May 20, 1924. 1,494,403

G. J. AYRES

DOOR FASTENER

Filed June 30, 1922

Fig. 1.

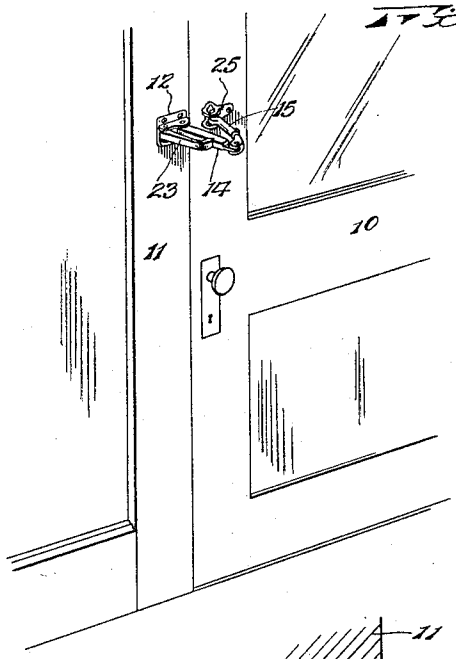



Fig. 3.

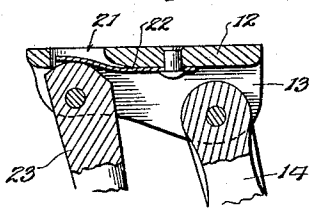



Fig. 2.

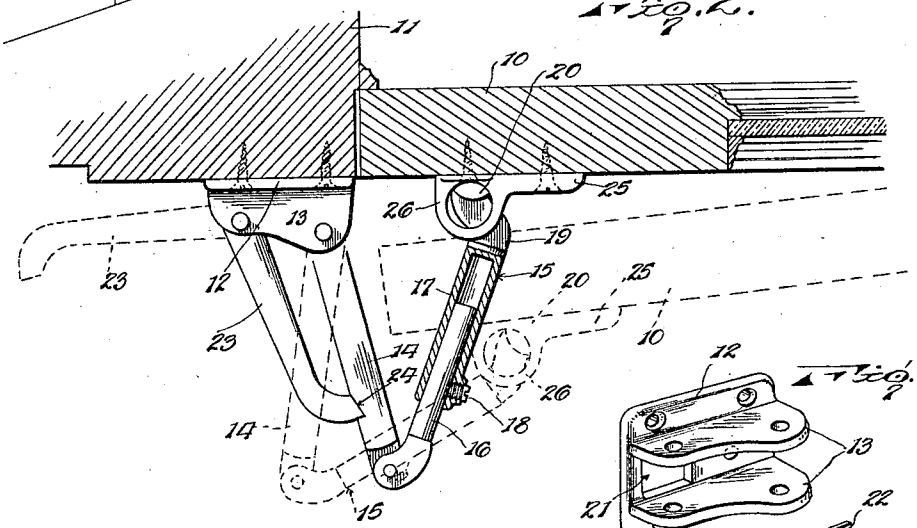
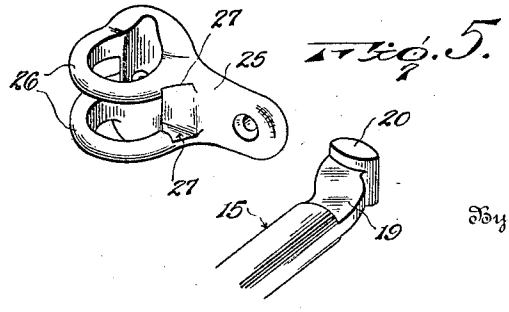



Fig. 4.




Fig. 5.




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# UNITED STATES PATENT OFFICE.

GEORGE J. AYRES, OF NEW YORK, N. Y.

## DOOR FASTENER.

Application filed June 30, 1922. Serial No. 571,877.

*To all whom it may concern:*

Be it known that I, GEORGE J. AYRES, citizen of the United States, residing at New York city, State of New York, have invented certain new and useful Improvements in Door Fasteners, of which the following is a specification.

This invention relates to an improved door fastener and seeks, as one of its principal objects, to provide a fastener which will permit a door to be partly opened while, at the same time, the fastener will prevent the door from being fully opened.

The invention has as a further object to provide a fastener which may also function for locking the door closed and wherein shaking or rattling of the door cannot serve to release the locking dog employed.

And the invention has as a still further object to provide a fastener which may be adjusted to suit the mounting of different doors.

Other and incidental objects will appear hereinafter.

In the drawing:

Figure 1 is a perspective view showing my improved fastener applied.

Figure 2 is an enlarged sectional view showing the manner in which the fastener is locked for securing a door closed and illustrating, in dotted lines, the manner in which the fastener may permit the door to be partially opened,

Figure 3 is a detail sectional view through the base plate of the device,

Figure 4 is a perspective view showing the base plate in detail, and

Figure 5 is a detail perspective view of the door plate of the device, this view also showing the free end of one of the arms of the fastener.

Referring now more particularly to the drawing, I have conventionally illustrated a door at 10 and a door jamb at 11. In carrying the invention into effect, I employ a base plate 12 which, as shown in Figures 1 and 2, is screwed to the door jamb, and rising from the base plate are parallel longitudinally directed flanges 13. Pivoted at one end between said flanges is an arm 14 and pivoted upon the opposite end of said arm is a coacting arm indicated as a whole at 15. This latter arm is, as best seen in Figure 2, formed of telescopic sections 16 and 17, the section 17 being provided with a barrel slidably receiving the section 16 therein and threaded through the wall of said barrel is a set screw 18 securing the sections together. At its outer end the section 17 is provided with a flattened offset shank 19 on which is formed a toe 20 preferably elliptical in cross section, the toe being disposed transversely of the shank and, at its ends, overhanging the shank. Formed in one end of the base plate 12 between the flanges 13 is an opening 21 and riveted or otherwise secured at one end to said plate is a flat spring 22, the free end of which overhangs said opening. Pivoted at its inner end between the adjacent ends of said flanges is a locking dog 23 rounded at its adjacent terminal, as best shown in Figure 3, to coact with the free end of said spring and formed in the outer side edge of the arm 14 is a notch 24 to receive the free end of the dog. Screwed upon the door 10 near the outer vertical edge thereof is a door plate 25 from one end of which rise parallel eyes or loops 26 and formed in the confronting edges of said loops at the upper end of the plate are horizontally disposed slots 27 adapted to freely receive the toe 20 of the arm 15 therethrough to engage within the loops.

As will now be seen in view of the preceding description, when the arm 15 is engaged with the door plate 25, as best shown in Figure 2, the dog 23 may, as illustrated in dotted lines, be swung to inactive position when the door may, as also shown in dotted lines, be partially opened. At the same time, the device will serve to prevent the door from being fully opened. However, should it be desired to lock the door closed, the dog 23 is swung to engage at its free end in the notch 24 of the arm 14 when the dog will function to prevent pivotal movement of the arm so that the device will thus form a rigid structure extending between the door and door jamb blocking opening movement of the door. The spring 22 will, of course, frictionally coact with the dog for holding the dog engaged with the arm and, in this connection, particular attention is directed to the fact that the dog lies in the path of travel of the arm when the door is opened. Accordingly rattling, shaking or pushing upon the door can only serve to advance the arm into tighter engagement with the dog. Accordingly, such rattling, shaking or pushing upon the door cannot serve to dislocate or release the dog to permit the door to be partially opened. The device will thus

provide an effective and secure lock for the door. To release the door, the dog is swung to inactive position when the arm 15 is grasped and shifted to ride the toe 20 through the slots 26 out of engagement with the loops 26 of the door plate when the arm 15 as well as the arm 14 may be swung to one side upon the base plate 12. In some instances, a door does not, when closed, rest flush with the door jamb and for this reason, the arm 15 of the device is adjustable in length to meet such a condition so that, as will be seen, the device is accordingly well adapted for a wide range of use.

Having thus described the invention, what is claimed as new is:

1. A door fastener including a base plate, a door plate, pivotally connected arms one swingingly mounted upon the base plate and the other engageable with the door plate, one of said arms being formed of sections and one of said sections being provided with a barrel slidably receiving the other section of the arm, and means upon the barrel adjustably connecting the sections.

2. In a door fastener, the combination with a base plate for attachment to a door jamb, a door plate for attachment to a door, and hingedly connected arms one swingingly mounted upon said base plate and the other engageable with the door plate, said first mentioned arm being provided at its rear edge with a notch, of a dog pivotally mounted at one end upon the base plate in the path of travel of said first mentioned arm when the door is opened and engageable at its opposite end in said notch blocking movement of said first mentioned arm toward the dog whereby pressure applied against the door for opening the door will tend to compress the dog.

In testimony whereof I affix my signature.

GEORGE J. AYRES. [L. S.]