255	26

Note—Tuberculosis are the notifications of 4 months.

GOOSTREY—On April 12th to Dr. and Mrs. Goostrey, of Vancouver, a son.

Dr. J. H. O. Lambert, for 21 years a resident physician in St. Boniface and many years Coroner of the district, passed away at St. Boniface Hospital on May 7th after a prolonged illness. He was 58 years of age. Dr. Lambert was born in the Province of Quebec. In 1876 he graduated from Victoria College, Montreal. He practiced in Quebec for some years and moved West in 1883, settling in St. Boniface, where for many years he held the office of Coroner. He is survived by his wife and three grown up children, one of whom, Dr. C. A. Lambert, practices in St. Boniface at the present time.

VACANCY

Doctor wanted to take charge of small hospital for two or three weeks. Apply Rev. J. Antle, 1033 Cardero Street, Vancouver, B. C.

BOOK REVIEWS

High Frequency Electric Currents in Medicine and Dentistry: Their Nature, Actions and Simplified Uses in External Treatments. By S. H. Monell, M.D. Finely illustrated with special instruction plates. 8vo, 448 pages, extra cloth, price $4.00 net. Published by William R. Jenkins Co., 851-853 Sixth Avenue, New York.

This book is easily read. The Chapter on Life Phenomena and Electricity is an interesting analysis of the natural forces working in the human body. The Chapter Fulguration might better have been left out. It is well illustrated. Dr. Monell is an enthusiast and his book portrays it.

International Clinics: A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles. Edited by Henry W. Cattell, A.M., M.D., with the Collaboration of Leading Members of the Medical Profession Throughout the World. Vol. I, Twentieth Series, 1910. Price, bound in cloth, $2. J. B. Lippincott Company, 1910, Montreal.

Devotes three chapters to Syphilis taking cognizance of the Serum Diagnosis through Drs. Swift and Noguchi. Dr. Sachis gives an interesting paper on Syphilis of the Nervous System. In a later chapter Dr. Fan William, of Washington, D. C., gives a few words on Tabes. A chapter on Chronic Mucous Colitis, by Dr. Dudley

Filton, of Los Angeles, is very interesting and gives a resume of what he found and did in 158 cases. Dr. Emil Beck has a paper on the Diagnostic Value and Therapeutic effect of the Bismuth Paste in Chronic Suppuration. The illustrations are very good. The last three chapters are a resume of the Progress in Treatment, Medicine, and Surgery.

The Sexual Life of Woman in its Physiological, Pathological, and Hygienic Aspects. By Heinrich Kisch, M.D., Professor of the German Medical Faculty of the University of Prague. Only Authorized Translation into the English Language from the German, by M. Eden Paul, M.D. With 97 Illustrations in the Text. New York: Rebman Company, 1910. *Pp. xi-686. Price* $3 50

Prof. Kisch has given the reader a book in three parts, corresponding to the Epochs of a woman's life. The first Menaretie or the Appearance of Menstruation—deals with the development and disorders that accompany puberty, giving a very interesting portion to The Sexual Impulse. The second—Menacme or "The Culmination of Sexual Development during which the Processes of Reproduction, Copulation, Conception, Pregnancy and Lactation occur." Much of interest is found here, especially the part devoted to The Determination of Sex. The third or Menapouse. The part here given to Hygiene during Menapouse is good. The book is full of valuable assistance and the translator has taken a great deal of trouble.

Sluss (J. W.). Manual of Emergency Surgery. Second Edition, Revised. With 600 Illustrations. 12mo; xii+745 pages. Full Limp Leather, Gilt Edges, Round Corners, $3.50 net. Chandler and Fisher, Winnipeg. The first edition of this book was exhausted within one year from date of publication.

In this Manual Dr. Sluss covers a large field very well. The illustrations are good and instructive. It should be specially useful to the country practitioner.

The March number of the Laryngo-Scopi is of special interest to the profession as it contains a complete Index Medicus of Oto-Laryngology for 1909. Its price is $1 and does great credit to the editor and publisher.

Enquiry:—What book on "Skin Diseases" would you recommend for a general practitioner and what would be the price of same?

Ans.—Diseases of the Skin by H Radcliffe Crocker is the best—and for a small work one by Malcolm Morris & Dore on diseases of the skin. For price, etc., write J. J. Dougan, Vancouver.

Synopsis of Canadian North-West Homestead Regulations

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

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

DUTIES:

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

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

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

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

W. W. CORY,

Deputy of the Minister of the Interior

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

A Year Without Kasagra

One of the largest hospitals in Canada formerly dispensed Kasagra exclusively.

It looked like a large single item and it was thought economical to try lower-priced goods.

A year has given ample time to try almost every available competing product.

The other day, without solicitation, they again contracted for Kasagra.

Can we give you any better proof that Kasagra is unquestionably not only the best, most uniform, but most economical product on the market for the purpose.

Kasagra is over twenty years old and its consumption is daily increasing.

That's a record we are proud of.

Frederick Stearns & Company

Windsor, Ont. **Detroit, Mich.**

Favorites for Many Years

These are long-established successes. They have been before the medical profession for a quarter of a century. They are prescribed in every civilized country in the world.

Liquor Sedans.

Each fluid ounce represents: Black Haw, 60 grains, Hydrastine, representing 30 minims fluid extract Hydrastis, Jamaica Dogwood, 30 grains; combined with aromatics.

Utero-ovarian sedative and anodyne of the highest merit. In the treatment of functional dysmenorrhea, menorrhagia, ovarian irritability and menstrual irregularity it has been prescribed with marked success in many thousands of cases.

LIQUOR SEDANS, Rx. 2 (WITHOUT SUGAR) has the same formula as **Liquor Sedans** except for the omission noted.

LIQUOR SEDANS WITH CASCARA is identical with **Liquor Sedans** except that each fluid ounce contains 10 minims of the fluid extract of cascara sagrada.

SYRUP Trifolium Compound

Each fluid ounce represents, Red Clover Blossoms, 32 grains; Lappa, 16 grains, Berberis Aquifolium, 16 grains, Xanthoxylum, 4 grains; Stillingia, 16 grains, Taraxacum Root, 16 grains; Cascara Amarga, 16 grains; Potassium Iodide, 8 grains.

One of the most valuable alteratives known to the medical profession. It is widely prescribed in scrofulosis and cutaneous affections. It meets important indications in secondary and tertiary syphilis, acting as a tonic to the digestive, assimilative and excretory organs. It is successfully used as a vehicle for the prolonged administration of inorganic alteratives in cases in which they could not be tolerated alone.

SYRUP TRIFOLIUM COMPOUND WITH CASCARA has the same formula as the older preparation with addition of 4 grains of cascara sagrada to each fluid ounce.

PARKE, DAVIS & COMPANY

Laboratories: Detroit, Mich.; Walkerville, Ont.; Hounslow, Eng.

Branches. New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Minneapolis, London, Eng., Montreal, Que., Sydney, N.S.W., St Petersburg, Russia, Bombay, India, Tokio, Japan; Buenos, Aires Argentina.