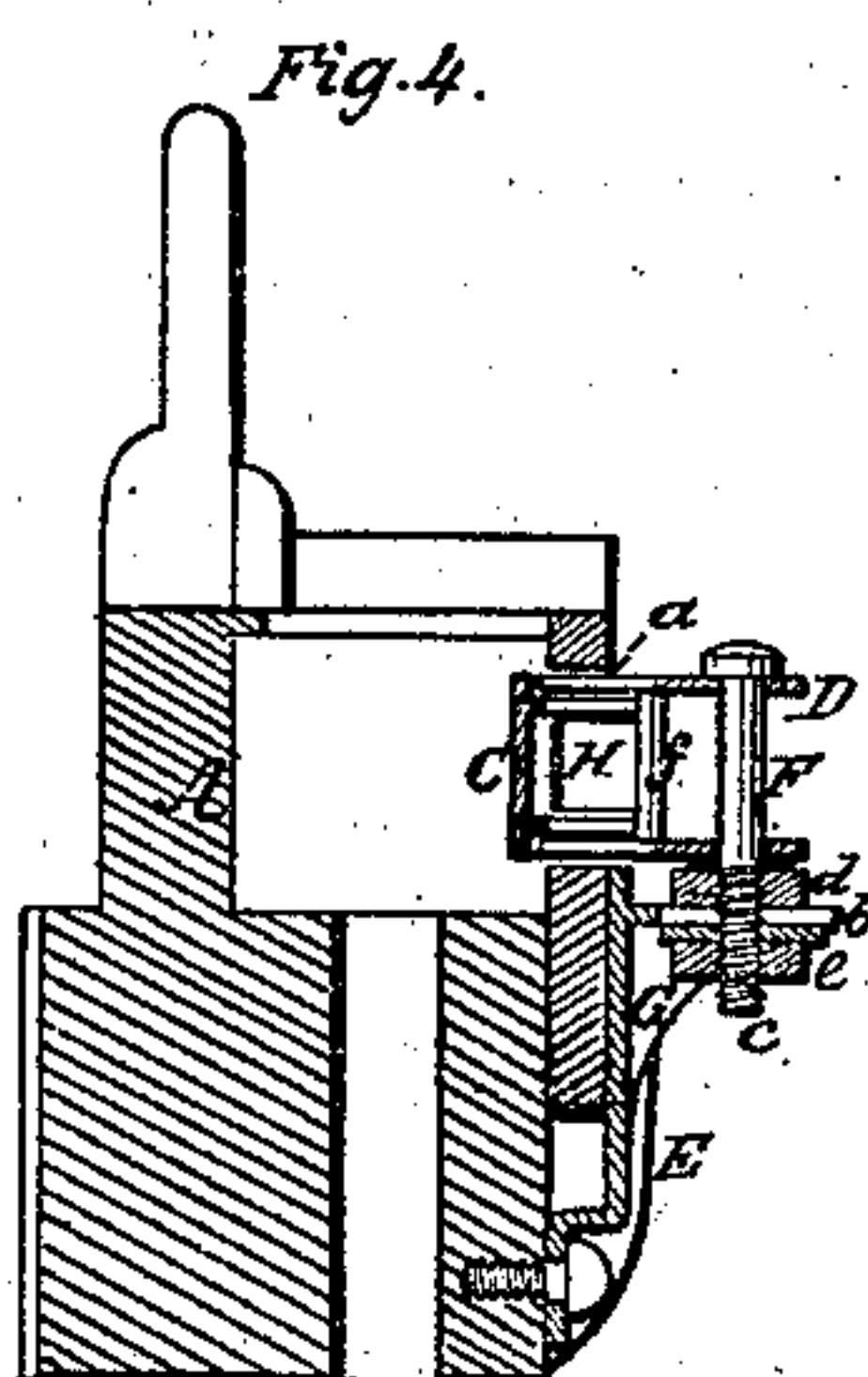
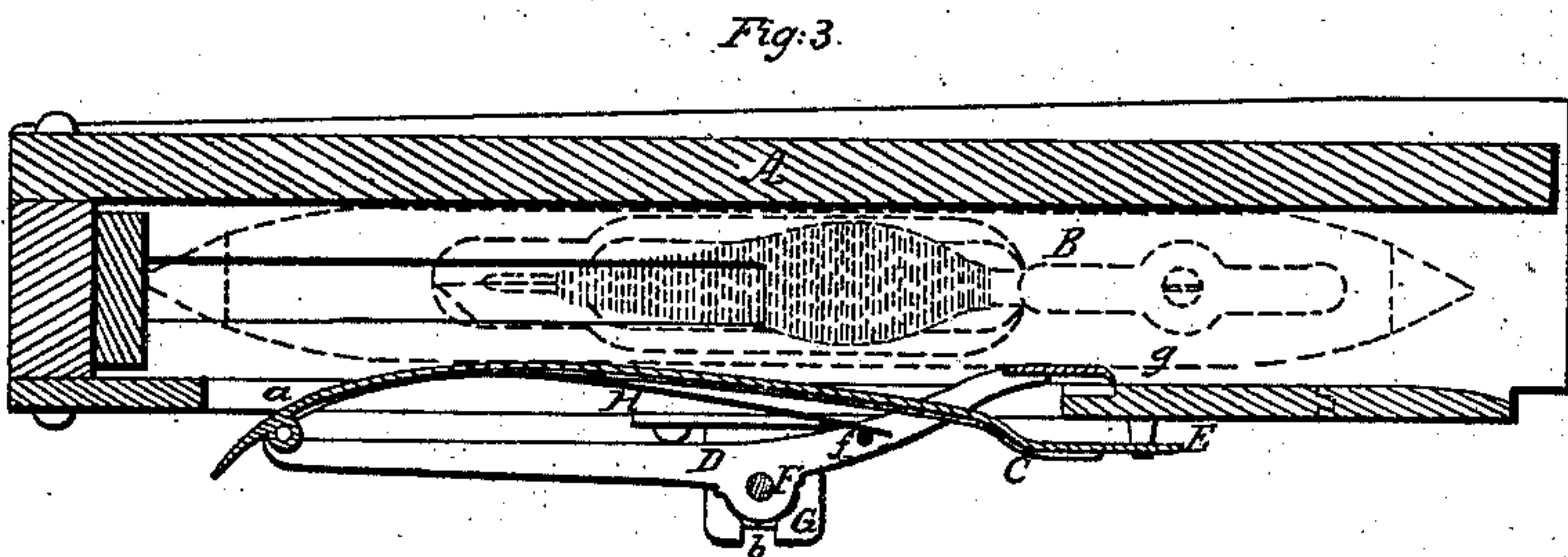
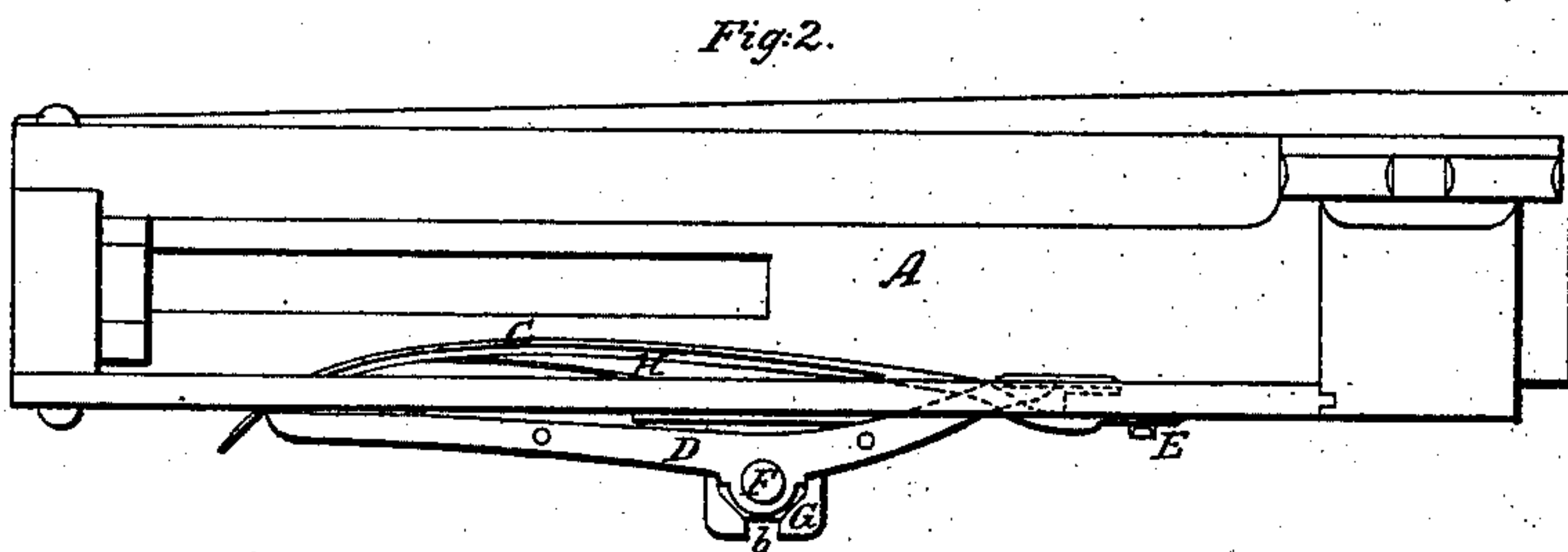
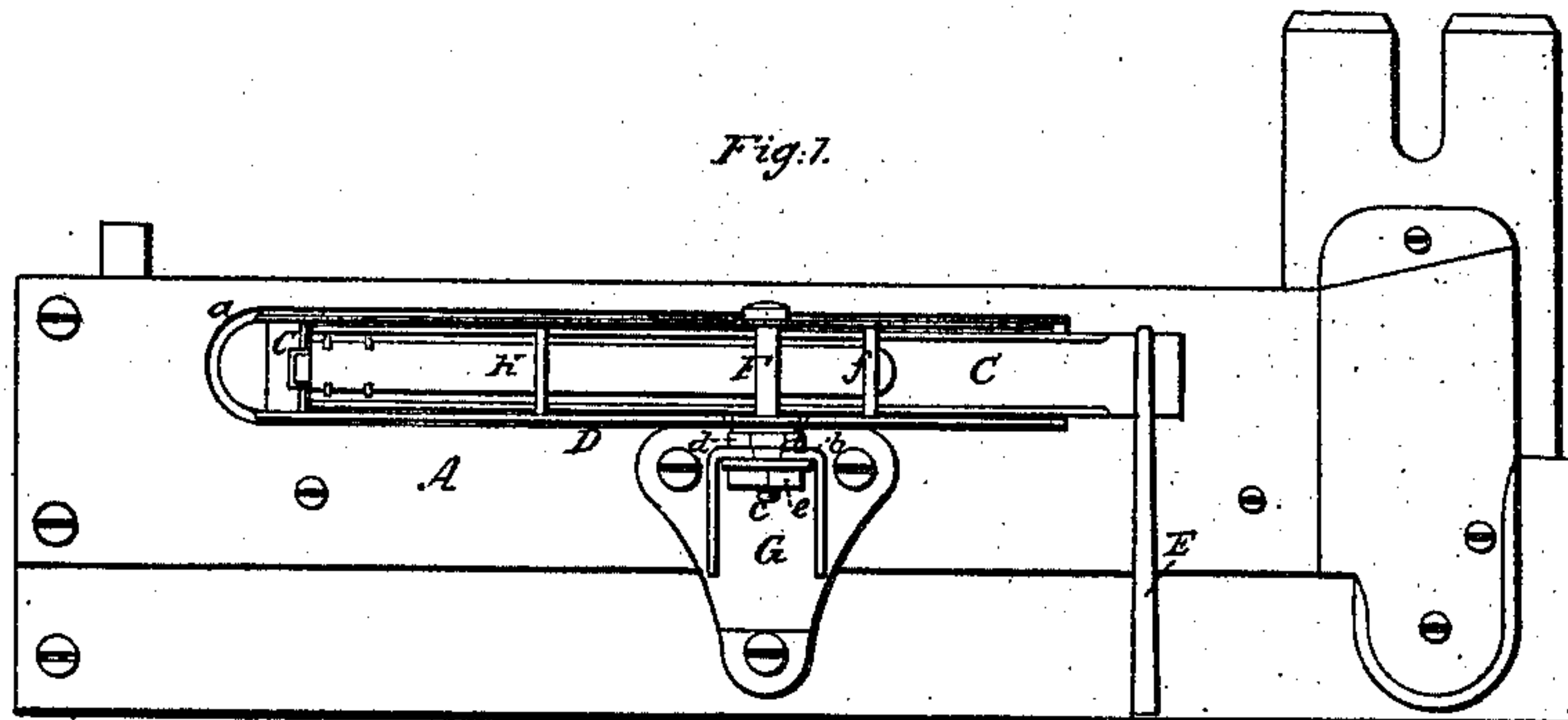


E. PRENTICE.
SHUTTLE BINDER FOR LOOMS.

No. 86,688.

Patented Feb. 9, 1869.



Witnesses.

S. N. Piper.
J. R. Snow.

Inventor.

E. Prentice,
by his Attorney

R. H. Eddy



EPHRAIM PRENTICE, OF WAUREGAN, CONNECTICUT.

Letters Patent No. 86,688, dated February 9, 1869.

IMPROVEMENT IN SHUTTLE-BINDER FOR LOOMS.

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

To all persons to whom these presents may come:

Be it known that I, EPHRAIM PRENTICE, of Wauregan, in the county of Windham, and State of Connecticut, have invented a new and useful Mechanism for arresting a Shuttle while passing into the Shuttle-Box of a Loom; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a front elevation of a shuttle-box provided with my invention;

Figure 2 is a top view; and

Figure 3, a horizontal section of the same.

Figure 4 is a transverse section of the shuttle-box, it being taken through the fulcrum-pin of the auxiliary shuttle-binder.

In such drawings, A denotes the shuttle-box, the shuttle being shown at B, in red lines.

Instead of having a single friction-lever or shuttle-binder, arranged in the side of the shuttle-box, as is the common practice, I employ two of them, so arranged and combined that one, while being acted on by the shuttle, shall force the other up to the shuttle. I also have a means of adjusting the two with reference to the shuttle or interior of the box, as the shuttle may become worn, or may require the binders to be moved to properly operate with it.

In the drawings, the usual binder is shown at C, but, instead of being hinged directly to the box, it is jointed or hinged, at or near its outer end, to one end of the longer arm of an auxiliary or duplicate binder, or lever D, and extends through the shorter arm of such lever, so as to be acted on in the usual manner by a spring, E, or the finger of the protector.

The auxiliary binder turns on a fulcrum, or pin, F, and has its shorter arm extended into the shuttle-box, the two levers being arranged in a slot, *a*, made in the side of the box.

The fulcrum-pin F extends up from a bracket, G, provided with a slot, *b*, arranged in it at right angles with the front face of the shuttle-box.

Furthermore, the pin F has a screw, *c*, cut on it, which goes through the slot *b*, and receives two nuts,

d e, one of which is arranged in the top, and the other underneath the bracket, in manner as represented.

The spring for operating the main binder is shown at H, as fastened to it near its outer end, and as extending along the binder, and against a vertical pin, *f*, going through the shorter arm of the auxiliary binder. The single spring is thus made to answer for the two binders, and in such manner as to force the longer arm of one inward, and the shorter arm of the other outward, at one and the same time, and thereby bring both into their proper positions in the shuttle-box, preparatory to the entrance of a shuttle therein. They will be in such positions when the shorter arm of the auxiliary binder is brought against the part *g* of the shuttle-box.

When a shuttle is in the act of passing or being driven into and through the box, it will first come in contact with the main binder, and will gradually force or move it outward. As the said main binder may be moved, it will, by its action on the tail of the auxiliary binder, move the latter binder on its fulcrum, so as to force its bearing-arm into the box, or toward and against the shuttle, and thus the shuttle, while passing into the box, will be acted on by both binders, whereby its momentum will be gradually overcome, and the shuttle will be prevented from rebounding.

The advantages of my auxiliary binder will be easily discoverable by persons skilled in weaving.

I claim the combination and arrangement of the two binders, constructed as described, with their spring, as set forth.

I also claim the combination and arrangement of the two binders, constructed as described, with their spring, and the shuttle-box.

I also claim the combination of the shuttle-box with the two binders, constructed as described, and adjustable with reference to the shuttle-box, as specified.

EPHRAIM PRENTICE.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.