H. B. ROBERTS.

FASTENING DEVICE.

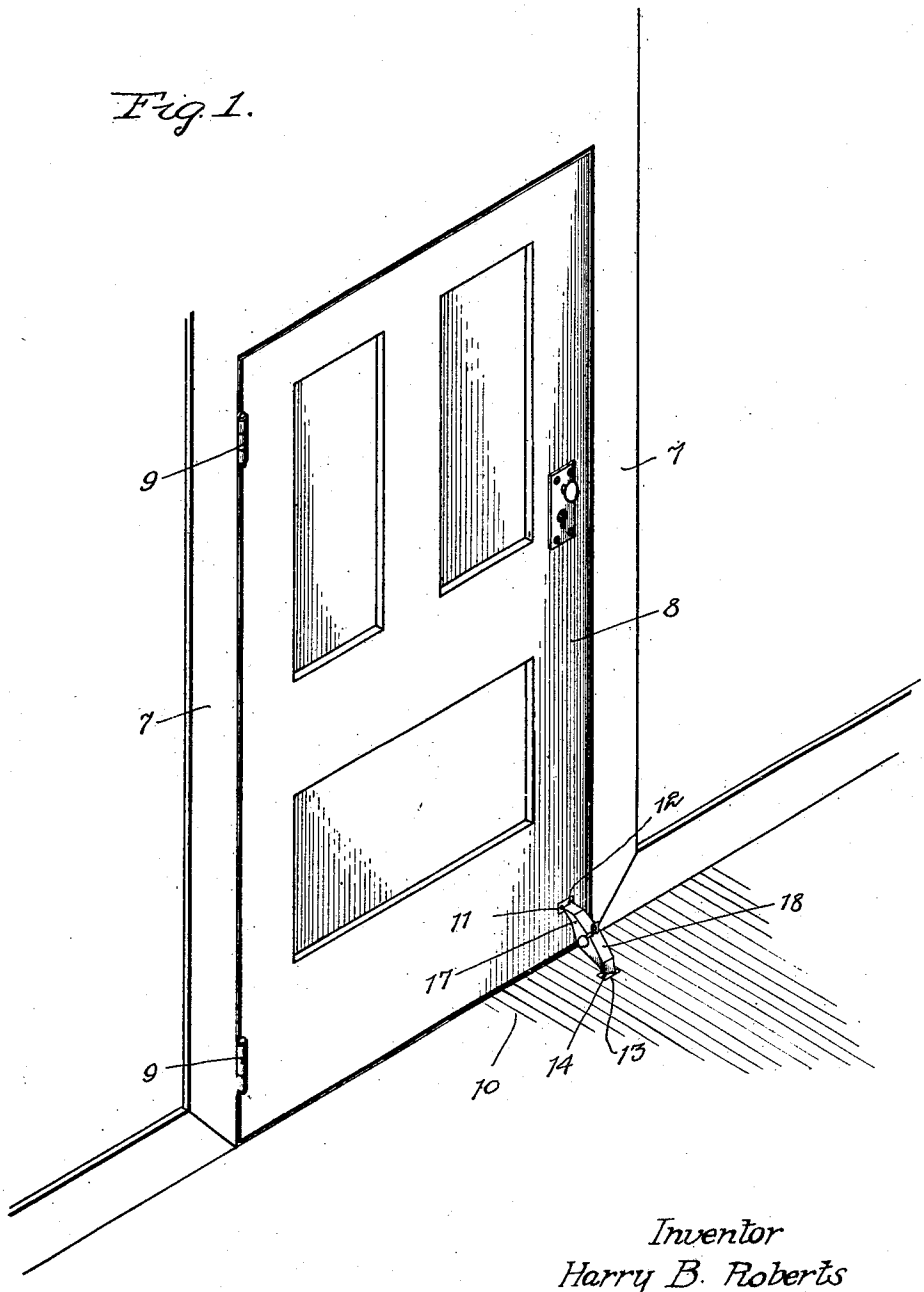
APPLICATION FILED APR. 7, 1916.

1,246,160.

Patented Nov. 13, 1917.

2 SHEETS—SHEET 1.

Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 2.

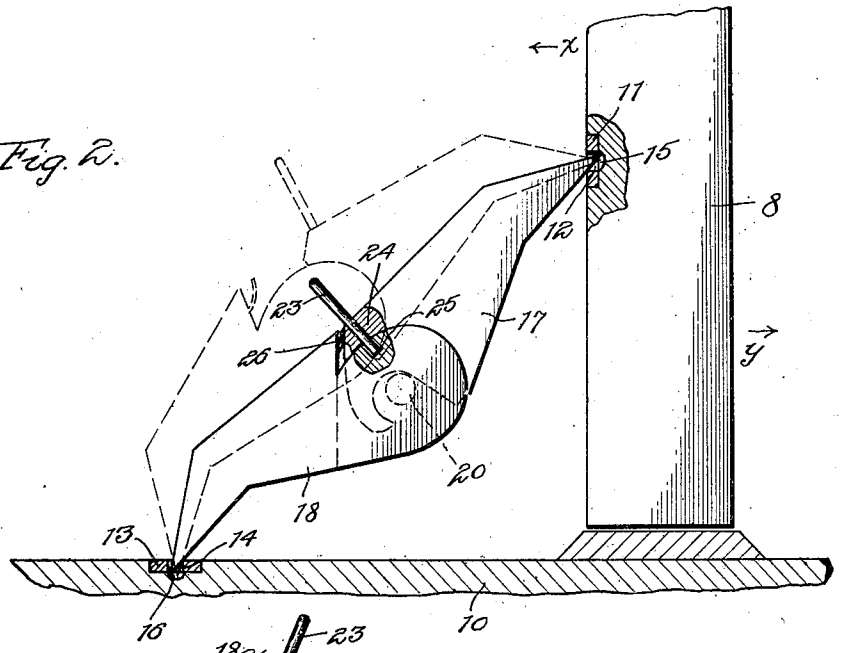
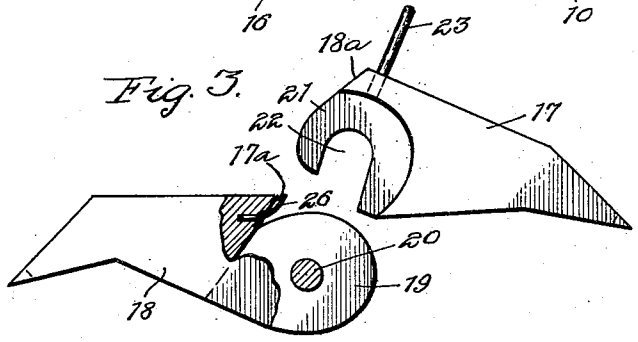


Fig. 3.



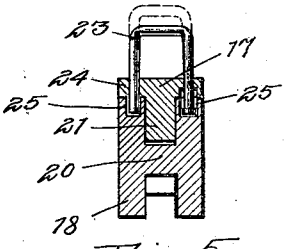
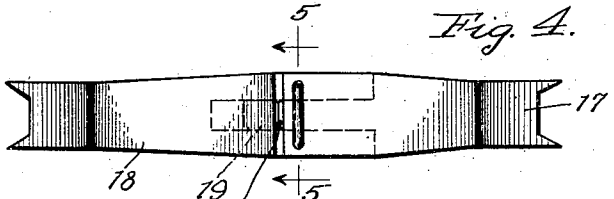


Fig. 5.

Fig. 4.



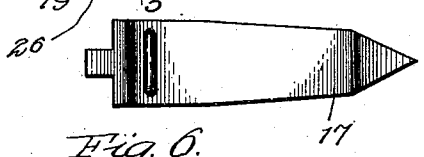


Fig. 6.

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UNITED STATES PATENT OFFICE.

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FASTENING DEVICE.

1,246,160. Specification of Letters Patent. Patented Nov. 13, 1917.

Application filed April 7, 1916. Serial No. 89,554.

To all whom it may concern:

Be it known that I, HARRY B. ROBERTS, a citizen of the United States, residing at Highland Park, in the county of Lake and State of Illinois, have invented a certain new and useful Improvement in Fastening Devices, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to fastening devices for doors, windows, and the like, and its object is to provide a structure which will effectively prevent movement between two parts, such as a floor and a door, and which will be "burglar proof" and of simple and durable construction.

The device of my invention is portable and may be applied to any door, on occasion, either as the only locking means or as a supplementary safety device. Thus it is particularly useful where the door of an apartment is not supplied with a lock or where shrinkage or a disorder of some kind has made the lock useless. The device is thus well adapted for the use of the traveler who may not wish to rely upon hotel door locks while asleep but may well be employed by the average householder to brace any door which would otherwise be protected by nothing better than a key lock or a latch.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the application of the fastener or brace of my invention to a door;

Fig. 2 is an elevation view thereof, parts being broken away to show the interior construction;

Fig. 3 is also an elevational view, showing the two parts of the brace separated;

Fig. 4 is a plan view of the device;

Fig. 5 is a cross sectional view taken on the plane of the line 5—5 of Fig. 4 and looking in the direction indicated by the arrows; and

Fig. 6 is a plan view showing a modification.

Referring first to Fig. 1, it will be seen that the door frame is illustrated at 7, the door 8 being hinged at 9, 9. The floor is indicated at 10.

Toward the free side of the door near the bottom thereof a plate 11, having holes 12, 12 therein, is provided and in the floor, in line with the plate 11, a plate 13, having holes 14, 14 therein is provided. As shown in Fig. 2 these holes are supplemented by small pockets 15 and 16, in the door and floor, respectively, for a purpose which will be understood presently.

Between these two plates the brace is adapted to be disposed. As shown, the brace comprises two parts 17 and 18, each in the form of a double pointed prong. The member 18 has a slot 19, across which the shaft 20 extends, and the member 17 has the tenon 21 which has a slot 22 which takes over the shaft 20, as shown in Fig. 2, and thus the two parts are pivotally joined. They are adapted to engage to complete the brace at the surfaces 17^a and 18^a respectively. As shown in Fig. 2, the prongs of the members 17 and 18, respectively, are introduced into the holes 12 and 14 of the plates 11 and 13, respectively, while the two parts are buckled outwardly, that is, above the line drawn through the opposite points, as indicated in dotted line in the figure referred to. With the prongs thus held in the plates, as described, the central portion of the jointed members is pushed downwardly into the position shown in full lines in Fig. 2, the shaft 20 then lying below the lines drawn through the opposite prong, the action thus being in the nature of a buckle or toggle joint. With the axis of the shaft lying below the buckle line, a positive brace is formed and any effort to open the door 8, in the direction of the arrow x (which is the only way the door can be opened) would result merely in forcing the brace more firmly into the floor and door. Since there are two holes 12 and two holes 14, with corresponding prongs on the members 17 and 18, it is impossible for the brace to swing around or to be forced around into the opposing position where it might be buckled by the opening of the door. Thus it is impossible for a person to introduce a case knife under the door to affect the position of the brace 17 and 18 with any effective results.

As an ancillary feature, I provide precautionary means in the nature of a staple 23 which rides in the portion 24 of the member 17 and is adapted to engage in sockets 25 and 25 in the member 18, as illustrated in Fig. 5, when the two members 17 and 18 occupy the relative position illustrated in Fig. 2, thus forming an absolute lock against the unauthorized buckling of the two members. Thus, when the parts are in the position

shown in dotted lines in Fig. 2, the staple 23 is withdrawn so as to occupy the position shown in dotted line in Fig. 5. When, however, the parts are jammed down into the position shown in full line in Fig. 2, the staple 23 is in line with the sockets 25, 25 and is pushed down into the sockets, as illustrated in full lines in Fig. 5, to form the positive lock.

As a further precautionary feature I provide a small leaf spring 26 set in the member 18 and engaging the member 17, as illustrated in Fig. 2. The idea of this device is to prevent the release of the two members by any possible play in the door. Thus, assuming the staple 23 to be out of use, if the door should have a slight play in the direction of the arrow *y*, it might be possible to shake the door to release the upper prongs from the holes therein. However, with the presence of the spring 26 the member 17 is made to follow the shaking of the door and cannot be released from the openings in which it engages.

In Fig. 6 I have shown a modified form of the member 17 where only one prong is provided instead of two. It will be seen that even in that event the swinging of the brace is prevented by reason of the double prong arrangement invariably on the member 18.

It will be obvious that my brace may be applied to prevent movement between any two parts, such as the two sashes of a window, as well as to prevent movement between a door and a floor. It will also be clear that it is not necessary to employ the plates 11 and 13 but that the door and floor, on the other hand, may themselves be provided with small openings in which the points may engage.

I claim:

1. A fastening device comprising a pair of linked sections, the free ends of which are adapted to impinge upon and engage two objects to be held, the adjacent portions of said sections being provided with shoulders for relative engagement, the juncture of said sections, when the latter are in holding position, being disposed out of alinement with the line of stress between the objects held, means to take up lost motion between said sections, and means engaging through both sections adjacent their junctions to prevent accidental relative movement of the sections when in holding position.

2. In combination, a pair of linked sections, the free ends of which are adapted to impinge upon two objects between which relative movement is prevented, said sections having engaging shoulders adjacent their junction, and a flat spring carried by one of the shoulders to engage the other shoulder and prevent lost motion between the sections.

In witness whereof, I hereunto subscribe my name this 4th day of April A. D. 1916

HARRY B. ROBERTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."