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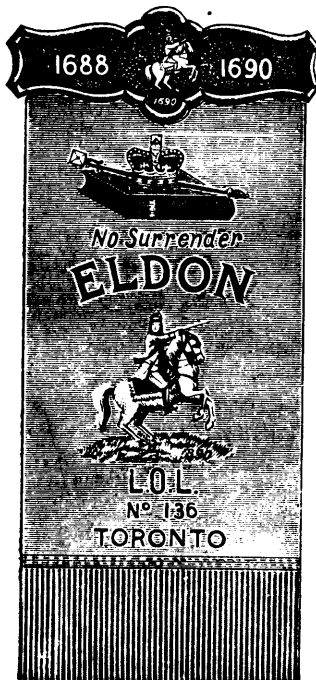
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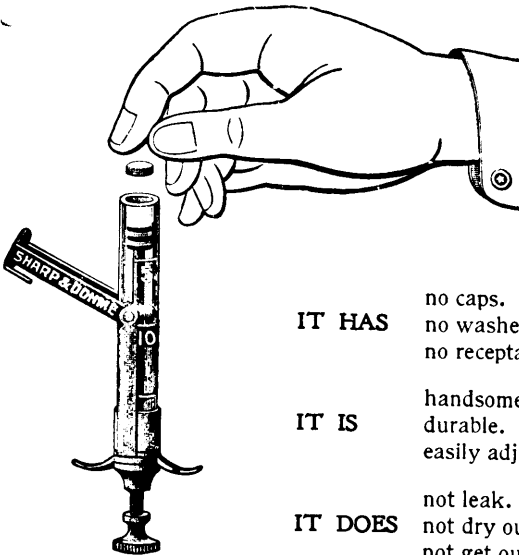
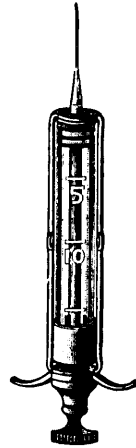
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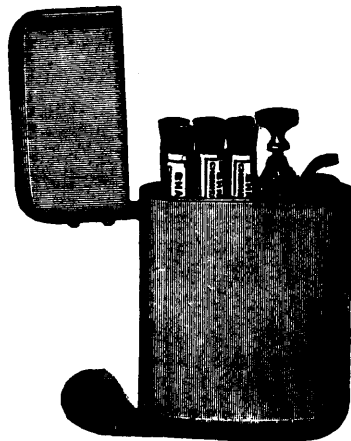
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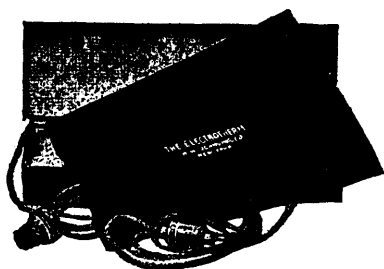
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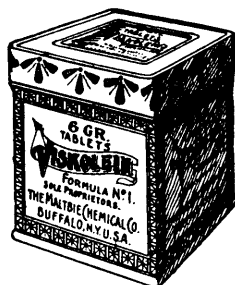
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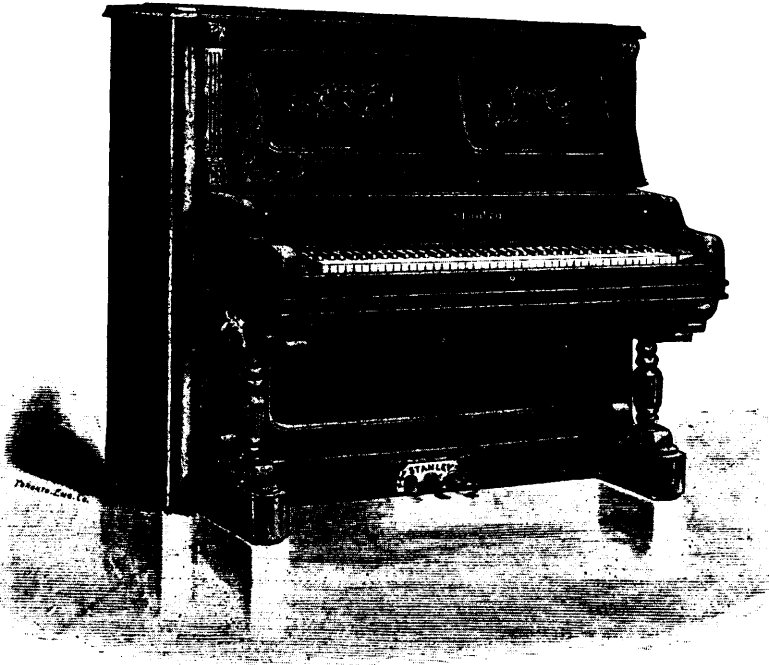
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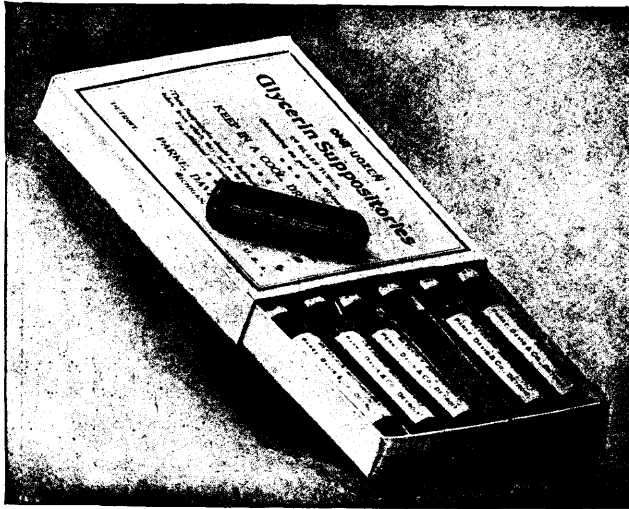
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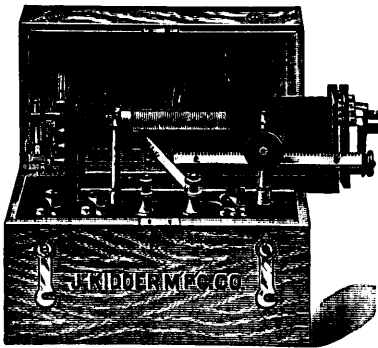
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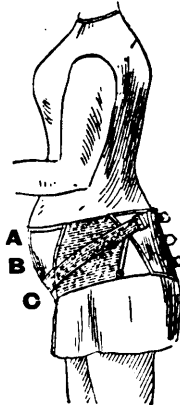
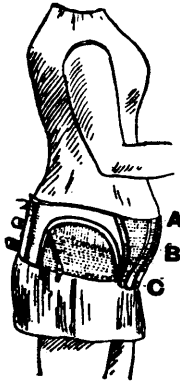
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M. D.,
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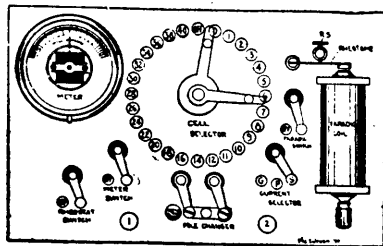
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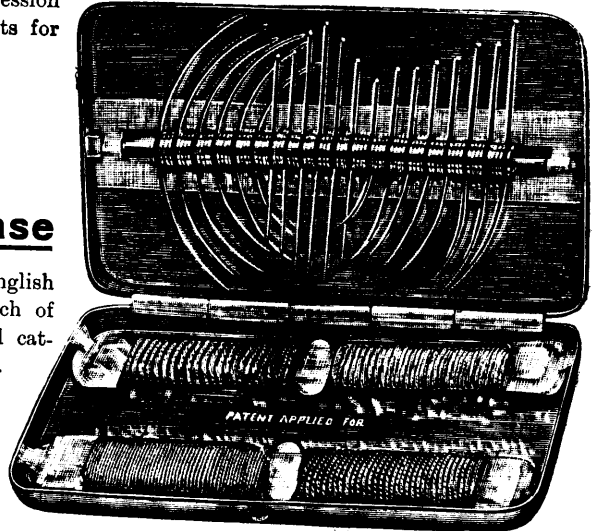
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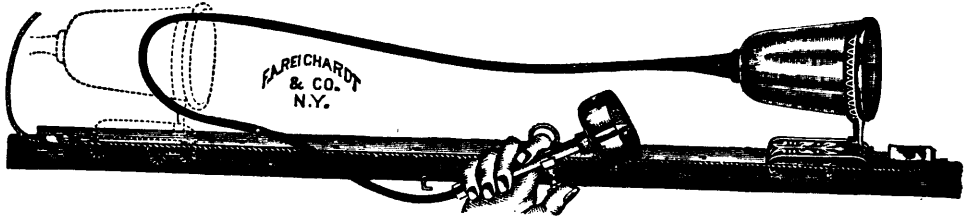
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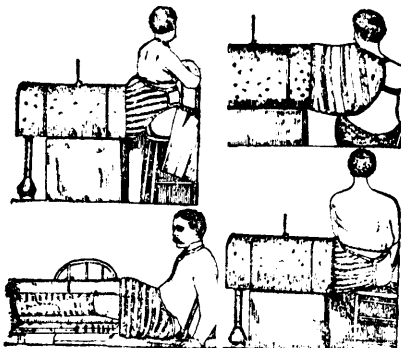
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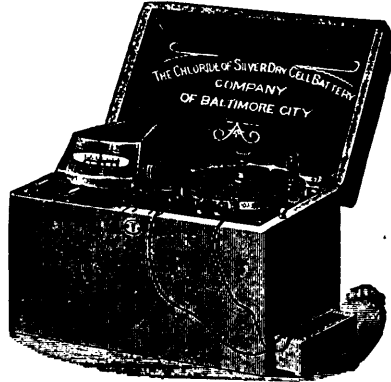
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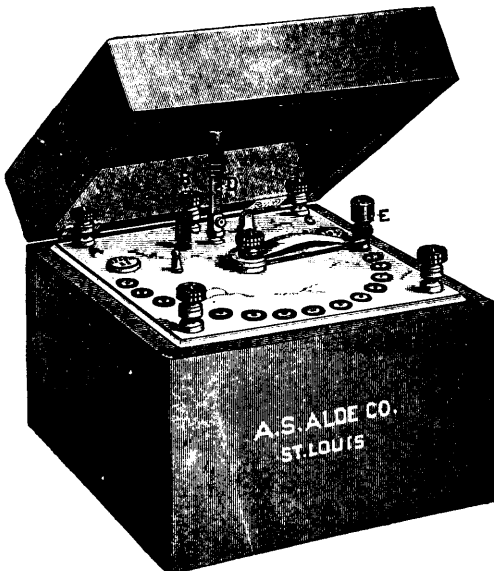
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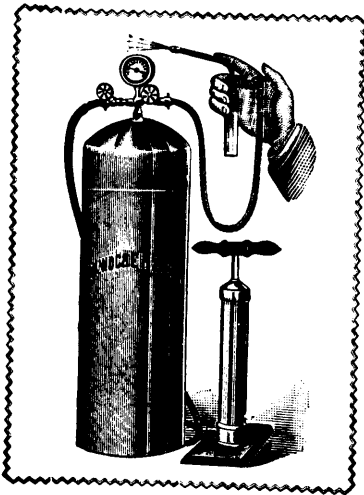
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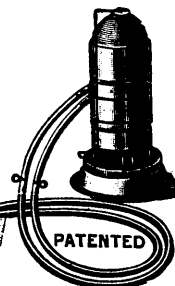
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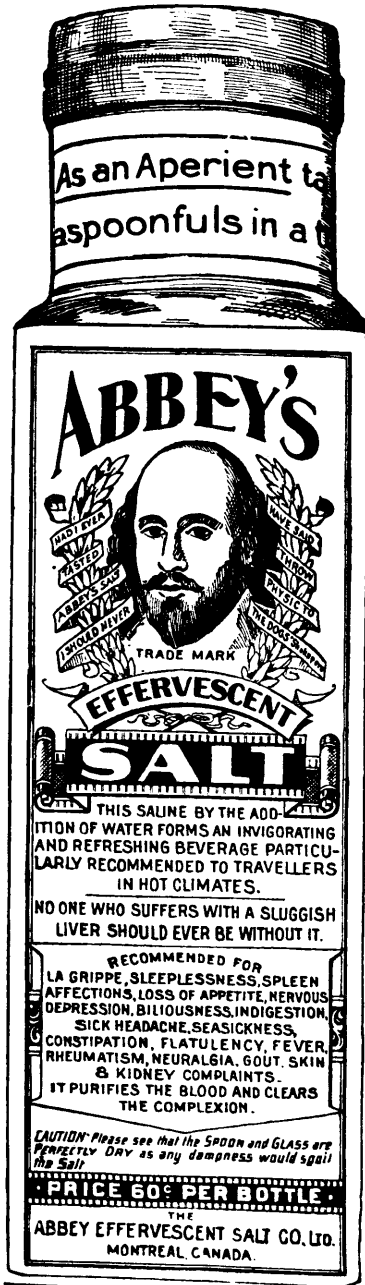
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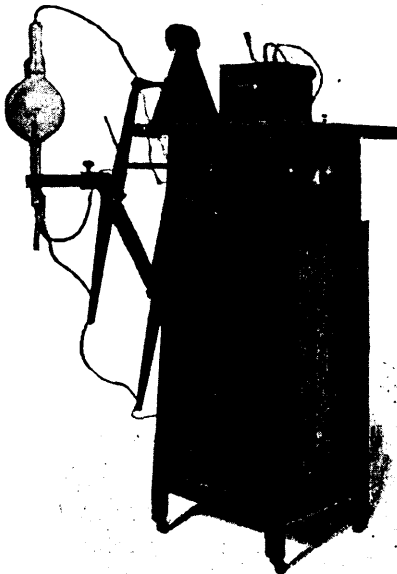
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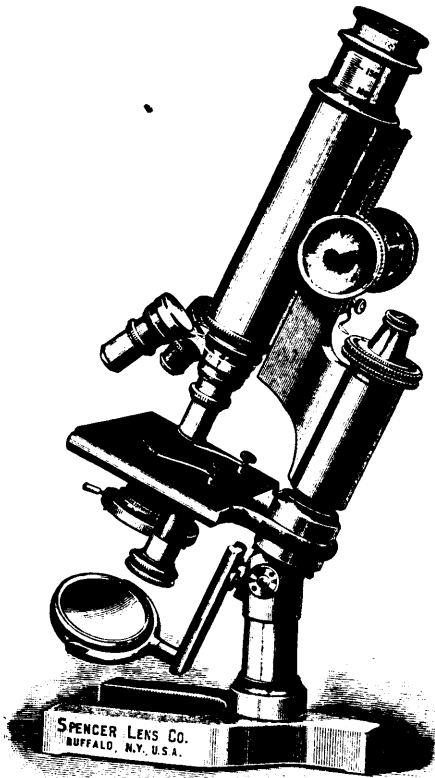
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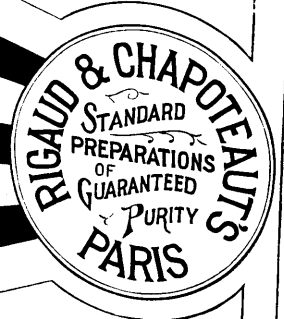
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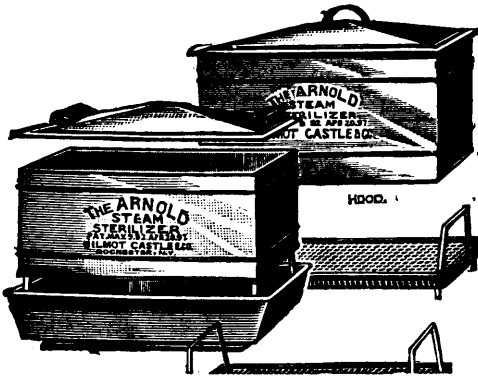
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Original Contributions.

MENTAL CAPACITY IN WILL-MAKING.

BY ARTHUR JUKES JOHNSON, M.B., M.R.C.S.(ENG.)

A MEDICAL practitioner may be asked to make a will for a patient, or witness the signing of a will, or express an opinion as to whether or not a patient is in a fit condition to make a will, or from facts supplied to him, to give an opinion as to the state of mind in which a deceased person was when he executed his last will and testament.

As to making a will for a patient, though it may at times become necessary on account of impending dissolution, a medical man should never consent, if it is possible to secure the services of a solicitor, or if not even of a friend to do the work for him.

In the witnessing of the signature to a will, it should be remembered that when a medical man signs his name as a witness it does not merely mean that he thereby acknowledges that the testator really did sign the document in his presence, but rather that the testator was in a fit and proper condition to sign the will. Therefore before a medical man undertakes to make himself a witness to a will he should satisfy himself as to the state of mind of the testator. If a medical man be asked to decide whether a dying person is or is not in a fit state of mind to make a will, it is as a rule only necessary to ascertain whether the sick person can clearly and rationally answer a few questions put to him or can repeat unaided the provisions of the will he wishes to make. If a dying or sick person cannot do this without prompting or suggestion, there is, as Taylor says, reason to believe that he has not

a sane and disposing mind. At the same time it must be remembered that to render a will valid the law requires that the testator should possess at the time the will was executed "a sane and disposing mind," though interpretation of this term frequently depends upon the nature of the will itself, rather than on the mental condition of the testator at the time of making the will.

Another class of cases is that in which a medical opinion is sought as to the testamentary capacity of a feeble-minded person who is not ill or dying. In these cases much more care in examination is required, and a private interview with such a person should always be insisted on. Besides the ordinary questions put to test the mental capacity of the individual, carefully framed questions should be asked to ascertain if possible how far any undue influence has been brought to bear from without. It has happened that the patient will disclose the existence of such undue influence when treated in this way, which he never would have mentioned or even agreed to were he in the presence of the person exerting such undue influence over him.

When a will is in dispute after the death of the testator, and a medical opinion is asked concerning the probable testamentary capacity of the deceased, the inquiry becomes much more complex and searching. The points for consideration will now embrace the evidence obtained from the friends of deceased, who were well acquainted with him and his habits and opinions, and were on such terms of intimacy with him as should enable them to supply as fully as possible the data on which to form a conclusion. The evidence obtained from this source should be a reliable guide in many ways. From these witnesses we can learn whether deceased was ever treated by anyone as if he was incapable of managing his own affairs. They will probably know something of the testator's acts and correspondence, and from the actions of these friends of deceased we should learn whether they ever had any distrust of his sanity or capacity to make a deed while he was living.

The evidence to be obtained from the will itself is this: Does deceased express in it such a disposition of his estate as it is reasonable to expect he should make? We should not be surprised to find that the will of an eccentric man contains evidences of his eccentricities, which would be such as might always have been expected from him; and in this way his will may perhaps be unjust in our estimation to the near relatives or friends of the testator yet it will not necessarily be void, unless it becomes apparent that the seeming injustices in the will are due to the influence in the mind of the testator of a delusion, and that the will was made under this delusion. Proofs of such delusion should be carefully examined, as it must be remembered that what relatives assert to be delusions are sometimes found to be actual facts.

In the wills of the insane, that is, in those wills which are based on certain delusions, it will be found that they bear no resemblance to a will made by the same man before his mind was affected by

his delusion. Such a will is wholly different from what it would be reasonable to expect it would be had it been made prior to the dominancy of the delusion on which it is based.

Formerly the English law was that if there was any evidence of unsoundness of mind in the testator, it was *prima facie* evidence that he was unfit to make a will, for it was held that "the mind, though it has many and various faculties, is one and indivisible." If then one of these faculties is weak or disordered, the whole mind must share that weakness or disorder, and consequently cannot be sound. The late Sir Alex. Cockburn changed all this some years ago when he gave judgment in the will case of *Banks vs. Goodfellow*, (59, B. 549). In this case Banks, whose will was being contested, had been insane, and had been in an asylum, and though discharged at the time he made his will had certain fixed delusions. One of these was that a certain man long dead continued to haunt and molest him, another, that he was interfered with by devils who were visibly present. Added to this he had recently had a number of epileptic fits. On the other hand it was shown that at the time of making his will Banks was a shrewd, careful business man, and managed his affairs, such as they were, correctly. Sir Alex. Cockburn thereupon pointed out that a degree or form of unsoundness of mind that neither disturbs the exercise of the faculties necessary for such an act, nor is capable of influencing the result, ought not to take away the power of making a will.

It has therefore been held that the mere existence of a delusion in the testator's mind should not vitiate his act unless it can be shown that the delusion formed the ground work of the act, or that the testator's mind was influenced by such a delusion.

If the provisions of a will are just and reasonable, and the delusion does not affect those provisions, the will is usually upheld. If on the other hand the delusion bears on the provisions of the will, then the document might become invalidated.

A person may be incapacitated from making a will by unsoundness or feebleness of mind or by disease. When disease is the alleged cause the law looks to the actual effect of the bodily *disease on the mind* at the time the will was made. Bodily disease or incapacity does not affect the validity of a will unless the mind is directly or indirectly disturbed by it. As Dr. Taylor says: "*Integritas mentis non corporis sanitatis exigenda est*" is the rule of the courts. Thus in *Harwood vs. Baker*, not *erysipelas and fever* but the *stupor and drowsiness induced by them*, were held by the Privy Council as invalidating the will. A man's mind may not be so strong during bodily suffering as when in perfect health, but still it may be quite strong enough to enable him to make a good will, as it appears from the judgments in these cases that a state of mind for which a person might be placed under control, or even under certain circumstances be deprived of the management of his business affairs, would not render him incompetent to make a will.

A person is temporarily incapacitated from making a will by drunkenness, delirium, the stupor induced by narcotics and similar conditions. The effect upon the mind of a large number of bodily diseases has been from time to time brought forward as substantial reason why a will made by a person suffering from any of these diseases should be declared void. The following will illustrate the rule of the courts in dealing with some of these cases:

In the case of the late Mr. Bravo a will made while suffering from the effects of a violent poison was adjudged valid.

In *Maxwell vs. Maxwell* (Probate Court, July, 1872) gastric fever was held by the court as an insufficient ground of objection to a certain will. And in another case, probably of typhoid, in which there was no delirium during the day, an opinion was given that a will made in the day-time was good, and as a consequence the will was never contested.

In the case of *Blewitt, 1833*, paralysis was adduced as a ground of incompetency.

In the case of *Day, 1838*, epilepsy was alleged to have affected the mind. But in *Penfold vs. Crawford* (C.P. 1843) though the testator had suffered from apoplexy with loss of speech, yet it was shown that his mental powers were good and a deed made subsequently was held to be valid.

In *Harrod vs. Harrod* (Vice-Chancellor's Court, 1854), it is shown that paralysis is not insanity. Hemiplegia without aphasia does not incapacitate the patient from formulating and expressing thought in intelligent speech.

In the *Duchess of Manchester's case, 1854*, though hysteria, convulsions, inflammation of the brain and mania existed before the will was made, the will was held to be good chiefly upon the evidence of the medical attendant who deposed that at the time of the execution of the will and for some days previously she had recovered her reason.

Aphasia may interfere with testamentary capacity. In pure "motor aphasia" a patient may be quite competent to make his wishes known, as by gesture he can show his assent to or dissent from any proposition.

In "sensory aphasia" there may be no means of ascertaining the desires of the patient, the channels of communication to the mind being blocked. In cases of "complete sensory aphasia," the individual is not competent to make a will, but in partial cases where either the channel of communication through the eye or ear remains intact the desires of a person might find expression.

In the case of *DeLafield vs. Parish, Henry Parish* a cultivated and refined gentleman, in July, 1846, was stricken with paralysis, described by the physician as hemiplegia. In 1842, while in perfect health, he had made a will. After the attack of 1849 his wife was hardly ever absent from his presence, she and her relatives excluding and taking the place of his relatives with whom up to this time he had always lived on terms of cordiality. In August,

1849, September, 1853, and June, 1854, codicils were made to the original will, which gave to his wife properties deeded to his brothers and sisters in the will of 1842. It was claimed that during all the period after his attack of paralysis down to his death in March, 1856, he was unable to speak intelligibly or coherently or to read or write, and that he frequently indecently exposed his person, and was guilty of ungentlemanly and violent conduct and could only indicate his wishes by gestures and peculiar sounds.

In the judgment Judge Davies laid great stress upon the entire change in the personal habits and character of the testator, and held that the attack of July, 1849, "obliterated the mental powers, moral perceptions and refined and gentle susceptibilities of Henry Parish, and that he was no longer an accountable being."

HIP DISEASE.—A CLINICAL LECTURE.

BY B. E. M'KENZIE, B.A., M.D.

(Continued from last month.)

THE diagnosis of hip disease is as difficult in some cases as it is easy in others. When the disease is far advanced no skill is required to determine the fact, whereas in incipient cases the disease may exist for a considerable length of time without detection. It is also true that there are many affections which simulate hip disease very closely. It will be our duty now to distinguish between some of these affections and hip disease.

1. Sarco-iliac disease. This disease is not common but produces lameness, of course, and pain may frequently be referred to in the same region as in hip disease. It also causes flexion of the femur. Local examination, however, will enable you to determine in most cases the location of the lesion. Pressing toward each other the iliac crests is likely to increase some of the symptoms complained of, whereas it would not in the patient with hip disease. Of course the two may exist together, but if it be remembered that sarco-iliac disease is comparatively infrequent and if careful local examination be made you will not fail in making a diagnosis.

2. Disease about the colon or cæcum. Several cases are reported where men of note have fallen into error because of the deformity, the elevation of temperature, the inability to use the limb and the swelling in the immediate proximity of the hip joint. You will readily see that where the inflammation exists about the cæcum flexion of the femur will bring about a condition simulating that of hip disease. We have learned that hip disease is apt to be rather vague in its history, whereas the inflammation about the cæcum, causing flexion of the femur, is likely to be much more acute. There is higher temperature, a greater general disability

and the symptoms from the first are much more pronounced. Careful local examination, as in other instances, will greatly assist in arriving at a correct conclusion.

3. Infantile paralysis. The instances where a mistake could be made must be comparatively few. Yet, occasionally, instead of having increased mobility of the hip joint the mobility is greatly lessened. There may be flexion and adduction or abduction and atrophy of the limb with lordosis. Under these circumstances it is occasionally necessary to make a careful distinction. The history of the case, however, with the local examination of the joint, ought to reveal the nature of the affection.

4. Traumatism which may have produced fracture or dislocation occasionally lead to error. A few of these instances I have seen. It is difficult to determine sometimes whether inflammation of the joint may not have resulted in consequence of an injury. A careful analysis, however, of the circumstances attending the accident, careful measurement of the length of the extremities together with the subsequent history, in most cases will enable you to reach a safe conclusion.

5. Hysteria. This is, perhaps, the most difficult of all. There is recorded at least one case examined frequently by two leading physicians, sometimes the examinations having been made separately, and sometimes the two having examined the case together. At times they thought there was hip disease, at others that the manifestations were hysterical. Death from an intercurrent affection revealed the fact that there was disease at both hips. The classic symptoms which mark hysteria may be confidently looked for and some of those which mark hip disease will certainly be found absent. In this case the discernment of the surgeon is sorely taxed to arrive at a reliable conclusion.

6. Sciatica. Not infrequently I have seen a well marked case of hip disease which had been pronounced sciatica because of the prominence of pain in that nerve as a symptom. Careful attention to the typical symptoms of the disease will prevent such a mistake.

7. New growths at the upper end of the femur or in its vicinity. The cases of this kind that have come under my notice were due to sarcoma, either of the pelvis or the upper end of the thigh bone. In these there was no real difficulty in making a diagnosis. I can readily understand, however, that cases may easily be found where the difficulty would be considerable.

8. Bursitis in the vicinity of the joint. Some time ago I was asked by a physician to see his little girl, who, he said, had hip disease. I found that the history dated back only some two or three weeks. Flexion and adduction were strongly marked, and temperature high. At the time of the first examination I expressed the opinion that there was an acute epiphysitis or a bursitis. Watching the case for some time, and having the child kept at rest and following the ordinary indications for treatment, the trouble speedily subsided and we reached the conclusion that her trouble

arose from inflammation of the bursa under the psoas. Sometimes something similar but producing a different deformity may arise from inflammation of other bursæ about the joint, particularly under the gluteus.

9. Inflammation of the great trochanter cannot properly be said to be hip disease, although by its continuance it may produce that condition and the symptoms arising from it may easily be confounded with those of that affection. The error would not be a serious one as it would probably be wise to treat the case much as if it were disease of the hip joint except in this, that operative interference is much more likely to be called for early in the case.

10. Psoas abscess. In disease of the vertebræ pus may form and find its way into the sheath of the psoas, giving rise to flexion of the femur, limitation of motion, lameness, etc. There may be much difficulty in determining the actual condition present. A knowledge, however, of the disease of the vertebræ and attention to local symptoms at the joint will generally enable you to reach a safe conclusion. Occasionally disease of the last dorsal or lumbar vertebræ may give rise to similar symptoms where no pus is present.

11. Disease of the knee. So constantly is there found pain at the knee when the hip joint is affected that the mistake has been made, not infrequently, of treating the knee when the hip was the seat of the lesion.

12. Congenital dislocation of the hip. This is by no means a common affection, and yet I am greatly pleased to be able to show you a typical case to-day. They are likely to be presented to a man in general practice who has never seen one before, and finding the patient walking as this little girl, that is, with a distinct limp, and finding the limb smaller and shorter as it is seen to be here, it is scarcely surprising that a diagnosis of hip disease is frequently made. If you watch this girl as she walks across the operating room, you will see that the upper end of the femur rides upward on the pelvis when her weight comes upon the right leg. The amount of shortening is an inch, so that the head of the femur is not in the acetabulum and is left without any bony anchorage. There is no disease present, but the femur by traction can be made to move through a space varying from one-half inch to two inches in most cases.

It is so plainly manifest in the case that is before you that it seems surprising that the mistake should be made, but if you will simply bear in mind what you have seen here, and recall the fact that there is no history of disease, you will not fall into the error referred to. There is one misleading feature in this case to which I wish to make reference. The fact that the junction of the femur with the illum is not a definite secure joint, and that the upper end of the thigh bone pushes up against the muscles at every step, causes more or less traumatism; and consequently after a long walk or other considerable exercise pain and stiffness are likely to

be found present and may further add to the difficulties of a diagnosis. The increased mobility upward and downward of the femur is almost pathognomonic and is in marked contrast with the conditions present in hip disease.

In advanced cases the deformity is generally very marked. It has already been stated that some flexion of the femur occurs early. At the same stage of the disease abduction and external rotation are commonly present. When the disease is far advanced the flexion is generally much greater, especially in children, and instead of abduction, adduction is generally found present. It will pay you well to give close attention to this part of our subject as an aid to the right understanding of the principles involved in the mechanical treatment.

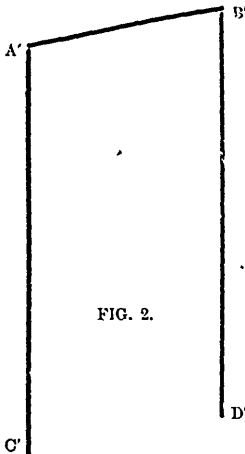


FIG. 2.

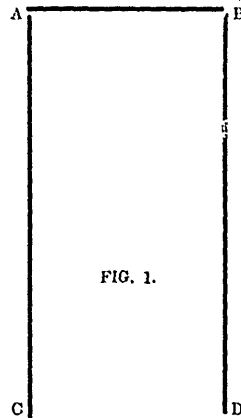


FIG. 1.

Assume that AC and BD—Fig. 1, represent the extremities extending from the acetabular cups, A and B, and that A is the diseased hip, and that abduction occurs so that the angle BAC becomes an angle of 120° . Now when you recall the clinical fact that there is lessened motion, or none, at the affected joint, you will understand why the leg, AC, cannot come into a position convenient for walking until the hip comes down to the position A' and the other hip comes to the position B'. This causes the tilting of the pelvis, the curvature of the spine and apparent lengthening of the affected limb so commonly observed in early hip disease.

When adduction takes the place of abduction, then the limb of the affected side will be apparently shortened instead of lengthened.

It is very important to bear in mind that adduction occurs in nearly all cases as the disease progresses, whether toward recovery or not, as this will afford a reason for extending the affected limb and keeping it in a condition of apparent lengthening, by the means of treatment adopted. The very exaggerated deformity which is often seen to follow in old cases might often have been wholly, or

in part, prevented by attention to this matter while under treatment. When once recovery has resulted, mechanical means are no longer available to rectify the deformity, and operation must be resorted to.

The treatment of hip disease must be directed largely according to indications. There are, however, certain well established facts and certain principles of treatment which must prevail in all cases.

Rest for the affected joint may be considered the first desideratum. How to secure it may be a matter of great difference of opinion. If the symptoms be acute and there be much deformity, it is well to put the patient in bed for a few weeks and use carefully adjusted extension. During this time a splint may be made so as to have it ready when the deformity has been corrected and the tenderness has subsided. I consider the splint shown you here—a Thomas splint, which I have so modified as to afford means of extension—as a most useful mechanical aid in keeping the joint at rest and enabling you to keep traction on the affected limb. It should be made to fit accurately, and the parts should be sufficiently rigid to prevent any movement at the joint. A cork-soled boot, made to elevate the patient three or four inches, is worn on the sound side so that when standing the bottom of the splint and the sole of the boot may be in the same plane. Though the patient can walk when thus fitted up, yet walking without crutches is to be discouraged as tending to keep the affected limb in a condition of unrest. It may be said that remaining for a long time in the erect position, even when crutches are employed, is unwise as favoring a retardation of the lymphatic and general circulation. A splint should not be regarded as a means by which the patient can resume the ordinary activities of life. It has performed its function well when, in addition to securing rest for the affected part, it has enabled the patient to avoid the invalidism implied by confinement to bed.

Constitutional treatment is important. Here the same principles should govern as in other forms of wasting disease.

Under the guidance of the plans advocated, a certain percentage of cases go on uninterruptedly to recovery, and some recover so completely that one cannot detect a limp or other disability.

Should the disease still make headway and fluid be found in the joint, one must operate. Having once opened the joint, the question arises as to whether one should excise the head of the femur or not. If no necrosed bone be readily found, I prefer to content myself with cleansing with the finger or curette as thoroughly as possible, and treating the open wound aseptically. In this manner I have often secured a good result. If carious bone be found, it must be removed; though it is wise still to leave the joint intact if possible. If there be good reason to suppose the acetabulum diseased, then one should excise.

There is at least one strong reason against early excision, viz., that the patient is thereby hopelessly maimed. The case thus early

consigned to such a fate might have been among the number who recover with good joints.

While I wish to advise you unequivocally against early excision, I do not wish to be understood as advising against early operation. If careful local examination reveals the presence of a focus of disease which may be reached without entering the joint, I think it should be removed.

After operation, the mechanical and constitutional treatment are of just as much importance as before.

12 East Bloor St., Toronto.

EPITHELIOMA OF THE EXTERNAL EAR.*

BY F. N. G. STARR, M.B.(TOR.),

Lecturer and Demonstrator of Anatomy, University of Toronto; Surgeon to the Out-door Department Toronto General Hospital and Hospital for Sick Children.

DURING the last week in May, 1897, I saw my first case of epithelioma of the pinna. It occurred in a man aged fifty-eight years, and was referred to my Surgical Out-door by Dr. McPhedran, from the Skin Clinic at the Toronto General Hospital. Nearly a year before the patient had first noticed what he took to be a small pimple on the outer edge of the external ear. It gradually became larger and thicker, and in the course of a few months the surface became raw. It continued to increase in size until I saw him ten months after he first observed the "pimple." There was then a mass of thickening about the middle of the edge of the helix, taking up nearly a third of that part, and extending across the antihelix down into the bottom of the concha. The surface of the thickened mass was more vascular than the surrounding skin. The external surface of the mass was ulcerating, and presented somewhat everted edges, as will be seen in Fig. 1. There was no pain.

On the 3rd of June, 1897, just one year ago, I cut out a V-shaped portion of the auricle, including the growth, carrying the apex of the V well down into the bottom of the concha. The raw edges were then brought together and two silk-worm gut sutures put through the cartilage some distance from the edges to prevent tension. A continuous horsehair suture was then used and the skin edges were carefully brought together. Union took place rapidly, but to be on the safe side the silk-worm sutures were left in for three weeks. Fig. 2 is a photo taken eight months after operation. There is at present—a year after—no sign of recurrence.

Case 2 was that of a man aged eighty-two years, upon whom I assisted Mr. I. H. Cameron to operate in June, 1897, about a week

* Read at meeting of Ontario Medical Association, 1898.

after my own case. In this patient the growth affected the base of the lobule, extending into the fossa of the antihelix, and involving the antitragus. It was not painful. It was removed, and the lobule sutured to the remaining part of the pinna. A good recovery ensued, but of late I have lost sight of the patient, and at the time I was unable to have a photograph.

Case 3 was that of a man aged eighty-four years, who came to the Out-door Department of the General Hospital, in June, 1897. There was a large cauliflower-like, fungating mass, about the size of a pigeon's egg, presenting at the external auditory meatus. It apparently had commenced in the concha, and now completely filled that part, protruding considerably beyond the level of the external ear. There was a great deal of pain and tenderness. The growth had existed for over two years. He refused operation, and



No. 1. Before operation.



No. 1. Eight months after operation.

before I could arrange to have a photograph taken, he died of an intercurrent affection.

In passing, I may say that before this wonderful month of June, 1897, was completed, I saw another old man on the street whom I believe presented a similar condition, namely, a fungating mass about the size of a filbert, apparently springing from the helix. I regret to say that my professional dignity would not permit me to make a further investigation of the case.

My reason for placing these cases on record is because I believe the disease in this location to be comparatively rare, for in an undergraduate and post-graduate experience of thirteen years I had never seen a case until the first of this series presented itself. Barr of Glasgow says the condition is very rare. Marmaduke Shields in Treves' System merely refers to it, but gives the figure of a case resembling Case 3 in my series very closely. Erichsen does not mention the condition. Gruber and also Schwartz agree

that epithelioma is more likely to occur in people who have suffered for years from a purulent otitis. It is interesting to note that in none of the cases related was I able to get a history of "running ears." Gruber says that the disease begins either by a gradual alteration in the character of warty growths, which have already existed for some time, or by the appearance in the skin or subcutaneous tissue of one or several hardish nodules. After an interesting account of the disease in this locality, he says: "Early excision of the diseased parts is particularly indicated with the auricle, as experience shows that even after its complete amputation the wound heals tolerably quickly, and that the operation generally results in a radical cure."

THE SUMMER AND HEALTH RESORT AREAS OF ONTARIO.*

BY E. HERBERT ADAMS, M.D., TORONTO.

It is not my intention in this paper to make a comparative meteorological or topographical study of the various summer and health resort areas of the Province of Ontario, but merely to emphasize to my professional brethren, in a general way, the importance of developing the health resorts, mineral springs and watering places of this great summer land of ours.

If this paper serves to awaken some thought and enterprise in this direction, among the medical men of the Province, its object will be accomplished.

While learned treatises have been written on the climate of almost every other section of the globe, but little attention has been given to the climate of Canada, and what has been written has been very often misleading, when it has not been absolutely inaccurate.

The entire Province of Ontario is one vast summer resort area. Containing, as it does, over 50,000 islands and thousands and tens of thousands of lakes and rivers, this region presents an unsurpassed natural variety of scenic wonders and opportunities for healthful varieties of sport, recreation, and amusement.

The proximity of such large bodies of water as the great lakes render the summer climate equable and delightful, and ozone-laden breezes from the immense pine forests of the northern highlands are wafted southward to meet the purified atmosphere of the balmy breezes of the great lakes.

There are practically no unhealthy localities in the Province, and no diseases such as malaria and hay fever, due to climatic influences. Sunstroke is almost unknown in this region. Ontario

*Read before the Ontario Medical Association, 1898.

can boast of as many different climates as any other country in the world. In the summer season, especially, a greater variety of natural health and pleasure resorts cannot be found in any other country.

There are many well-patronized resorts in the United States, Europe and elsewhere, which have but a small proportion of the natural requirements for health or pleasure resorts, as compared with some of our comparatively unknown districts.

There are health resorts in the United States that have hundreds and thousands and tens of thousands of tourists and health-seekers domiciled there for many months of the year, and yet they are vastly inferior in climatic, scenic, sanitary, and other advantages, to some of our Canadian resorts.

Some of these places across the border are simply the boom towns of enterprising Yankees, and owe their popularity almost solely to advertising, or to the success of a well managed, fashionable hotel.

And yet you will frequently observe Canadian physicians recommending Canadian patients to travel long distances to such inferior places many of which, from the sanitary aspect, are mere death traps. Many of these places, for instance, are infested with the germs of tuberculosis, the hotels, boarding houses and public places having been for years the resort of consumptives, and with the very lax southern methods of sanitation little or no precautions have been taken for the isolation and destruction of sputa. How often are convalescents from typhoid, pneumonia, rheumatism, lagrippe and other exhausting diseases, sent to these resorts by physicians whose knowledge of the climate, etc., is not based on actual travel, but on book-lore, and too often on the too glowing accounts of persons financially interested in that special health resort.

How much more frequent do you hear Canadian physicians lauding the virtues of Denver or Switzerland than they do those of Banff, Kamloops, Calgary, or other points in our own Canadian Rockies. How much more often do they extol the virtues of the White Mountains, Catskills, or Adirondacks, than our own Muskoka and Georgian Bay region.

How much more frequent do they recommend the seaside resorts of the United States than those of our own land.

Our resorts are not without esteem, save in our own country, for visitors from across the border know how to appreciate these resorts when once they discover them. Several hundred people from the neighborhood of the city of Pittsburg, Pa., spend their summers in Muskoka, while New Orleans, Memphis, Chicago, New York, and other large cities, have a nucleus of visitors there, which is rapidly increasing as the knowledge of the region spreads, and yet there is not enough faith or enterprise on the part of Canadians to put up one first-class fashionable hotel in the entire district.

What is the financial aspect of the question? It simply means

that Canada is losing millions of dollars every year by not giving prominence to the development of its health resorts.

A great many millions of dollars are spent every winter in the southern States by tourists and health seekers from Canada and the northern States, and there is no reason why we should not have reciprocity in this respect at least, and have millions of dollars come north to us during the summer months, from tourists and health seekers who find the south unsuitable for summer abode.

Any one who is familiar with popular health resorts would be surprised at the wealth of many of the people who visit such places. It is the wealthier classes who can afford to travel and in a small health resort in the south will often be found the representatives of more millionaire families than can be found in almost any Canadian city. These people spend a great amount of money, and often, too, make not inconsiderable local investments.

These health seekers and tourists from other lands make a desirable class of patients for the physicians, as they are generally well able to pay for the most skilful of attention.

It is both directly and indirectly, therefore, in the interest of the physicians to pay more attention to the health resorts within our borders, and when recommending a health or summer resort elsewhere, let us first make sure that there is not an equally good one nearer home.

It would be a good thing for this country if our Government would do as the United States has been doing, *i.e.*, undertake a systematic investigation of the subject of climate and its influence on health and disease.

The question of Canadian climate has never yet been handled properly by the Dominion Government. Our climate has been misrepresented for years both at home and abroad and little or no practical efforts have been made to counteract these wrong impressions. So strongly rooted are false impressions of our climate, even among Canadians, that some of our most intelligent citizens fancy I am romancing when I describe some of our comparative climatic advantages, the knowledge of which should be in the possession of every school boy.

This country will never progress as it should until these misconceptions of our climate both at home and abroad are cleared up and therefore a strong government policy should be adopted in reference to measures which will tend to produce this result as speedily as possible.

One reason why, says Prof. Roberts Austin of the Royal Mint of England, in his recent lecture in Toronto on Canada's metals, greater British efforts have not been made in the direction of developing our mineral resources is on account of misconception of the Canadian climate.

I am satisfied myself that climatic advantages are a loadstone for immigration, and that not even gold itself will have as much

effect in the permanent settlement of our country as will a thorough knowledge and advertisement of our climatic advantages.

A comparative practical study of our climatic resources is one of the first and fundamental measures which should be adopted for the encouragement of immigration. We are beginning wrong by sending out agents imperfectly acquainted with our climate, and I have never yet, not even in the Meteorological service of the country, found a man but seemed to have some unfavorable impressions of our climate which were not founded on fact. Though I have been studying and discussing this question of climate, both at home and abroad for many years as a medical climatologist, the more I study the subject the more I am surprised at the comparative climatic advantages which we possess over countries and localities with world-famed reputations as to climate.

In reference to the settlement of the districts of Muskoka, Parry Sound, Algoma, etc., it seems to me that in the light of our present knowledge of these localities as health and pleasure resorts, that to a large extent at least the proper settlement of these districts consists not in attracting the poorer classes of England but in attracting what I may term summer migrants or summer visitors from Europe and the United States, but more particularly from the Southern States. These people are always of the well-to-do and often of the wealthiest classes and leave their money in the district without taking away anything save renewed health and increased weight and pleasant recollections. They buy their provisions in Canada and employ Canadian labor in administering to their pleasures and wants and in building summer cottages, etc. Bring these people of wealth and leisure to these districts for a few months of the year and they will leave sufficient money in the country to support the permanent settler and the latter will come of their own accord or with but little direction on the part of the Government and will be of a class which will be suitable for the district.

The settlers around the principal lakes of Muskoka, though on the average among the poorer type of immigrants, have in the past ten years been more prosperous and their farms have increased more in value than the farmers in what are considered the best farming districts of Ontario. There are settlers in Muskoka who are neither progressive nor industrious, who perhaps are rather detrimental to the district on account of their bad habits and supposed depredations, who ten years ago were worth nothing and yet to-day they have a market at their doors and city prices from the tourist and summer cottagers for their labor and farm productions and their farms with their eligible points for cottages on the lakeside have become very valuable. Many of these people on the shores of the three great Muskoka lakes can show an average increase in the value of their land and buildings of \$500 a year in the past ten years, and others who have started boarding-houses and hotels can show a very much larger increase. Can the same be said of the average Ontario farmer? On the contrary the

settler in other parts of the Muskoka district as yet unfrequented by the summer visitor is still gaining a precarious living and there is little or no improvement on his property or in its value.

From the vicinity of Pittsburg, Pa., alone I know of several hundred people who have annually spent a few months in Muskoka and Georgian Bay district. Many of them are millionaires or very wealthy people, and have built summer cottages and with their families are prominent summer residents. Why should there not be several hundred people from every large city of Southern and Central United States. I have met representatives from all these parts in Muskoka and they are universal in their praise of the natural attractions of the district. This district, with its thirty thousand islands and thousands of lakes, is one of the greatest natural health and pleasure resorts of the world, and there is room for a million such summer visitors, and under proper management by the Government there could still be good fishing and hunting.

There is no reason why this district should not be as thickly populated in the summer by this class of people as is Florida in winter.

To those who travel for the sake of fashion as well as pleasure the undeveloped condition of the majority of our as yet comparatively unknown Ontario resorts presents few charms, and yet these gay butterfly travellers are among the wealthiest and most desirable classes and the element of fashion should be introduced together with improvements in our hotel system in order to attract this class.

Many wealthy invalids and others spend their winters in the south and their summers farther north, and to these there are no better places to get a summer temperature which is somewhat akin to the winter climate of Florida and the Carolinas than by coming to the resorts of Ontario. Indeed, by wintering in Florida and summering in Ontario, an equable all-year-round temperature is obtained, for portions of Ontario in summer possess a very similar climate to Florida in its fashionable winter season.

The untravelled citizen of Ontario knows not the comparatively great summer attractions of the well watered country and varied landscape and healthful climate of his Province; but those who have travelled the world over and have visited the leading and most fashionable health and pleasure resorts of the universe come back to Ontario convinced after all that in their travels over mountain, sea and plains there are few if any places that are better all-round abiding spots in summer for health, pleasure and climate than are the islands, lakes and rivers of the Province of Ontario. With this latter class and with the physicians of Ontario must rest largely the responsibility of directing public attention and enlisting the aid of capitalists and awakening a proper interest and co-operation for the development of the climatic resources, mineral springs and summer watering-places of the Province.

THE BOOT AS AN ORTHOPEDIC APPLIANCE.*

BY H. P. E. GALLOWAY, M.D.

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HERE and there in orthopedic literature are to be found references to the necessity of using boots of suitable shape and modified construction in the prevention and treatment of certain conditions of disability and deformity. It may be doubted, however, whether the subject of boot construction has received as much attention as its importance deserves, and whether the power of variously modified boots to serve some of the purposes of orthopedic practice is as fully appreciated as it ought to be. In my own practice I find certain forms of boots quite as indispensable as any other kind of appliance. A large proportion of patients who present themselves are in need of advice concerning the clothing of their feet, although they are not always aware of the fact; and were I deprived of the advantage to be gained by the use of some of the boots shortly to be described I should often feel sorely perplexed. At the outset, however, I desire to disclaim any expectation of saying anything startlingly new or original. I hope, rather, to excite fresh interest in an old subject, to show some patterns of boots that may differ somewhat from those ordinarily employed, to point out certain defects in construction, and to direct attention to the possible advantage of a more extended employment of the boot as an orthopedic appliance.

In nearly all works on orthopedic surgery, in connection with the treatment of flat-foot, it is recommended that the inner side of the sole and heel of the boot worn by the patient be built up higher than the outer side. We are indebted to the late Hugh Owen Thomas, of Liverpool, for this valuable suggestion. His plan, which is that ordinarily followed, was to not only raise the inner border of the sole and heel, but, at the same time, to fill up the space beneath the shank, which corresponds to the arch of the foot, to the same level. In doing this it is important to so build the boot as not only to make the sole thicker at the inside, but, at the same time, to project it inward. By this means a broader foundation is placed under the patient, and we gain support and leverage so acting as to raise the inner border of the foot and assist in overcoming that pronated position which is now recognized as often more concerned in the production of the symptoms of flat-foot than mere flattening of the arch.

In dispensary practice, and for patients who are regardless of appearances provided they obtain relief, this modification applied to the Waukenphast or other common-sense boot answers tolerably well; but in private practice we meet with many cases of weak

* Read before the American Orthopedic Association, at Boston, May 17th, 1898.

feet in patients, especially young women, who cannot be persuaded to wear anything that departs so far from the conventional. All orthopedic surgeons are aware of the necessity of carefully inspecting the feet as an important part of the routine of examination in cases of scoliosis. In my experience this inspection reveals a pair of weak, pronated feet in the majority of cases; and although symptoms pertaining to the feet may not be complained of, I feel that it is next to hopeless to begin treating the deformed spine without first putting the patient upon a more secure foundation. In many cases the condition of the feet is obviously due, in part at least, to the fashionable boots, with narrow soles and high heels, which the patient has just removed to permit of her feet being

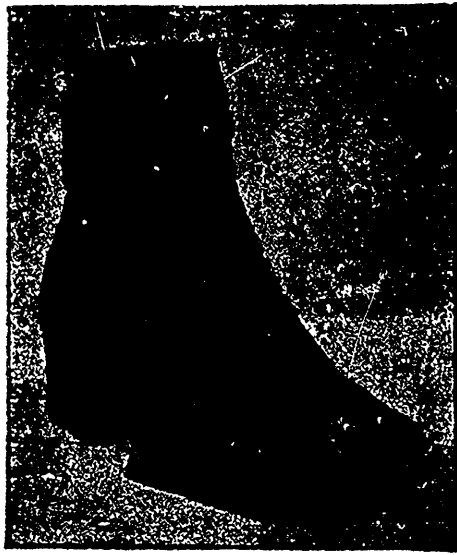


Fig. 1.

examined; and to attempt to treat by developmental methods a case of scoliosis or of flat-foot while the patient is perched upon a pair of boots which afford no security and make it impossible for the feet to be used to the best mechanical advantage is indeed a discouraging task. But while many patients, especially ladies of the better class, cannot be persuaded to wear boots as clumsy-looking as the ordinary pattern of flat-foot boot, the benefit of the raised and projected inner border can be secured by the modification of the ordinary plan of construction, shown in Figs. 1 and 2. In general, the last upon which this boot is built differs from an ordinary last chiefly in having a straighter inner border, in greater width, and especially in having a very broad and flat sole. The heel of

the boot is much lower and larger than usual, and its inner side widens out laterally as it approaches the floor, while its inner border is not only built up higher than the outer, but is continued farther forward beneath the shank; the inner side of the sole just beyond the shank is correspondingly raised and projected inward. By this plan of construction the same mechanical effect is secured as if the whole inner side of the sole, shank and heel were a solid mass of leather as in the ordinary form of flat-foot boot; while at the same time the boot is not only lighter than it could be if the arch were filled up with leather, but the departure from the conventional appearance is relatively so slight that it is very exceptional to meet with patients of any class who refuse to wear it. On the inside of the boot there is a strong counter of leather, of about the same size and shape, and occupying the same position in relation to the foot as the inner flange of a Whitman flat-foot brace. It gives some support to the foot at its weakest part, and, which is still more important, by exerting pressure in this situation, it serves to remind the patient of the necessity of holding up

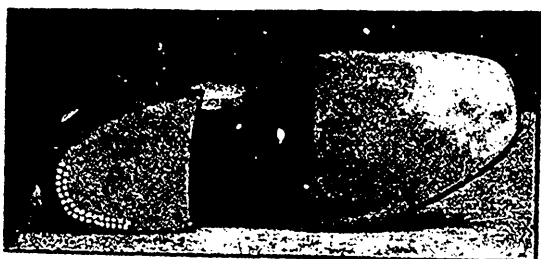


Fig. 2.

the inner side of the foot by muscular effort. As Dr. Whitman himself teaches, this function of the brace devised by him is a much more important one than is its action as a pure mechanical support. Of course, being made of yielding leather instead of unyielding metal, this counter is not expected to serve as a substitute for Whitman's brace in cases of a severe grade; but many of the slighter cases of flat-foot can be successfully managed by suitable exercises, training in the use of the feet to the best mechanical advantage, and the wearing of suitable boots; in these cases the addition of the leather brace I have described is of considerable value.

The mechanical principle involved in the construction of the flat-foot boot may with great advantage be applied in the making of boots to be used with or without braces in cases of valgus resulting from infantile paralysis. Very frequently the paralyzed limb is considerably shorter than its fellow, and in such cases the first point in the mechanical treatment should be the providing of a suitable boot, with a sufficient amount of cork to make up the

deficiency in length; but instead of making the upper and lower surfaces of the cork parallel, and its sides perpendicular and symmetrical, as is usually done, it should grow gradually thicker toward the inner side so as to be from one-fourth to one-third of an inch higher than at its outer margin. Its inner side should also slant decidedly from above downward and inward. Fig. 3. A boot so constructed answers most admirably in many of the slighter cases of valgus resulting from infantile paralysis, and will often prove to be the only thing of the nature of a mechanical appliance required. It should be a principle in orthopedic practice never to use braces of any kind if it is possible to get along as well without them; but when the interest of the patient demands the employment of a mechanical appliance it should always be the simplest that will answer the purpose. More or less pressure and constriction are inseparable from the use of most forms of orthopedic apparatus; this constitutes a serious objection, because it means interference with the nutrition and development of tissues which are frequently already atrophied and weak; and although this disadvantage may be unavoidable we should seek to reduce it to a minimum. In the class of cases under consideration, should any of the appliances usually employed to hold the foot in its proper relation to the leg be necessary, they can as easily be attached to the cork boot just described as to one of ordinary construction, and the efficiency of the brace will by this means be greatly increased.



Fig. 3.

We will now turn our attention to a couple of boots in the construction of which the mechanical principle involved is exactly opposite to that of the flat-foot boot. The first is a club-foot (*equino-varus*) boot. It is not, however, designed to correct the deformity, but to assist in preventing relapse after the foot has been fully corrected or over-corrected by operative means. The last is of such shape that the front part of the boot is bent outward at a point corresponding to the medio-tarsal joint. The heel counter is very firm and an additional brace of stiff leather at a point corresponding to the first metatarso-phalangeal articulation affords a point of counter-pressure and serves to keep the foot from assuming the varus position; while the

rolling downward and inward of the outer border of the foot is counteracted by having the outer side of the sole well built up and

projected a considerable distance beyond the upper. Fig. 4. By this construction considerable leverage is gained and every step of the patient forces the foot in a direction opposite to that which it is disposed to assume. This boot, the invention of Dr. B. E. McKenzie, is a simple and valuable adjunct in the successful after-management of club-foot. Also, in the treatment of cases of paralytic club-foot it will be found very useful; and should a high sole be desirable on account of shortening, the plan of constructing the cork with its outer side projected and elevated should be adopted. The boot so built will supply all that is necessary in the way of apparatus in many cases; while if a brace is required it will serve much better if attached to a boot of this



Fig. 4.

form than to one without such modification. These modified boots will, however, fail to accomplish their purpose unless the shoemaker succeeds in so building the sole that it will touch the floor in its entire breadth when the whole surface of the heel is in contact with the floor. It is useless to project the sole and build it thicker on one side than the other if it is made so convex that all the weight comes upon a small area at about its middle. Shoemakers invariably fail to grasp this point, and even in repairing they seldom succeed in restoring the original form, until they have been specially trained.

Just here I wish to say a few words about the construction of ordinary cork-soled boots; I mean those which are intended simply to supply a deficiency in the length of the limb upon which they are worn. Pattens of some kind are constantly needed in orthopedic practice, and those made of cork are perhaps as free from objection as any other; and while the shoemakers have acquired some success in devising models of high-soled boots which are as far as possible unobjectionable in appearance, many of these serve the purpose for which they were intended very inadequately. There are five chief faults with the ordinary cork-soled boot.

1. The shay does not correspond to the shape of the foot.
2. The sole is too narrow.
3. The sole is convex from side to side.
4. The heel is too small.
5. The shank is weak and unsupported.

Of these faults perhaps the most serious are the narrow and convex sole, and small heel. In my office I have often taken one

of these boots, which a mother had just removed from her child, and placing it upon my desk have with a slight touch set it rocking from side to side like a cradle; and have pointed out that the sole of the boot in front of the shank resembled a portion of the surface of a globe, only a very small area coming into contact with the floor; while the high, slender heel, with its sharp margins worn off, formed a mere prop under the back part of the foot. Watch a patient standing in such a boot, and you will easily observe that in effect he is poised on the rounded lower ends of two small columns. Such a condition of affairs would be bad enough with the locomotor apparatus of the patient in every way normal; but the very fact that a patten is necessary is proof that there is some defect in this apparatus; consequently there is increased reason for so constructing the high boot that it will form a secure and reliable foundation for the limb upon which it is worn. Should such a boot be necessary because of some antecedent disease which has left one limb shorter than its fellow, how is the short limb to do its full share of work, if, already more or less disabled, it has to suffer the additional disadvantage imposed by a boot which is liable to roll and wobble at each step of the patient? Or, if worn upon the sound limb, with the object of elevating it to a sufficient height to prevent its disabled fellow from coming into contact with the floor, it is still more necessary that it should afford reliable support, with no disposition to sway unsteadily; for in this case the patient bears all his weight either upon the sound limb alone, or upon a splint and the sound limb, and a splint is by no means equal as a support to a healthy leg and foot. Hence in constructing a cork-soled boot, particular attention must be paid to having the sole broad and flat so that its entire width shall come into contact with the floor; the heel also must be large and perfectly flat. From its upper surface, where it is attached to the upper of the boot, the cork should grow wider as it descends to the sole, thus giving it increased breadth of base and making the patient more secure, on the principle that a stool with diverging legs is less liable to topple over than one with legs which are perpendicular. Fig. 5.

If the height of the patten required is an inch or less it is possible to construct the boot satisfactorily by adding the necessary amount of cork to that part of the sole in front of the shank and increasing the height of the heel to a corresponding extent. The appearance of the boot so constructed is preferred by some patients, especially ladies. A thin cork elevation may even be put wholly inside the boot, but if more than an inch of added height is required it is decidedly preferable to have the cork extend over the whole area of the sole, and to build upon the cork a low, broad, flat heel of leather. To put from one to four inches of cork upon the front of the boot, and on the back part a heel of corresponding height, with an unsupported shank between them, is a bad mechanical arrangement, and in the writer's opinion can hardly be defended even from cosmetic considerations. A boot with a solid foundation

under it of from one to three or more inches in height may be objectionable because of its heavy and bulky appearance, but scarcely less so than one in which the shank is cut away so as to leave a high, narrow heel, which looks like a mere prop under the back part of the boot, while the latter has the additional disadvantage of affording an unreliable and shifting foundation; for in a boot of this design the unsupported shank yields more or less and forms a kind of hinge between the elevated sole and heel. A judicious compromise between these two plans of construction, which is perhaps free from the objections attaching to both, is to cut away part of the cork beneath the shank, enough to form a respectable arch without entirely divorcing the raised sole from the high heel; so built the shank will still be sufficiently rigid, while the heel will not have the appearance of a prop.

The boots before described are for use only after conditions of deformity or disability have set in. But as at least one of the pathological conditions above referred to as requiring in its treatment a boot of special construction, namely flat-foot, is largely caused by injury to the structure and function of the foot inflicted by the badly-designed boots that are commonly worn, the consideration of prophylaxis arises, and it becomes a pertinent question:—“What are the characteristics of a good boot for ordinary wear with the foot in a condition of health?” Dr. Lovett thus summarizes the answer in vol. 2, page 662, of Roswell Park's Surgery:—

“The essentials of a good boot are as follows: The inside line should be straight or nearly straight. The boot should be built to hold the foot in an adducted position; that is to say, the forward part should be at an angle to the hind part if their axes are shown by lines drawn in the middle of the sole and middle of the heel. There should be plenty of width across the metatarso-phalangeal joints in order that the weight may be properly borne upon the ends of the metatarsals, and the sole of the boot should be as wide as the sole of the foot. The shank should be broad, not cut away at its inner aspect; it should be fairly stiff.”

To this I would add: The sole should be flat, not convex, from side to side, and only slightly turned up at the toes. The heel should be low, flat and large, not only broad but long, for a stiff



Fig. 5.

shank will be of little service unless sufficiently supported by a good heel below. A small heel soon becomes rounded at the edges and allows the foot to roll, twisting and weakening the shank of the boot and rendering the foot liable to strain.

Although boots with the front part strongly adducted in relation to the back part, and with a straight inner border, are beyond doubt theoretically correct, in practice I have not found them as easily employed as I anticipated. A couple of years ago I had a set of lasts manufactured after the model of the one shown in Fig. 6. The model was based on plaster casts of the least distorted feet I could find. Whatever other defects this last may have it at least fulfils the requirements of a straight inner border and adducted fore part. But it is only very exceptionally that I can recommend my adult patients to have boots made from this last, unless I intend to have a toe-post built into the boot, to keep the displaced great toe in proper position. The feet of practically all adults in civilized life have the great toe deflected outward, and if the boot is made with its inner border straight the result is an unoccupied space to the



Fig. 6.

inner side of the great toe, unless some device such as the toe-post is employed. Also, the greatly adducted forepart of the boot has, in my experience, been apt to cause uncomfortable pressure upon the smaller toes, cramping them under the foot and causing corns; but this is doubtless due more to deformity of the foot than to the shape of the boot, as the normal adduction of the foot at the mediotarsal joint, as seen in the infant, is apt to have largely disappeared, or even to have given place to abduction by the time adult life is reached. If, however, a form of boot meeting the requirements summarized by Dr. Lovett were worn continuously from infancy, I fancy that perfectly normal feet in the adult would cease to be such a rarity as at present. It should be said, however, that it is useless to construct a boot of proper shape unless some attention is at the same time bestowed upon the stockings. These are nearly all made with pointed toes, and constitute a mechanical force sufficiently powerful, acting as it does every day in the year to deform the foot even without the assistance of badly shaped boots. Socks and stockings should always be made with a separate compartment for the great toe.

I wish to add a word as to the manufacture of the special forms of boots to which reference has been made in this paper. The experience of Dr. B. E. McKenzie and myself has been that the only sure way of having our wishes executed is to train our own mechanics and have the work done in our own shops. Even then it is necessary to keep a watchful supervision of the work to prevent slight departures from original models, and to guard against the introduction of unauthorized "improvements" by the workmen. To send a patient to the shoemaker with instructions to get a particular kind of boot is to court certain disappointment. The patient will almost surely suggest slight modifications with a view of improving the appearance, etc., and these wishes are obligingly met as far as possible; and if the patient is pleased with the result the shoemaker will gradually introduce more and more of his own conception of what is required, until in a few months he is turning out boots which bear little resemblance to the original pattern. We have found that even in making repairs an untrained mechanic will almost without exception show that he has little or no conception of the mechanical requirements of the special boots here described; and after the repair is completed the surgeon may congratulate himself if the restored boot is even a near approach to the original. If the surgeon desires to get the best results obtainable from the use of modified boots in the management of orthopedic conditions, it is absolutely necessary that he should to some extent personally supervise the work of the mechanics who make them.

12 East Bloor St., Toronto.

DRS. J. A. TEMPLE, Allen Baines and W. Wilson attended the annual meeting of the American Pediatric Association, in Cincinnati, last month.

DR. H. MORELL (Trinity, '92), now practising at Slayton, Minn., has been appointed Examiner in Anatomy to the State of Minnesota. The doctor has just published a book entitled "Records of Urinary Examinations," a review of which will appear in our next issue.

THROUGH a typographical error, we regret that the word "proctitis" was used instead of "prostatitis," in Dr. Manley's article on "The Bearing of Pathological Processes on the Therapy of Morbid Processes along the Genito-Urinary Tract in the Male," appearing in the June issue.

DR. WM. OSLER, professor of medicine at the Johns Hopkins University, and physician in charge of the Johns Hopkins Hospital, is one of the fifteen scientists selected this year by the committee of the Royal Society to be recommended for membership in the Royal Society of England. The Society embraces the most distinguished scientists of the world.

Public Health and Hygiene.

... IN CHARGE OF ...

J. J. CASSIDY, M.D., AND E. H. ADAMS, M.D.

THE CANADIAN NORTH-WEST AND ROCKY MOUNTAIN DISTRICTS IN THE TREATMENT OF TUBERCULOSIS.*

BY P. H. BRYCE, M.A., M.D.,
Deputy Registrar-General.

SINCE it would be impossible in the few minutes for a paper to set forth in detail the several conditions of the climate in the many districts extending from Rat Portage to Vancouver, I shall endeavor to indicate briefly some of the influences especially affecting the tuberculized, resident in such climates.

Perhaps nothing has during the last fifteen years grown into such favor in the treatment of tuberculosis as the so-called air-cure. Naturally warm climates, owing to the ability of the invalid to be much in the open air, seemed most suited for such treatment, and so Florida, the Bermudas and the West Indies became noted as winter health resorts. Later, however, the salubrious inland valleys of California—hemmed in by the spurs of the Sierras of the Coast Range, with a climate so modified by the Japanese Current that roses bloom in the winter—have grown into greater favor, since with the warmth the quality of dryness has been added.

Still later, as the railways gave access to the high levels of the Rockies, it has been found that to a still greater dryness, owing to the expansion of the atmosphere with decreased pressure, were added certain effects due to height above the sea level, experienced by all, although the physiological causes therefor were for years not understood. What were apparent was, greatly increased translucency of the atmosphere, excessive evaporation both from lungs and skin, and extreme variations between day and night temperatures, with an almost constant and often great atmospheric disturbance with high winds.

Though such marked characteristics distinguished these mountain climates, they nevertheless, owing to the small amount of rainfall, the constantly dry soil, the great warmth of the sun at mid-day and the brilliancy of the atmosphere, have constantly grown in favor, because of the outdoor life possible and the encouragement given to exercise. The lassitude and enervation due to

* Read before the Ontario Medical Association, June, 1898.

warm, moist climates were replaced here by a stimulation of the physical and mental energies, while a momentum was given to the reconstruction of tissues not at all equalled in the dry and beautiful climate of southern California.

The cause of this influence of high altitudes has within very recent years been apparently well determined by the experiments of Paul Bert, Regnard, Viault, and others. They have found that, in fact, the amount of oxygen demanded by the physiological requirements of the tissues cannot at first be obtained by the red corpuscles of the blood in the lungs from the atmosphere at an altitude of, say, 5,000 feet, due to their lessened ability to hold oxygen under reduced pressure. The primary effect of this deficiency is the feeling of shortness of breath, which in excess is accompanied with various sensations summed up by the phrase *mal de montagne*. Thus the respirations are notably increased, the pulse quickened, the nervous system excited, while sleeplessness for several days is present. Nature, however, soon comes to the rescue, and within ten days or a fortnight has increased the red blood corpuscles to the extent that they are equal to the needs of the system in supplying oxygen by what is termed hæmatocytosis. Such a hæmatocytosis becomes a true hæmatopoiesis, and shows itself in a marked and rapid increase of the general nutrition, a lessening of the tuberculous processes, a diminution of the cough and fever, an increase in weight, and general progression toward health.

While these special influences have been studied, especially in connection with what Regnard calls "*la cure d'altitude*," the conditions can by no means be wholly ascribed to the one factor—altitude. To anyone familiar with the climatic qualities of the Great West of Canada, it will seem plain that in the prairie region rising from the lands of Manitoba westward until Banff is reached, at a height of 5,500 feet, every degree of height may be had which may be found most suitable to any particular case of tuberculosis, while in the 500 miles—extending through the sea of mountains, made up of the three ranges with the intervening plateaus between, from Banff to Vancouver—there is infinite variety of heights and local conditions to tempt the most fastidious searcher after health.

I have indicated that the one element of height cannot be said to be the only, though a very important, factor in the work of general nutrition and reconstruction of tissue. Regnard very properly points out the marvellous purity of the air at elevated heights, as regards its freedom from microbes. This has been fully demonstrated in Pasteur's earlier experiments on the question of spontaneous generation. This, however, can be found in almost equally great degree in the great prairies and country of the foothills about McLeod, Calgary and Edmonton. Besides this, however, the transparency of the atmosphere, the brilliancy of the sunlight and the large number of days of sunshine play a part certainly as great as in the famed resorts of the dry tablelands of Algeria

and Oran; while the general presence of vegetation and of a cold air supply a stimulus to the circulation, to the appetite and to nutrition, which must certainly result in a rapid and notable hæmatopoiesis. The effects of sunlight, not only upon the destruction of microbes, but also in direct hæmatinic effects, will, it is hoped, be soon proved by exact experiment to be as great upon the animal as it has been shown to be in the metabolism of plant life. The influence of cold in maintaining vigor during the period when the ground is wrapped in its snow mantle is so well known to every Canadian as to hardly require a reference. Not only is the relative humidity low, but the cold causes an increase in air density, and therefore of the amount of oxygen in the amount of air taken in with every respiration. That this is very notable may be understood, since the capacity of air for moisture is doubled with every 23° F. of increase in temperature, owing simply to the expansion. That the reconstruction of the tissues depends notably upon this is seen not only in the increased demands of the system for food and its ability to assimilate large amounts of meat-producing foods in winter, but also from the statements and statistics regarding increase of weight, and the notable improvement in the health of consumptives given by Trudeau after twelve years' experience at the Saranac Lake Sanatorium at 2,000 feet of height in the Adirondacks, as well as by observers at high level stations in the Alps, as at Davos and in the "Hautes Pyrenees."

Assuming, however, that height varying according to the individual physical conditions of a patient, since those with weak hearts and notably neurotic symptoms cannot with impunity be taken at once to the high level climates, it is evident that from Maple Creek, at 2,200 feet, in Alberta, we have stations with a graduated ascent to Calgary at 4,500 feet, Banff at 5,500, and, by easy ascents, 6,000 feet near Laggan, up to 8,000 on the summits that may be reached. To many in Ontario and Quebec it will be a surprise to learn that the climate of Banff is more equable and less severe than many parts of Quebec and Ontario, while the influence of the Chinook winds causes an earlier and more pleasant spring than is experienced in the region of the Great Lakes. Westward toward the coast this Chinook influence becomes still more marked, and as we enter the plateau between the Selkirks and the Coast Range lying south of Kamloops to the 49th parallel through the Okanagan valleys, we find an ideal climate so far as the several elements affecting the tuberculous process are concerned. Thus, curious as it may seem to us in Toronto under the 43rd parallel, there lies under the 51st parallel a country where there are not more on an average than seventy-five days in the year on which rain falls, with a climate having an annual mean temperature 1° higher than that for Toronto. With a high mid-day temperature during July and August, succeeded by cool nights, we have an autumn with a mean monthly temperature higher to the end of December, it being 4° warmer in that month than Toronto. With January and

February come two months of clear, cold weather, with little snow. As March arrives, spring weather approaches rapidly, giving for this month 7° higher of an average temperature at Kamloops than Toronto. Thus this climate of relatively remarkable equability is due to the warm winds blowing constantly landward from the Japanese Current and becoming dry over these valleys, having been robbed of the moisture by the mountains of the Coast Range. The general altitude of these valleys is from 1,000 to 1,500 feet, whence, however, the equestrian can within an hour or two reach heights on the branches and foothills of the ranges of 3,000 to 4,000 feet, as may be found desirable or good for an invalid.

It thus becomes apparent that altitudes most favorable for hæmatocytosis can be reached, or a return to the lower levels made, as may prove in experience most suitable. Owing to the dryness, there being not more than ten or fifteen inches of annual rainfall, the climate has almost perennial sunshine, and exercise out of doors is almost always possible. Add to this the present sparseness of population and the absence of all polluting agencies of the atmosphere, and we have united in a most remarkable manner those elements which experience has found favorable to nutrition and for curing and holding in check the tuberculous process.

As yet the country is hardly known, even to Canadians, as a health resort, owing to its distance from the Eastern Provinces, and still more to its newness and the few facilities for the accommodation of travellers and invalids. What, then, is first required is the knowledge spread amongst the medical profession of the remarkable climate of that region, and along therewith the establishment of sanatoria under precise medical regulation. While nothing can be more melancholy than to see a patient sent by the order of his medical adviser to a new country, where he must endure poor accommodation in a small hotel or boarding-house and amongst strangers, with no medical adviser to tell him how to regulate his daily life, yet nothing is more pleasing than to see a series of single cottages grouped together as a sanatorium, where a number of the tuberculized, living their simple lives, may enjoy to the full the life-giving influences of a climate where, with days spent wholly in the open air, by promoting nutrition and by encouraging through gentle exercise the metabolism of tissues, sleep is improved, the nervous cough and expectoration are gradually lessened, and the feeling that the place's home is generated with a love for the country and climate which are bringing him life and hope.

Owing to the character of the climate and the productiveness of the soil under irrigation, the country must shortly become the home of thousands, who will be occupied in fruit-growing and in cattle-raising on the bench lands of the foothills. Possessed of so fortunate a gift from Nature, Canadians will do well to make provision whereby the health-giving qualities be not injured in their good repute, as has occurred notably in California by the absence

of regulating the tuberculized who go there and have caused many instances of house infection amongst the resident population. But more than this, the experience of every physician who has visited in the South or West the numerous winter resorts has taught us that very little permanent good is to be accomplished by sending patients to such districts, except to sanatoria where their daily routine of life is guided and regulated by the wise but firm hand of the trained physician.

The Poultice in Pneumonia.

Dr. A. W. Schin, in the *Lancet*, gives several very strong reasons why the poultice should not be used in bronchopneumonia of children. The weight of the poultice, and the change of temperature between the application and removal, tend to heart failure, and are, like the repeated removal of a patient from a hot to a cold room, unscientific and prejudicial to the welfare of the patient. He obtains better results by applying to the chest a packet, loosely fitting, made of light material, and rubbing it with oil and turpentine, giving at the same time the remedy indicated by the stage of the disease.—*Medical Age*.

Professor Ricord.

A good story is told of this celebrated surgeon. In a little town near Orleans there lived, more than fifty years ago, a celebrated bone-setter, who cured all the ills of humanity, and who enjoyed a great reputation in that country; no doctor had ever attempted to supplant him. One day, however, a young doctor, fresh from the learned faculty, arrived in the town and installed himself close by the bone-setter. It was not long before our *confrère* found out that his diplomas were of little use in competition with his rival. One day he was called to see the blacksmith, who was very ill, and after a proper examination he prescribed for him according to the rules of his art, and said that he would return the following day. That same evening, however, the bone-setter stepped in and told the patient that if he took what had been ordered for him he would be dead before the moon set a second time. Needless to say, the bottles were thrown out, and the charms of the medicine man substituted. The blacksmith got well. Exposed to constant affronts and a thousand and one annoyances, our unfortunate doctor determined to abandon the struggle, and returned to Paris with only five shillings in his pocket. He died a few years ago, leaving a colossal fortune, a brilliant renown, and a celebrated name, and a statue has been erected to him opposite the hospital where he worked the greater part of his life in the interest of humanity and science. His name was (?) Ricord.—*Medical Age*.

REPORT OF DEATHS FROM CONTAGIOUS DISEASES IN ONTARIO FOR THE MONTHS OF APRIL AND MAY, 1898.

PREPARED BY P. H. BRYCE, M.A., M.D., DEPUTY REGISTRAR-GENERAL.

APRIL, 1898.

Total Population Reporting.	Total Municipalities Reporting.	Total Deaths Reported.	Scarlatina.	Rate per 1,000 per Annum.	Diphtheria.	Rate per 1,000 per Annum.	Measles.	Rate per 1,000 per Annum.	Whooping Cough.	Rate per 1,000 per Annum.	Typhoid.	Rate per 1,000 per Annum.	Tuberculosis.	Rate per 1,000 per Annum.
1,465,703	522	219	14	0.1	12	0.1	7	0.05	4	0.03	9	0.07	173	1.4
64%	68%													

MAY, 1898.

1,634,503	604	238	17	0.1	16	0.1	15	0.1	9	0.06	13	0.09	108	1.2
75%	81%													

Population of Province 2,263,492
Municipalities of Province..... 745

Proceedings of Societies.

ONTARIO MEDICAL ASSOCIATION.

THE eighteenth annual meeting of the Ontario Medical Association was held in Toronto, June 1st and 2nd—Dr. William Britton, Toronto, presiding. Dr. E. L. Shirley, President of the Michigan State Medical Society, was introduced and given a seat on the platform.

Dr. A. McPhedran presented the report of the Committee on Papers and Business and moved its adoption. Carried. The reception of the report of the Committee of Arrangements was postponed.

Dr. Greig, Toronto, read a paper on "Infant Diet."

Dr. George Peters, of Toronto, opened the discussion in Surgery. Subject, "Treatment of Fractures of the Skull." This was discussed by Drs. Bingham, T. T. S. Harrison, T. K. Holmes, and I. H. Cameron. Dr. Peters closed the discussion.

Dr. Samson, of Windsor, read a paper on "Conclusions Culled from Thirty Years' Experience."

WEDNESDAY AFTERNOON.

The President read a communication from Dr. Rogers, chairman of the Committee of Foreign Invitations of the American Medical Association, extending an invitation to the members of the Ontario Association to be present at the Denver meeting. On motion of Dr. Harrison, seconded by Dr. McPhedran, a vote of thanks was tendered to the American Association for their kind invitation. The secretary read the minutes of the morning session.

Dr. Ryerson read the report of the Committee of Arrangements, which was adopted.

Dr. Bruce Smith presented the first interim report of the Committee on Credentials, which was adopted.

Dr. Britton then delivered the presidential address. He was tendered a hearty vote of thanks on motion of Dr. John Coventry, seconded by Dr. Harrison.

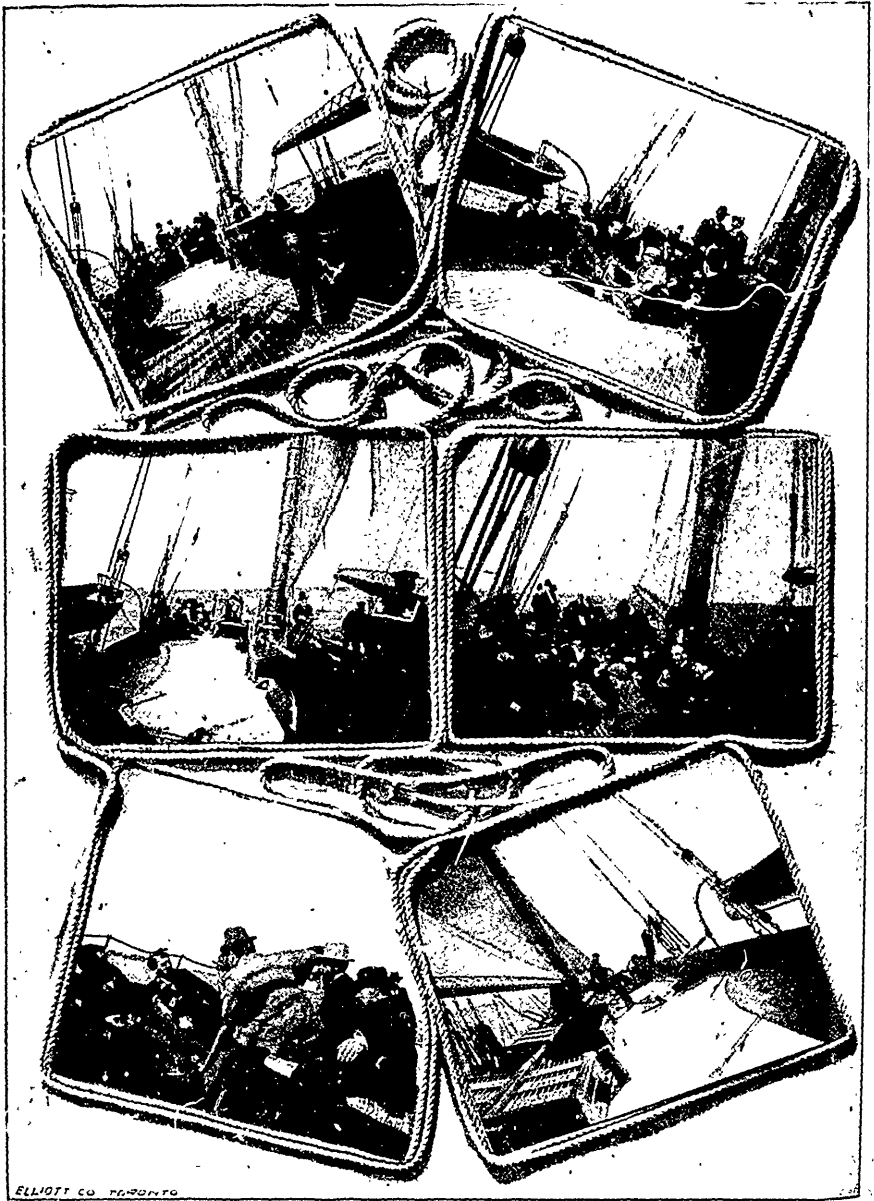
Dr. W. J. Wilson moved that the regular order of business be suspended, as he had a resolution to bring before the meeting. Carried.

Dr. Wilson moved "That, in the opinion of this Association, no one should receive free treatment as an out-door patient in our public hospitals, except those receiving their hospital maintenance from the municipality to which they belong."

Dr. Samson moved in amendment that a committee consisting



ONTARIO MEDICAL ASSOCIATION, 1898.
Photo of H. C. A. - Annual L. M. S. and. June 20. 1



ELLIOTT CO. TORONTO

ONTARIO MEDICAL ASSOCIATION, 1898.

Snap shots taken on board *The Oriole*, afternoon of June 2nd.

of Drs. Coventry, John Wishart, T. K. Holmes, Bruce Smith, A. H. Wright, J. C. Mitchell, W. J. Wilson and C. O'Reilly be appointed to consider the various recommendations made in the president's address. On motion of Dr. Ross, seconded by Dr. Powell, Dr. Wilson's resolution was tabled.

Dr. A. T. Hobbs, of London, read a paper on "Some Present Methods of Treatment of Patients at London Asylum for the Insane." This was discussed by Drs. J. Russel, Bruce Smith and J. F. W. Ross. The Association then divided into sections.

MEDICAL SECTION.

Dr. J. C. Mitchell was appointed chairman in this Section, Dr. Brown acting as secretary.

Dr. R. Ferguson, of London, read a paper on the "Injurious Effects of our Over-wrought School System on the Health of Public and High School Pupils." Dr. Ferguson, at the end of his paper, introduced the following resolution:

"That this Section of the Ontario Medical Association expresses its conviction that the school pupils of this Province are over-worked, that the examination system is overdone, and that the strain and cramming due to excessive study is injurious to the mental and physical constitution of the pupils.

"That this Section recommends that the number of school studies be lessened, and that the curriculum be framed with a due regard for the mental capacity and the preservation of the health of the school children."

This was discussed by Drs. Sheard, Spence and Britton. Dr. Ferguson closed the discussion. The chairman suggested that those who had spoken on the subject constitute a committee to consider the resolution and report before the general session of the Association.

Dr. J. C. O. Hastings read a paper on "Toxæmia of Pregnancy."

A paper on "Vicarious Urination" was presented by Dr. A. T. Rice, of Woodstock. This was discussed by Drs. Adami, Hastings, McLurg, Cruickshanks, McCallum (London), Fenton, Chambers, Dr. Rice closing the discussion.

Dr. C. B. Oliver's paper on "Traumatism of Labor" was taken as read.

Dr. Walter McKeown read a paper on "The Application of the Principle of Osmosis to the Treatment of Toxæmia."

Dr. Olmstead's paper was postponed.

SURGICAL SECTION.

Dr. Angus McKinnon was appointed chairman of the Section and Dr. Herbert A. Bruce, secretary.

Dr. A. Primrose presented a paper on "Operative Methods in the Conservative Treatment of Tubercular Joints." This was discussed by Drs. Coventry, A. Davidson, H. P. Galloway and C. L. Starr. Dr. Primrose replied.

Dr. Holmes was appointed chairman, while Dr. McKinnon read his paper on "Supra-Pubic Prostatectomy." This was discussed by Drs. A. B. Wolford, Greig, Forfar, H. H. Oldwright, Holmes and Peters. Dr. McKinnon replied.

The Section then adjourned.

EVENING SESSION.

Dr. McPhedran presented his paper on "Cretinism in Ontario," illustrated with lantern slides.

Dr. H. A. McCallum opened the discussion in "Medicine on Immunity in Excretion and Cure." This was discussed by Dr. Anderson.

Dr. J. C. Adami, of Montreal, read a paper on "Syphilitic Cirrhosis."

THURSDAY MORNING.

The president ruled that papers read be handed into the secretary to be disposed of by the Committee on Publication.

Dr. Holmes, of Chatham, opened the discussion in "Gynecology." Subject, "Carcinoma of the Uterus." This was discussed by Drs. Rowe, Georgetown; and A. A. MacDonald, of Toronto.

Dr. A. H. Wright presented a paper on "The Management of Difficult Breech Labors." The essayist demonstrated his methods by the use of a manikin. Drs. C. J. Hastings, W. Oldwright, Bray and Rice discussed the paper.

Dr. J. H. Richardson was invited to the platform and briefly addressed the Association.

A communication was read from Dr. A. M. Rosebrugh, secretary of the Prisoners' Aid Society, regarding the establishment of a home for inebriates. The President said that he would, with the consent of the Association, appoint a committee whom he would ask to consider the matter and report at the next annual meeting. This was approved of by the meeting. The President referred the matter to the Committee on Public Health.

Dr. McKinnon begged the privilege of introducing a motion—"That the dinner of the Association take place on the first evening of the Association, and that the out-of-town members pay their own way." Seconded by Dr. Rowe. Carried.

The Association then divided into sections.

MEDICAL SECTION.

Dr. A. T. Rice, of Woodstock, was appointed chairman of this Section.

Dr. R. Doan, of Harrietsville, read a paper on "My Experience with Antitoxin in the Fall of 1897." This was discussed by Drs. E. L. Shirley, C. Sheard, Price, Brown, Adami, L. M. Johnston, McPhedran and Samson. Dr. Doan closed the discussion.

Dr. Heggie then read a paper on "Hyperresonance of the Chest a Premonitory Symptom of Pulmonary Tuberculosis."

Dr. P. H. Bryce read a paper on "The Effect of the Climate of our Canadian North-West on Patients with Tuberculosis."

The Section then adjourned.

SURGICAL SECTION.

Dr. N. A. Powell read a paper on "Catgut, Gauze and Sponges—What are the best methods of their preparation?"

Dr. Oldright, sen., read a paper on "When Should We Operate, illustrated with cases." This was discussed by Drs. McKinnon, Riddell, McKenzie, C. Starr and Holmes.

Dr. G. H. Burnham read a paper on "The Various Operative Methods of Dealing with Eyes Lost through Injury or Disease." This was discussed by Dr. Chas. Trow.

The Section then adjourned.

The luncheon was then eaten at the Royal Canadian Yacht Clubhouse. A clinic followed at the Victoria Hospital for Sick Children. Dr. W. B. Thistle showed two cases of rheumatoid arthritis.

Dr. G. Peters showed (1) a case of teratomatous tumors on the back of a child, each containing intestine; (2) a case of ectopia vesicæ with prolapse of the rectum; (3) a case of empyema.

Dr. Primrose showed (1) a case of psoas abscess in which he had operated without drainage; (2) a case of deformity due to birth palsy; (3) a case of arthrectomy for tuberculosis of the knee-joint; (4) a case of Calot's operation for forcible reduction of spinal deformity.

Dr. Crawford Scadding made some remarks on the administration of chloroform in the prone position. He showed a case of rickets.

Dr. Powell showed a case in which he had fractured both lower limbs by manual force, followed by plaster-paris splintage for correction of deformity.

The hot air bath, as used in the treatment of surgical and medical diseases, was shown and its operation demonstrated.

EVENING SESSION.

Dr. Britton presided. The minutes of the preceding session were read and adopted.

Dr. McPhedran presented the report of the Committee on Nominations. It was as follows: Next place of meeting, Toronto. President, W. J. Gibson, Belleville; First Vice-President, J. F. W. Ross, Toronto; Second Vice-President, I. Olmstead, Hamilton; Third Vice-President, W. J. Rowe, Georgetown; Fourth Vice-President, N. McCrimmon, Kincardine; General Secretary, John N. E. Brown; Assistant Secretary, E. Hurlbert Stafford, Toronto; Treasurer, Geo. Carveth, Toronto. And to the Committee on Creden-

tials were added: W. J. Wilson and W. J. Greig, Toronto; to the Committee on Public Health, J. Hutchinson, London, and Gilbert Gordon, Toronto; to the Committee on Legislation, J. C. Mitchell, Enniskillen and John Samson, Windsor; to the Committee on Publication, J. T. Fortearingham, Toronto, and V. Anklin, Kingston; to the Committee on By-laws, J. Wishart, London, and A. McKay, Ingersoll; to the Committee on Ethics, A. McKinnon, Guelph, and G. Hodge, London; to the Advisory Committee, Wm. Britton, Toronto.

The report was adopted. Dr. Samson was then appointed to the chair.

Dr. W. Britton presented the report of the committee appointed to consider the resolution appended to the paper of Dr. Ferguson. It was as follows:

"The committee appointed yesterday by the Medical Section to prepare a resolution for submission to the Association on the subject of over-study in the public and high schools of Ontario and other matters pertaining thereto, beg leave to recommend the adoption of the following resolution:

"Inasmuch as the promotion and maintenance of the public health constitutes one of the most important objects for which the Ontario Medical Association was organized, it is submitted that, while fully recognizing the high standard of general education attained under our provincial school system, it is the opinion of this Association:

1. That the school children are over-worked to the detriment of their mental and physical health.
2. That in many schools the ventilation and air space per pupil are not ample to fulfil the proper sanitary requirement.
3. That the lighting of the school rooms is often so inadequate or so badly arranged as to induce various forms of visual defects.
4. That while some provision has been made for physical exercise there is room for improvement in this respect.
5. That home studies are as a rule made too arduous to allow for such rest and recreation as are essential to physical growth and development.

It is therefore recommended:

1. That the number of subjects of study prescribed by the Education Department be lessened.
2. That homework be curtailed.
3. That less exacting examinations be imposed on the pupils.
4. That more time during school hours be devoted to physical culture.
5. That school trustees should confer with members of the medical profession as to lighting, ventilation and capacity of school rooms.
6. And that the curriculum generally be framed with full consideration of the paramount necessity for preserving the physical health of the rising generation.

Dr. Britton moved the adoption of the report.

Dr. Peter Bryce seconded the motion. It carried unanimously.

Dr. Ross, Minister of Education, who was present, was then called upon. He expressed his pleasure at the recommendations made by the Association, and invited the president to appoint a committee to confer with him regarding the points touched upon in the report.

All of which is respectfully submitted."

The resolution was signed by Drs. Britton, Sheard and Ferguson.

The president named the following gentlemen as members of the committee to confer with the Minister of Education: Drs. R. A. Reeve, A. A. MacDonald, D. G. Wishart, E. J. Barrick, A. McPhedran, J. T. Fotheringham, R. Ferguson, A. McKinnon, C. Sheard, J. Spence, Rowe, G. Gordon, Hutchinson, H. Griffin, P. H. Bryce, G. S. Ryerson, and L. L. Palmer.

The treasurer presented his report, which was adopted.

It was moved by Dr. Britton, seconded by W. J. Wilson and *Resolved*,—"That this Association deplores the fact that in the various hospitals and dispensaries of the Province, under the guise of poverty many designing persons who are quite able to pay a medical practitioner at least a moderate sum for his services make false representations as to their financial standing, thereby securing gratuitous care and professional advice or attendance, inflicting a grievous evil upon the profession at large, imposing upon the time and skill of those who attend them and obtaining the charitable consideration which is designed exclusively for the deserving poor; therefore it is further resolved that a Representative Committee be appointed, consisting of five members from the staffs of as many hospitals, and five chosen from the outside profession, with power to add to their number, in the same proportion, whose duty it will be to make full enquiry during the coming year as to the extent of the evil, and to report to this Association at its next annual meeting their conclusions as to the best means for its suppression."

The resolution was discussed by Drs. Ryerson, Bryce and Fotheringham. Carried.

It was moved by Dr. F. N. G. Starr and seconded by Dr. T. S. Harrison, "That this Association desires to express its willingness to approve of some scheme whereby reciprocity between the Provinces may become an accomplished fact, without degradation of the Ontario standard, and that its members in meeting assembled do request that the Ontario Medical Council act in conjunction with the councils of the other Provinces with a view to bringing about this happy result."

This was discussed by Drs. Powell, Britton, Ryerson, Cruikshanks and Barrick, and carried.

It was moved by Dr. Barrick and seconded by Dr. W. J. Wilson, "That it be an instruction to the Committee on Papers and Business

to take up the report of the Legislative Special Committees, and resolutions of which notice has been given, immediately after the president's address at the next meeting of the Association."

This motion was discussed by the mover, the seconder, J. F. W. Ross, H. T. Machell and Bryce. Lost.

Dr. Barrick then gave the following notice of motion:

"That whereas there is reason to believe there is a widespread feeling among the medical men of this Province that the system now in vogue of lodge and contract practice is undignified and derogatory to the best interests of the profession, and should be abolished;

"Be it therefore resolved that in the opinion of this Association the Medical Council be and is hereby memorialized to take a plebiscite on the question of prohibition of lodge and contract practice.

"And further, in case the prohibition be endorsed by a substantial majority, to immediately, or as soon thereafter as possible, apply to the Local Legislature to have such amendments made to the Medical Act as to put the above in force."

The usual honoraria were then voted to the secretaries.

A letter was read from Dr. C. R. Dickson, president of the American Electro-Therapeutical Association, inviting the members of the Ontario Medical Association to attend the annual meeting to be held in Buffalo in September.

On motion of Dr. E. H. Adams, all papers unread were taken as read.

Dr. Bruce Smith presented the following report of the Committee on Necrology:

"Your Committee on Necrology beg to report the names of the following members of this Association who have gone over to the majority during the past year: Drs. Burns, Strange, Burgess and Closson, of Toronto; Drs. Miller and Shaw, of Hamilton; Dr. Cronyn, of Buffalo; Dr. Dixie, of Springfield; Dr. Newcombe, of Sandwich; Dr. McClure, of Thorold; Dr. Griffin, of Brantford; Dr. Killock, of Perth; Dr. Hill, of Ottawa, and Dr. Cunningham, of Kingston."

The report was adopted.

Dr. Primrose presented the report of the Committee on Publication as follows:

"The Committee on Publication beg to report that in consequence of the fact that during the past few sessions of the Association members have been permitted to part with their papers otherwise than through the Committee on Publication, the members of the Association have not handed their papers to the secretary. The president ruled this morning that all papers should be disposed of through the committee and that they should be distributed to the various journals. This ruling was, however, too late to affect matters this session and in consequence the committee have no papers referred to them."

Dr. N. A. Powell presented the report of the Committee on Ethics. It was as follows:

"Your committee beg to report that during the year no formal complaints have been sent in calling for action at our hands.

"We recommend that, as the supply of copies of the 'Code of Ethics' adopted by this Association is now exhausted, a new issue be arranged for. The code having received a thorough revision when last before the Association it is inexpedient to make further changes in it at the present time."

It was moved by Dr. Samson and seconded by Dr. Harrison, "That the sum of \$75 be donated to the Ontario Medical Library Association in recognition of its usefulness to the profession throughout the Province generally, if the funds of the Association will warrant it." Carried.

The following votes of thanks were then passed:

It was moved by Dr. Gibson, seconded by Dr. C. R. Dickson, "That the thanks of this Association be tendered to the Royal Canadian Yacht Club for the use of their clubhouse in entertaining the members of the Association."

It was moved by Dr. Dickson and seconded by Dr. Clouse, "That the secretary be instructed to send to the Toronto Street Railway Company the thanks of the Association for their kindness in supplying cars for the excursion about the city." Carried.

A hearty vote of thanks was tendered to the Honorable the Minister of Education for the courtesy manifested in placing once more the handsome rooms of the Education Department at the services of the Association.

The meeting then adjourned until the first Wednesday and Thursday of June, 1899.

FORTY-NINTH ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

DENVER has redeemed her pledges, and the meeting of this Association just closed has been one of the most satisfactory in its history. The very atmosphere of Colorado seemed to be imbued with hospitality. The attendance exceeded all expectations, the registration reaching 1,600. In the absence of President Sternberg, the chair was gracefully filled by First Vice-President Joseph M. Mathews, of Kentucky.

The entertainments provided by the local committee were not only elaborate, but pleasing in the extreme, and the memories of Denver's beauty spots will ever remain in the minds of the visiting physicians.

The following officers were selected for the ensuing year:—

President—Joseph McDowell Mathews, of Louisville, Ky.

First Vice-President—W. W. Keen, of Philadelphia, Pa.

Second Vice-President—J. W. Graham, of Denver, Col.

Third Vice-President—H. A. West, of Galveston, Texas.

Fourth Vice-President—J. E. Minney, of Topeka, Kansas.

Secretary—William B. Atkison, of Philadelphia, Pa.

Treasurer—Henry P. Newman, of Chicago, Ill.

Members of the Board of Trustees—Alonzo Gracelon, of Maine;
I. N. Love, of St. Louis, Mo.; H. L. E. Johnson, of Washington, D.C.

The next place of meeting is Columbus, Ohio.

CANADIAN MEDICAL ASSOCIATION.

THERE is no man so deserving of a holiday as the hard-working physician who has had his nose to the grindstone from early morning till late at night. It is not only a privilege but a duty to relax one's energies at least once a year and take an outing. Having made up one's mind to go away for a bit, the next question is where to go, for one likes to gain some mental profit as well as physical vigor. This year the Canadian Medical Association offers peculiar inducements to the busy man by meeting in the historic old city of Quebec on August 17th, 18th and 19th next. This will give to the physicians of the Dominion an opportunity to visit at a trifling cost one of the most picturesque parts of Canada, with profit to himself and benefit to his patients. It, too, will enable the English and the French to become better acquainted, thus helping to bring about a better understanding of each other.

The president, Dr. J. M. Beausoliel, is putting forth every effort to make the meeting a success. The Local Committee of Arrangements, under the chairmanship of the vice-president, Dr. Parker, ably assisted by the local secretary, Dr. Marois, are doing good work toward making the visit of their medical brethren enjoyable. It has been whispered that a trip to Grosse Isle is probable as a part of the entertainment. The officers of the Association are confidently looking forward to a large and enthusiastic gathering.

For particulars, address

Toronto.

F. N. G. STARR, *General Secretary.*

DR. THEODORE COLEMAN (Toronto, '94) has returned from England and will practise probably in Toronto.

DR. DON. ARMOUR (Toronto, '94) will remain in England. He has received an appointment on the staff of University College, London.

DR. FRANK P. FOSTER, editor of *The New York Medical Journal*, paid a visit to Toronto to attend the meeting of the Ontario Medical Association.

DR. HARRISON, of Selkirk, sailed for England recently to attend the meeting of the British Medical Association as the representative of the Ontario Medical Association.

The Canadian Journal of Medicine and Surgery

J. J. CASSIDY, M.D.,
EDITOR.

69 BLOOR STREET EAST, TORONTO.

W. A. YOUNG, M.D., L.R.C.P.LOND.,
BUSINESS MANAGER.

145 COLLEGE STREET, TORONTO.

Surgery—BRUCE L. BORDAN, M.D., M.C.M., McGill University; M.D. University of Toronto; Surgeon Toronto General Hospital; Surgeon Grand Trunk R.R.; Consulting Surgeon Toronto Home for Incurables; Pension Examiner United States Government, and F. N. G. STAIN, M.B., Toronto, Lecturer and Demonstrator in Anatomy, Toronto University; Surgeon to the Out-Door Department Toronto General Hospital and Hospital for Sick Children.

Orthopedic Surgery—E. F. MCKENZIE, B.A., M.B., Toronto, Surgeon Victoria Hospital for Sick Children; Clinical Lecturer, Orthopedic Surgery, Toronto University; Assistant Surgeon, Ontario Medical College for Women; Member American Orthopedic Society; and H. P. H. GALLOWAY, M.D., Toronto, Orthopedic Surgeon, Toronto Western Hospital.

Oral Surgery—E. H. ADAMS, M.D., D.D.S., Toronto.

Surgical Pathology—T. H. MANLEY, M.D., New York, Professor of Surgery, New York School of Clinical Medicine, New York, etc., etc.

Medicine—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and W. J. WILSON, M.D., Toronto, Physician Toronto Western Hospital.

Gynecology and Obstetrics—Geo. T. McKEOWN, M.D., M.R.C.S. Eng., Chatham, Ont.; and J. H. LOWE, N.D., Toronto.

Medical Jurisprudence—W. A. YOUNG, M.D., L.R.C.P. Lond., Eng., Toronto.

Mental Diseases—EZRA H. STAFFORD, M.D., Toronto, Resident Physician, Toronto Asylum for the Insane.

Public Health and Hygiene—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and E. H. ADAMS, M.D., Toronto.

Pharmacology and Therapeutics—A. J. HARRINGTONS, M.D., M.R.C.S. Eng., Toronto.

Physiology—A. B. EADIE, M.D., Toronto, Professor of Physiology, Woman's Medical College, Toronto.

Pediatrics—AUGUSTA STOWE GULLER, M.D., Toronto, Professor of Diseases of Children, Woman's Medical College, Toronto.

Pathology—W. H. PEPLER, M.D., L.R.C.P. Lond., Toronto, Demonstrator of Pathology, Trinity Medical College; Medical Registrar, Toronto General Hospital.

Laryngology and Rhinology—J. D. THOMPSON, M.D., Toronto, Laryngologist and Rhinologist, Toronto General Hospital.

Ophthalmology and Otolaryngology—J. M. MACCALLEM, M.D., Toronto, Assistant Physician, Toronto General Hospital; Oculist and Aurist, Victoria Hospital for Sick Children, Toronto.

Address all Communications, Correspondence, Books, Matter Regarding Advertising, and make all Cheques, Drafts and Post-office Orders payable to "The Canadian Journal of Medicine and Surgery," 145 College St., Toronto, Canada.

Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited.

Advertisements, to insure insertion in the issue of any month, should be sent not later than the fifteenth of the preceding month.

VOL. IV.

TORONTO, JULY, 1898.

NO. 1.

Editorials.

THE DUTY OF PHYSICIANS IN PREVENTING TUBERCULOSIS.

EVER since 1883, when Koch demonstrated that tuberculosis is a bacillary disease, the medical world has accepted this truth, while at the same time clinging a little to the old-time doctrine of hereditary transmission.

Evidence continues to accumulate, showing that heredity contributes a small share, the principal part being played by contagion operating in a suitable soil. The more frequent the exposure to contagion, the more likely is an attack to occur. Owing to the far-reaching effects of modern travel, few places, even the

most remote, can be said to be exempt from this disease. Observation, however, confirms what would seem to be a reasonable view, that the bacilli are more generally and widely diffused in the large centres of population. It is also precisely in these centres, that physicians find a relatively greater number of cases of tuberculosis and statisticians record a relatively larger mortality from this disease.

Thus, in Ontario 11 per cent. of the total annual mortality for 1896 was due to tuberculosis; but, in the combined population of the thirteen cities of this Province, the mortality from tuberculosis for the same year was 13.35 per cent. Similar conclusions have been drawn from the mortality returns of France, Scotland and the United States.

It is quite in keeping with Koch's doctrine of the contagious origin of tuberculosis, that cases of this disease should occur more frequently in cities than in country places, simply because there are more houses and consequently more foci of contagion in cities than in the country. This is a more correct view than to ascribe the relative frequency of consumption in cities to bad air and its infrequency in rural districts to pure air.

From the standpoint of treatment the presence of a considerable number of phthisical cases in a city is regrettable, because patients of this class often derive great benefit from a residence in the pure air of the country. Financial and social considerations, often mere whim, induce tubercular patients to remain in and other tubercular people to crowd into the cities, so that, unless hygiene can disinfect old centres of contagion and secure the proper disposal of fresh tubercular sputa, a large urban mortality from tuberculosis will, probably, be recorded for many years to come.

Efforts are being made to send candidates for consumption and patients also to places renowned for pure air and also to sanatoria, where, in addition, hygienic, dietetic and medicinal forms of treatment are carried out. Whatever advantages are obtained from fresh air, exercise and diet in sanatoria, much stress is not put on medicines, and specific medicines are now seldom used in these institutions. For instance, at Dettweiler's sanitarium expectorants and codeia are given to prevent severe coughing, phenacetin and antifebrin are given in fever; ice over the heart in especially high fever; against night sweats cognac at bedtime or dusk, or washing with alcohol. In case of hæmoptysis, ice, codeia and ergot.

Professor Landouzy, of the Laennec Hospital, Paris, has

recently published in *La Presse Medicale* a splendid article on the prevention of tuberculosis, and in treating this part of the subject, we shall take the liberty of reproducing his views, which, in the main, are now universally accepted. He says, that the hygienic treatment in use at the various European sanitaria, is of the first importance and sometimes works wonders, when begun at an early date and when continued, pertinaciously, for a considerable time.

Unfortunately, however, this hygienic treatment is necessarily very lengthy, so long, indeed, that the general run of tubercular cases cannot derive full benefit from it. It often happens, besides, that cases of acute phthisis occur which defeat the best laid plans of hygienic treatment and carry off the victims in a few months.

Preventive measures are, therefore, in Landouzy's opinion, of much more importance than any method of treating tuberculosis, and wherever a physician may practise—in a city or in the country—while he should strive to do what he can to cure phthisis, he will do more good to his patients and the people of the municipality in which he practises, if he propagates the doctrine that it is more easy to *protect one's self against phthisis than to be cured of it*. To do this in private families, as well as in public institutions, he should speak of the danger of contagion from expectoration and should exemplify what he means, just as surgeons, when inveighing against the evil effects of pyogenic organisms, take care to wash the body of the patient as well as their instruments and their hands, etc., in order to secure a good operative result.

A physician, attending a case of phthisis, should provide for the prevention of contagion and should consider the interests of the other members of the patient's family. If physicians practised prevention in cases of consumption as carefully as they do in cases of small-pox and diphtheria, the proximate and distant results of their efforts would lessen the mortality from consumption more than the best conceived medical treatment.

If people are careless or imprudent in dealing with tubercular cases, it is largely due to the fact that they have not been fully instructed. Such instruction should be given by physicians, who would then be exercising one of the noblest functions of their office, that of guardians of the public health.

Physicians should say frankly, that tuberculosis is contagious; but they should also explain how, when and why contagion takes place. Information should be given the public about phthisis, just in the same way as about scarlatina, typhoid fever or diphtheria.

The physician should explain that it is not the consumptive's body nor his breath, nor his perspiration, nor the air of the room he inhabits which is hurtful: the danger resides in the expectoration. He might also explain that the continuity of this disease, observed in certain families, and which is often spoken of as hereditary, is only a form of a preventable revivification of the bacilli. People understand, that when a patient dies of small-pox, diphtheria or scarlet fever, the disease does not die with him, but may be communicated to others by the emanations or excretions of the dead body. So also, after the departure or death of a consumptive patient, the contagion of his disease remains and survives, since his expectoration, which may have fallen in some corner of the room he occupied, dries up, mixes with the dust and the bacilli, contained in it, are ready for a favorable opportunity and a suitable culture ground to renew the process of tuberculization in some other person. The use of cuspidors should be enforced in the treatment of all cases of phthisis, and further, cuspidors, made of some combustible material, should be provided in all places, private and public, and the people, old and young, should be taught to use them.

Medical opinion taught people the necessity of vaccination and revaccination, in order to prevent the spread of small-pox, long before laws were passed in any country, making it obligatory to vaccinate. Just in the same way medical opinion can teach people that:

Tuberculosis is a preventable disease, since it is transmitted by a controllable contagion:

That the prevention of tuberculosis is particularly a question of family hygiene, a question of hospital hygiene, as much or more than social hygiene.

By saying such things and repeating them broadcast, a physician will do excellent work in preventing and stamping out tuberculosis and will, by so much, help to lighten the arduous task of treating this disease.

J. J. C.

HOSPITAL FOR THE INSANE, LONDON, ONTARIO.

"LONDON ASYLUM," as it is generally called, is beautifully situated on the Old Governor's Road, some three miles east from the City Hall, London. Building operations were commenced in 1869, and the main building was first occupied by patients in the following

year, 1870. There was, in those early days, accommodation for about 500 patients; the number of beds at present occupied is 1,004, making this as large an Institution of its kind as any in the Province.

The St. Mary's branch of the Grand Trunk Railway skirts the property at the suburban village of Pottersburg, and the Canadian Pacific track crosses still nearer to the main building. The eastern terminus of the London Electric Railway is at the asylum gate; and street cars pass to and from the city every twelve minutes during the day. The ornamental grounds immediately surrounding the buildings are considered the finest of the kind in Ontario, and in summer time constitute one of the principal attractions of London.



LONDON ASYLUM: MAIN BUILDING.

The first Medical Superintendent was Dr. Henry Landor, whose death occurred, after a long illness, on 6th January, 1877. For three years previous to the occupation of London Asylum he had been in charge of Malden Asylum; so that at the time of his decease he had gained an experience of nine years in the service. In his official report for the year 1877, Inspector J. W. Langmuir thus wrote respecting the late Dr. Landor:—"Holding advanced views in regard to the treatment of insanity and the administration of asylum affairs, he advocated and enforced these views upon all occasions, to the great benefit of the unfortunate persons committed to his care and the furtherance of effective asylum management. To his attention and energy in utilizing the labor of the inmates

and his skill in farming, gardening and general outdoor operations, the 300 acres of land attached to the asylum, and which at the time of its purchase was almost a barren waste, has now become one of the best farm properties in the Province; yielding a large profit every year and thereby reducing the cost of maintenance. In addition, Dr. Landor at all times was most indefatigable in bringing all branches of the asylum up to its present high state of efficiency."

During Dr. Landor's long illness, and until the appointment of the present eminent incumbent, Dr. Stephen Lett, now of Home-wood Retreat, Guelph, was the acting superintendent, and performed the duties of the office with very great satisfaction to all concerned.

Dr. Richard Maurice Bucke was installed as Medical Superintendent on the 15th February, 1877: and for over twenty-one years has guided and governed the affairs of the institution with the wisdom, progressiveness and enthusiasm which have gained for him a continental reputation.

There are now three classes of buildings occupied by patients, which may be conveniently designated as follows: (1) The North Building, which is set apart for the most refractory and troublesome patients, including many epileptics; (2) the three Cottages, where are domiciled quiet, chronic patients of both sexes; and (3), the Main Building, which includes the cases intermediate between these two extremes. Another and most necessary building has been urgently demanded for some time past to further complete the equipment of this large institution, namely, an Infirmary.

Readers of this journal may be surprised to learn that the excellent surgical work which is being done with marked success at London Asylum, and of which something was heard at the recent meetings of the Ontario Medical Association, is necessarily confined to a small suite of rooms in the fourth story of the Main Building, where the patient, to whom perfect rest and quiet are essential, must be more or less disturbed at times by the noises and confusion inseparable from such a location. We are happy to learn that there is now a reasonable prospect of work in the building of the Infirmary being commenced at an early date.

It may be interesting to learn that the water supply of this large institution is derived from a well of excellent spring water, eight feet in diameter and one hundred and twenty feet in depth to its rock bottom, which, under actual test, has been found to have a capacity of 500,000 gallons. It is pumped into iron tanks at the

top of the different buildings, which tanks have a capacity of about 60,000 gallons; and from these the water is distributed by gravitation wherever needed. The water is always good and the supply has never yet failed.

The vexed question of sewage disposal, which in the earlier days of the asylum was a very puzzling one, met a very satisfactory solution when, in 1889, what is called the Intermittent Downward Filtration System was adopted. Of this system a very full explanation, with accompanying plans, will be found in the report of the Provincial Board of Health for 1888. The new system was formally inaugurated on the 5th of July, 1889; and since then the asylum people claim that their sewage field has become "A thing



LONDON ASYLUM: NORTH (OR REFRACTORY) BUILDING.

of beauty and a joy forever." No more nuisances, no more threatened lawsuits; but a pure and wholesome atmosphere, with enormous crops of the finest vegetables and fruits in their season.

The subject of occupation and amusement has received a great amount of consideration from the inception of the institution; and perhaps in no other asylum have the various schemes for employment and entertainment of the inmates been more thoroughly and successfully carried out. Even in the most disturbed wards of the refractory building fully 75% of the patients are engaged in work of some sort, while among the cottagers scarcely an idler may be found. The farm, the sewage field, the gardens, workshops, orna-

mental grounds and wards have each their quota of male workers; while the laundry, sewing room and tailor's shop, furnish regular occupation to those women who are competent, or may be trained, and who are not needed for employment in the wards.

In the matter of amusements, the long winter evenings, from October to April, are taken up with a variety of entertainments in the spacious amusement hall: dances, concerts, lectures, stereopticon views, "At Homes," etc., make a very pleasing diversion for five nights in the week. In summer the excellent band of the asylum, under Dr. Sippi's accomplished leadership, gives a weekly promenade concert from 7 to 8 p.m.; while football, baseball, cricket, quoits and other sports furnish ample diversion and relaxation to patients and attendants alike at other times.

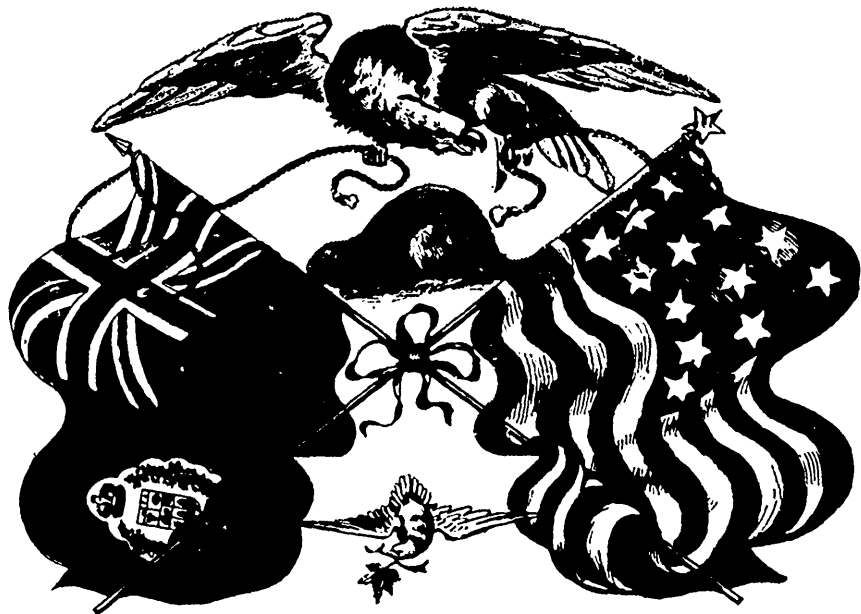
The medical staff includes:—Medical Superintendent, R. M. Bucke, M.D.; Assistant Medical Superintendent, H. E. Buchan, M.A., M.D.; 1st Assistant Physician, Frank Beemer, M.D.; 2nd Assistant Physician, A. T. Hobbs, M.D.

Dr. Bucke has just completed his term of office as President of the American Medico-Psychological Association; the most distinguished society of alienists on this continent.

H. E. B.

MEETING OF THE INTERNATIONAL ASSOCIATION OF RAILWAY SURGEONS.

WELCOME! A right hearty welcome to the railway surgeons of America. It is true that physicians are all akin, no matter from what land they come, and can fraternize through the promptings of professional interests and likings; yet the added influence of the mother tongue, common to Americans as well as ourselves, together with similar strains of ancestry, make the meetings of a representative American Medical Association in Toronto peculiarly pleasing to the physicians of Ontario. This kindly feeling is blended with admiration for the attainments of our visitors. We know that they are in the foremost rank of the living acting surgeons of to-day and are men of brilliant intellect and sound judgment. We are sure that, with such a learned array of surgeons, the scientific results of the Toronto meeting will equal the best of the annual meetings that have been held in different States of the Union. Speaking for the staff of this journal, we feel much pleasure in expressing the earnest hope that our



THE WELCOME OF "THE CANADIAN JOURNAL
OF MEDICINE AND SURGERY"

TO THE

International Association of Railway Surgeons,

TORONTO, JULY 6th, 7th and 8th, 1898.

From the Old South's plantations, or dim Sierra's snow,
Or lonely Yellowstone, you gather here :
But alike from plain or desert, or mystic Mexico,
To all a British welcome most sincere.

The meteor-flag of England in royal splendor falls
Beside Columbia's colours, floating forth :
The red cross of Saint George—yet not to arms it calls ;
But waves a sign of peace, along the North.

Of peace, although the cannon upon the Spanish Main
Are roaring o'er the roll of battle drums ;
The pride of race is with us as those squadrons close again,
And from their smoke a dream of EMPIRE comes.

Not in that martial vanguard you keep your daily post—
Not in the silken boudoirs of the rich—
But at the smoking train-wreck a part as brave you boast
Beside the injured at a shattered switch.

In the white mountain passes, the washout and the storm,
Beneath the broken trestle, fallen bridge ;
Called to as stern a duty, yours is it to perform
A strong man's trust—and yours the privilege !

EZRA HURLBURT STAFFORD, M. D.

visitors may bear away with them to their homes in the United States friendly recollections of their Canadian brethren and the land of the Maple Leaf. It is a great pleasure to learn that our valued collaborator, Dr. Bruce L. Riordan, is chairman of the Committee of Arrangements of the meeting. The position is an onerous one; but we feel confident that Dr. Riordan will accomplish the duties of his office with credit to himself and his confreres, and so satisfactorily to the visiting members of the Association, that, at no distant day, we may have the pleasure of seeing the Stars and Stripes and the Union Jack intertwined at another representative medical gathering.

J. J. C.

ISOLATION IN LEPROSY.

AN interesting letter on this subject has been recently published by Dr. Ashmead, of New York, in the *Indian Lancet* of Calcutta. Dr. Ashmead, who attended the Berlin Leprosy Conference last October, made it his principal object to endeavor to obtain universal means of isolation, and therefore wished to stir up the different governments. He contended, that leprosy could be easily kept out of America, if European, Asiatic and South American governments would provide lazarettos and enforce regulations for the detention of lepers in them. Dr. Ehlers, of Copenhagen, Dr. Hansen, and the non-contagionist group from London opposed these views.

Now that immigration from Europe and Asia is beginning to flow strongly towards this country, Canadians, as well as Americans, are interested in preventing the advent of foreign lepers to America. There is not much native leprosy in Canada, any existing cases having occurred principally among the Acadian population in the Maritime Provinces of the Dominion. In 1896, Dr. Smith, physician of the lazaretto at Tracadie, New Brunswick, the only institution of this kind in Canada, reported, that leprosy had died out in the village of Tracadie; in two or three old districts he found two or three cases awaiting admission to the lazaretto. He thought this condition of affairs due to strict precautions and effective segregation of patients. There were in all nineteen patients—thirteen males and six females.

Lepers may, however, find their way to Canada from Iceland, Norway, China, and other countries. Last year, in fact, three lepers escaped from Iceland and found their way to Manitoba. We understand, that they have been sent to Tracadie, through the

efforts of the Provincial Board of Health of Manitoba. We do not think this disease will ever make much headway in Canada, for the simple reason that Canadians are instinctively contagionists, and would not tolerate the appearance in public of persons, bearing undeniable marks of leprosy. It is not so, however, in other countries. For instance, Dr. Ehlers states in a letter, which appears in *La Presse Medicale*, May 14th, 1898, that lepers may be recognized at the offices of specialists in Paris, and also at the hospitals in that city. He also states, that anyone familiar with the appearance of the lesions of leprosy can easily recognize cases of the disease, and mentions travelling in June, 1897, between Cannes and Nice in the same compartment of a railway carriage with a male leper, who expectorated freely and was incessantly scratching the leprosy ulcers with which his face was covered. Also, that in May, 1898, when he was returning from Spain, he lunched at the refreshment counter of the Hendaye railway station beside a leprosy woman, covered with open leprosy ulcers.

The fact that lepers travel about without hindrance in France and Spain, would induce one to think, that, with care and cleanliness, ordinary cases of leprosy are not contagious. This is the opinion of Dr. G. A. Hansen, of Bergen, Norway, who says, in writing to Dr. Hewitt, of Minnesota, that leprosy is not likely to spread in America, on account of the cleanly habits of the American people—a consoling reflection for Canadians, who may claim to be as cleanly in their habits as their neighbors. But, whatever views may be held on the contagionist or non-contagionist side of the leprosy controversy, it is quite certain, that no person known to be a leper would be allowed to live with or travel about in company with healthy people in this country. There is but one place for such an unfortunate person, and that is the Tracadie Lazaretto.

Taking a leaf from Dr. Ehler's experience in Spain and France, we think that our medical quarantine officers should be familiar with ordinary forms of leprosy, so that, in future, the introduction of lepers as emigrants to Canada may be arrested in time.

J. J. G.

THE ONTARIO MEDICAL ASSOCIATION.

ANOTHER meeting (the eighteenth) of the Ontario Medical Association has passed. The attendance was exactly the same as that of the '97 meeting. The papers, most of which will appear within the next few months in the medical journals, were, as a rule,

most practical. The clinic at the Victoria Hospital for Sick Children was a new feature on the programme, and relieved what might have otherwise been perhaps tedious work. There were a number of papers and demonstrations of special interest. The Pathological exhibit, contributed mainly from the medical colleges, was another new feature and very instructive. The entertainment programme, under the superintendence of Dr. Ryerson, was varied and enjoyable. The smoker, the luncheon, the street-car excursion about the city, the sail on the *Oriole*, and the private receptions, contributed greatly to the pleasure of the outside members and guests.

There were present: Drs. Adami, of Montreal, who carried cordial greetings from our Quebec confrères; E. L. Shurley, of Detroit, President of the Michigan State Medical Society, and Frank P. Foster, of New York, who presented the goodwill of our American brethren.

The action of the Association in re-endorsing the reciprocity scheme was commendable, and its resolution respecting the health of school children one of the most important features of the work done in committee.

Next year the Association is announced for Toronto, the first Wednesday and Thursday of June, and the President is W. J. Gibson, of Belleville.

For the benefit of those of our readers who were not able to be present at this year's meeting, we give in this issue two full page half-tones, one of a photograph taken by flash light of the interior of the Banquet Hall at the R.C.Y.C., where the annual luncheon was held, and some snap-shots taken on board the *Oriole*, so courteously granted the Association by Mr. George Gooderham, on the second afternoon of the Convention.

W. A. Y.

ANOTHER SANATORIUM FOR CONSUMPTIVES.

A MOVEMENT is being made by some medical practitioners and others in Toronto, to provide a sanatorium for consumptives a few miles out of the city on one of the trolley lines, on which there are elevated sites, so that city and county patients can be easily visited therein by their physicians and their friends.

It is intended that it shall be a first-class institution in every respect, on an economical cottage plan. And the promoters state

that provision will be made for the poorer classes, and patients in all stages of the disease, with the hope of checking its progress even when considerably advanced in the second stage, as sometimes has been done; and also for a home wherein the last days of hopeless sufferers may be relieved of their most distressing symptoms and made as comfortable as possible, and not be a source of danger to their relatives and others.

It is also the intention, it is said, to have a piece of farm or garden land in connection with the Sanatorium, on which certain patients who would be benefited by such exercise may be engaged and so help to provide farm and garden food-stuffs for the institution.

Though, as our readers are all aware, we are strongly opposed to the multiplication of charitable institutions in and around Toronto, the large majority of which tend to simply beggar the ordinary practitioner, yet such a project as this should, and doubtless will, appeal so strongly to the charitable public of Toronto and its vicinity that there should not be much difficulty in securing sufficient funds to carry it to a successful issue.

W. A. Y.

GO AHEAD, COMMITTEE.

At a meeting of the Toronto Medical Society on Thursday, 26th May, the following resolution was moved by Dr. W. J. Wilson and seconded by Dr. H. H. Oldright and carried unanimously:

Resolved—That in the opinion of this Society no one should receive free treatment as an in-door patient in our public hospitals except those receiving their hospital maintenance from the municipality to which they belong.”

A committee composed of Drs. Wilson, B. E. McKenzie and T. F. MacMahon was appointed to confer with the other Societies and in other ways further the interests of the resolution.

DR. D. C. MEYERS has been promoted to be adjutant in the Royal Grenadiers.

DR. H. J. HAMILTON, of Church Street, was married on the 21st of last month.

DR. WILLIAM LEHMANN has resigned his captaincy in the Royal Grenadiers, retaining rank.

DR. JOACHIM GUINANE was married last month and will reside at the corner of Mutual Street and Wilton Avenue.

The Physician's Library.

BOOK REVIEWS.

A Treatise on Aphasia and other Speech Defects. By H. CHARLTON BASTIAN, M.A., M.D., F.R.S. London: H. K. Lewis. 15s.

Since the earlier researches of Broca in this field, more and more attention has been given to the subject; and to the literature of this branch of nervous disease the present work is an exceedingly valuable addition; not only summarizing, as it does, the progress already made, but giving the careful results at which the writer, himself a high authority, has arrived.

While indispensable to the alienist, the work will also be acceptable to the general practitioner, being written in a singularly lucid style. Sufficient physiological and psychological data are given to enlighten, but not to exhaust, the reader, preliminary to entering upon the subject in hand; the author having wisely avoided the method, which seems to be a peculiarly German one, of thoroughly fatiguing the reader through the first three hundred pages with irrelevant minutiae and aimless digressions which arrive at nothing, and prove nothing but the writer's conscientious erudition.

Having stated the relations which exist between Thought and Language, the writer proceeds to classify the various forms of Speech Defects, and in the chapters on Structural Disease in the Auditory and in the Visual Word Centres, records a large number of singularly interesting cases which throw much new light upon a subject always more or less confusing to the general practitioner. In the concluding chapters the Etiology, the Diagnosis, the Prognosis and the Treatment of Speech Defects are taken up; and in these pages the results of many years' close study are vouchsafed. The evidences of untiring care and inexhaustible patience are marked on every page of the book, which we feel justified in designating as a great work; and upon a subject of the first importance, having so intimate a bearing upon many obscure nervous lessons which have for too long a time been comfortably left in their obscurity.—E. H. S.

The State Hospitals Bulletin. A Quarterly Report of Clinical and Pathological work in the State Hospitals for the Insane (New York), and the Pathological Institute. Published by authority of the State Commission of Lunacy. Utica State Hospital, N.Y.

This publication is well known in Canada, and has since its first appearance, two years ago, been regarded with great favor by the members of the profession who have made a specialty of mental and nervous diseases. In the last annual report of Ontario Asylums, Dr. C. K. Clarke, of Rockwood Asylum, made apt reference to the Bulletin as a work which might be imitated with great advantage in Ontario, a suggestion which rather indicates the favorable reception which has been accorded the Bulletin, than any really imperative need for a similar publication in a Province where the chief activity among alienists seems at present to be either wholly gynecological or wholly anti-gynecological, and to begin and to continue and to end in activity.

The steady growth of the publication has exceeded even the anticipations of those most favorable to it. With the next (third) volume it will be issued under the new title, "Archives of Neurology and Psycho-Pathology," and with this wide scope, and the almost unlimited material at its disposal, a career may be predicted for it as brilliant and as long continued as that of the American Journal of Insanity or the Alienist and Neurologisy, the two leading periodicals of the sort, by all odds, in the world.

In glancing over the volumes already published, one is struck by the

immense field covered by the Bulletin. The latest steps in pathological research are minutely described, and the results of the latest methods in the treatment of the insane are particularly set down. Many of the articles are as exhaustive as special monographs; and that group of questions which cluster about the study of Insanity, such as Criminal Anthropology and Inebriety receive thorough treatment by experienced pens. Illustrations are very numerous and the paper and press could not be improved.

To say much in little, the Bulletin has in its "experimental stage" proved a library of the latest information upon Mental diseases, and transformed as the "Archives of Neurology and Psycho-Pathology," it will prove indispensable to the alienist and of exceptional value to the general student of neurology.

E. H. S.

International Clinics. A Quarterly of clinical lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on Treatment and Drugs, by professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by JUDSON DALAND, M.D., University of Pennsylvania, Philadelphia; J. MITCHELL BRUCE, M.D., F.R.C.P. London, Eng.; and D. W. FINLAY, M.D., F.R.C.P. Volume I., Eighth Series, 1898. Philadelphia: J. B. Lippincott Co. Montreal: C. Roberts, 593A Cadieux Street.

Amongst the formidable looking, but certainly influential array of contributors to this work are found the names of such men as Byron Bramwell, of Edinburgh; C. G. Cumston, of Tufts College; J. Abbott Cantrell, Professor of Diseases of the Skin in the Philadelphia Polyclinic; W. S. Davis, of Chicago Northwestern University Medical School; H. O. Walker, of Detroit College of Medicine; C. G. Stockton, of Buffalo University; Paul F. Mundé, of New York; J. M. Matthews, of Louisville; Alex. James, of Edinburgh, and many others.

The contents of Vol. I. include Clinical Lectures on Drugs and Remedial Agents; Treatment; Medicine; Neurology, Surgery, Gynecology, Ophthalmology, Laryngology, Rhinology and Dermatology. We have not often seen a work which shows such superior mechanical excellence. The type is large, easily read and well spaced, the paper is good, and the illustrations are all exceedingly clear and render the perusal of the lectures much more enjoyable and consequently add to the interest of the reader. The idea of the publishers in giving the profession the benefit of clinical lectures delivered by some of the "stars" in our calling was a most happy one. It is little wonder that it became necessary to publish not only a second but an eighth edition of the book. There have been many additions made to the text, some of the chapters being longer than in the last, and others entirely re-written. The profession will find the new *International Clinics* a valuable addition to their book shelves.

A System of Medicine by many Writers. Edited by THOMAS CLIFFORD ALBUTT, M.A., M.D., LL.D., F.R.C.P., etc., Regius Professor of Physic in the University of Cambridge, etc. Vol. I. London: Macmillan & Co., Limited. New York: Macmillan & Co., 1896. Toronto: A. P. Watts & Co., College Street.

We have to acknowledge with thanks the courtesy recently extended to us by the publishers of this splendid system of medicine in being favored with a handsomely bound set of the work, Vols. I. to IV. The favorable impression created from the very first by this work has rendered the sale up to the present very large indeed. So much so, that the purchaser in receiving each volume as it comes out, awaits anxiously for the next. Vol. I. is devoted to Prolegomena and Infectious Diseases. Amongst the former are included Medical Statistics, by Dr. Billings; Anthropology and Medicine, by Dr. Beddoe; Temperament, by Dr. Rivers; The Laws of Inheritance in Disease, by Mr. Hutchinson; Medical Geography of Great Britain, by Mr. Haviland; Inflammation, by Dr. Adami; The Doctrine of Fever, by Dr. Burden Sanderson; The General

Pathology of Nutrition, by Dr. Mott ; The General Pathology of New Growths, by Mr. Shattock and Mr. Ballance ; The Principles of Drug Therapeutics, by Dr. Leech ; besides other chapters of equal interest. Under Division 2, Part I, that of Fevers, deals with Insolation or Sunstroke, by Sir Joseph Fayrer, and under Part II., that of The Infections, such subjects as : The General Pathology of Infection, by Dr. Kanthack ; Septicæmia and Erysipelas, by Mr. Watson Cheyne ; Infective Endocarditis, by Dr. Dreschfeld ; Puerperal Septic Disease, by Dr. Playfair ; Furuncle, by Dr. Melsome ; Epidemic Pneumonia, by Dr. Whitelegge ; Influenza, by Dr. Goodhart ; Diphtheria, Tetanus, Enteric Fever, Cholera Asiatica, Plague and Relapsing Fevers are taken up and dealt with in a most concise and interesting manner. This is a book of value to every physician and we hope that the publishers will meet still with the same hearty response from the profession in the constantly increasing demand for Allbutt's System of Medicine.

Operative Gynecology. By HOWARD A. KELLY, A.B., M.D., Fellow of The American Gynecological Society ; Professor of Gynecology and Obstetrics in The Johns Hopkins University, Baltimore ; Gynecologist and Obstetrician to The Johns Hopkins Hospital, Baltimore ; formerly Associate Professor of Obstetrics in The University of Pennsylvania, etc.; etc. With 24 plates and over 550 original illustrations. Vol. I. Toronto : George N. Morang, 63 Yonge Street, 1898.

In the usual amount of space allotted in medical journals to review a work, it is a physical impossibility to elaborate or detail the merits of any particular book at such length as in many cases is certainly well deserved. Some works published receive their just deserts in a few words of condemnation, others are received with universal praise. Reviewers of books should be quite impartial, it being but fair that the publisher of any particular work have, if necessary, pointed out to him, when being "weighed in the balance," just where he has been "found wanting." In Howard Kelly's work, however, to the publication of which the entire professional world has been looking forward, it is quite unnecessary to go on the "still hurt" for deficiencies or errors, as of such there are none. Of this work it can therefore be said, it has been "weighed in the balance and not been found wanting." It is a pleasure at any time to peruse leisurely any book in which special attention and care have been given to its illustrations ; but when one gets a book in which unusual magnificence, and we might almost say positive extravagance (if such were possible) had been lavished upon the illustrations of cases under discussion, especially when much time and labor had been expended upon them in having them drawn from the original cases, it is a difficult matter to put such a book aside. We do not know of any volume where such attention and care has been given to the drawings. The author in writing the work desired to place in the hands of the professional world a convenient summary of the various gynecological operations which he has found most beneficial in his own practice. Dr. Kelly has not attempted to present a digest of the literature of his subject, or to describe all the important operations, but has summarized in such a manner as to carry out his original intentions in the matter. It is one of the duties almost (if we may so express it) of the gynecologist of to-day to accurately record his own experience and by that means benefit his confrères. Dr. Kelly has done this, and without attempting to even mention the many other excellent points of his work, we say candidly to one and all, "Get Kelly as soon as you can."

Atlas and Abstract of the Diseases of the Larynx. By Dr. L. GRÜNWARD, of Munich ; authorized translation from the German. Edited by Dr. CHARLES P. GRAYSON, lecturer on Laryngology and Rhinology in the University of Pennsylvania ; Physician in charge of the Throat and Nose Department, Hospital of the University of Pennsylvania. 107 colored figures on 44 plates. Philadelphia : W. B. Saunders, 925 Walnut Street, 1898. Toronto : J. A. Carveth & Co.

By far the most valuable point about Dr. Grünwald's book is that each

colored illustration is accompanied by the necessary data in the form of a short history. On that account the reader receives almost the same amount of benefit from the careful perusal of each illustration as he would in the study of the case itself, if present. To the ordinary practitioner especially this is of unbounded service, as in many instances he has not the opportunity of seeing such cases in practice, and be able thereafter to diagnose them if they should come under his care. Another point of value is that the author has arranged the illustrations according to external appearances, thus comparing cases side by side and assisting diagnosis in a very material manner. The book will be found to have been written in such a way as to appeal not necessarily to the specialist, but to the general practitioner also.

Atlas of Legal Medicine. By Dr. E. VON HOFMANN, Professor of Legal Medicine and Director of The Medico-Legal Institute at Vienna; authorized translation from the German. Edited by FREDERICK PETERSON, M.D., Clinical Professor of Mental Diseases in The Women's Medical College, New York; Chief of Clinic, Nervous Department, College of Physicians and Surgeons, New York; assisted by A. O. J. KELLY, M.D., Instructor in Physical Diagnosis, University in Pennsylvania; Adjunct Professor of Pathology, Philadelphia Polyclinic; Visiting Physician to St. Mary's and St. Agnes' Hospitals; Pathologist to the German Hospital, Philadelphia. 56 plates in colors and 193 illustrations in black. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898. Toronto: J. A. Carveth & Co.

We ask the question, "Is there any department of medicine in which carefully drawn illustrations are becoming more and more necessary every day, than in that of Legal Medicine?" We at once answer, no. In ordinary text books on medical jurisprudence, this idea cannot conveniently be carried out, therefore there is all the more need of an atlas on so important a subject. It is little wonder that the other Atlases published by W. B. Saunders & Co. have received such recognition all over this continent,—they have shown such a high degree of excellence. This work of Drs. Peterson and Kelly at once places within the reach of all a book giving most graphic illustrations of the principal cases of medico-legal interest. The illustrations have been prepared from cases or recent museum specimens. The author has not attempted to go into the subject by giving exhaustive accounts of cases as a whole, but has devoted most space "to portray instructive instances of at least the most important medico-legal occurrences." Plates 7, 15, 16 and 21 could not be improved upon. We recommend this atlas to not only coroners, but the profession generally.

MAGAZINES RECEIVED.

The Sanitarian. Published monthly. The American News Co., New York, general agents. Price, \$4.00 a year; 35 cents a copy. The June number contains the following articles: "Climate, Health Resorts and Spas of Canada," by T. G. Roddick, M.D., M.P.; "Sanitaria for the Treatment and Prevention of Tuberculosis," by Harold Bryn, M.D.; "Benefit of Water Filtration," by John W. Hill, C.E.; "Non-Contagiousness of Yellow Fever," by A. N. Bell; "Quarantine Regulations—Convention Report"; "Experiments with Formaldehyde as a Disinfectant," by E. M. Parks, M.D.; "Use of Formaldehyde in House Disinfection," by David D. Brough, M.D.; "La Maladie du Sommeil—A New Disease"; "National Health Service—Bill Reported by Committee on International and Foreign Commerce"; "The Ninth International Sanitary Congress"; "Some Public School Needs," by Austin Thorndike.

(PUBLISHERS' DEPARTMENT.)

TANNOFORM.

THE use of tannoform, a product of condensation obtained from formaldehyde and tannic acid, which has already been referred to on previous occasions (*vide* Merck's Report 1895, p. 13, and 1896, p. 148), has been considerably extended in the course of last year. This is attributable not only to its influence on hyperidrosis and bromidrosis but also to our improved knowledge of the therapeutic properties of this substance, by virtue of which it is an excellent astringent and antiseptic medium adapted both for internal treatment of catarrhus affections of the intestinal canal and for external application in wounds and skin diseases.

The specific action of tannoform in hyperidrosis and bromidrosis is acknowledged by all, without exception, who have tested its properties. I will here only mention the most recent publications, viz.: Weiser (Therap. Wochenschrift 1897, No. 46, p. 1187), Carl Sziklai (ibid. No. 41, p. 1050), Paul Richter (Allg. med. Central-Ztg. 1897, No. 73, p. 928), A. Hoff (Aerztl. Central-Anz., Vienna, 1897, No. 24), J. Munk (Aerztl. Central-Anz., Vienna, 1897, No. 35), M. Kortum (Aerztl. Central-Anz., Hamburg, 1897, No. 38, p. 397). Dr. Leop. Herz, of Prague, in a private communication describes tannoform as a sovereign remedy for intertrigo. In the communications of other medical correspondents it is stated that 10 per cent. tannoform ointment forms an excellent remedy for erythema solare, which is a source of much discomfort to certain individuals while exposed to the influence of sea-air. Hoff cured cases of badly ulcerated balanitis by means of tannoform within 48 hours, he also found the preparation to be a most efficient means of treating decubitus, ulcera cruris and buboes. This writer also refers to the great value of tannoform for troops on the march, since it renders galled feet immediately fit for marching. J. Munk found tannoform to be useful also in the following cases: (1) in fresh wounds covering a moderate area and in superficial ulcers, (2) in weeping eczema, intertrigo and excoriations, (3) in ordinary ozaena and pharyngitis, (4) internally applied as a remedy for diarrhoea, intestinal hæmorrhages and clumps of piles.

For the latter Munk recommends the following prescription:

R. Tannoformii 2.0 (gr. 32)
 Extr. Belladonnæ 0.10 (gr. 1½)
 Butyri cacao, a sufficiency
 To be made up into 10 suppositories.
 2 suppositories to be applied daily.

Sziklai goes so far as to ascribe to tannoform a life-saving power when given internally to children suffering from severe diarrhoea. This is also confirmed by J. Braun (Therap. Wochenschr. 1897, No. 46, p. 1189).

THE IMPORTANCE OF WILL-MAKING,

MEDICAL men will at once allow that in the years of their practice they have come across many cases where a great deal of unnecessary suffering has been caused through the neglect of people making their wills in their days of health. Families have many times been left in most embarrassing positions by such neglect and have been caused in some cases months of discomfort, which could have been prevented by a little foresight.

Many people struggle to accumulate property during life, but do not give sufficient consideration to its disposition after death, even postponing this simple duty of making a will until too late. No doubt the delay in making a will frequently arises from inability to select an executor of requisite ability and integrity, more particularly if a trust is created under the will, and even when a suitable person is selected, the grave doubt is always present whether such persons will live to execute the trust.

The Toronto General Trusts Company was established expressly to remove such doubt and to meet all requirements in respect to security, continuity of service, and efficiency in management. The Company therefore confidently solicits the appointment, under wills, of executor and trustee.

Confidential interviews upon all trust and estate matters are invited.

The Toronto General Trusts Company also acts in all trust and fiduciary capacities. It is qualified in every way to take charge of assets both before and after the death of the owner. There are many advantages in putting the management of financial affairs in the care of the Company, either as trustee or agent, for the purpose of making investments, collecting interest, rents, etc.

The Board of Directors are leading business men of the highest character, whose integrity and standing in the community afford the amplest guarantee that all business entrusted to the Company will be faithfully managed.

Special attention is called to the fact that all trust funds and investments are kept separate and apart from the assets of the Company; the records of each individual trust show the assets belonging thereto.

THE TREATMENT
OF
CHOLERAIC DIARRHŒA.

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THE VALUE OF BRAN FOODS.

AT a meeting of the College of Physicians of Philadelphia, a valuable paper on this subject was presented by Drs. N. A. Randdolph and A. E. Rousel. The following are their conclusions :

The experiments of Rubner leave no doubt that a white bread contains more assimilable nutriment than one made from the whole wheat does, but this does not render it a desirable foodstuff for exclusive use. On the contrary, a weaned but still quite young omnivorous mammal thrives better upon an exclusive diet of bran bread than on white, and, presumably, because the earthy and alkaline salts are present in greater abundance in the former, and also because the indigestible constituents tend to give to the intestinal contents that bulk and consistence which are essential to the hygiene of the digestive tract. But, as has been shown by Edward Smith and others, the branny scales are needlessly irritating, and unduly hasten the passage of food but partially digested. The end which popular hygiene attempts to effect by the retention of bran in breadstuffs can be better attained by other means. Thus, thenutritive minerals of food, so frequently lost in ordinary methods of preparation, are readily restored by the concentration of the liquor in which meats and vegetables are cooked into a soup stock, as is practised in almost every French kitchen. Again, the various fresh green vegetables used as salads yield in abundance these mineral foodstuffs, the presence of which we have seen is indispensable to normal tissue activity. A further advantage of these and other succulent vegetables lies in the fact that their cellulose is as compared with bran scales, soft and unirritating to the digestive tract. From the facts, old and new, which have been presented, the following deductions appear to us justifiable :

1. The carbohydrates (or starches and sugars) of bran are digested by man to but a slight degree.
2. The nutritive minerals of the wheat grain are contained chiefly in the bran, and, therefore, when bread is eaten to the exclusion of other foods, the kinds of bread which contain these elements are the more valuable. When, however, as is usually the case, bread is used as an adjunct to other foods which contain the inorganic nutritive elements, a white bread offers, weight for weight, more available food than does one containing bran.
3. That by far the major portion of the gluten of wheat exists in the central four-fifths of the grain, entirely independent of the cells of the fourth bran layer (the so-called "gluten cells"). Further, that the cells last named, even when thoroughly cooked, are little, if at all, affected by passage through the digestive tract of the healthy adult.
4. That in an ordinary mixed diet the retention of bran in flour is a false economy, as its presence so quickens digestive action as to prevent the complete absorption, not only of the proteids, or flesh-formers, present in the branny food, but also of other foodstuffs ingested at the same time.
5. That inasmuch as in the bran of wheat as ordinarily roughly removed there is adherent a noteworthy amount of the true gluten of the inner parts, any process which in the production of wheaten flour should remove simply the three outer protective layers of the grain would yield a flour at once cheaper and more nutritious than that ordinarily used.—*The Dietetic and Hygienic Gazette*.

Rx: Ung't. Resinol ℥i—iii.

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40,000 PHYSICIANS

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For Eczema, Erysipelas, Pruritus and all Itching and
Inflammatory Skin Diseases.

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LAXATIVE, ALTERATIVE, ANTACID AND TONIC.

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A specific for habitual constipation and the digestive derangements resulting therefrom.

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Meat Juice extracted from the prime raw meat by pressure, and contains in an unaltered state the albuminous and other nutritive properties ready for immediate assimilation.

Invalid Soups, Potted Meats of finest quality.

THE A1 SAUCE.

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RELIEF OF PAROXYSM IN DYSMENORRHŒA.

BY W. R. DALTON, M.D., NEW YORK.

AMONG the dyscrasæ feminæ nothing so often presents itself to the physician for amelioration as dysmenorrhœa.

It is one of those diseased pathologic conditions, where, aside from all technical, gynecological knowledge, an urgent, absolute demand is made for immediate alleviation of pain. The mere cessation of pain leads the patient to believe in the skill of the doctor more than a discourse upon the finest powers of discriminating diagnosis.

That saturnine warrior, Napoleon, once said: "Give them grape shot—quell the mob—then talk!" The sufferer echoes, "Give me relief from agony and then descant all you want to concerning pathological conditions."

To expect a drug to cure a dysmenorrhœa due to obstruction of the menstrual flow, caused by a stenosis of the os, is absurd, but to find a woman willing to be satisfied by a mere narration of causes alone, is equally so.

I have made it a rule, when called to a case of dysmenorrhœa, to relieve the pain at once, then, at my leisure, I can study out the cause. For all practical purposes dysmenorrhœa can be divided into two heads—constitutional and local. Systemic causes arise from a depraved blood supply, or neurasthenia. Local ones from some abnormality of the uterus, ovaries or Fallopian tubes. It is extremely difficult sometimes to make a differential diagnosis between these two—indeed, it taxes the utmost skill of the gynecologist.

It is not the purpose of this paper to discuss that subject. I only propose to devote a few lines to the medical—therapeutical side, and to present a few cases to demonstrate the beneficial effect accruing from the use of some remedies upon this distressing complaint.

CASE 1. Miss H., December 6, 1896, aged 32, had suffered for ten years; weight, 112 pounds; anemic, no appetite. Upon examination found ante-flexion just above os, cervix thin and quite long, bent acutely; made forcible dilation and prescribed rest for two weeks in bed. Made good recovery, but caught cold in April, 1897, and presented herself again for treatment on April 19. Complained of insomnia, anorexia, and constant "bearing down pains," lasting for forty-eight hours from beginning of menstruation. Showed me "what passed" that day, which proved to be a case of membranous dysmenorrhœa, enough to excite suspicion. It was a large fragment, representing almost the whole interior of uterus, there being three openings in it, the external one and two others for Fallopian tubes. I prescribed chloral, extract hyocianus and camphor, which seemed at the time to relieve the spasmodic attacks, but at next period all the above mentioned symptoms reappeared. Gave her cannabis indica with belladonna and asafoetida, to be taken three times daily, beginning three days before contemplated attack. Very little relief obtained. Tried all sorts of anti-spasmodics and alteratives for the following four or five periods, but with rather poor results until I happened upon ammonol. "Eureka!" Ten grain dose was exhibited, followed in half an hour by another. Afforded complete relief in less than an hour. Since then she anticipates the dysmenorrhœa by taking a tablet, five grs., every night for two or three days before expecting the catamenial flow, and ten grs., two tablets, when the flow is established, with complete cessation of former distress and agony.

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so it shall be palatable requires great pharmaceutical skill. But to have it "odorless and tasteless" at the full expense of its therapeutical power is another question.

Scott's Emulsion

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is as odorless and tasteless as any preparation of cod-liver oil can be, when the whole oil is used. Of course it is easy to make an odorless and tasteless cod-liver oil, if you throw away all the oil, or fat, and mix a little of the iodine, bromine, etc., with aromatics and alcohol.

But what about the therapeutical power? Just keep in mind: these fancy so-called preparations of cod-liver oil do not contain a single drop of the oil. SCOTT'S EMULSION is precisely what it claims to be: the best Lofoten Cod-Liver Oil, thoroughly emulsified, Glycerine and the Hypophosphites.

Two sizes, 50c. and \$1.00. In prescribing, please specify unbroken package. Small size put up especially for convenience in cases of children.

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20 " round,	- - - -	3.00 "
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THE BEAVER LINE of steamers include some of the finest and most palatial crossing the Atlantic Ocean. This Company offer special inducements to those physicians intending to be present at the approaching meeting of the British Medical Association in Edinburgh. Physicians thinking of taking this trip should communicate at once with Mr. D. W. Campbell, General Manager of the Beaver Steamship Co. at Montreal, who will gladly give desired information. The *Gallia* sails from Montreal July 6th, and the *Lake Ontario* on July 13th, either of which will suit as to date. We take pleasure in putting in a word for the Beaver Line service.

ANNUAL REPORT.—The recent health report of the District of Columbia calls special attention to the gratifying general decrease in mortality from diphtheria. The rate is lower in the district now than it has been at any time before since records have been kept. In the months of November and December when the mortality is usually highest this reduction amounted to 8.1 and 11.2 per cent. respectively. When antitoxin was first introduced by the Board they prepared their own product, but this plan was subsequently abandoned and all antitoxin purchased in the open market with the above satisfactory results. Mulford's Concentrated Product was employed exclusively and the superior results confirm those reported by other authoritative medical bodies.

OF INTEREST TO THE MEDICAL PROFESSION.—It is an undoubted fact that as a rule one half of the distress from a prolonged illness is from the patient having to toss from one side of the bed to the other in order to secure a comfortable position, owing most frequently to a tendency of one part of the mattress to sag, thus rendering the illness doubly disagreeable. It is a fact that such frequently occurs, so that it becomes the duty of the attendant physician to see that his patient is given the most comfortable position possible, by securing a mattress which it is known will not permit of such a state of matters. We take pleasure in directing the attention of our readers to the half page advertisement appearing on page —, of the firm of Geo. Gale & Sons of Waterville, Quebec. This firm are the manufacturers of the Lawson Tait Bedstead, an article which has been adopted years ago in all the largest hospitals and institutions in the Old Country, and is being rapidly taken up in similar places all over Canada. The Lawson Tait Bedstead is made of coppered wire fabric, heavily nickel plated. The springs are oil tempered and tested up to seventy pounds. The bed is so constructed that the strain of the occupant is evenly distributed over the fabric. The fabric is made of V links and yields at the end, where only a few springs are called upon to share the strain, whereas at the centre, by the diagonal construction of the fabric the strain is thrown upon a large number of springs at the end, thus keeping the patient level. Geo. Gale & Sons are manufacturers of all the patterns of the Lawson Tait Bedsteads, and it will be well for the profession to see to it that they secure the genuine article, there being several imitators (as there always are of a good thing) on the market.

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During the month of May we will place on absolutely free trial for thirty nights one of our **Patent Felt Mattresses**, made of interlaced sheets of pure, white, elastic, sanitary Felt ; we will make the mattress to order any size desired, in one or two pieces, and prepay the transportation charges. And we undertake that if at the end of thirty days the mattress has not given satisfaction *in every respect*, we shall receive it back and refund the total amount paid on same.

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GENERAL AGENT TORONTO, ONT.

WE TAKE pleasure in drawing the attention of our readers to the half-page advertisement of Lyman, Sons & Co., 380 to 386 St. Paul St., Montreal, on page xxxiv. of this issue of the JOURNAL. It is hardly necessary to remind the profession that this firm occupy one of the first places in the ranks of surgical instrument houses in Canada. They keep everything in the line of physicians' supplies, and a stock of surgical instruments and dressings second to none in America. They hold a number of agencies for houses of repute all over the U. S., and, what is more, their prices are in every instance the lowest consistent with good workmanship.

By referring to page xlvi. of this issue, our readers will see the advertisement of Lyman, Sons & Co., of Montreal (representing E. Fongera & Co., New York), where such preparations as Morrhuol (the curative principles of cod liver oil), Morrhuol and Creasote, Strontium Salts, Phosphoglycerate of lime, and Apioline are referred to. These preparations are amongst the most elegant in the pharmaceutical world, being the product of the laboratory of Rigaud & Chapoteant, of Paris; therefore the standard of purity and excellence. It will more than repay every physician to look into their merits as therapeutic agents, as the manufacturers claim for them nothing but what can be easily corroborated by trial.

A BEAUTIFUL BOOK.—Printed in blue and gold on creamy white paper, the cover of the beautiful little book just published by the North American Life Assurance Company, and its artistically illustrated letterpress contents, comprising the annual report, as well as other interesting matter in regard to this successful Canadian financial institution, constitute one of the most creditable productions of the press we have seen for some time. The occasion of this fine piece of printing is the completion of improvements in the historic building, erected by the United Empire Club in Toronto, and afterwards occupied by the Canadian Pacific Railway, now the home office of the North American Life. It is said to be one of the most admirable for its purpose in this country. An illustrated descriptive article about the building and its appointments, written by F. Howard Annes, is included in the book.

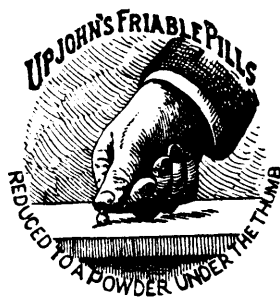
THE NEW ENGLAND VACCINE Co. (Boston, Mass.), having been continuously engaged in the propagation of vaccine virus for more than a quarter of a century, is the oldest of its kind in the United States. This long period of observation and study of the various methods of preparing and storing vaccine virus, together with their advantages for clinical and competitive trials of the products of these methods, have enabled them to keep their establishment well in the advance in all matters pertaining to asepsis and antisepsis. While continuing the propagation and sale of ivory points, this firm are now dispensing glycerinated vaccine in capillary tubes prepared after the recently published German method. This form of virus has received the unqualified endorsement of many of the most eminent bacteriologists in this country and Europe. It is prepared by macerating and triturating the pulp of vaccine vesicles in pure glycerine until they become a homogeneous mass. It is then tested upon a series of primary subjects. If these tests produce characteristic vesicles it is passed into the hands of the bacteriologist who examines it from time to time until the glycerine renders it practically sterile. This condition obtains usually in from twenty-five to forty days. By this process each tube can be pronounced positively sterile and reliable. The New England Vaccine Co.'s bacteriological laboratory is under the care of a recent graduate of the Harvard Medical School, who has made this branch a specialty.

Why Under the Hammer?

The significance of the test which consists of driving old mass pills into a board with hammer and block of wood has been questioned by some makers of the "solid kind" of pills.

This test is simply intended to supply the pharmacist and physician with a ready and quick means for estimating the age of factory-made pills and their therapeutic value.

It is effective in showing that there is a difference between **Fresh Mass Pills** and **Old Mass Pills**. The test shows the difference in hardness. Hardness must have some relation to therapeutic value. This is the teaching of pharmacy. The soft pill mass is insisted upon for the pills dispensed extemporaneously by the pharmacist. There can be no exception made in favor of manufacturers whose pills become progressively harder with age. The retail pharmacist cannot be asked with consistency to dispense soft pills extemporaneously and hard pills from the general stock. The stock of ready-made pills should be of the kind that does not deteriorate with age, and that preserves their quality of ready disintegration indefinitely. Upjohn's Friable Pills have these qualities and preserve them indefinitely.



THE UPJOHN PILL & GRANULE CO.

Samples and Price List free on application to

GILMOUR BROS. & CO., Montreal,

Sole Agents for Canada

FEEDING THE ARMY OF THE UNITED STATES.—The President has called out 125,000 volunteers and as soon as these men enlist, they must be fed, clothed and cared for. It is a big task to feed so many men. To cook their rations in one utensil, for one day, would require a frying pan nearly a mile wide, while to make the coffee for this number would require a pot as big as the average three-story house. Six and one-half tons of sugar, and two thousand cans of condensed milk would be needed every day for an army of 100,000 men, who would also consume seventy-five thousand pounds of bacon or corned beef, fifteen thousand pounds of beans, two thousand gallons of molasses, five hundred gallons of vinegar, four thousand pounds of salt, and two hundred and fifty pounds of black pepper. The minimum cost for the simplest form of rations for this army would be \$22,000 a day. As long as the troops are in the United States, or in easy communication with the United States, they will be issued some of what, from an army point of view, are considered as luxuries, including fresh meat and canned goods, at a slightly increased expense. Where the troops are liable to be completely cut off from the base of supplies, they will be furnished with more condensed foods. The introduction of condensed and canned foods has brought about the greatest improvement in the condition of the soldier in active service, and all soldiers owe a debt of gratitude to a Texas State surveyor, who in 1852 invented a meat biscuit, the first condensed food ever made in the United States. This man was Gail Borden, who had but then recently laid out the City of Galveston, and while surveying in the vast and almost unpopulated territory of Texas, he learned the necessity of possessing some portable, condensed form of food. On leaving Texas, the inventor settled in New York State, and turning his attention to milk, he perfected a process of condensing it, which is now in use throughout the world. Gail Borden was born at Norwich, New York, November 6th, 1801, and died at Harvey's Creek, Texas, January 11th, 1874. The first great impetus given to the use of his condensed milk, to



which he gave the name of "Eagle Brand," was furnished by the demand for supplies for the armies of the United States during the civil war, and through the occasional capture of United States supply trains, the "Eagle Brand" condensed milk became widely known to the soldiers on both sides. Now no army supply train is considered complete without its quota of "Eagle Brand" condensed milk and Eagle Brand Condensed Coffee, and since the health and comfort of the soldiers are of prime importance in war, Gail Borden has rendered a greater service by his invention of condensed food and condensed milk than have many of the generals whose names are prominent in military history. We print herewith a portrait of Gail Borden, whose rugged features indicate the originality, energy and tenacity which were character-

istic of the man and which enabled him to surmount innumerable mechanical difficulties in perfecting the invention which has proven such a boon to soldiers, sailors, miners, travellers and humanity in general, not forgetting many thousands of babies which have been raised to vigorous health on the "Eagle Brand" Condensed Milk.

SURGICAL APPLIANCES

are used to support the body when illness or accident has thrown the human machinery out of gear, and when the digestive organs are enfeebled,

BOVRIL

will act as a sustainer, and replace the solid meat at which the stomach revolts, by the vital principle of Prime Ox Beef in the most appetizing and easily digestible form.

~~~~~

## BOVRIL, LIMITED,

**CHAIRMAN:**

THE RIGHT HON. LORD PLAYFAIR,  
G.C.B., LL.D.

**CONSULTING CHEMISTS:**

PROFESSOR SIR EDWARD FRANKLAND,  
K.C.B., M.D.,

Corresponding Member French Institute.

WILLIAM HARKNESS, F.I.C., F.C.S.,  
F.R.M.S.,

40 Years Food Analyst to H.M. Government.

Food 

Specialists

 LONDON

~~~~~

Canadian Branch 

25 and 27 ST. PETER STREET, MONTREAL

A USEFUL CHART.—Write to The Imperial Granum Food Company, New Haven, Conn., for sample copies of their new "Nursing World Fever Chart" for recording the vital signs and other information relating to the Baths given in the treatment of fever cases. It is very complete and will be found especially useful in typhoid fever.

USES TO WHICH EGGS MAY BE PUT.—A mustard plaster made with the white of an egg will not leave a blister. A raw egg, taken immediately, will carry down a fish bone that cannot be extracted. The white skin that lines the shell is a useful application to a boil. White of egg, beaten up with loaf sugar and lemon, relieves hoarseness—a teaspoonful taken once every hour. An egg in the morning cup of coffee is a good tonic. A raw egg, with the yolk unbroken, is beneficial for convalescents. When combined with cereals, as in Eskay's Albumenized Food, we have the best food for infants and invalids known.

A NEW VEGETABLE ALTERATIVE COMPOUND.—Resinol can be used "in conjunction with any internal treatment." "Any internal treatment" is a phrase of large latitude. It means, of course, a very excellent potency for the favorite unguent. But it is evident in order to obtain the most apt efficacy, the most potent internal medicine is indicated. Modern practitioners are not content to await the tardiness of old-fashioned "physic," and the Resinol Chemical Company, of Baltimore, Md., well known as the proprietors of Resinol, have contributed wisely to the materia medica in providing Cascanata. It is an ideal preparation for the purpose. It is a scientific combination of the active principles of Cascara Sagrada, Gentian, Rhubarb, Trifolium and Rumex, with phosphate of soda and magnesia. The term "alterative" has been abused, but this is a vegetable alterative. It is manifest that cutaneous disorders are frequently indicative of disorder of the alimentary tract in some measure or other. The Elixir Cascanata corrects this disorder, promotes healthy secretions and restores the normal alkalinity of the blood. Disorders resulting from congestions of the pelvic viscera are also promptly remedied by this preparation. The attention of the medical profession is sure to be attracted to this interesting and valuable alterative compound.

LAST September a lady called on me, aged 45, married, saying: "I would like you to examine my hand. I heard you was good on old sores." I asked her how long her hand had been in that condition. "Five years," she said, "and I have carried it most of the time bound to my shoulder, for when I carried it down the pain nearly made me wild." The case was pronounced tuberculosis of the joints by no less than nine different physicians and treated by all of them—curreted, burnt out with caustic potash, all kinds of washes, all kinds of salves. The joints were all open, the back part of the hand bone exposed. This was the condition of the hand when I saw it. Amputation had been recommended and refused. To say it was a desperate case is drawing it mild. I gave her a four ounce box of Unguentine (Norwich Pharmacal Co., N.Y.) and told her to spread it on a linen rag and keep it on continuously, change once a day. I never expected to see the case again. Six weeks after she came back—the hand was better. She had been using Unguentine until the 10th of March, 1898. This hand at the present time is entirely well, no pain, and enjoys splendid health. The case is notorious in this county, Saline, and McPherson, where the M.D.'s reside that treated the case. Her name is Mrs. Nygram, and she lives one half mile north of Bridgeport, Saline Co., Kans. Any one can write to her and get the facts as I have stated. And Unguentine done the business. Yours truly,

C. H. B. GILE, M.D., Falum, Kans.

FOR MAKING LITHIA WATER OF A KNOWN STRENGTH
WHAT CAN BE MORE SATISFACTORY THAN

Wyeth's Compressed Effervescing Lithia Tablets.

WYETH'S LITHIA TABLETS

are most convenient for the preparation of artificial Lithia Water, and the great advantage these tablets have over the natural Lithia Water is that the dose can be regulated very readily to suit the case by dissolving one or more in any desired quantity of water.

WYETH'S LITHIA TABLETS

when taken in doses of from one to two tablets, dissolved in water, and repeated two or three times daily, exerts a marked influence in cases where patients are voiding uric acid gravel, causing the formation of deposits to become less or cease altogether.

WYETH'S LITHIA TABLETS

have been so perfected that they dissolve almost instantly in water, and a tumblerful of Lithia Water of a known strength can be quickly, easily and economically made by dropping one or more of these tablets into a glass of moderately cold water, producing a pleasant and palatable draught.

Price, per dozen bottles, 5 grains, 50 tablets in each, \$5.00
" " " 3 " 40 " " 4.00

Wyeth's Effervescing Anti-Rheumatic Tablets

OF SALICYLATES, POTASSIUM AND LITHIUM

(Each Tablet represents 3½ grains of Combined Salts.)

These Tablets of Salicylates of Potassium and Lithium, in the above proportions, are readily soluble, effervesce quickly and freely, producing a pleasant, sparkling draught, and we believe, where salicylate salts are specially indicated, will have the cordial endorsement of physicians.

This combination is recognized as almost a specific in the treatment of **Acute and Chronic Rheumatism, Rheumatic Gout** and kindred ailments, and is an invaluable remedy in all **febrile affections** inducing headache, **pain in the limbs**, muscles and tissues; it is also prescribed in **Lumbago, Pleurisy, Pericarditis**, and all muscular inflammatory conditions.

Price per dozen bottles, - - - \$4.00
(Each bottle contains 50 Tablets.)

DAVIS & LAWRENCE CO., LIMITED, SOLE AGENTS FOR **MONTREAL**
CANADA

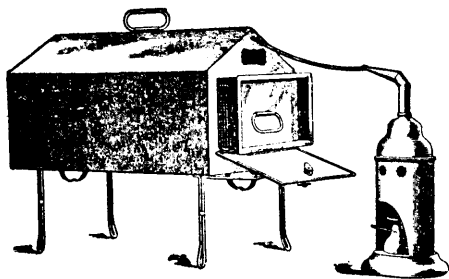
ONE PERSON out of every three of those who die in the United States are said to fall victims to pulmonary complaints. Thousands of these sufferers could unquestionably be saved if, in the early stages of the disease, they would go into climates which would be beneficial. Such a climate is afforded by Southern and Western Texas, Southern Arizona, New Mexico and California. It can be said, in all sincerity, that in that belt of country lying between San Antonio, Texas, and Los Angeles, California, the sufferer from throat and lung affections can, in ninety-nine cases out of a hundred, find not only relief but permanent cure. San Antonio, El Paso, Tucson, Phoenix and Indio are all admirable stopping points, affording alike the benefits of climate and the best comforts and conveniences for the invalid.

SUMMER DISTURBANCES OF CHILDREN.—In fermentative disorders of the alimentary canal in the young, middle-aged or old, listerine has given most satisfactory results. In the summer diarrhoea of children, Dr. I. N. Love, of St. Louis, speaks very highly of it, given in combination with glycerine and simple syrup. A formula that I have time and again used—in fact it has almost become routine with me of late years—is as follows:—

- R Bismuth Sub. Nit.....Half a drachm.
- Tr. Opii.....Twenty drops.
- Syr. Ipecac
- Syr. Rhei Arom. } aa.....Two drachms.
- Listerine.....Half an ounce.
- Mist. Creta.....One ounce.

M. Sig. Teaspoonful as often as necessary, but not more frequently than every three or four hours. This for children about ten or twelve months old.—*Deering J. Roberts, M.D., in Southern Practitioner.*

FORMALDEHYDE STERILIZER AND VAPOR LAMP.—The convenience, efficacy and economy of formaldehyde as a gaseous disinfectant is now quite generally recognized. From being employed chiefly as a means for disinfecting infected apartments, its use has been widely extended. The apparatus which is shown by the illustration is designed for sterilizing surgical instruments and dressings and articles of this nature. It is convenient to handle, easy to operate, and non-destructive to any objects which may be exposed. In addition to being an inexpensive steril-



izing apparatus for general practitioners, dentists, etc., parts are invaluable for other purposes. The generator is useful for interrupted or continuous deodorizing of invalid apartments or surgical wards, while after exchange of a few simple attachments it may be used for medicating vapors or applying steam heat locally. The apparatus, as will be observed, consists of an alcohol lamp, a formaldehyde cup, a device for collecting and delivering the gas, and a closed chamber. The latter is made of block tin, and to economize space is provided with folding legs. The sieve drawer is amply large to contain all the instruments required in an ordinary operation. When a small quantity of the commercial solution of formaldehyde has been put into the cup and the lamp supplied with alcohol and lit, dry gas appears in large volume within two minutes, and in less than ten minutes enough gas has been generated. The whole act need not consume over half an hour. The apparatus is being introduced to the profession by H. K. Mulford Company.

That Wheel You Want

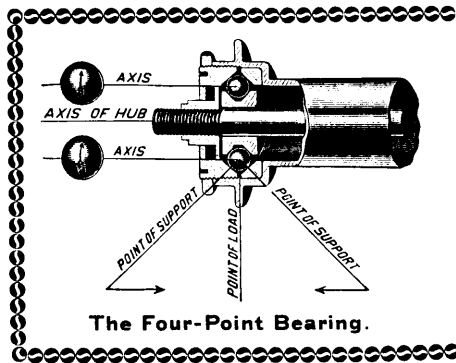
Is an . . .

E. & D.



Its price is . . .

\$85.⁰⁰



The Four-Point Bearing.

And you may be assured that no better wheel is made, whatever may be the price. Perhaps the most convincing argument of why the \$85.00 E. & D. is as fine a bicycle as it's possible to make, is the fact that they have always heretofore been \$100.00, and that the \$85.00 E. & D. is an improvement on the \$100.00 wheel of last year.

Why is it?

Labor-saving machinery, tremendous output, colossal sales and cash only.

Go and see our Agent and he will explain where and why we differ from all other makes of Bicycles. You will know what a high-grade wheel is after you have seen the E. & D.

Canadian Typograph Co.

WINDSOR, ONT.

It is the desire of G. W. Flavell & Bro., Philadelphia, Pa., to extend their appreciation to the medical profession for the continued favors for their line of goods, by stating that there will be no advance in prices for goods on account of any stamp war tax.

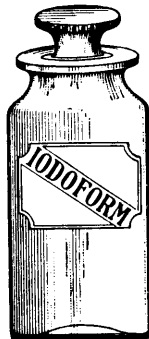
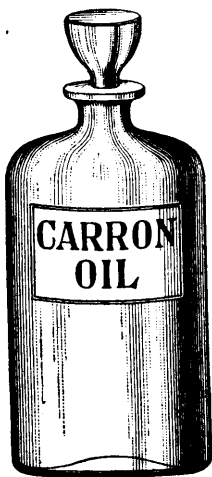
It is with satisfaction that we hear that Franz Josef Mineral Water is making steady progress in the right direction. This natural aperient from the first won the approval of the medical men as a body, so that it is little wonder that its sales should be on the upward grade. Franz Josef will be found to be most effectual in cases of hepatic congestion, torpid liver, and chronic constipation, and we do not hesitate to endorse it as a therapeutic agent.

A HANDSOME BOOK FOR A TWO CENT STAMP. NEW PUBLICATION BY THE D. & C. LINE.—To those who contemplate taking a summer outing, we will mail for 2c. postage our illustrated pamphlet, which contains a large number of fine engravings of every summer resort between Cleveland, Toledo, Detroit and picturesque Mackinac. It has many artistic half-tones of points of interest of the Upper Lake region. Information regarding both short and extended tours, costs of transportation and hotel fare, etc. Address A. A. SCHANTZ, G.P.A., Detroit, Mich.

TRUE AMERICANISM.—Physicians and pharmacists, like the masses of the people, have tired of the arrogation of superiority implied by the announcements of foreign manufacture, and are revolting against them. This spirit is especially commendable at the present time, when a vast wave of patriotism is rolling over the land, making the North and the South, the East and the West as one band of brothers by its magic influence. The Antikamnia Chemical Company, of St. Louis, in all of its advertising matter, whether through the journals or by circular, takes particular pains to impress upon physicians and pharmacists that its goods are made in America, by Americans, and for American use. This enterprising company realizes that the words "made in Germany," or "made in France," no longer possess the influence and meaning they once had. The people of this country no longer scorn or underrate the products of their own native laboratories and workshops.—*The National Druggist*.

A PURE MALT BEVERAGE used in moderation is of great benefit to most people. Dr. Carpenter, of England, the eminent physiologist, stated that "in some cases they constitute a better medicine than could be administered under any other form." But he did not refer to a beverage composed principally of water and chemical preservatives like some lagers; he referred to the ale of Great Britain, made from barley malt; an ale in which enough malt is used to produce naturally, by partial fermentation, sufficient spirit to preserve the remaining nutritive and other qualities of the beverage. The imported ale of Great Britain, however, while all right for that country, is too heavy for our climate. We want our readers to know what John Labatt is making. About the time of the Centennial Exhibition in 1876, when he first tried for and won medals, he brewed and bottled an article expressly for this climate. It is made from choice Canada barley malt, fine hops, and pure spring water, no compounds or substitutes of any kind being used. It is brewed, fermented and matured in the proper way, without attempt to shorten processes or economize material. His ale and porter have been awarded medals in France, Australia, West Indies, United States and Canada. Four eminent chemists have analyzed them at different times. He will send you their reports for the asking. These beverages have not the faults of lager, nor those of imported ales. They are pure, wholesome and palatable, as we can say from experience.

BACK NUMBERS



In
the
Treatment
of
Burns



Carron Oil is wholly wanting in germ destroying properties.

Picric Acid, besides staining the hands and bed clothes, is utterly useless in allaying the inflammation, or assisting in granulation.

Iodoform, owing to its strong toxic effects and odor, is very objectionable to the patient and in some cases dangerous to use.

.. IN ..

UNGUENTINE

.. WE HAVE A ..

Thoroughly Antiseptic, Healing and Restorative Dressing

WHICH IS

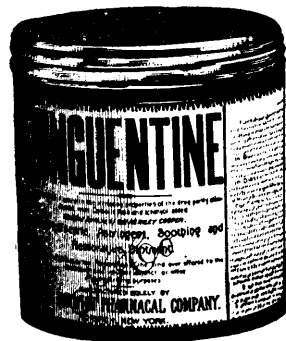
NON-TOXIC, INODOROUS AND CLEAN

It readily subdues inflammation and assists in granulations and was used in the

**HOSPITAL BARRACKS,
KEY WEST, FLORIDA**

Where the wounded sailors of the MAINE were sent for treatment from Havana.

Fourth edition of Clinical Notes and Reports, with sample, sent upon request by



**The Norwich Pharmacal Co.,
NORWICH, NEW YORK.**

New York Salesroom, 51 John St.

THE RAY HYGIENIC CYCLE SADDLE, manufactured by The Bridgeport Gun Implement Company, Bridgeport, Conn., has several features which commend it. It consists of a cast metallic frame (light though strong), with two large round foramina behind, and one long foramen in front. The whole is covered with a stuffed leather cushion, except the anterior foramen. This latter feature allows for the relief of pressure from the perinæum, yet retains the nose of the saddle which is of so much aid in steering. The two posterior foramina correspond to the tuber ischii and allow the pad to depress slightly at these points. Medical men can recommend this saddle to their friends of both sexes.

AN INCOMPARABLE CLIMATE.—The committee of the French Medical Academy, which a year or two ago reported, after an investigation covering five years of careful study of every portion of the globe, that the Valley of the Rio Grande was as to climate most admirably adapted for the cure of pulmonary affections, and told what the common experience of thousands and thousands has shown to be the truth. San Antonio, Texas, has been the Mecca to which thousands of sufferers from throat and lung troubles flock, and that great region lying from San Antonio west to the Pacific Coast is destined to draw to it that great multitude who seek restored health and prolonged life from the sources from which nature destined they should draw it. In Arizona and New Mexico the health-seeker finds near the south borders a climate of unusual dryness and a temperature which varies but little throughout the year. The Southern Pacific System is the only one which directly reaches this section, and the tourist via New Orleans is taken there speedily, and with every convenience to make the journey a pleasant one.

VISKOLEIN IN PNEUMONIA.—Dr. Rice reports the following case of pneumonia: Monday, April 26th, 1897, I was called at 9 p.m. to see little Leonard G., aged three years. He had been having a fever for two or three days and coughing. I found him with temperature $104\frac{1}{2}$ deg. F.; pulse 150; very restless and moaning all the time; respiration 42, and breathing with great difficulty. I gave him Viskolein, 10 minims of the liquid added to the same quantity of boiled water, followed with the powder, 10 grains every four hours. In thirty minutes the child was asleep and fever gone; no more medicine was given until 4 a.m. Tuesday, 9 a.m.: pulse, 100; respiration, 26, and temperature normal. I ordered the powders to be given every four hours through the day. I saw him no more that day. Wednesday, 9 a.m., I found temperature 101 deg. F.; respiration, 28; pulse, 108. He showed slight symptoms of cyanosis (he had always been a sickly, puny child from birth). I gave him another hypodermic injection of the liquid, and gave for the heart trouble, digitalis, nitroglycerin, and strophanthus, in pill form, one every hour during the day. At the hour of midnight the father came after me, and said the child was restless, and the fever had come up again. I did not go to see the child, but ordered a cold bath to be given, and the powders five grains every hour. He went home and did as directed, and said when he came to me the next morning that in fifteen minutes after the child had the bath and one powder he was resting easy, comfortable, and fell fast asleep. Viskolein is the active (stimulant) principle of kola with the carbolized (antiseptic) sulphoborate of zinc. Viskolein has been placed in the hands of The Maltbie Chemical Co., of Buffalo, N.Y., who have the sole right to manufacture it. They are gentlemen of high reputation as pharmacists, and have complete facilities for its manufacture in large quantities at a moderate cost, and have placed it before the profession in good shape. Therefore, I recommend them and the trial of this remedy in your practice.

E. MERCK

16 JEWRY STREET
LONDON, E.C.



MERCK & CO.

UNIVERSITY PLACE
NEW YORK

Merck's

Chemicals for medicinal use are recognized as the standard for Purity, Reliability and General Excellence.

When ordering, please specify—MERCK'S

COCAINE HYDROCHLORATE.

LACTIC ACID.

SALICYLIC ACID AND SALTS.

STRYCHNIN.

IODIFORM.

SANTONIN.

Please direct attention to MERCK'S

Tannoform

In excessive perspiration Tannoform used externally in substance, or in trituration with Talcum, promptly checks excessive sweating. It not only restrains profuse and irritating secretion, but overcomes offensive odor. It is of service also in the treatment of fetid ulcers and bed-sores, in pruritus, ozæna and chancroids.

Literature with useful formulary on application.

TO BE HAD OF ALL DRUGGISTS AND CHEMISTS, OR DIRECT OF

E. MERCK, Chemical Works, Darmstadt

MERCK'S ANNUAL REPORT ON APPLICATION

FOR FURS of every description, suitable for physicians' use in driving in cold weather, it ought to be remembered that the best can be procured at the lowest prices from the firm of G. R. Renfrew & Co., King St. East, Toronto. Now is the time to get furs at lowest prices. We recommend this well-known house to the medical profession all over Canada as being strictly reliable in every particular.

THE G. CRAMER DRY PLATE CO. succeeds, on the first of this month, to the business of the G. Cramer Dry Plate Works (St. Louis, Mo.), having just been incorporated with a capital stock of \$200,000, fully paid up, divided into 200 shares of \$1,000 each. These shares are held by G. Cramer, F. Ernest Cramer, Jason C. Somerville and Emile Cramer, respectively. The officers of the new corporation are as follows: G. Cramer, President; F. Ernest Cramer, Vice-President and Treasurer; Jason C. Somerville, Secretary. We refer our readers with pleasure to this firm's advertisement appearing on another page of this issue.

YOUR HOLIDAYS—WHEN?—If you have a week, ten days, two weeks or longer; if you can spend twenty, thirty, fifty dollars or more, under any of these circumstances you can arrange a pleasant outing through the Richelieu & Ontario Navigation Co., 2 King street east. No more pleasant or healthful outing can be had than a sail through the lakes and majestic River St. Lawrence, with its beautiful 1,000 islands, rapids and wonderful scenery. The steamers of this company are staunch, seaworthy and commodious, fitted up with the sole idea of comfort and convenience. Nothing that can contribute to that end has been omitted. The officers are uniformly courteous, gentlemanly and obliging. Mr. J. F. Dolan, 2 King street east, is the Toronto representative, and will cheerfully give all information. Intending holiday-makers should consult Mr. Dolan.

PRACTITIONER OF FIFTY YEARS HAS NO TWO OPINIONS.—Dr. Robert Hunter, of New York, says: "Replying to your favor, asking my opinion of the merits of Dr. Bracelin's Chlorine preparation as applicable to the treatment of diphtheria, I will say that I received the sample and have examined his mode of administering chlorine, which I consider safe and suitable. On the general question of the value of Chlorine and its preparations in the treatment of diphtheria, I have no two opinions. After more than fifty years' experience in the treatment of throat and lung diseases, as a specialist, I am prepared to say that Chlorine properly administered is specific in diphtheria, and the only specific known to medicine. It is also the best remedy known for the malignant sore throat of scarlet fever. If Dr. Bracelin has discovered a better way to deprive it of its suffocating properties and irritating qualities than those in use, he has done a service to humanity and should receive recognition and thanks from the profession and the gratitude of the general public."

Dr. Holland, of Chicago, on July 9th, writes as follows: "Mr. J. J. Russell, New York City. Dear Sir: I have the pleasure of reporting to you very favorable results from the use of Dr. Bracelin's Chlorine Bactericide in a very bad case of *true* diphtheria (so diagnosed by the Chicago Health Department. The case commenced with a temperature of 103, pulse 140, and remained so for two days. On the morning of the third day the tonsils and throat were entirely covered and filled in on either side of the uvula with the characteristic membrane. The inhalations of the bactericide were then commenced and continued hourly, and in forty-eight hours the entire mass was cleared out of the throat, and the patient improved very rapidly from that time until complete recovery resulted."



(Trade Mar.)

BAYER'S PHARMACEUTICAL PRODUCTS

SOMATOSE A tasteless, odourless, nutrient meat powder; it contains all the albuminoid principles of the meat in an easily soluble form. It has been extensively employed and found to be of the greatest service in consumption, diseases of the stomach and intestinal tract, chlorosis and rickets. It is of great value in convalescence from all diseases. SOMATOSE strengthens the muscles and stimulates the appetite in a remarkable manner. Dose for adults: a level teaspoonful three to four times a day with milk, gruel, coffee, etc.

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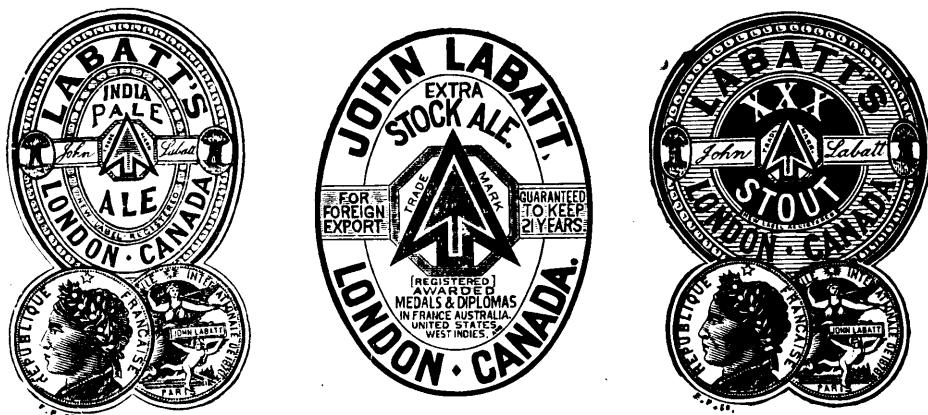
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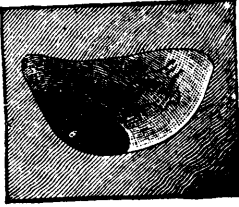
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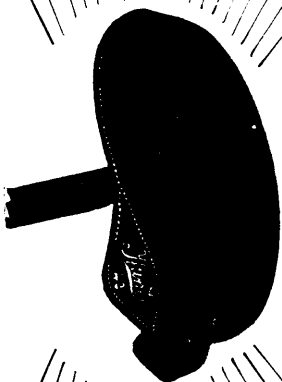
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| Ms  | Downwards.                              | Upwards.                               |
|-----|-----------------------------------------|----------------------------------------|
| 0   | Lve. Toronto ..... 12 00 P.M.           | Lve. Montreal (Canal Basin) 10 00 A.M. |
| 44  | " Darlington (Bowmanville) ..... 5 23 " | " Lachine ..... 12 30 N <sup>O</sup> N |
| 64  | " Port Hope ..... 6 53 "                | " Valleyfield ..... 6 00 P.M.          |
| 70  | " Cobourg ..... 7 20 "                  | " Coteau Landing ..... 06 40 "         |
| 178 | " Kingston ..... 5 00 A.M.              | " Cornwall ..... 9 30 "                |
| 202 | " Clayton ..... 6 20 "                  | " Dickinson's Landing ... 2 30 A.M.    |
| 205 | " Round Island ..... 6 30 "             | " Prescott ..... 7 30 "                |
| 208 | " Thousand Isl. Park 7 00 "             | " Brockville ..... 8 30 "              |
| 216 | " Alexandria Bay ... 7 15 "             | " Alexandria Bay ..... 10 30 "         |
| 241 | " Brockville ..... 8 45 "               | " Thousand Isl. Park ... 10 40 "       |
| 255 | " Prescott ..... 9 30 "                 | " Round Island ..... 11 00 "           |
| 299 | " Cornwall ..... 12 45 N <sup>O</sup> N | " Clayton ..... 11 30 "                |
| 329 | " Coteau Landing ... 2 45 P.M.          | Arr. Kingston ..... 1 00 P.M.          |
| 376 | Arr. Montreal ..... 6 30 "              | Lve. Kingston ..... 3 00 "             |
|     |                                         | " Deseronto ..... 6 15 "               |
|     |                                         | " Belleville ..... 8 03 "              |
|     |                                         | " Trenton (foot Canal) ... 9 30 "      |
|     |                                         | " Brighton ..... 11 00 "               |
|     |                                         | " Cobourg ..... 1 30 A.M.              |
|     |                                         | " Port Hope ..... 2 10 "               |
|     |                                         | " Darlington (Bowmanville) 3 30 "      |
|     |                                         | Arr. Toronto ..... 6 30 "              |

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 b Connects with 5.00 p.m. train Grand Trunk Ry. for Montreal.

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|                                                    |                                                 |
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| " Toronto ..... " ..... 6 00 P.M.                  | " Valleyfield ..... Fri ..... 1 00 A.M.         |
| " Darlington ..... " ..... 9 30 "                  | " Cornwall ..... " ..... 4 00 "                 |
| " Port Hope ..... " ..... 11 30 "                  | " Morrisburg ..... " ..... 9 00 "               |
| " Cobourg ..... " ..... 12 00 N <sup>O</sup> N     | " Iroquois ..... " ..... 11 00 "                |
| " Brighton ..... Tues. ... 3 00 A.M.               | " Prescott ..... " ..... 1 00 P.M.              |
| " Trenton ..... " ..... 5 30 "                     | " Brockville ..... " ..... 2 15 "               |
| " Belleville ..... " ..... 7 15 "                  | " Gananoque ..... " ..... 5 15 "                |
| " Northport ..... " ..... 8 30 "                   | " Kingston ..... " ..... 10 00 "                |
| " Deseronto ..... " ..... 9 30 "                   | " Glenora ..... Sat ..... 5 00 A.M.             |
| " Picton ..... " ..... 11 15 "                     | " Picton ..... " ..... 5 30 "                   |
| " Glenora ..... " ..... 12 00 N <sup>O</sup> N     | " Deseronto ..... " ..... 7 30 "                |
| " Bath ..... " ..... 2 00 P.M.                     | " Northport ..... " ..... 8 00 "                |
| " Kingston ..... " ..... 5 00 "                    | " Belleville ..... " ..... 9 00 "               |
| " Gananoque ..... " ..... 6 45 "                   | " Trenton ..... " ..... 10 30 "                 |
| " Brockville ..... " ..... 9 45 "                  | " Brighton ..... " ..... 12 00 N <sup>O</sup> N |
| " Prescott ..... " ..... 11 00 "                   | " Cobourg ..... " ..... 3 00 P.M.               |
| " Iroquois ..... " ..... 12 15 N <sup>H</sup> T    | " Port Hope ..... " ..... 4 00 "                |
| " Morrisburg ..... Wed ... 4 00 A.M.               | " Darlington ..... " ..... 6 00 "               |
| " Cornwall ..... " ..... 6 00 "                    | " Toronto ..... " ..... 9 30 "                  |
| " Coteau ..... " ..... 8 30 "                      | Arr. Hamilton ..... Sun ... 2 00 A.M.           |
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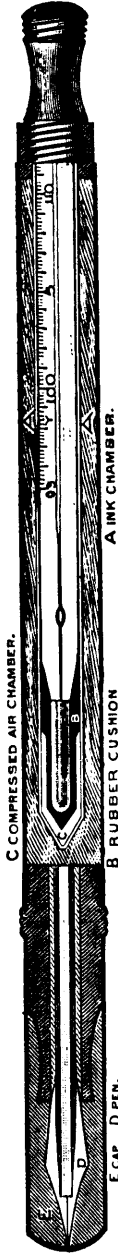
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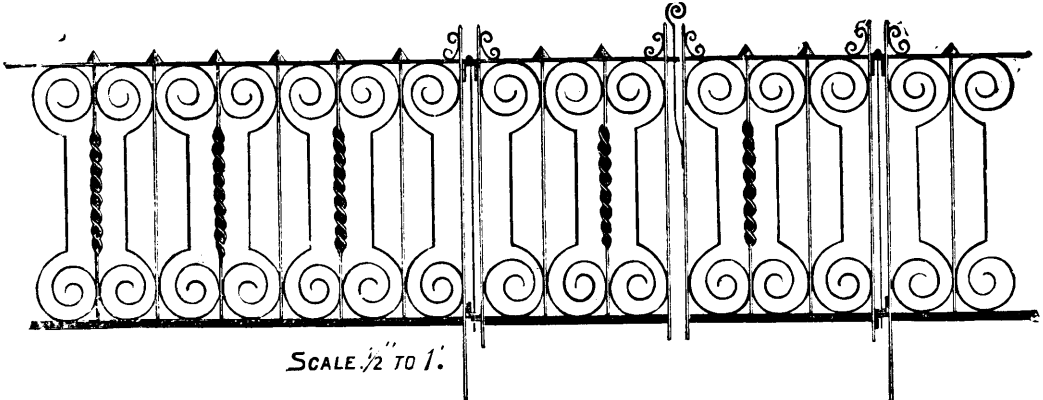
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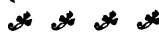


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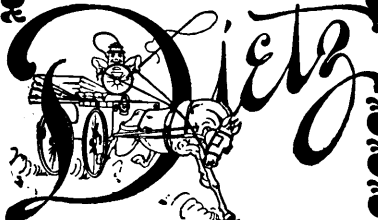
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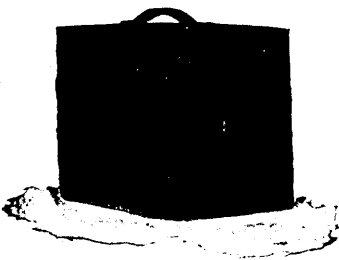
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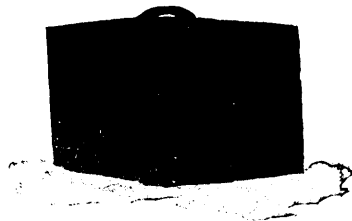
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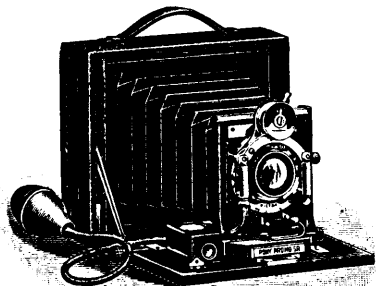
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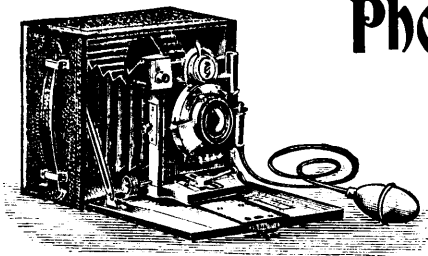
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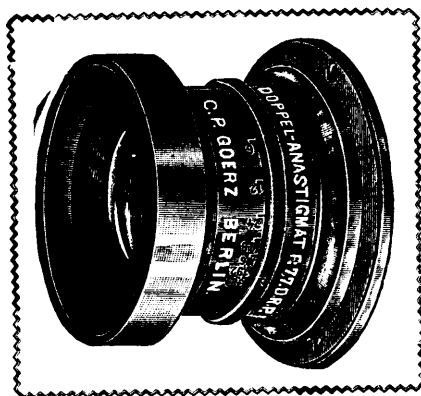
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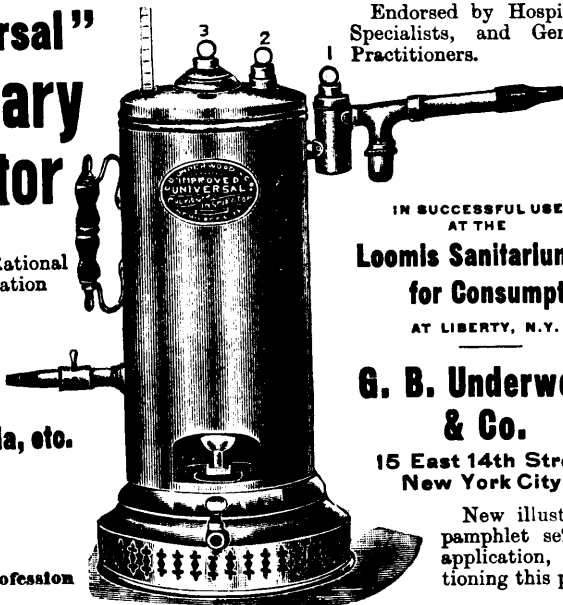
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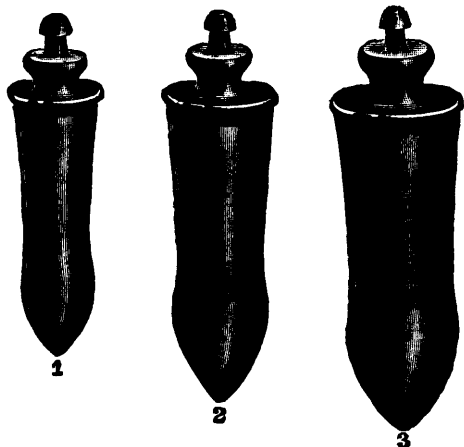
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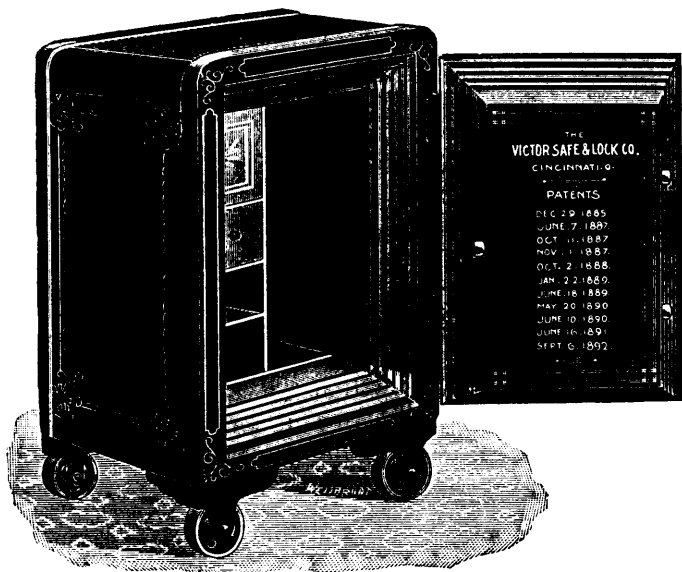
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
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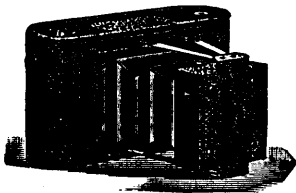


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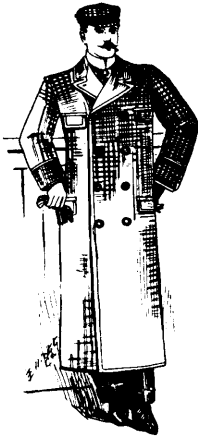
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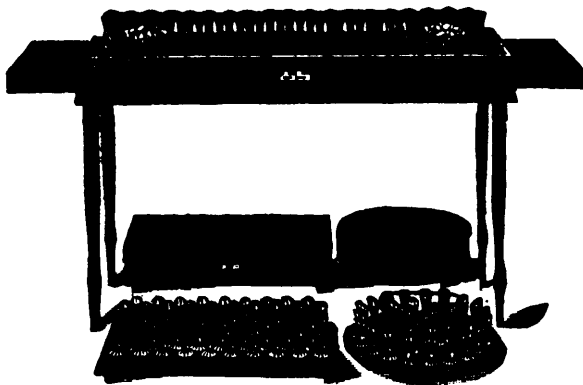


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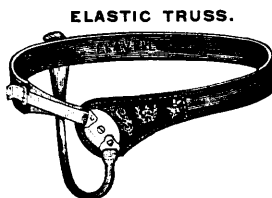
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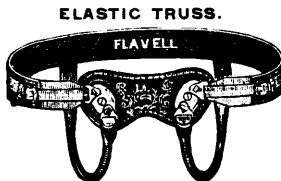
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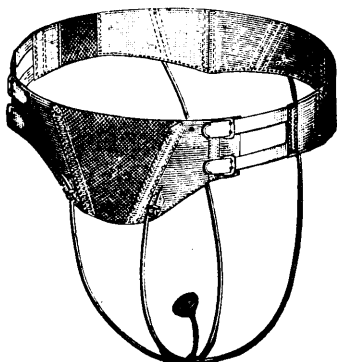
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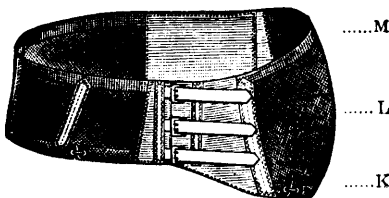
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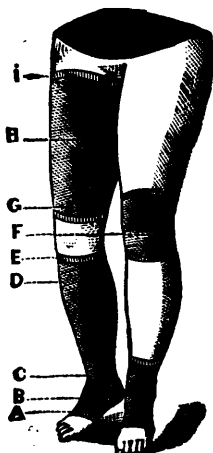
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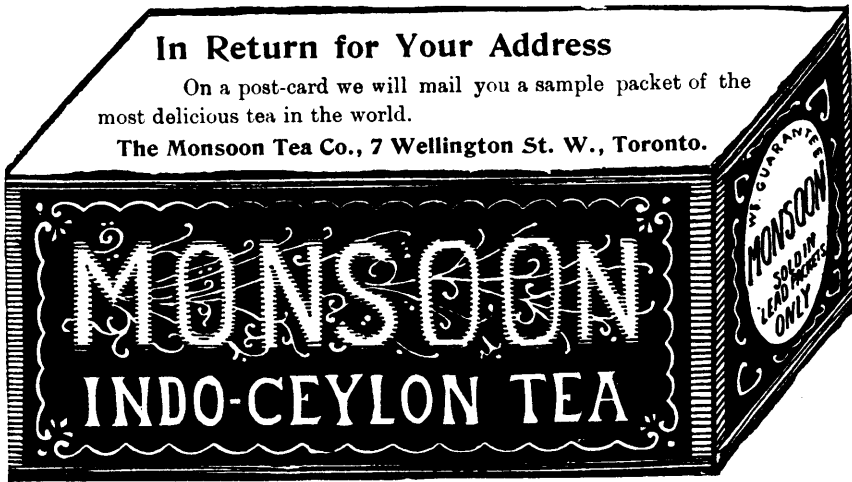
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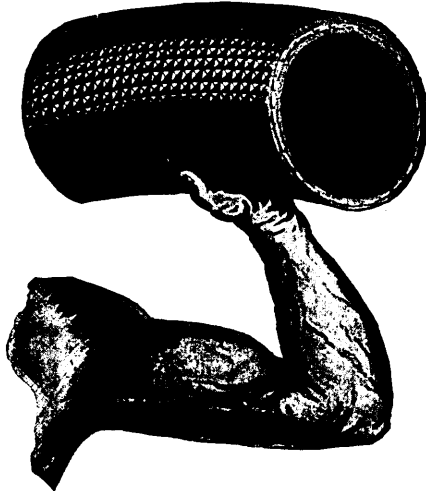
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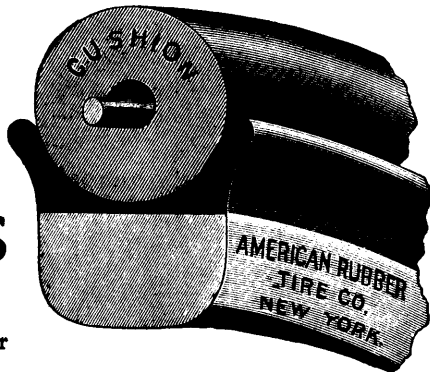
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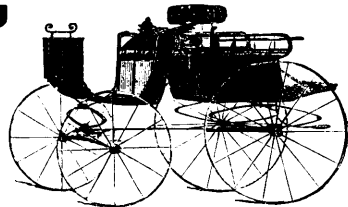
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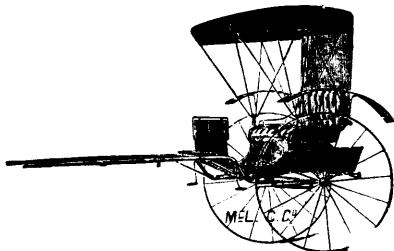
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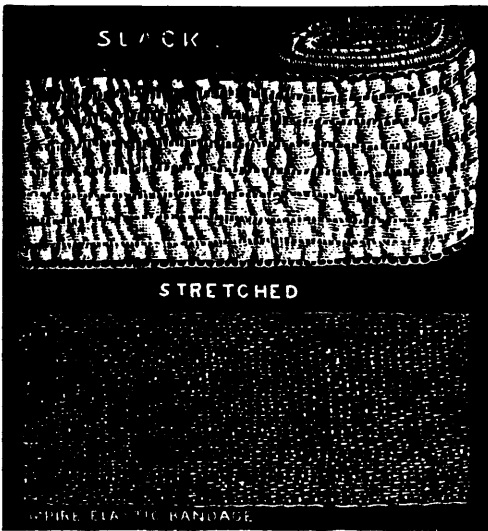
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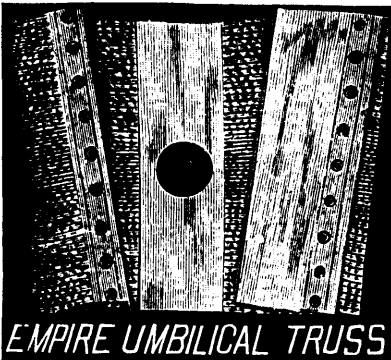
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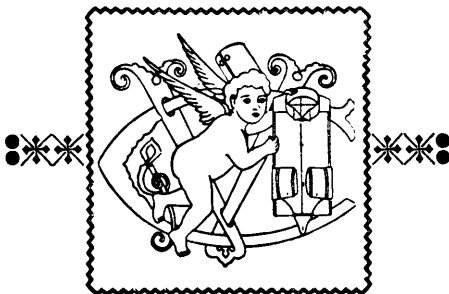
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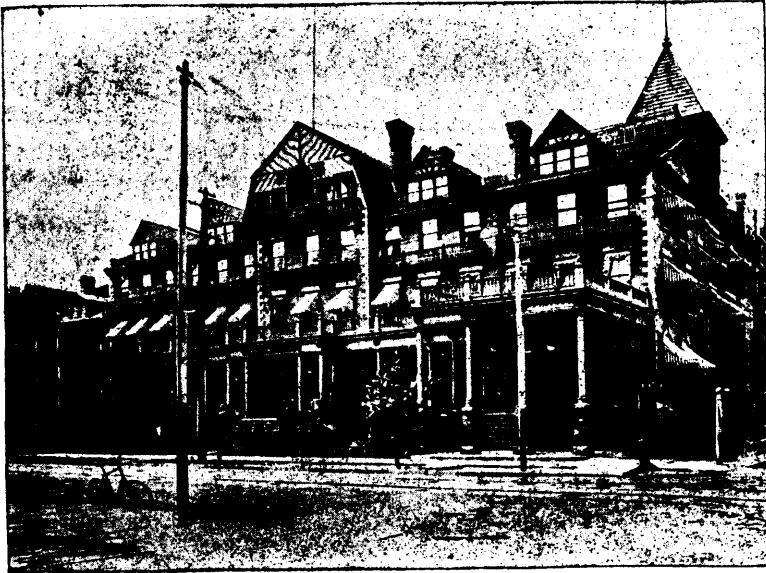
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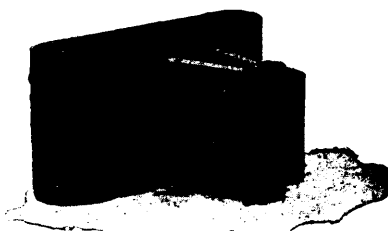
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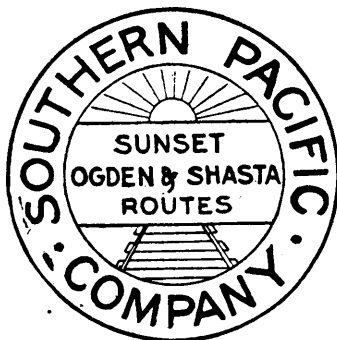
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