

No. 736,053.

PATENTED AUG. 11, 1903.

T. B. ARMSTRONG.
HATCH FASTENER.

APPLICATION FILED DEC. 8, 1902.

NO MODEL.

Fig. 1,

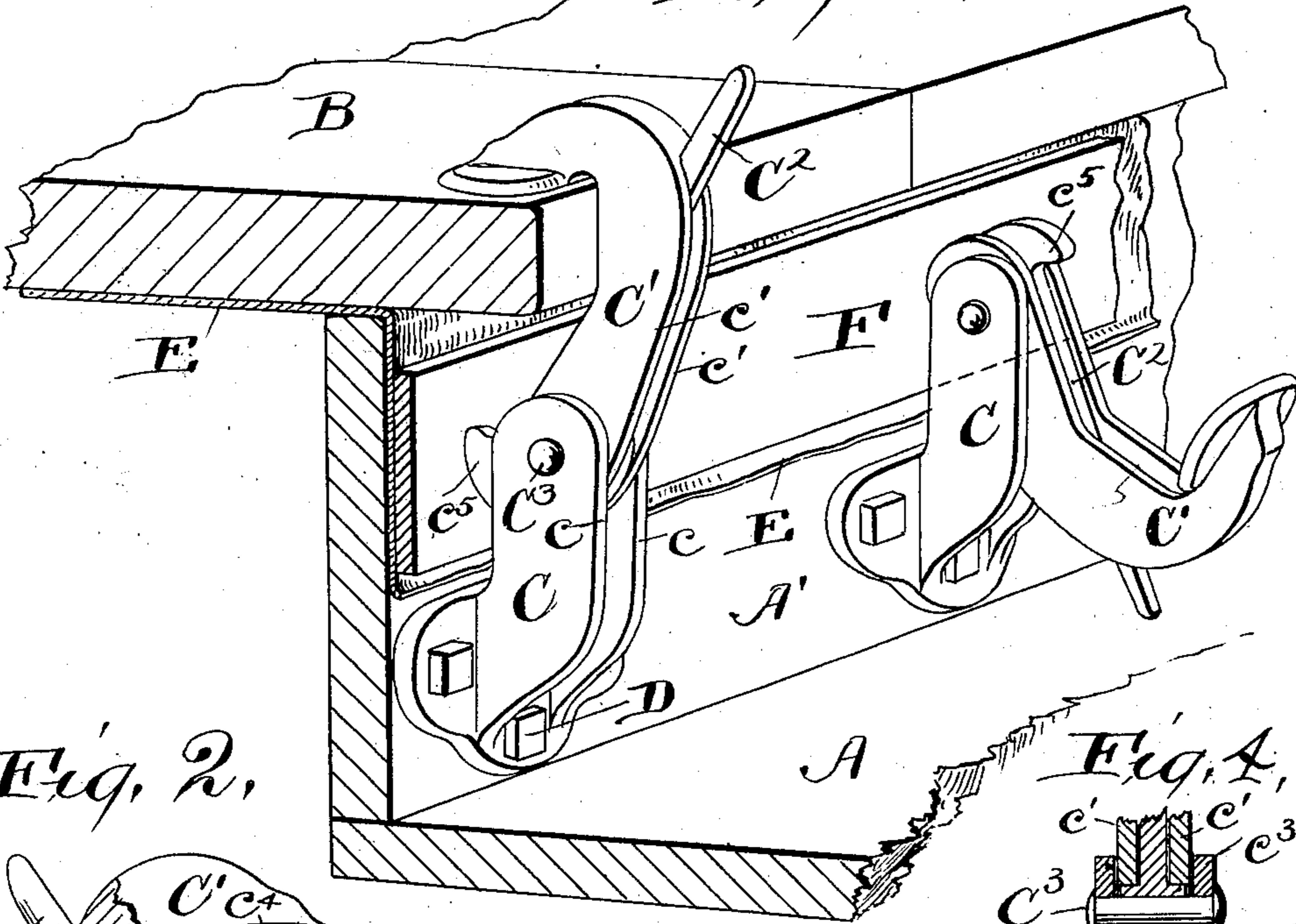


Fig. 2,

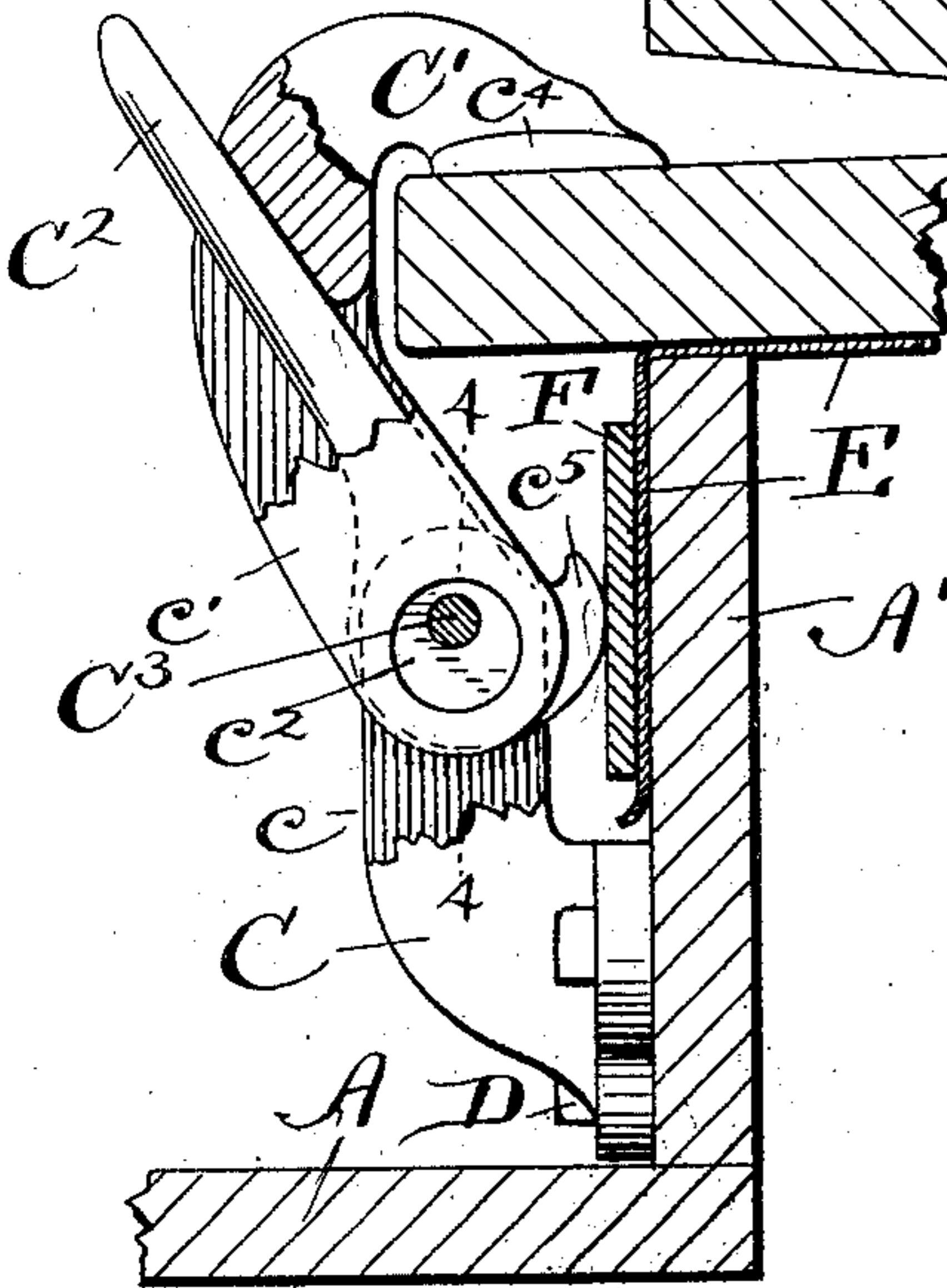


Fig. 3,

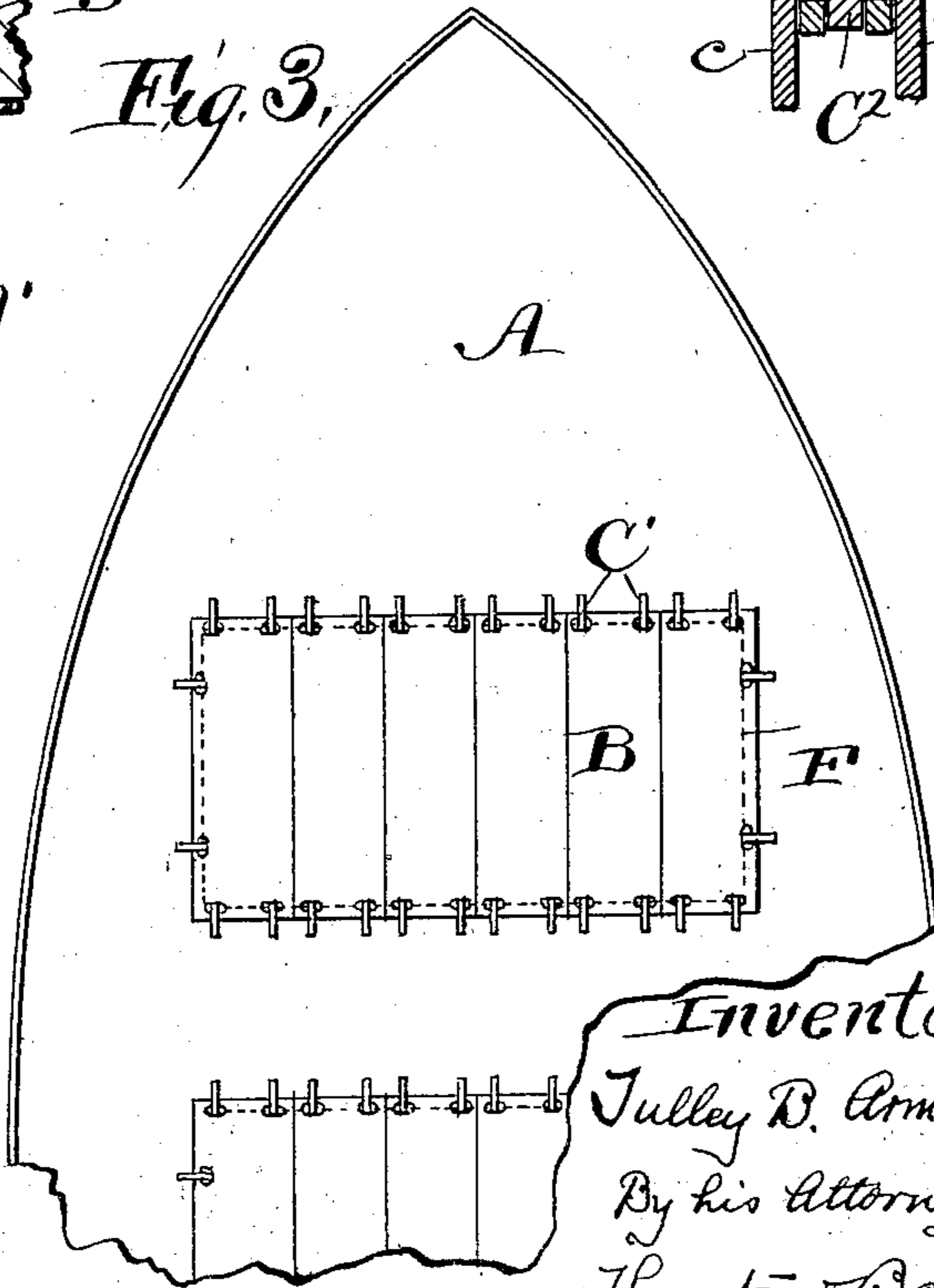
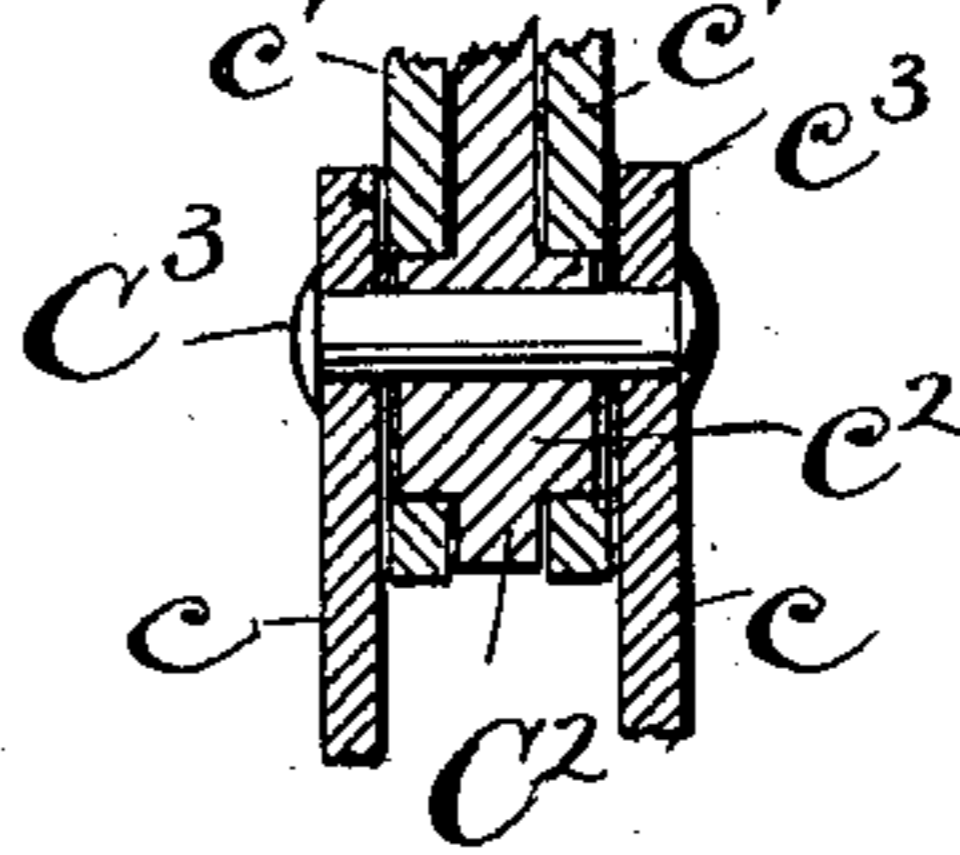


Fig. 4,



Witnesses.

E. B. Filchus
N. L. Brennan

Inventor.

Julley B. Armstrong,
By his Attorneys,
Thurston & Davis.

UNITED STATES PATENT OFFICE.

TULLEY B. ARMSTRONG, OF CLEVELAND, OHIO.

HATCH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 736,053, dated August 11, 1903.

Application filed December 8, 1902. Serial No. 134,275. (No model.)

To all whom it may concern:

Be it known that I, TULLEY B. ARMSTRONG, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Hatch-Fasteners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

The object of this invention is to provide a clamp for fastening down hatch-covers in a form which shall be very cheap in construction, efficient in service, and not have any loose parts to get lost or washed overboard. My clamp also at the same time that it fastens down the hatch-cover may clamp the edges of waterproof canvas extending over the hatch-opening.

The invention may be summarized as consisting of the combination of parts to the above end, as hereinafter more fully explained and as definitely set out in the claims.

In the drawings, Figure 1 is a perspective section through a hatchway, showing my clamp in use. Fig. 2 is a cross-section with parts of the clamp broken away. Fig. 3 is a plan of a portion of a boat to which my fasteners are applied. Fig. 4 is a fragmentary detail section of the clamp on the line 4 4 of Fig. 2.

Referring to the parts by letter, A designates the deck of a vessel, A' the hatch-coaming rising therefrom around the hatchway, and B the hatch-cover, these parts being of any usual form.

C represents a bracket constituting part of my clamp. This is secured, as by screw-bolts D, to the hatch-coaming. This bracket C is bifurcated by having two parallel flat-sided arms *c*, and within the bifurcation fits a hook C'. This hook is also bifurcated by the two flat-sided arms *c'*. Between these arms *c'* takes a third member of my clamp, consisting of the lever C², which has on opposite sides a pair of circular bosses *c*², which fit into similar openings *c*³ in the arms *c'*. Across the lever C² and through the bosses *c*, eccentrically thereof, is an opening which is occupied by the bolt or rivet C³, which passes also through the arms *c* of the bracket C.

By the above-described arrangement the hook C' becomes eccentrically pivoted to the

bracket C and is thus adapted to be drawn downward by the movement of the lever C². In the arrangement shown in the drawings this downward movement of the hook takes place when the lever C² is turned upward, as shown in Fig. 2. This brings the face-plate *c*⁴, carried by the hook, down tightly onto the hatch-cover B, clamping it in place.

It is desirable that the clamp may also hold in place a canvas covering over the hatch-opening. This is provided by my clamp in a very simple manner. E represents such canvas covering, and F a metallic strip or band adapted to lie against the outer side of the same on the hatch-coaming. On the inner side of the lever C², I form an eccentric-toe *c*⁵, adapted to bear against the strip F and clamp it and the canvas in place whenever the lever is thrown into position to cause the hook to bind the hatch-cover.

My clamp, it will be seen, is entirely self-contained and has no parts to be lost or washed overboard. It may be very cheaply constructed of three malleable castings and a pivot-pin. When not in use, it is out of the way near the base of the hatch-coaming, as illustrated near the right hand of Fig. 1. It is always in position ready for use, the operation consisting simply (after the canvas, band, and hatch-covers are in place) of turning up the hooks C' and then the levers C². The extreme point of the eccentric-toe *c*⁵ is flattened slightly or decreased in eccentricity, so that the tendency shall be to hold the lever C² in its extreme upper position. The projecting end of this lever furnishes convenient means for forcing it downward to release the clamp.

As many of my clamps as desired are employed around the hatch-opening, according to the number of panels of which the hatch-cover is constructed. This is illustrated in Fig. 3.

I claim—

1. A hatch-fastener comprising a bracket, a hook pivotally connected thereto, and means for changing the position of the pivot to give the hook clamping action, substantially as described.

2. In a hatch-fastener, the combination with a bracket, of a hook and a lever pivotally connected with each of such members,

the pivots being out of alinement, substantially as described.

3. A hatch-fastener having in combination a bracket, a hook, an eccentric connecting the hook with the bracket, and means for moving the said eccentric, substantially as described.

4. A hatch-fastener including two members, namely, a bracket and a hook, combined with a lever, an eccentric carried by the lever, and a pivot-pin for said lever, said pivot-pin connecting the lever with one of said members of the hatch-fastener and the eccentric connecting the lever with the other member, substantially as described.

5. In a hatch-fastener, in combination, a bifurcated bracket, a pivot-pin carried thereby, a lever having an eccentric-boss pivoted on said pin within the bifurcation, and a hook within the bifurcation pivoted on said eccentric-boss, substantially as described.

6. The combination of a bifurcated bracket, a bifurcated hook occupying the bifurcation of the bracket, and a lever occupying the bifurcation of the hook, said lever being pivoted to both the hook and the bracket, said pivots being out of alinement with each other, substantially as described.

7. In a hatch-fastener, in combination, a bifurcated bracket, a bifurcated hook ex-

tending into the bifurcation of the bracket, a lever occupying the bifurcation of the hook, a circular boss on said lever engaging a corresponding opening in the hook, and an eccentrically-placed pivot-pin connecting said boss with the bracket, substantially as described.

8. In a hatch-fastener, the combination, with a bracket, of a hook, a lever pivotally connected with each of such members, the pivots being out of alinement, and an eccentric-toe carried by said lever, substantially as described.

9. The combination of a bifurcated bracket, a bifurcated hook occupying the bifurcation of the bracket, a lever occupying the bifurcation of the hook, said lever being pivoted to both the hook and the bracket, said pivots being out of alinement with each other, and an eccentric-toe carried by said lever whereby both the toe and the hook may simultaneously exert clamping action, substantially as described.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

TULLEY B. ARMSTRONG.

Witnesses:

ALBERT H. BATES,
B. W. BROCKETT.