

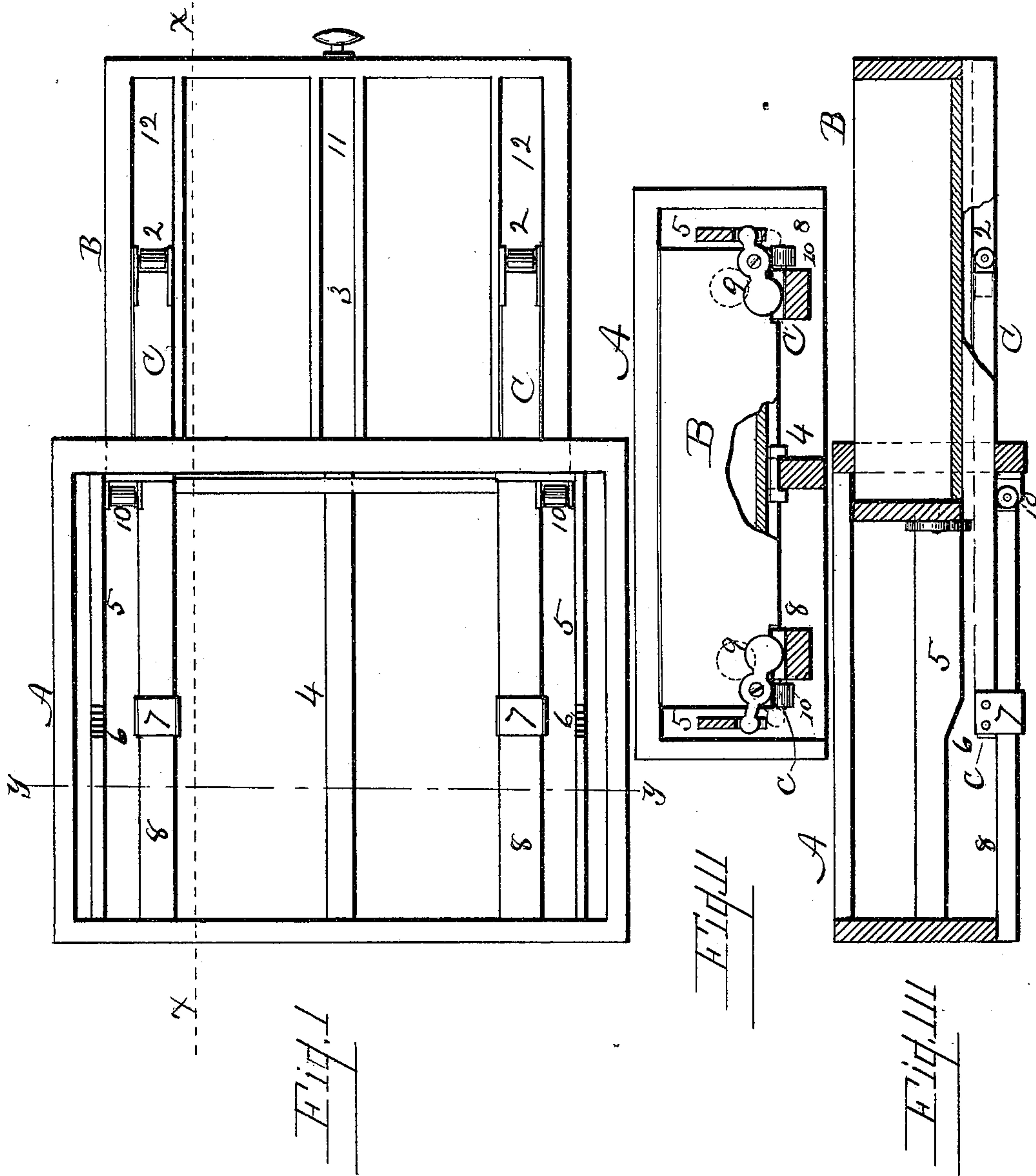
No. 644,438.

Patented Feb. 27, 1900.

E. MERTENS.  
DRAWER SUPPORT.

(Application filed July 17, 1899.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

EMIL MERTENS, OF DAYTON, OHIO.

## DRAWER-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 644,438, dated February 27, 1900.

Application filed July 17, 1899. Serial No. 724,097. (No model.)

*To all whom it may concern:*

Be it known that I, EMIL MERTENS, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Drawer-Supports; 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, and to the letters and numerals of reference marked thereon, which form a part of this specification.

My invention relates to improvements in drawer-supports, the features of which will be hereinafter fully described and claimed.

The object of my invention is to support a drawer or writing-desk so that in drawing the same out nearly its full length a horizontal position is maintained.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan of the device, exhibiting the under surface. Fig. 2 is a transverse section of the same on line *y*, right side up, with the drawer partially drawn out. Fig. 3 is a longitudinal section of the same on line *x*, right side up.

Like letters and numerals designate like parts throughout the several views.

The frame A may be of any desirable form and of different kinds of furniture. The longitudinal rails 8 8 and the guides 5 5, parallel therewith, are the essential features of said frame. The central rail 4 serves as a guide, but can be dispensed with. B is the drawer, adapted to slide within said frame. In its bottom, near the sides, are the longitudinal grooves 12 12 and the groove 11 in the central rail 3. These grooves may be plowed in the bottom or they may be plowed in separate pieces or rails, as shown in Fig. 1. In other respects the drawer is constructed as usual.

The two supporting-arms C are comprised of the bar adapted to slide in the groove 12, the roller 2, held in ears attached to the end of said bar, and the stirrups 7, attached to the inner end. These stirrups embrace the rails 8, over which they slide. The rollers 10 10

are held in a casting secured to the frame, and the side rails of the drawer traverse these, and over which the drawer freely moves. At Fig. 2 are shown the gravity-arms 9 9, pivoted to the back end of the drawer, near the corners. The outer ends engage the under surface of the guides 5 5, which they traverse, and when in withdrawing the drawer the incline 6 is reached (see Fig. 3) the inner ends of the arms are raised and the supporting-arms arrested in their outward movement. When the inner ends of these gravity-arms are not lifted, they remain in contact with the inner ends of said supporting-arms, and as a consequence they are carried forward until the incline is reached on the guides 5, and here the movement of the supporting-arms is arrested, the outer ends being at a point near the center of the drawer, and thereby maintains the drawer in a horizontal position. The relation of the parts is shown at Fig. 1.

The operation is thus: As the drawer is being drawn out the gravity-arms engage the ends of the supporting-arms, which are relieved after being carried about one-half their length, and on closing the drawer the outer ends of said supporting-arms are engaged at the end of the grooves and are thus carried back.

Having described my invention, what I claim is—

1. In a drawer-support the combination of the frame with longitudinal rails, the guides parallel therewith provided with inclines midway on their under surfaces, the supporting-arms, the stirrups attached to said supporting-arms, the longitudinal rails, the drawer with grooves in its under surface adapted to receive said supporting-arms, the gravity-arms pivoted to the rear of said drawer to operate said supporting-arms, substantially as described.

2. In a drawer-support the combination of the frame with horizontal rails, the rollers connected immediately with the front ends thereof, the guides with inclines midway thereof, the supporting-arms, the stirrups attached to said supporting-arms and these provided with rollers on their outer ends, the drawer with grooves in its under surface adapted to re-



ceive said supporting-arms, the stirrups at-  
tached to the inner ends of said supporting-  
arms, the gravity-arms pivoted to the rear  
end of said drawer to carry said supporting-  
5 arms outwardly about one-half the movement  
of the drawer, substantially as described.  
In testimony that I claim the foregoing as

my own I affix my signature in presence of  
two witnesses.

EMIL MERTENS.

Witnesses:

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