Oct. 24, 1933. E. D. STROUP 1,932,195

BOW

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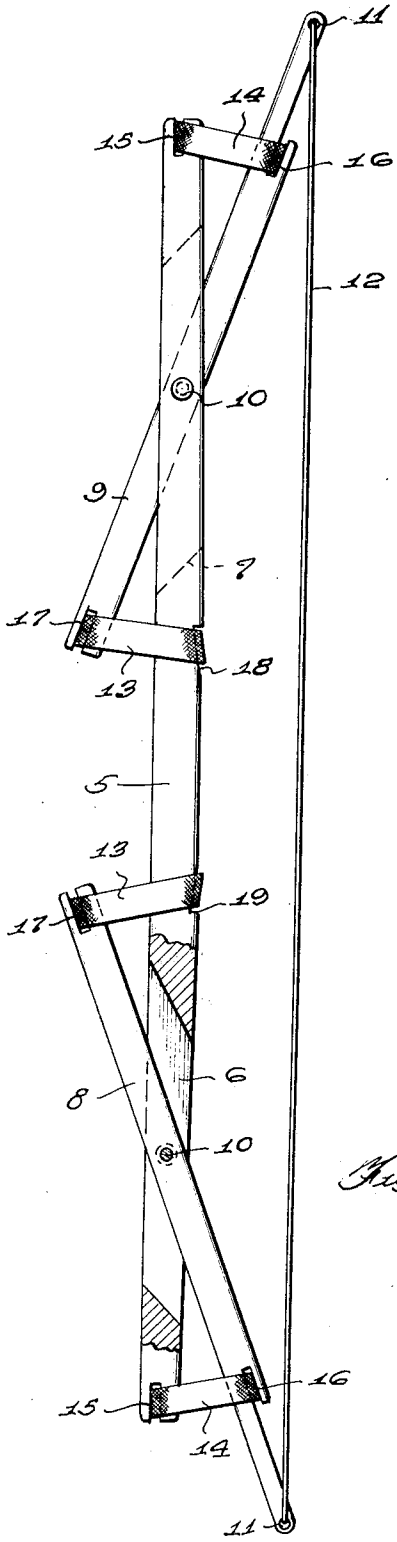


Fig. 1.

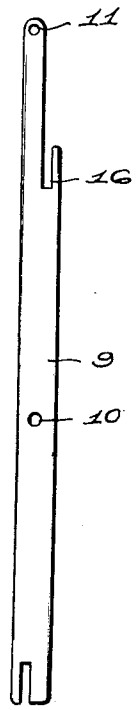


Fig. 2.

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BOW

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3 Claims. (Cl. 273—107.5)

This invention relates to bows, and more particularly to bows of the type used to shoot arrows.

It is a primary object of the invention to provide an article of this character that will be strong and rugged in construction; extremely powerful and accurate; may be easily regulated; will not be adversely effected by unfavorable weather conditions; will be ready for action at any time, and need not be unstrung when not in use, and one which, by reason of the accurate distribution of the tension upon the string, will shoot any arrow of any make with the same degree of accuracy.

For a better understanding of the invention, reference will be made to the accompanying drawing wherein:

Figure 1 is a side elevation of the completed bow with certain of the parts broken away and in section and

Figure 2 is a detailed view of one of the tension levers hereinafter described.

Like numerals designate corresponding parts in both the figures of the drawing.

Referring to the drawing, 5 designates the main beam of the bow, said beam having slots 6 and 7 formed therethrough for the passage of tension levers 8 and 9, said levers being pivoted, at 10, to the beam 5.

The levers 9 have holes 11, or other suitable elements, provided for the securing thereto of the bow string 12, and for throwing the outer ends of these levers outwardly and upwardly with a uniform degree of tension, I provide a pair of resilient members 13 and 14 for each of the levers. These resilient members preferably consist of stout rubber bands but may consist of metallic springs, if desired.

The bands 14 are engaged in notches 15 formed in the ends of the beam 5 and in slots 16 formed in the under portions of the levers 8 and 9, respectively. The bands 13 are engaged in slots 17 formed in the inner ends of the levers 8 and 9 and in notches 18 and 19 of the beam 5. Thus, it will be seen that an equal degree of tension or force is exerted upon each of the levers 8 and 9 to the end of placing the bow string under strong tension and under a tension that will be accurately balanced at each end of the structure.

This makes for accuracy and aids in rendering it possible to shoot arrows of varying makes with equal effect. The yieldability of the string provided by the elements 13 and 14 renders it unnecessary to unstring the bow when not in use because increased tension upon the string arising from excessive humidity will merely result in drawing the ends of the tension levers toward each other without causing breaking of the bow string. The parts shown and described are of the utmost simplicity and are such that they can be readily secured almost anywhere. The leverage may be varied by varying the degree to which the levers 9 project beyond their pivot points 10.

Having described my invention, what I claim is:

1. A bow of the character described comprising a beam, a pair of tensioning levers passing through said beam and pivoted thereto intermediate their ends, a resilient tensioning element engaged with the beam and with each of said levers upon each side of the pivot point of said levers, and a bow string extending between and secured to the outer ends of said levers.

2. A device of the character described comprising a beam having an opening formed therethrough adjacent each of its ends, a tension lever pivoted in each of said openings, said tensioning levers having notches formed in their inner ends and notches formed in their lower portions adjacent their outer ends, resilient bands engaged with said levers and with the notches of the beam upon opposite sides of the pivot points of each of said tension levers so that at least two resilient tension means act upon each of said levers to tend to move their outer ends away from each other, when said ends are pulled toward one another, and a bow string connected to the outer ends of said levers as described.

3. A bow of the character described comprising a longitudinal beam, a pair of levers pivoted intermediate their ends to said beam and projecting to opposite sides of said beam, resilient members engaged with said levers and with said beam and tending to throw the outer ends of said levers away from each other, and a bow string extending between and connected to the outer ends of said levers and lying in substantial parallelism with said beam.

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