E. L. PERKINS. Lock for Drawers.

No. 197,975.

Patented Dec. 11, 1877.

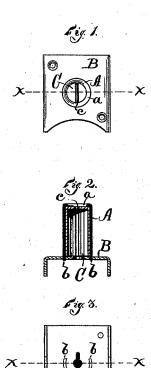


fig.

Milneysev. H. M. Sale. L.S. Burn

Elihu L. Perkins. By James Shepard Atty.

UNITED STATES PATENT OFFICE.

ELIHU L. PERKINS, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO N. G. MILLER, OF SAME PLACE.

IMPROVEMENT IN LOCKS FOR DRAWERS.

Specification forming part of Letters Patent No. 197,975, dated December 11, 1877; application filed August 16, 1877.

To all whom it may concern:

Be it known that I, ELIHU L. PERKINS, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Locks for Drawers, &c., of which the following is a specification:

My invention relates to that portion of the lock which receives and governs the body of the flat or plate key; and consists in the peculiar construction of parts, and in the combination of them, as hereinafter described.

In the accompanying drawing, Figure 1 is a front elevation of parts of a lock which embody my invention. Fig. 2 is a sectional view of the same on lines xx of Figs. 1 and 3. Fig. 3 is a rear elevation of the same, and Fig. 4 is a side elevation of the portion of the key which fits the parts of the lock herein shown and described.

A designates the key-cylinder, formed of sheet metal struck up from a flat disk, and the central portion of its outer end removed, so as to leave an inward-projecting flange, a, at said outer end. The inner end is so cut off as to form lugs b, which pass through openings in the lock-plate B, by means of which lugs the cylinder is secured to said plate. Inside of the cylinder A is a rotating cylinder, C, which is also struck up from sheet metal. The open end is cut off smooth and square, and rests upon the lock-plate B. The solid end is slotted with a narrow key-slot, c, the length of which is fully equal to the inside diameter of the rotating cylinder. The diameter of the space inside of the flange a is also the same as that of the inside of the rotating cylinder, whereby the flange hooks over the end of the rotating cylinder a distance equal to the thickness of the metal of said cylinder, and holds the same from working endwise out of place, and at the same time allows the full width of the flat or plate key, Fig. 4, to be passed through the outer end of the cylinder A, and rotated therein.

The portion of the lock-plate B directly opposite the inner end of the cylinder, instead of being wholly removed, is slotted with a circular enlargement in the middle, as shown most clearly by the rear or inside view of said

plate, Fig. 3, the length of the slot in plate B being the same as that of slot c. The body d of the key, Fig. 4, is of a width that will readily pass through and fit the ends of the slots, and also the interior of the rotating cylinder. At the inner end of the key-body d there are two notches, e e, and a narrow neck, f, between them. The width of the neck f is such that it can be rotated with the circular enlargement of the slotted portion of the plate B, and the notches e e are of such size as to admit the edges of the plate B, whereby the said plate is made to serve as wards for the key, which, although formed in one of the outside plates of the lock, are completely concealed by the key-cylinder. The remaining portion of the inner end of the key will be adapted to the interior of the lock used, which may be any desired style.

Heretofore, so far as I know, the cylinder has been formed of a solid piece of metal bored

out.

My improvements reduce the cost of the lock, and enable a small cylinder to take in a

wide key.

The key is inserted through the slot a at the outer end of the cylinder, and then through the plate B, until the slots e e are opposite the edges of said plate, when the key may be turned, and the cylinder will rotate with the key, and the edges of the key-body be supported meanwhile by the inside walls of said cylinder.

I claim as my invention—

In a flat-key lock, the cylinder A, having flange a at its outer end, and secured to the lock-plate, in combination with the hollow rotating cylinder secured within the main cylinder, and having a portion of the outer end projecting over the inside bore of said cylinder, in which end portion is a narrow key-slot, the length of which is the same as the inside diameter of the hollow rotating cylinder, substantially as described, and for the purpose specified.

ELIHU L. PERKINS.

Witnesses:

JAMES SHEPARD, R. H. TOWNSEND.