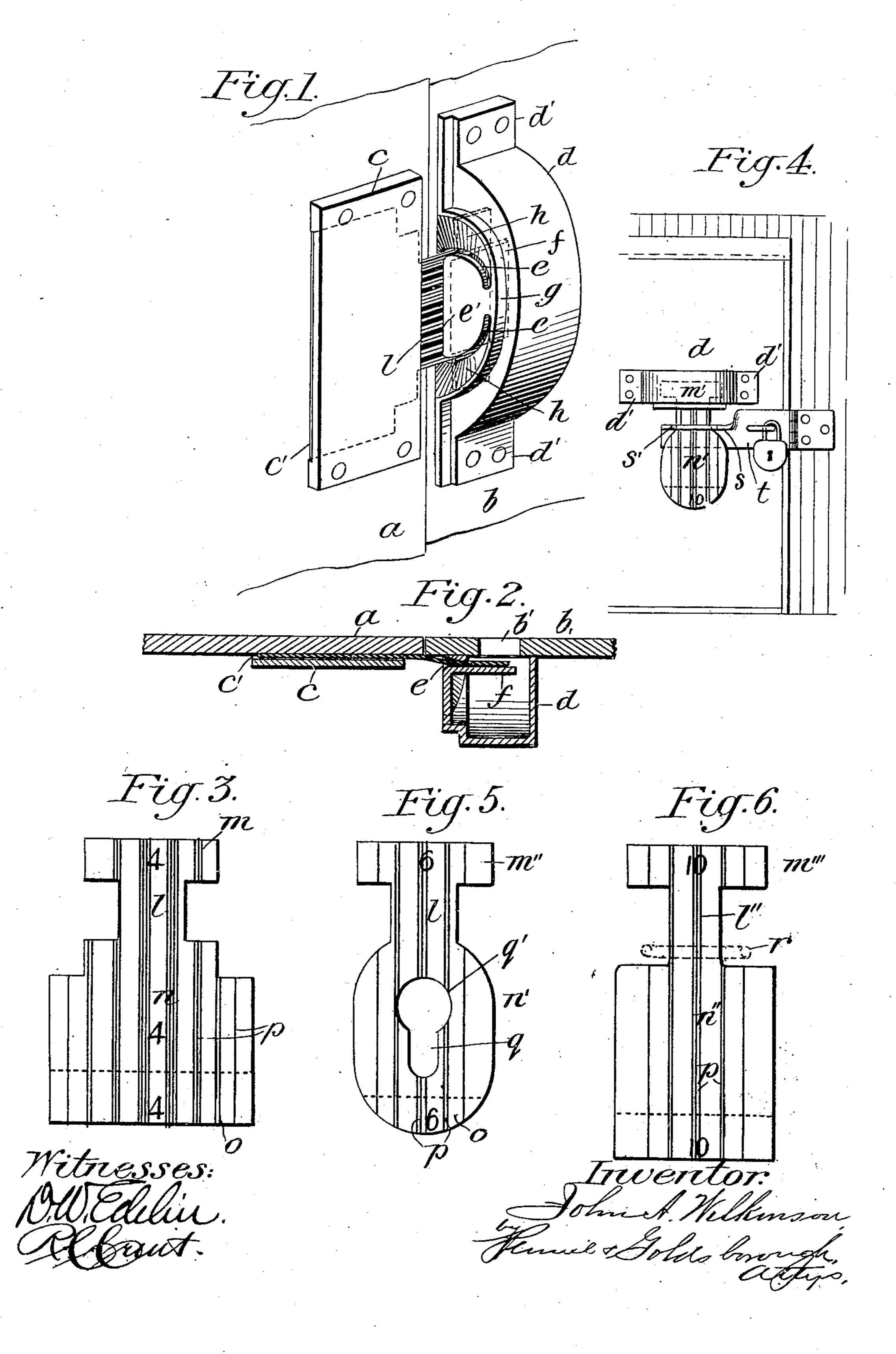
J. A. WILKINSON. SEAL LOCK. APPLICATION FILED FEB. 21, 1906.



UNITED STATES PATENT OFFICE.

JOHN ALLAN WILKINSON, OF WASHINGTON, DISTRICT OF COLUMBIA.

SEAL-LOCK.

No. 869,761.

Specification of Letters Patent. Patented Oct. 29, 1907.

Application filed February 21, 1906. Serial No. 302,211.

To all whom it may concern:

Be it known that I, John Allan Wilkinson, a sub- | inafter more particularly described. ject of the King of Great Britain, residing at Washington, District of Columbia, have invented certain new 5 and useful Improvements in Seal-Locks and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to seal locks for closures, and 10 has for its object to provide a seal lock for vaults, boxes, trunks, and other compartments or receptacles having a closure which is adapted to be opened to permit access to the interior, which seal may be applied to its 15 intended use without the employment of any tools or appliances, and which, when so applied, cannot, by any possibility, be removed, to permit the closure to be opened, without either destroying the seal, or so mutilating the same as to evidence the fact that it has 20 been tampered with.

An additional object is to provide a seal lock having a simple, cheap and efficient destructible member, adapted to be applied to the correlative permanent parts of the seal lock, and to be incapable of dissocia-25 tion therefrom without destroying or mutilating said destructible member to such an extent as to evidence such removal.

To this end, the invention comprises a sheet of resilient material, adapted to be inserted in a confining 30 member associated with the closure, and to have its end inserted in a slot in a keeper, of such form as to require the temporary bending or deformation of the sheet, and to permit the inserted end to spring back into substantially its normal relation, thereby prevent-35 ing its removal through the slot without rupturing or mutilating the sheet.

The invention is illustrated in the accompanying drawings, in which;

Figure 1 is a perspective view of the improved seal 40 lock applied to a door or similar closure; Fig. 2 is a horizontal section thereof; Fig. 3 is a plan view of one of the destructible sheets; Fig. 4 shows a slightly modified form of the invention, applied to a door or other closure that is secured by a hasp and lock; Fig. 5 is a 45 plan view of a destructible sheet, involving a still further modification; Fig. 6 is a similar view of another modified form of sheet, and the means for securing the same to the closure, or an associated part thereof.

Referring to Fig. 1 of the drawings, a indicates the 50 closure, which, in the present instance, is a door adapted to close against a jamb or other abutment b. Secured to the face of the door, by rivets or other suitable means, is a plate c provided with a recess c', conveniently located in its under surface, and preferably hav-55 ing shoulders or abutments near its forward edge, which plate serves as the means for confining the body of the

destructible sheet member of the seal lock, to be here-

Secured to the jamb b, on the wall adjacent to the door, is the keeper or receiving member of the seal, 60 which is conveniently formed as a hollow casting having a generally semi-cylindrical body portion d and a base or flange portion d', by means of which the keeper is secured to the member b by bolts, rivets, or other suitable means. In the lateral face of the keeper, ad- 65 jacent the door a, there is provided a slot of nonrectilinear or irregular form, having a straight portion e' and two lateral curved portions e, e, which slot is adapted to receive the forward end of the destructible sheet member of the seal, the length of the entire slot, 70 comprising the straight portion e' and the two lateral curved portions e, e, being substantially equal to the width of the forward end of the sheet, while the straight portion e' is of a length substantially equal to the reduced intermediate portion of said sheet, so that, in 75 order to insert the sheet within the slot, it is necessary to bend or deform the end thereof.

The third portion of the seal lock consists of a resilient sheet of thin metal, celluloid, fibroid, indurated fiber, or other material that is capable of springing back 80 into its original form, after being bent and deformed and subsequently released. To adapt the sheet to cooperate with the confining plate c and the keeper d, in its sealing function, said sheet is preferably provided with a head m formed of laterally projecting portions, a 85 reduced intermediate portion or neck l, and a main body portion n, which may be provided with one or more angular shoulders to correspond with the angular abutments formed on the inner surface of the confining plate c, together with a transversely scored or perfo- 90 rated end section o, which is adapted to be removed as a check. The end or head of the sheet constitutes a tongue, which, as hereinbefore indicated, is adapted to be bent or deformed to conform to the shape of the curved members e, e in the slot of the keeper, and, when 95 said head has been passed through the slot into the keeper, by virtue of the resiliency of the head or tongue, to spring back into substantially its normal or flat relation, so as to lie in the plane of the sheet proper.

In order to facilitate the insertion of the head or 100 tongue of the destructible sheet in the slot, to effect the sealing, the face of the keeper, in which the slot is formed, is provided with a generally circular rib q. which is beveled or inclined toward the slot to form a guide, by means of which the head or tongue is directed 105 into the slot. To assist the tongue or head m of the sheet in resuming its normal flat relation, after it has been inserted through the slot, the central web of the keeper, inclosed within the slot, is provided with a flat tongue-like projection f, which lies normal to the slot 110 and generally parallel with the plane of the destructible sheet.

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In its practical application, the invention contemplates the provision of a number of the destructible sheet members of the seal lock, one of which is to be applied each time the closure is to be sealed, and which is 5 also to be destroyed in the opening operation. In order to prevent the forward end of the sheet, constituting the head or tongue, being removed from the keeper, after it has once been inserted, without destroying or mutilating the sheet, said sheet is made of substantially the 10 same thickness as the slot in the keeper, and the width of the head is substantially equal to the longitudinal dimensions of the slot, so that when the head is bent to conform to the slot, it will slide snugly therethrough without lateral play, and so that it will be practically 15 impossible to insert any instrument, however thin, through the slot to bend or guide the head or tongue minto proper shape to be withdrawn through the slot. In applying the seal lock, a destructible sheet, cut to proper form and dimensions, is inserted in the recess c'20 in the rear of the confining plate c, so that the head or tongue m projects beyond the opposite edge of said confining plate, in position to be rolled or curled sufficiently to conform to the contour of the slot, through which said head is forced, the reduced portion or neck l of the 25 sheet occupying the straight portion e' of the slot, and the lateral projections of the head or tongue m passing through the corresponding curved portions e of said slot. After the lateral projections of the head m have passed through the slot, the inherent resiliency of the material 30 of which the sheet is composed, causes the lateral projections to flatten out, the inwardly projecting tongue fwithin the keeper assisting this flattening operation, as hereinbefore described. Under these conditions, it will be noted that the head of the sheet is securely 35 locked within the keeper, and the body portion is confined within the plate c, and as the keeper is located on one member and the confining plate c upon the other relatively moving member of the receptacle, it will be obvious that said receptacle cannot be opened without 40 rupturing the sheet-like member of the seal.

Although the seal lock, hereinbefore described, is shown as applied to a door or similar closure, it will be obvious that its application is not limited to such form of closure, as it is equally well adapted to the lids of 45 trunks, express boxes, mail bags, and, in fact, to any receptacle or compartment that is capable of being closed or locked.

The destructible sheets or cards, which form an essential element of the invention, may, of course, be given 50 any desired configuration, ornamentation, or other means of individual identification. It is found convenient, for example, to provide the sheets or cards with a series of longitudinal lines, as p, which may be printed in different colors, and which also may be arranged in 55 different orders on each card, so as to evidence the fact that the end of the card or sheet retained in the keeper, when the seal is ruptured, and that held by the confining plate c are portions of the same card. Likewise, the respective ends of the cards may be supplied with suit-60 able identifying numerals, which will be different for each card; that is to say, one card may have the numeral 4 at each end, as shown in Fig. 3, while the next card in the series may be numbered 44, and so on. The invention also admits of the sheet or card being pro-65 vided with a detachable stub, which, when the sheet is

inserted in sealing position, projects beyond the edge of the confining plate c, and may be torn off, by the proper authority, and conveniently forwarded as a way bill or other check, with which the portions of the sheet or card held in the coöperating members of the seal must tally. 70 It will be apparent that any discrepancy between the markings on the stub and the other portion or portions of the destructible sheet, will indicate that the seal has been tampered with, and that access to the receptacle or compartment, secured by the seal, has been had by 75 unauthorized persons.

When the owner or proper authority desires to open the door or other closure, secured by the seal lock, the sheet or card is torn or otherwise ruptured, conveniently at the reduced portion or neck l, after which the door or 80 closure may be regularly opened. The body portion of the seal may be then quite readily removed from the confining plate c, and the severed head portion may be withdrawn from the keeper, through a suitable opening b' formed in the rear of the keeper, and, of course, 85 the identifying marks on the head and body portions of the ruptured sheet should correspond not only with each other, but with the tab or stub o, which was removed at the time of sealing.

Instead of providing a special form of confining plate 90 for the destructible sheet, which coöperates with the keeper to confine the sheet in sealing position, it will be apparent that other forms of retainer may be employed, without departing from the spirit of the invention. For example, in Fig. 4 the retainer is formed of the ex- 95 tended end of an ordinary hasp t, by means of which a door or other closure may be locked, said extended end being provided with an angularly disposed flange s, having therein a slot s', through which the head m' of the destructible sheet may be passed, by canting or tilting 100 the sheet sidewise, said slot s' being of such dimensions as to readily permit the passage of the head, but not the enlarged body portion n' of the sheet, so that when the head is inserted within the keeper, the neck occupies the slot in the hasp, and the body portion n' lies on the 105 opposite side of the hasp, so that the latter cannot be released without rupturing or breaking the sheet or card. If the seal lock is applied to closures that are exposed to the weather, it may be found desirable to make the destructible sheet or card member thereof of thin metal, 110 or suitable water proof material, which may be readily ruptured, and the same may be provided, if desired, with identifying marks, and also with the detachable stub or tab, to subserve the purposes hereinbefore described. The seal may also be applied to various other 115 forms of lock, and many changes and modifications will suggest themselves to the ordinary intelligent mind. In Fig. 5, for example, the destructible sheet or card, is provided with a key-hole shaped slot q in the body portion n' thereof, the upper enlarged portion q' of said slot 120 being of sufficient dimensions to permit the passage of a bolt head, while the lower portion thereof will not permit the bolt head to pass. By threading the card or sheet over the bolt head, through the enlarged portion q' of the slot, and then inserting the head m'' in a keeper 125 of the character hereinbefore described, it will be apparent that the sheet or card cannot be removed without tearing or rupturing the same. In Fig. 6, the application of the card member of the seal lock is somewhat similar to that shown in Fig. 4, except that the confin- 130

ing member, through which the head m''' is passed preparatory to inserting the same in the slot in the keeper, is formed by the ordinary staple r, by means of which a closure is secured by a lock or other suitable means, the 5 head m''' being formed of such dimensions as to permit it to be passed through the staple when the card is tilted laterally, the staple, however, being altogether too small to permit the body n'' of the card to be passed through it, but sufficiently large to receive the neck l''. It is also to be noted that the keeper and the slot therein to receive the forward end of the resilient frangible card or sheet member of the seal lock, may be varied or modified to suit the varying conditions of application or use, provided, of course, that the disposition of the slot is 15 such that after the forward portion of the card or sheet has been passed through the slot in the keeper, the said head or end will, because of its resilient character, move out of registry with said slot and be locked within the keeper.

20 Having thus described my invention, what I claim and desire to secure by Letters Patent, is:—

1. A seal lock for closures, comprising a hollow member having a non-rectilinear entrance slot, and a normally flat resilient member adapted to be inserted in part in the slot and to assume a relation out of alinement or registry with said slot after insertion.

2. A seal lock for closures, comprising a hollow keeper provided with a non-rectilinear entrance slot, and a substantially flat resilient member having a head adapted to be inserted in the slot of the keeper and to assume a relation out of alinement or registry with said slot after insertion.

3. A seal lock for closures, comprising a hollow keeper provided with a non-rectilinear entrance slot, a substantially flat resilient member having a head adapted to be inserted in the slot of the keeper and to assume a relation

out of alinement or registry with said slot after insertion, and means associated with the closure for confining the body of the resilient member.

4. A seal lock for closures, comprising a normally flat 40 sheet of resilient material having a reduced intermediate portion, a hollow keeper having a non-rectilinear entrance slot adapted to receive the end of the sheet only when the said end is deformed and to permit said end to assume substantially its normal relation after its insertion in the 45 slot, and means associated with the closure for confining the body of said sheet.

5. A seal lock for closures, comprising a hollow keeper having a non-rectilinear entrance slot, and a normally flat sheet of resilient frangible material having a head of 50 substantially the same cross sectional area as the slot in the keeper, said head being capable of deformation to enter the slot and of resuming substantially its normal relation after passing through said slot.

6. A seal lock for closures, comprising a hollow keeper 55 having a non-rectilinear slot, a normally flat sheet of resilient frangible material having a head of substantially the same cross sectional area as the slot in the keeper, said head being capable of deformation to enter the slot and of resuming substantially its normal relation after 60 passing through said slot, and means associated with the closure for confining the body of the resilient sheet.

7. A seal lock for closures, comprising a normally flat sheet of resilient frangible material having a main body section, a head and a connecting neck, means associated 65 with the closure for confining the body section, and a hollow keeper having a non-rectilinear entrance slot for receiving the head, said slot being so disposed as to require a relative deformation of the head and body portion during the act of inserting the head.

In testimony whereof I affix my signature, in presence of two witnesses.

JOHN ALLAN WILKINSON.

Witnesses:

CHAS. J. O'NEILL. GEO. W. REA.