Feb. 3, 1925. 1,524,811

M. BOUCHON

SLIDING AND SWINGING METAL RACK UTILIZABLE IN TRUNKS, CUPBOARDS, SHOP WINDOWS, STALLS, ETC

Filed Nov. 6, 1922

Fig. 1

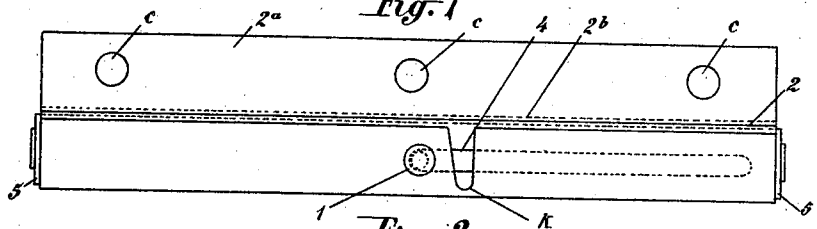


Fig. 2

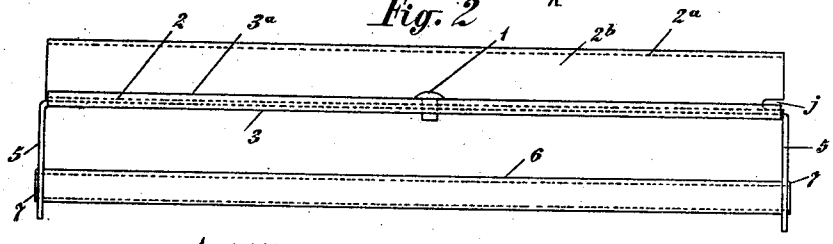


Fig. 3

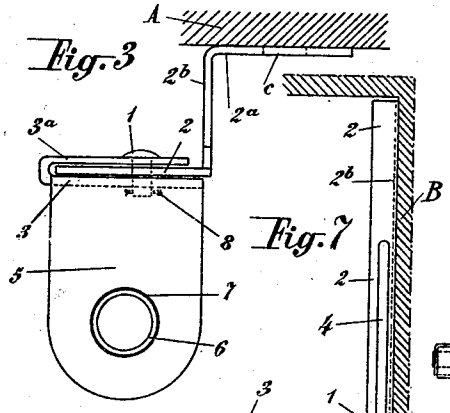


Fig. 7

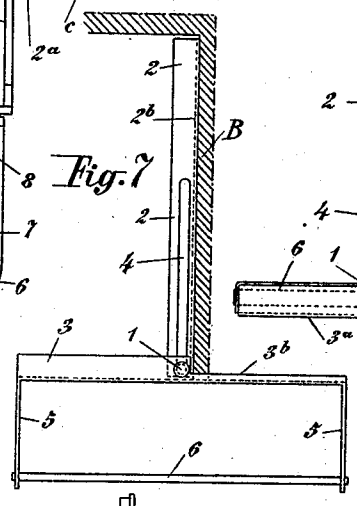


Fig. 4

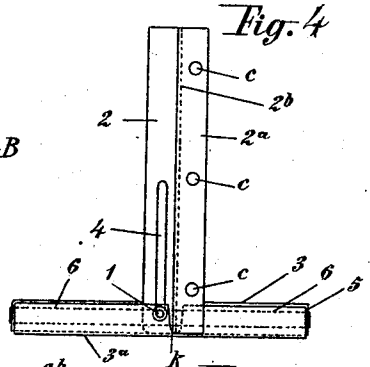


Fig. 8

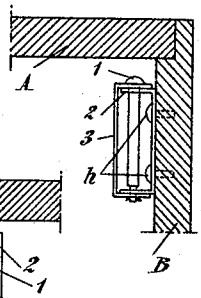


Fig. 5

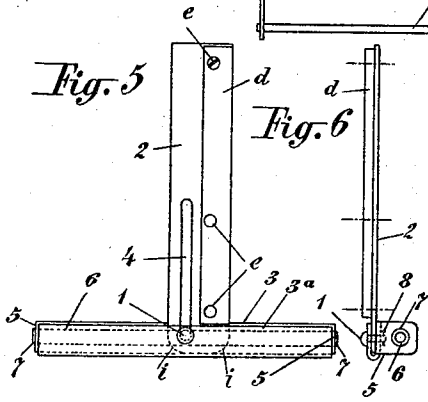
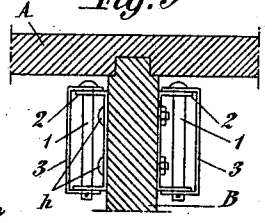


Fig. 6

Fig. 9



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Patented Feb. 3, 1925. 1,524,811

UNITED STATES PATENT OFFICE.

MARCEL BOUCHON, OF PARIS, FRANCE.

SLIDING AND SWINGING METAL RACK UTILIZABLE IN TRUNKS, CUPBOARDS, SHOP WINDOWS, STALLS, ETC.

Application filed November 6, 1922. Serial No. 599,468.

To all whom it may concern:

Be it known that I, MARCEL BOUCHON, a citizen of the Republic of France, residing at Paris, France, have invented new and useful Improvements in Sliding and Swinging Metal Racks Utilizable in Trunks, Cupboards, Shop Windows, Stalls, Etc., of which the following is the specification.

The present invention relates to certain new and useful improvements in movable garment racks for use in trunks, cupboards, shop-windows, stalls and the like and has for its primary object to provide a sliding and swinging metal rack of that type of very simple construction, which can be readily manufactured at low cost and which is of high efficiency in use.

Another object of the invention is to provide a sliding and swinging rack of that type so designed and constructed as to readily permit clothes or similar articles in the trunk, cupboard, stall or other receptacle to be hung and to be readily taken therefrom either one by one or altogether at will.

With these and other objects in view as will appear hereinafter the invention consists of certain novel features of construction, combination and arrangement of parts and members as will be hereinafter described in detail and particularly set forth in the appended claim, reference being had to the accompanying drawings and to the characters of reference thereon which form a part of this application.

This metal rack is constituted by two juxtaposited iron members or rails: a stationary rail and a movable rail united together by a bolt which may slide in an elongated slot formed in the stationary rail. The latter is secured, as by screws, against the internal wall—which may be vertical or horizontal—of a trunk, cupboard, shop-window, stall or other receptacle or else against an internal stationary wall such as a room partition. The other or movable rail is arranged relatively to the stationary rail so as to freely slide outwardly adjacent thereto and thus it may be brought to a position in which it protrudes out of the trunk, stall or other receptacle. When the bolt uniting both rails has reached the outer end of the slot it becomes possible to swing the movable rail thereabout and position it at right angles to the stationary rail, this perpendicular and protruding position of the said movable rail permitting ready access to the clothes or other articles supported on the hangers hanging from the said rail.

Both rails may be shaped as inverted U, or else the stationary rail may be a plain plate or a right angled V-shaped plate so as to be easily secured, according to requirements, either against a horizontal wall or against a vertical wall, in which latter case the movable rail is folded on itself so as to embrace the stationary rail and slide along thereto.

In the accompanying drawings are represented several constructional forms of this improved rack.

Figure 1 is a plan view showing both rails juxtaposited in parallel relation, in the positions which they occupy at rest when accommodated within a trunk or cupboard.

Figure 2 is a longitudinal elevation of the two rails arranged in parallel relation.

Figure 3 is an end view of the two rails, the stationary rail having the shape of a double square.

Figure 4 is a plan view of the whole rack, the movable rail being positioned at right angles to the stationary rail, such relative positions being the ones which they occupy when the movable rail and the clothes or other articles carried thereby have been brought opposite the door of the trunk or cupboard.

Figure 5 is a plan view of a sliding and swinging metal rack according to the invention, whose stationary rail is constituted by a plain plate, the movable rail being positioned at right angles thereto, as in Figure 4.

Figure 6 is an edge view of the rack represented in Figure 5.

Figure 7 is a plan view of a sliding and swinging rack whose rails are both of U-shape, the movable one being positioned at right angles to the stationary one, assuming said movable rail has been drawn out opposite the door of the trunk.

Figure 8 is a vertical section of the slid-

ing and swinging rack represented in Figure 7, both rails being arranged in parallelism, the movable one being bolted in position in order to be parallel to a vertical wall of a trunk or cupboard.

Figure 9 illustrates the way of securing such a sliding and swinging rack as the one shown in Figure 7 on either sides of a vertical wall.

The sliding and swinging rack is essentially constituted by two juxtaposited rails united by a pin or bolt 1. The rail 2 is stationary whilst the rail 3 is movable.

Referring first to the constructional form shown in Figures 1 to 4, the stationary rail 2 is constituted by a flat sheet of iron folded twice at right angles; it comprises two parallel portions or wings 2 and 2^a connected by a perpendicular portion or web 2^b. The wing portion 2 is pierced with a plurality of holes c to accommodate the shanks of securing screws or bolts that serve to secure the rack at the desired position, for instance underneath a shelf (see Figure 3). Said stationary rail 2 is formed longitudinally in the middle of its width with an elongated slot 4 extending from the neighbourhood of one of its ends unto approximately the middle of its length.

The movable rail 3 is of equal length as the stationary rail. It is constituted by a metal plate having a width substantially equal to twice the width of the stationary rail 2; such plate is folded on itself in the middle of its width so as to form two parallel branches 3 and 3^a separated by a distance slightly superior to the thickness of the stationary rail 2. The latter is accommodated between the branches 3 and 3^a of the movable rail. Both extremities of the branch 3 are bent perpendicularly to their main plane, to the opposite side of the adjacent branch 3^a so as to form two parallel cheeks 5; each of these cheeks is bored with a circular aperture of equal diameter. These apertures are provided to receive a hollow tube 6 which is arranged parallel to the plate 3. That tube is rigidly secured in position in the cheeks 5 owing to its ends being hammered as at 7 to form outer flanges. From the said tube 6 are hung the cloak-hangers of usual shape and construction.

The bolt 1 passes through the slot 4; it is maintained therein by a split pin 8 (see Fig. 3) underneath the branch 3.

When pulling the extremity of the movable rail 3 to draw it out of the trunk, cupboard or other receptacle, the bolt 1 slides in the slot 4 and when it has reached the end of the said slot, it then suffices to swing the said movable rail, which has just been thus slidden, about the bolt 1 to bring it in a position perpendicular to the one of the stationary rail 2, as represented in Figure 4. In order to facilitate such swinging motion, the upper branch 3 of the movable rail is cut with a V-shaped notch k (see Fig. 1) in line with the web 2^b of the stationary rail, such web 2^b being similarly notched at j from the level of the wing portion 2 and over a height slightly greater than the thickness of the branch 3^a.

Referring now to the modified constructional form represented in Figures 5 and 6, the stationary rail 2 is merely constituted by a wide plain sheet of iron, the width of which is equal to twice the width of the wing portion 2 shown in Figures 1 to 4. The longitudinal slot 4 is only formed on one half of the width of the said plain sheet, its other half being pierced with holes c through which the screws used to secure it underneath a shelf such A may pass. In order to set such plain rail 2 at a certain distance apart from such shelf A, a wooden plank d of sufficient thickness to prevent the head of the bolt 1 from contacting with said shelf is inserted between the lower surface thereof and the said plain rail 2. The corners i of this stationary rail 2 are rounded and the notches k and j can be spared.

Referring now to the modified constructional form of rack represented in Figures 7, 8 and 9 the bracket is constituted by two U shaped rails 2 and 3 the channel-like portions of which engage or overlap each other and having their horizontal branches juxtaposited. Such rails are assembled in the middle of their length by a bolt 1 going through said horizontal branches. The vertical branch of the stationary rail 2 may be secured against the inner vertical wall B of a trunk or against the vertical upright B of a cupboard by means of screws or bolts h, as clearly shown in Figure 8. The horizontal branches of the stationary rail 2 are cut longitudinally in the middle of their width with a slot 4 extending from the neighbourhood of the extremity of such rail that corresponds with the open part of the trunk, cupboard or other receptacle unto the middle of the length of the said rail 2. The movable rail 3 has a height slightly superior to the height of the stationary rail 2 so that its branches assume an outer position with relation to it and close to the horizontal branches of said stationary rail. The horizontal branches of the said movable rail 3 have a width equal to the one of the stationary rail 2, said width extending as far as a position slightly beyond the uniting bolt 1; beyond such position the branches 3^b are narrower so as to completely unmask the slot 4. At both extremities of said movable rail, the metal constituting same is bent at right angles so as to form cheeks 5 which, in the vicinity of their free ends,

carry a rounded tube 6 the open ends of which are hammered on to the outer face of such cheeks 5 to form slight flanges which maintain said tube in rigid position. From that tube 6 which, as clearly shown in Figure 7, is parallel to the main portion of the movable rail hang the cloak-pegs.

From the above detailed description of the invention, it will be quite apparent that the same provides simple constructions of sliding and swinging brackets for use in trunks, cupboards, shop-windows, stalls and the like possessing many advantages in use.

It will be understood that some changes might be made in the arrangement and combination of the various parts and members as well as in the details of the construction of the same without departing from the scope of the present invention as set forth in the foregoing specification and as defined in the appended claim. Hence, the invention is not limited to the exact arrangements and combinations of the various parts and members as described in said specification, nor is it confined to the said parts as illustrated in details in the accompanying drawings.

What I claim and desire to secure by Letters Patent is:—

A garment rack for use in trunks, cupboards, shop-windows, stalls and like receptacles, comprising a stationary angle plate having a web and winged portions extending in opposite directions from the web, the free wing portion of said stationary plate having a longitudinal elongated slot extending over substantially one-half of its length; a movable U-shaped member arranged astride of said free wing and provided with a transverse notch substantially midway of one limb thereof, and a bolt extending through both limbs of the movable plate and movable in said slot of the free wing of the first named plate and enabling said movable member to be moved longitudinally of the first named plate and also to be swung with respect thereto.

In testimony whereof I have signed my name to this specification.

MARCEL BOUCHON.