April 21, 1925. 1,534,201

J. A. BLIN

DRAWER GUIDE CONSTRUCTION

Original Filed Nov. 14, 1921

Fig. 1

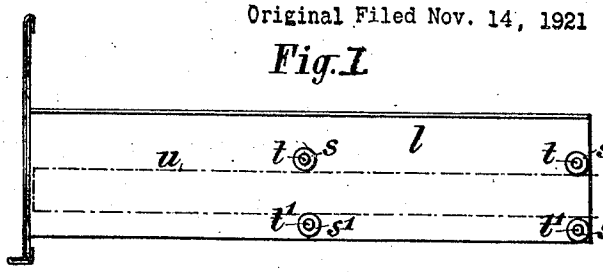


Fig. 2

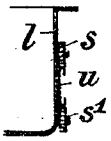


Fig. 3.

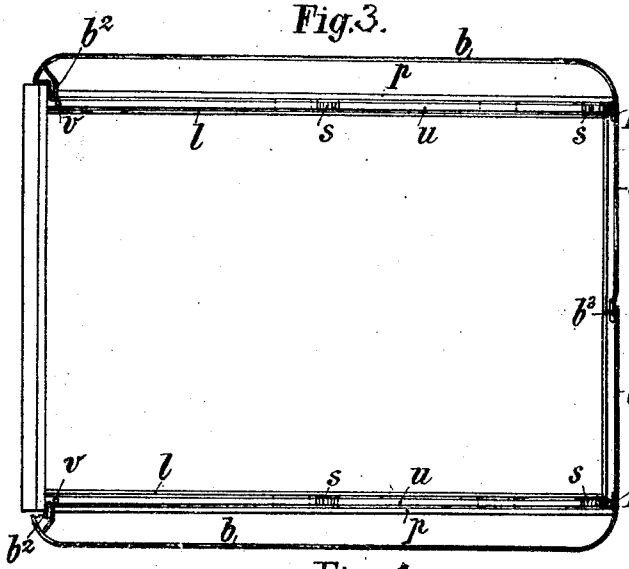


Fig. 8.

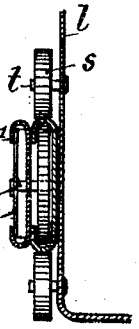


Fig. 4.

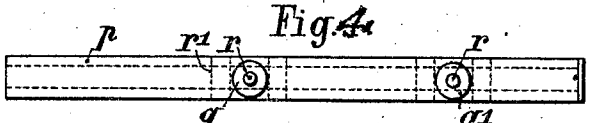


Fig. 5.



Fig. 6.

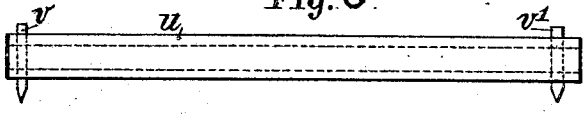


Fig. 9.

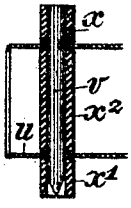
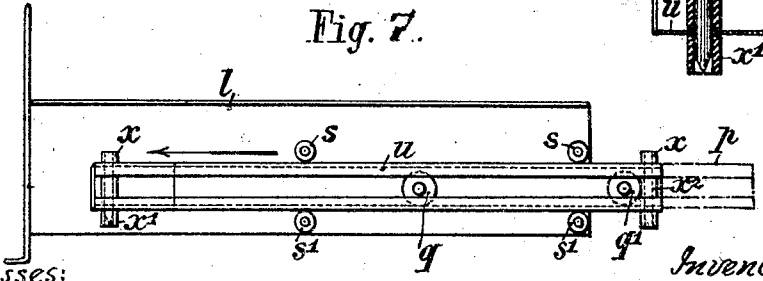


Fig. 7.



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UNITED STATES PATENT OFFICE.

JULES ARMAND BLIN, OF PARIS, FRANCE.

DRAWER-GUIDE CONSTRUCTION.

Original application filed November 14, 1921, Serial No. 515,109. Divided and this application filed April 8, 1922. Serial No. 550,890.

To all whom it may concern:

Be it known that I, JULES ARMAND BLIN, a citizen of the French Republic, residing at Paris, France, have invented new and useful Improvements in Drawer-Guide Construction, More Especially for Metal Furnitures, of which the following is a specification.

This invention relates to drawer guide construction and its object is to provide means for safely guiding the drawer in its article and for holding it securely in its position of maximum opening without any overhanging and no matter what the weight of the contents may be.

This guide construction is especially well adapted for metal furnitures as described in my co-pending application for Letters Patent Serial No. 515109, filed on November 14, 1921, of which the present case is a division.

A constructional form of the invention is shown in the accompanying drawings wherein:

Fig. 1 is a side view of a drawer;

Fig. 2 is a sectional view of the same;

Fig. 3 is a plan view of the drawer and of its arrangement in the article to be used therewith;

Fig. 4 shows separately in longitudinal elevation, one of the fixed runners of the arrangement;

Fig. 5 is a face view thereof;

Fig. 6 likewise shows separately and in longitudinal elevation one of the movable runners forming a guide for the drawer;

Fig. 7 shows in side view, the complete drawer and its guiding means;

Fig. 8 shows in cross section to a larger scale, the whole of one of the guiding arrangements for the drawer, and

Fig. 9 likewise shows to a larger scale one of the pins which limit the movement of the drawer.

The body of the article of furniture which is to receive the drawers consists of two side panels b each comprising an aluminum plate suitably bent and shaped to form half the bottom b^1, one of the lateral sides and a rigid upright head b^2, slightly set back, against which the front plate of the drawer closes when it is fully pushed home.

The members for supporting the drawers consist of metal strips p in the form of slides p^1 with the longitudinal edges folded over. These latter are parallel with the article on which they are fixed, at front thereof to the rigid upright b^2 and at the rear to the back panel b^1, by means of a claw p^2 cut out of the strip p.

Each slide p^1 is provided at the outside of the strip p, with two rollers q and q^1 carried by spindles r in the side of said strip and supported by bridge pieces r^1 (Fig. 8).

The drawers l, are provided on each lateral side with rollers s and s^1 mounted freely on spindles t, t^1 and between which can engage a movable slide u comprising, similarly to the fixed slides, metal bands suitably bent over to form a double guideway. These are movable slides and have at each end removable pins v, v^1 (Figs. 6, 9) held in position by rubber sleeves x, x^1 and x^2 (Fig. 9). These latter consist of rubber sleeves whose internal diameter is equal to or preferably, slightly less in diameter than the pins v which they surround. It results that these sleeves, by reason of their resiliency, expand when the pins pass into them and compress strongly onto such pins.

In order to secure these to the movable slides u, the sleeve x^2 is first engaged within the slide opposite circular holes formed in the edges of the guideways for the passage of the pin, then this latter is introduced in the sleeve x^2 until each of its extremities protrude by an equal amount above and below the guideways formed by the slide u. The sleeves x and x^1 are then slipped on the protruding extremities of the pin.

This method of mounting the pins and their sleeves so as to form abutments avoids all fixing means, while yet enabling them to be put in place or removed quickly and easily.

The drawer so constructed is placed in the article of furniture in the following manner.

Each of the movable slides u is engaged on the two rollers q, q^1 carried by the fixed slides p^1 so that these rollers can turn on their spindles inside the movable slides.

When these latter are fully engaged, the rear pins v^1, which penetrate into the sleeves x^2 which have first been introduced into the movable slides, are fitted and then the sleeves x and x^1 are placed on each of the extremities of the pins which are thus held on

the slides and at the same time ensure the connection between the movable slides and the fixed slides.

It is then only necessary to push the drawer into the article of furniture by engaging it so that its rollers s and s^1 bear on each upper and lower edge of the movable slides u. When the drawer is sufficiently entered on the movable slides, the front pins v with their rubber sleeves x, x^1 and x^2 are put into position in the same manner as described for the rear pins.

The drawer is thus maintained inside the furniture by the rollers q and q^1 engaged in the movable slides u and by its rollers s, s^1 which run on these slides.

If the drawer is opened, the movable slides u move on the rollers q, q^1 carried by the fixed slides until the rear pins v^1 abut against the rollers q^1 which thus limit the movement of the movable slides.

By continuing to pull out the drawer, the latter slides, by reason of its rollers s, s^1, on the slideway formed by the movable slides u until the front rollers s and s^1 abut against the sleeves x and x^1 of the pins v in the direction of the arrow, Fig. 7. The pins and the rollers are disposed so that the drawer can be pulled fully outwards till the front rollers abut against the pins v. In this position of full opening, the drawer is efficiently held or supported, without hanging down and immaterial of the weight of the contents, by the two movable slides with which its rollers are always in engagement, these two movable slides remaining engaged and held in the interior of the piece of furniture over the greater portion of their length, by the rollers q and q^1 carried by the fixed slides p.

On the other hand, the rubber sleeves x and x^1 against which abut the pins v and v^1 form shock absorbers and prevent noise.

I claim:

1. An article of furniture, a drawer guided therein, metal guide-strips having rolled edges fast to the internal side walls of the furniture and parallel with the sides of the drawer, fixed spindles and freely turning rollers mounted thereon on the external face of the fixed strips, a movable slide with rolled edges riding on and embracing each pair of rollers on each fixed guide strip, and a superposed roller and a pair of sublocated spaced rollers positioned on opposite edges of the movable slide and mounted along the sides of the drawer to run on the edges of each movable slide, as described.

2. An article of furniture, a drawer guided therein, metal guide strips having rolled edges fast to the internal side walls of the furniture and parallel with the sides of the drawer, fixed spindles and freely turning rollers mounted on the spindles on the external face of the fixed strips, a movable slide with rolled edges riding on and embracing each pair of rollers on each fixed guide strip, rollers mounted along the sides of the drawer positioned to run on opposite edges of each movable slide, removable pins projecting through the edges at the ends of each movable slide, and rubber sleeves tightened on the middle portion and on the external portions of said pins, as and for the purpose described.

JULES ARMAND BLIN.