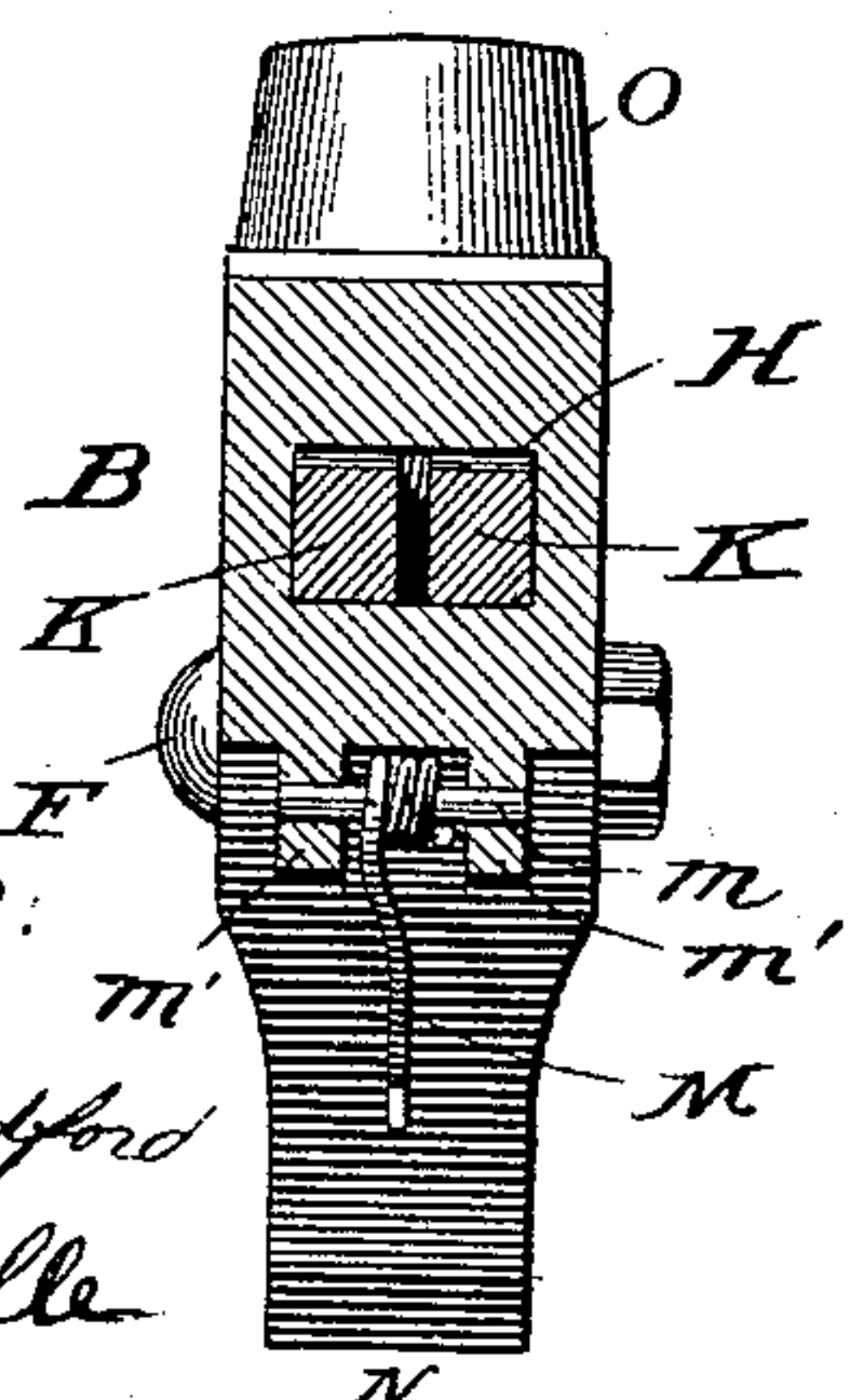
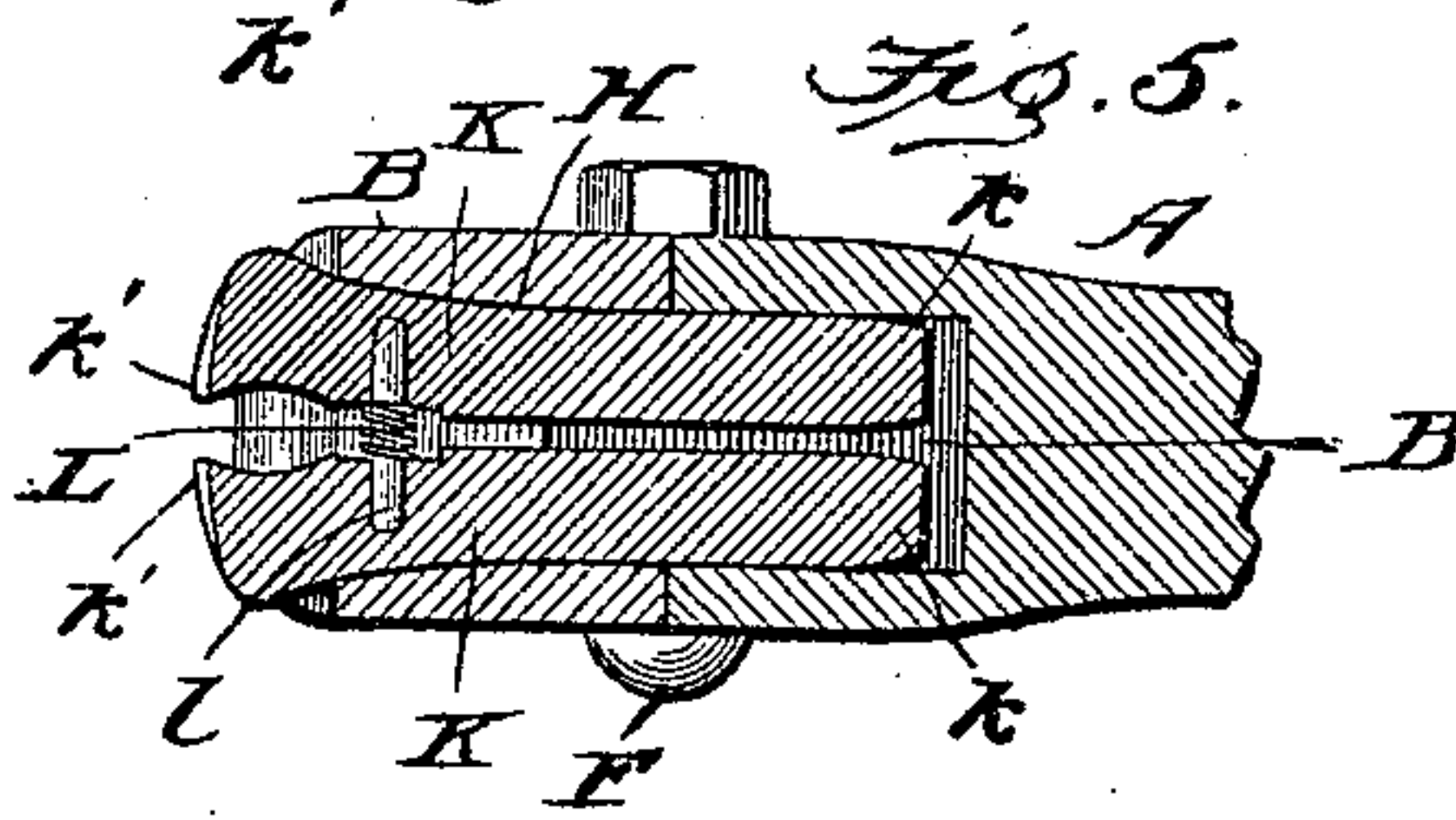
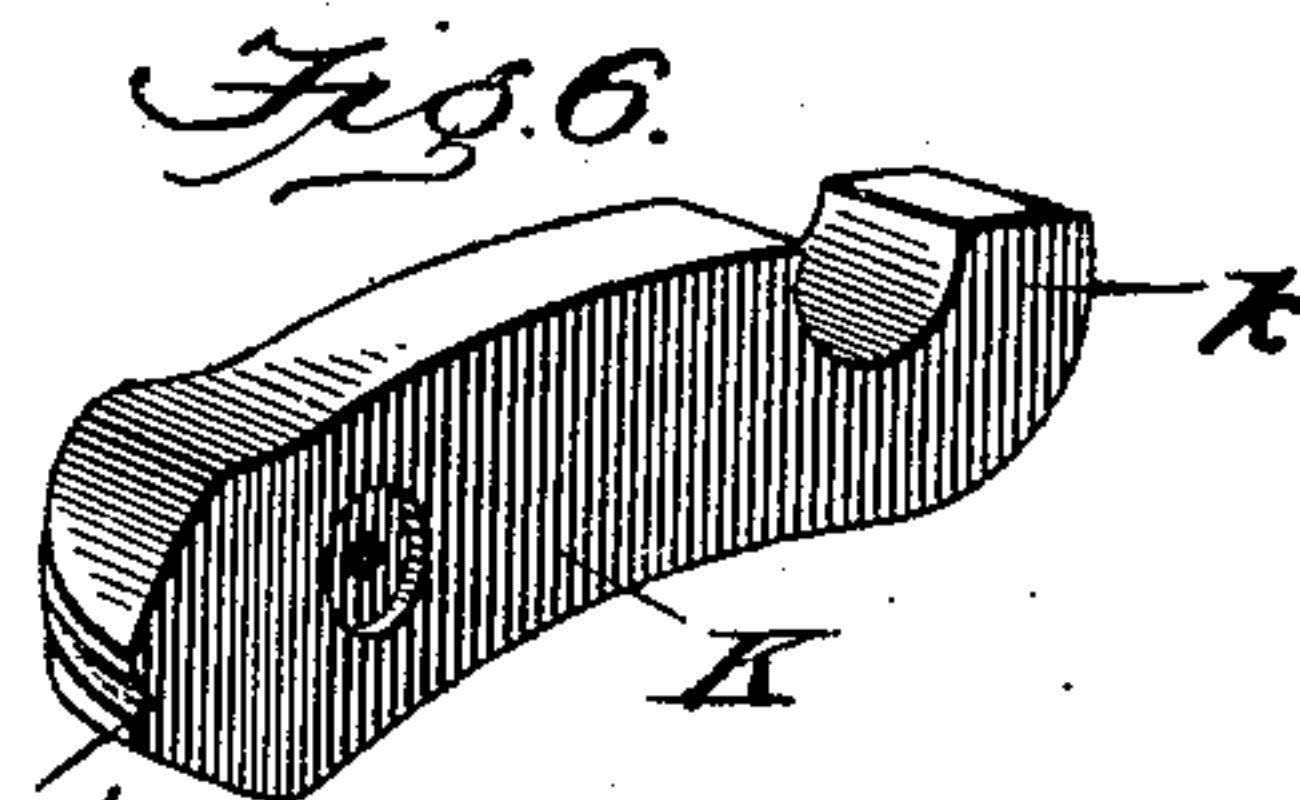
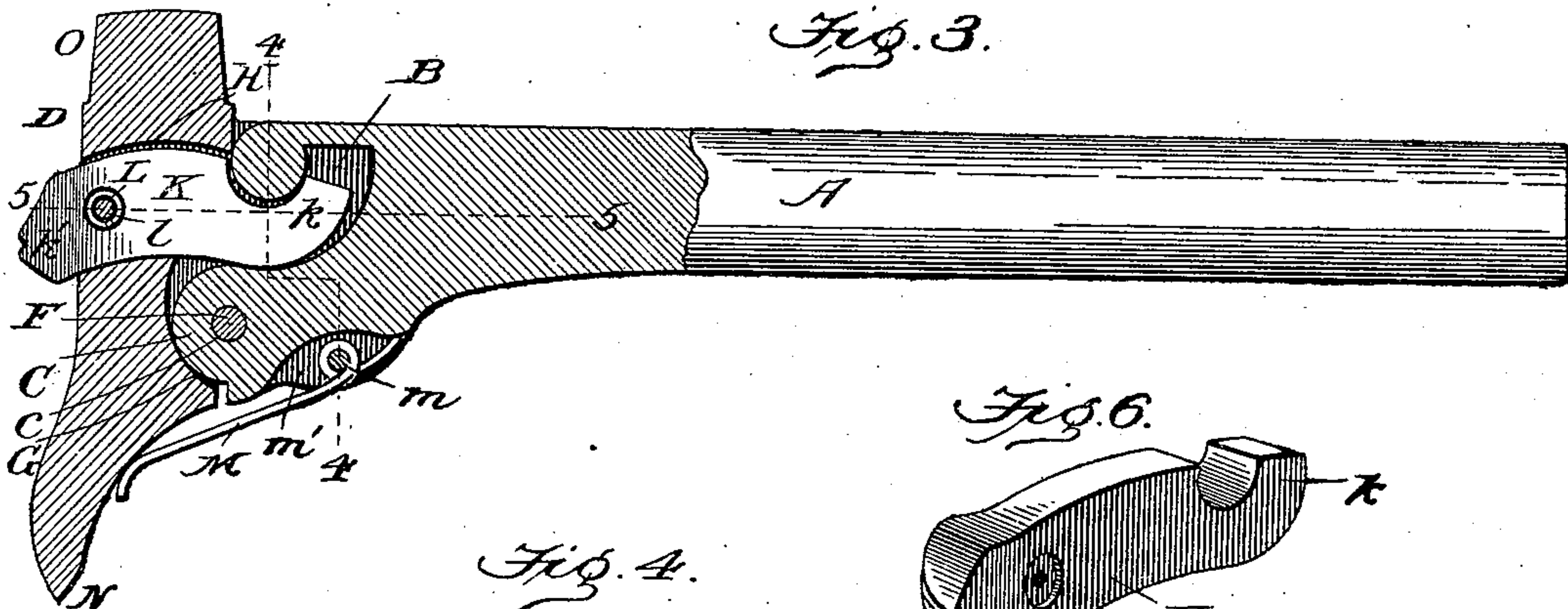
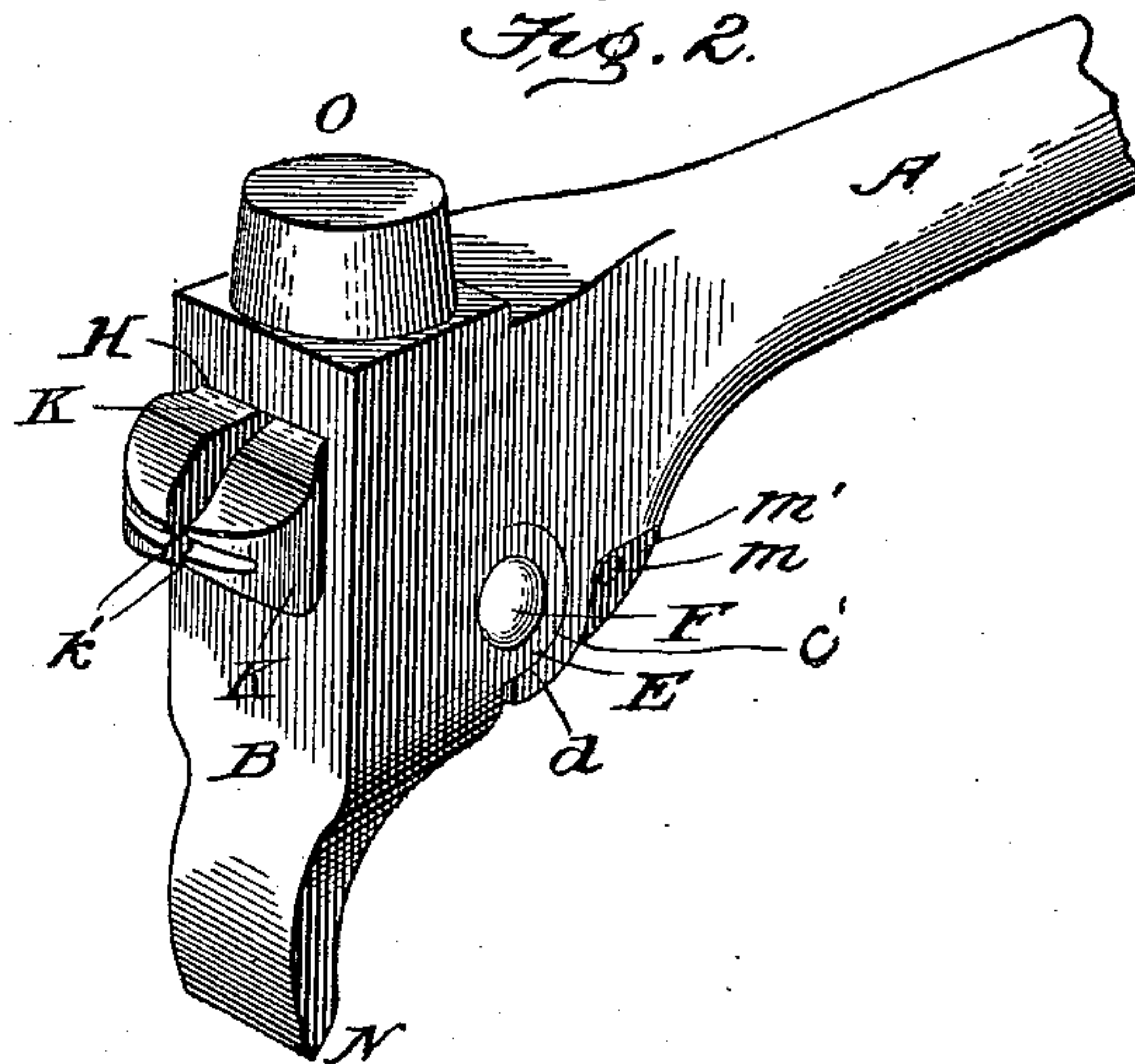


(No Model.)

A. MARTINSON.
STAPLE PULLER.

No. 564,094.

Patented July 14, 1896.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ANDREW MARTINSON, OF LA CROSSE, WISCONSIN.

STAPLE-PULLER.

SPECIFICATION forming part of Letters Patent No. 564,094, dated July 14, 1896.

Application filed April 10, 1896. Serial No. 586,999. (No model.)

To all whom it may concern:

Be it known that I, ANDREW MARTINSON, of La Crosse, in the county of La Crosse and State of Wisconsin, have invented an Improved Staple-Puller, of which the following is a specification.

This invention is an improved tool or device for pulling staples from fence-posts and the like, though it can be employed for pulling nails, spikes, and the like.

The object of the invention is to provide a tool of the kind described which can be cheaply and easily manufactured, one which consists of very few parts, and one in which the parts are not liable to get out of order.

Another object is to provide a tool in which the gripping and pulling operation are accomplished by the leverage of the handle and by the same operation.

Another object is to provide a tool of the kind described which shall also combine the hammer and ax as adjunctive devices.

With these various objects in view my invention consists in the peculiar construction of the several parts, and in their various combination or arrangement, all of which will be fully described hereinafter, and pointed out in the claims.

In the drawings hereto attached and forming a part of this specification, Figure 1 shows the invention in use. Fig. 2 is a detail view of the tool. Fig. 3 is a vertical longitudinal section. Fig. 4 is a section on line 4 4 of Fig. 3. Fig. 5 is a section on line 5 5 of Fig. 3. Fig. 6 shows details of construction.

In carrying out my invention I provide a handle A, which may be made any desirable length, and can be made solid or tubular, as desired, but in practice I prefer to make the same solid.

The handle A is somewhat enlarged at the forward end, and is formed with a curved recess or chamber B, and projecting outwardly from said end in line with said recess is an ear or lug C, having an aperture *c*, and upon the opposite sides of said ear or lug C are the recesses *c' c'*.

The head D has perforated ears or lugs E, adapted to fit upon opposite sides of the ear or lug C and rest in the recesses *c' c'*, said head and handle being pivotally connected by

means of a bolt F, passing through the said ears or lugs C and E, the head having a recess G in its inner face to receive the lug C, and said head rocks upon this ear or lug, thereby taking the strain off the bolt F, which acts only as a pivot and not as a fulcrum.

The head D has a rectangular opening H, in which the gripping-jaws K K are arranged, said jaws having curved inner ends *k k*, which fit into the curved recess B in the handle and thereby prevent said jaws being pulled out. The jaws are made somewhat wedge shape and are provided with teeth *k' k'* at the outer ends, the ends of said teeth being grooved to receive the wire which the staple holds. The jaws are normally held apart by means of a coiled spring L, held between them upon a pin *l*, and the head is normally held against the end of the handle by means of a spring M, mounted upon a pin *m*, passing through the flanges *m'*, cast upon the handle. One end of this spring bears upon the handle while the opposite end bears upon the end of head. This end of the head is preferably sharpened to provide an ax N, while the opposite end is made heavy to provide a hammer O.

Now in assembling the parts the jaws are placed within the head, then their curved ends inserted in the curved recess of the handle and the said handle and head pivotally connected. The jaws are arranged vertically, as shown, to grip the staple, which is usually driven vertically, and it will be noticed that the foot of the head extends forward nearly as far as the teeth of the jaws.

Now in operation the jaws are arranged opposite a staple and pressed thereover. The foot of the head is then pressed against the post and the hand pressed down. This virtually rocks the handle and head, and as the jaws are connected to the handle they are drawn into the opening in the head, thereby bringing said jaws together to grip the staple. Continued pressure upon the handle draws the staple, and it will be noticed that the gripping and drawing operations are accomplished by one and the same act of leverage.

It will thus be seen that I provide an exceedingly simple and durable form of tool and one which will effectively perform all its intended purposes.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a staple-puller, the combination with
5 a handle having a lug and a curved recess, of
a head having a recess and an opening, the
head being pivoted to the lug C situated on
the handle A, the gripping-jaws having curved
10 ends adapted to fit in the curved recess the
said jaws being wedge shape and fitting in a
wedge-shaped opening, and carried by the
head and connected to the handle, a fulcrum
for leverage purposes, a spring L for holding
15 the jaws open in their normal position, and
a second spring M, substantially as set forth.

2. The combination with the handle, having a curved recess and a pivot-lug, of a head

having an opening, and a recess to receive
the pivot-lug, the gripping-jaws arranged in
the opening in head, said jaws being wedge 20
shape and having ends and operated by the
said head in conjunction with the said handle,
a spring between said jaws, the spring on handle
and bearing against the head, and the
pivot passing through the head and lug on 25
handle, and a fulcrum for leverage purposes,
substantially as set forth.

In testimony whereof I affix my signature
in the presence of two witnesses.

ANDREW MARTINSON.

Witnesses:

JOHN J. ESCH,
FRANK WINTER.