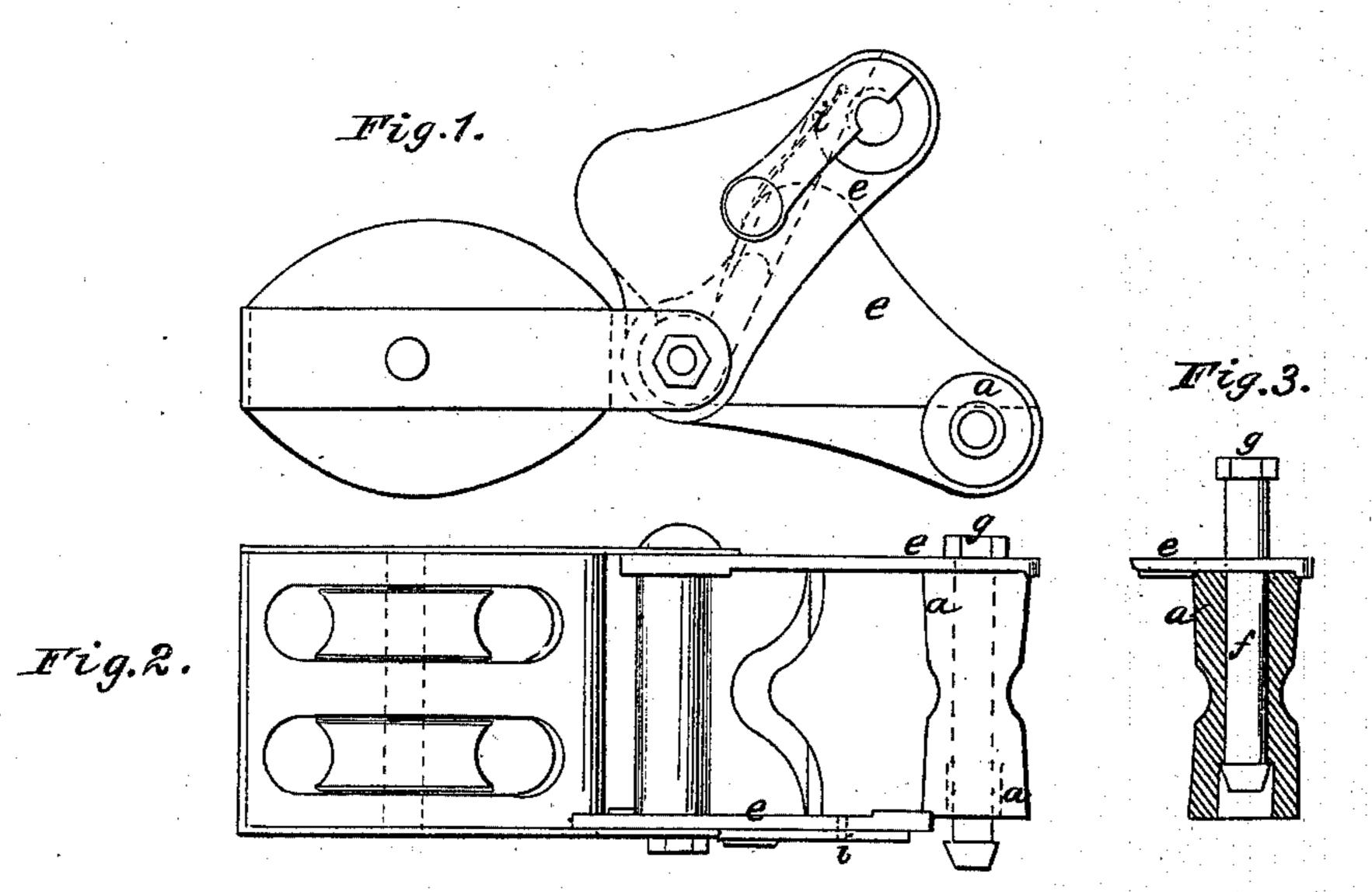
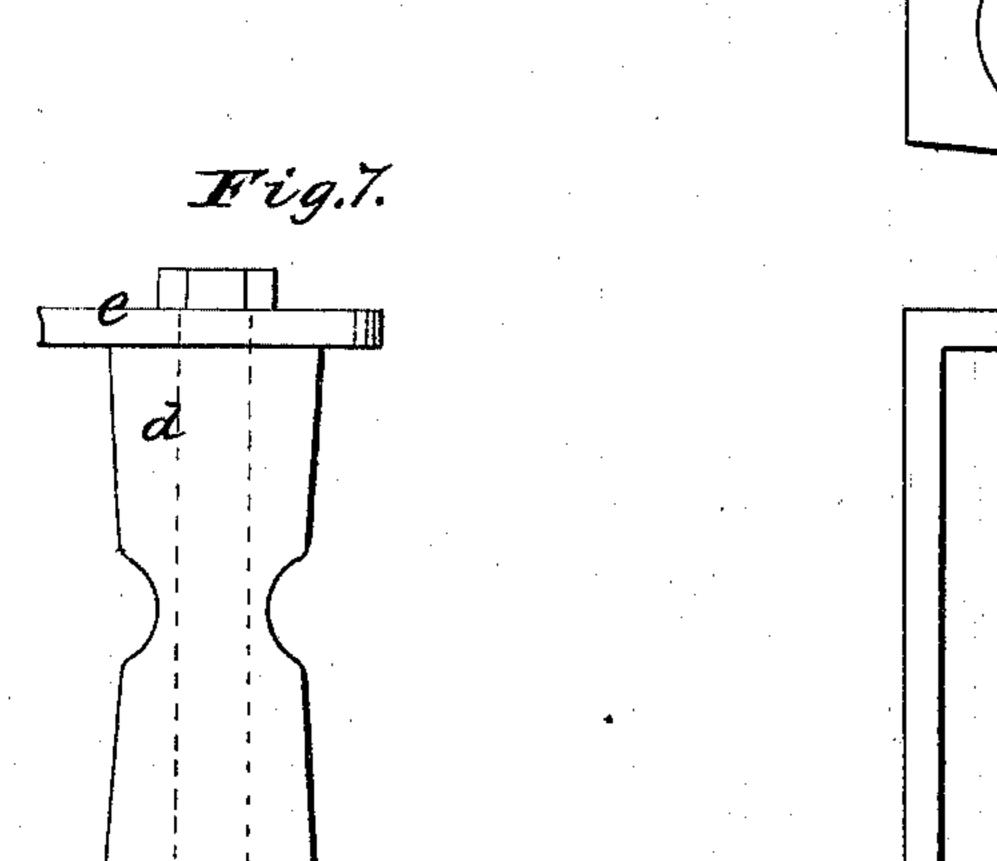
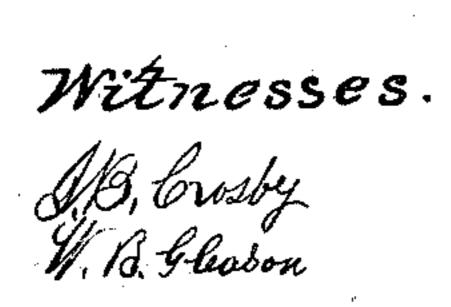
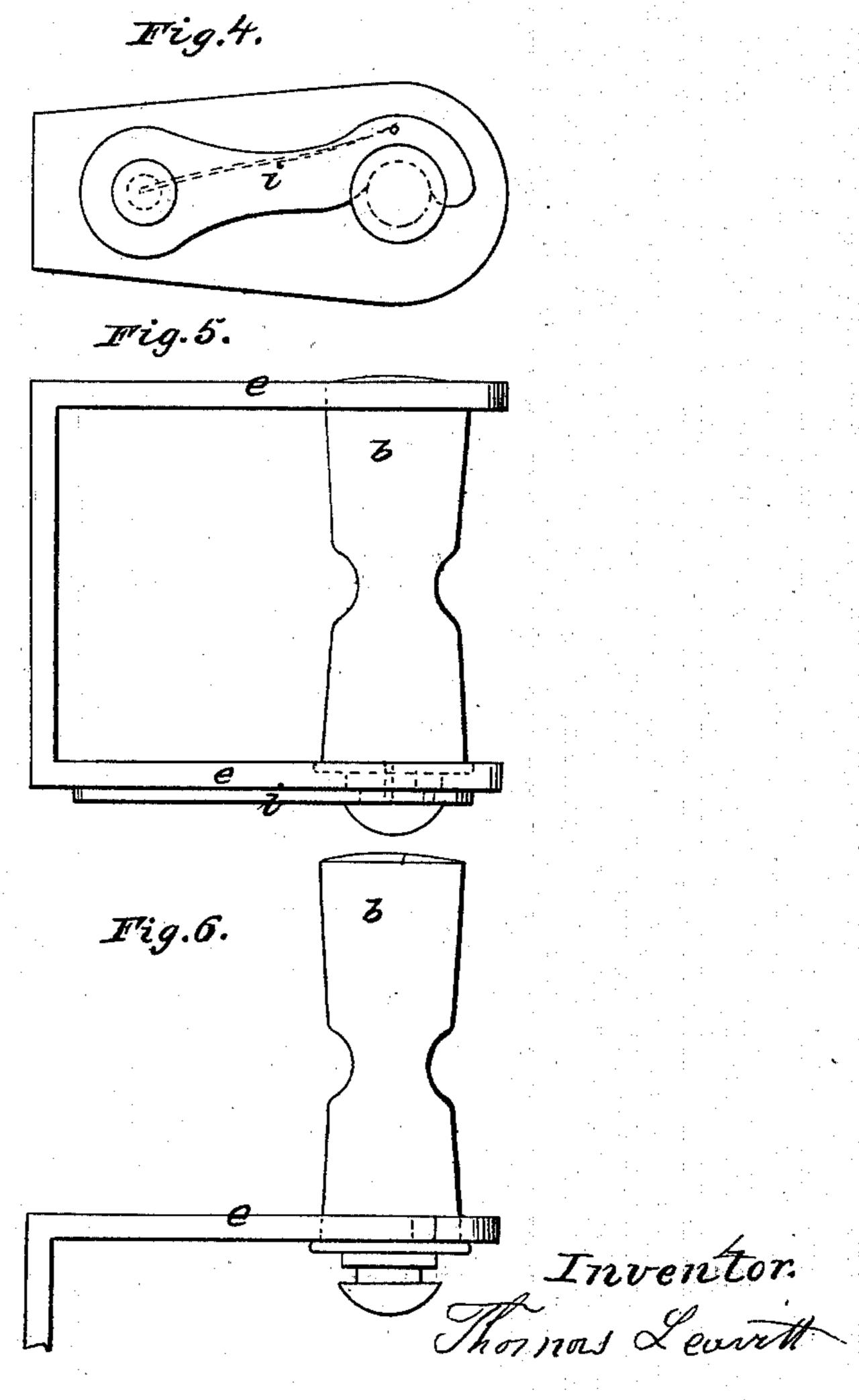
I. Leavitt. 1.11000... Cable Stopper Patented Jan. 3, 1860

Nº 20,684.









N.PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS LEAVITT, OF MALDEN, MASSACHUSETTS.

SECOND-ANCHOR SHACKLE.

Specification of Letters Patent No. 26,684, dated January 3, 1860.

To all whom it may concern:

Be it known that I, Thomas Leavitt, of Malden, in the county of Middlesex and State of Massachusetts, have invented an 5 Improvement on the "Second Anchor-Shackle" and on an "Improvement in Messenger Shackle-Blocks," both patented to George Gilmour on the 10th day of March and on the 21st day of April, A. D. 1857, 10 respectively; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a clear, full, and exact description of the same and sufficient for 15 those skilled in the art to make and use my invention.

Of the drawings, Figure 1 is a side view of a Messenger shackle block constructed with my improvement, and arranged ready 20 to be slipped upon a chain. Fig. 2 is a plan of the same. Fig. 3 is a sectional view of the roller (a) exhibiting one form of my improvement, and Fig. 7 is a view of a similar roller as commonly constructed and with-25 out my improvement. Fig. 4 is a side view of that part of either an anchor shackle, or shackle block, with which my improvement is immediately connected. Fig. 5 is a plan of the same with the roller (b) in the posi-30 tion it occupies when upon the chain. Fig. 6 illustrates the position and connection of roller (b) with the other parts, when arranged to be slipped upon the chain.

Previous to my improvement, the roller 35 which "facilitates the movement of the shackle block on the chain," had been so constructed that, in order to place the shackle upon the chain, it became necessary to remove the bolt (c) Fig. 7, entirely from the 40 shackle, which left the roller loose, and it, as well as the bolt, became the object of special care to the operator; for if either of the parts, bolt or roller, were lost, the shackle was, for the time, rendered useless. 45 The care and exertion required for the retention of the bolt and roller, when the operative is swung over the bows of a vessel, endeavoring to slip the shackle on the chain cable, when she is pitching her bows in 50 and out of the water, and rolling heavily, and where the roller weighs, as it often does, more than fifty pounds, is obvious; it is always under any circumstances a drawback to the use of Gilmour's otherwise efficient 55 apparatus, and under unfavorable circumstances renders its use impossible.

The object of my invention is to avoid the described defect in Gilmour's patents before referred to, and its nature consists in the means described, or their substantial 60 equivalents, of so constructing the roller as to have it connected with the other parts of the apparatus when the shackle is being slipped upon or taken from the chain, and not separable from it, accidentally, under 65 any circumstances, while at the same time provision may be made for separating the roller from the other parts for repairs &c.

As this invention is an improvement on a well known matter I shall confine my de- 70 scription nearly as possible to the improvement.

By reference to Fig. 7, it will be seen that the roller (d) is supported between the cheeks (e) on a plain bolt (c) which passes 75 through the cheeks and is secured by a pin in the pin hole shown in the bolt. This is the method of attaching and securing the roll in Gilmour's second anchor shackle and Messenger shackle block. It is evident if 80 the pin be withdrawn from the pin hole, that, in some positions the bolt can and will work clear from all the parts, and that then the roller is entirely free. It is true that the bolt may be confined to one of the cheeks by 85 a chain, as is common for securing similar bolts and pins, and so that if the bolt should get adrift it would not be lost. But no such security can be had for the roller. If it gets adrift accidentally it is lost, and the 90 same result attends negligence, accident, or inability on the part of the operative.

As Gilmour's apparatus (the second anchor shackle especially) is a safety, and therefore a life and property preserving, 95 apparatus. The utility and importance of any change therein which detracts from its liability to accident, and consequent inefficiency, is too obvious to need further comment.

In Figs. 1 and 2, where one of the cheeks (e) can be moved independently of the other, the roller may be constructed with a chambered axial bore, shown in dotted lines Fig. 2, and in detail in Fig. 3. The bolt (f) 105 is constructed with a head, or shoulder, larger than the body of the bolt, so that when the fastening, of whatever kind, employed to hold the bolt in the cheeks, is removed the bolt can be withdrawn, so that 110 the end by which it is secured will be entirely within the roller, which will allow

one cheek to be swung past the roll, as shown in Fig. 1, for the purpose of slipping the shackle on or off the chain cable. The kind of fastening employed to hold the bolt or 5 roller between the cheeks, and shown in Figs. 1, 2, 4 and 5 consists of a latch (i) which is thrown into a recess formed in the bolt or roller, as plainly shown in the drawings, by a spring acting on a pin in the latter, both pin and spring being shown by dotted lines. Any other method of confining the bolt or roller, such as a pin, or key, or split spring pin, or nut, will serve a good purpose, and the manner of their application for the purpose is obvious.

In order to insert the bolt in the roller, when both are constructed similarly to those shown in Figs. 2 and 3, the head (g) should be made separate from the bolt and riveted on

Figs. 4, 5, and 6, illustrate a manner of constructing the roller which I prefer to any other; for by it the boring of the roller and the construction of the bolt is saved, and besides the cheeks (e) can be fastened together, and the shackle can be placed upon and taken off the chain by simply removing the fastening at one end of the roller and

withdrawing it from and out of one cheek, when it will be supported and held securely by the other. This roller is inserted into 30 suitable holes formed in the cheeks before they are riveted or otherwise fastened together. The end of this roller where it is secured by the latch may be otherwise fashioned for any suitable fastening.

It is evident that the detail of arrangement by which the roller is secured to one or the other of the cheeks while adjusting the shackle upon or taking it from the chain may be very much varied, and also that 40 those variations will be no departure from the spirit of my invention when the roller is secured in, or to, one of the cheeks during the dismemberment of the apparatus.

I claim as an improvement on the appara- 45 tus herein before referred to as patented—
The combination of the roll (a or b) with

The combination of the roll (a or b) with the cheek (e) substantially in the manner described for the specified purpose.

THOMAS LEAVITT.

Witnesses:

J. B. Crosby, W. B. Gleason.