

No. 662,130.

Patented Nov. 20, 1900.

M. MULHOLLAND
FASTENING FOR HATCHWAY COVERS.

(Application filed July 21, 1900.)

(No Model.)

Fig. 1.

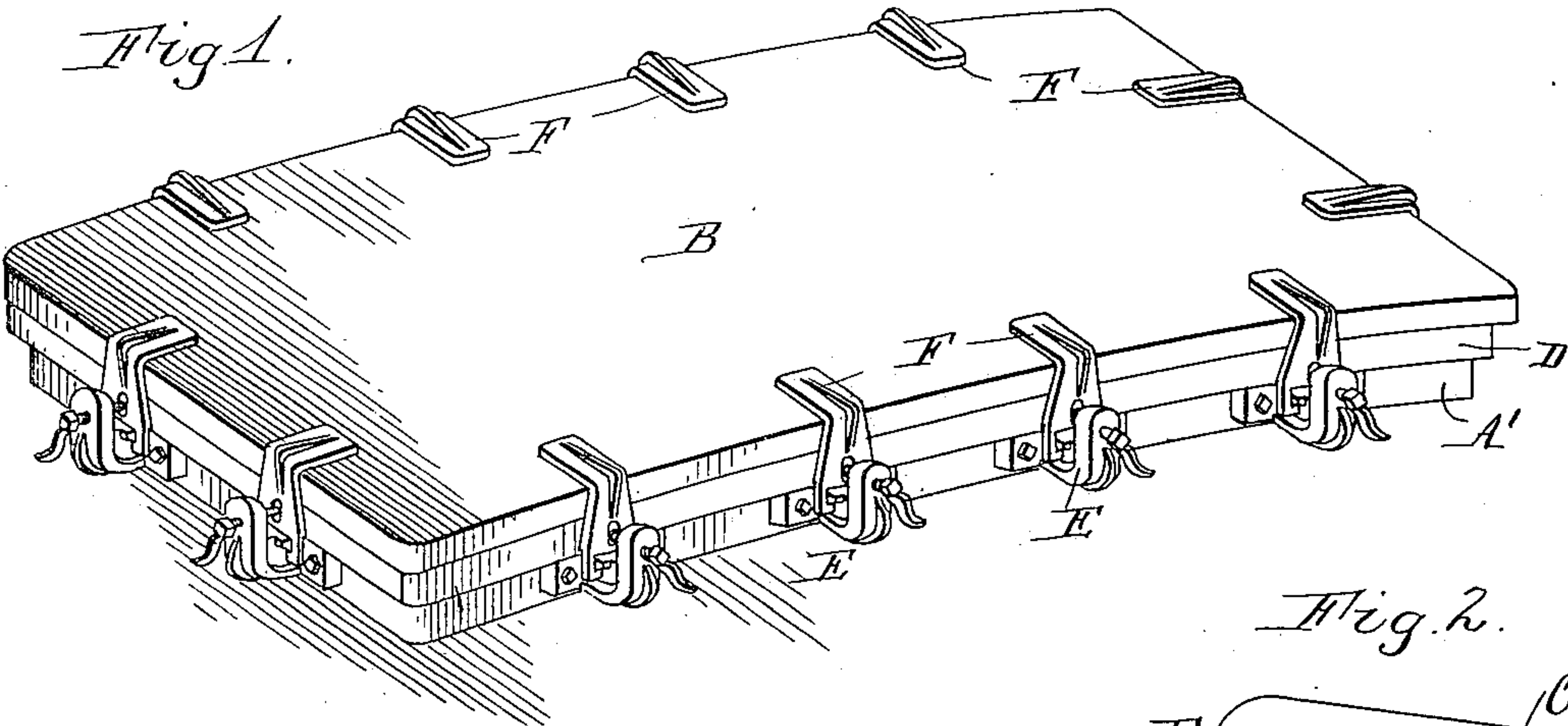


Fig. 3.

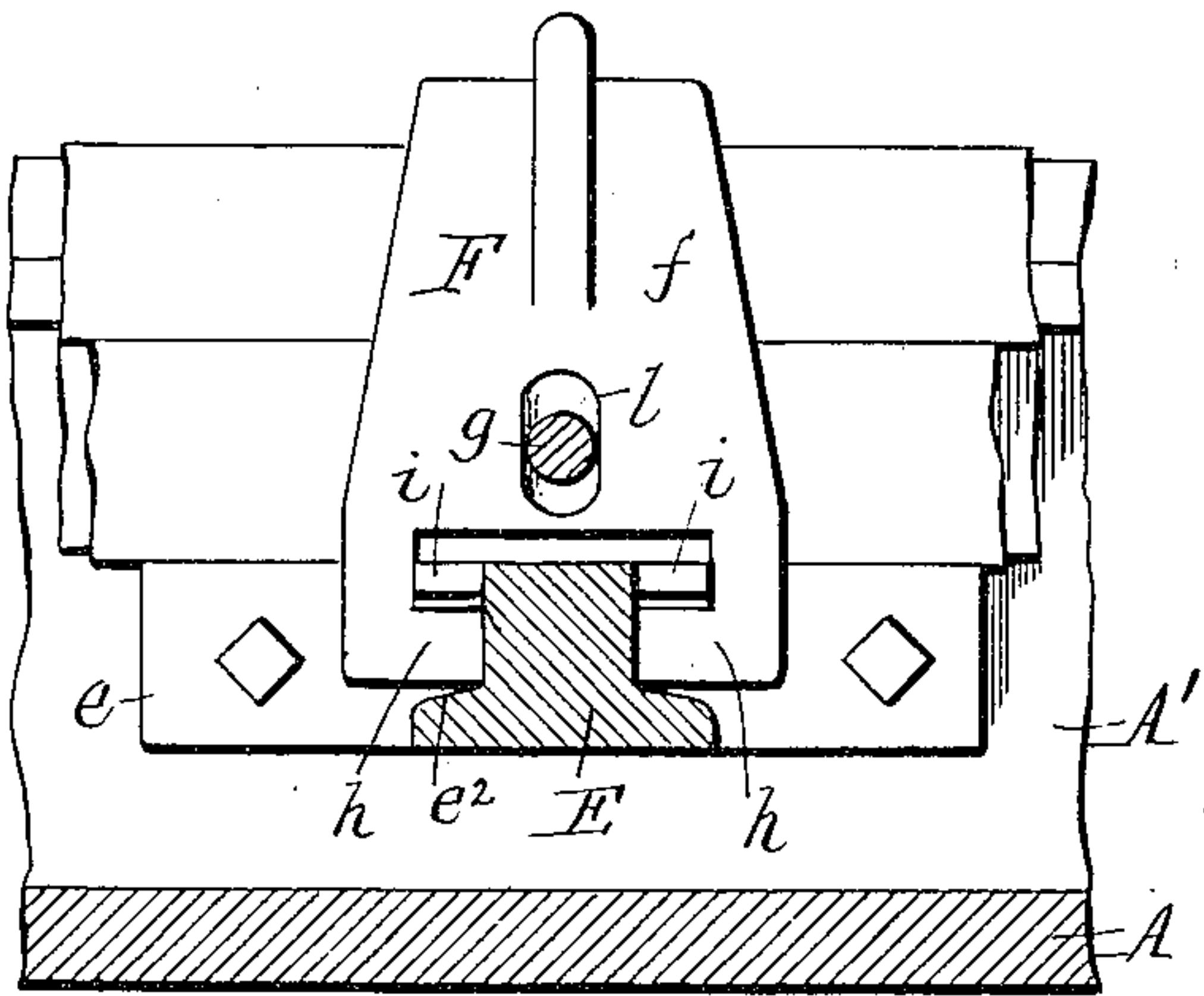


Fig. 4.

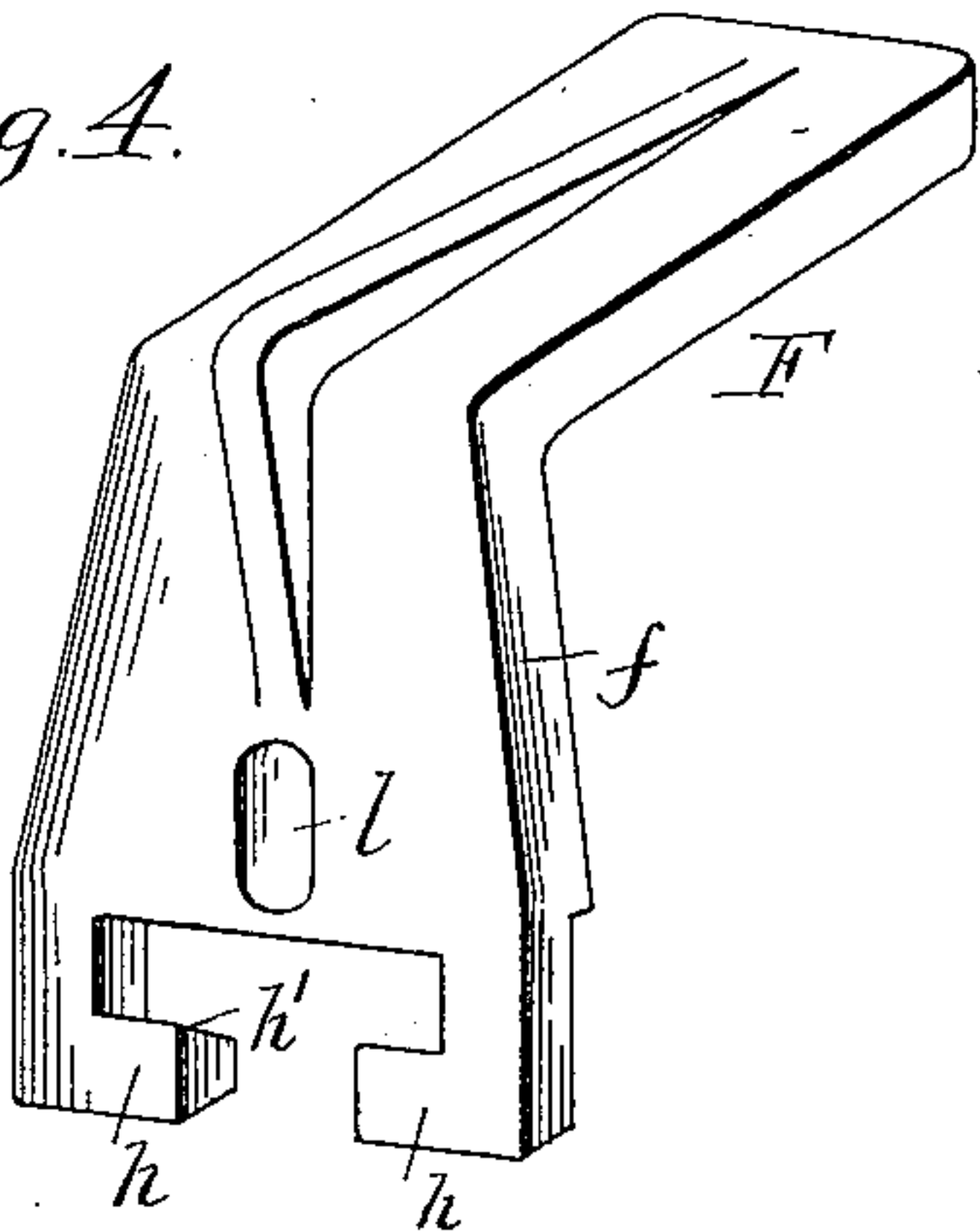


Fig. 2.

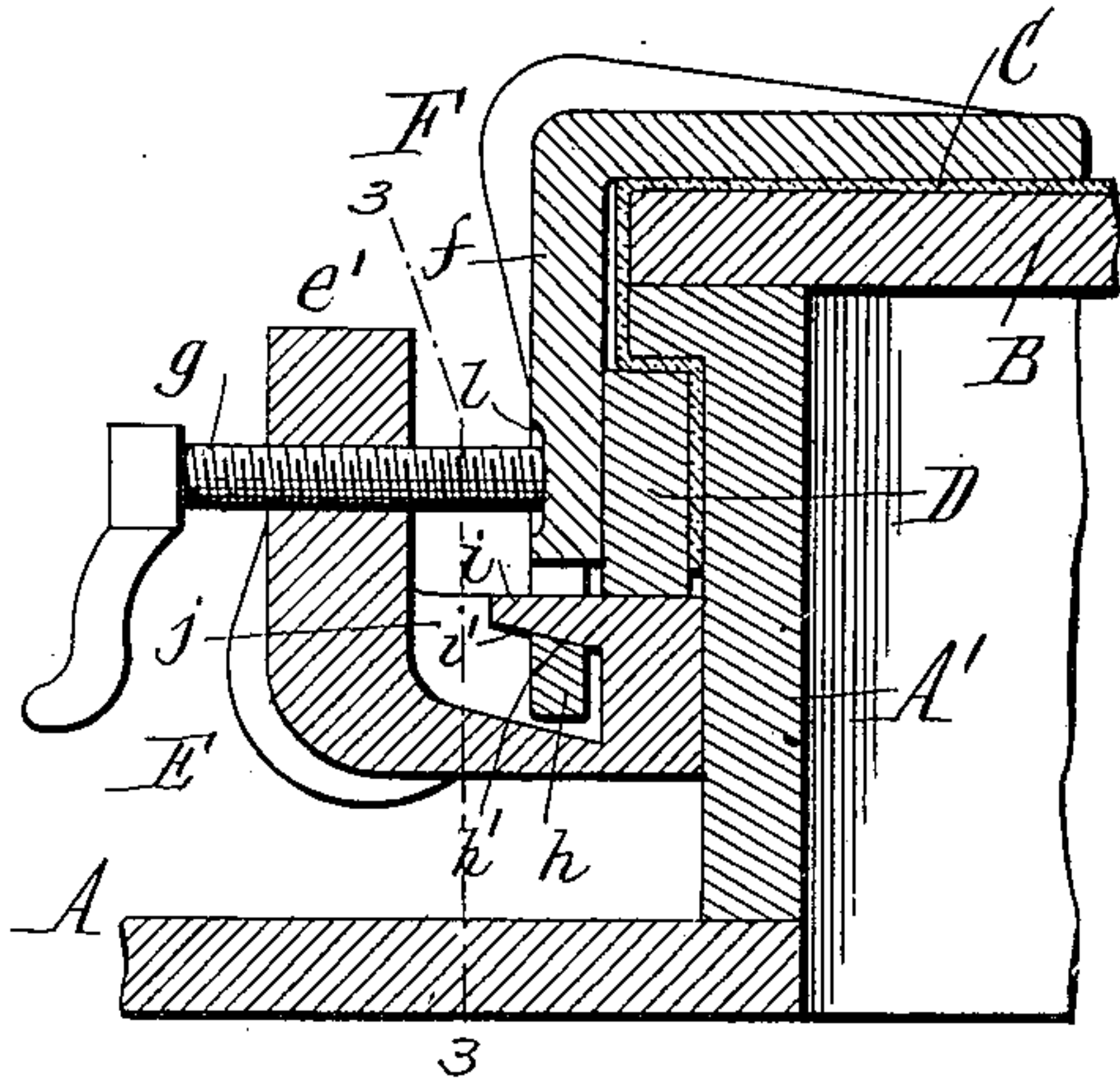
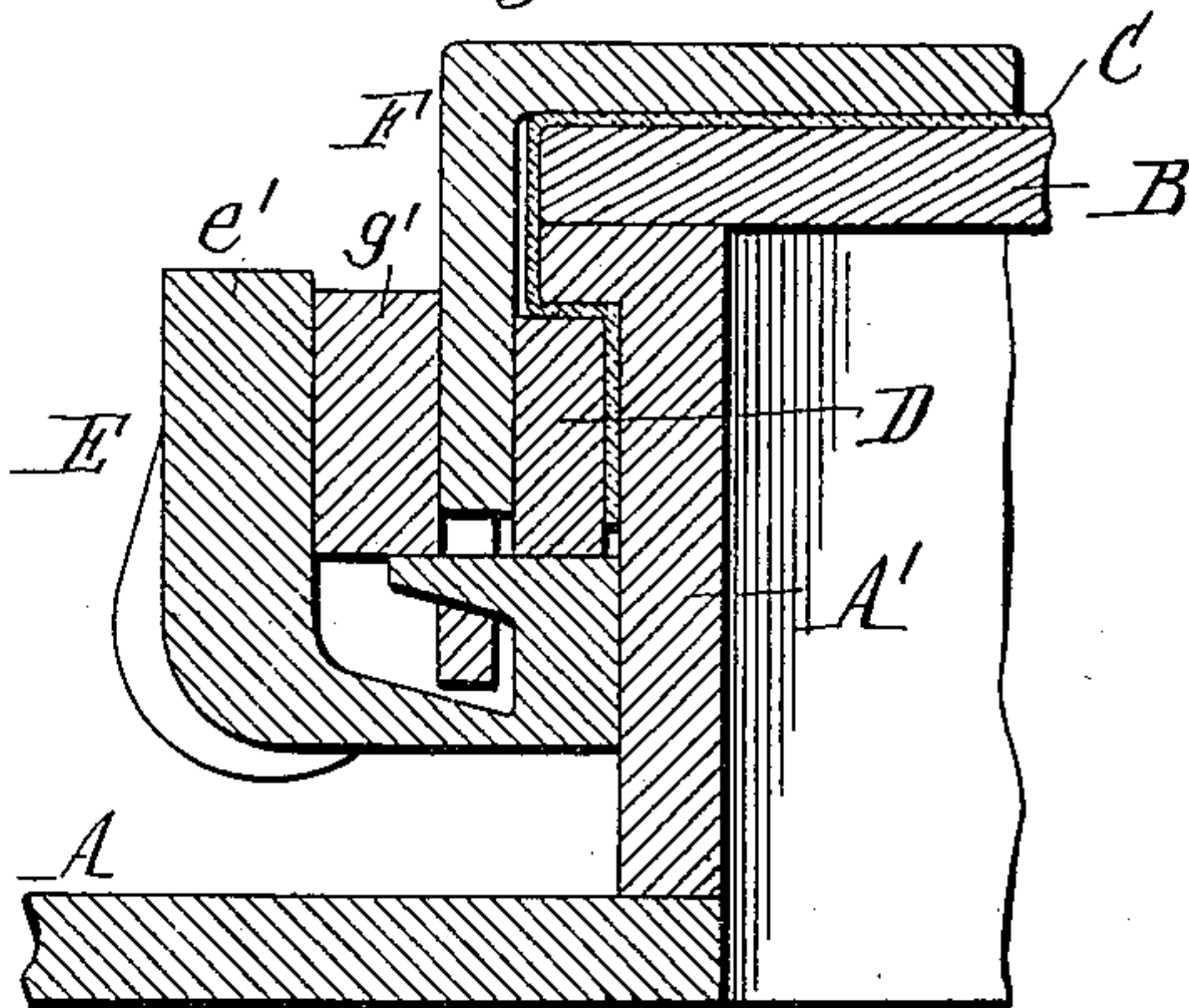


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

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FASTENING FOR HATCHWAY-COVERS.

SPECIFICATION forming part of Letters Patent No. 662,130, dated November 20, 1900.

Application filed July 21, 1900. Serial No. 24,408. (No model.)

To all whom it may concern:

Be it known that I, MATHEW MULHOLLAND, a citizen of the United States; residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Fastenings for Hatchway-Covers, of which the following is a specification.

This invention relates to the fastenings employed for securing the covers of hatchways in place.

The object of my invention is the provision of a simple and convenient fastening of this kind which firmly holds the cover down upon the coaming and at the same time causes the batten to clamp the canvas or tarpaulin tightly against the sides of the coaming.

In the accompanying drawings, Figure 1 is a perspective view of a hatchway-cover provided with my improved clamps. Fig. 2 is a fragmentary transverse section on an enlarged scale, the plane of the section being centrally through one of the clamps. Fig. 3 is a longitudinal section in line 3 3, Fig. 2. Fig. 4 is a perspective view of the detachable clamp member of the fastening. Fig. 5 is a view similar to Fig. 2, showing a modified construction of the fastening.

Like letters of reference refer to like parts in the several figures.

A is the deck of a vessel, A' the usual coaming or raised frame around the edge of the hatchway, and B the cover resting thereon.

C is the canvas or tarpaulin, and D the batten which clamps the depending portion of the tarpaulin against the side of the coaming.

Each of my improved cover-fastenings consists of a bracket E, secured to the outer side of the coaming, and a clamp member F, which is interlocked with said bracket and which overlaps the marginal portion of the cover. The bracket E is provided at its inner end with a base-plate *e*, which is bolted or otherwise secured to the coaming, and at its outer end with an upwardly-projecting lug or standard *e'*.

The clamp F has the form of an angle-iron, and its upper or horizontal member bears upon the cover, while its shank or vertical member F is arranged between the standard *e'* of the bracket and the batten and bears against the outer side of the latter.

g is a horizontal clamping or set screw which engages in a screw-threaded opening formed in the standard *e'* and bears at its inner end against the outer side of the vertical member *f* of the clamp, so that upon tightening said screw it forces the clamp member and the batten inwardly and causes the batten to clamp the tarpaulin against the coaming. As shown in Fig. 2, the batten projects slightly beyond the rim of the cover and the coaming, so as to leave the necessary clearance between the clamp member and said parts to insure the clamping of the batten and the tarpaulin.

The clamp member is provided at its lower end with a pair of inwardly-extending hooks *h*, which are arranged parallel with the coaming and which engage under lugs *i*, projecting forwardly from the base-plate of the bracket E and arranged on opposite sides of the bracket-body, as shown in Fig. 3. The upper faces of these hooks are inclined inwardly or toward the coaming, as shown at *h'*, and the contiguous under sides of the lugs *i* are correspondingly beveled or inclined, as shown at *i'* in Fig. 2, so that upon forcing the clamp member toward the coaming by means of the set-screw *g* said member is at the same time drawn downwardly by the action of the inclined faces *h'* and *i'*, thereby tightly clamping the cover upon the coaming.

The side portions of the bracket E are recessed in front of the lugs *i*, as shown at *j* in Fig. 2, to leave a space for the passage of the hooks *h* in engaging the same under said lugs. The flanges *e²* at the base of the bracket are preferably provided with sloping upper sides, as shown in Fig. 3, for shedding water and dirt from the same.

In order to hold the clamp member F against lateral displacement, the same is provided in the outer side of its shank with a vertical groove or depression *l*, which receives the inner end of the clamping-screw and which while preventing sidewise movement of the clamp member permits the necessary vertical movement of the member.

In my improved fastening the clamp member is automatically drawn downward in the act of tightening the batten by the clamping-screw *g*, rendering the manipulation of the fastening quick and convenient, and as the

means for drawing the clamp member downward are integral with said member and the bracket the construction of the fastening is greatly simplified and its cost correspondingly reduced.

As shown in Fig. 1, the cover-fastenings are arranged at the four sides of the cover and located at suitable intervals—say of two feet.

To release the cover, it is only necessary to unscrew the clamping-screws *g* sufficiently to allow the hooks *h* of the clamp members to be disengaged from the lugs *i* of the brackets.

While I prefer to employ the clamping-screws *g* for tightening the parts, any other suitable device may be used for this purpose. For example, a wedge *g'*, which is driven between the vertical member of the clamp *F* and the standard *e'* of the bracket, as shown in Fig. 5, may be substituted for the clamping-screw, if desired.

I claim as my invention—

1. The combination with the coaming of a hatchway, and a cover, of a bracket secured to the coaming, a clamp having a vertical member arranged between the coaming and said bracket and a horizontal member which extends inwardly from the upper end of said vertical member and overlaps said cover, for holding the same down upon the coaming, and a clamping-screw arranged in said bracket and bearing against the outer side of the vertical member of said clamp, substantially as set forth.

2. The combination with the coaming of a hatchway and a cover, of a bracket secured to the coaming, a clamp engaging over the cover and capable of moving both vertically and horizontally with reference to the cover, said clamp and said bracket being provided with cooperating inclined faces which act to draw the clamp downwardly upon shifting the same in a horizontal direction, and a tightening device operating against said clamp, substantially as set forth.

3. The combination with the coaming of a hatchway and a cover, of a bracket secured to the coaming and provided at its outer end with a standard and on the inner side of said standard with a lug or projection, a clamp engaging over the cover and provided with a hook which engages under said lug, and a tightening device operating against said clamp, substantially as set forth.

4. The combination with the coaming of a hatchway and a cover, of a bracket secured to the coaming and provided at its outer end

with a standard and on the inner side of said standard with a lug or projection having a beveled under side, a clamp engaging over the cover and provided with a hook having an inclined upper side which bears against the beveled face of said lug, and a tightening device operating against the outer side of said clamp, substantially as set forth.

5. The combination with the coaming of a hatchway, the cover, the tarpaulin and the batten, of a bracket secured to the coaming below the batten and provided at its outer end with a standard and on its base-plate with a forwardly-projecting lug having a beveled under side, a clamp engaging over the cover and bearing against the outer side of the batten and provided at its lower end with a hook having a beveled upper face which bears against the beveled face of said lug, and a tightening device bearing against the outer side of said clamp, substantially as set forth.

6. The combination with a coaming of a hatchway, the cover, the tarpaulin and the batten, of a bracket secured to the coaming below the batten and provided at its outer end with a standard and on its base-plate with a forwardly-projecting lug having a beveled under side, a clamp engaging over the cover and bearing against the outer side of the batten and provided on its outer side with a vertical groove or depression and at its lower end with a hook having a beveled upper face which bears against the beveled face of said lug, and a clamping-screw arranged in said standard and engaging at its inner end in the groove of the clamp, substantially as set forth.

7. The combination with the coaming of a hatchway, and the cover, of a bracket provided at its outer end with a standard and having a base-plate which is provided on opposite sides of the bracket-body with forwardly-projecting lugs having beveled under sides, a clamp engaging over the cover and provided at its lower end with a pair of inwardly-extending hooks having inclined upper faces which bear against the beveled faces of said lugs, and a clamping-screw arranged in said standard and bearing against said clamp, substantially as set forth.

Witness my hand this 17th day of July, 1900.

MATHEW MULHOLLAND.

Witnesses:

CARL F. GEYER,
CHAS. F. HAGEMANN.