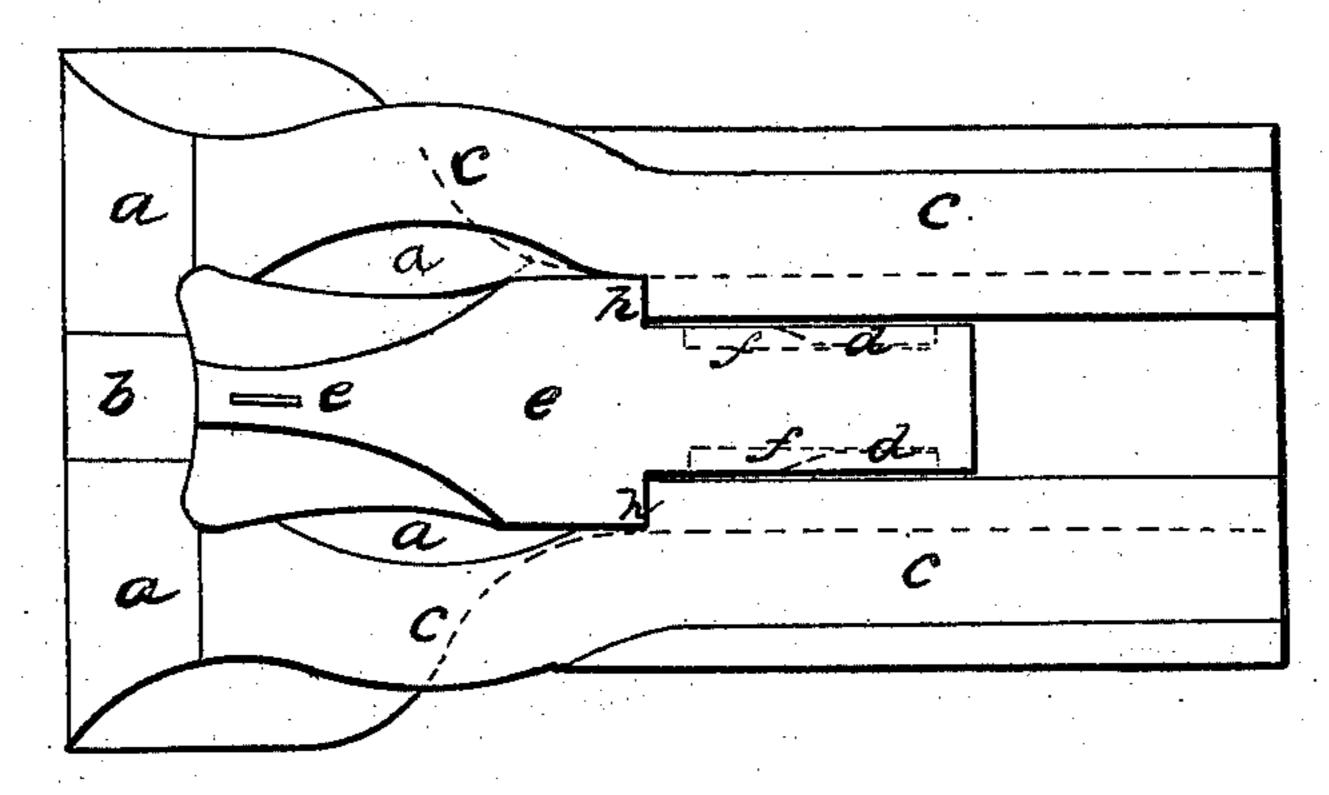
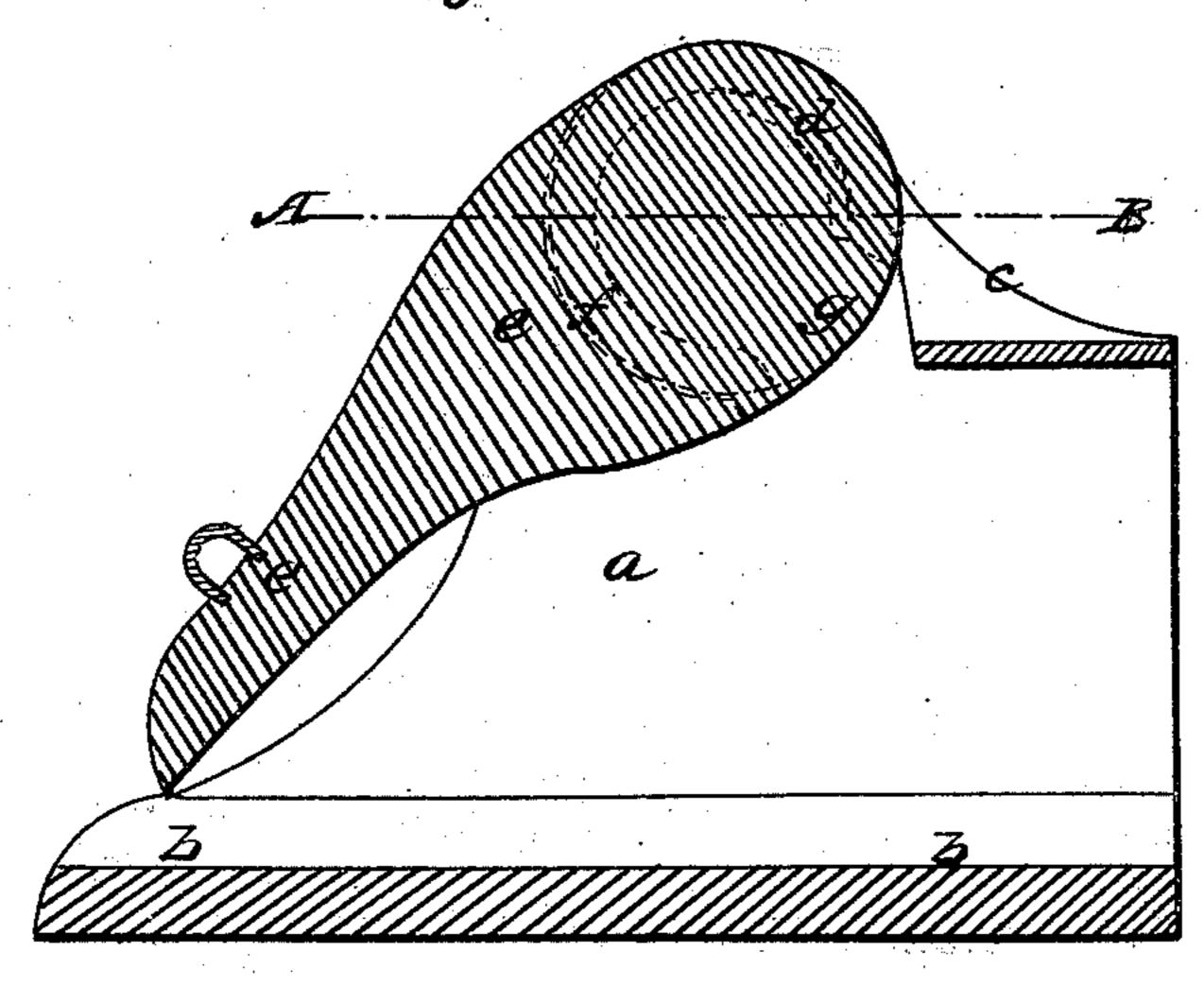
M.H. Gray. Cable Stopper. Patented Aug. 24, 1858

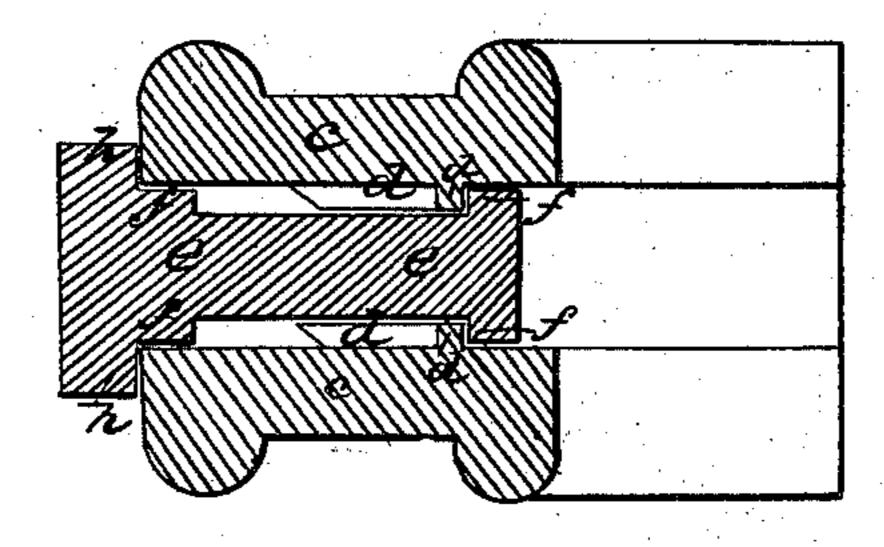
N921,296.

Fig.1.



Tig.2.





Witnesses.

UNITED STATES PATENT OFFICE.

WM. H. GRAY, OF DOVER, NEW HAMPSHIRE, ASSIGNOR TO HIMSELF, AND ALBERT G. BROWNE, OF SALEM, MASSACHUSETTS.

CHAIN-STOPPER.

Specification of Letters Patent No. 21,296, dated August 24, 1858.

To all whom it may concern:

Be it known that I, William H. Gray, of Dover, in the county of Strafford and State of New Hampshire, have invented certain 5 new and useful Improvements in Chain-Stoppers to be used in Connection with Anchor-Cables on Shipboard, and that the following description, taken in connection with the accompanying drawings, forms a 10 full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The figures of the accompanying plate of

drawings represent my improvements.

Figure 1 is a plan or top view of my im-

proved chain-stopper. Fig. 2 is a central vertical section of the same. Fig. 3 is a horizontal section taken in the plane of the line A.B. Fig. 2

line A B, Fig. 2. The strain which comes upon the pawl 25 of a chain-stopper when the anchor is being weighed is so great, that it is very essential that the utmost possible strength should be provided in the bearings which sustain the pawl. This cannot be the case when standards are used, as is usually the case, with circular holes for supporting the shaft on which the pawl turns, and my improvement avoids the necessity of weakening the standards by thus making these holes, and leaves them solid to sustain the whole strain which is thrown back upon them through the pawl. These stoppers are placed directly behind the hawse holes in the night heads or near the windlass.

My improved stopper is represented as mounted or cast upon a tube of proper diam-

eter shown at a a Figs. 1 and 2 having a guiding groove b b for the chain which holds the anchor. The supporting standards or ears c c are made nearly circular and as be- 45 fore suggested are cast solid upon or with the top of the tube a a and on each of their inner faces are provided with elongated curved bossings or projections d d shown by dotted lines in Figs. 1 and 2 on which the 50 butt or rear of the pawl e e is supported, by being rabbeted or cut out on either side so as to form a curved rim f f which rests on said bossings as shown in Figs. 1 and 2. Said rim has an opening g g to allow it to 55 be shipped or unshipped from the bossings whenever required.

The pawl e e should be made very strong at its butt and is formed near the same with two shoulders h h, which, when the pawl is 60 in its diagonal position are brought to bear against the front and underside of the standards or ears c c, so as to take the whole strain to the said ears, which are not weakened as before stated by having holes bored in them 65 to support the shaft of the pawl.

Having thus described my improvements, I shall state my claim as follows:

I shall state my claim as follows:

What I claim as my invention and desire to have secured to me by Letters Patent, is— 70. The improvement in chain stoppers herein above described which consists in hanging

in above described which consists in hanging the butt of the pawl on bossings cast on the inside of the two supporting standards or ears, in combination with the shoulders h h 75 on said pawl bearing against said standards as described, the whole being arranged and operating as herein above specified.

W. H. GRAY.

Witnesses:

RHEIMUNT SAYER, ALBERT W. BROWN.