Sept. 9, 1930. E. V. HUGHES 1,775,491

CABINET DOOR MOUNT

Filed May 2, 1929

Fig. 2.

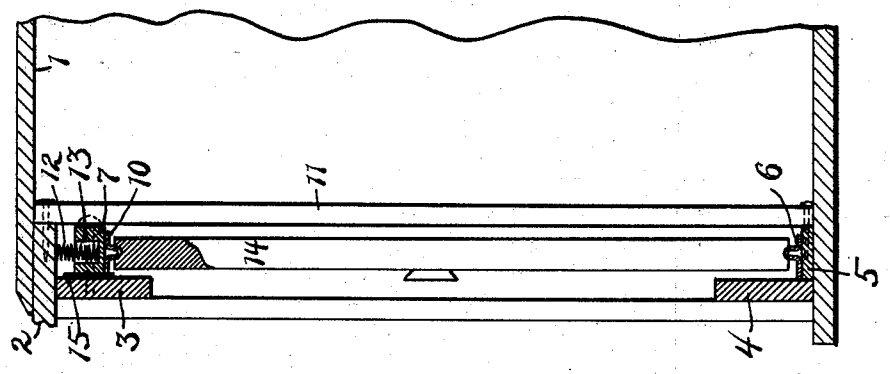
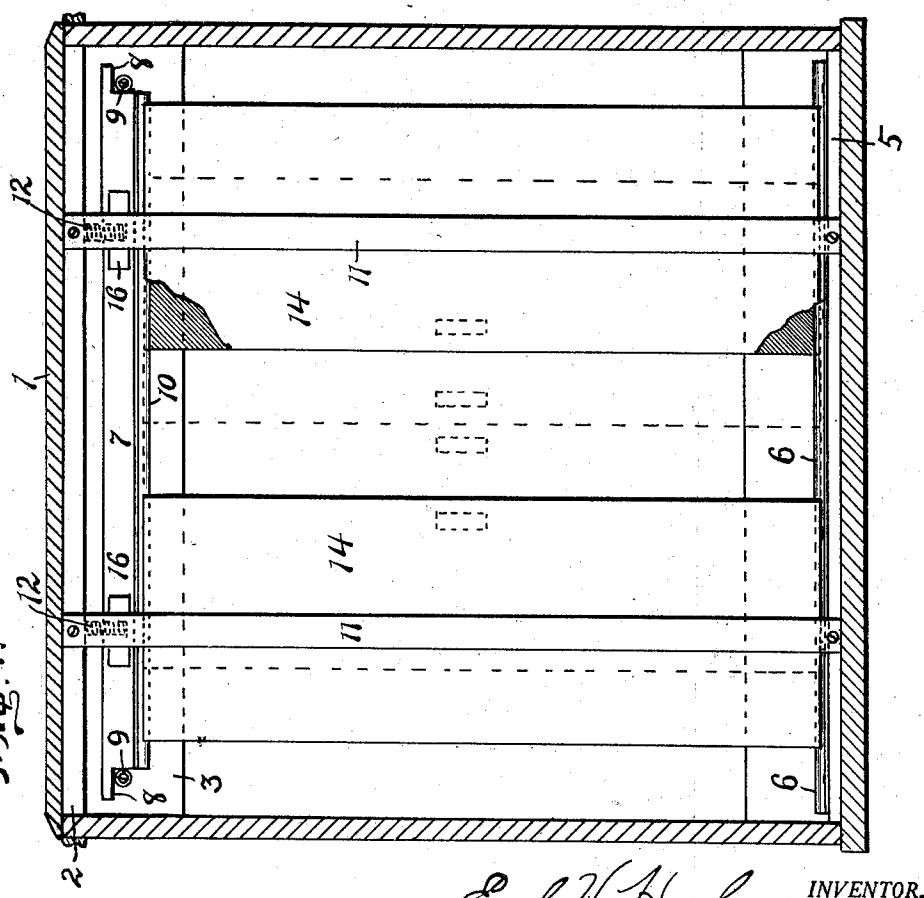


Fig. 1.



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UNITED STATES PATENT OFFICE

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CABINET-DOOR MOUNT

Application filed May 2, 1929. Serial No. 359,787.

This invention relates to improvements in cabinet door mounts, particularly for radio cabinet doors that are arranged to have sliding movement. The object of the invention is to provide support for sliding doors in a radio cabinet by means of which the guides for the doors are held firmly in contact with the ends thereof in such manner as to obviate trembling or vibration of the doors that occurs because of sound produced by the radio apparatus housed in the cabinet.

Ordinarily, the sliding doors of radio cabinets, because of wear between the guides and the doors positioned therein, or conditions that arise through climatic changes, such as shrinking, swelling, or warping of the cabinet or the doors therefor, become loose in their mounts and tend to vibrate noisily when the radio appliance is operated, or become jammed between their guides which hinders their opening and closing movements. The objects of the present invention contemplate a structure in which these tendencies are obviated.

These objects are accomplished by the construction illustrated in the accompanying drawings, in which:—

Fig. 1 is an elevation showing a rear view of a pair of sliding doors installed in a cabinet in which the invention is embodied, parts being in section; and

Fig. 2 is a fragmentary view projected from Fig. 1, the view being shown in section.

The invention consists of a cabinet 1 having a door frame 2, there being fixed cross-pieces 3 and 4 in the frame respectively at the top and bottom thereof. In the bottom of the cabinet back of the cross-piece 4 is fixed a cleat 5 upon which is positioned a guide-rail 6 spaced from and in parallel relation with the cross-piece, and in the upper part of the cabinet back of the cross-piece 3, is disposed a loose beam 7 having a jog 8 in each end thereof, through which jogs extend corresponding pins 9 that project from the cross-piece 3, by means of which downward movement and end play of the beam are limited. On the lower face of the beam 7 is secured a rail 10 that extends parallel with the rail 6. A pair of slats 11 are disposed vertically in the cabinet adjacent each end of the beam 7, their ends being secured respectively to the top of the frame 2 and the cleat 5 at the bottom of the cabinet, between which slats and the cross-piece 3, said beam 7 has vertical play that is restrained by compression springs 12 which are seated in corresponding cavities 13 in the beam and bear against the frame 2.

Between the rails 6 and 10 are positioned a pair of doors 14 that are grooved at their ends to receive said rails. The height of the doors is such that when positioned between the rails, the beam 7 is thereby elevated from the pins 9 in opposition to the pressure of the springs 12 so that the rail 10 secured to said beam bears downwardly upon the upper ends of the doors. Upon the inner face of the cross-piece 3 are secured pads 15 of felt, and upon the rear face of the beam 7 are secured similar pads 16, which pads are so disposed as to prevent contact of the beam 7 with the cross-piece and the slats between which it is confined, whereby rattling of the beam is obviated. The space between each cross-piece 3—4 and the slats 11 is greater than the thickness of the doors, and said doors are movable between the rails, longitudinally with respect to the latter without having contact with said cross-pieces or slats. The doors are supported solely by the rails 6 and 10 between which they have sliding movement in a common plane toward and from each other, and are held yieldingly therebetween through action of the springs 12 which bear downwardly upon the beam. In this manner the doors are held in position under constant pressure applied endwise thereto whereby vibrations thereof are eliminated or absorbed.

In operating the invention the doors are opened or closed by sliding them apart or toward each other while held between the rails, to the desired positions, where they are held frictionally owing to the downward pressure of the springs upon the beam. Endwise movement of the beam during the sliding action of the doors is prevented by the pins 9 that extend into the jogs of the beam. The doors may be easily removed from their mount by first sliding them singly into the

space between the slats 11 and applying upward pressure so as to elevate the beam 7 sufficiently to permit removal of the door from between the rails. The beam 7, after removal of the doors, is retained in its place by the pins so that removal of the doors is not accompanied by dislodgement of the beam and its springs.

What I claim is:—

1. In a door mounting for a cabinet, a horizontal cross-piece in the cabinet, slidable doors in the cabinet each arranged in the same plane, a horizontal guide rail fixed in the cabinet having means engaging one of the ends of each of the doors, a horizontal beam in the cabinet common to each of the doors and having means engaging the opposite end of each of the doors, means to mount the beam for bodily vertical movement, spring means for resiliently holding the beam engaged with each of the doors in all positions thereof, a vertical fixed slat for each door in the cabinet, pads secured to the rear side of the beam and slidably engaged with the respective slats, and pads secured to the rear face of said cross-piece and slidably engaged with the front side of the beam.

2. In a door mounting for a cabinet, slidable doors each arranged in the same plane in the cabinet, a horizontal guide rail fixed in the cabinet having means engaging one of the ends of each of the doors, a horizontal beam engaging the opposite end of each of the doors, means to mount the beam for bodily vertical movement, spring means for resiliently holding the beam engaged with each of the doors in all positions thereof, independent supports on opposite sides of the beam to guide same in its said vertical movements, and pads at the front and at the rear of the beam between same and each of said independent supports to absorb lateral vibrations of the beam.

In testimony whereof I affix my signature.

EARL V. HUGHES.