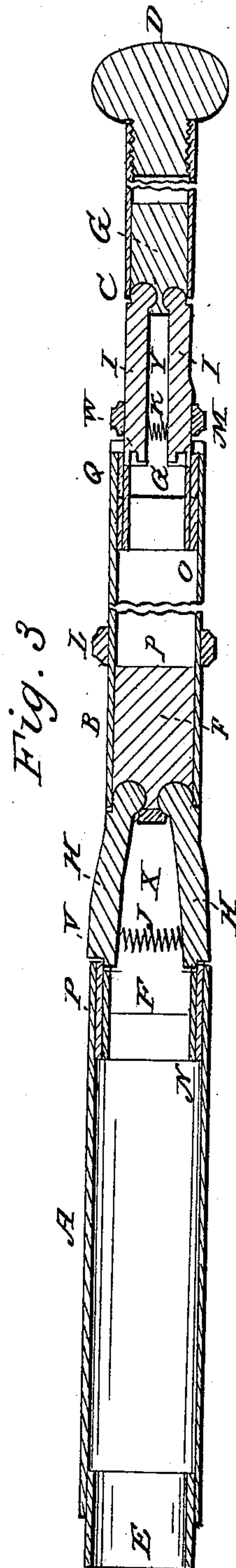
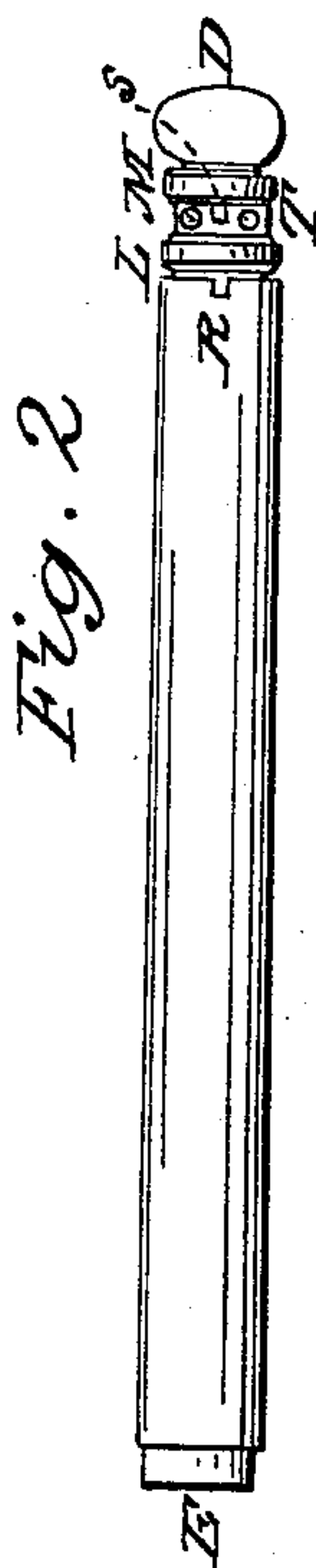
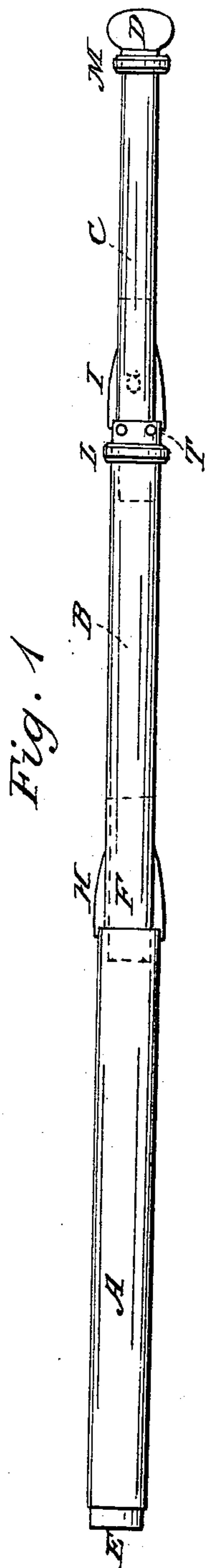


A. T. BREWER.  
 Rammer for Ordnance.

No. 102,214.

Patented April 26, 1870.



Witnesses:  
 W. B. Ghy.  
 Alfred Ghy.

Inventor:  
 A. T. Brewer

# United States Patent Office.

ALANSON T. BREWER, OF BRIGHTON, MASSACHUSETTS.

Letters Patent No. 102,214, dated April 26, 1870.

## IMPROVEMENT IN RAMMER-STAVES.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, ALANSON T. BREWER, of Brighton, in the State of Massachusetts, have invented a new and improved Sponge and Rammer-Staff for Ordnance, of which the following, with the drawing, is a full description.

The object of my invention is to furnish a rammer-staff which can be shortened or lengthened, as needed, so as to be used behind a parapet or embankment, or in a monitor, more advantageously than any now in use.

Figure 1 is a view of the rammer elongated.

Figure 2 is a view of it shortened.

Figure 3 is a section of the same in parts.

It is made of a series of tubes, shutting one within the other.

A, B, and C represent these tubes.

D is a knob screwed into the end of the smallest tube.

E is a small length of tube; or it may be a solid cylinder, inserted, by screwing or otherwise, into the end of the largest tube.

F is a plug the size of the bore of the tube B, and inserted and fastened into the lower or butt end of B.

G is a similar plug, inserted and fastened into the lower end of C.

P is a small bushing, inserted and fastened into the upper end of tube A, the diameter of the inside of which is the same as the diameter of the outside of tube B.

Q is a similar bushing in the upper end of tube B.

N is a tube-ring, fastened on the outside of the lower end of tube B, having an outer diameter the same with the inner diameter of tube A.

O is a similar ring on the lower end of tube C.

Through the tube B, near its lower end, and through the plug F, is cut a slot, X, and in tube C and plug G a similar slot, Y.

H H are arms or levers let in at their rounded upper ends into the plug F, so as to turn in their seats, and move in the slot X, and

J is a spring to throw them out and apart. They have shoulders, V, at their lower ends.

I I are similar arms let into plug G, and moving in slot Y, having shoulders at W and a spring, K.

L is a ring moving on tube B, and

M, a ring moving on tube C.

R are notches in upper end of tube A, and

S, similar notches in end of tube B.

The operation is this:

E being taken out of tube A, and D out of tube C, C is inserted into B, and B into A. As they are pushed or drawn through and to their utmost extension, N will strike against P, and O against Q, and the arms H H will be driven outward by the spring J, and their shoulders, taking into the notches R, will hold the tube B at its length outside of A. In like manner, spring K will act on arms I, and their shoulders, taking into notches S, will hold tube C distended. D and E may be replaced. Pushing down ring M over arms I will close them in, so as to bring their outer edges on a line with the interior of the bushing Q, and the tube C may then be pushed into tube B. In like manner, by use of ring L, tube B may be pushed into tube A. The spring-arms may be pressed down by the hand. The pushing in may be done by drawing the rammer back, with the end D against the wall.

T are small screws to retain ring L on tube B.

This staff is for sponge, rammer, worm-ladle, &c.

What I claim is—

1. The telescopic rammer-staff for ordnance, constructed and arranged to operate substantially in the manner described.

2. The combination of rings and levers or arms, substantially as and for the purposes set forth.

In testimony whereof I have hereunto subscribed my name.

Witnesses:

W. B. ELY,  
ALFRED ELY.

A. T. BREWER.