

G. Gilmour.
Cable Stopper.

Nº 16,821.

Patented Mar. 10, 1857.

Fig. 1.

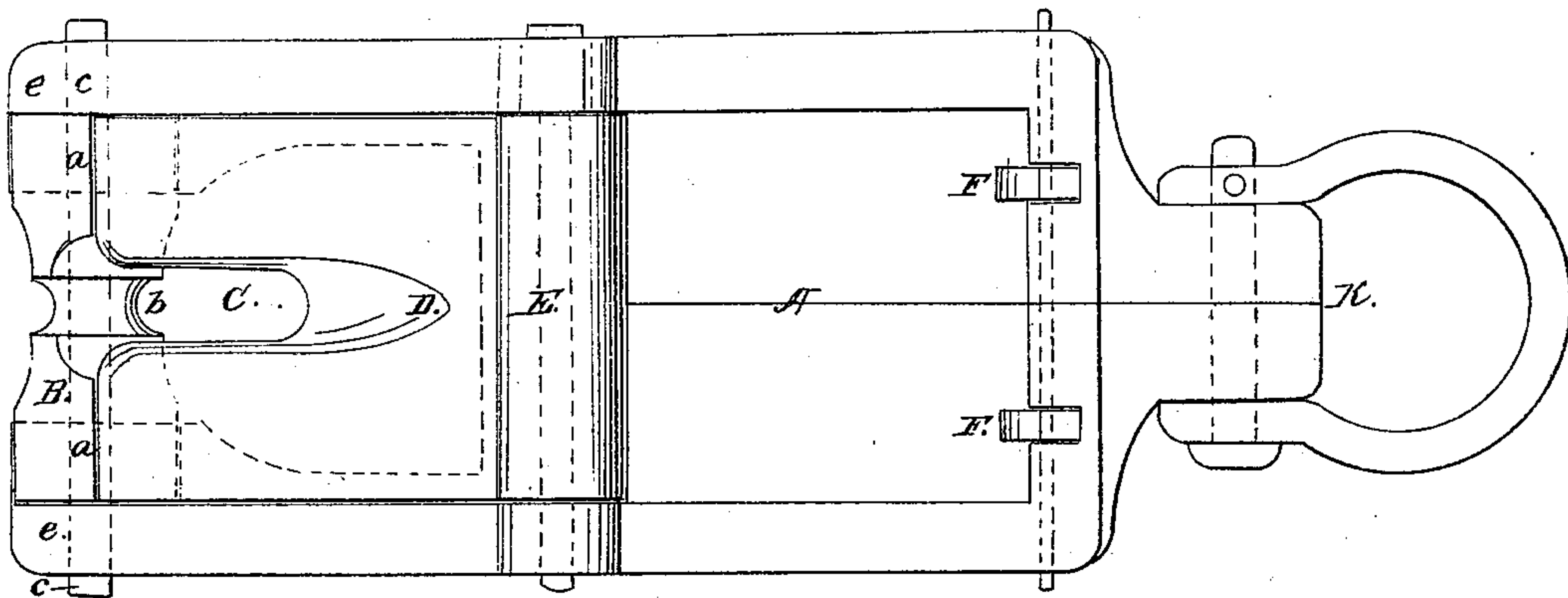


Fig. 2.

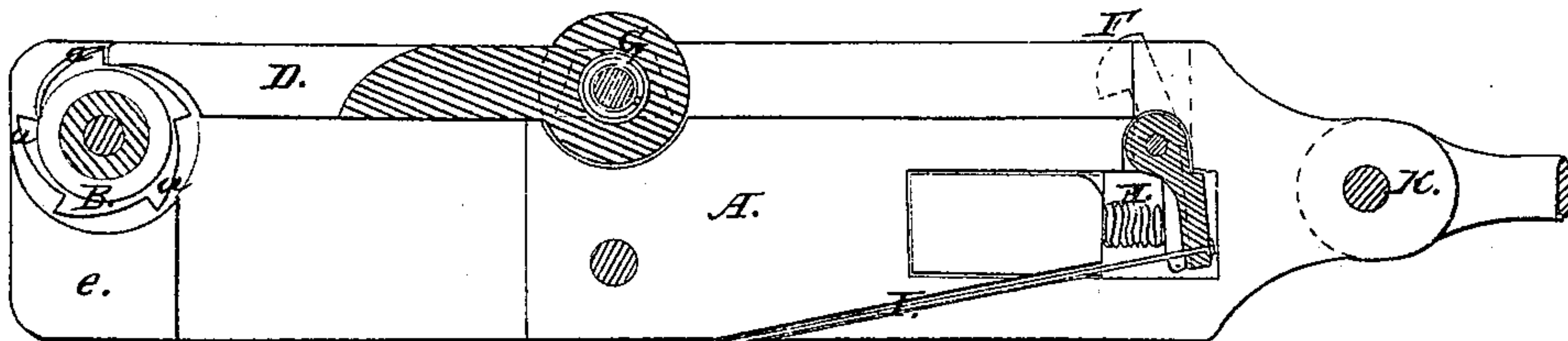


Fig. 3.

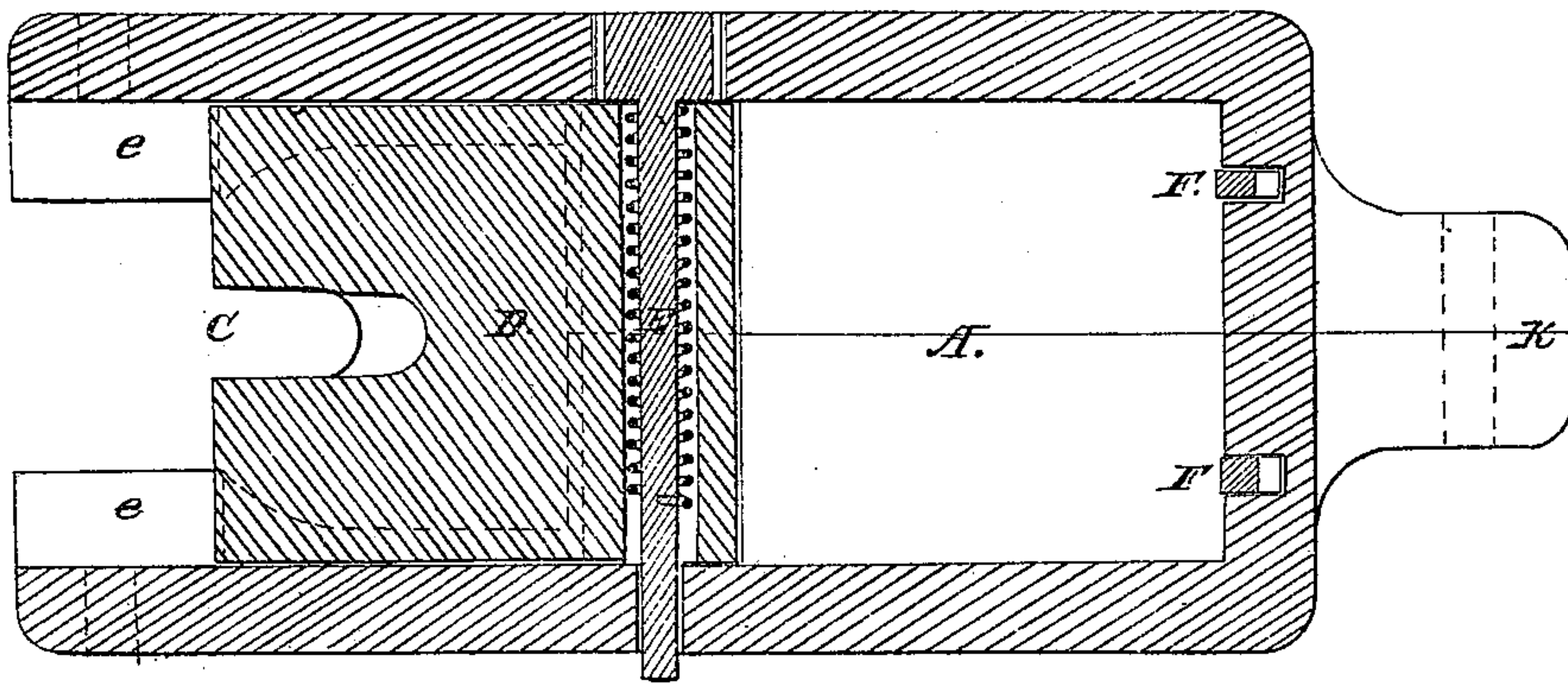
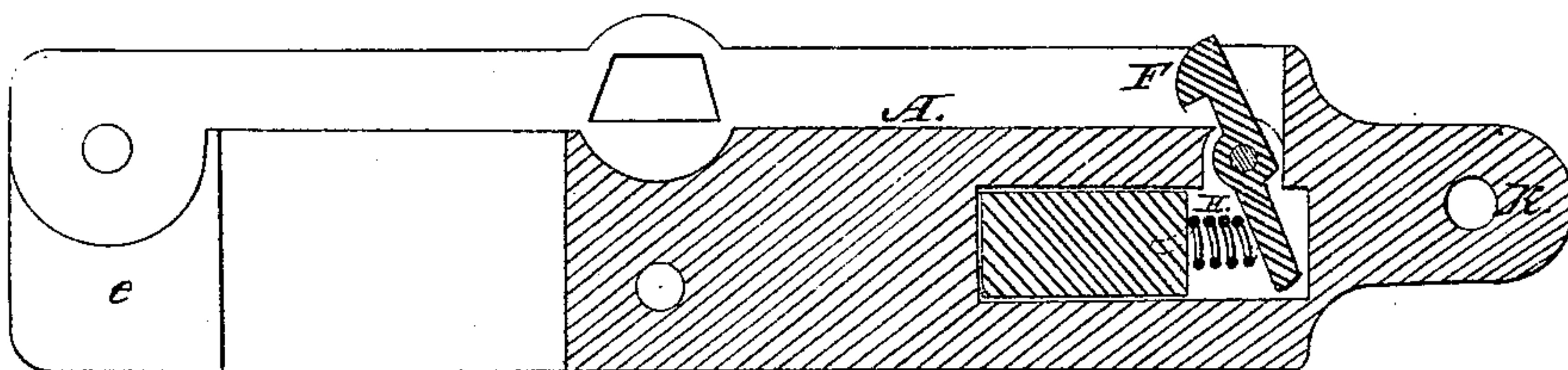


Fig. 4.



UNITED STATES PATENT OFFICE.

GEORGE GILMOUR, OF CHELSEA, MASSACHUSETTS, ASSIGNOR TO G. GILMOUR AND H. R. CLINKARD.

SECOND-ANCHOR SHACKLE.

Specification of Letters Patent No. 16,821, dated March 10, 1857.

To all whom it may concern:

Be it known that I, GEORGE GILMOUR, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented a new and useful contrivance or mechanism for shackling or attaching another anchor to the chain of an anchor to which a vessel may be riding, my said invention being termed by me a "second-anchor shackle;" and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which,—

Figure 1 denotes a top view of it. Fig. 2, a central, vertical, and longitudinal section of it. Fig. 3, a horizontal section taken through its spring fly or pawl. Fig. 4, a longitudinal section taken through one of its spring latches.

In the drawings A denotes a bifurcated block or frame, having arranged near the extremities of the prongs *e, e*, of its fork, a roller B, such being as seen in the drawings. Combined with the opening C, of said frame, or applied to the rear part of it, is a forked pawl, D, which turns freely on a pin E one hundred and eighty degrees, or from the roller B over and toward one or more lever catches or latches F, F, arranged in the frame A, as shown in Figs. 1 and 4. A spring G, should be so applied to the pawl D, and the frame A, as not only to allow said pawl to be revolved from the roller B to the catches F, F, but to cause the said pawl when the catches are unlatched to be sprung smartly toward or against the roller or a chain while passing through the opening C. The spring catch or catches are forced toward the pawl, or maintained in engagement with it, by the action of one or more springs suitably applied to them and the frame A, such being shown at H, in Fig. 4. A wire I, jointed to the lever catch and extending and sliding freely through the frame A, in manner as shown in Fig. 2, enables the catches to be so operated or moved as to disengage them from the pawl D, as occasion may require. The block or frame A, should be constructed in a proper manner to enable a chain or anchor to be attached to the front or projecting part K, and in order to enable the pawl and roller to operate together to advantage I prefer to make the roller with teeth or projections as seen at *a, a*, and also with a

groove *b* extending around it, the whole being as shown in the drawings.

In using an apparatus constructed substantially in the above described manner it is to be attached to an anchor which it may be desirable to send down upon a chain of a vessel or ship while riding at anchor, the object being to apply a second anchor to said chain under circumstances that may require the same. The secondary anchor may be attached to the block A by a short chain.

In carrying on the operation of applying said apparatus to the vessel's riding chain we first turn over the pawl and latch it by its catches. Next the pin *e*, by which the roller D is kept in place in the frame A, should be drawn out of the roller and frame so as to allow the frame A, to be passed up underneath the chain, and receive said chain into the opening C. This done, the roller and pin should be put back in place again. A line or rope of small diameter and of sufficient length should be attached to the wire I. The apparatus is then ready for the second anchor to be dropped from the cat head, or part of the vessel from which it may be suspended. After the anchor has been cast off from the cat head, its weight acting on the shackle will draw said shackle down upon the riding chain of the main anchor until the secondary anchor may reach its destination in the bottom of the sea, which having taken place the line attached to the wire I should be pulled so as to unlatch the catches and permit the pawl to be thrown over so as to act between the links of the riding chain and clutch the secondary anchor to the said riding chain of the main anchor. At the same time that the shackle is being taken down by the secondary anchor such shackle if desirable, may carry down with it a chain, cable, or messenger attached to it, such being also connected to the vessel. Furthermore in case a chain should part at or near the main anchor or at any distance above the same, that part of its chain which hangs from the vessel may have by my shackle or invention, an anchor attached to its lower part, as by knowing about the length of said chain or part depending from the vessel, and having the tripping line suitably marked we may stop the anchor shackle at such part of the chain as may be desirable.

My invention is one of great value and importance as by means of it a vessel may be often saved from being wrecked or driven on shore.

5 I am aware that a patent has been applied for by Wm. J. Stetson on a hoisting block made so as to contain a holding pawl and a tripping lever. In this block the purpose of the tripping lever is to force the pawl
10 out of engagement with the chain extending around the sheave of the block and in order that such chain may run freely over the sheave. This hoisting block, however, has little similarity to my anchor shackle, nor could it be employed for the
15 same purpose, as its peculiar construction would prevent it from being so used. Although in common with such block I employ a roller and pawl, yet I use no tripping lever
20 to operate against the pawl in such manner as to elevate it, out of engagement with the chain. The latching apparatus or trigger of my anchor shackle operates to hold the pawl back against the reacting power of the
25 spring of said pawl.

When the cord of the latching apparatus is pulled backward, the force of traction operates to set the pawl free so as to enable its spring to throw it over and into engagement with the chain so as to confine the
30 block thereto. Besides this, the latching apparatus or trigger levers and the roller of my said anchor shackle are arranged at opposite ends of the frame A, and have the

pawl disposed and hinged between them, in
35 such manner that it may turn or be turned over through a semicircle and from the roller to the latches and vice versa, the same causing the pawl to be entirely out of the way of the chain, while the anchor shackle may be
40 running down upon it. Furthermore the pawl is formed forked or with a recess by which it is enabled to straddle a link of the chain, and thereby hold the chain to much better
45 advantage than it would were it made so as to extend only against the front of the link and between the two adjacent connecting links and not straddle the middle link.

I do not claim a hoisting block made with a pawl and tripping lever so applied to the
50 pawl as to enable a person to elevate the latter out of engagement with a chain when passing around the sheave of the block, but

What I claim is—

1. My new or improved anchor shackle
55 as made with a spring pawl, D, and trigger or latching apparatus (FF, etc.,) arranged with reference to the roller, B, and made to operate substantially as described.

2. I also claim making the pawl forked
60 or with a recess so as to enable it to straddle the chain as described.

In testimony whereof I have hereunto set my signature.

GEO. GILMOUR.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.