

No. 639,747.

Patented Dec. 26, 1899.

F. MACEY.
CARD INDEX.

(Application filed Aug. 21, 1899.)

(No Model.)

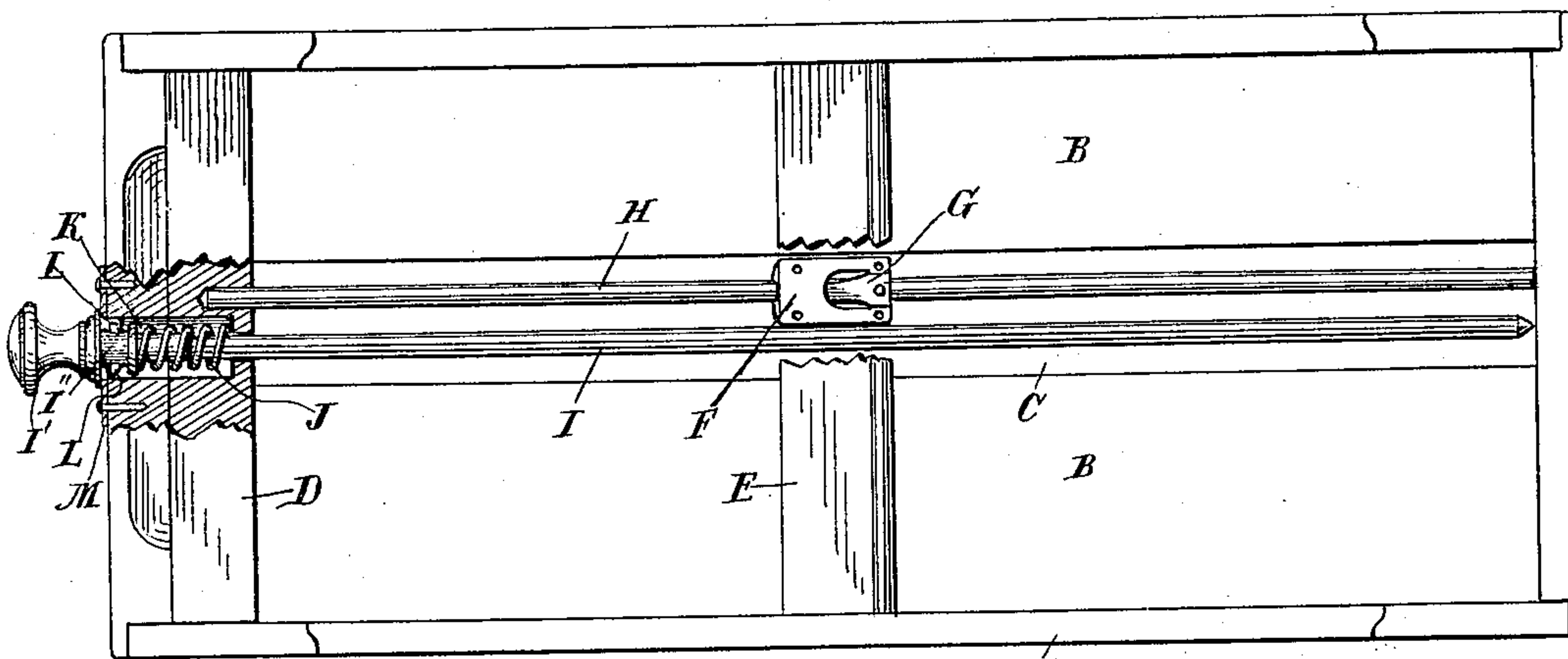


Fig. 1.

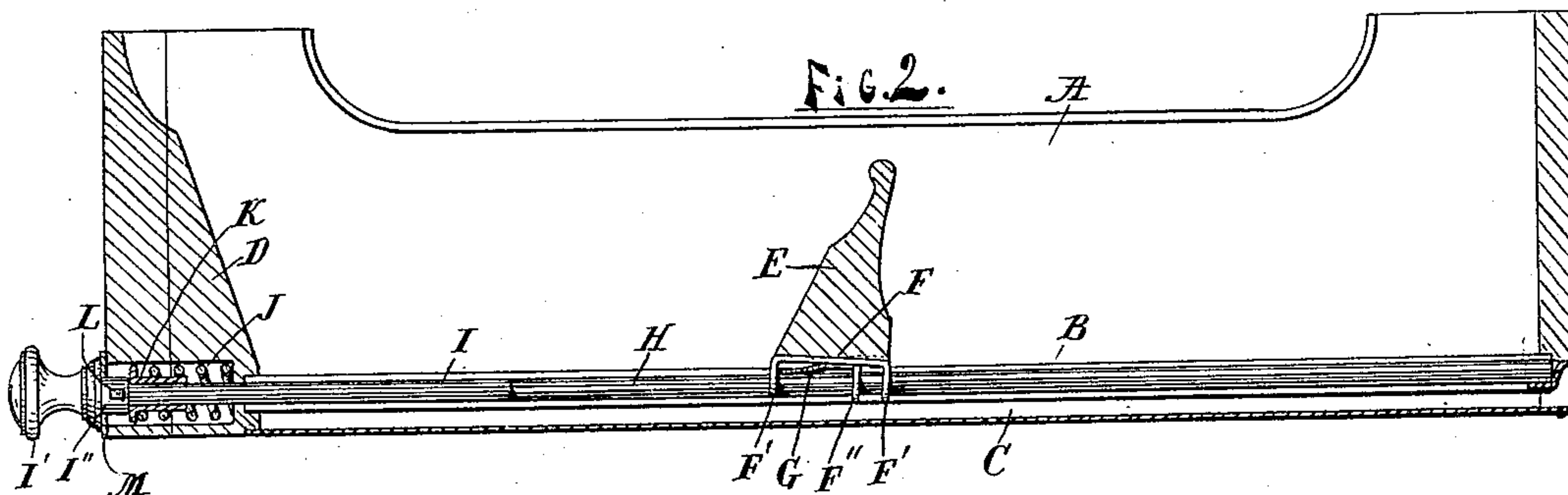


Fig. 2.

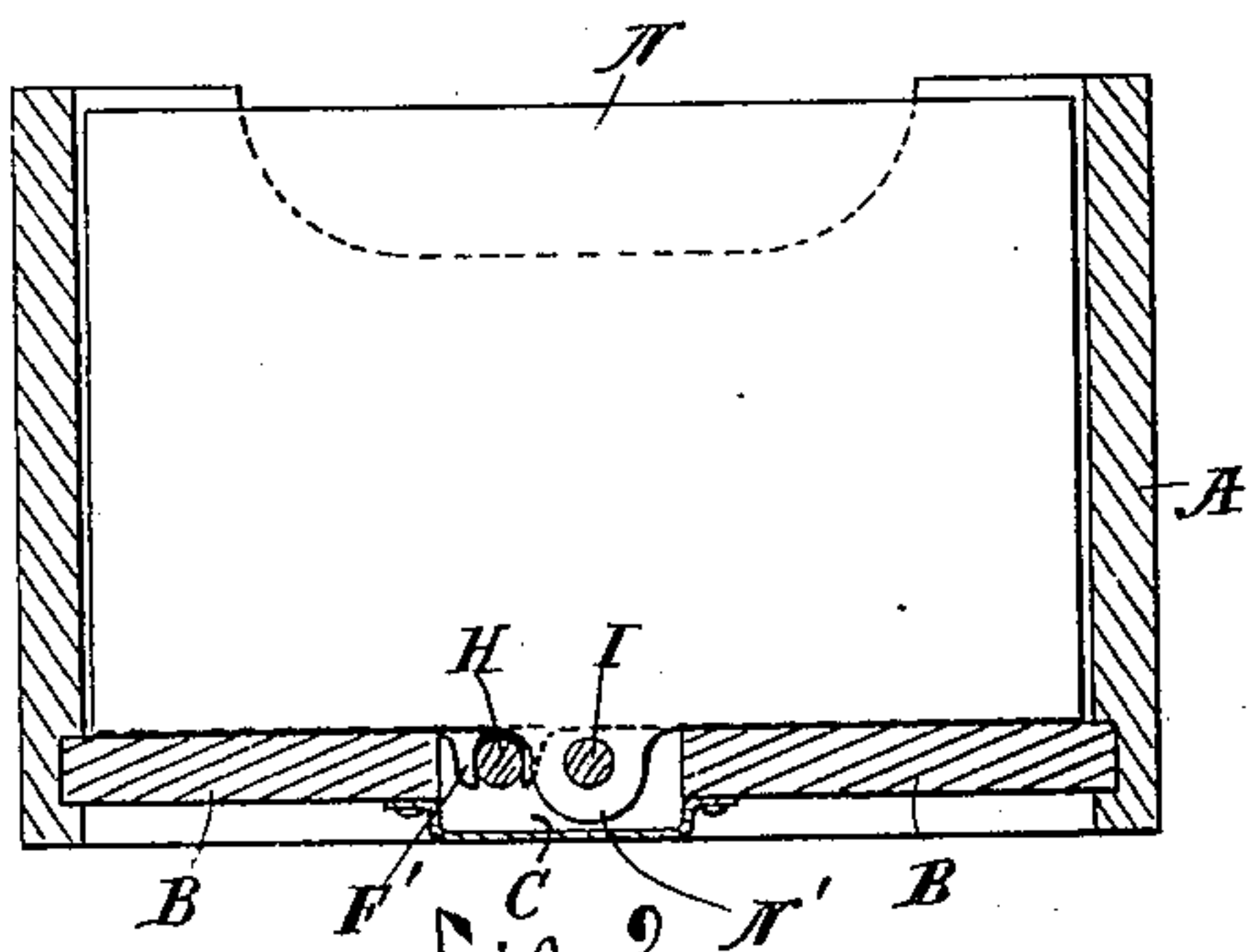


Fig. 3.

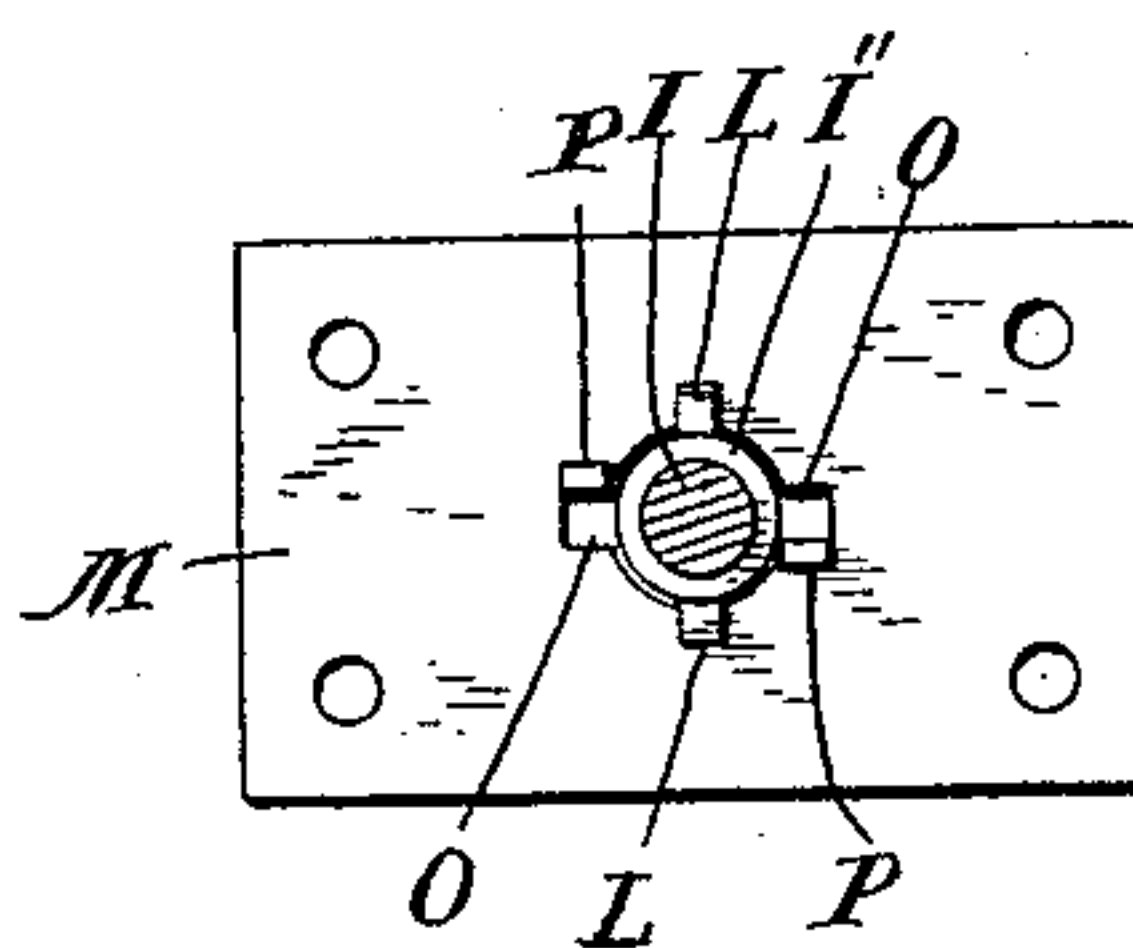


Fig. 4.

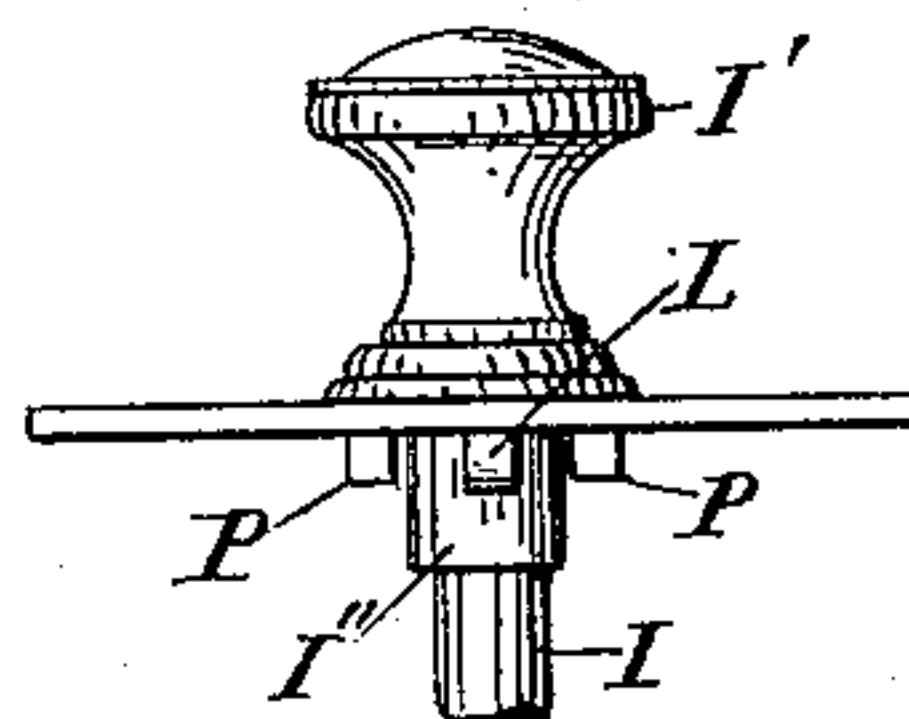


Fig. 5.

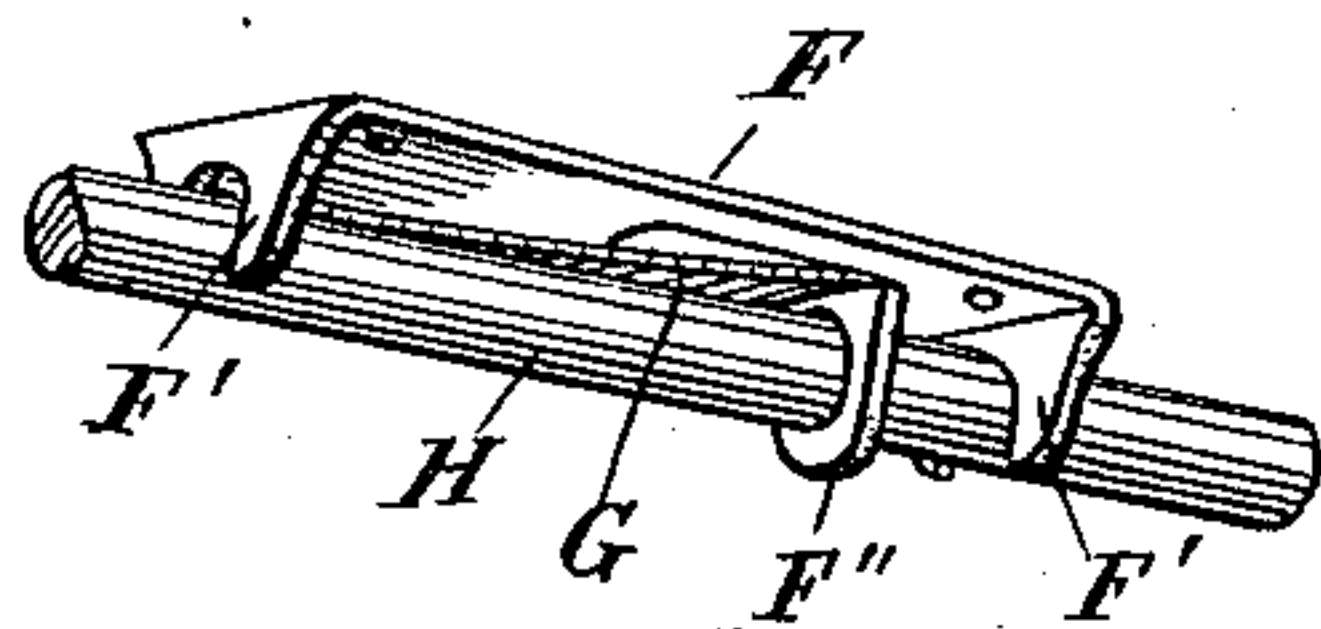


Fig. 6.

WITNESSES:

Joseph F. Finner
George J. Hubbard

INVENTOR:

Frank Macey

By

Moulton & Flanders,

Attorneys.

UNITED STATES PATENT OFFICE.

FRANK MACEY, OF GRAND RAPIDS, MICHIGAN.

CARD-INDEX.

SPECIFICATION forming part of Letters Patent No. 639,747, dated December 26, 1899.

Application filed August 21, 1899. Serial No. 727,920. (No model.)

To all whom it may concern:

Be it known that I, FRANK MACEY, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Card-Indexes; 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.

My invention relates to card-indexes; and its object is to provide improved means for adjusting and holding the back rest and to provide the device with certain new and useful features hereinafter more fully described, and particularly pointed out in the claims.

My invention consists, essentially, in providing the back rest with a slide having forked guide-flanges to engage a rod in the tray, a flange perforated to receive the rod and move thereon, and a spring to engage the rod and raise one end of the slide to cause the flanges to bind on the rod; also, in the arrangement of a fixed rod and a removable rod in a channel in the bottom of the tray and below the plane of the upper surface of said bottom, guide-cards having downwardly-projecting portions perforated to receive the removable rod, and a back rest adjustably attached to the fixed rod, and also in various details of construction, as will more fully appear by reference to the accompanying drawings, in which—

Figure 1 is a plan view of a device embodying my invention with parts broken away to show the construction; Fig. 2, a longitudinal vertical section of the same; Fig. 3, a transverse vertical section of the same; Fig. 4, an enlarged elevation of the scutcheon-plate and a part of the removable rod; Fig. 5, a plan view of the same, and Fig. 6 a perspective detail of the means for adjusting and holding the back rest.

Like letters refer to like parts in all of the figures.

A represents the drawer or tray having an internally-inclined front D and having a bottom B with a longitudinal channel C, in which channel are a fixed rod H and a removable rod I, arranged below the plane of the upper surface of the bottom B. Longitudinally ad-

justable on the fixed rod H is a slide consisting of a plate F, to which plate the inclined and adjustable back rest E is attached. Said plate is provided with downwardly-turned and forked ends F', embracing the rod H, and also with a downwardly-projecting flange F'', having an opening through which the rod H passes and slides freely. A spring G is attached to the slide and engages the top of the rod H and yieldingly moves the forward end of the slide away from the said rod.

M is a scutcheon-plate attached to the outer surface of the front of the tray and provided with a central opening to receive the rod I. At each side of this central opening are lateral openings O O, and at opposite sides of these lateral openings are projections P P to engage the lugs L L on the boss I'' of the knob I', in which boss the rod I is axially inserted and fixed.

K is a collar loosely surrounding the rod I and provided with a suitable flange at its forward end, against which flange a suitable spring J abuts and presses the same forward against the inner end of the boss I'.

N represents one of a suitable series of cards which are detachably secured in place by means of the downwardly-extended portions N', having openings to receive the removable rod I.

By the arrangement of the rods H and I in the channel C and below the plane of the surface of the bottom B they are out of the way and allow cards, envelopes, or any document having a straight lower edge to rest on the bottom, and the tray A presents no obstructions within its interior. When the rod I is in place, it passes through the openings in the extension N' and secures the cards in place. The lugs L L pass through the openings O, the end of the boss engaging the collar and compressing the spring. By rotating the rod the lugs engage the plate and hold the rod in place. The spring pressing the lugs against the inner surface of the plate the rod does not easily turn and become accidentally released. By turning the rod backward the lugs L L strike the projections P P and are stopped in position to pass through the openings O O, the pressure of the spring J now serving to move the rod outward and

eject the lugs through said openings. These projections also prevent turning the rod I too far and inadvertently releasing the same. The spring G tends to raise the forward end of the plate F, which movement causes the other end of the plate and the flange F' to cramp or bind on the rod H, thus preventing any movement of the slide along the rod. When the back rest E is tilted forward, the spring G yields and allows the forked front end of the plate to contact the rod H, when the binding action ceases and the slide moves freely and longitudinally on the rod. Thus the back rest may be released and moved and will be automatically secured in place when released.

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

1. A tray having a longitudinal groove in the bottom, a fixed rod and a removable rod in said groove, a back rest having a slide engaging the fixed rod and adjustable thereon, and cards having perforated downward extensions within the groove and engaging the removable rod, substantially as described.

2. The combination of a tray, a fixed rod in the tray, a back rest, a slide attached to the back rest and engaging the rod at one end, a perforated flange on the slide and engaging the rod, and a spring attached to the back rest and engaging the rod, substantially as described.

3. The combination of a tray, a fixed rod in the tray, a back rest, a slide attached to the back rest having forked portions and a perfo-

rated flange engaging said rod, substantially as described.

4. The combination of a tray having a longitudinal groove in its bottom, a fixed rod in said groove, an adjustable back rest, a plate attached to the back rest, having forked ends and a perforated flange engaging said rod, and a spring engaging the rod, to raise one end of the slide, substantially as described.

5. The combination of a tray having a longitudinal channel in the bottom, a fixed rod in the channel, a back rest, a slide attached to the back rest and adjustable on said rod, a removable rod in said channel, means for detachably securing the removable rod in place, and a card having a perforated extension engaging the removable rod, substantially as described.

6. The combination of a tray having a longitudinal channel a fixed rod in said channel, an adjustable back rest, a plate attached to the rest and having forked ends and a perforated flange engaging with fixed rod, a spring attached to the back rest and engaging the said rod, a removable rod in said channel, lugs on said rod, a scutcheon-plate having a central opening and lateral openings to receive the rod and lugs, a sleeve on the rod, and a spring engaging the sleeve and pressing the rod outward, substantially as described.

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

FRANK MACEY.

Witnesses:

FRED MACEY,

LUTHER V. MOULTON.