

W. H. DARLING.

Seal-Lock.

No. 162,805.

Patented May 4, 1875.

Fig.1.

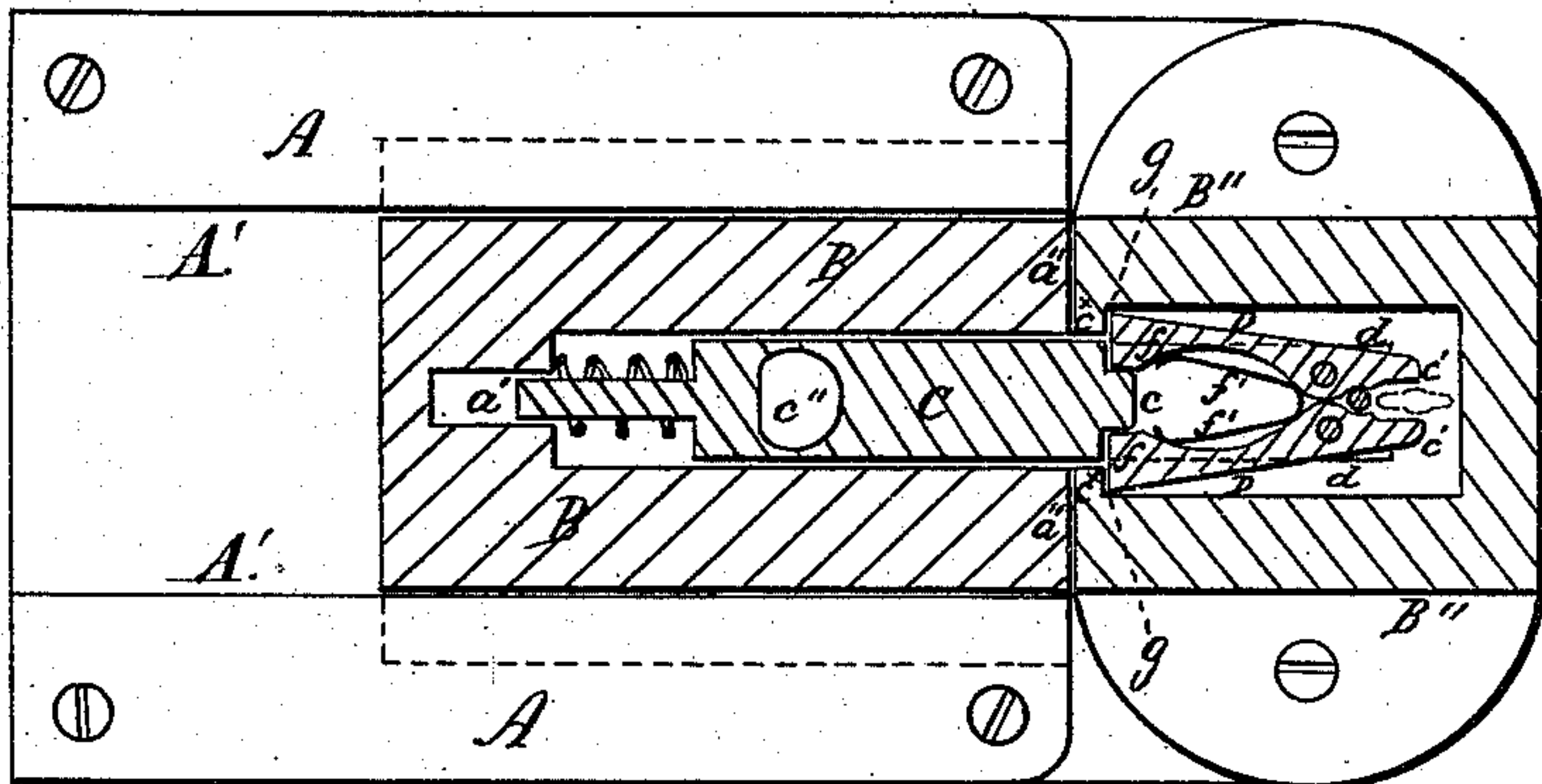


Fig.2.

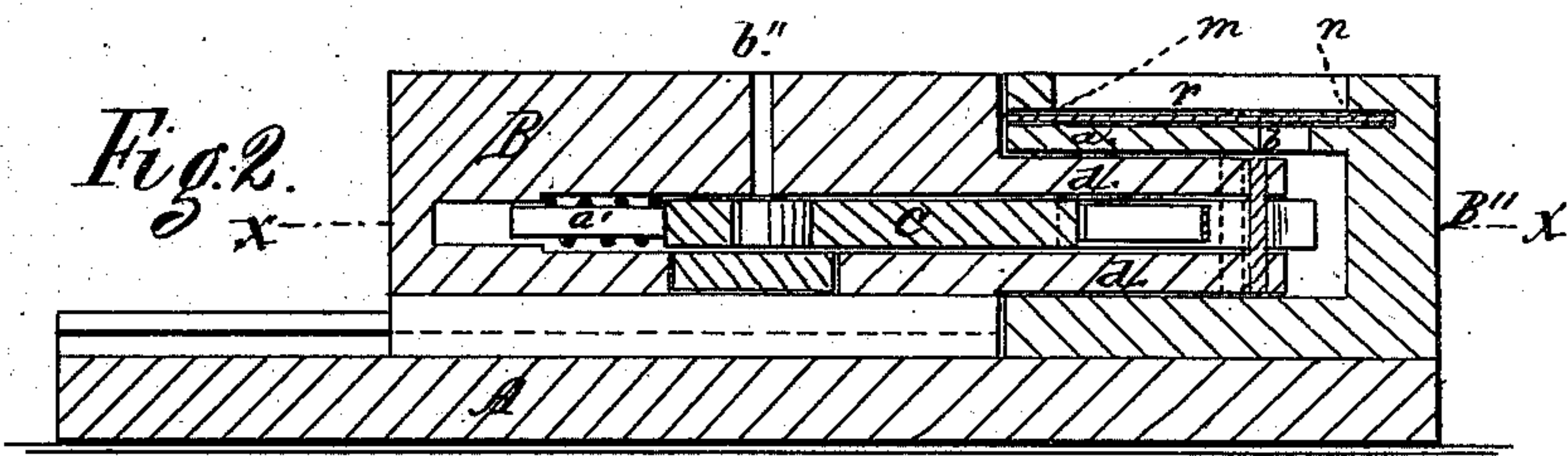


Fig.3.

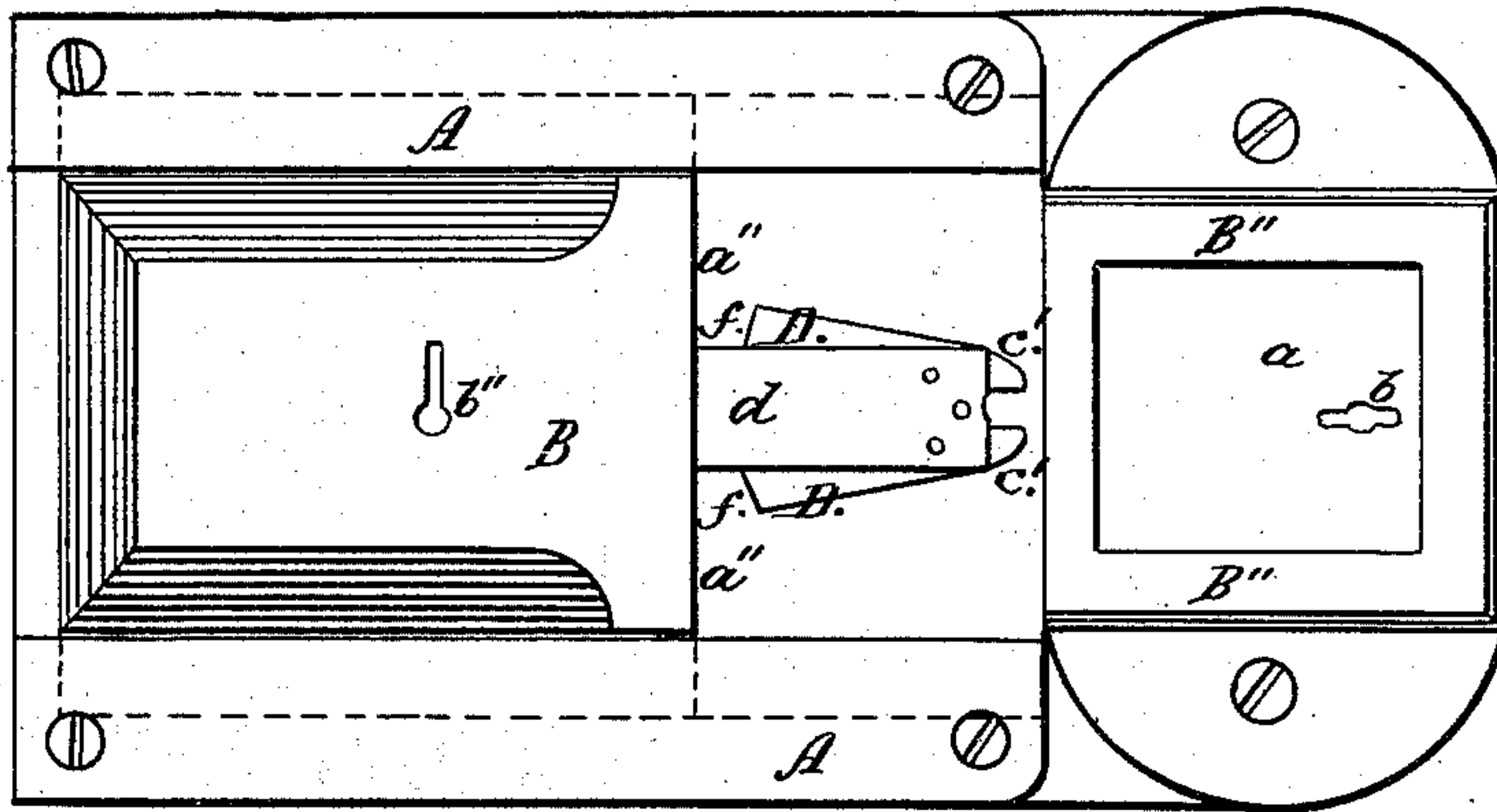


Fig.4.

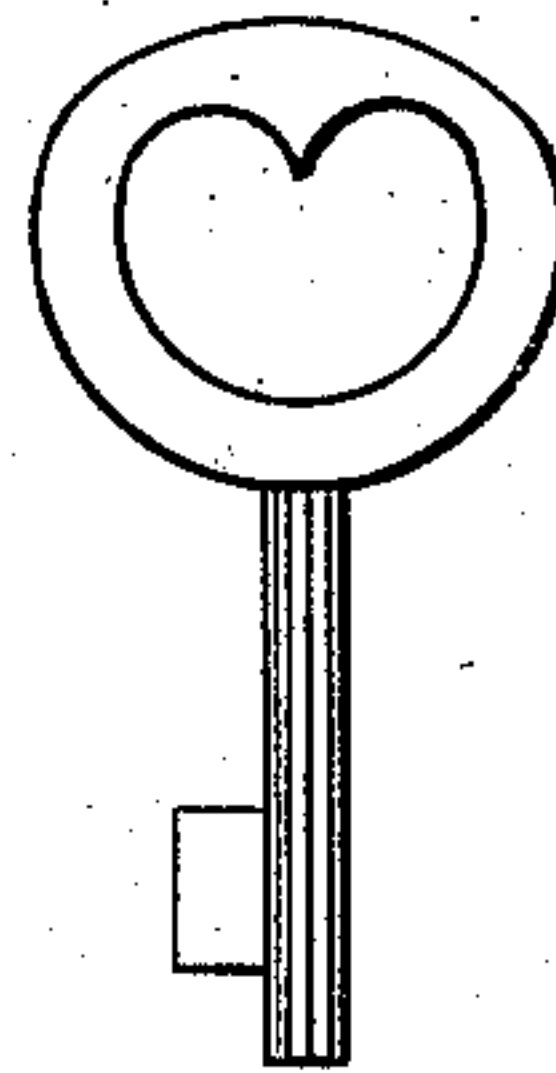
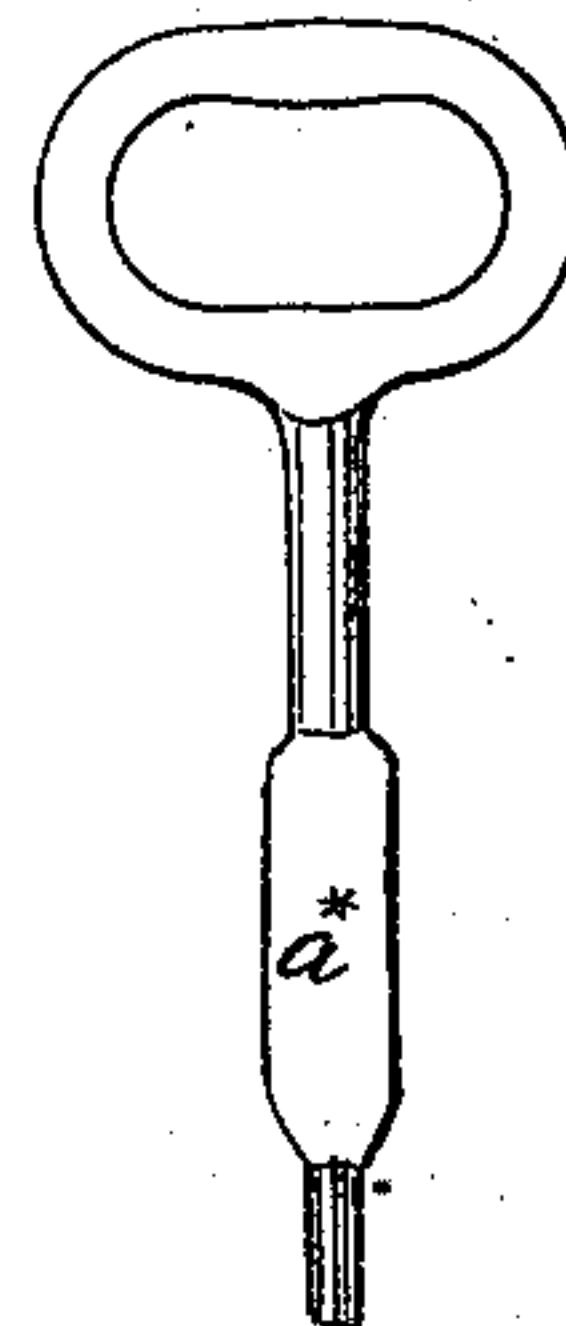


Fig.5.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM H. DARLING, OF NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT
TO JOHN ARDRY, OF BROOKLYN, N. Y.

IMPROVEMENT IN SEAL-LOCKS.

Specification forming part of Letters Patent No. 162,805, dated May 4, 1875; application filed
October 2, 1874.

To all whom it may concern:

Be it known that I, WILLIAM H. DARLING, of the city, county, and State of New York, have invented certain Improvements in Seal-Locks, of which the following is a specification:

This invention embraces certain novel combinations of mechanical devices, whereby a seal-lock adapted for use on railway baggage-cars, on the doors of dwellings and other buildings, on closets and the like, and on chests, trunks, &c., is provided.

Figure 1 is a horizontal sectional view of a seal-lock made according to my invention, taken in the line *x* of Fig. 2. Fig. 2 is a central vertical longitudinal section, and Fig. 3 is a plan view of the same; and Figs. 4 and 5 are detached views of the keys used in the legitimate manipulation of the apparatus.

A is a frame or base-plate, which, by any suitable means, may be fixed upon the door-frame of the cars, building, closets, or the like, on which the appliance is to be used, or, when such use is upon trunks, &c., upon the body thereof. In this base-plate is provided a guide, A', in which slides the block B, which is to be fixed or attached in any appropriate manner to the door or cover to be sealed. The base-plate A is formed with an outwardly-projecting hollow keeper, B'', in which is provided the fixed top plate *a*. In this latter is a key-hole, *b*. Within the block B is a slide, C, the outer end of which is formed with a squared stud, *c*, the inner end of the said slide being formed with a stem, *a*, on which is a spiral spring, which tends to push the slide outward, with the stud *c* projecting beyond the face *a''* of the block B, as more plainly shown in Fig. 1. By inserting and turning the key (represented in Fig. 4) through a key-hole, *b''*, provided in the top of the block, (see Fig. 3,) the slide may be moved inward; the wing of the key fitting into the cam-shaped hole *c''* in the slide C, the purpose of which movement of the latter is hereinafter fully explained. Projecting forward from the end of the block B is an arm, *d*, in which are pivoted the two tumblers D, the rear or inner ends *f* of which are pushed outward by a spring, *f'*, arranged between, as indicated in Fig. 1. The

opposite ends *e* of the tumblers project forward and outward in such manner that when, by any suitable means, they are spread apart, their inner ends are brought inward within the sides of the arm *d*, compressing the spring *f'*. In the inner side of the keeper B'' is a slot or opening, *c**, which permits the inward thrust of the arm *d*, there being, furthermore, shoulders *g* on each side of the said opening. The just-named inner side of the keeper has formed in it, near the top thereof, and above the top plate *a*, a horizontal slot, *m*. In the same horizontal plane with the slot *m* is a groove, *n*, the latter extending around the interior of the hollow keeper B''. Preparatory to closing the lock, a piece of paper, mica, thin metal, or other suitable material, is thrust in through the slot *m* over the plate *a*, as shown at *r* in Fig. 2. The edges of this piece *r*, which constitutes the seal, are held in the groove *n*; and the block B being brought up snug against the inner side of the keeper B'', the seal (or piece) *r* is confined in place, and, so long as the block remains in such position, can only be removed by destroying it. The seal *r*, as thus applied in place, covers the key-hole *b*, and of course any tampering with, or access to, the said key-hole is shown by the fracture of the aforesaid seal. When the block is moved inward, as just described, the spring *f'* yields to permit the tumblers to pass the shoulders *g*, which done the said spring forces outward the inner end of said tumblers as they pass behind the shoulders *g*, and thereby prevent the return or outward movement of the block, the tumblers themselves being locked in this position by the stud on the end of the slide C, the latter being moved by the spiral spring, or by the key shown in Fig. 4, to bring the aforesaid stud between the two tumblers, as shown in Fig. 1. By this means, therefore, the block B is held against the keeper B'', the two parts being firmly locked together, and can only be separated by inserting a key through the key-hole in the top plate, and thereby rupturing the seal. The breaking or picking of the lock without detection is impossible.

In order to open the lock to separate the block B from the keeper B'', the key shown

in Fig. 4 is inserted in the key-hole b'' , and the slide is drawn inward to bring the stud out from between the tumblers, to permit the same to move inward. This inward movement of the tumblers is secured as follows: The key (see Fig. 5) is thrust into and through the key-hole b in the top plate, as just described, and, being turned one-fourth of the way around, its winged or flattened portion a^* spreads apart the ends c' of the tumblers, thereby bringing the opposite ends inward away from the shoulders g , in order to permit the retraction of the arm d from the slot c^* .

What I claim as my invention is—

1. In a seal-lock, the combination of the block B, carrying the tumblers D, with the

keeper B'', constructed with the shoulders g , and adapted for use with the seal r , substantially as and for the purpose set forth.

2. The combination of the seal r , thrust into place through the slot m in the keeper, and with its edges held by the groove n therein, the top plate a , provided with the key-hole b , and the tumblers D, carried by the block B, and arranged to lock upon the shoulders g of the keeper, the whole constructed and arranged substantially as and for the purpose set forth.

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Witnesses:

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