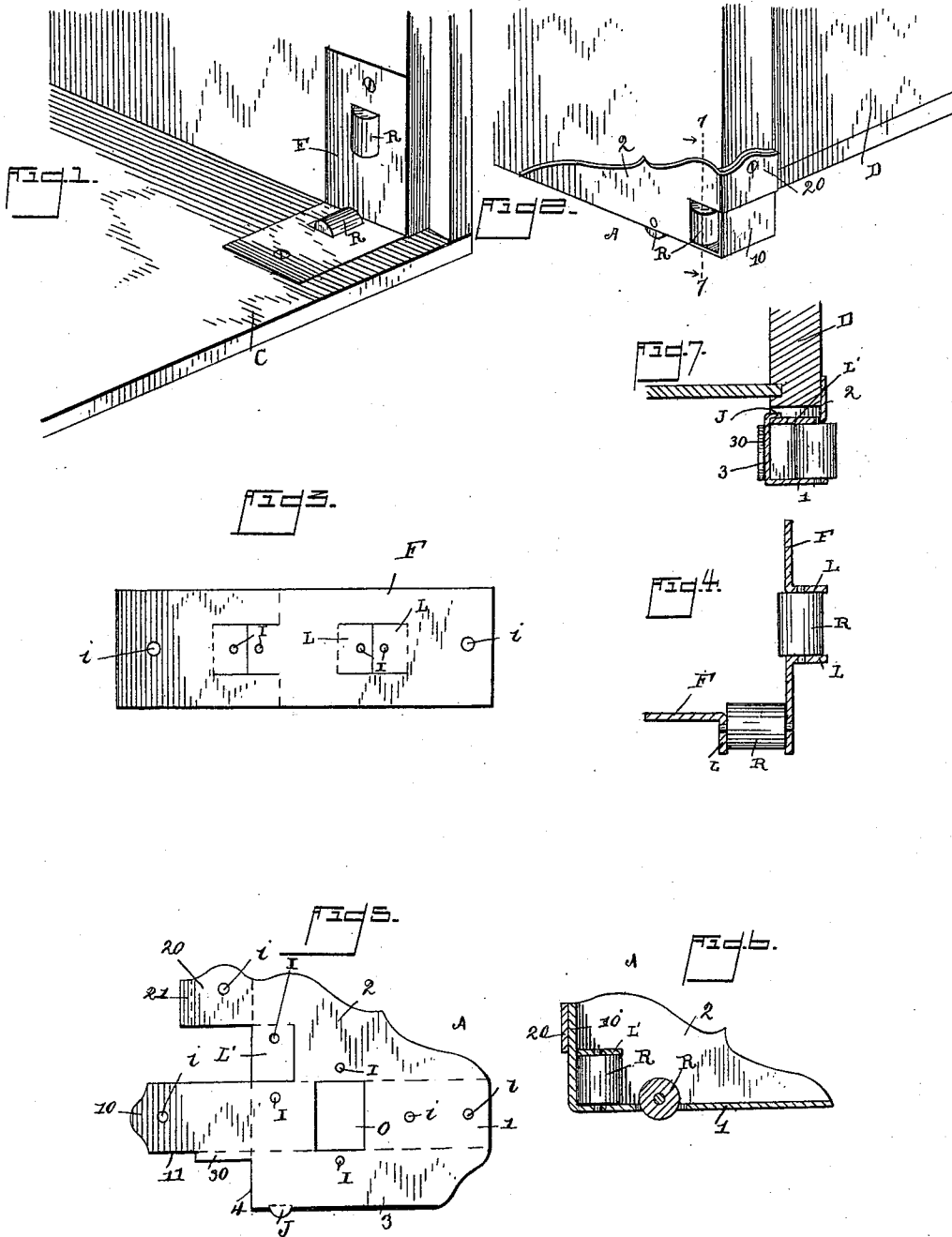


(No Model.)

J. H. BALDWIN, Jr.
DRAWER.

No. 466,069.

Patented Dec. 29, 1891.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN H. BALDWIN, JR., OF SAN ANTONIO, TEXAS.

DRAWER.

SPECIFICATION forming part of Letters Patent No. 466,069, dated December 29, 1891.

Application filed May 15, 1891. Serial No. 392,844. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BALDWIN, JR., a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Drawer, of which the following is a specification.

This invention relates to furniture, and more especially to that class thereof known as "drawers;" and the object of the same is to provide the drawers of a bureau, a desk, or other piece of furniture with anti-friction devices to prevent their binding.

To this end the invention consists in the details of construction and relative arrangement of parts hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a perspective view of the drawer-casing, and Fig. 2 of the rear corner of the drawer. Fig. 3 is a plan view of the blank for the strap in the casing. Fig. 4 is a central longitudinal section of this strap with the rollers in place. Fig. 5 is a plan view of the blank for the strap at the corner of the drawer. Fig. 6 is a central longitudinal section of this strap with the rollers in place. Fig. 7 is a section on the line 7 7 of Fig. 2.

Referring to the said drawings, the letter D designates a drawer which moves within a casing C, and the latter may be a bureau, a washstand, a desk, or other article of furniture adapted to receive one drawer or a number of drawers; but as they are of the same construction a description of one will answer for all.

F is a strap, which in the blank shown in Fig. 3 is flat, and which is cut on the full lines and bent at right angles on the dotted lines—that is to say, it is bent across its body into approximate L shape, as shown in Fig. 4, and is secured in a suitable mortise, and by countersunk screws or nails in the inner lower corner of the casing, as seen in Fig. 1. The lips L are bent outwardly at right angles to the body, and rollers R have their spindles journaled in eyes I in the said lips, the wood-work of the casing being properly recessed beneath the strap to permit the rollers to extend into the same, while their outer faces project slightly beyond the faces of the strap. The size of these rollers and their ma-

terial are not essential, although they are preferably small enough to be surrounded by the wood-work of the casing and long enough to afford the lower or horizontal one a bearing for the lower edge of the side of the drawer and the upper or vertical one a guide for the outer face of the side of the drawer. The horizontal roller is located close in the angle of the casing, while the vertical roller is some distance above the said angle, for a purpose to appear hereinafter.

The letter A designates what I shall call the "angular strap," which in the flat blank is best seen in Fig. 5, and like the other is to be cut on the full lines and bent at right angles on the dotted lines. When in place and bent in proper position, the central portion 1 of this blank stands against the lower edge of the side of the drawer, the upper portion 2 resting against the outer face thereof and the lower portion 3 against the inner face. At the left of the vertical dotted line the central portion 10 stands against the end of the drawer and the small flap 30 is turned over the end 4 of the portion 3. The upper portion 20 is in the form of a tongue, which then passes across the central portion 10, and its flap 21 turns over the edge thereof at the point 11.

L' is a lip provided with an eye I, and when this lip is turned inwardly a roller R, similar to those above described, has one end of its spindle journaled in said eye and the other in a similar eye in the central portion 1. By this means this roller (which is vertical and which is let into a cut-away portion of the side of the drawer) stands at the extreme rear corner and low enough to move beneath the vertical roller in the casing when the drawer is withdrawn.

The letter O designates an opening cut in the central portion 1, and at each end of this opening is an eye I in the portion which is to be turned at right angles to the central portion, and in these eyes is journaled the spindle of a horizontal roller. The lower edge of the side of the drawer is cut away to make room for this roller, and the latter projects slightly beyond said lower edge and stands in a horizontal plane just forward of the corner roller.

i designates several holes through which

are passed countersunk screws or nails for holding this angular strap in place upon the drawer. In addition to the above, I may provide a projection J on the lower edge of the lower member 3, or, in fact, at any suitable point or points around the periphery of the blank, and such projection or projections are adapted to be turned inwardly and seated in the wooden body of the drawer, their function being to support the lip L and prevent it from bending and allowing the roller to drop out.

With the above construction of parts, when the drawer D is inserted in the casing C and moved to the rear the horizontal rollers in the drawer travel on and rest upon the bottom of the casing and support the rear end of the drawer, while the horizontal rollers in the casing support the lower edges of the sides of the drawer at the front of the latter. Obviously the vertical rollers guide the drawer in its movement and prevent its binding laterally. When the drawer is withdrawn completely from the casing, the horizontal rollers have to move over each other; but the corner rollers in the drawer move beneath the vertical rollers in the casing. A drawer thus provided with rollers will not bind in the casing in any direction and may be very easily moved therein even when heavily loaded or filled.

Considerable departure may be made from the details of construction without changing the nature of my invention, and even one or the other of the straps could be omitted or differently located, if preferred.

I lay no claim to the specific shape, size, or materials of parts, as experience and fancy will teach what is necessary or desirable in that line.

What is claimed as new is—

1. In a drawer, the combination, with the casing and the drawer moving therein, of an angular strap at the rear lower corner of each side of the drawer, said strap comprising a

central portion 1, secured to the lower edge and having an opening O, an upper portion 2 at one side of the central portion and secured to the outer face, an inturned lip L' in said upper portion, forming another opening, the side of the drawer being recessed beneath said opening and the members of the strap having eyes at the ends of the opening, friction-rollers located in and projecting slightly through the openings and having their spindles journaled in said eyes, a lower portion 3, secured to the inner face of the side, and other portions secured to the rear end thereof, substantially as described.

2. In a drawer, the combination, with the casing and the drawer moving therein, of an angular strap at the rear lower corner of each side of the drawer, said strap comprising a central portion 1, secured to the lower edge and having an opening O, an upper portion 2 at one side of the central portion and secured to the outer face, an inturned lip L' in said upper portion forming another opening, the side of the drawer being recessed beneath said opening and the members of the strap having eyes at the ends of the opening, friction-rollers located in and projecting slightly through the openings and having their spindles journaled in said eyes, and a lower portion 3, secured to the inner face of the side, the end 10 of the central portion being turned up against the end of the side and having a flap 30 bent over the end 4 of the lower portion, and the end 20 of the upper portion 2 forming a tongue overlapping the end 10 and having an end flap 21 bent over the edge 11 of said end beyond its flap 30, substantially as described.

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

JOHN H. BALDWIN, JR.

Witnesses:

FERD STAFFEL,
JOSEPH RYAN.