

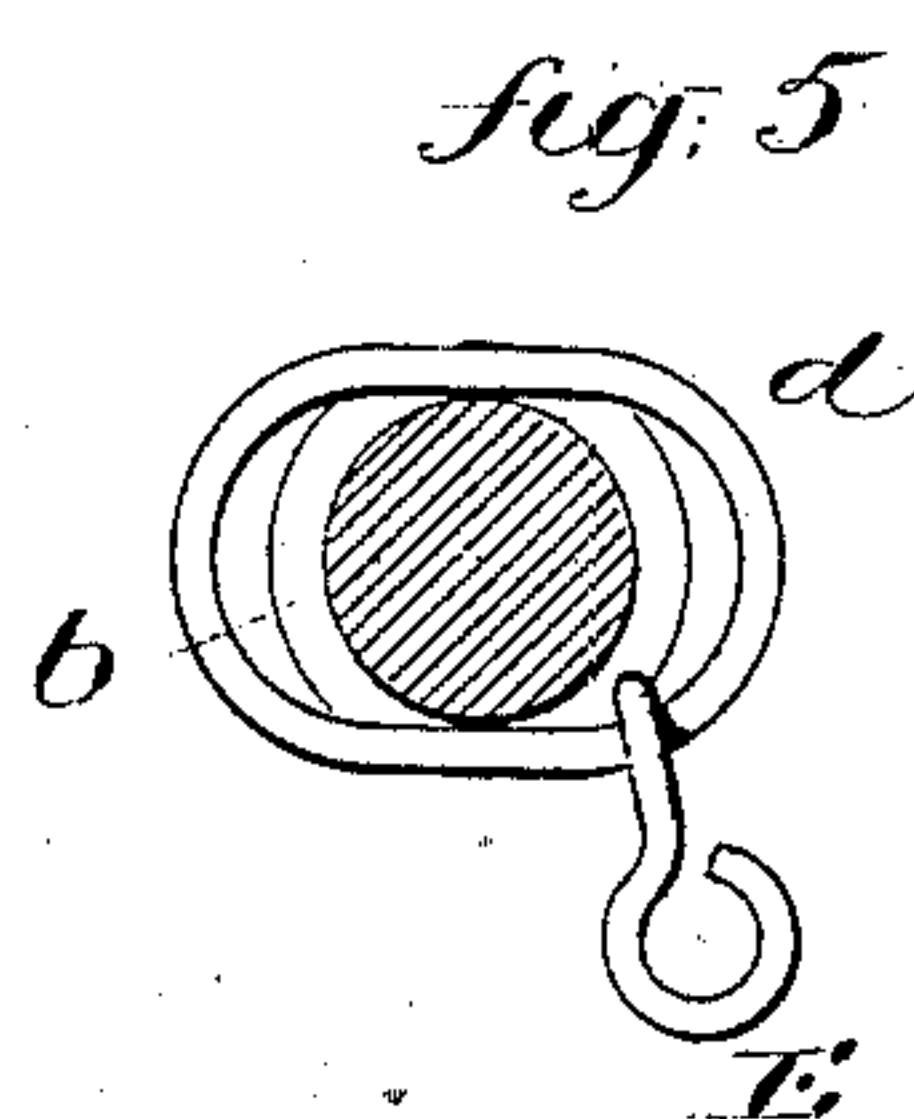
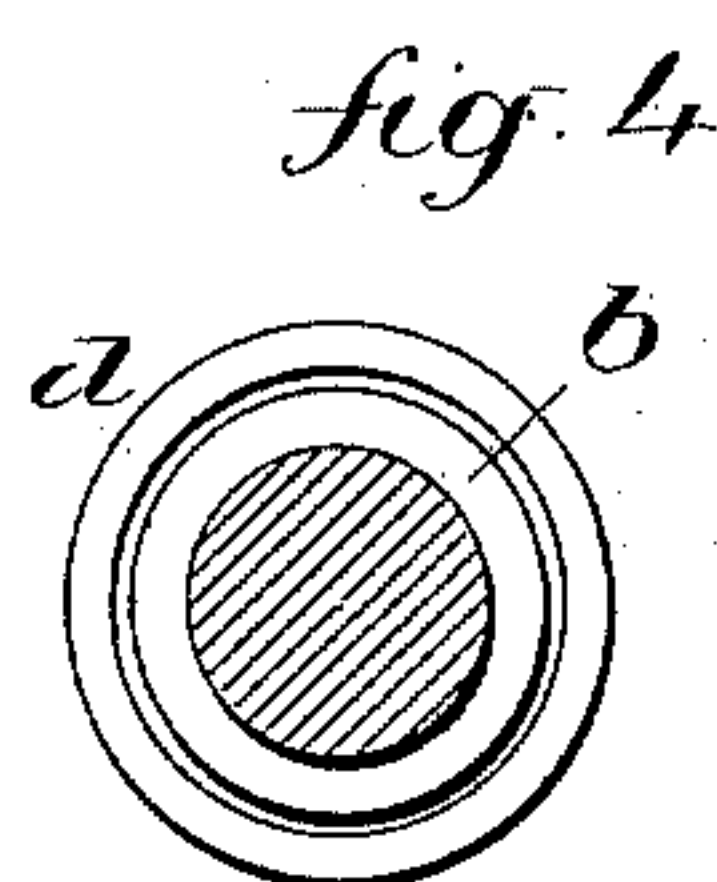
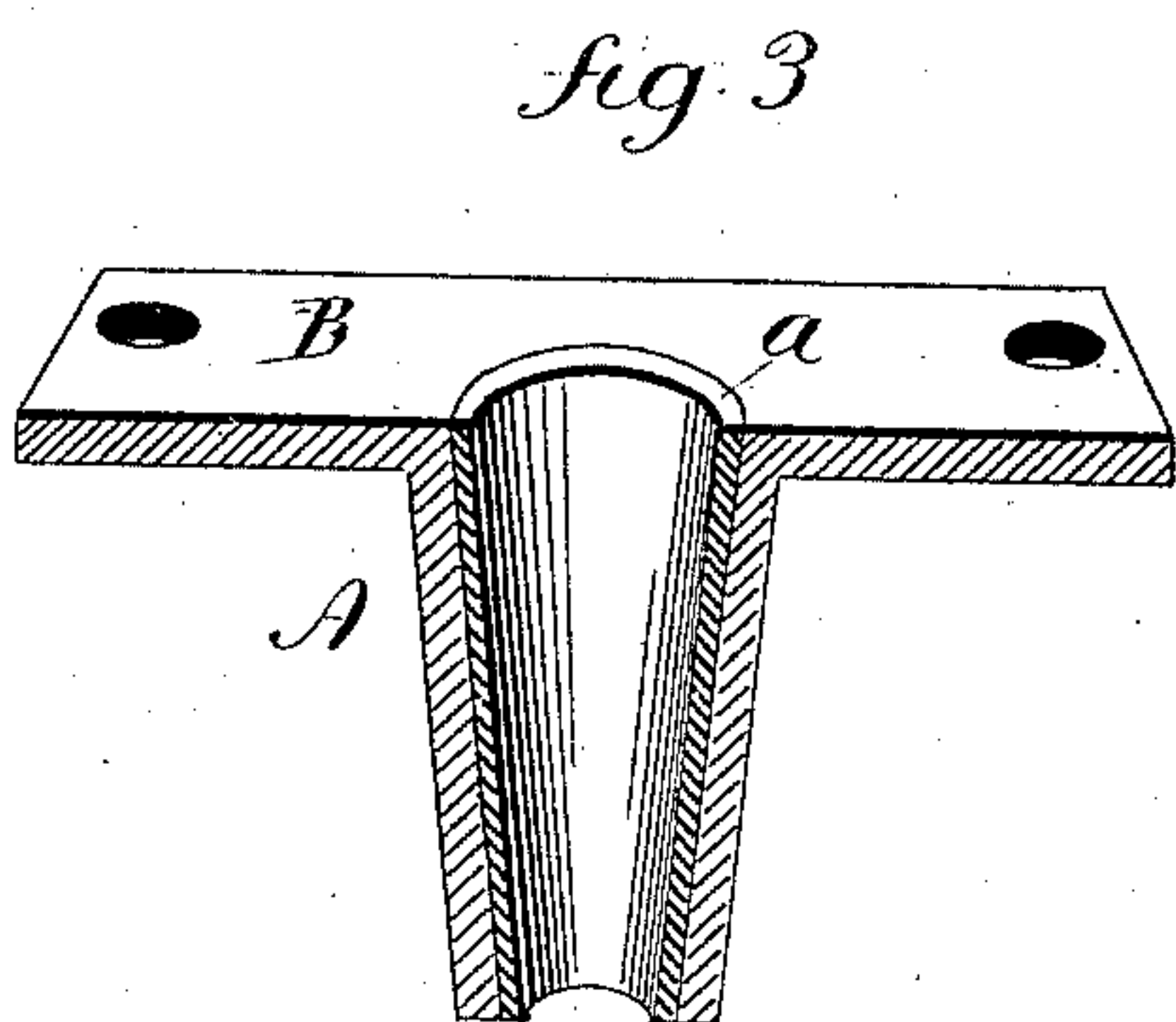
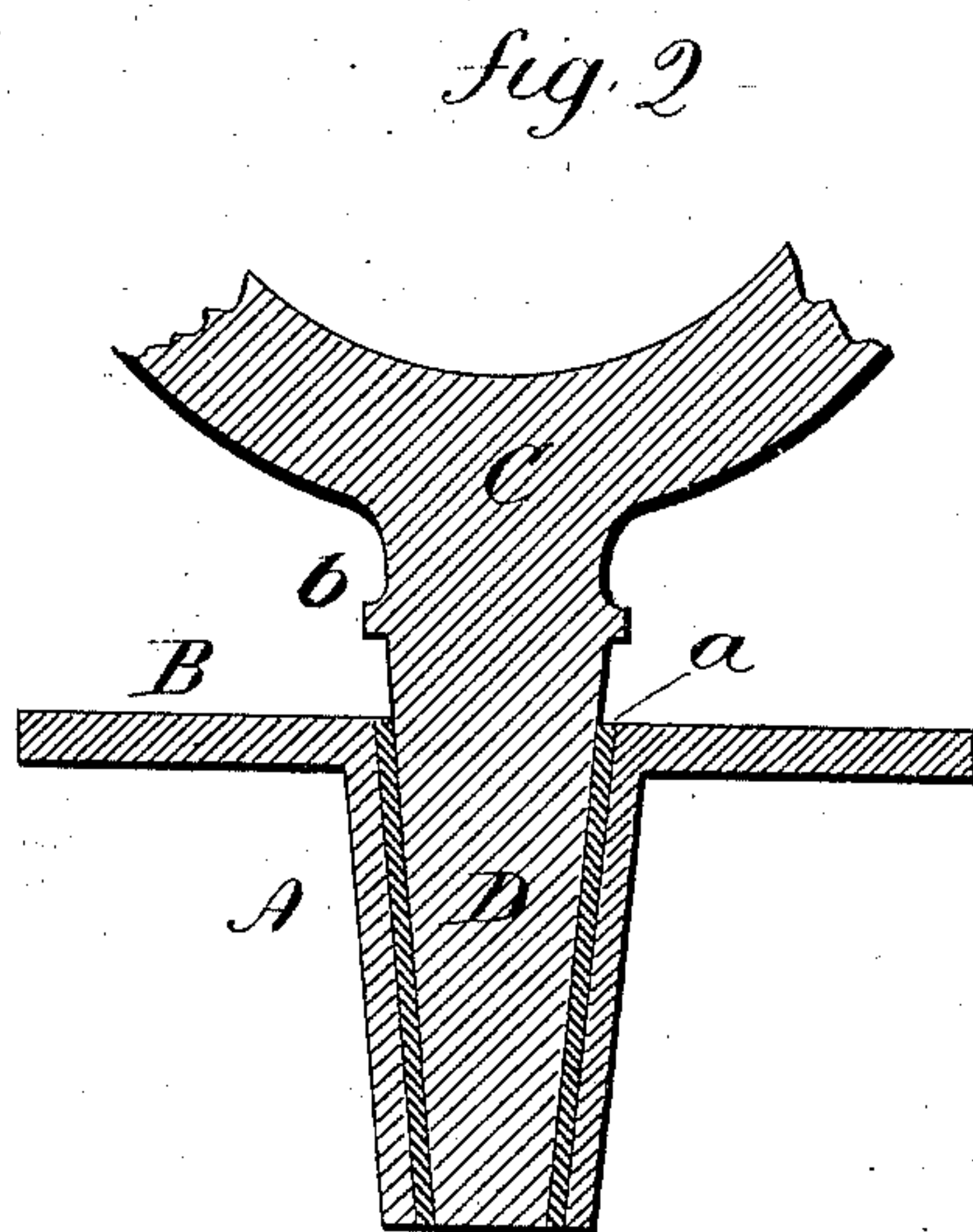
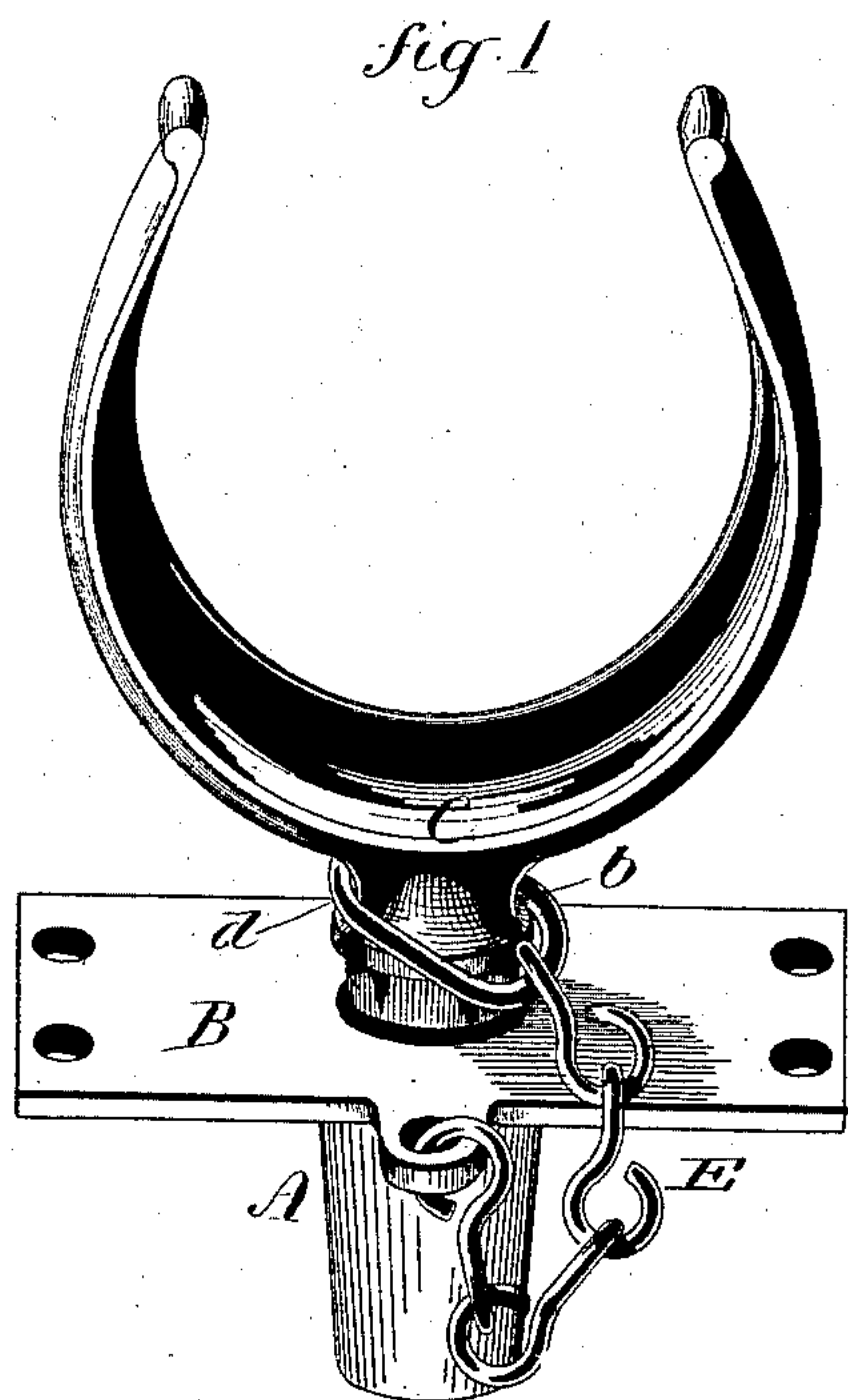
(No Model.)

E. B. BEACH.

OAR LOCK.

No. 277,662.

Patented May 15, 1883.



Witnesses  
*J. H. Shumway*  
*Wm. D. Earle*

*Edgar B. Beach*  
Inventor  
By atty.  
*Wm. D. Earle*



# UNITED STATES PATENT OFFICE.

EDGAR B. BEACH, OF STONY CREEK, CONNECTICUT.

## OAR-LOCK.

SPECIFICATION forming part of Letters Patent No. 277,662, dated May 15, 1883.

Application filed February 7, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EDGAR B. BEACH, of Stony Creek, in the county of New Haven and State of Connecticut, have invented a new Improvement in Oar-Locks; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view; Fig. 2, a vertical central section; Fig. 3, a perspective sectional view of the socket; Figs. 4 and 5, method of attaching the chain to the lock.

This invention relates to an improvement in oar-locks, with special reference to the socket upon which the lock swivels and the method of connecting the lock, so that when removed from its socket it will be suspended thereto.

In the usual construction the shank is made substantially cylindrical and the socket correspondingly shaped, both presenting metal surfaces. These metal surfaces cannot well be lubricated, and consequently wear rapidly, so that very soon the lock becomes loose in its socket.

The object of my invention is to prevent such a wear as will render the lock loose in its socket, and at the same time to construct the socket so as to always be well lubricated; and the invention consists in the construction, as hereinafter described, and more particularly recited in the claims.

A represents the socket, which is constructed with a flange or plate, B, by which it is secured to the gunwale. The seat for the lock in the socket is made inverted conical shape—that is, the opening gradually diminishing in diameter from the upper surface downward.

C is the lock, constructed with a shank, D, corresponding to the opening in the socket—that is, gradually diminishing in diameter toward its end, and so that when set into the socket its conical shape fits the corresponding conical shape of the socket, but yet so as to allow it to turn freely in the socket. Because of this conical shape, so fast as the shank or socket wears, by the rotary movement of the lock, the shank will settle into the

socket, and hence will always stand firm and avoid the rattling which attends the usual construction.

To prevent contact of metal with metal, as well as to lubricate the socket, I make the opening through the socket of somewhat larger diameter than the shank of the lock, and then into the socket fit a wood bushing, *a*, driven in so as to stand firm and solid, and bored out corresponding to the shank. This wood bushing is thoroughly saturated with oil; and hence forms a constantly-lubricated surface, and so that while the shank of the lock will fit closely in the socket it will turn with perfect freedom in the thus well-lubricated seat. The wear upon the shank is greatly reduced because of presenting wood to metal instead of metal to metal; but whatever wear there may be upon the wood it still presents the lubricating-surface so as to retain a nice fit and free turning of the lock.

The lock is frequently thrown from its socket, and some connection of the lock with the boat is desirable to prevent its loss. This connection I make by means of a chain, E, one end of which is attached to the socket or other convenient point. The lock has a reduced neck, *b*, above its shank. The end of the chain is fitted with a ring, *d*, the internal diameter of which is greater than the enlargement below the neck *b*, and so as to pass freely on over the enlargement to the neck *b*, and when it has been placed in that position, as seen in Fig. 4, the ring is collapsed—that is, opposite sides are pressed inward to contract the diameter of the ring in that direction to less than the diameter of the enlargement below the neck, as seen in Fig. 5, and by such contracting of the ring its removal from the lock, or the lock from it, is impossible, except by breaking or opening the ring. This method of engaging the chain with the lock is very much cheaper than providing the lock with a fixed eye by which the chain may be attached, leaves the lock perfectly free to be revolved in its socket, is not affected by any twist in the chain, and the lock is as free as if not thus attached.

I claim—

1. An oar-lock having a shank inverted conical

cal shape, combined with a socket of corresponding inverted conical shape, the socket provided with a wood bushing, *a*, to form bearing-surfaces for the shank of the lock, substantially as described.

5 2. The combination of an oar-lock constructed with a neck, *b*, with an attaching-chain, *F*, having a ring of larger diameter than the lock

below the neck, said ring passed onto the neck and there contracted, substantially as described.

EDGAR B. BEACH.

Witnesses:

JOHN E. EARLE,

JOS. C. EARLE.