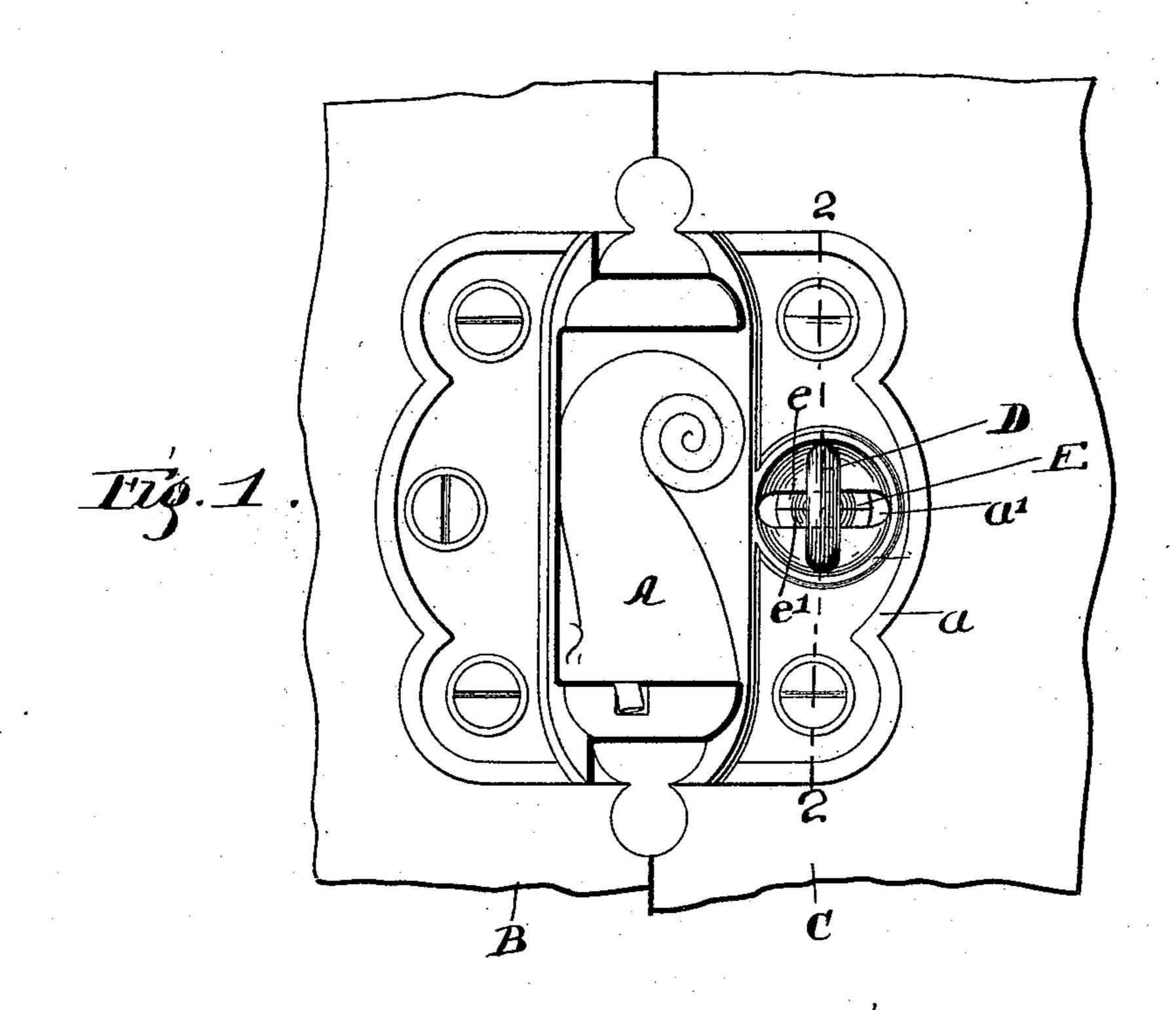
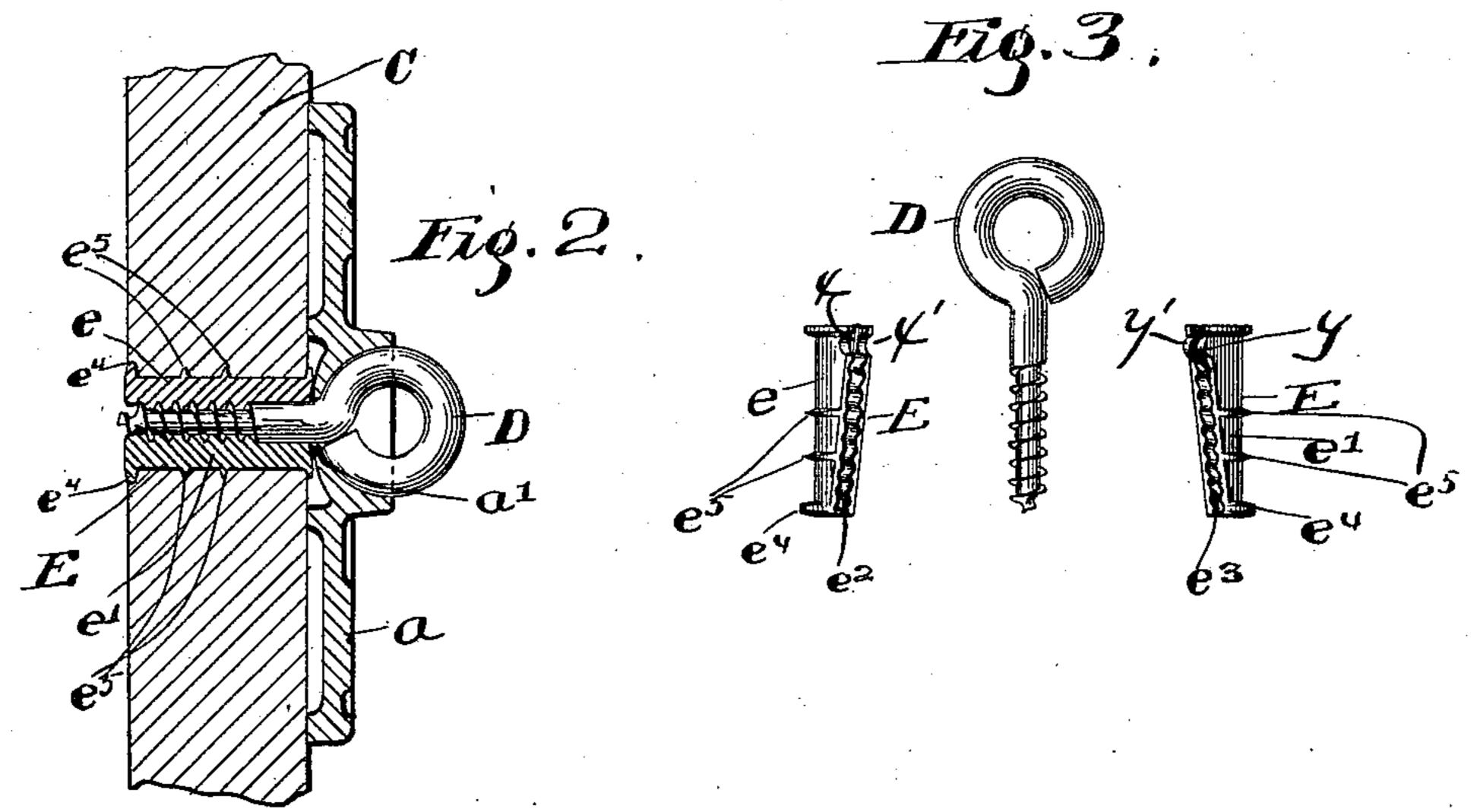
A. S. HELD. DETACHABLE HINGE.

(No Model.)

(Application filed Apr. 29, 1897.)





Mitnesses: Chas. O. Shervey. R. Q. Pailey Treventor: August S. Hald mles mruen Bituer His attys.

United States Patent Office.

AUGUST S. HELD, OF FREEPORT, ILLINOIS, ASSIGNOR TO THE STOVER MANUFACTURING COMPANY, OF SAME PLACE.

DETACHABLE HINGE.

SPECIFICATION forming part of Letters Patent No. 606,925, dated July 5, 1898.

Application filed April 29, 1897. Serial No. 634,337. (No model.)

To all whom it may concern:

Be it known that I, AUGUST S. HELD, a citizen of the United States of America, residing at Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Detachable Hinges, of which the following is a specification.

My invention relates to certain improvenents in detachable hinges, the object of which is to provide a better device for effecting an easy engagement between said hinges and the part to which they are intended to be secured.

The invention is illustrated by means of three views, of which Figure 1 is a front elevation of a complete hinge. Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a detached view of certain parts which make up the device by means of which the hinge is attached

or detached, as may be desired.

In the drawings the hinge is lettered A and has in one of its leaves a a slot a'. The hinge is shown as secured to a door B, and in the 25 casing C, adjacent to the door, is secured a screw-eye D by means of a two-part bushing E, made up of halves ee', each provided with a portion of an internal screw-thread $e^2 e^3$ and having upon the outside circumferential ribs 30 $e^4 e^5$. The hole within the two-part bushing is preferably tapered, growing smaller inwardly, so as to aid the tapered screw in wedging the bushing apart. The bushing is put in the casing by boring a hole of the right 35 size in the latter, inserting the bushing, and then screwing in the screw-eye, thereby crowding the two parts of the bushing apart and sinking the ribs into the adjacent wood. This prevents the bushing from pulling out and 40 furnishes a durable screw-thread to engage with that of the screw-eye. The spring of the wood also prevents the screw-eye from becoming loose in the bushing.

To apply the hinge to the casing, the slot a' is slipped over the head of the screw-eye and the latter screwed up until it clamps the leaf a tightly to the casing. The head of the screw-eye is left at right angles to the slot to prevent withdrawal therefrom.

At the top of the portion e of the bushing 50 E will be seen a pair of notches x x', and at the top of the portion e' will be seen a pair of lugs y y', corresponding to the notches and adapted to enter the same to prevent the longitudinal movement of one portion of the 55 bushing upon the other.

I claim as new and desire to secure by Letters Patent—

1. The combination with a hinge having a slotted leaf, of a screw having a head adapted 60 to enter the slot and engage the leaf by a quarter-turn with respect thereto, and an internally-screw-threaded, longitudinally-divided bushing adapted to be seated in a suitable opening and to receive the screw and be expanded thereby; substantially as described.

2. The combination with an internally-screw-threaded, longitudinally-divided bushing adapted to be seated in a suitable opening, of a screw adapted to enter and engage 70 said bushing and spread the parts thereof; substantially as described.

3. The combination with a longitudinally-divided bushing adapted to be seated in a suitable opening and having an inwardly-ta-75 pering screw-threaded bore, of a screw adapted to engage with the thread of the bore and expand the bushing; substantially as described.

4. The combination with an internally- 80 screw-threaded, longitudinally-divided bushing adapted to be seated in a suitable opening and having elevations upon its outer surface to increase the frictional engagement thereof, of a screw adapted to enter said bush- 85 ing and expand the same; substantially as described.

5. The combination with an internally-screw-threaded longitudinally-divided bushing adapted to be seated in a suitable open-90 ing, the parts of which have means of engagement, one with the other, to prevent longitudinal movement of one upon the other, of a screw adapted to enter the bushing, engage the internal thread therein and separate the 95 parts thereof; substantially as described.

6. The combination with a longitudinally-divided bushing adapted to be seated in a

suitable opening, said bushing having an inwardly-tapering screw-threaded bore and the parts of the bushing having engaging portions adapted to prevent longitudinal movement of one upon another, of a screw adapted to enter the bushing, engage the thread therein and separate the parts thereof to expand the bushing and secure it in the opening; substantially as described.

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In witness whereof I have hereunto set my no hand, at Freeport, in the county of Stephenson and State of Illinois, this 22d day of April, A. D. 1897.

AUGUST S. HELD.

Witnesses:

W. A. MERRIFIELD, W. H. J. STRATTON.