(No Model.)

G. B. COWLES.

METHOD OF SECURING CABINET LOCKS IN PLACE.

No. 309,205. Patented Dec. 16, 1884.

Fig. 1.

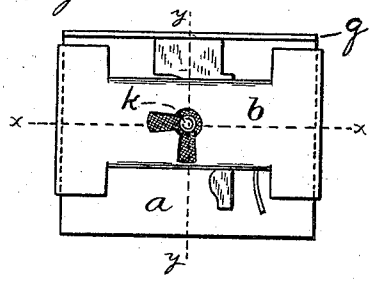


Fig. 2.

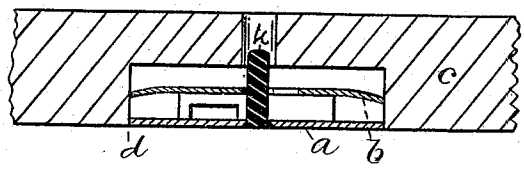


Fig. 3.

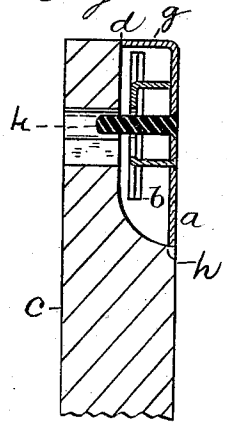


Fig. 4.

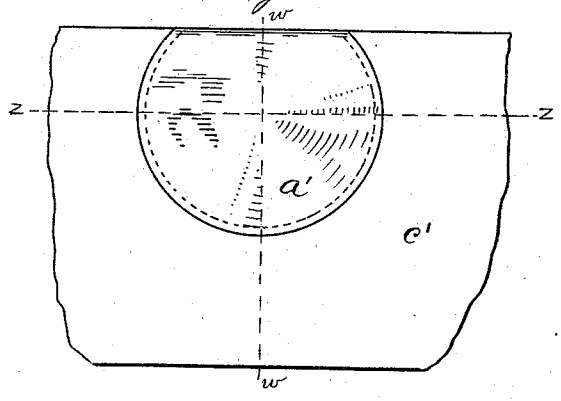


Fig. 6.

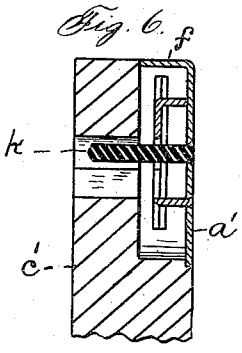


Fig. 5.

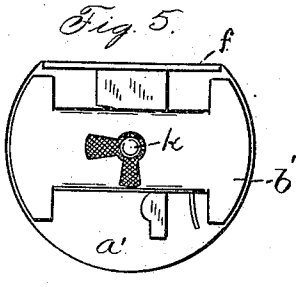
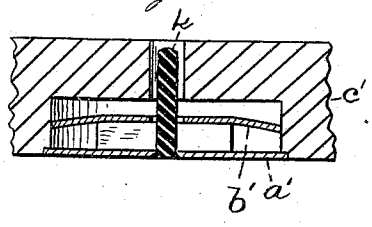


Fig. 7.



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UNITED STATES PATENT OFFICE.

GEORGE B. COWLES, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE CORBIN CABINET LOCK COMPANY, OF SAME PLACE.

METHOD OF SECURING CABINET-LOCKS IN PLACE.

SPECIFICATION forming part of Letters Patent No. 309,205, dated December 16, 1884.

Application filed June 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. COWLES, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in the Method of Securing Cabinet-Locks in Place, of which the following is a specification.

My invention relates to improvements in the method of securing cabinet-locks in place upon drawer-fronts, doors, &c.

The object of my invention is to furnish a cheap and simple method by which a lock-case may be securely fastened in place within a simple mortise without the aid of screws or equivalent devices, and also by which locks having key posts or pins which are longer than the selvage is wide may be secured.

In the accompanying sheet of drawings, Figure 1 is a side elevation of one form of lock-case which is adapted to be secured in place by my method. Fig. 2 is a horizontal section thereof on line *x x* of Fig. 1, showing said lock-case inserted in a routed cavity. Fig. 3 is a vertical section of the same on line *y y* of Fig. 1. Fig. 4 is a side elevation of a lock-case with a circular form of cap and plate, and also a portion of the front rail of a drawer to which said lock is secured in accordance with my invention. Fig. 5 is a side elevation of said lock-case detached. Fig. 6 is a vertical section, on line *w w* of Fig. 4, of said lock-case and the rail or stile to which it is secured in accordance with my invention; and Fig. 7 is a horizontal section of the same on line *z z* of Fig. 4.

My improvement is principally intended to be used by manufacturers of furniture who set the lock-cases into machine-made mortises or cavities.

In Figs. 1 and 5 of the accompanying drawings I have shown the bolt-works of the lock, while all the mechanism of the lock proper, except the key-post, is omitted in the other figures. Any ordinary form of lock-works may be employed.

In Figs. 1, 2, and 3 of the drawings, *a* designates the ordinary lock-plate; *b*, my improved cap; *c*, the drawer-rail, and *d* a cavity routed out from the edge of the drawer-rail. The cap *b* may be connected to the lock-plate *a* in any ordinary manner. I make the cap *b* a trifle wider than the lock-plate *a*, as shown in Figs. 1 and 3, and make the mortise or cavity for the insertion of the lock-case of a size which the lock-plate will just fill.

In order to secure the lock-case in place, I lay it over the side of a properly-formed cavity or mortise, *d*, and force it flatwise into said cavity. By so forcing it into the cavity or mortise the free edges of the cap *b* are slightly bent backward, and thereby so firmly press against the side edges of the cavity or mortise *d* that all attempts to remove it only serve to more firmly bind it against the walls of the cavity. The lock-plate *a* enters the mortise without bending, and fills said recess to form a neat finish, as shown in Fig. 2.

Figs. 4, 5, 6, and 7 show a lock-case having circular edges for the cap *b'* and plate *a'*, the same being adapted to be set in a recess bored out from one side, as shown in Fig. 4. In this lock-case the cap *b'* is made of a little less width than the lock-plate; but instead of making the sides of the mortise or cavity in the rail or stile *c'* of uniform width I bore the outer side of the mortise a little the larger for a depth equal to the thickness of the lock-plate *a'*, and of a size which said plate will just fill when flat, as shown in Fig. 4. The remaining part of the mortise or cavity in the drawer-rail *c'* is preferably of a depth just equal to the selvage *f*, while its size is a little less than the width of the cap *b'* in its normal condition, so that when the lock-case is forced into the mortise flatwise its free end will be bent and impinge against the sides of the mortise to hold the lock-case in the manner hereinbefore described in reference to the case shown in Figs. 1, 2, and 3. The lock-case illustrated in said figures is seated in its mortise by resting upon the edge of its selvage *g* and the lower edge of the lock-plate *a*, as at *h*, Fig. 3. The lock-case with rounded edges is seated within the mortise by means of the lock-plate *a'*, resting upon the shoulder at the junction of the wider and narrower parts of the mortise. The form of lock-case shown in Fig. 1 may, if desired, be made with the lock-plate wider than the cap, and have its mortise correspondingly fitted, as

described, for the mortise of the lock having the rounded edges. This latter lock-case may also be fitted to a mortise of uniform width by forming its plates and cavity of the same relative width as described in connection with Figs. 1, 2, and 3. A general rule for all cases may be stated as follows: Make the outer part of the mortise or cavity of a width which the lock-case will neatly fill, and that part of the mortise which is to receive and hold the cap-plate so much narrower than the width of the cap in its normal condition that the edges of the cap must be deflected a little in order to force the case flatwise into its mortise. It will readily be seen that when a lock-case is thus inserted flatwise into a mortise the key post or pin *k* may be made of any desired length, and not in the least interfere with the insertion of the lock.

Lock-cases of various forms have heretofore been secured in correspondingly-formed mortises by inserting said cases edgewise into place. In all lock-cases so inserted it is necessary to make the key post or pin of a length which does not exceed the width of the selvage of said cases.

I claim as my invention—

1. The herein-described method of securing a lock-case in place, which consists of forming the case and mortise of such relative sizes that the cap in its normal condition is a trifle wider than the part of the mortise designed to receive it, and then forcing said lock-case flatwise into said mortise, substantially as described.

2. The combination of a lock-case having a lock-plate, substantially as described, and the rail or stile of a piece of furniture or other article having a cavity or mortise the outer part of which is of a proper size for the lock-plate to fill, and the part which is to receive the edges of the cap is a little narrower than the cap in its normal condition, substantially as described.

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