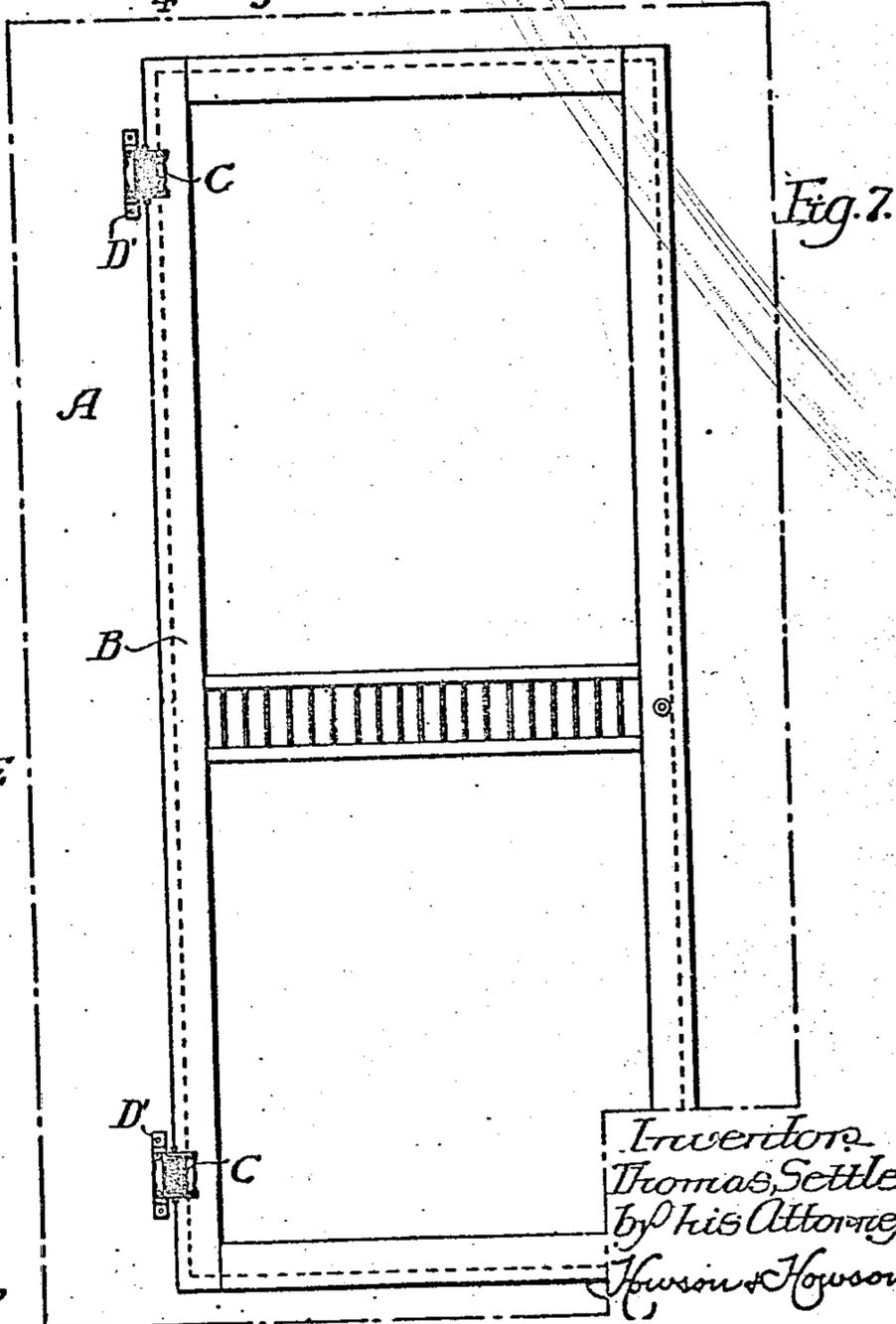
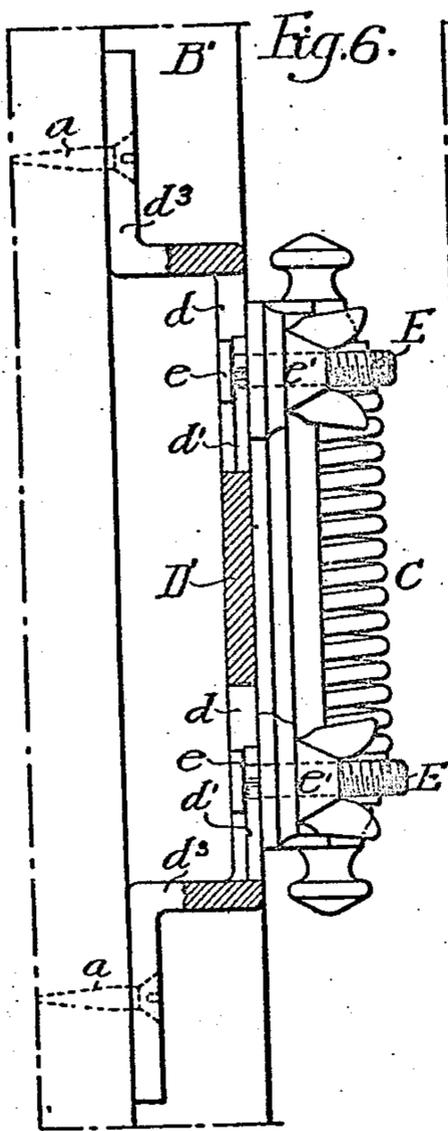
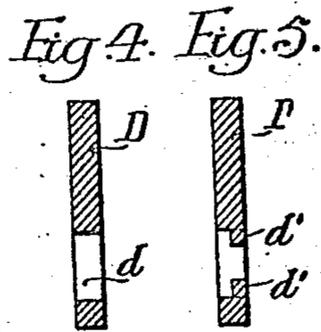
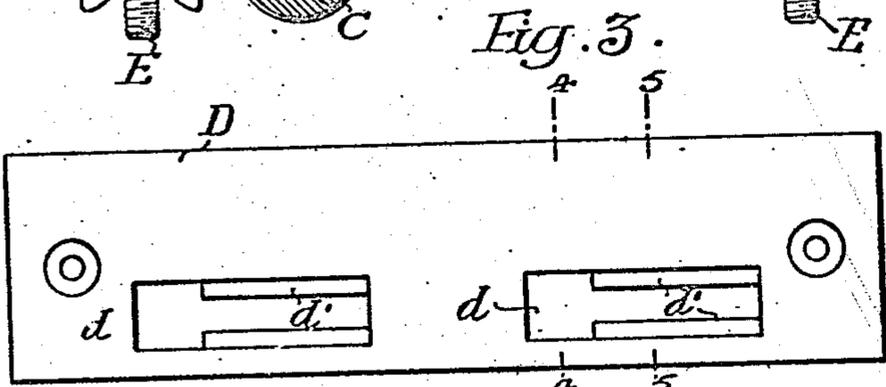
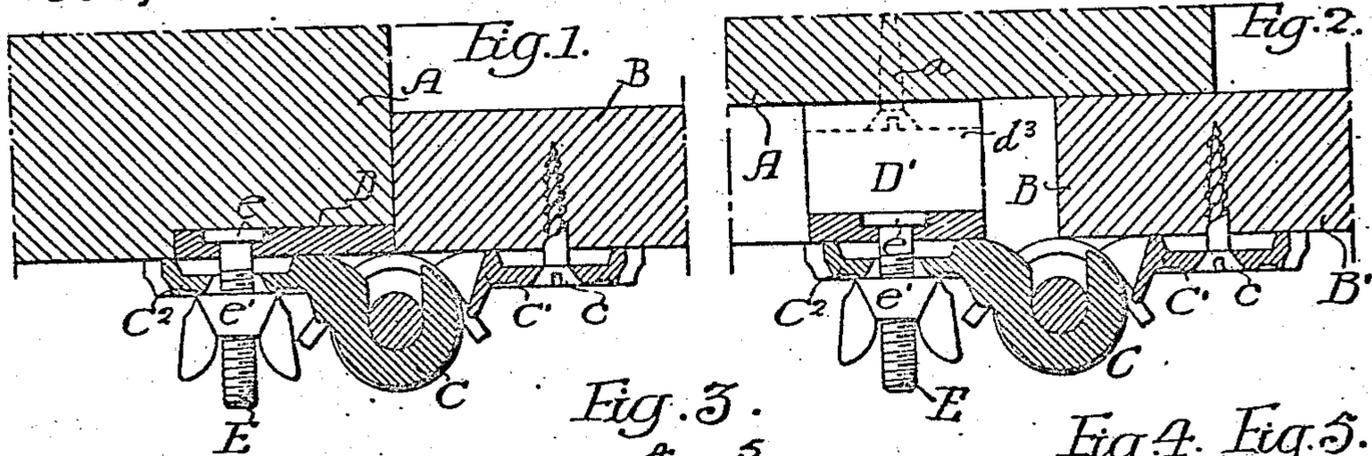


T. SETTLE.
 HINGE SUPPORT.
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Patented Sept. 15, 1908.

898,933.



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THOMAS SETTLE, OF PHILADELPHIA, PENNSYLVANIA.

HINGE-SUPPORT.

No. 898,933.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THOMAS SETTLE, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Hinge-Supports, of which the following is a specification.

One object of my invention is to provide a device primarily designed to permit of the adjustment of a door and its attached hinges upon the structure on which they are supported; it being desired to provide such structure with pieces permanently attached thereto to which the hinges of the door are removably fastened.

It is further desired to provide a hinge-supporting structure having its parts so arranged as to serve as a suitable supporting structure for one member of a hinge whose second member is attached to it and mounted upon a door projecting beyond the surface of a door jamb.

In addition to the above objects I also desire to provide a structure for permanent connection to a door jamb so designed as to permit of the convenient and quick attachment and removal of hinges belonging to a door, either of the flush or projecting type.

These objects I attain as hereinafter set forth, reference being had to the accompanying drawing, in which:

Figure 1, is a transverse section of a portion of a door, and the supporting structure or jamb therefor, illustrating one of the hinges as provided with my invention; Fig. 2, is a transverse section, similar to Fig. 1, illustrating my invention as modified for use in connection with a projecting door; Fig. 3, is an inverted plan of the hinge-supporting plate employed in connection with that form of my invention shown in Fig. 1; Figs. 4 and 5 are vertical sections taken on the lines 4—4 and 5—5 Fig. 3. Fig. 6 is a partial vertical section, further illustrating that form of my invention shown in Fig. 2, and Fig. 7 is a side elevation of a door of the projecting type, showing my invention as applied thereto.

Referring to Figs. 1, 3, 4 and 5, of the above drawings, A represents a portion of a door jamb and B a part of a door whose outer surface is flush with said jamb, there being usually provided two spring hinges C for swinging the door from the jamb. Each hinge has one of its leaves or members C' permanently fixed by means of screws c to the door B and it has hitherto been customary to attach the other leaf C² of the hinge in

a similar manner. In the present instance, however, I provide a metallic plate D on the door jamb so placed that its outer surface is flush with the outer surface thereof, providing in this plate a pair of undercut slots, as shown in Figs. 3, 4 and 5; there being, however, a portion *d* at one end of each slot from which the undercut parts *d'* are omitted. There is thus formed a square hole or opening directly through the plate D, which may, if desired, be made in other forms than that shown.

For the purpose of connecting the member C² of the hinge to this plate, I provide screw bolts E, having squared heads *e* of such size that they will pass through the square portions of the slots, but will engage the undercut ribs *d'*. I also provide the bolt with wing or butterfly nuts *e'*.

In case it should be desired to avoid the necessity for cutting the edges of the door so as to make it fit the jamb with its outer surface flush with the surface of said jamb, I form the plate as illustrated at D' in Figs. 2, 6 and 7; in such instance providing it with oppositely disposed L-shaped legs *d²* so that it is supported at such a distance from the surface of the door jamb that its outer surface is flush with the outer surface of the door. That is to say, the height of the piece D' is equal to the thickness of the door B'. As in the case shown in Figs. 3, 4 and 5, the piece D' is provided with undercut slots having square openings *d* and undercut ribs *d'* so as to provide for the placing and holding of the bolts E.

To confine a door to the jamb, it will be seen that with my invention the hinges are first screwed to the door in the predetermined and customary positions. A pair of the pieces D or D' are then attached to the jamb by screws *a* in positions which need only be approximately determined, though they should be about the same distance apart as the hinges C and placed on the jamb in position to give a proper hanging of the door. The bolts E are then placed in the slots, their heads being passed through the openings *d*; the pieces D or D' being, of course, mounted so that these square openings are at the upper ends of the slots. The door is then applied to the jamb and the bolts are passed through the screw holes of the hinges after which the wing nuts *e'* are put on said bolts and screwed up. It is obvious that the door may now be raised above the floor so as to

give it the desired clearance, after which the nuts can be tightened so as to maintain it in this position.

By the use of the device above described it is possible for an unskilled person to quickly and properly hang a door, particularly those of the type which project beyond the plane of the jamb. These doors are commonly sold in sizes larger than are ordinarily required to permit them to be used as flush doors, and the necessary cutting to make them fit, as well as the proper mounting on their hinges, is an operation requiring considerable skill. Moreover, the doors to which my invention is particularly applicable are usually of the screen type and require to be put up and taken down every season. As a consequence, the door jambs to which they are applied are disfigured with the screw holes and after a few years are in such condition that it is a difficult matter to properly hang the doors. It will, therefore, be understood that in such cases my invention is a distinct advantage, inasmuch as not only may a door be quickly hung by its use, but the door jamb is saved from the injury and disfigurement which would ordinarily occur from the formation of additional screw holes.

I claim:

1. The combination of a door, a supporting structure therefor, hinges for the door, pieces on said structure having undercut slots, with means for detachably and adjustably securing each of the hinges to one of said pieces, the same including bolts having heads operative in the undercut parts of said slots, and removable nuts for the bolts placed to be accessible from a face of the door, said bolts being removable from the slotted pieces without requiring the removal of said pieces from the supporting structure.

2. The combination of a door, a supporting structure therefor, hinges each having one member fastened to the door, plates mounted on the supporting structure and provided with undercut slots each having an enlarged portion, and bolts having nuts removably connecting each hinge with one of the plates, the connections between the

plates and the hinges being adjustable and the heads of the bolts being operative in the undercut portions of the slots as well as removable through the enlarged portions thereof.

3. The combination of a door, a supporting structure therefor, vertically slotted plates permanently mounted upon said structure, hinges each having one member permanently fixed to the door, and bolts for the slots respectively in engagement with the second members of the hinges for vertically adjusting the position of said hinges relatively to the plates, substantially as described.

4. The combination of a door jamb, a door therefor, a pair of plates permanently attached to the door jamb apart from each other and supported at a distance therefrom substantially equal to the thickness of the door, with hinges permanently attached to the door and detachably connected to the said plates, substantially as described.

5. The combination of a door jamb, a door therefor, a pair of plates permanently attached to the door jamb apart from each other and supported at a distance therefrom substantially equal to the thickness of the door, with hinges permanently attached to the door and detachably and adjustably connected to the said plates, substantially as described.

6. Plates adapted to be attached to a door jamb, each having substantially L-shaped legs and vertical undercut slots each having at its upper end an enlarged portion, hinges permanently attached to the door, with bolts for connecting said hinges to the plate, each provided with a head capable of passing through an opening in the plate and engaging the undercut portions of the slots, substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

THOMAS SETTLE.

Witnesses:

WILLIAM E. BRADLEY,
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