

(No Model.)

W. HORROCKS.
DRAWER FOR DESKS.

No. 553,031.

Patented Jan. 14, 1896.

Fig. 1.

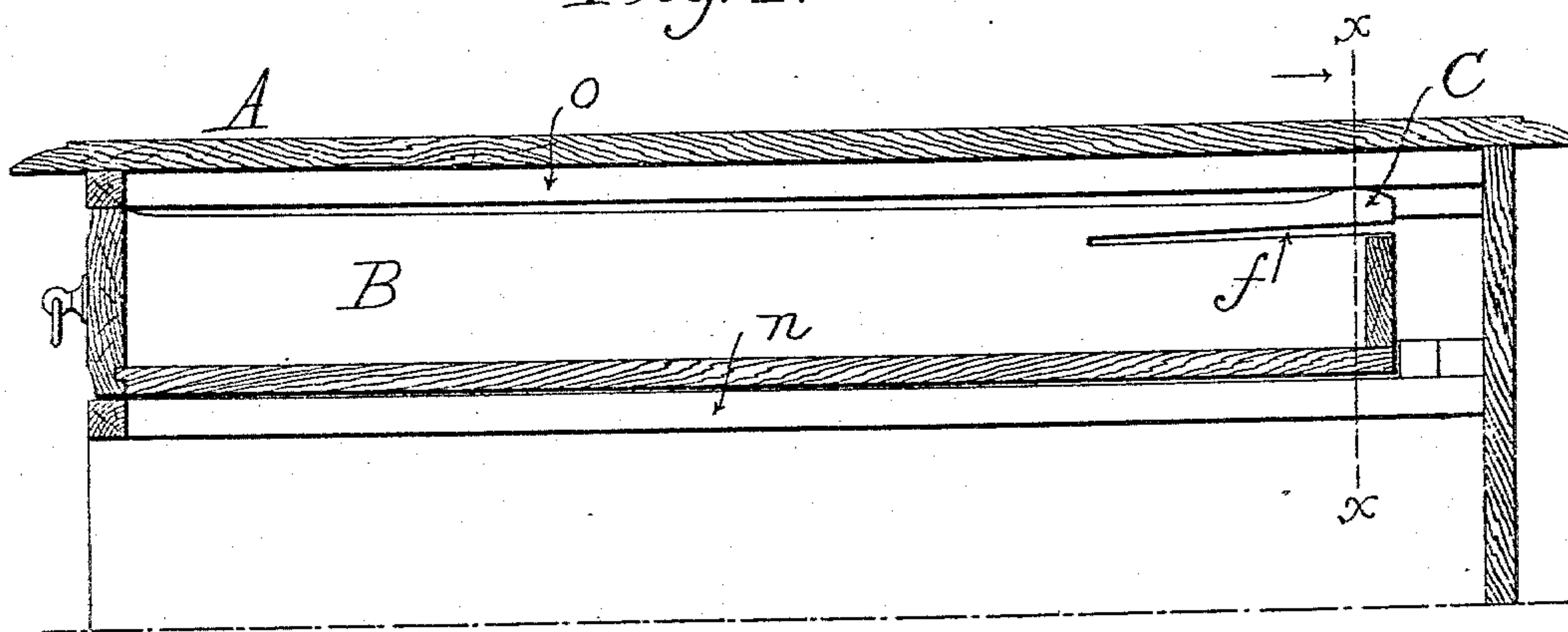


Fig. 2.

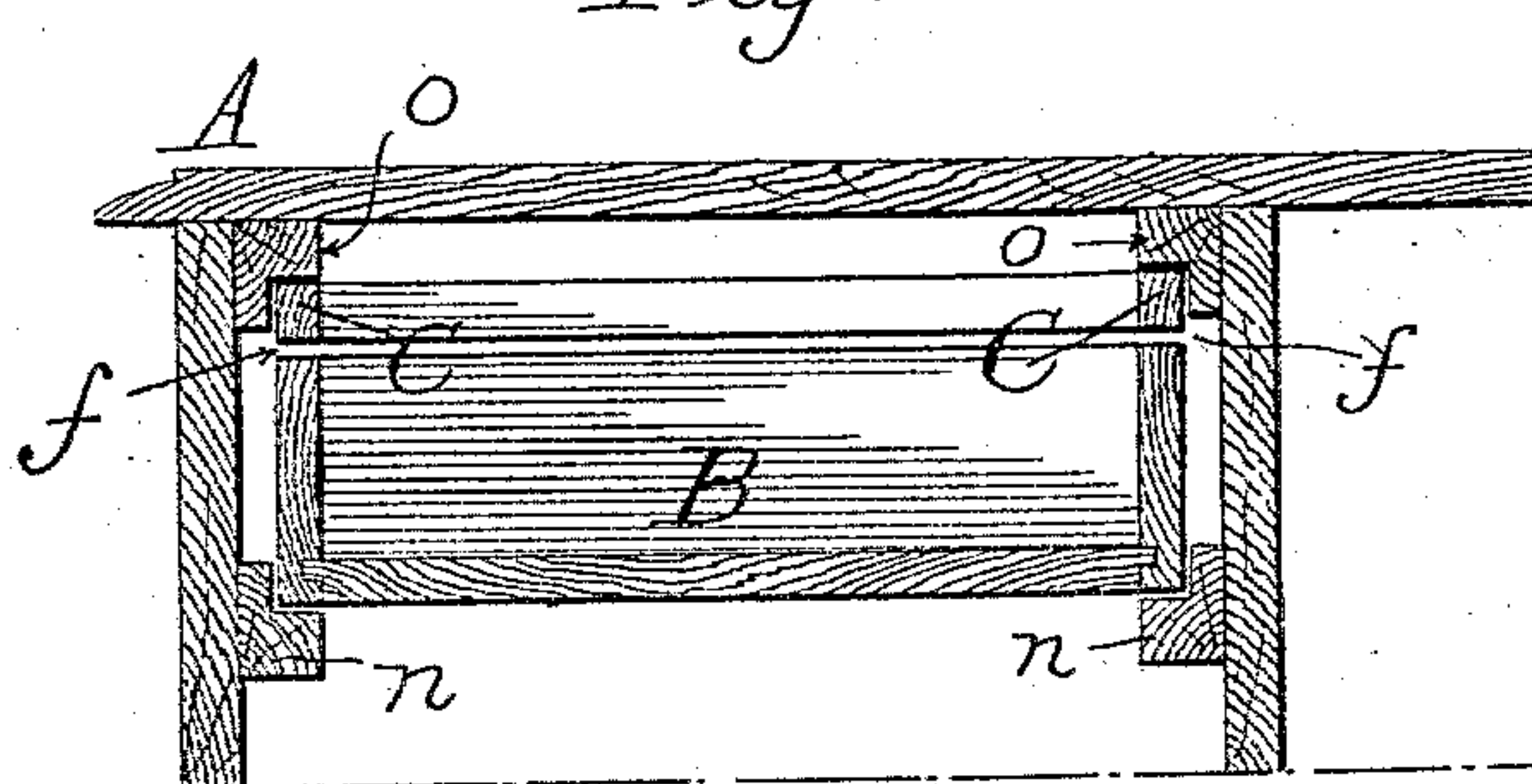
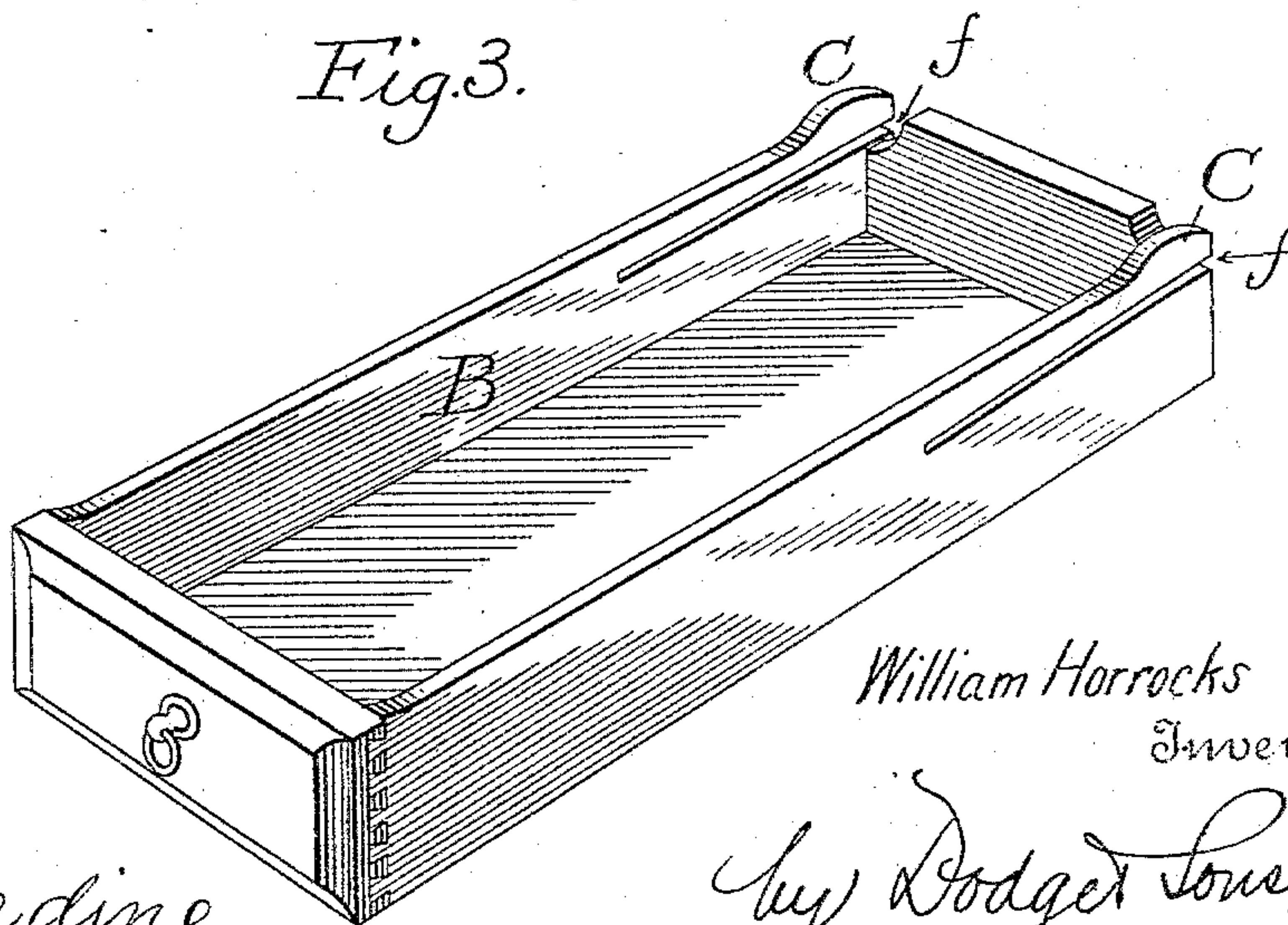


Fig. 3.



Witnesses

C. C. Burdine.
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UNITED STATES PATENT OFFICE.

WILLIAM HORROCKS, OF HERKIMER, NEW YORK, ASSIGNOR TO THE
HORROCKS DESK COMPANY, OF SAME PLACE.

DRAWER FOR DESKS.

SPECIFICATION forming part of Letters Patent No. 553,031, dated January 14, 1896.

Application filed September 26, 1895. Serial No. 563,702. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HORROCKS, a citizen of the United States, residing at Herkimer, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Drawers for Desks, &c., of which the following is a specification.

This invention relates to drawers used in desks, type-writer cabinets and the like; and the invention consists in so constructing the drawer that a portion of the drawer itself shall act as a spring to allow for the swelling or shrinking of the wood, and also cause the drawer to run smooth and evenly when shoved in or drawn out, as hereinafter more fully set forth.

Figure 1 is a vertical section of a portion of a type-writer cabinet and drawer having my improvement applied thereto. Fig. 2 is a vertical section of the same on the line $x x$ of Fig. 1, taken at right angles to Fig. 1; and Fig. 3 is a perspective view of the drawer detached.

It is desirable in desks and cabinets to have the drawers fit as snugly as possible, and yet not stick when the wood is swelled, or be so loose as to rattle when dry. Various plans have been devised for this purpose, generally by making separate springs of wood or metal, or wood and metal, and attaching them to the frame of the desk or bureau at one side, or to the drawer; but as made and applied these occupy room and have to be attached by screws or similar means and add considerable to the cost.

The object of my invention, therefore, is to so construct the drawer as to dispense with all these extra parts and make a portion of the drawer itself act as a spring or springs. This I accomplish by making up the drawer in the usual manner, with the front and sides of the full width of the opening, and at the rear end make the sides slightly wider than at the front, and which may be done by making the side pieces a little wider at one end than the other, or by gluing on a small piece, whichever is most convenient. I then cut away the top edge of the sides from the front to near the rear end, as shown in Figs. 1 and

3, so they will not touch the guide-rail o above, except at the ends of the drawer. I then round off the top of the rear ends of the sides, as shown, so they will run smoothly and not catch on the guide-rail o when drawn out or shoved in. After the drawer is thus made up I cut a thin slit f in the rear portion of each side piece near the upper edge for one-fourth or more of the length of the drawer, thereby forming a spring-arm C on each side. The length of the slits, and of course of the springs, will depend upon the length of the drawers; but they should in all cases be of sufficient length, and the part thus severed should be of such width, as to give to the arm the requisite elasticity and cause it to act as a spring.

If the rear end of the drawer be made of full width, it may have its upper corners cut away slightly, as shown in Fig. 3, to enable the slit to be cut in the sides only; or if made of full width and fastened to the sides at the top, then the slit may be cut through the sides and the end piece also, as shown in Fig. 2. In the latter case the slit can be cut in an instant by means of a circular saw. If the slits be made in the side pieces only, they may be cut before the drawer is put together, or afterward, as is most convenient.

The rounded surfaces of the spring-arms will bear at all times against the guide-rail o above, the spring-arms pressing the drawer down upon the guide-rails n below with sufficient force to prevent the drawer from being loose and rattling when shrunk, and the spring or elasticity of the arms will prevent it from sticking fast when swelled, as the sides, being cut away at the top, touch the rail above only at their rear ends, and that portion being rounded causes the drawer to move with a steady and easy movement.

The device is exceedingly simple, cheap and efficient, and does away with all separate springs and extra pieces.

This improvement, though more especially designed for desks, type-writer cabinets and similar office furniture, is applicable to bureaus, and in fact wherever drawers are used.

Having thus described my invention, what I claim is—

1. A drawer having slits cut in its side walls to form springs substantially as shown and described.

2. A drawer having the upper edge of its side pieces cut away to near their rear ends, and having a slit cut in the rear part of said side pieces near their upper edges, thereby providing the drawer with springs or spring arms substantially as and for the purpose set forth.

3. A drawer having springs or spring arms formed integral with the sides of the drawer itself.

In witness whereof I hereunto set my hand in the presence of two witnesses.

WILLIAM HORROCKS.

Witnesses:

CHAS. P. AVERY,

JACOB BODENSTEIN.