

(No Model.)

C. B. O'MELVENY.

SAFETY DEVICE FOR MEDICINE CASES.

No. 344,055.

Patented June 22, 1886.

Fig. 1.

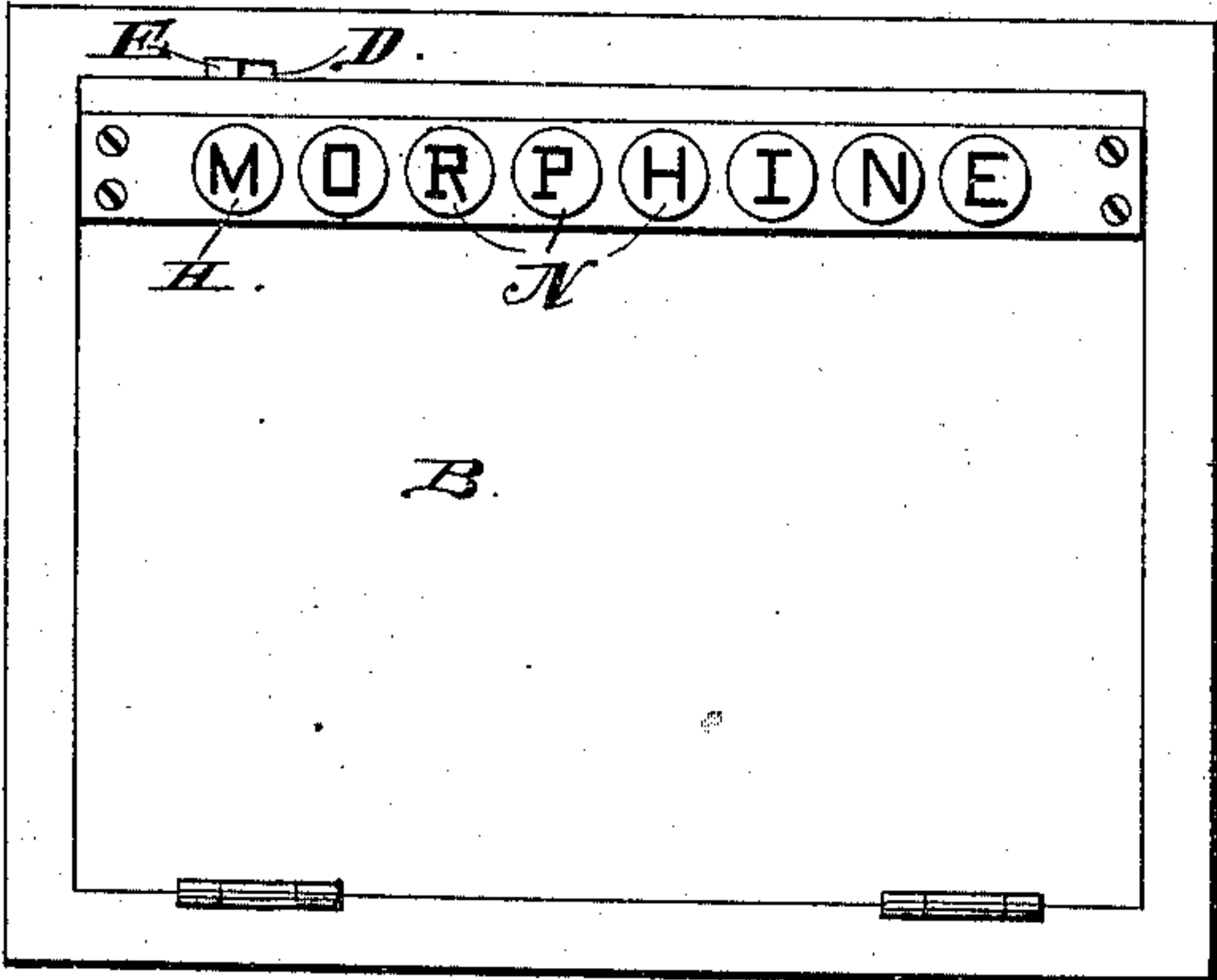


Fig. 2.

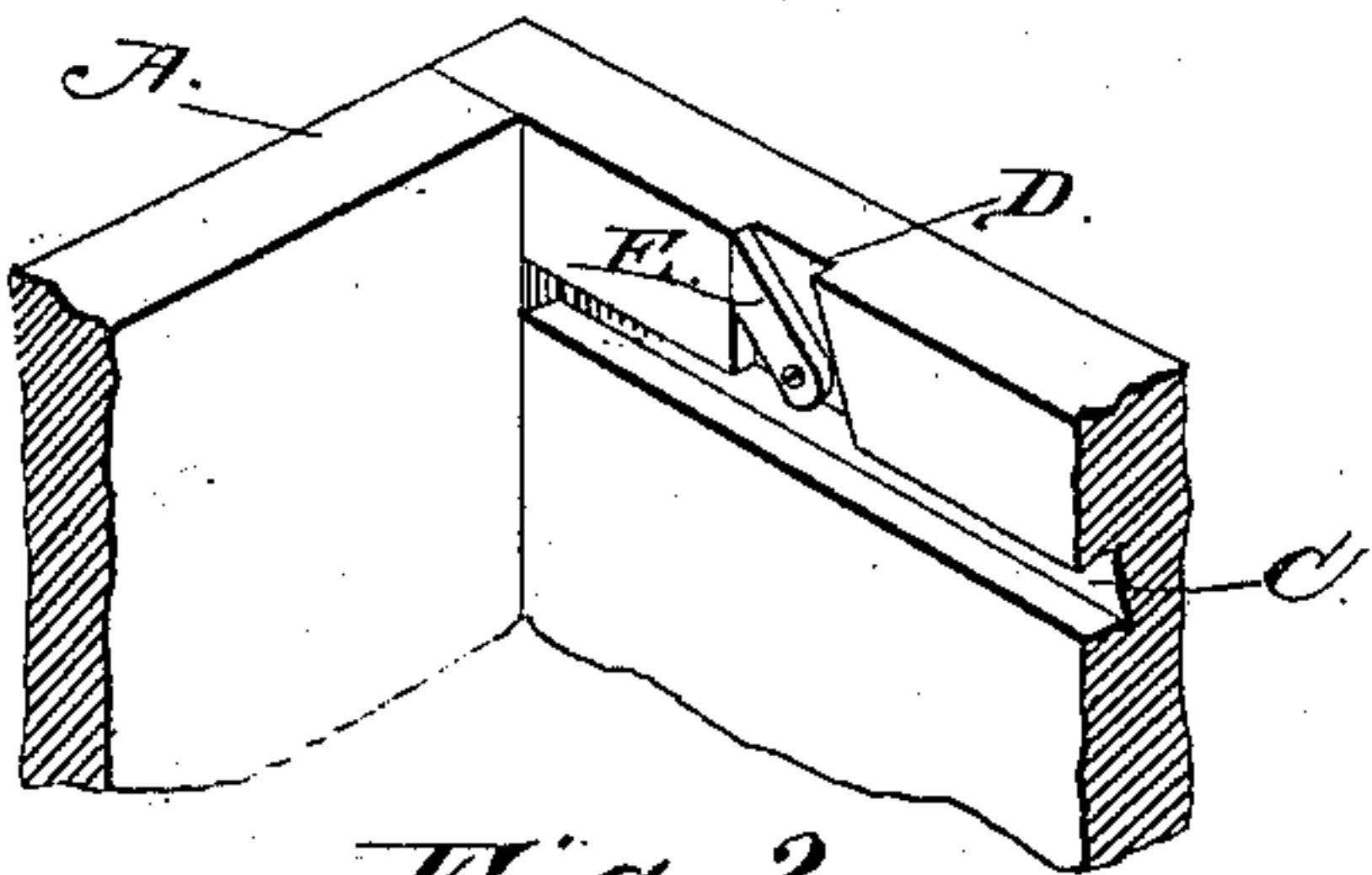
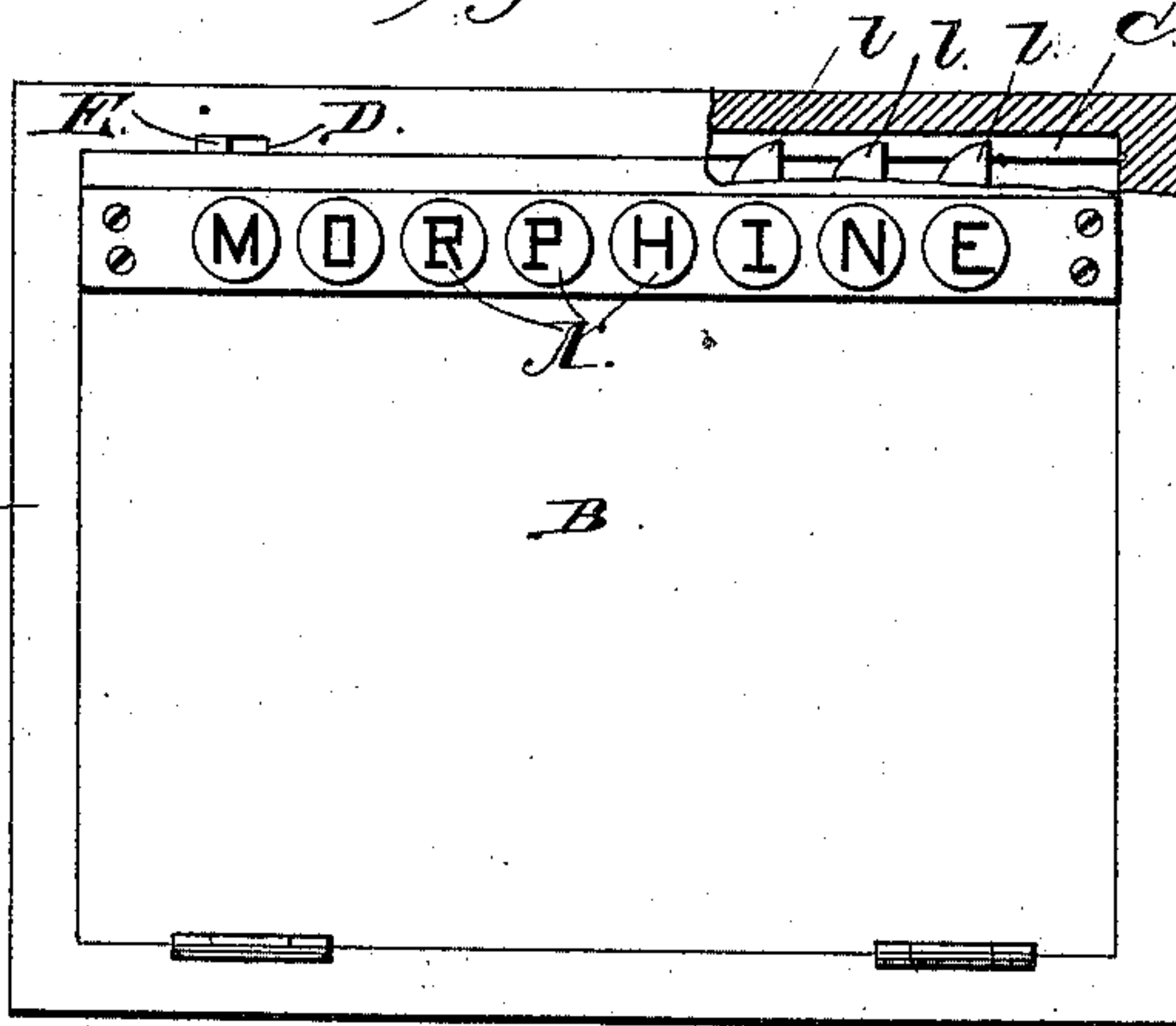


Fig. 3.

Fig. 5.

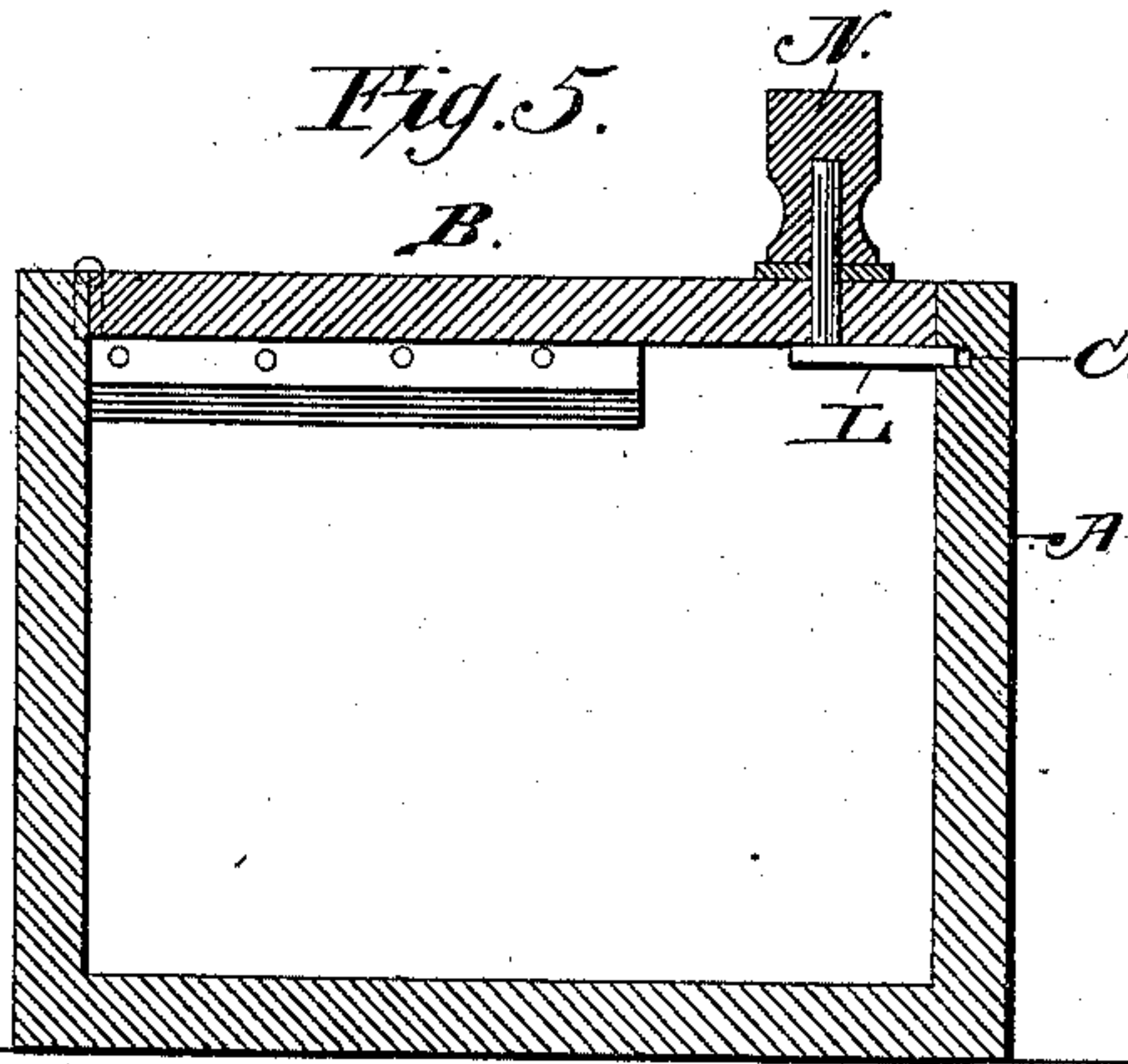
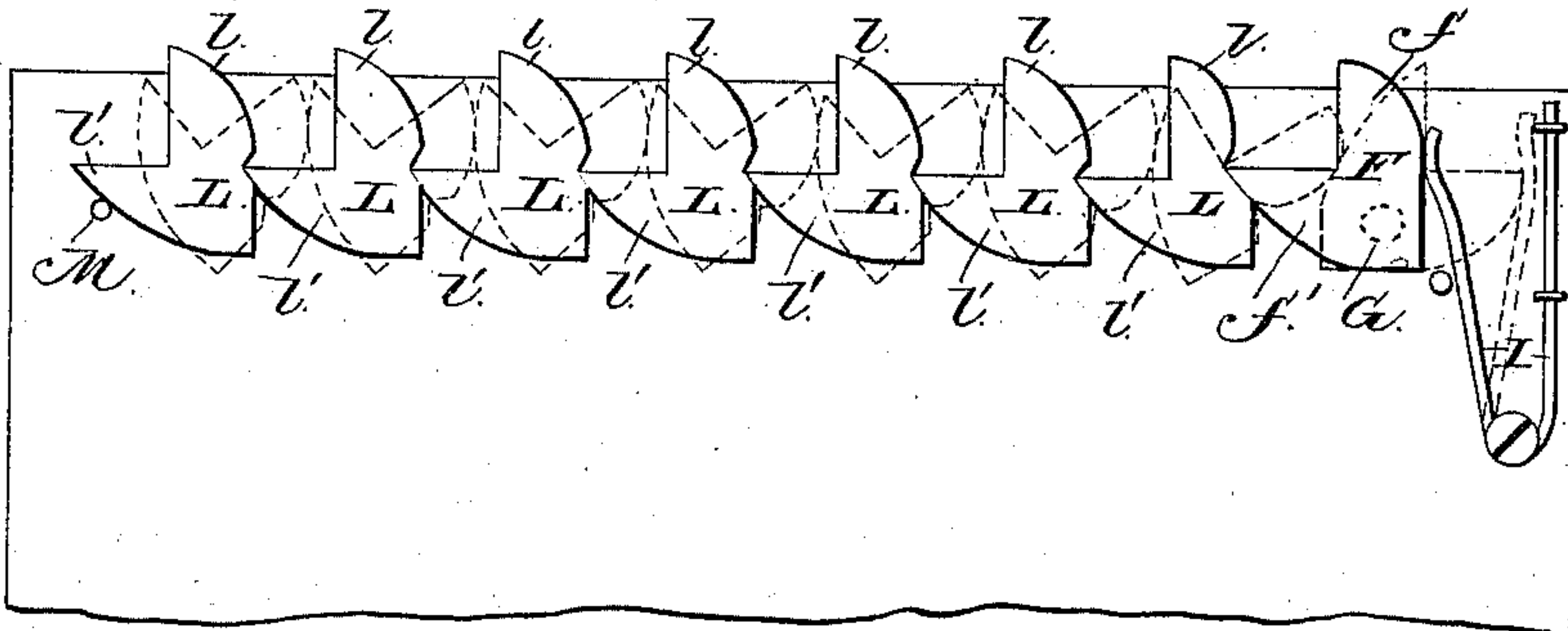


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

CURRAN BREEZE O'MELVENY, OF CENTRALIA, ILLINOIS.

SAFETY DEVICE FOR MEDICINE-CASES.

SPECIFICATION forming part of Letters Patent No. 344,055, dated June 22, 1886.

Application filed April 10, 1886. Serial No. 198,516. (No model.)

To all whom it may concern:

Be it known that I, CURRAN BREEZE O'MELVENY, a citizen of the United States, residing at Centralia, in the county of Marion and State of Illinois, have invented a new and useful Improvement in Locking Devices for Preventing Mistakes in Dispensing Poisons, of which the following is a specification.

My invention relates to an improvement in locking devices to prevent mistakes in dispensing or compounding poisonous medicines; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a box provided with my improved locking devices. Fig. 2 is partly an elevation and partly a longitudinal sectional view of the same. Fig. 3 is a detail perspective view. Fig. 4 is an elevation of a portion of the lid of the box from the inner side. Fig. 5 is a transverse sectional view.

A represents a box or other compartment into which a poisonous medicine of any kind is to be kept.

B represents the hinged lid or cover of the box. In one side of the box, against which the lid closes, is made a longitudinal groove, C, at a suitable distance from the outer edge or top of the box, and in the said side, near one end, is made a recess, D, in which is pivoted a detent, E. The lower pivoted end of this detent is in the center of the recess, and the upper end of the detent is free to move to either side of the upper end of the recess. To the free edge of the lid, on the inner side thereof and near one end, is secured a tumbler, F, which is provided with a shank, G, that is journaled in an opening made in the lid, and to the outer end of the said shank is attached a knob, H. This tumbler is provided with a locking-arm, *f*, the outer end of which normally projects beyond the free edge of the hinged lid, and is adapted to enter the groove C. At right angles from the locking-arm *f* extends a detent-arm, *f'*.

I represents a spring, which is secured to the inner side of the hinged lid or cover. The free end of this spring bears against the outer side of the locking-arm *f* of the tumbler.

L represents a series of tumblers, which are

similar in construction to the tumbler F, and are arranged side by side on the inner side of the lid or cover. These tumblers have locking-arms *l*, which normally project beyond the free edge of the lid or cover, and detent-arms *l'*, which extend at right angles from the locking-arms. The detent-arm *f'* of the tumbler F bears against the locking-arm of the adjacent tumbler L, and the detent-arms of each of the said tumblers bear against the locking-arm of the adjacent tumbler in the series. A stop, M, is secured to the lid at the opposite end of the same, and against the said stop the detent-arm of the last of the series of tumblers L normally bears.

The tumblers L are provided with shanks, which are journaled in openings made in the lid, and to the outer ends of the said shanks are attached knobs N.

The entire number of tumblers must be equal to the number of letters in the word or the abbreviation of the word designating the contents of the box or case. Thus, if morphine is contained in the box or case, the entire number of tumblers will be eight, corresponding to the number of letters in the word, and beginning with the knob H one letter of the word will be inscribed or marked upon each of the tumblers in regular order, as shown in Fig. 1.

The operation of my invention is as follows: In order to close the lid, the knob H, containing the letter M, is turned to the left, causing the locking-arm *f'* of the tumbler F to bear against the spring I and press the said spring inwardly until the said locking-arm reaches the stop O on the inner side of the lid, when the spring will maintain the tumbler in that position. The detent-arm *f'* of the tumbler will then project slightly beyond the outer edge of the lid, and will thus release the adjacent tumbler L, which will be turned by turning its knob to the position shown in dotted lines in Fig. 3, and so on through each of the series of tumblers L. The detent-arms of the said series of tumblers are shorter than the detent-arm of the tumbler F, so that they do not project beyond the outer edge of the lid or cover. When the latter is closed, the projecting rim of the detent-arm *f'* passes into the recess D and strikes against the inclined side of the detent E. As the cover is forced in, the said in-

clined detent releases the tumbler F from the spring I and partly rotates the said tumbler in the reverse direction, thereby causing the spring, by pressing against the locking-arm 5 *f*, to turn the tumbler through half a revolution and cause the said locking-arm to engage the groove C. While the tumbler F is being thus turned by the spring, the motion of the said tumbler is communicated to the entire series of tumblers L, causing the locking-arms of the latter to engage the groove C simultaneously with the locking-arm of the tumbler F.

We will now suppose that the druggist is 15 called upon to fill a prescription in which morphine is one of the ingredients. In order to open the box containing the morphine, the druggist first turns the knob H, having the letter M, to the left, causing the locking-arm 20 to bear against the spring I, as previously described, and the detent-arm to range opposite the lower side of the recess D. He next turns the knob having the letter O to the left, causing the said knob to release the locking-arm 25 of its tumbler from the groove C, and so on to the rest of the series of knobs containing the remaining letters of the word, until each knob of the series has been turned and the word spelled. All of the locking-arms of the tumblers are thus disengaged from the groove C, 30 and the lid is free to be opened.

As it is necessary, in order to open the box, to spell the name of its contents by turning the knobs, the attention of the druggist will be 35 fixed so closely upon the word as to prevent him making a mistake and getting out the wrong medicine. In order to still more closely engage the attention of the druggist to the name of the poisonous drug he is dispensing, 40 it is advisable, when opening the box, to first

turn the knob having the letter M, and then check off the same letter of the word in the prescription, and proceed with each letter of the word, checking each letter on the prescription when the corresponding letter in the box 45 is turned.

Having thus described my invention, I claim—

1. The combination, in a case for poisonous medicine, of the series of locking devices for 50 securing the lid or door of the said case, the said series of locking devices having detents to prevent them from being withdrawn, excepting in regular order, and also provided each with the letter forming a part of the name of 55 the medicine in regular order, thus rendering it necessary to spell the name of the medicine in order to open the case, substantially as described.

2. The combination of the box or case having the grooves C, the recess D, communicating therewith, and the detent E, pivoted in the said recess, and the hinged cover, with the tumblers F and L, secured to the said cover, the tumbler F, having the locking-arm *f*, the 65 detent-arm *f'*, adapted to engage the recess D, and the spring bearing against the locking-arm, the tumblers L being each provided with a locking-arm for engaging the groove C, and a detent-arm to bear against the locking-arm 70 of the adjacent tumbler in the series, for the purpose set forth, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CURRAN BREEZE O'MELVENY.

Witnesses:

JAS. BENSON,
I. ODELL.