

No. 843,804.

PATENTED FEB. 12, 1907.

E. H. FREY.
HATCH FASTENER.

APPLICATION FILED MAY 11, 1903.

Fig. 1

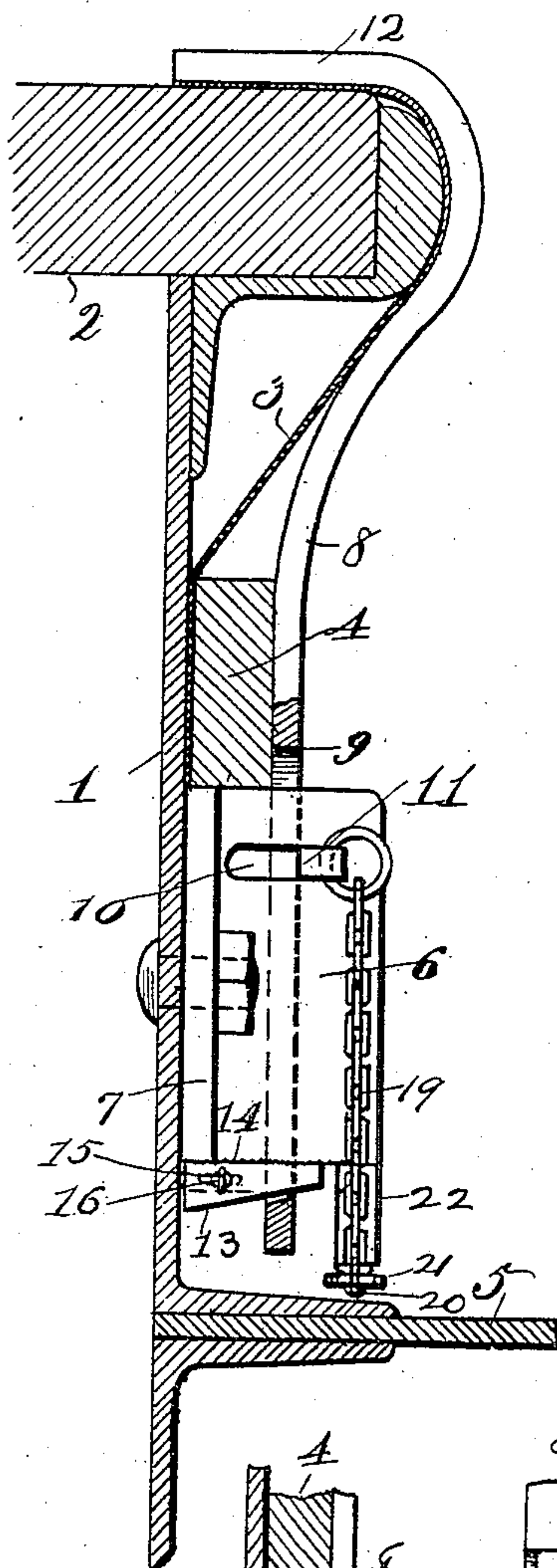


Fig. 2

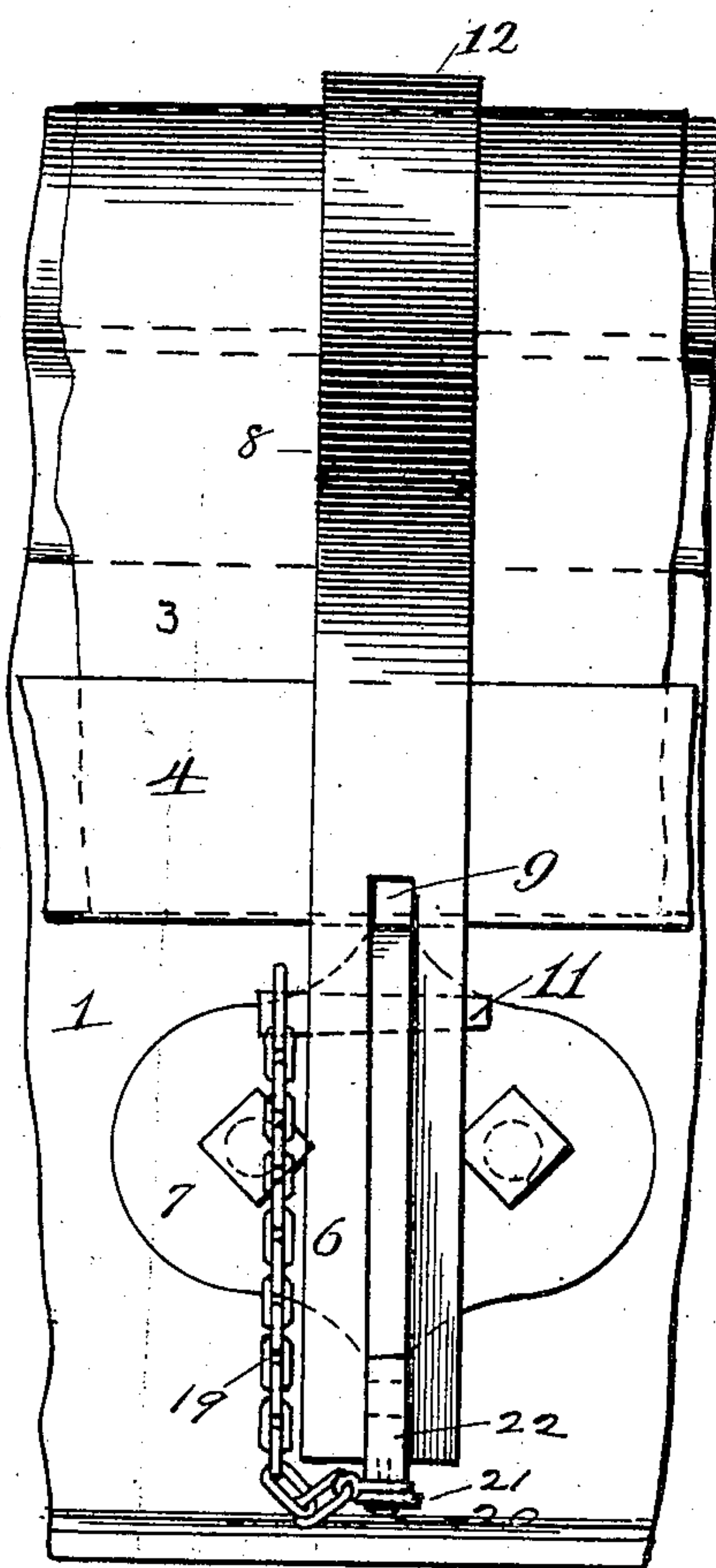


Fig. 3

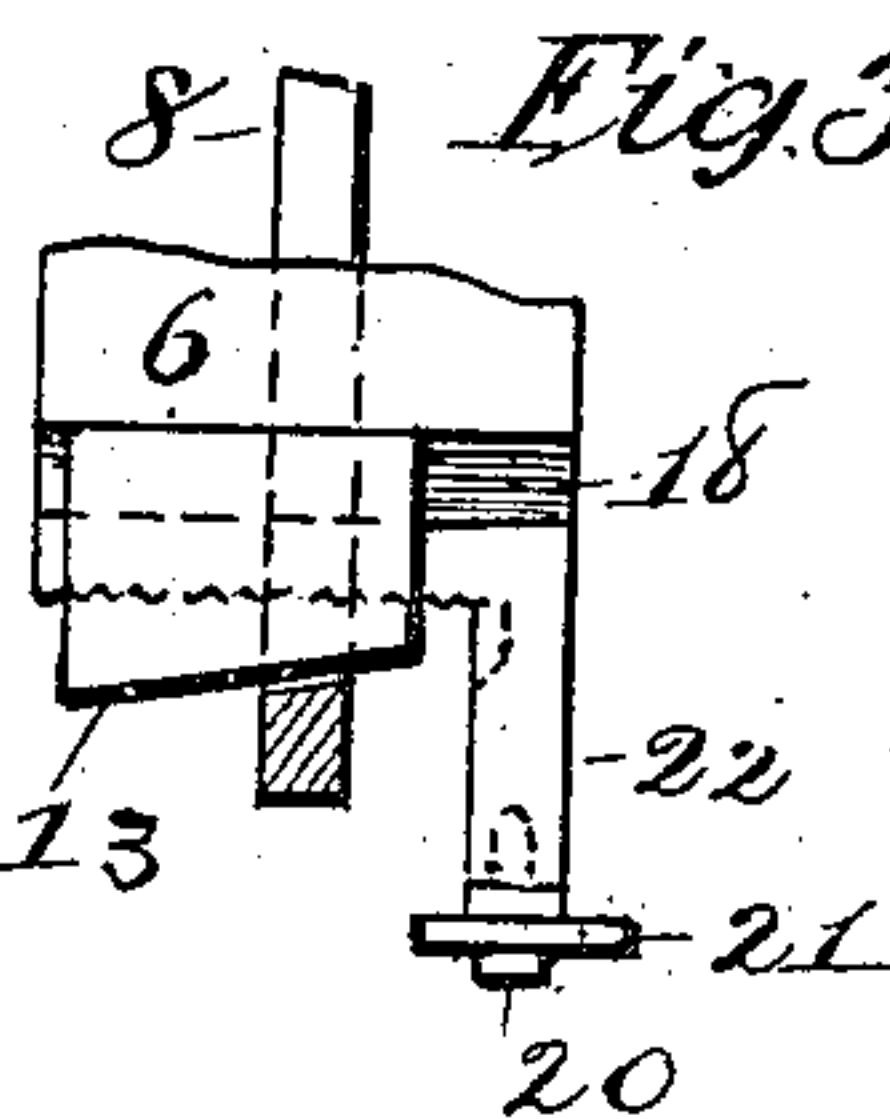


Fig. 4

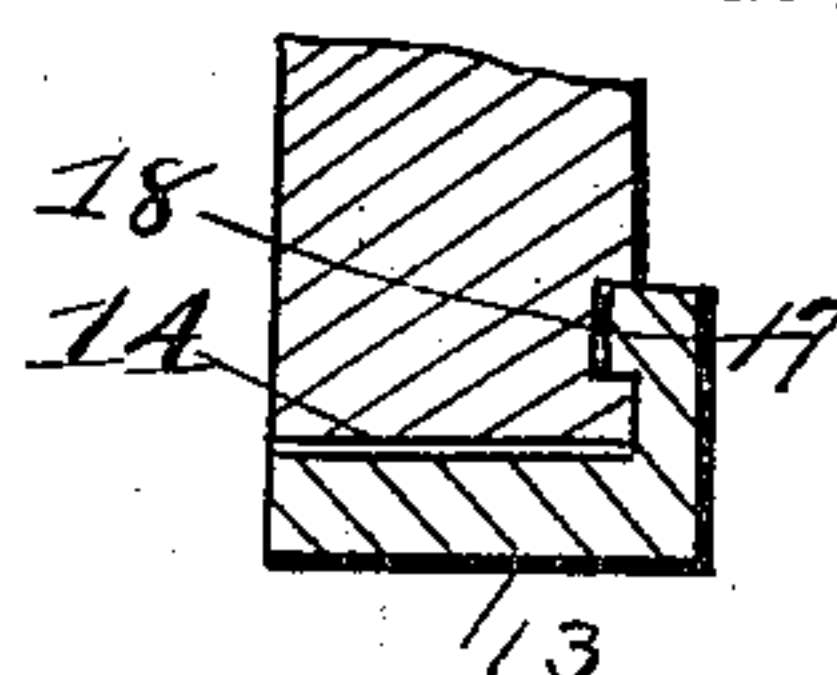
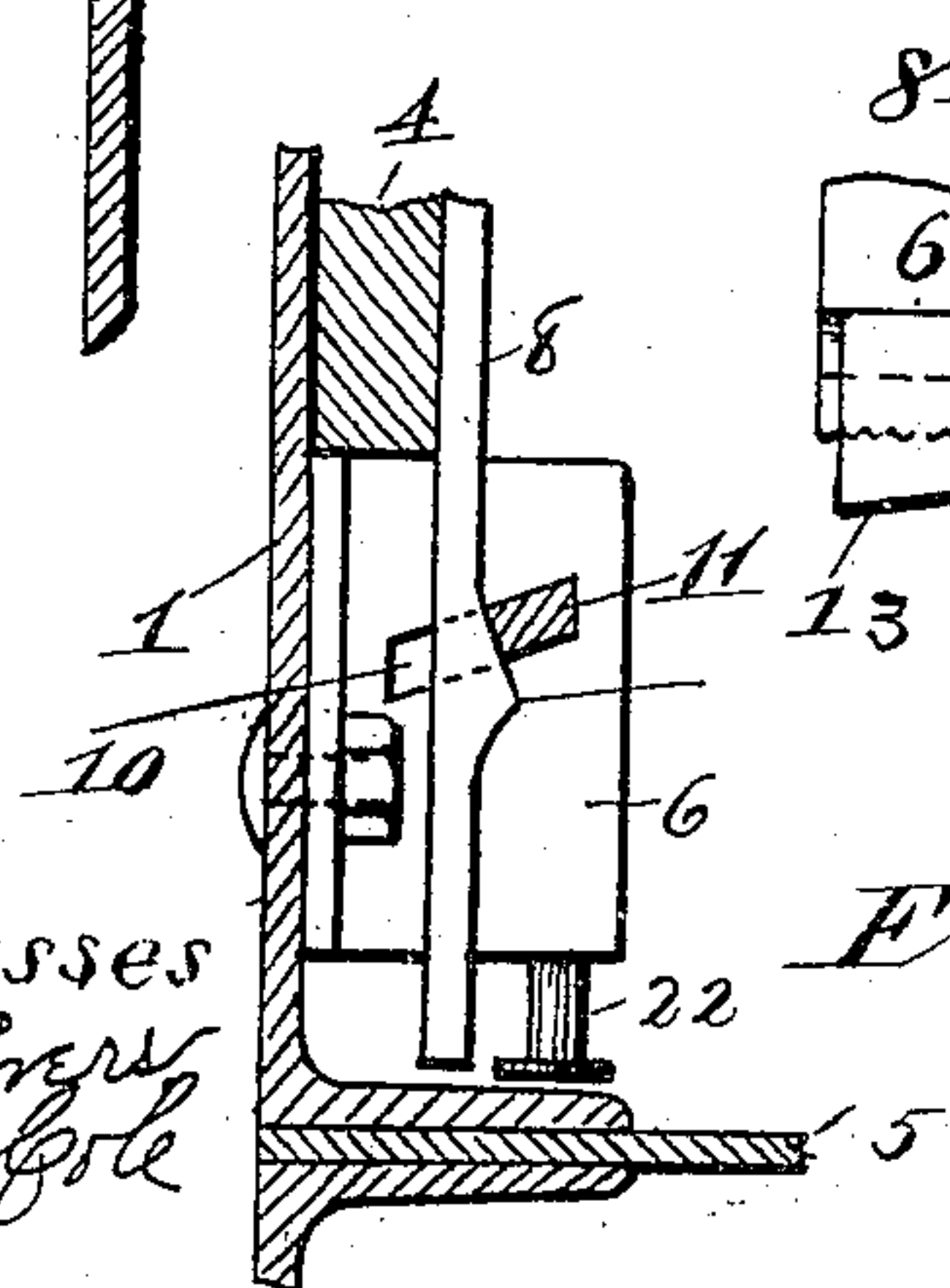


Fig. 5



Witnesses
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UNITED STATES PATENT OFFICE.

ERNEST H. FREY, OF GLENNVILLE, OHIO.

HATCH-FASTENER.

No. 843,804.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed May 11, 1903. Serial No. 156,580.

To all whom it may concern:

Be it known that I, ERNEST H. FREY, a citizen of the United States, and a resident of Glennville, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Hatch-Fasteners, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of the invention is to provide a simple and efficient fastening to firmly hold the hatch-cover down upon the coaming and simultaneously compress the batten down upon the tarpaulin to insure a water-tight seal of the parts, and more particularly to provide a form of fastener which can be laid back against the coaming when not in use, thus preventing the obstruction of the narrow alley-way between the hatches by projecting clamps.

A further object is to provide for taking up the wear upon the clamp or lost motion from stretching of the clamp under strain and also to provide means for preventing the detachment and loss of the various parts.

The invention consists in the combination and arrangement of parts and construction of details, as hereinafter described, shown in the accompanying drawings, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical section of a hatchway-coaming and cover therefor, showing the improved form of fastener. Fig. 2 is a front elevation of the same. Fig. 3 is a side view of a detached portion of the fastener, showing construction of wedge. Fig. 4 is a transverse section thereof, and Fig. 5 shows a modified form of clamp in which the wedge engages an inclined surface.

In these views, 1 is the coaming. 2 is the cover therefor; 3, the tarpaulin; 4, the batten which encircles the coaming and secures the tarpaulin.

5 is the deck.

6 is a bracket secured to the coaming by means of side lugs 7.

8 is the clamp, which is provided with the elongated slot 9 in the lower portion, through which the bracket projects.

A transverse slot 10 in the upper portion of the bracket receives the wedge 11, by means of which the clamp can be forced into tight engagement with the batten, and thus compress the tarpaulin against the coaming.

The upper portion of the clamp extends over the edge of the cover at 12 and is drawn down upon the tarpaulin simultaneously with the compression of the batten by means of the wedge 13, inserted between the bottom of the slot in the clamp and the bottom of the bracket. This wedge can be set at any point desired to obtain the greatest efficiency of action by means of the flutes 14 upon the engaging edges of the wedge and bracket. In this manner adjustments for wear or stretching of the parts can be made.

In order to keep all the different portions of the device together, where they can be used at a moment's notice, the wedge 13 is hung upon the bracket in any convenient manner. In Fig. 1 a screw 15 in the wedge moves in a slot 16 in the lower portion of the bracket, and in Figs. 3 and 4 the wedge is provided with a rib 17, which engages the shallow slot 18 in the bracket. The wedge or key 11 is attached to the bracket by means of the chain 19, secured thereto by means of the bolt and washer 20 and 21.

The vertical projection or arm 22 at the lower extremity of the bracket is adapted to receive the clamp when it is detached and falls upon the deck and serves as a pivot upon which the clamp can be swung back against the coaming out of the way. The washer 21 serves also to prevent the clamp from falling off from the arm.

In Fig. 5 I show a modification where the transverse slot 10 is made somewhat inclined and the wedge bears upon an inclined portion 30 of the clamp. Here the wedge 13 can be dispensed with, since the wedge 11 will act upon the inclined portion 30 of the clamp to draw it down upon the cover as well as to force it in against the batten.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the coaming of a hatchway and a cover therefor, of a bracket secured to the coaming provided with a transverse slot, a clamp passing over the cover at its outer edge, provided with a vertically-elongated slot through which the bracket passes, a wedge in said slot between the clamp and outer portion of the bracket and a wedge between the bottom of the bracket and lower edge of the vertical slot in the clamp, substantially as described.

2. The combination with the coaming and cover therefor of a hatchway, of a bracket

secured to the coaming provided with a transverse slot, a clamp provided with an upper portion adapted to overlap and engage the cover, and a vertical portion vertically slotted, through which the bracket extends, a wedge in the transverse slot in the bracket between the clamp and the outer portion of the bracket, a wedge passing through the lower end of the vertical slot in the clamp engaging the bottom of the bracket, and means for adjustably fixing the wedge in its position, substantially as described.

3. The combination with the coaming of a hatchway, the cover, tarpaulin and batten, of a bracket secured to the coaming, a clamp having a horizontal upper portion adapted to extend over the cover and top of the tarpaulin and a lower vertical portion engaging the bottom provided with an elongated slot through which the bracket extends, a wedge engaging the bottom of the bracket inserted in the lower end of the vertical slot in the clamp, the engaging edges of the wedge and bracket being fluted, and a downwardly-turned arm upon the bracket upon which the clamp pivots when detached from engagement with the cover, substantially as described.

4. The combination with the coaming of a hatchway, the cover, the tarpaulin, and the batten, of a bracket secured to the coaming and provided with a transverse slot, and a fluted lower surface, of a clamp passing over the outer edge of the cover and engaging the batten and provided with a vertically-elongated slot through which the bracket passes, an upper wedge in the transverse slot in the bracket between the clamp and outer portion of the bracket, a lower wedge in the lower end of the vertical slot in the clamp adjust-

ably fixed in engagement with the bracket, an arm on the bracket upon which the clamp is adapted to pivot when released from the cover, a washer on the outer end of said arm, and a chain connecting the said upper wedge and arm, substantially as described.

5. The combination with the coaming of a hatchway and a cover therefor, of a bracket secured to the coaming, a clamp with a vertical portion vertically slotted through which the bracket extends, and provided with an upper portion adapted to overlap and engage the cover, a wedge in the transverse slot in the bracket between the clamp and the outer portion of the bracket, and means for continuously drawing down the clamp to engage the cover, acting simultaneously with the action of the wedge in the transverse slot in the bracket, substantially as described.

6. The combination with the coaming of a hatchway, and a cover therefor, of a bracket secured to the coaming provided with a transverse slot, a clamp provided with an upper portion adapted to overlap and engage the cover, and a vertical lower portion provided with a vertical slot through which the bracket extends, a wedge in the transverse slot in the bracket between the clamp and the outer edge of the bracket, means for forcing down the clamp upon the cover simultaneously with the movement of the wedge to force in the clamp against the batten, and means for securing the clamp movably to the bracket, substantially as described.

In testimony whereof I hereunto set my hand this 2d day of May, 1903.

ERNEST H. FREY.

Witnesses:

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