

No. 673,403.

Patented May 7, 1901.

F. MACEY.
CARD INDEX.

(Application filed Nov. 17, 1900.)

(No Model.)

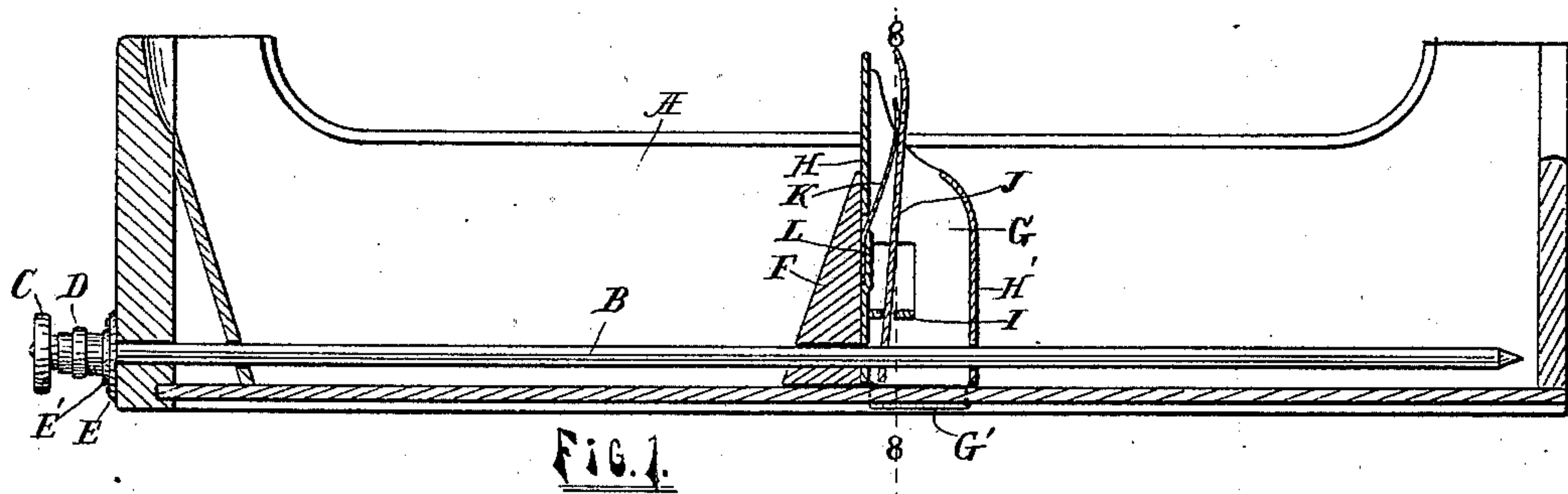


Fig. 1.

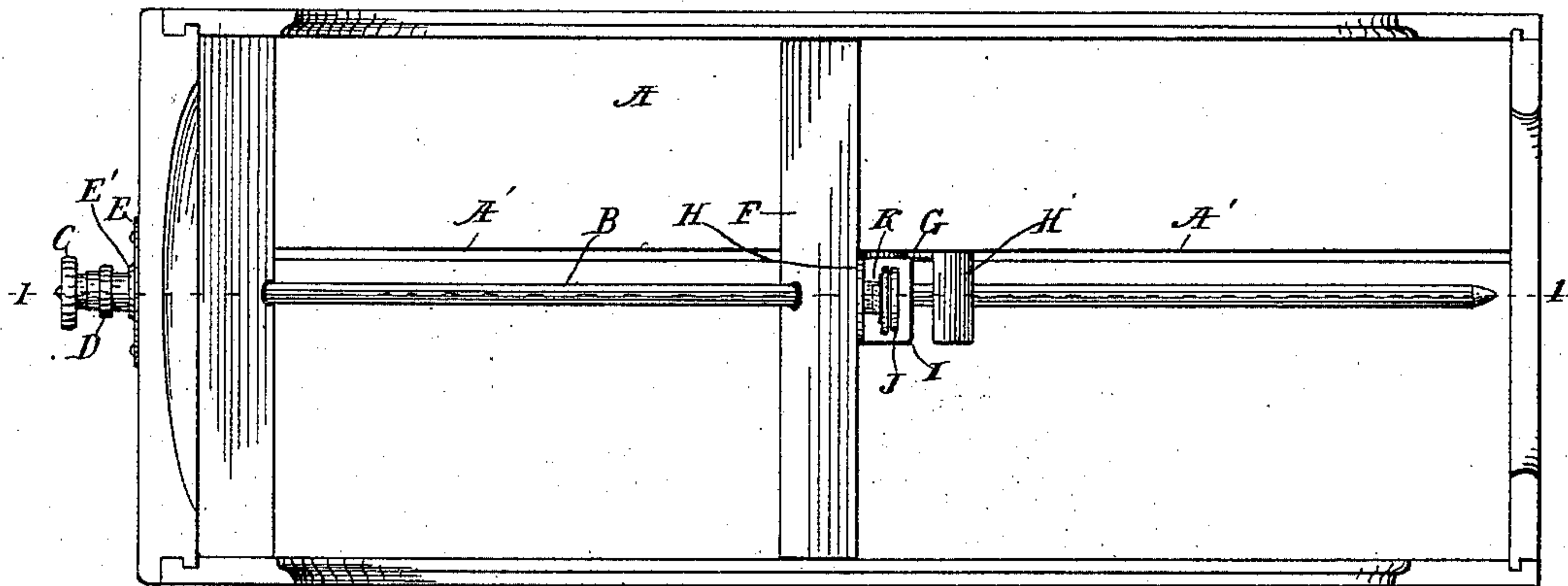


Fig. 2.

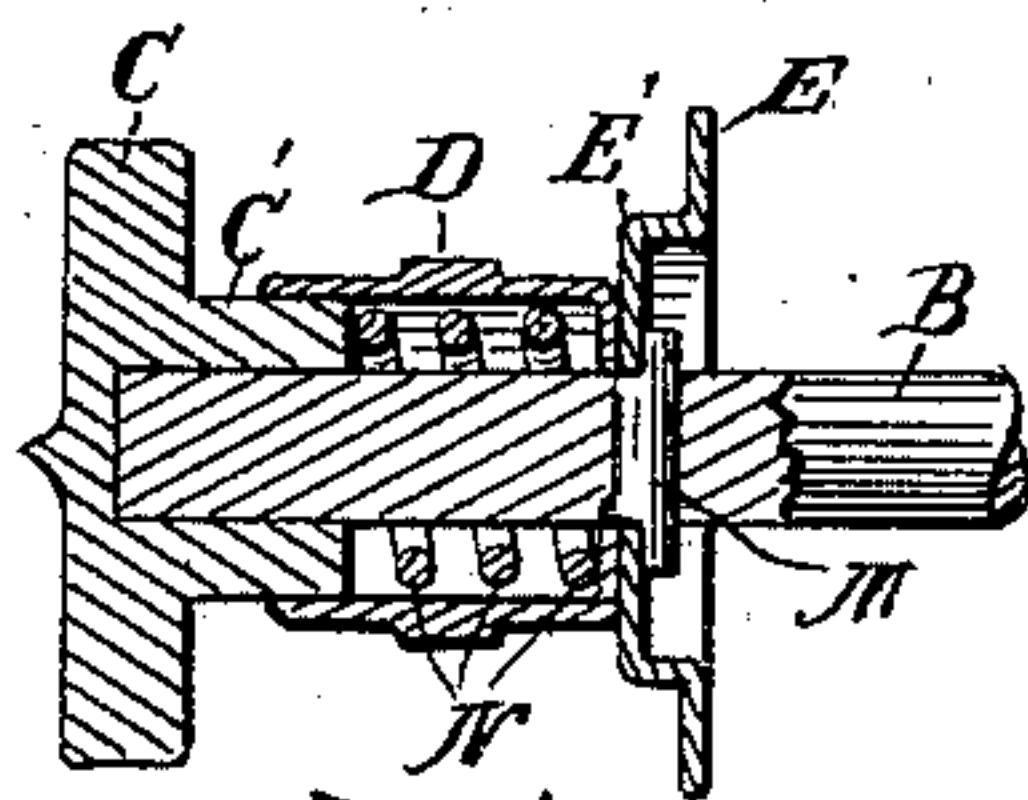


Fig. 4.

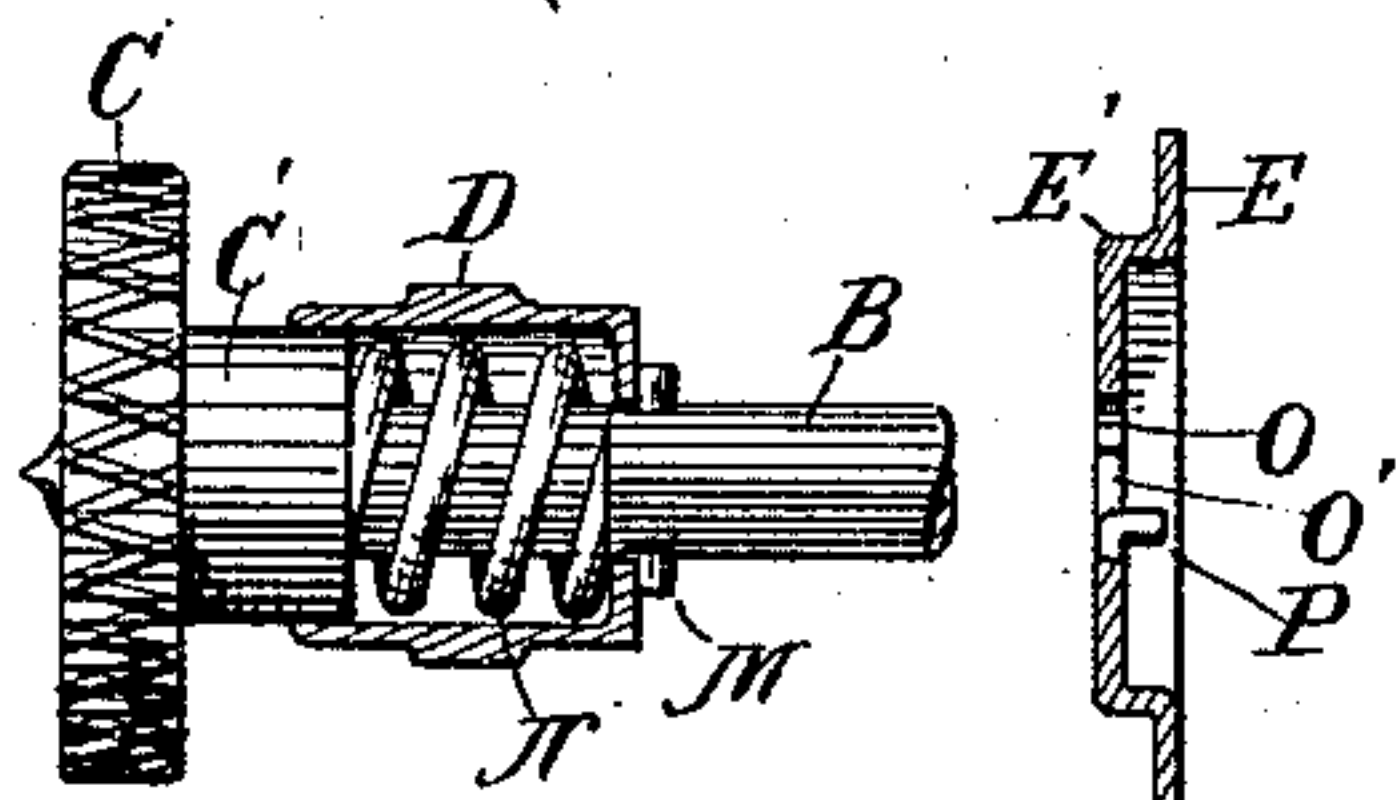


Fig. 5.

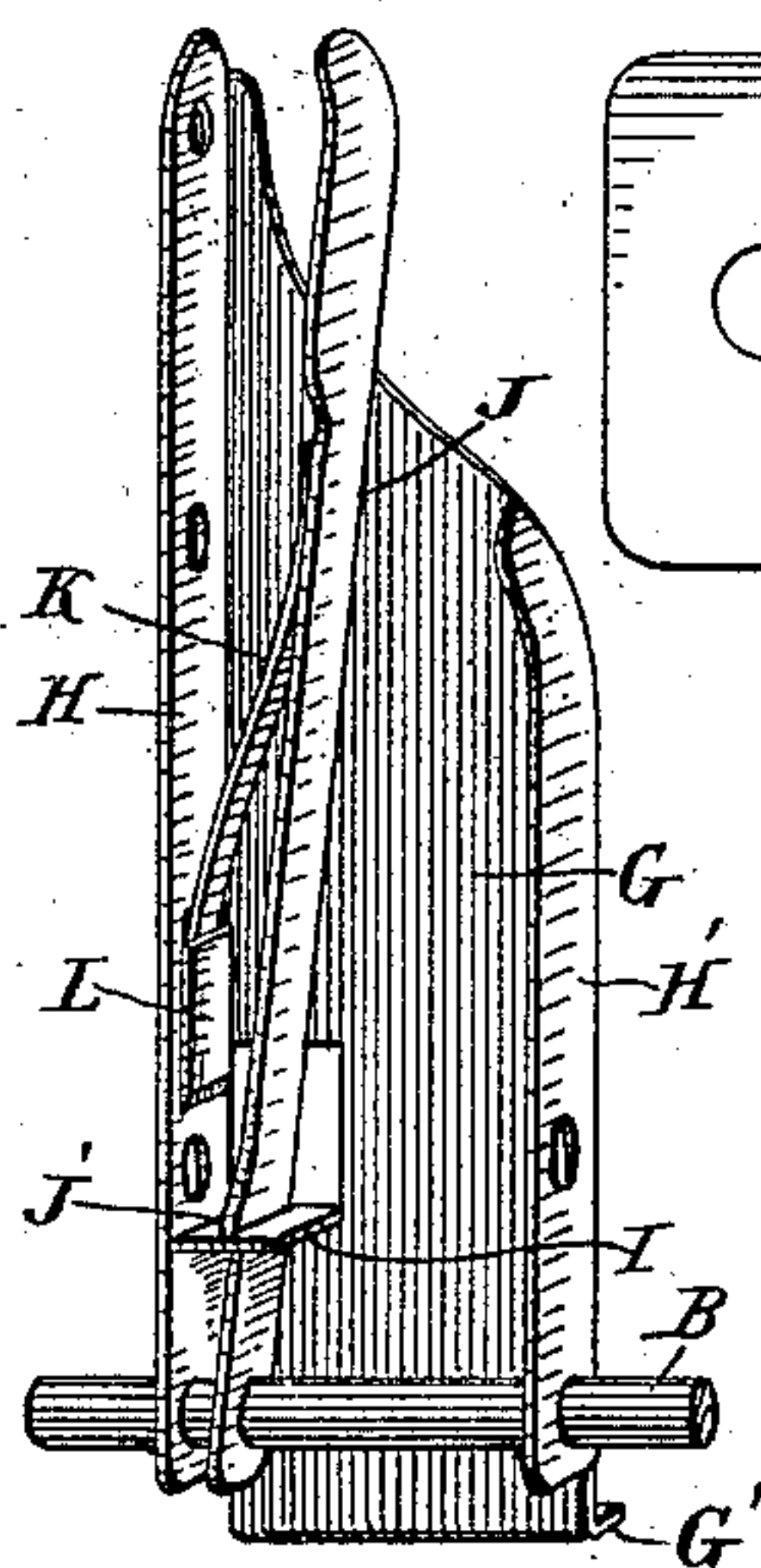


Fig. 3.

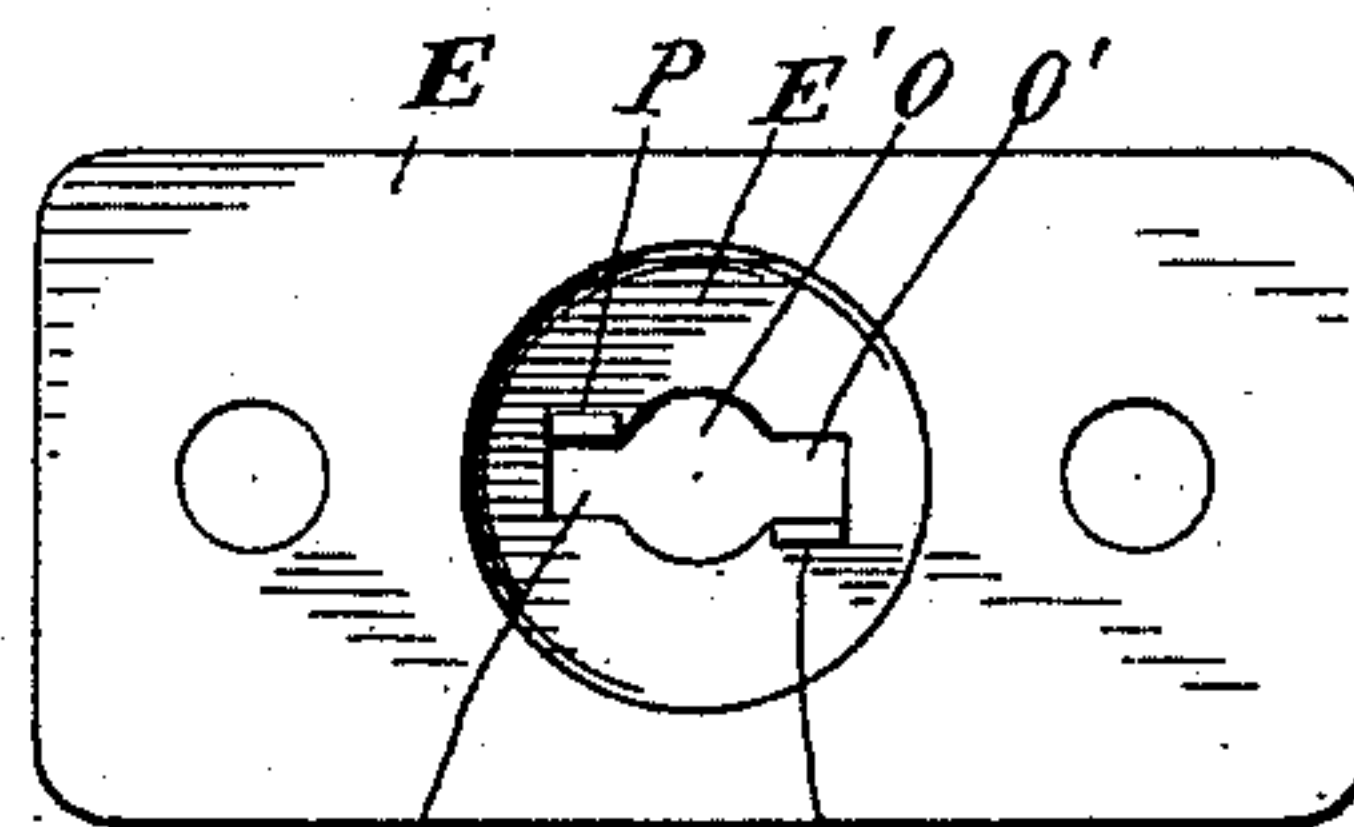


Fig. 6.

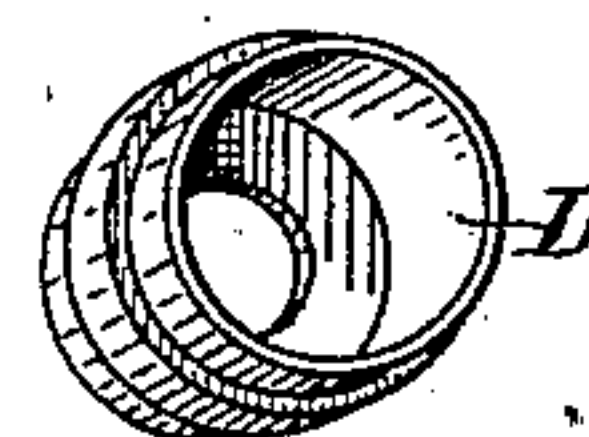


Fig. 7.

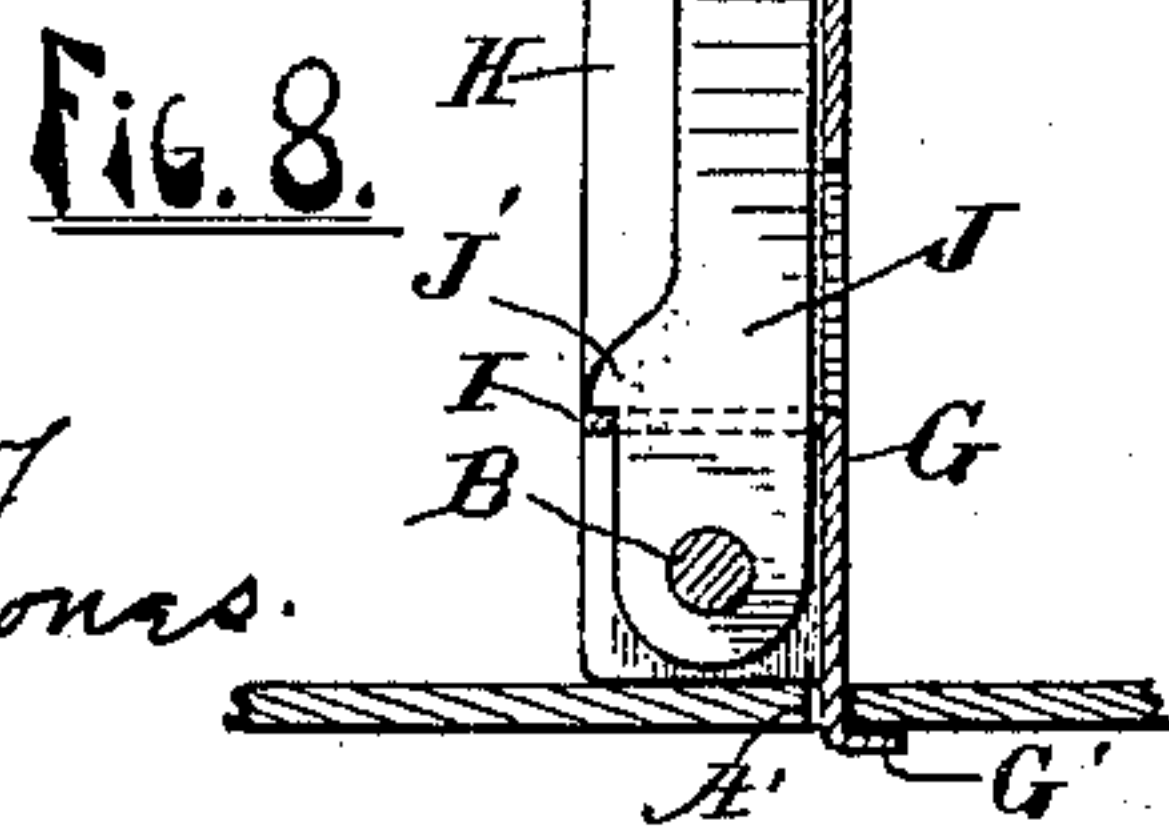


Fig. 8.

Witnesses

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CARD-INDEX.

SPECIFICATION forming part of Letters Patent No. 673,403, dated May 7, 1901.

Application filed November 17, 1900. Serial No. 36,857. (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 improvements in card-indexes, and more particularly to card-indexes having longitudinally - removable rods inserted in openings in the cards to secure the same in the case or drawer; and its objects are to provide improved means for securing the rod in place; and improved means for detachably securing the back-rest to the rod; also, to provide means whereby a single rod will serve to secure the cards and to hold the back-rest, to provide means whereby the rod cannot be removed when the case is closed, and to provide the device with certain new and useful features hereinafter more fully described, and particularly pointed out in the claims, all of which will more fully appear in detail by reference to the accompanying drawings, in which—

Figure 1 is a longitudinal vertical section of a device embodying my invention, taken on line 1 1 of Fig. 2. Fig. 2 is a plan view of the same; Fig. 3, an enlarged perspective detail of the mechanism attached to the back-rest; Fig. 4, an enlarged detail of the means of securing the rod in place as it appears when detached; Fig. 5, the same as it appears when detached; Fig. 6, an elevation of the inner side of the scutcheon-plate; Fig. 7, a detail of the sleeve, and Fig. 8 a detail in section on the line 8 8 of Fig. 1.

Like letters refer to like parts in all the figures.

A represents any suitable drawer or case to receive index-cards, said case and cards having suitable openings to receive the rod.

B is a rod extending longitudinally of the case A and near the bottom thereof and adapted to be inserted longitudinally in the openings in the cards and also removably inserted in suitable openings in the front of the case and in the adjustable back-rest F. To detachably secure the rod in place, I provide

a scutcheon-plate E, having an outwardly-projected portion E', forming a recess. In the middle of said recess is an opening O to receive the rod, and lateral extensions O' O' at opposite sides of the opening. Portions of the plate are turned inward at the upper side of one extension, and at the lower side of the other extension to form stops P P.

C is a suitable milled head fixed on the outer end of the rod B and having an inwardly-projecting boss C'.

Surrounding the rod B is a compressible spring N, abutting against the boss C' at one end and against the annular head of the sleeve D, which sleeve incloses the spring N and slidably engages the rod B and boss C'. This spring serves to eject the rod and also presses the sleeve in frictional contact with the scutcheon-plate, and thus prevents a too-free turning of the rod. A pin M is inserted transversely in the rod B and shouldered at each end. The ends of this pin engage and stop the sleeve when the rod is detached from the plate E. The shoulders of the pin engage the sides of the opening in the head of the sleeve and retain the pin in place. The ends of this pin pass through the lateral recesses O' O' and engage the inner surface of the scutcheon-plate, and thus prevent the withdrawal of the rod. The lugs P P stop the pin and prevent turning the same far enough to again release the rod, and when the pin is turned in the opposite direction they stop the pin opposite the lateral recesses O' O', thus insuring the ejection of the rod by the action of the spring N, to adjustably attach the back-rest to the rod and to support the back-rest when the rod is removed.

G is a plate arranged vertically and at right angles to the back-rest F and attached thereto by a flange H. Said plate extends downward through a slot A' in the bottom of the case and is provided with a flange G' at the lower end to engage the under side of the bottom. The plate G is also provided with a flange H', and the flanges H and H' have openings near their lower ends to receive the rod B. A portion of the plate G is also severed at three sides and turned at right angles, forming a ledge I. Through an opening or slot in this ledge is inserted a lever J, which lever is pivotally supported in said opening

by a shoulder J' engaging the ledge. This lever is also perforated near the lower end to receive the rod B, and when the lever is vertical or at right angles to the rod it moves freely on the same, and when said lever is inclined it binds on the rod and locks the plate and back-rest on the same.

K is a spring having its lower end inserted in a recess or pocket between the back-rest and the flange H. Said pocket is formed by pressing a portion L of the flange H away from the rest. The upper end of the spring K engages the lever J and presses the same away from the flange H, and thus automatically locks the lever on the rod. By grasping the upper ends of the flange H and the lever J and pressing the lever toward the flange the grip of the lever is released and the rod can be withdrawn or the back-rest adjusted at pleasure. It will, however, be observed that when the drawer is closed the rod cannot be released, but is firmly secured by the back-rest, and thus locking the drawer prevents removal of the rod.

When the device is used in a drawer, the head C can be used as a drawer-pull. If not thus used, the means for securing the rod to the scutcheon-plate may be wholly omitted and the rod secured in place by the lever J only.

When the rod is removed, the cards tend to tilt the back-rest backward, and this movement binds the edge of the bottom between the flange G' and the lower end of the flange H', thus holding the back-rest from moving.

When the rod is inserted, it holds the back-rest vertical, and the back-rest slides freely when the lever J is released, the plate where engaged with the slot serving as a guide for the back-rest.

By the construction of the scutcheon-plate and parts for securing the rod in place I avoid any necessity of forming any recess or chamber in the front of the case and also provide a simple, cheap, and durable structure quickly and easily attached to any drawer or case for containing cards. These parts being outside the woodwork and made wholly of metal, the device does not get out of order by shrinking or swelling of the wood. It can also be manufactured and assembled ready to attach to any drawer or case adapted to receive cards and sold as an article of manufacture in this condition.

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

1. The combination of a case, a longitudinally-removable rod in the case, a knob and lateral projections on the rod, a scutcheon-plate on the outer surface of the case and having a recess in the side adjacent to the case, and also having a central opening to receive the rod and lateral openings to receive the projections, and a spring between the knob and plate, substantially as described.

2. The combination of a scutcheon-plate having a central opening having lateral ex-

tensions, a rod, a head attached to the rod, a boss on the head surrounding the rod, a cap longitudinally movable on the rod and boss, a spring in the cap, and a transverse pin in the rod yieldingly engaged by the cap and adapted to pass through the lateral extensions in the plate and engage the inner side of the plate, substantially as described.

3. The combination of a scutcheon-plate having a recess, and a central opening having lateral extensions, and lugs at opposite sides of the opening, a rod, a head having a boss surrounding the rod, a cap longitudinally movable on the boss and rod, a spring in the cap, and a transverse pin in the rod, substantially as described.

4. As an article of manufacture, a rod, a head attached to the rod and having a boss surrounding the same, a cap longitudinally movable on the rod, a spring in the cap, and a transverse pin in the rod yieldingly engaged by the cap, substantially as described.

5. The combination of a rod, a head on the rod, a cap longitudinally movable on the rod, a spring in the cap, a pin in the rod, and projecting oppositely therefrom, and having its opposite ends shouldered, substantially as described.

6. The combination of a case having a slot in the bottom, a rod in the case, a movable back-rest in the case, a plate extending through the slot and having a lateral flange at the bottom, a vertical flange at one side of the plate and attached to the back-rest, and a pivoted lever on the plate and engaging the rod, substantially as described.

7. The combination of a case having a slot in the bottom, a rod in the case, a back-rest movable in the case, a plate attached to the back-rest and extending through the slot and having a flange to engage the bottom, vertical flanges on the plate perforated to receive the rod, and a pivoted lever engaging the rod, substantially as described.

8. The combination of a case, a rod in the case, an adjustable back-rest, a plate having flanges, said flanges having openings to receive the rod, and secured by one flange to the back-rest, a lever pivoted to the plate and having an opening through which the rod extends, and a spring engaging the lever, substantially as described.

9. The combination of a case, a rod, an adjustable back-rest, a plate having flanges, provided with openings and secured to the back-rest by one of said flanges, a ledge formed by partially severing and bending a portion of the plate, a lever extending through the ledge and having a shoulder, and also having an opening, a spring engaging the lever, and a rod inserted longitudinally in the case and in the openings in the flanges and lever, substantially as described.

10. In combination with an adjustable back-rest, and a rod, a plate having flanges at each side, said flanges having openings to receive the rod, one of said flanges being also

secured to the back-rest and having a pocket, a ledge formed of a portion of the plate, severed on three sides and bent at right angles, a lever passing through the ledge and pivoted therein and having an opening to receive the rod, and a spring inserted in the pocket, and engaging the lever, substantially as described.

11. The combination of a case having a longitudinal slot, a rod longitudinally and removably inserted in the case, a movable back-rest in the case, means for adjustably attaching the back-rest to the rod, and a plate engaging the slot to support the back-rest when the rod is removed, substantially as described.

12. The combination of a case, a rod removably inserted in the case, an adjustable back-rest in the case, a lever pivoted on the back-rest and having an opening to receive the rod, a spring engaging the lever, and means for supporting the back-rest when the rod is removed, substantially as described.

13. The combination of a case having a

longitudinal slot in the bottom, a back-rest adjustable in the case, a plate attached to the back-rest and extending through the slot, a flange on the plate engaging the under side of the bottom, a removable rod in the case, a lever pivoted on the back-rest and engaging the rod, and a spring engaging the lever, substantially as described.

14. The combination of a case having a longitudinal slot, a removable rod in the case, a back-rest adjustable in the case, a plate having vertical flanges; perforated to receive the rod; and attached to the back-rest, an extension of the plate to traverse the slot, a flange on the extension of the plate to engage the bottom, a lever having an opening to receive the rod, and a spring to engage to operate the lever, substantially as described.

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

FRANK MACEY.

Witnesses:

LUTHER V. MOULTON,
PALMER A. JONES.