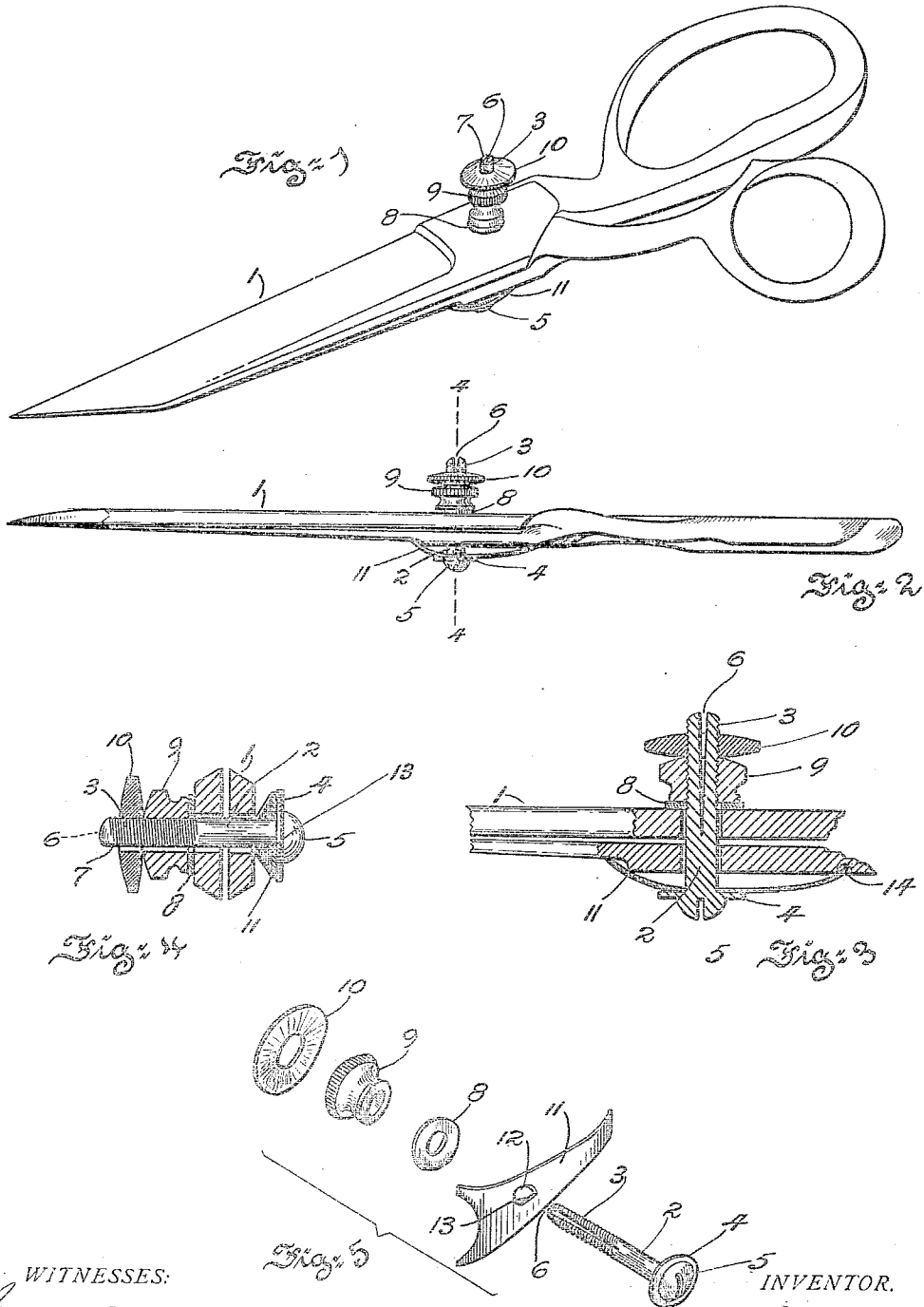


G. A. PARKER.
TENSION DEVICE FOR SHEARS.
APPLICATION FILED OCT. 28, 1909.

953,705.

Patented Apr. 5, 1910.



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GEORGE A. PARKER, OF PHILADELPHIA, PENNSYLVANIA.

TENSION DEVICE FOR SHEARS.

953,705.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed October 28, 1909. Serial No. 525,140.

To all whom it may concern:

Be it known that I, GEORGE A. PARKER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improved Tension Device for Shears, of which the following is a specification.

This invention relates to that class of shears or scissors in which an arched spring-bar is arranged on the outside of one of the blades and by which pressure is applied through the shears-pivot to yieldingly hold the edges of the shears together in making a cut.

Considerable difficulty has been experienced in this class of shears or scissors with regard to the loosening of the thumb nuts that lock the parts together due to the vibrations of the cutting blades that are imparted to the pivot-bolt.

The principal object of the present invention is to provide simple, efficient and comparatively inexpensive means whereby the above-recited disadvantageous feature may be eliminated and in the providing of the novel combination and arrangement of parts as will hereinafter more fully appear.

The invention consists of the improvements hereinafter described and finally claimed.

The nature, characteristic features and scope of the invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof and in which:—

Figure 1, is a perspective view of a pair of shears or scissors embodying the invention, Fig. 2, is an edge elevation of the same, Fig. 3, is a longitudinal mid-section of Fig. 2, cutting axially through the pivot, and drawn to an enlarged scale, Fig. 4, is a cross section taken upon the line 4—4 of Fig. 2, and drawn to an enlarged scale, and Fig. 5, illustrates in perspective the various parts going to make up the tension elements of the shears.

In the drawings, the shears or scissors 1, are made up of blades and handles of any well-known and usual construction according to the purposes for which the shears or scissors are intended. The two blades are apertured at the pivot point in a smooth circular manner and through the same a pivot-bolt 2, is introduced. This pivot-bolt

consists of a solid cylindrical member externally screw-threaded as at 3, at one end and terminating in and having formed integral therewith at its opposite end a washer-like portion 4, that rounds or swells out into a screw-head 5. The threaded end 3, of this pivot-bolt 2, is split longitudinally for a portion of its length as at 6, for a purpose to be presently described. This pivot-bolt is also squared as at 7, longitudinally thereof, throughout its entire length (see Fig. 4) the purpose of which will also presently appear.

The screw-threaded end 3, of the pivot-bolt is adapted to receive when in proper position a washer 8, a thumb nut 9, and a jam nut 10. Upon the outside of one of the blades of the shears or scissors is applied a spring bar 11, apertured as at 12, for the passage therethrough of the pivot-bolt 2, the portion 13, of said aperture being squared to cooperate with the squared portion 7, of the pivot-bolt 2 (see Fig. 4) in order to prevent the said spring-bar from rotating upon the surface of the blade to which it is attached. This spring-bar is adapted to bear against the blade beneath the parts 4 and 5, of the pivot-bolt 2, hereinbefore referred to, the forward end of the spring-bar taking a broad bearing upon the blade and the rear end thereof being preferably tapered and taking a bearing in a cavity 14, in said blade.

The blades of the shears or scissors being assembled upon the smooth portion of the pivot-bolt with the spring-bar in proper position, the washer 8, is passed freely over the screw-threaded end of the pivot-bolt 2, and the thumb nut 9, screwed to place thereon thus clamping together the respective parts of the shears. In this connection it may be remarked that the screw-threaded end of the pivot-bolt 2, being split as at 6, the split parts thereof have the tendency to spread outward. This is particularly true if the split 6, has been made by a wedge-shaped tool. This tendency of the pivot-bolt to spread serves to securely hold in position the thumb nut 9. This is important because as the shears or scissors are used, the movements of the spring-impelled cutting blades impart more or less vibration to the pivot-bolt and serve to loosen the thumb nut. However, by splitting the end of the bolt as described this tendency toward loosening of the thumb nut through vibrations is elimi-

nated. To further hold the thumb nut 9, from loosening, the jam nut 10, is provided. Obviously, the split end of the bolt also serves to firmly clamp the jam nut with respect to the thumb nut.

What I claim is:—

As a new article of manufacture shears or scissors comprising a pair of blades having smooth circular pivot bolt receiving openings, a spring-bar having a similar opening slightly squared arranged upon one of the blades, a pivot bolt having a longitudinally disposed squared portion to fit the squared opening in said spring-bar passing through said openings said pivot bolt having a head

abutting against the spring bar at one end and having a projecting externally screw threaded and longitudinally disposed split portion at its opposite end, a thumb nut, and a jam nut abutting thereagainst said nuts being fitted over said projecting threaded bolt the split portion thereof serving to spread within and beyond the nuts to lock them against movement through vibration.

In testimony whereof I have hereunto signed by name.

GEO. A. PARKER.

Witnesses:

AGNESS SWEENEY,
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