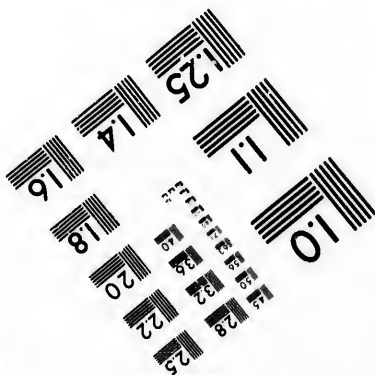
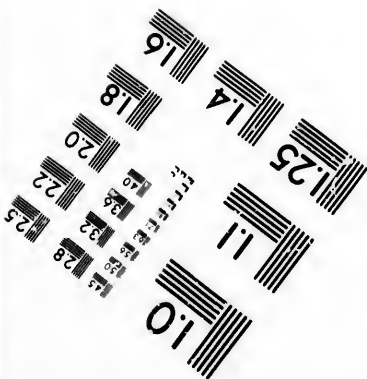
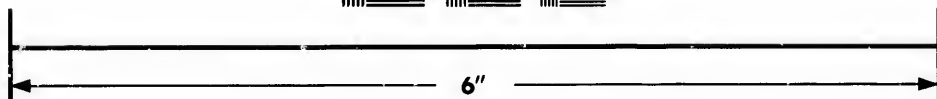
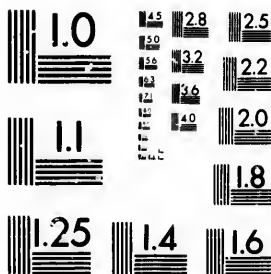


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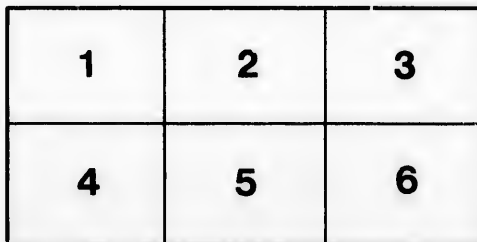
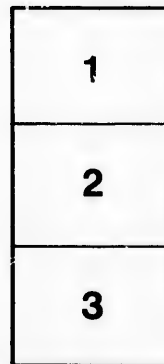
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Dr Bell.
Alexander, J. R. *Geological Society*

ELECTRO-GALVANIC TRUSS

J. R. ALEXANDER, M. D.,

PATENTEE,

8 BEAVER HALL SQUARE

—AND—

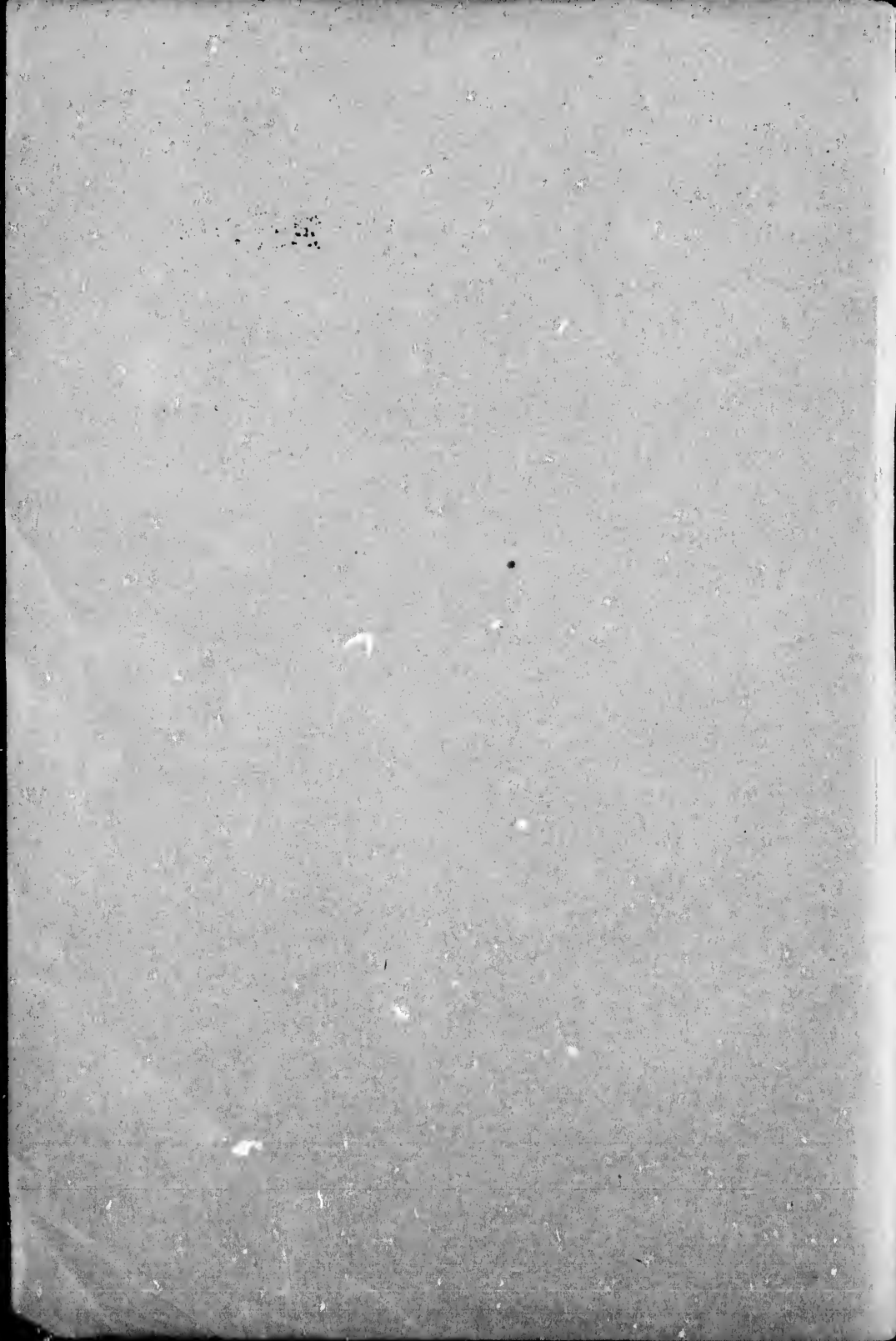
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As I purpose devoting my attention SOLELY TO THIS DEPARTMENT OF MECHANICAL SURGERY, not being otherwise engaged in practice, I appeal with confidence to the *profession* for their encouragement in introducing a Truss which I know will meet a want not otherwise supplied, as it can be bent and moulded to fit any conformations and will afford to all (even the worst cases) immediate and permanent relief. "The treatment of ruptures," observes Lawrence, "demands as great a combination of anatomical skill, with experience and judgment, as that of any disorders in Surgery." Holtman writes:—"In spite of this undeniable truth, the public seem to imagine that they have only to purchase a truss as they would a hat, in order to be at once relieved of their malady." Birkett says:—"The injurious results of this practice are being continually forced on the attention of Surgeons. Among the poor we constantly observe the lamentable effects of this proceeding. Ill-shaped trusses are applied: the springs being too feeble, allow the hernia to descend behind the pad, when it becomes compressed; or they are too strong, and their pressure induces absorption of the abdominal parieties on which the pad presses. Frequently a truss, suitable for supporting a femoral hernia is applied to one of the inguinal kind, and *vice versa*."

J. R. ALEXANDER, M. D.

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Dr. ALEXANDER'S
ELECTRO-GALVANIC TRUSS.

Patented 1877,

IN

CANADA, GREAT BRITAIN, UNITED STATES AND FRANCE.

As the world advances in civilization and knowledge, the truth becomes more fully recognized that art and science fulfil their noblest mission when they alleviate human suffering, and, by reducing disease and misfortune, contribute to the health and happiness of the human family.

Having been afflicted with Right Inguinal Hernia for sixteen years, and Left Inguinal Hernia for eleven years, I have from the first spared neither time nor money in endeavouring to relieve myself of the suffering to which I was constantly subject. No truss would retain the hernia, except for a short time, and that with much difficulty. In 1862, when studying medicine in McGill College, I requested G. W. Campbell, A.M., M. D., LL.D., Emeritus Professor of Surgery, and Dean of the Medical Faculty of the University of McGill College, Montreal, to operate on me for the radical cure, but he objected to do so, saying that "the highest aim of surgery is to avoid the use of the knife whenever it can be done with safety to the patient." From that time until the present I have been experimenting practically upon myself, and have tried most of the old trusses, and every new truss that looked in any way reasonable or scientific, but with no success. I became gradually but unmistakeably worse. In September, 1876, I was so bad on two different occasions, that I knew something must be done to obtain permanent relief—suffering being constant, and danger of strangulation staring me continually in the face. I

went to New York, Philadelphia, and Boston, and expended \$205 for a truss in New York, but came back no better than when I went away. It was after this unsuccessful and expensive trip that I went to work with desperation, determined that I would not give up until I had made a truss that would embrace all the advantages possessed by other trusses, with few if any of their disadvantages, and one that I could wear with ease, comfort and safety.

On the 20th day of October, 1876, I put on my own truss for the first time, which had no less than ten screws, although it had no hinge. I have kept on simplifying and improving the truss, and making additions and modifications to suit different cases and different hernias, but the principle has remained the same. On the 15th day of February, 1877, there was a very slight protrusion on my left side, but there has been none since, and I know that I am **RADICALLY CURED**, and, strange to say, in different ways. On one side the cure seems to have been effected by the adhesion of the walls of the inguinal canal to the cord and to each other, and on the other by the contraction of the muscular fibres around the internal ring. The latter would be described by some as the absorption of the hernial sac.

This truss is pronounced by all surgeons who have seen it applied, and by those who have worn it, to be superior to all others; and, in point of mechanical construction, and special adaptation to the end desired—comfort, permanent relief, and in many cases a radical cure—is looked upon as one of the most valuable inventions of the age. This truss possesses the following advantages over every other now in use:—If the hernia is not retained, the truss must be removed immediately or the suffering will be intense—this compels the patient to return the protruded parts without delay. It is less complicated than most trusses. It is the most perfect and durable truss made, and will last many years if properly cared for, as it will never rust or become offensive. Its use imposes no restrictions in occupation, exercise, diet or pleasure, if worn properly. It will retain the hernia easily, and that in cases where no other will or possibly can. It will retain it with less pressure than any other, because of its long circular lever power, which surrounds the body completely. It is the only complete circular metallic lever non-elastic band truss made. It is the only truss

which can be adjusted properly and worn with comfort, without a strap or covering of any kind, being purely metallic. It will not chafe or annoy the wearer in the least, if an ordinary case, and less than any other if a bad case.

It causes little or no pressure on the spine or sides of the sufferer, as spring-band, rubber-band and strap-band trusses invariably do. It will not injure the spermatic cord and vessels, as it does not touch the bone in inguinal, and very slightly, if at all, in femoral hernia. It will not induce the development of tumours and other difficulties, such as inflammation of the cord, epididymitis, atrophy of the muscles or paralysis. It cannot be displaced by any movement of the body, as it adapts itself to every motion and impulse by its elastic self-adjusting spiral spring pressure, and it presses less when the wearer is sitting or lying down. It fits snugly, and is so compact that it does not show through the clothes.

It can be worn at night as well as during the day, in most cases, if necessary. It will always remain the same, and come in the same place when once properly adjusted by the surgeon, unless purposely deranged. It can have the pad brought to the exact place needed, and varied in position even to the one thirty-second part of an inch. It requires a smaller pad than others, because its position never changes. It can be increased in size, changing the circumference from two to four inches. It can have the pressure increased or diminished by changing the spring on the pad. It can be made so as to weigh not more than eight or nine ounces in most cases. It is perfectly clean, needing no covering, but if necessary in any case, the cover can be removed easily and washed weekly, or whenever the patient thinks proper. It can be bent and moulded to fit the body perfectly and comfortably in all cases. It can be perfectly adapted to parties measuring fifty inches in circumference, and also to the babe of only ten inches. If its durability and comfort are considered, it will be in the end cheaper than the cheapest truss in the market. This truss will effect a radical cure in a large proportion of healthy subjects in inguinal and femoral hernia, if proper care is taken, and it be worn as directed.

Inguinal and femoral hernia, in most cases, can be cured, I believe, with as much ease and certainty as a broken limb, but it is as useless to attempt to cure it with a truss that cannot and will not retain it completely and constantly until the opening is contracted, or adhe-

sion is perfected, (or, as some claim, the sac is absorbed), as it would be to cure a broken arm or leg by stripping off the splints and bandages and moving the broken bones every few hours; but as a broken bone will begin to knit in eight or nine days, if held securely together that length of time, so, in most cases of inguinal hernia, cures will be effected if the pressure is retained constantly and invariably the same. Of umbilical I will not speak so positively as of inguinal and femoral hernia. Still many of those, no doubt can be cured.

Unless completely destroyed, the serous lining of the inguinal canal and the serous membranes of the hernial sac, never lose their peculiar tendency to adhesion under very slight irritation, the pressure necessary to bring both surfaces together, and to retain the hernia sufficient in most cases. Now in the majority of cases, when the radical cure of inguinal hernia is effected, the inguinal canal and neck of the hernial sac is obliterated by adhesion. In some, however, a cure is effected by the contraction of the curvilinear tendino-muscular fibres which surround the internal inguinal ring, or it may be effected by both jointly, which no doubt it is. Some claim a cure by absorption, which I believe rarely if ever occurs.

That serous membranes, when acted upon by proper applications and appliances, will throw out a coagulable lymph, which, coming between the serous surfaces thus excited, will cause them to adhere, is not a theory but an established fact in pathology. The reason why this truss will effect a cure is, the hernia is completely reduced, and then the truss is so adjusted that it maintains its position over not only the line of the internal abdominal ring, but along the line of the inguinal canal to the external abdominal ring, and the equal, elastic and natural supporting pressure (together with what I claim to be the uninterrupted electro-galvanic action) of the pad, causes irritation of the lining membranes of the canal and sac, and the result is the adhesion of the walls of the canal and sac to each other, and to the cord or the round ligament, as the case may be. This action also stimulates the tendino-muscular fibres to contract. If too much pressure is applied it might produce absorption; I, however, doubt this mode of curing hernia. When adhesion has been fully accomplished, or contraction effected, or both, the hernial opening is hermetically sealed and the patient radically cured.

I would ask the profession to give the truss a fair trial, as I am

satisfied that it will accomplish even more than is claimed, giving permanent relief to cases of the longest standing ; but, whilst this is the case, I would not fail to warn all persons interested that it must be adjusted with the greatest care and in the exact place, and that in some extreme cases there will be a great deal of difficulty experienced before the hernia will be retained perfectly and with ease. With patience and perseverance, however, the most difficult cases can be conquered. It will be found at first by the surgeon unaccustomed to it to be the most difficult truss to adjust properly, because the metallic circle is complete, and it cannot be pulled together or be made to appear to fit when it in reality does not. When, however, a few have been adjusted, little or no difficulty will be found in fitting the majority of cases.

DR. ALEXANDER'S NEWEST IMPROVED ELECTRO-
GALVANIC TRUSS OR SUPPORT.

(From the Commercial Review.)

There is no disease so serious in its nature, so dangerous, in its liability at any moment to prove fatal, or so full of pain, as that terrible affliction, rupture. The sufferer from this disease is never at ease, he is never out of danger, the utmost precautions are essential to avoid a fatal result. The effects on the mental powers are equally detrimental, often rendering the patient incapable of attending to his ordinary business. Manifold have been the appliances to relieve or cure this malady ; and when we take into consideration its prevalence, and the certainty of a rich reward awaiting him who would devise a radical cure, we can easily understand why the market is flooded with every kind of truss, made of all shapes and materials, and why there are so many sold and worn. For it is necessary that the afflicted should do or use something to relieve their distress ; and, even when convinced by experience that the chances against any new appliance proving useful or adequate are in the ratio of fifty to one, they still hope against hope, and expend still more money in the effort to conquer the affliction. From the information we have gained in our researches touching this disease, we are sure that there is scarcely one of the dispensers of these appliances who ever expects to do more than relieve the patient, while, as for an absolute cure, we think it would be a matter of extreme difficulty to find one well-attested case. On the contrary,

we know many instances where they have aggravated the malady they intended to cure. Looking at the matter in a scientific point of view any surgeon will state, as a matter simply of adaptation to the end in view, they are intrinsically inadequate. Aware of these facts, it was with a somewhat sceptical mind we paid a visit to the rooms of Dr. J. R. Alexander, and examined his Electro-Galvanic Inguinal, Femoral, Umbilical and Abdominal Trusses, for which Letters Patent have been granted in Canada, Great Britain, United States and France. We must mention at the commencement that the Doctor does not claim to make a radical cure of any case which he undertakes, but he does claim that Hernia is curable, and he has the proper appliances to effect same, not simply temporarily relieving the patient but completely restoring him to life and vigor. And now on what are those claims based? A very natural question, which we shall elucidate for the benefit of our readers, and let them form an opinion of their own. In the first place Dr. Alexander has been afflicted with this terrible malady—Right inguinal hernia—for sixteen years and Left inguinal hernia eleven years, and, after vainly trying every description of so-called improved trusses, found them utterly worthless. Having practically experimented by the application on himself of his Improved Electro-Galvanic Truss, which has been improved from time to time, it now possesses in a high degree all requisites claimed for other inventions for relief and cure of hernia. Next to its efficiency, its comfort recommends it above all others. It is the only method which is certain, where no operation is needed—and this in itself is no small gain, for even the best surgeons will use the knife only where it is the ultimate and last resort. No surgeon knows until after the operation, what the effect will be, and in, alas, too many cases that effect is death. By Dr. Alexander's method the patient is almost at once placed in a condition to do any kind of labor, and with perfect safety. We do not consider it necessary to recapitulate proofs as to the Doctor's skill and reliability—these are well known—an experience of over twelve years, the best testimonials, including many of the most eminent surgeons and physicians in Canada, a clear record for honorable dealing, and lastly, the letters of patients, teeming with gratitude, bear sufficient evidence of his skill and success. Although, as our readers are aware, we do not often recommend or notice what are called specialists, yet in this case we consider we are

doing them a favor in bringing to their notice a gentleman who has met with uninterrupted success in this department of mechanical surgery, and who is a benefactor to his race. We cordially recommend those upon whom this disease has fastened to give him a call. He is very explicit, stating at once, after examination, what can be done, his terms, &c. Everything is fair and straightforward, and no deception of any kind for one moment."

OPINIONS OF EMINENT SURGEONS AS TO POSSIBILITY OF COMPLETE CURE OF HERNIA.

HOUSTON, 1726 :—"That infants are very liable to ruptures and easily cured by a well adapted truss or bandage, is a truth I need not here insist on. But since trusses and other helps were found out to strengthen relaxed fibres, some cases may happen, which, though seemingly incurable, yet may chance to be cured, especially if from a sound race, and when the constitution has not been broken, of which authors have given us examples."

ARNAUD, 1748 :—"There are few disorders more easily cured than those hernias of adults which arise from a simple relaxation of the peritoneum and abdominal muscles. By the methodical application of the truss alone, we cure at least two-thirds of hernias."

"The only intention to be pursued in the cure of all hernias, is to restore all the parts to their natural powers, to shrivel up such as are enlarged, and to shorten such as are elongated. It is an established principle that, by destroying the causes of diseases, the effects of them must cease of course."

POTT, 1763 :—"The reduction of the protruded parts, and the retention of them when so reduced by proper bandage; these sometimes, and in some circumstances, produce a perfect cure.' "There are many ruptures in persons of mature age, which will admit of perfect cure if properly and judiciously managed from the first." "There is no age at which a truss may not be worn, or ought not to be applied; it is, when well made, and properly put on, not only perfectly safe and easy, but the only kind of bandage that can be depended upon; and as a radical cure depends greatly on the thinness of the hernial sac, and its being capable of being so compressed as possibly to unite, and thereby entirely close the passage from the belly, it must therefore appear to every one who will give

himself the trouble of thinking on the subject, that the fewer times the parts have made a descent, and the smaller and finer the elongation of the peritoneum is, the greater the probability of such cure must be."

BRAND, 1784 :—"Every case properly treated must have a truss constructed, adapted, and applied, to its own particular circumstances, and without which neither success nor even safety can be expected. Yet, with all these difficulties, under judicious treatment there are very few cases of ruptures but may be cured or relieved."

Translated from M. Juville, Paris, 1786 :—"The constant use of the truss proves that it will radically cure children attacked with hernia, places adults in perfect security, frequently causes their hernias to disappear, and procures for them sometimes a radical cure. Even certain aged persons are not deprived of this advantage."

SHELDRAKE, 1803 :—"That out of a given number of patients who have ruptures, a certain proportion, perhaps one in ten, gets absolutely radically cured—they lay aside their trusses and never feel the least return of their ruptures."

SIR ASTLEY COOPER, 1804 :—"The proper method of completely obliterating the mouth of the hernial sac is to apply the truss, not only on the external abdominal ring, but also on the aperture at which the spermatic cord, and with it, the hernia, first quit the abdomen ; for the descent of a hernia cannot be entirely prevented, or a cure effected, but by making pressure on the internal abdominal aperture, and on the inguinal canal. The effect of wearing a truss on this part is to approximate the sides of the mouth of the sac, and thus to prevent any future descent into the same cavity ; if the pressure be long continued, adhesion takes place at the orifice of the sac, and interrupts the communication between the abdomen and the cavity of the sac, which being no longer distended by the descent of any viscera, contracts in dimensions, and at length, in some cases, becomes entirely obliterated. I have known a hernia completely cured by wearing a truss only nine months, and instances are not at all uncommon of the truss being left off at the end of a year without any relapse of the complaint."

In speaking of Femoral Hernia he says : "A truss thus formed and regularly worn will have the effect of preventing the descent of the

hernia, and may, in process of time entirely obliterate the mouth of the sac."

TURNBULL, 1806:—"It should also be understood that the stronger the compression of the truss, the greater probability there is of a radical cure being effected."

SCARPA, 1814:—"We never can expect a radical cure by means of a bandage in small and recent inguinal hernia, if we do not attend to compress with the ring, that portion of the neck of the hernial sac which runs under the aponeurosis of the external oblique, from the pubes towards the ilium."

In answer to Scarpa, Horatio Norsia, an operator, very skilful in hernia, said, "That formerly he had every year operated on more than 200 patients, and that at present he scarcely operated on 20; and he replied to me, on asking him the reason, because many cured themselves by wearing the truss."

Translated from M. J. Cloquet Paris, 1819:—"The contraction of the sac generally, but not invariably, begins at the neck. This is caused no doubt by the pressure of the truss."

Translated from Jalade—Lafond, 1822:—"The perfecting of hernial trusses is, without doubt, one of the greatest services which the modern surgeon has rendered to humanity; there is no surgeon at the present time but acknowledges the efficacy of the truss in the curing of hernia."

DUFOUR, 1829:—"In fine, the cure of hernia or of rupture ceases to be a desideratum; for hernia or rupture may now be cured."

EGG, 1831:—"The method which I adopt for the cure of Hernia is purely mechanical, and its successful result certain. The period for which the rupture may have existed is immaterial. Should it even have been of twenty years standing, or co-eval with the patient, is of no consequence; the result will be equally certain. At the end of a short time the instrument may be removed by the patient himself, who will be enabled at once to ascertain whether the instrument be so appropriate to his particular case as to effect his cure."

ACRET, 1835:—"It is the opinion of some surgeons that even in the adult an inguinal hernia may be cured by wearing a truss without intermission for two years. No doubt some radical cures do take place even when the truss is not so constantly worn. The

cure of hernia is effected by the truss keeping the sac empty and admitting a chance of its sides cohering, or in recent cases, when the adhesion is but slight, a spontaneous reduction of the sac may take place, or the pressure of the truss may cause a contraction and thickening of its neck and mouth sufficient to obliterate the passage from the cavity of the abdomen."

LAWRENCE, 1838 :—"The constant pressure of the pad keeps the neck of the rupture empty, and thus favors the commencement and progress of those natural processes by which recurrence of the complaint may be prevented; viz. spontaneous reduction, or gradual contraction of the sac, with obliteration of its neck or body, and agglutination of its sides."

"The pressure of the truss may excite slow inflammation and thickening, both of the empty sac and of the surrounding cellular substance, and thus assist and accelerate the contraction of the neck, and the separation of the sac from the peritoneum. I have seen empty hernial sacs, with the neck either contracted throughout or entirely closed to a greater or less distance. Obliteration of the cavity of the sac at its entrance, adhesions of the formerly protruded parts at the orifice, and thickening both of the hernial sac and the surrounding cellular tissue, have been found by others in the examination of individuals, in whom the use of the truss had effected a radical cure. Trusses, when skilfully employed, often excite, without pain, a slow inflammation, which terminates in the desirable object of obliterating the mouth of the peritoneal process, thus effecting a radical cure."

They found an adhesion of the omentum to the orifice of the sac in a patient radically cured by a truss. Arnaud gives several instances.

ASTON KEY, 1844 :—"The well ascertained fact of small hernial sacs being readily returned into the abdomen proves the propriety of applying trusses, while the cellular membrane connecting the cremaster and sac preserves that capability of distension which, after a long continuance of the sac in the scrotum, it ceases to have. A small and recently formed hernia is cured by a different process from that required in the cure of a large and old sac; in the latter the gut can only be permanently prevented descending by adhesion taking place between the sides of the mouth of the sac; whereas a small hernia is cured by giving firmness to the cellular texture sur-

rounding the neck of the sac, and thus preventing the elongated peritoneum descending through the internal abdominal ring."

T. P. TEALE, 1846 :—"Like the neck of the sac, they have a tendency to become diminished in size when the descent of the viscera is prevented. In this manner the use of well-adapted trusses promotes the radical cure of hernia." "By the use of well-adapted compresses, retained by bandages of various kinds, hernia is often permanently cured." "The mode in which trusses effect a radical cure is not by exciting adhesion in the parts which they compress, nor by inducing contraction, or even closure, of the neck of the sac, an effect which they have a well known tendency to produce; they simply operate by preventing the hernial descent for a sufficient length of time to allow Nature to effect the contraction of the aperture in the aponeurotic and muscular portions of the walls. Our object, then, in attempting the radical cure of hernia by trusses, should be to secure perfect retention of the viscera without exercising injudicious pressure."

MILLER, 1846 :—"By careful and constant use of the truss, a radical cure is expected in the child. In the case of the adult the truss must be worn for life. And yet a happy incident may occur in favor of a better issue. Thus, we have seen a phlegmon form under the pressure of a galling pad; the abscess opened, contracted, and healed; and, on cicatrization, it was found that the extent and site of plastic exudation had been such as to consolidate the outlet, and render further use of the truss quite unnecessary."

GAY, 1848 :—"In taking a cursory review of the modern surgery of rupture, I shall commence with those operations and modes of treatment which had for their object what is termed the "Radical Cure," most of which are but modifications of ancient practice. The obliteration or closure of the orifice of the sac, or its entire removal, were the ends designed by these proceedings; and these were to be effected by the following methods :—By compression: this method, adopted it appears with great success by Fabricio de Norsia, has in modern times been practised and commended by, amongst others, Pare, Lieutand, Richter, Langenbeck, Ravin, and Beaumont. Bandages, trusses worn tightly, and rough wooden blocks, have been

severally used for this purpose. The rough blocks were first proposed by Stagner."

JOHN WOOD, 1863:—"Such a compression of the sides of the hernial canal and openings, if continued long enough, would promote the contraction of the calibre of the canal, and give a much greater chance of an ultimate closure. In small and incipient cases such an application of the pressure may be fairly expected to produce a cure without further interference. Undoubted cases are on record in which the pressure of truss, brought to bear, perhaps accidentally, upon the proper place, has been followed by this satisfactory termination. The chief reason why such good results do not more commonly ensue, lies in the faulty construction of the truss pads ordinarily worn." In a clinical lecture delivered at King's College Hospital, in 1877, he says:—"It must be done by judicious truss pressure, by which even a radical cure may be obtained in some cases. To accomplish this, however, requires so accurate a fit, so appropriate an instrument, and such care on the part of the patient, or, in the case of children, on the part of the nurse, that it is not often successful. About 15 to 20 per cent. of hernia patients may be cured by judicious and persistent truss pressure—perhaps more in the case of children and young persons, and certainly less in adults."

T. P. SALT, 1865:—"There is now, I believe, no doubt remaining in the minds of our eminent practitioners that certain classes of ruptures may be radically cured by the timely and skilful application of properly constructed trusses. They are those which occur in people with good health; these may be generally cured, provided the instructions respecting the wearing of the truss be scrupulously and religiously carried out."

"The pressure of a truss has a tendency to produce thickening of the walls or sides of the hernial canal, and rings, to contract them, and to promote their adhesion by exciting the effusion and deposition of coagulable lymph."

R. DRUITT, 1867:—"If the patient is below the age of puberty, or not much above it, and if the hernia has not existed very long, the truss, if constantly worn, may effect a permanent cure. The

herniary aperture, no longer subject to distention, then becomes firmly closed, and the neck of the sac obliterated.

CARSTEN HOLTHOUSE, 1870 :—"Instances again are not rare in which the continuous pressure of a well-fitting truss, worn constantly, has effectually cured a recent hernia. In such cases, the instrument may possibly act in the same way as some of the operations alluded to, namely, by setting up such an amount of inflammation as shall bring about the obliteration of the sac, and its amalgamation with the walls of the inguinal canal. On the other hand, its action may be solely mechanical, and preventive of the protrusion, nature herself effecting the closure, on the principle of that inherent tendency of the tissues to perfect themselves after an injury; or, possibly, cures may have been effected sometimes by one of these processes and sometimes by the other, or even by their joint influence. Whichever hypothesis we adopt, the deduction is obvious, namely, that nature requires but a small amount of assistance from art in order to repair the defect of which we are treating."

J. ASHURST, 1871 :—"The application of a well-fitting truss will occasionally cure."

Professor S. D. GROSS, of Philadelphia, 1872 :—"For the reducible hernia, the best remedy is a suitable truss, an instrument designed to answer the purpose of a retention apparatus. It should be applied as soon as the true nature of the disease has been determined, and worn uninterruptedly until there is reason to believe that the opening of descent has become effectually and permanently closed." "The American truss, on the contrary, while it most effectually answers the purpose of a retention apparatus, often, by the steady, gentle, and uniform pressure of its block, permanently cures the disease." "The sooner, therefore, a truss is applied, the better it fits, and the more steadily it is worn, the greater will be the chances of a speedy and permanent cure. Yet the fact that a rupture is old and bulky should not prevent the use of such an expedient, provided the parts are still reducible; for the efforts of the surgeon are occasionally crowned with success in cases apparently the most unpromising. In young subjects, the probability is that the obliteration of the abdominal aperture is materially promoted by the natural tendency which its margins have to contract."

ERICHSEN, 1873 :—" Various means have been devised in order to effect the radical cure of reducible hernia. The only plan that is at the same time perfectly safe and permanently successful, is the compression of a well made truss."

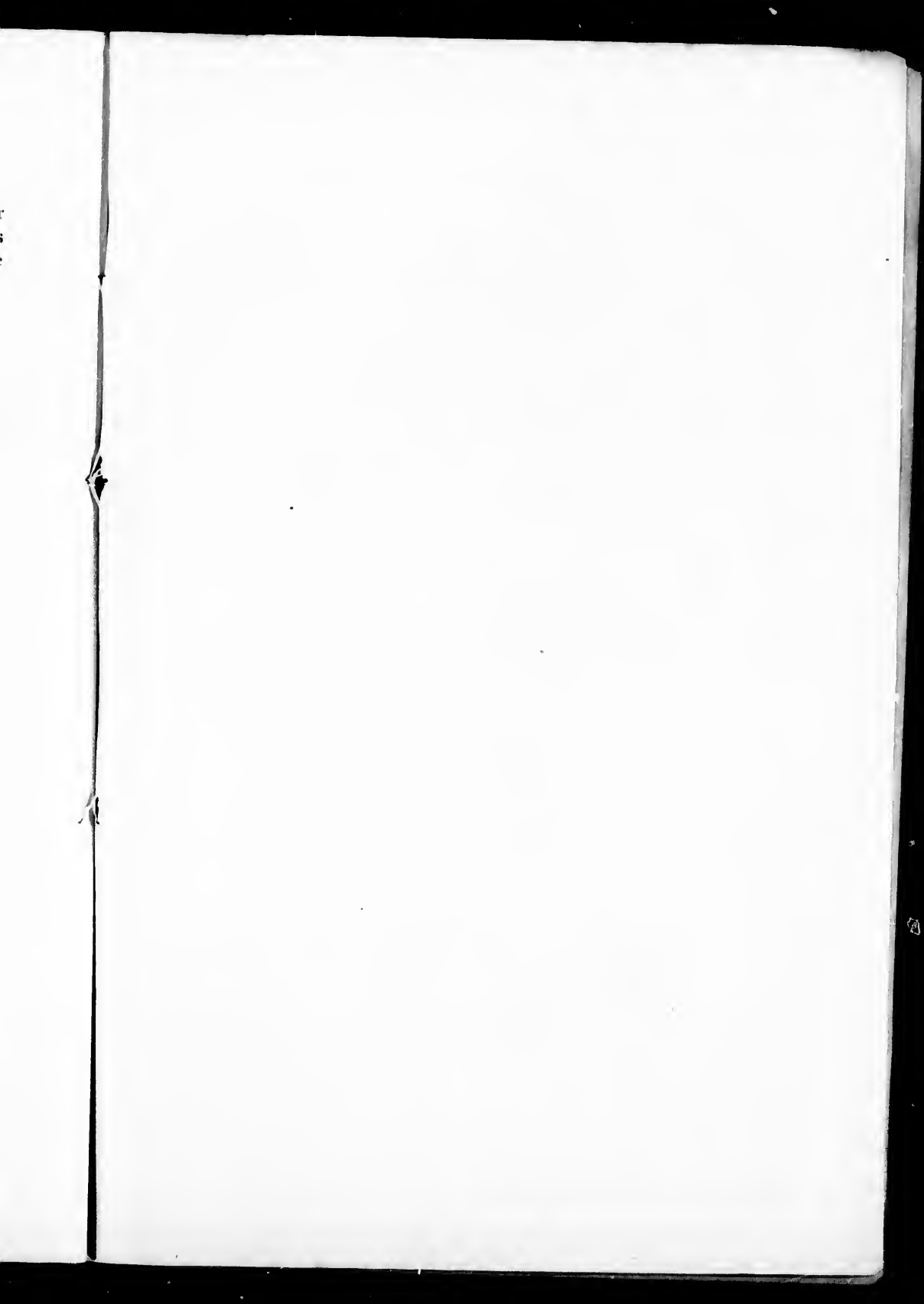
T. BRYANT, 1873 :—" Every subject of a hernia should wear a truss, and, in a good proportion of cases, particularly of the young, a cure may take place ; that is, the neck of the sack may close."

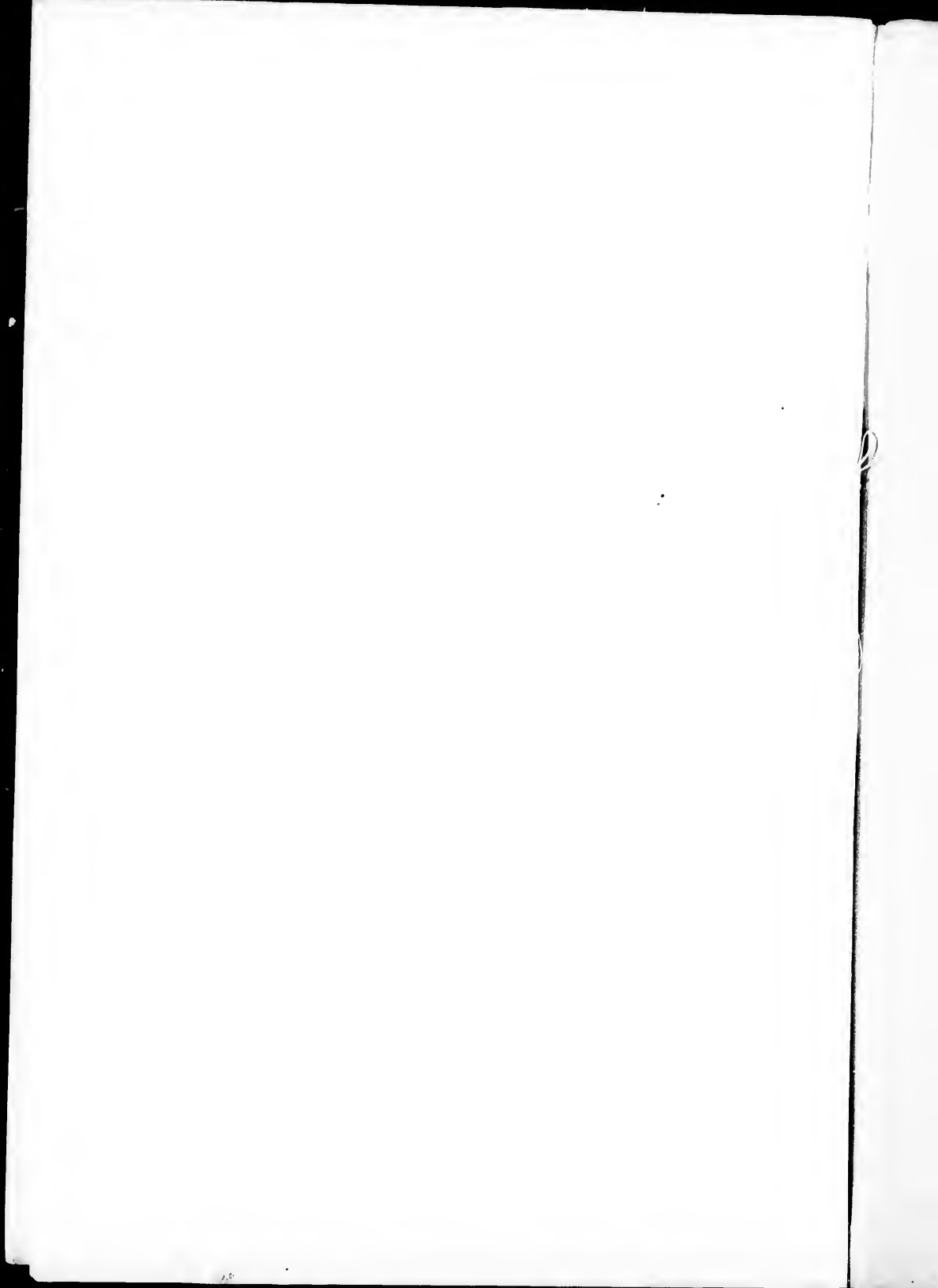
HOLTHOUSE—1874 :—" To conclude, a properly constructed and properly applied truss ought not only to prevent the descent of the rupture, but in a large proportion of young persons radically to cure it."

T. HOMES, 1875 :—" In no case of reducible hernia should the continued support of a truss be omitted. An impression prevails that an infant may be too young to wear a truss, but no error can be more unfortunate. The wearing of a truss may, it has been said, prove curative."

G. DOWELL, 1876 :—" The truss should be worn constantly, if the patient expects to be radically cured, as every return of the hernia will leave the opening as patulous as before. The ratio of radical cures by the truss is in proportion to age, the time of protrusion of the tumor, and the size of the oriñce and tumor."







ÆTNA LIFE INSURANCE COMPANY.

The ÆTNA LIFE has upwards of TWENTY-FOUR MILLIONS of DOLLARS of Rest, or Reserve, with which to pay its way, of which over Four Millions is Surplus, or profits, available for division among members in future increasing dividends.

Never before has the old ÆTNA been in so strong a position, financially, as at present. Its Surplus, after paying an increased dividend to Policy holders, shews a gain of nearly half a million dollars over last year. The Company has, therefore ample means of making further reductions in the premiums.

So productive are its assets, and so carefully selected are its Lives, that the Interest Receipts more than defray the Death Losses, as the following figures for the past year will shew :

Interest on Funds, 1877	\$1,527,307.70
Death Claims paid, 1877	1,121,083.73

DIFFERENCE TO THE GOOD 406,223.97

SOLID PROGRESS DURING THE PAST TWELVE YEARS.

Years.	Assets.
1866	\$2,036,823.05
1867	4,401,433.86
1868	7,538,612.35
1869	10,350,521.23
1870	13,284,594.21
1871	15,120,686.11
1872	16,640,786.24
1873	18,077,540.06
1874	19,482,415.88
1875	20,657,603.56
1876	22,092,734.32
1877	23,357,648.95

January 1st, 1878—\$24,141,175.70.

MONTREAL DISTRICT BRANCH,

OFFICE: OPPOSITE THE POST OFFICE.

J. R. ALEXANDER, M.D.,

Manager.

GOVERNMENT SECURITY

FURNISHED BY THE

AETNA LIFE INSURANCE CO.

THIS COMPANY having transacted business in Canada so acceptably for TWENTY-SEVEN years past as to have, to-day, the largest Canada income of any Life Company save one (and a larger proportional income than even that one),

NOW ANNOUNCES

that it will deposit, in the hands of the Government of Canada, at Ottawa, the whole RESERVE, or RE-INSURANCE FUND, from year to year, upon each Policy issued in Canada after the 31st March, 1878.

The importance of having even a strong Company, like the AETNA LIFE, backed by Government Deposits, will be appreciated when attention is directed to the millions of money lost, even in our own Canada, through the mismanagement of Directors and others, during a very few years past.

AETNA Assets, January 1st, 1878.....	\$24,141,175.70
“ Gross Liabilities, January 1st, 1878.....	19,962,147.84

SURPLUS FOR POLICY HOLDERS \$4,179,027.86

Paid to Policy-Holders for claims by Death, and Endowments since 1850.....	\$14,682,636.43
Paid in Dividends to Policy-Holders and Returned Premiums.....	13,573,754.71
Paid for Policies Cancelled.....	6,996,833.92

Total Paid to Policy-Holders from commencement.....	\$35,253,225.06
Present Annual Income, nearly.....	5,000,000.06
Number of Policies in force, Jan. 1st, 1878, 56,698.	

Total Amount of Insurance in force, Jan. 1st, 1878 **\$82,719,074.00**

The success and productiveness of a Life Insurance Company absolutely depend on the ratio of assets to liabilities, interest earned, careful selection of risks, and expenses incurred in transacting the business.

Average ratios Working Expenses per \$100 of Income in Canadian Companies.....	\$30.23
In American Companies.....	19.11
In English Companies.....	22.97
Working Expenses of the AETNA LIFE, only.....	7.91

Thus saving to its policy-holders about \$20 out of every \$100 of premiums paid in, as compared with the average expenses of other Companies.

Canada pays \$2,800,000 a year for Life Insurance. If the whole of it were paid to the AETNA LIFE INSURANCE COMPANY, the saving would be over \$500,000 a year, affording to the policy-holders that much larger dividends on their money than they now receive.

AETNA'S ratio of Assets, **\$1.00** to every **\$3.43.** of Insurance in force!

MONTREAL DISTRICT BRANCH:

OFFICE: OPPOSITE POST OFFICE,

J. R. ALEXANDER, M.D.,

Manager.

