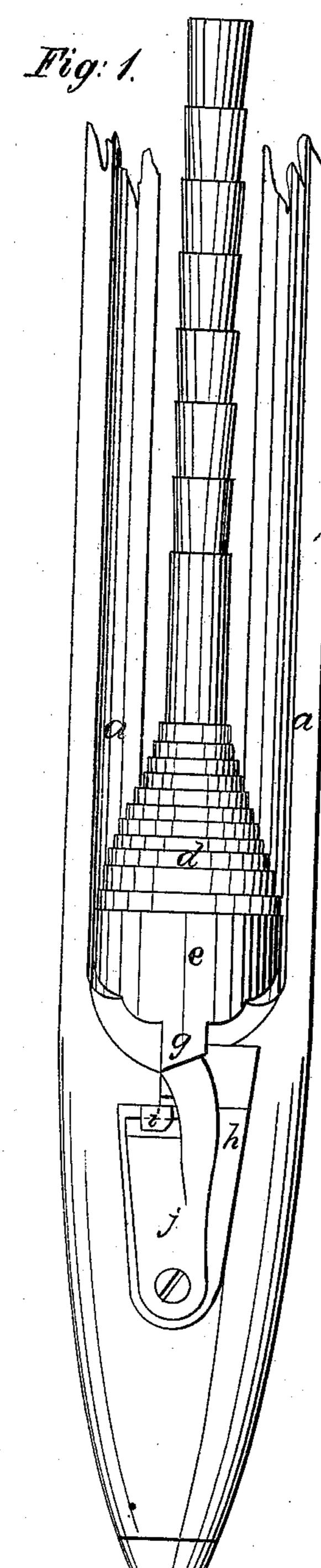
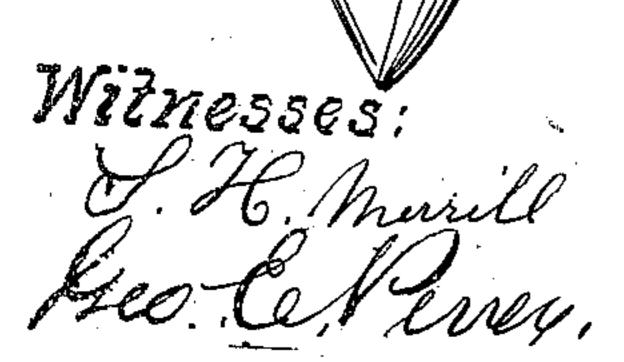
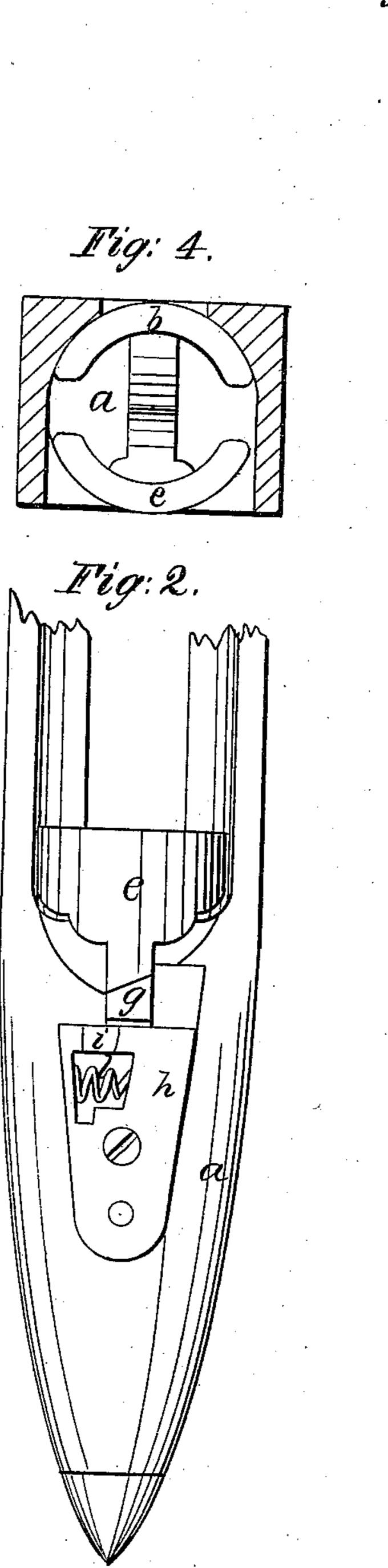
## C. H. Fishe. Loom Simile.

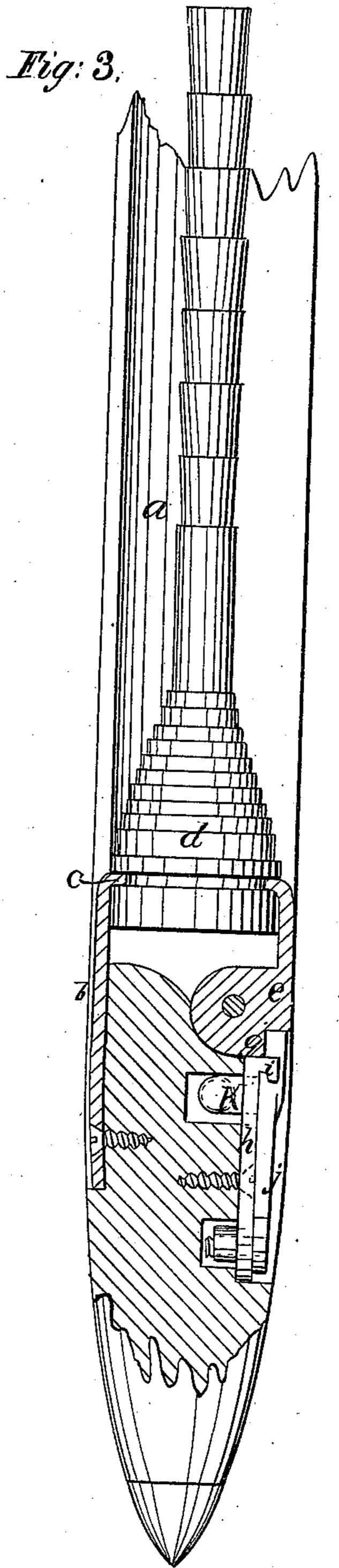
193,608.

Patented Ang. 10, 1869.









Inventor: Charles H. Fiske

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

## Anited States Patent Office.

## CHARLES H. FISKE, OF LOWELL, MASSACHUSETTS.

Letters Patent No. 93,608, dated August 10, 1869.

## IN SHUTTLE FOR LOOM.

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

To all whom it may concern:

Be it known that I, CHARLES H. FISKE, of Lowell, in the county of Middlesex, and State of Massachusetts, have invented new and useful Improvements in Shuttles; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in providing for shuttles a suitable device, which consists of a movable and stationary jaw or clamp, with lateral latch and spring, whereby the bobbin may be retained in the same, by it being secured by its head.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 represents a plan of one end of a shuttle, with a bobbin in position, held by my improved de-

vice. Figure 2 represents a similar plan, without the bobbin, and parts removed to show the operation of my device.

Figure 3 represents a longitudinal section of fig. 1. Figure 4 represents a vertical section of fig. 2.

Similar letters in the different figures indicate corresponding parts.

The shuttle a is constructed in the usual manner, of the required size, form, and shape, its ends being provided with steel tips.

To the shuttle a is secured my improved device, at the opposite end from the thread-delivery.

The under side of the shuttle a is provided with a stationary jaw or clamp, b, which is firmly secured to the same, in a mortise previously prepared, which brings the same about flush with the bottom face of the shuttle a.

The top of this clamp b is furnished with a semicircular projection, c, which, when the bobbin d is placed in position, its head resting on or against the shuttle a, fits into the groove made in the same.

On the opposite side of the shuttle a, is a movable

clamp or jaw, e, which is pivoted to the same, its top being furnished with a semicircular projection, f, to correspond with the projection c on the stationary clamp b, the other end of this movable clamp e being provided with a stem, g.

Located between the movable clamp e and end of the shuttle a, is the bed-piece h, with guide i, which is secured firmly in a mortise previously made in the shuttle a to receive it.

On the top of this bed-piece h is pivoted, at one end, the latch j, the other end operating in the guide i, formed on the bed-piece h.

The under side of this lateral latch j is provided with a lip, k, which passes through an opening in the bed-piece h, and operates against the spring l, located underneath the bed-piece h.

The operation is as follows:

The latch j is pressed laterally from behind the stem g, which allows the movable jaw to be thrown forward, for the introduction of the bobbin. When so introduced, and the jaw returned to its position, the pressure is removed from the latch, and it, through the operation of the spring l against the lip k, is again brought in contact with the stem g, locking the jaw firmly on the bobbin.

I disclaim a clamp holding a bobbin by direct springaction; but

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the stationary clamp b and movable clamp e, when held in position by a positive locking-device, substantially as and for the purposes herein specified.

2. The locking-device, as described, consisting of the lateral latch j, lip k, bed-piece h, and spring l, in combination with the movable clamp e, as specified. CHARLES H. FISKE.

Witnesses:

S. H. MERRILL, GEO. E. PEVEY.