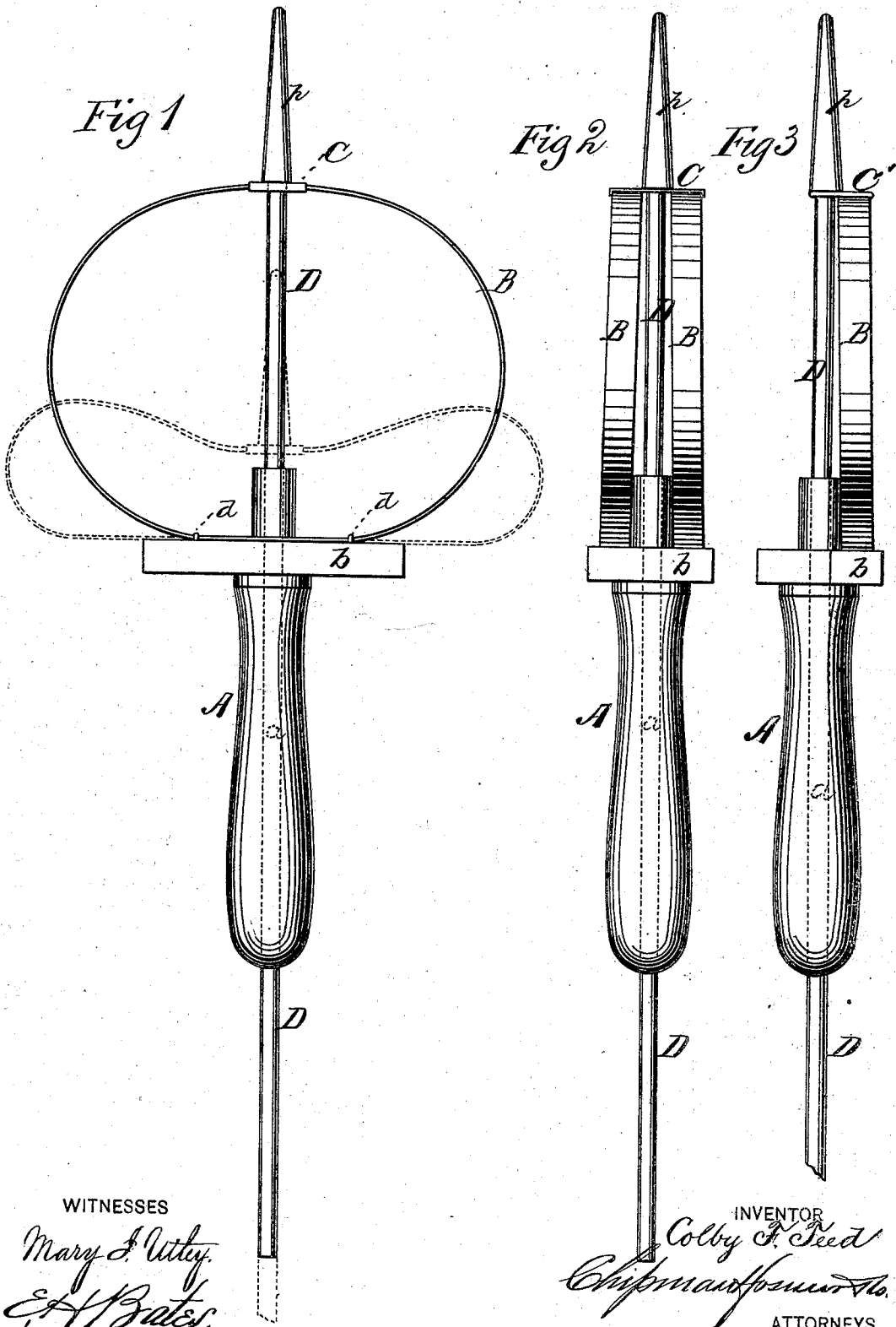


BOW AND ARROW.

No. 171,192.

Patented Dec. 14, 1875.



UNITED STATES PATENT OFFICE.

COLBY F. TEED, OF ELMIRA, NEW YORK.

IMPROVEMENT IN BOWS AND ARROWS.

Specification forming part of Letters Patent No. **171,192**, dated December 14, 1875; application filed November 6, 1875.

To all whom it may concern:

Be it known that I, COLBY F. TEED, of Elmira, in the county of Chemung and State of New York, have invented a new and valuable Improvement in Bows and Arrows; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my bow and arrows. Figs. 2 and 3 are edge views.

This invention has relation to bows and arrows; and it consists in the construction and novel arrangement of a perforated handle for the admission of an arrow, in combination with a shoulder or support rigidly secured near the upper end of the handle, and flat wire springs provided with a guide-loop at their tops, as will be hereinafter fully described.

In the annexed drawings, the letter A designates a, preferably, wooden handle of the usual shape and construction, having a perforation, *a*, running through it from end to end, for a purpose hereinafter explained. Near the top of handle A is rigidly secured, in any suitable manner, a flat wooden board, *b*, to which are rigidly secured, by means of staple-shaped braces *d* at a suitable distance apart, one or more flat or wire springs, B, bent in the form of an annulus, and arranged at a suitable distance apart, by which means they are prevented from being unduly separated and getting out of order. At the top of these rings and in line with perforation *a* in the handle is arranged a guideway, C, for the arrow. This guideway is made of metal, and is rigidly secured thereto by having its ends clinched on the under side of the flat springs, or in any other suitable manner. D designates an arrow, made of wood, one end of which is pro-

vided with an enlarged spear-head. This arrow is adapted to be passed through guideway C into and through the perforation *a* in the handle above described, and it is then held in position for firing. Arrow D is prevented from falling through the guideway by means of its spear-shaped point *p*, which, being larger than the said guideway C, cannot be drawn through it.

The manner of working my improved device is as follows: The arrow is inserted through the guideway C and through the perforation in the handle when its lower end will project a sufficient distance to afford a grasp for the hand. The handle is then held in the left hand, and the arrow being seized by the right is forcibly drawn back, thereby compressing springs B, which will react with considerable power when the arrow is let go, and will project the said arrow a distance proportionate to the strength of the springs and the power expended in compressing the same.

In practice I may sometimes use a single spring. In this case it will be secured to the board to one side of perforation *a* in the handle, and will have a guide-loop, C', for the guidance and holding of the arrow, the said loop being in line with the said perforation.

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

The bow and arrow herein described, consisting of the tubular handle A, cross-piece *b*, spring B, having guide-loop C, and the arrow D with shoulder *p*, combined to operate substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

COLBY F. TEED.

Witnesses:

G. M. NYE,
A. F. MOSHER.