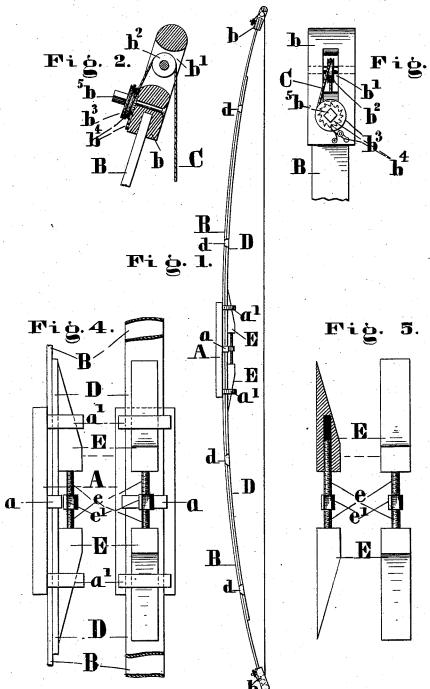
C. A. HOWE. ARCHERY BOW.

No. 261,610.

Patented July 25, 1882.



WITNESSES! J. S. Mest,

twill. 2.V

INVENTORI Chas A. Howe.

UNITED STATES PATENT OFFICE.

CHARLES A. HOWE, OF PHILADELPHIA, PENNSYLVANIA.

ARCHERY-BOW.

SPECIFICATION forming part of Letters Patent No. 261,610, dated July 25, 1882.

Application filed September 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. HOWE, a citizen of the United States of America, residing at Philadelphia, in the county of Philadelphia 5 and State of Pennsylvania, have invented certain new and useful Improvements in Archery-Bows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in to the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to metallic bows for archery; and the object of the invention is to provide a bow which can be readily re-enforced to increase its shooting strength, easily bisected for packing and transportation, and simply and

20 accurately adjusted for use.

My invention also consists in providing one or both tips of my bow with rollers, and a ratchet and pawl, by means of which the tension of the bow-cord may be increased or reduced at the 25 will of the archer without unstringing the bow

or loosening the bow-cord.

In the drawings, Figure 1 represents a side view of my invention; Figs. 2 and 3, detailed views of the bow-tips; Fig. 4, a detailed view 30 of the center piece and its parts, and Fig. 5 a detailed view of the screw and wedges by means of which the arms of the bow are held in position.

The same letters and numerals are employed 35 in all of the figures in indication of identical

The center piece, A, is provided with the centrally-located transverse lug a and the trans-

verse staples a' a'.

The metallic arms of the bow BB are inserted into this center piece, A, passing under the staples $a'\,a'$ until their ends abut against the trans-

verse bar or lug a.

The wedges E E are inserted under the sta-45 ples a' a' and over the bow-arms BB, and the right-and-left-threaded bolte, provided with the square section e', upon being turned forces the wedges, by being threaded into them, under the staples and firmly retains the bow-arms in 50 position.

The incline of the wedges and the space be- ent, is—

tween them will admit of the introduction of one or more bow arms or blades, B, sufficient to secure any desired strength of bow.

The transverse bar or $\log a$ and the ends of 55 the bow blades or arms being properly constructed and adjusted, the adjustment of the bow for use is simple and accurate.

C is the bow-cord, and D is an extra bowblade in position to give greater strength to 60

The re-enforcing bow-blade D is constructed shorter than the main blade B, and the st rength of the bow may be varied by refreating the outer ends of the re-enforcing blades D toward the 65 center piece or advancing them therefrom, thus providing a bow of different strength by adjustment of these bolts in relation to each other.

The bow-tips b b are constructed of metal, and attached preferably by chill-fit to the first 70 or longest bow-blade, B B, or one of them. These tips are provided with a longitudinal slot, b', in which is pivoted a pulley, b^2 , over which pulley the bow-cord C passes and is attached to the roller b^3 , which is provided with 75 a ratchet and pawl, b^4 . This roller is wound by a key until the bow is strung to suit the archers. These clips may be so constructed as to admit of being attached to the bow-blade, so that the bow-cord will draw upon the edge . of the bow, thus avoiding lateral strain upon the bow or deflection of the arrow by operation of the same.

I do not wish to confine myself to the position of the roller as designated in the draw-8 ings, as it may be located transversely below

the slot on the clip.

The center piece, A, may be provided with a flange to retain the bow-blades and for strength, and the bow-blade D may be provided with 9c flange-clips d to retain it in position.

The following are some of the advantages

to be derived from my invention.

My bow can be made of greater or less strength or power by means of adding or re- 95 moving the re-enforcement blade D. It can be repaired by restoring broken or injured parts. It is easily unstrung, bisected, and convenient for packing.

Having thus described my invention, what I 100 deem new, and desire to secure by Letters Pat-

