June 14, 1927. 1,631,979

P. J. PICCIRILLI

DOOR BRACE

Filed May 16, 1925

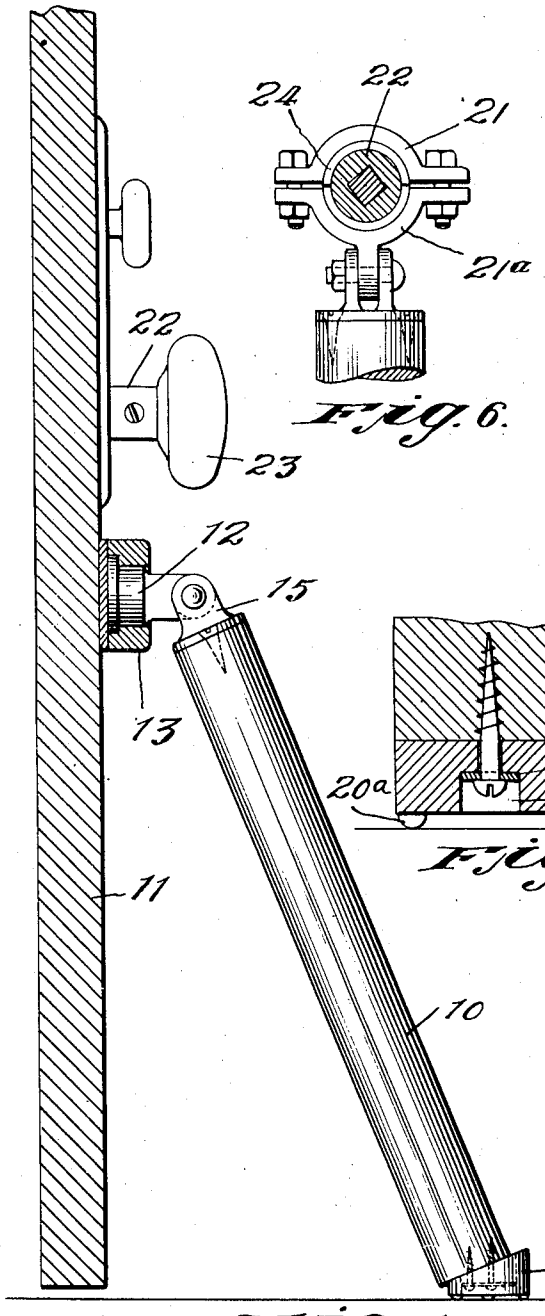


Fig. 1.

Fig. 6.

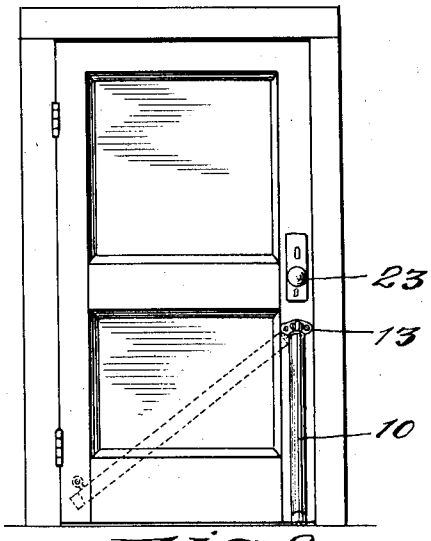


Fig. 2.

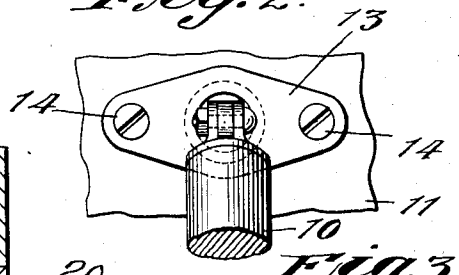


Fig. 3.

Fig. 5.

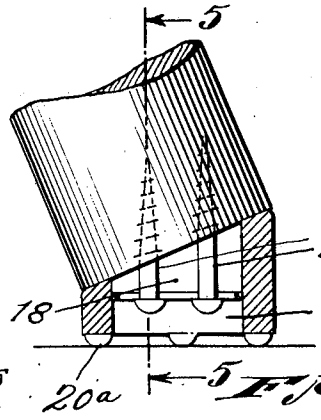


Fig. 4.

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UNITED STATES PATENT OFFICE.

PASQUALE J. PICCIRILLI, OF NEW YORK, N. Y.

DOOR BRACE.

Application filed May 13, 1925. Serial No. 30,679.

My invention relates to a door brace. In general, the object of my invention is to provide a brace for a door which shall be positive acting, economical of space, both in operative and inoperative positions, and simple to manufacture.

My invention will be best understood from the following detailed description taken with the annexed drawing, in which:

Figure 1 is a view in side elevation of a preferred form;

Figure 2 is a view similar to Figure 1 but seen from the front;

Figure 3 is a detail view of the top portion of the brace;

Figure 4 is an enlarged view partly in section of the lower end of the brace;

Figure 5 is a view in section taken along line 5—5 of Figure 4; and

Figure 6 shows an alternative means for attaching the brace to the door.

In the above drawings 10 denotes the bracing rod which is attached to the door 11 preferably by means of a universal joint consisting of a flanged cylindrical member 12 rotatable in a socket member 13 which is secured to the door by means of wood screws 14. Cylindrical member 12 is pivoted to rod 10 by means of a hinge member 15 secured to the top of rod 10.

For insuring a more positive locking action of the brace I have provided a special means consisting of a wedge member 16 which is slidably held to the bottom of rod 10, suitably by means of a pair of screws 17 in rod 10, the portions of the screws projecting therefrom engaging a slot 18 in the wedge 16. Slot 17 communicates with the enlarged slot 19 to accommodate the heads of screws 17. Preferably a bearing surface is provided for the heads of screws 17, in the form of a metal lining 20 secured to the bottom of slot 19 in order to protect from injury the material of which the wedge is made.

I also preferably provide pegs 20ª of resilient material, as for example rubber, between the floor and the wedge.

In use, the door having been closed, the rod 10 is dropped into position with wedge 16 outwardly protruding slightly as shown in Figure 1. The wedge is then driven home by engaging same with the foot whereupon the rod 10 is jammed securely between the wedge 16 and the door 11. In all the prior devices with which I am familiar, the bracing rod does not jam until after the door has been opened an appreciable amount. In my improved device, on the other hand, the brace is jammed between the door and the floor when the door is in the closed position thereby preventing it from being opened even a slight amount. Moreover, by means of this construction the angle of the rod 10 with the door 11 may be relatively small. This enables the rod to act as a column because the reaction on the rod is very nearly coincident with the axis thereof. In addition, by having such slight inclination, the rod 10 is less in the way and makes a more sightly appearance. When it is desired to release the brace, the wedge 16 may be thrust outward from behind with the foot. When the brace is not being used, due to the universal joint connecting it with the door it can be moved to one side, the lower end latched to the door as shown in dotted lines of Figure 2.

In Figure 6 I have shown an alternative means for securing the brace to the door. As shown, I have provided a collar consisting of separable sections 21, 21ª which engage the neck 22 of the door knob 23. Preferably I line the collar sections 21 and 21ª by means of a resilient material of suitable composition such as rubber whereby injury to the door knob is prevented. This construction provides lateral motion of the brace similar to the cylinder and socket arrangement of Figure 1.

It will be apparent from the foregoing that I have provided a simple yet effective device for the purpose described and which may be cheaply and easily manufactured. It will also be understood that various changes may be made in the illustrated device without departing from the spirit of the invention or the scope of the claims.

What I claim is:

1. A door brace comprising a bracing rod, means for pivotally attaching same to a door, a wedge member between the end of

the rod and the floor when the rod is in operative position, said wedge slidably engaging the said rod to jam same between the wedge and door.

2. A door brace comprising a bracing rod, means for pivotally attaching same to a door, and a wedge insertible to act against an end of said rod and jam the rod when same is in operative position, and means to position said wedge.

In testimony whereof I have affixed my signature to this specification.

PASQUALE J. PICCIRILLI.