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PRESSURE APPLYING DEVICE

Filed Feb. 23, 1960

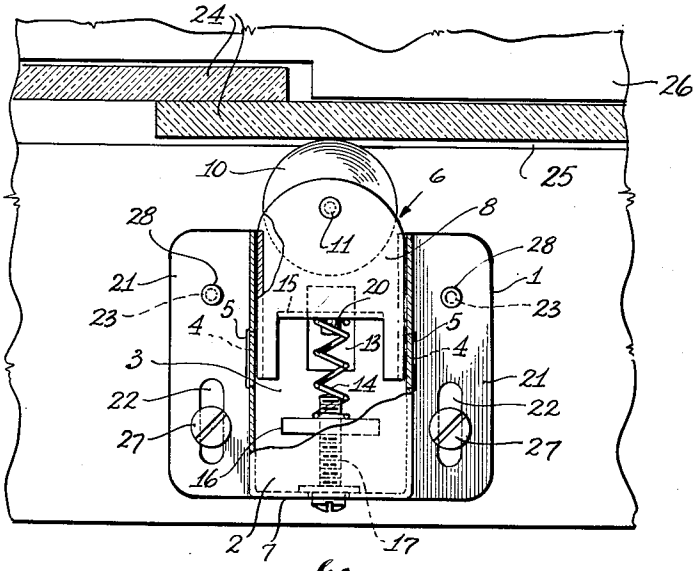


Fig. 1.

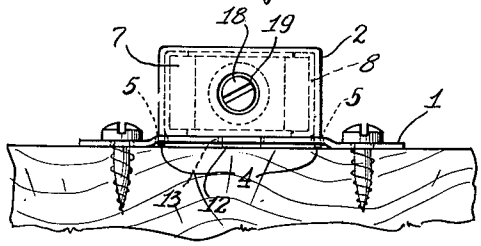


Fig. 3.

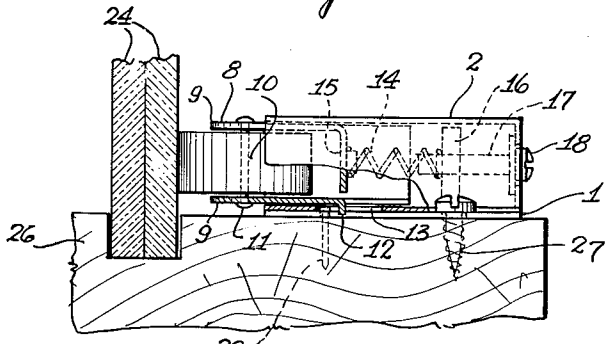


Fig. 2.

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PRESSURE APPLYING DEVICE

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1 Claim. (Cl. 16—91)

This invention relates to a pressure applying device for applying sealing pressure to closure panels such as windows, doors, and the like.

In sliding panel construction in building structures, such as the sliding glass panels of windows, it is desirable practice to provide means for resiliently urging the panel into snug fitting engagement with a wall of the groove in which it is slidably mounted in order to prevent the occurrence of drafts and to avoid rattles and the like.

It is an object of this invention to provide a pressure applying device for a sliding panel which is of simple, inexpensive construction, which maintains the panel in substantially draftproof relation to its mounting structure, which holds the panel substantially free from vibration, and which readily permits normal sliding movement of the panel.

The invention will be described with reference to the accompanying drawing, in which:

FIGURE 1 is a plan view of a device in accordance with the invention in association with a sashless window structure,

FIGURE 2 is a bottom plan view of the device, and

FIGURE 3 is an end elevation of the device.

The device of the present invention comprises a base plate 1 and a channel-shaped member 2 mounted thereon. The member 2 forms with the central portion of the base plate a rectangular housing 3. Conveniently, the member 2 may be fixed to the plate 1 by means of edge tabs 4 on member 2 which project through complementary openings 5 in the base plate and the ends of which are upset. The housing 3 has an open end 6, its opposite end being closed by a wall 7.

Slidably mounted in housing 3 is a bracket 8 having a pair of opposed ears 9 at one end thereof and in which a roller 10 is rotatably carried as by means of a pin 11. Sliding movement of the bracket is limited by means of a lug 12 carried by the bracket and projecting through a slot 13 in the base plate portion of the housing. The roller-carrying portion of the bracket projects outwardly through the open end 6 of the housing and a peripheral portion of the roller is disposed outwardly of the bracket ears 9 and of the housing 3 in all positions of the bracket with respect to the housing.

Means are provided for resiliently urging the bracket and roller in an outward direction and comprises a spring 14 in the housing having one end engaging a flange 15 fixed to the bracket and its other end engaging a nut 16 carried by a screw 17. Screw 17 has a slotted head 18 seated in an opening 19 in housing end wall 7 whereby the screw may be rotated from outside the housing by applying a screw driver thereto. The spring 14 is retained in

position at one end by a stud 20 carried by the flange 15 and at its other end by the end portion of screw 17. The nut 16 is restrained from rotation by engagement with the walls of the housing.

The lateral portions of base plate 1 constitute mounting flanges 21. Each flange is preferably provided with a slot 22 and a hole 23.

FIGURE 1 illustrates one mounting installation of the device by way of example. A pair of sashless window panels 24 are shown as slidably mounted in a groove 25 in a frame 26. The device of the present invention is mounted on the frame 26 with roller 10 in pressure-applying engagement with one of the panels 24 thereby to press the panels against one wall of the groove 25. In installing the device, screws 27 are driven through the slots 22 into the frame and the device moved into engagement with the panel 24 and the bracket and roller retracted into the housing until pressure is applied to the panel by means of the spring 14. When the device has been placed in desired relation to the panel, the screws 27 are tightened to hold the device in such position. Finally, the device is positively locked in position by driving nails 28 through the holes 23 into the frame. The tension of the spring 14 is then adjusted, if required, by applying a screwdriver to the screw 17.

There has thus been provided a pressure applying device which may be readily and positively installed in operative position and which may be conveniently adjusted while in such operative position.

We claim:

A pressure applying device for sliding panels comprising a rectangular housing having side walls, an open end, an end wall closing the opposite end thereof, and laterally projecting mounting flanges, a bracket slidably mounted in said housing, means limiting the sliding movement of said bracket, a roller carried by said bracket and having a portion of its periphery projecting through said open end of said housing and lying outwardly thereof, resilient means urging said bracket and roller in a direction outwardly of said housing comprising a spring in said housing having one end seated on said bracket, a screw having a head seated on said housing end wall and a nut on said screw, said nut being in engagement with the other end of said spring and constituting a seat therefor, said nut having engagement with said side walls of said housing to prevent rotation of said nut, said end wall having an opening therein and said screw head having a slotted portion projecting through said opening, said slotted portion being accessible exteriorly of said housing for application of rotative motion thereto to rotate said screw and cause said nut to travel therealong and thereby adjust the tension of said spring.

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