(No Model.)

D. C. CLAPP.

DRAWER GUIDE FOR BUREAUS, &c.

No. 413,028. Patented Oct. 15, 1889.

Fig. 1.

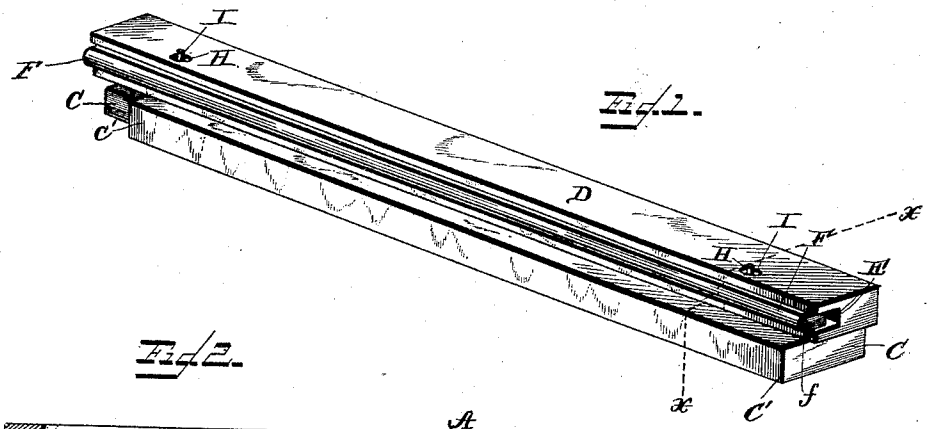


Fig. 2.

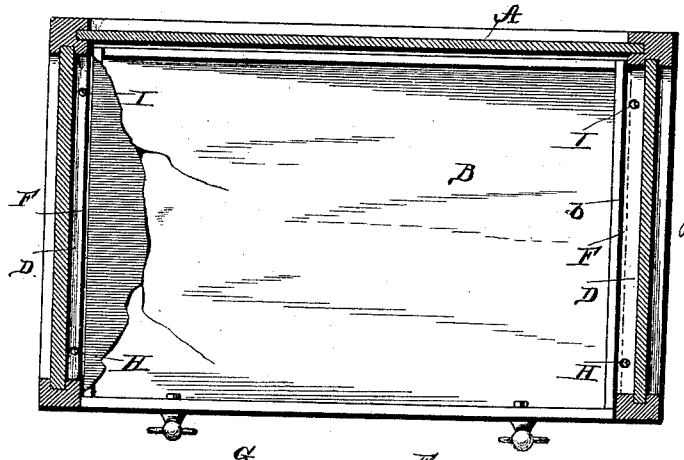


Fig. 3.

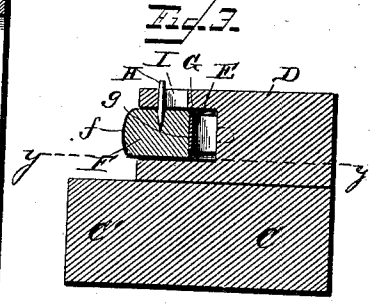


Fig. 4.

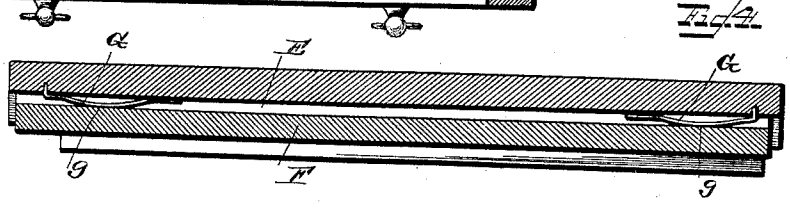
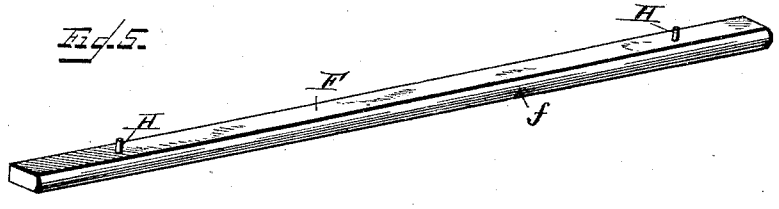


Fig. 5.



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UNITED STATES PATENT OFFICE.

DWIGHT C. CLAPP, OF OWOSSO, MICHIGAN, ASSIGNOR OF TWO-THIRDS TO DAVID M. ESTEY AND THE ESTEY MANUFACTURING COMPANY, OF SAME PLACE.

DRAWER-GUIDE FOR BUREAUS, &c.

SPECIFICATION forming part of Letters Patent No. 413,028, dated October 15, 1889.

Application filed February 15, 1889. Serial No. 300,044. (No model.)

To all whom it may concern:

Be it known that I, DWIGHT C. CLAPP, a citizen of the United States, and a resident of Owosso, in the county of Shiawassee and State of Michigan, have invented certain new and useful Improvements in Drawer-Guides for Bureaus and the Like; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved drawer-guide. Fig. 2 is a horizontal sectional view of a bureau, illustrating the application of the same. Fig. 3 is an enlarged cross-section of my improved drawer-guide on line *x x* in Fig. 1. Fig. 4 is a longitudinal sectional view of the same on line *y y* in Fig. 3, and Fig. 5 is a perspective view of the yielding guide strip or cushion removed from the fixed portion of the guide into which it is inserted.

Like letters of reference denote corresponding parts in all the figures.

This invention relates to drawer-guides for bureaus, chiffoniers, desks, and similar articles of furniture in which drawers are used; and it consists in certain improvements upon the drawer-guide described and claimed in my Letters Patent No. 381,760, dated April 24, 1888, as will be hereinafter more fully set forth.

In the accompanying drawings, the letter A designates the frame or casing of a bureau to which my improved drawer-guides have been applied.

B denotes one of the drawers, and C C′ the bar or bars which, in conjunction with the top bar D, form the fixed part of the drawer-guide, as fully described in my patent hereinbefore referred to. The top bar D is recessed or grooved longitudinally on the side facing the side *b* of the drawer, so as to form a rectangular recess E, running from end to end, into which is inserted a bar or strip F, of wood or other suitable material, also rectangular in cross-section, and of such dimensions that it will fit loosely within the rectangular groove or recess E. The projecting edge of this strip is rounded off or beveled, as shown at *f*, and the strip bears with its straight or squared back part against two or more springs, which may be of rubber, coiled wire, or other material, although I prefer to use steel springs of the form shown more clearly in Fig. 4 of the drawings—*i. e.*, flat springs G, made of steel of suitable width and temper bent to form an arch or bulge *g*, bearing with its crown or swell against the back part of the strip. The latter is retained movably within its groove or recess E by means of pins H, projecting with their upper or outer ends through holes or slots I in the top of the fixed guide-piece D, said slots being of sufficient size to allow the pins some play and thereby admit of the automatic adjustment of the spring-cushioned strip in relation to the fixed guide-bar of which it forms a part. The slots or openings I are circular in form, the purpose of which is to allow a universal movement of the pins, and thereby prevent the binding of the drawer in any direction, and this constitutes the essential feature of my invention.

From the foregoing description, taken in connection with the drawings, the operation of my improved drawer-guide will be readily understood. By its use it will be seen that the drawers will at all times be held firmly and without play between the guides, as the spring-cushioned strips will force them against the guides at the opposite end, so that the drawers will always fit their respective recesses and yet work smoothly forward and back without danger of binding.

I am aware that it is not new to provide a spring guide-strip with studs which move in elongated slots and guide the strips in but one direction, and my invention differs from this in that the guide has a universal movement and avoids all danger of the drawers binding.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a drawer-guide, the combination, with the strip having the recess in one side and

the circular openings in the top wall of the said recess, of the spring guide-strips arranged in said recess and having pins arranged in the circular openings of the recess, whereby the guide-strip is capable of a universal movement in all directions and binding of the drawer is prevented, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

DWIGHT C. CLAPP.

Witnesses:
E. L. BREWER,
BESSIE OTT.