

May 10, 1927.

S. J. SMALL

1,627,752

DOOR FASTENER

Filed Sept. 22, 1925

Fig. 1.

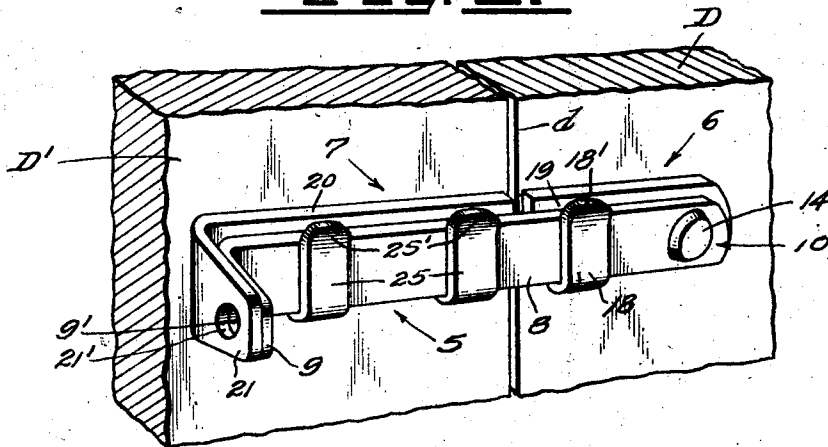


Fig. 2.

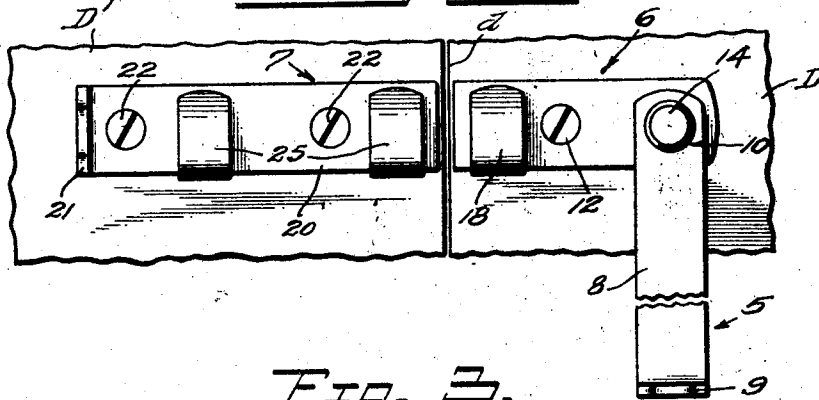


Fig. 3.

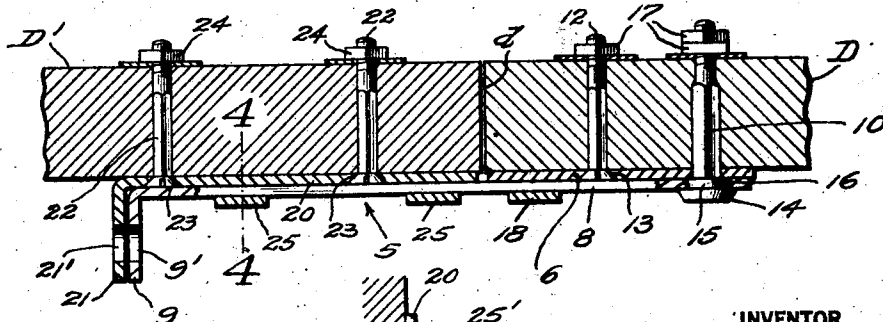
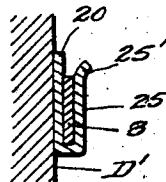


Fig. 4.



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DOOR FASTENER.

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This invention relates to door and gate fastenings.

The object of the invention, generally, is the provision of a combined hasp and latch which is especially suitable for use as a fastener for a pair of doors operating in a single doorway of a garage or the like.

A more specific object is to provide a fastening device of this character wherein the parts thereof are so interconnected and arranged as to hold in a closed position a pair of doors in the plane of each other and in a manner to effectually prevent any rattling or vibration of the doors.

Another object is to provide a door fastening constructed and arranged to conceal the means which is employed to secure the same to the doors, thereby preventing the removal of the fastening from the doors when closed.

Further objects and advantages of the invention are strength, durability and inexpensive construction.

The invention consists in the novel construction, adaptation and combination of parts hereinafter described and claimed.

In the accompanying drawing,—

Figure 1 is a perspective view of portions of a pair of doors with devices embodying my invention applied thereto and represented in engaged relation; Fig. 2 is a front elevation of Fig. 1 with the hasp illustrated in its disengaged position; Fig. 3 is a longitudinal horizontal section of Fig. 1, parts being shown in plan; and Fig. 4 is a detail sectional view on line 4—4 of Fig. 3.

In said drawing, the reference characters D and D¹ represent portions at the free ends of companion doors which are swingingly connected by hinges (not shown) to the casing of a doorway such as employed in a garage.

According to the present invention, my improved door fastener is composed of three metal members 5, 6 and 7.

The member 5, or hasp, is in the nature of a bar having a flat portion 8 from one end of which extends at right angles an arm 9.

In proximity of the other end of the portion 8, the hasp is pivotally connected by means of a stud or bolt 10 to an end of the second member 6, hereinafter designated as the backing plate.

This backing plate is secured horizontally to its door D by means of the bolt 10 and

another bolt 12 having a conoidal head fitting within a counter sunk hole 13 (Fig. 3) provided in said backing plate.

The bolt 10, as shown, has a head 14 located in front of the hasp, a cylindrical collar portion 15 fitting in the hasp hole 16 and constituting the pivotal bearing for the hasp; said bearing being of greater diameter than the hole in the plate 6 through which the bolt shank passes. Both of said bolts are screw threaded to receive securing nuts 17 at the inner side of the door. The backing plate 6 is formed, furthermore, to provide in proximity of the door edge a tongue or keeper element 18 extending outwardly from the lower edge of the plate and thence upwardly in front of the latter to afford between the plate and the keeper an opening 19 into which the hasp may be swung from above. The other member 7, hereinafter designated as the receiving plate, is formed with a flat portion 20 and an arm 21 extending at right angles from one end thereof. The receiving plate is secured horizontally to its door D¹ in alignment with the backing plate 6 and is arranged to have its arm element 21 disposed to be adjacent to the arm element 9 of the hasp when the latter occupies the position in which it is represented in Figs. 1 and 3.

The means for securing the receiving plate to the door D¹ consists preferably of screw threaded bolts 22 having conoidal heads fitting into horizontally spaced apart counter sunk holes 23 provided in the plate and cooperating with nuts 24 threaded upon the respective bolts to hold the receiving plate rigidly to its door. Said receiving plate is provided in horizontally spaced apart positions with two tongues or keeper elements 25 to receive the hasp 5.

The keeper elements 18 and 25 are spaced from the respective plates so as to accommodate closely the hasp when in its operating position and, to enable the hasp to be conveniently directed into the openings provided therefor by the keepers, the upper ends of the same are desirably inclined forwardly as at 18¹ and 25¹. The arm 9 of the hasp and the arm 21 of the receiving plate are each provided with a hole, as 9¹ and 21¹, for the shackle of a padlock, not shown.

The operation of my device is as follows: When unemployed the hasp is permitted to hang from its pivot as shown in Fig. 2

permitting the doors to be opened and closed.

Upon closing the doors, the hasp is swung about its pivot and into the spaces between the keepers 18, 25 and the respective plates 6 and 7, thereby securely holding the doors in a plane. A padlock is utilized by inserting its shackle through the arm holes 9¹ and 21¹ of the hasp and receiving members, respectively.

While I have illustrated screw threaded bolts and nuts for securing the members 6 and 7 to the doors, it is apparent that other suitable known means may be used in lieu thereof such, for example, bolts with riveted ends.

Other changes may also be made with respect to the details of construction and I do not wish to be understood as confining myself specifically to the illustrated embodiment of the invention except as limited by the appended claim.

What I claim, is,—

A fastener for a pair of doors comprising, in combination, a backing plate and a receiving member adapted to be secured to the respective doors, said member having at one end thereof a forwardly directed arm provided with an aperture, a hasp, a pivot connecting the hasp at one of its ends with said plate, said hasp having at its other end a forwardly directed arm element provided with an aperture, a keeper provided upon the receiving member and adapted to be engaged by the hasp for coupling the doors, said keeper also serving for supporting the hasp in position to have the aperture of the hasp arm in opposed relation with the aperture of the arm of the receiving member.

Signed at Seattle, Washington, this 16th day of September, 1925.

SYLVESTER J. SMALL.