

No. 613,687.

Patented Nov. 8, 1898.

H. F. KRUEGER.
PIVOT HOLDER.

(Application filed Mar. 26, 1898.)

(No Model.)

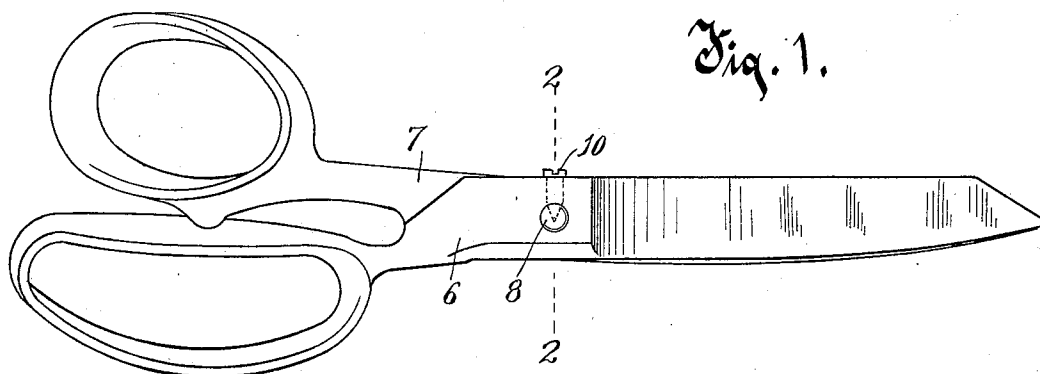


Fig. 2.

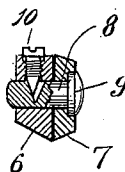


Fig. 3.

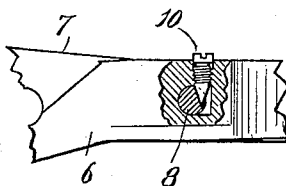


Fig. 4.

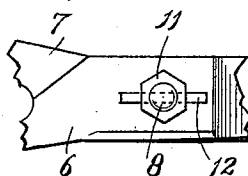
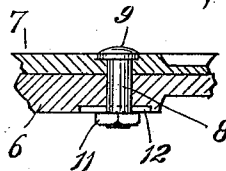


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

HENRY F. KRUEGER, OF NEENAH, WISCONSIN.

PIVOT-HOLDER.

SPECIFICATION forming part of Letters Patent No. 613,687, dated November 8, 1898.

Application filed March 26, 1898. Serial No. 675,340. (No model.)

To all whom it may concern:

Be it known that I, HENRY F. KRUEGER, of Neenah, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Pivot-Holders, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention is especially adapted for use in tools or implements—like scissors, shears, and analogous tools of a cutting, biting, or gripping capability—such as pincers, nippers, punches, and the like—in which there is a plurality of complementary members pivoted to each other, the complementary and coacting parts of which tool or implement when pivoted together are liable to much wear and loosening of their members.

As my invention is especially adapted to be employed in scissors or shears, I have shown it in a pair of shears.

The invention consists of the devices and combinations of devices herein described and claimed or their equivalents.

In the drawings, Figure 1 illustrates a pair of shears with my improved device shown and indicated in connection therewith. Fig. 2 is a transverse section on line 2 2 of Fig. 1. Fig. 3 shows a slightly-modified form of my improved device.

In the drawings, 6 and 7 are the two members of a pair of shears. These two members of the shears are pivoted together medially by a pivot 8, provided with a head 9, that bears against one member of the shears. The pivot 8 is provided with a conical recess or socket within and opposite to the other member of the shears, and a holder 10, preferably consisting of a screw provided with a conical point, is inserted and turns by its thread in the member of the shears, the conical point of the screw 10 entering the conical recess in the pivot 8 and bearing against that wall of the recess that is most distant from the head 9. The conical recess in the pivot 8 is of such

size and is so disposed that the conical surface of the point of the holder 10 bears against the surface or wall thereof that is most distant from the head 9 when the holder has entered it only a slight distance. When after considerable use the members of the shears shall have become worn and loose about the pivot 8, this looseness can be obviated and the play taken up by turning the holder 10 by its screw-thread a little farther into the pivot, thus by its wedge-shaped construction drawing the two members of the shears closer to each other. It will be understood that as the holder 10 enters the pivot 8 it prevents the pivot from rotating in that member of the shears in which the holder is located, thus preventing the loosening of that member of the shears which is most distant from the head 9.

In the modified form shown in Fig. 3 the recess in the pivot 8 for the holder 10 is made in one side of the pivot instead of being a recess or socket entering it centrally or directly through its longitudinal axis, as in the form shown in Figs. 1 and 2.

What I claim as my invention is—

The combination of the complementary movable members of a cutting or analogous tool, a pivot passing transversely through the members of the tool at their junction, and a holder inserted in a member of the tool and entering and bearing against the pivot holding it to synchronous movement or non-movement therewith, the holder being screw-threaded and turning in a member of the tool and having a conical point bearing against that wall of a recess in the pivot, most distant from its head.

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

HENRY F. KRUEGER.

Witnesses:

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