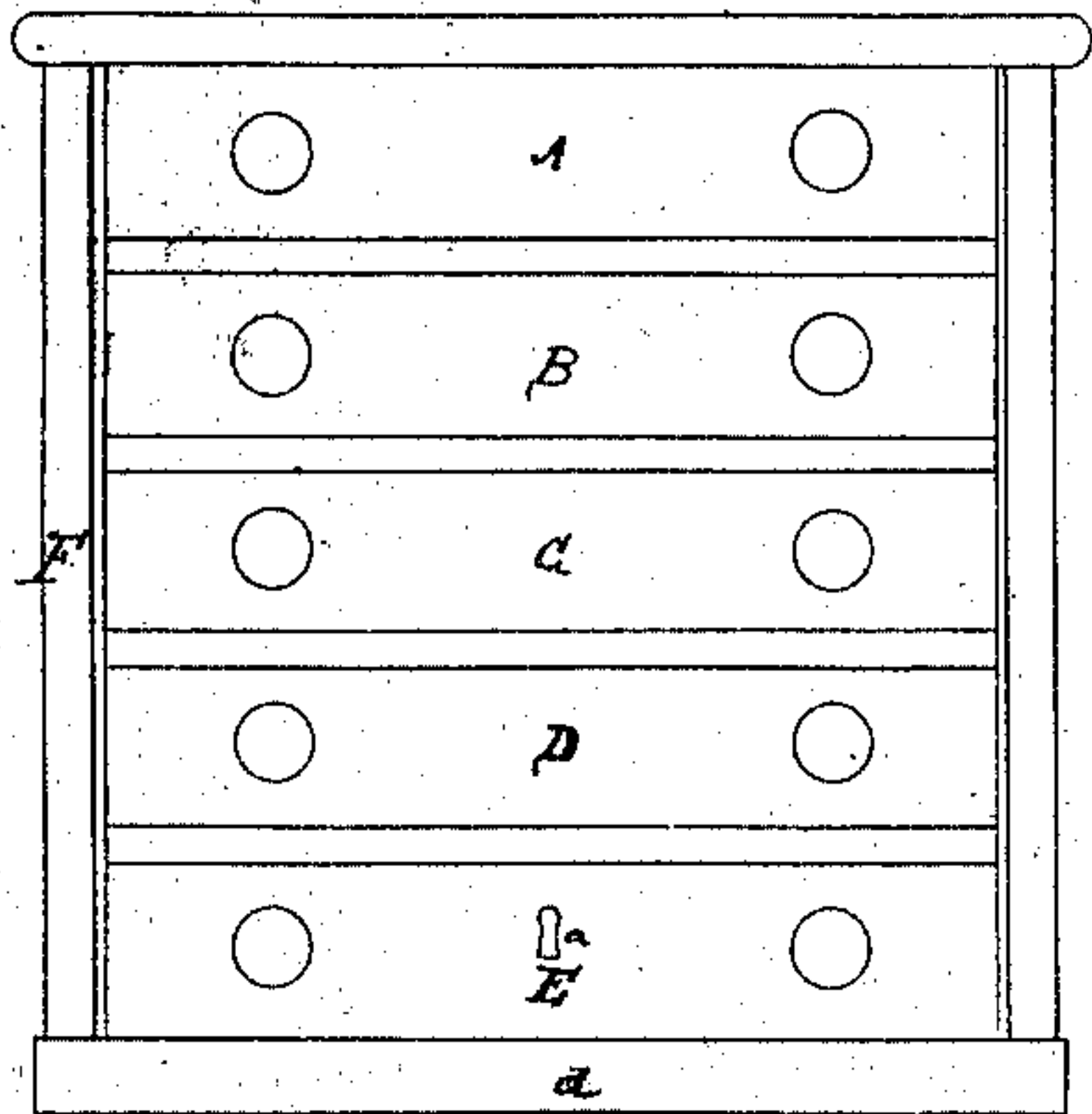
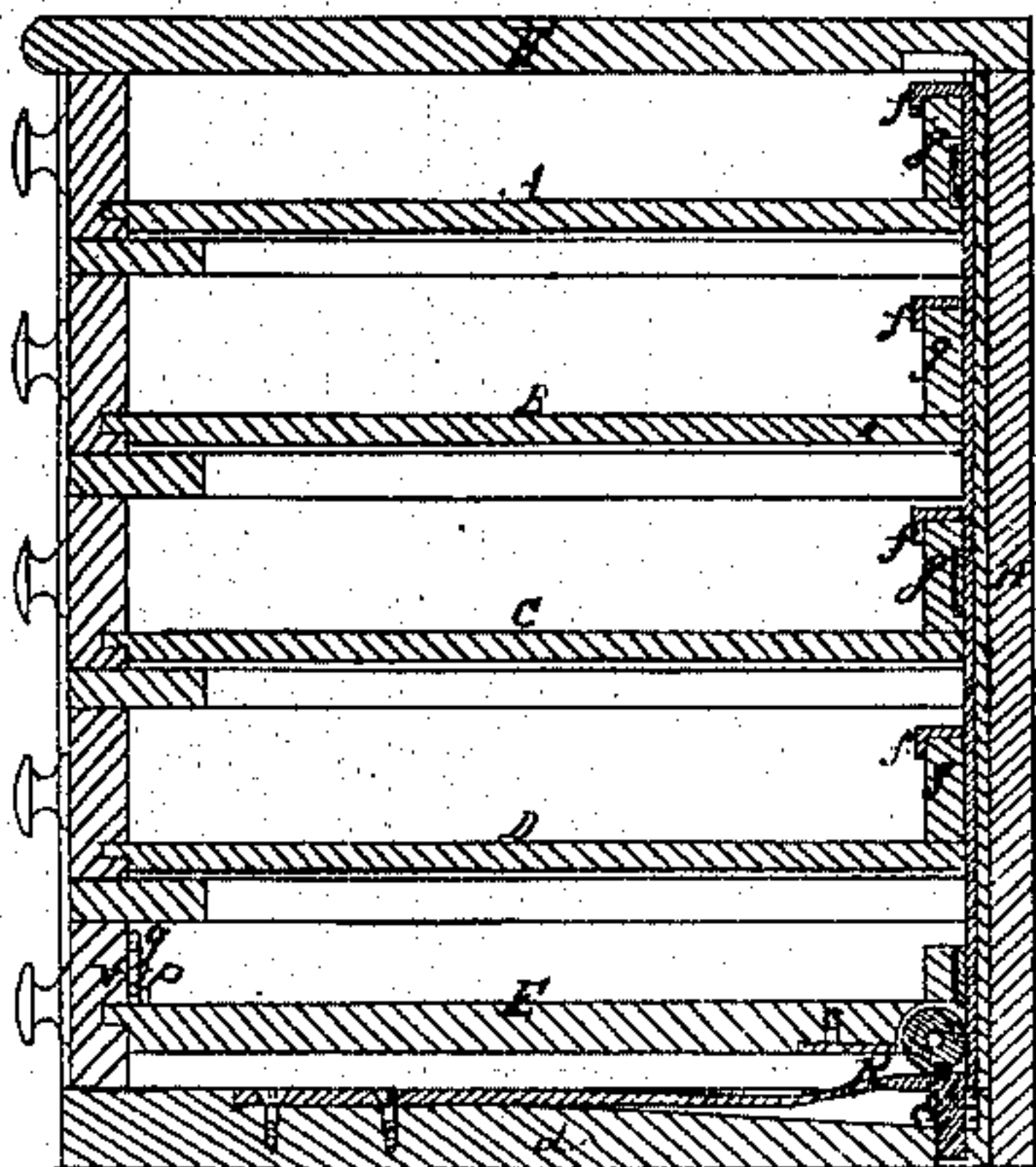


*J. Koch.*  
*Furniture-Drawers & Fastenings.*  
*N<sup>o</sup> 75553*                      *Patented Mar. 17, 1868.*

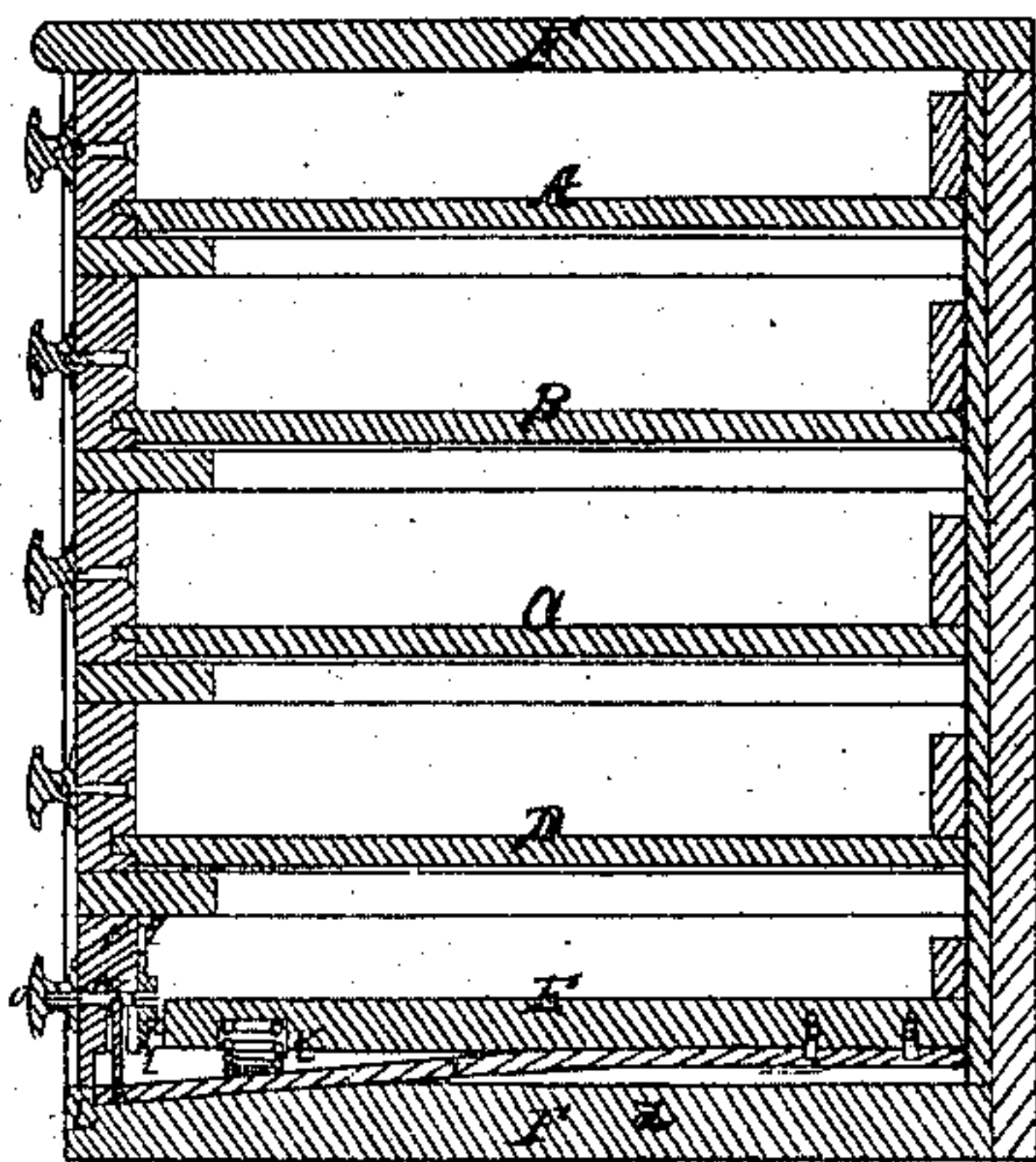
*Fig. 1.*



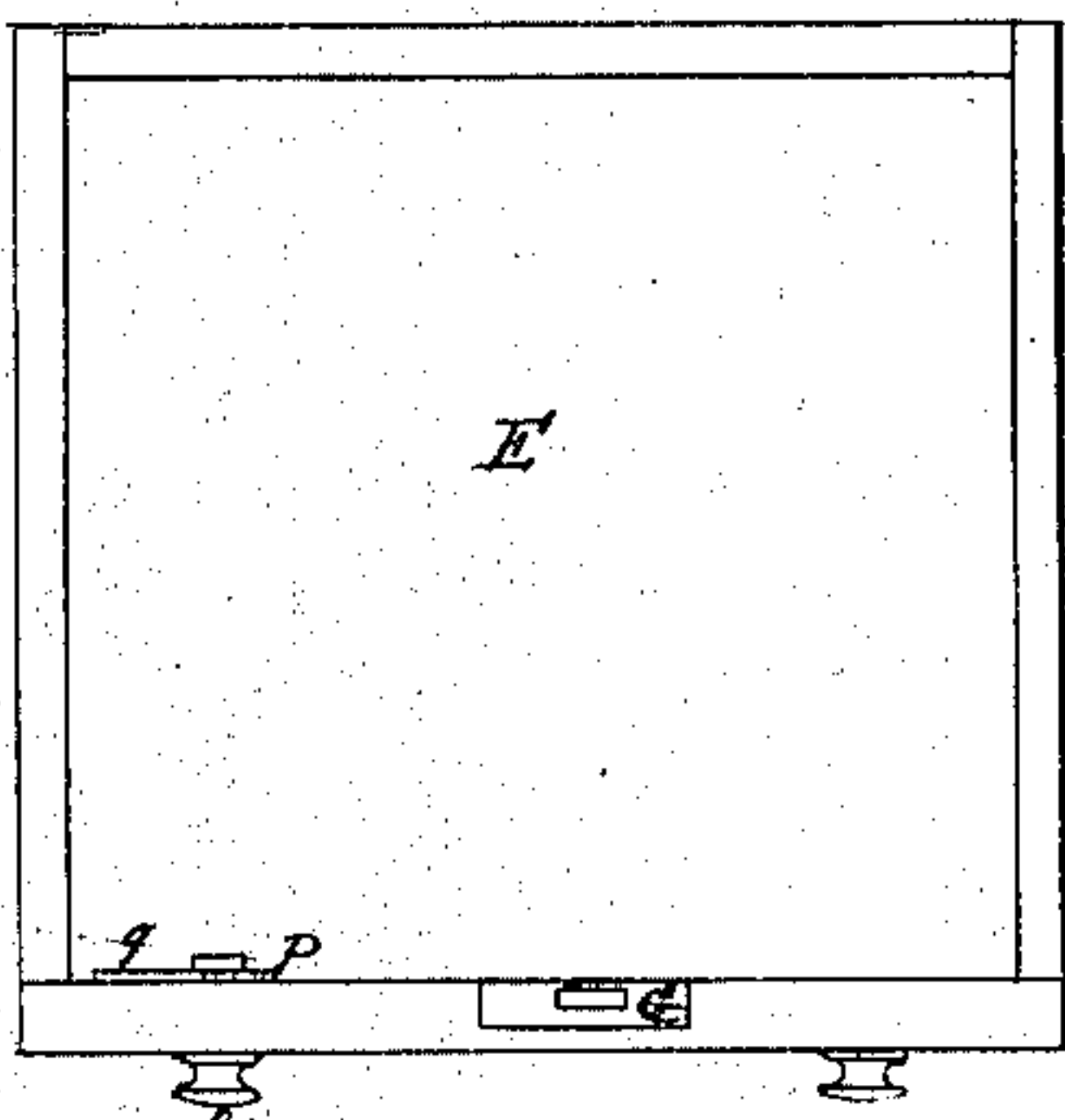
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses:  
*J. P. Cole Jr.*  
*J. D. Snow*

Inventor  
*Johr Koch*  
 by his attorney  
*R. M. Lundy*



# United States Patent Office.

JOHN KOCH, OF BROOKLINE, MASSACHUSETTS.

*Letters Patent No. 75,553, dated March 17, 1868.*

## IMPROVED FURNITURE-DRAWERS AND FASTENINGS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, JOHN KOCH, of Brookline, of the county of Norfolk, and State of Massachusetts, have made a new and useful invention having reference to Furniture-Drawers and Fastenings therefor; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front view of a case of drawers provided with my invention.

Figure 2 is a vertical section thereof, taken through the primary locking-apparatus of the series of drawers.

Figure 3 is a vertical section, taken through the auxiliary locking-apparatus.

Figure 4 is a top view, and

Figure 5 is a cross-section of the lower drawer, the latter being taken so as to represent the ratchet and pawl thereof.

The purposes of the drawer-fastening mechanism hereinafter described are as follows, viz, to cause all or any number of the drawers of the series to be locked when one of them is locked, by means of its lock and key; also, to lock a drawer by means applied to one of its knobs; also, to provide such means with a mechanism by which it may be estopped from action whenever such may be desirable.

The mechanism hereinafter explained will be found to be of great value for drawers of bureaus, mineralogical, conchological, or numismatical cabinets, as well as various other articles of furniture, as, with it, all the drawers of a series may be locked when one of them is locked, by a key applied to a lock fixed to such drawer.

I usually attach a common lock to the lowermost of the drawers, but this is not necessary, as it may be applied to either of the others.

In the drawings, A B C D E represent five drawers arranged within a case, F, constructed like a common bureau-case. The lowermost drawer, E, has a common lock, G, fixed to it in the ordinary way, and so as to be locked and unlocked by a key introduced through a key-hole, *a*, and into the lock. At the rear part, and to the bottom of the drawer, I apply a friction-roller, *b*, which, when the drawer is moved within its case, rolls upon a rail or bar, *c*, arranged within the bottom, *d*, of the case, and provided with spring *e*, for throwing it up at its rear end. The said rail or bar has an inclined plane or cam, *k*, projecting from its rear part, and is connected with an upright slide-bolt, H, arranged in rear of all the drawers, and provided with a series of hooks, *fff*, extended from it in manner as represented in fig. 2. There is a hook to each of the drawers, except the lower one, and such hook is so arranged as to close down upon and clasp the rear portion, *g*, of the drawer when the bolt H is in its lowest position, the hook, under such circumstances, operating to lock the drawer, so as to prevent it from being withdrawn from its case. When, however, the bolt H is in its highest position, the hooks will be so above the drawers as to allow of their being opened or drawn out of their case.

By pushing the lower drawer into the case and back, to place the roller, by its action, on the inclined plane *k*, will force downward the bar *c*, which will, in turn, depress the bolt H, and simultaneously lock all the drawers over the lower one. On withdrawing the said lower drawer a short distance, the spring underneath the bar *c* will force upward such bar, and cause it to elevate the bolt H, so as to carry its hooks out of engagement with the drawers.

There is affixed to the under side of the lower drawer a spring-bar, I, which is provided with a spring, K, to force its front end down below the drawer and into a notch or recess, L, made in the bottom of the drawer-case F. A cord, *l*, fastened to the free end of the spring-bar I, extends upward, and is secured to and wound around the shank or shaft *m* of one of the knobs *o*. The shank revolves freely in the drawer, and has fixed on it a ratchet, *p*, to engage with a retaining-pawl, *q*, that is arranged within the drawer and against the inner side of its front board, *r*, the whole being as represented in the drawings. By turning the knob, the bar I may be drawn up out of the notch, and, by means of the ratchet and pawl, such bar may be kept up out of the notch. When in the notch, the bar I will prevent the drawer from being opened. Thus the said bar I, and its actuating and retaining-mechanism, as described, become an auxiliary bolting-apparatus, which may be used with any drawer, but when employed with the primary bolting-apparatus, as described, becomes an additional security, and prevents the drawers from being opened when the key-lock may be forced.



I am aware of the subject of Patent No. 26,881, by which the drawers are locked by the action of the bolt of the lock of the upper of the series against a lever connected with a long catch-bolt arranged in rear of the drawers, and operating with a series of spring-catches extended from the drawers. Therefore, I make no claim to such subject, the locking of the drawers by the primary locking-mechanism of my invention being effected by one of the drawers, or a roller thereof, being forced against an inclined plane connected with or applied to the locking-bar, so made as to close upon the rear parts of the drawers while locking them. I require no spring-catches to extend from the drawers for the purpose of co-operating with the locking-bar in order to lock such drawers.

What, therefore, I claim as my invention, is as follows:

I claim the combination of the inclined plane or lever *k*, the spring *e*, and the bolt *H*, made with hooks arranged to catch upon the drawers, as specified, such combination being arranged in manner, and so as to operate with the drawers, as explained, and being what I term the primary or bolting or fastening-mechanism.

I also claim the combination of the bar *I*, the spring *K*, the notch *L*, the knob *o*, the ratchet *p*, and the pawl *q*, as arranged with a drawer and its case, substantially as set forth, such combination being what I term the auxiliary fastening-mechanism.

I also claim the arrangement of the primary and auxiliary fastening-mechanisms with the series of drawers and their case, all as described, for the purposes set forth.

JOHN KOCH.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.