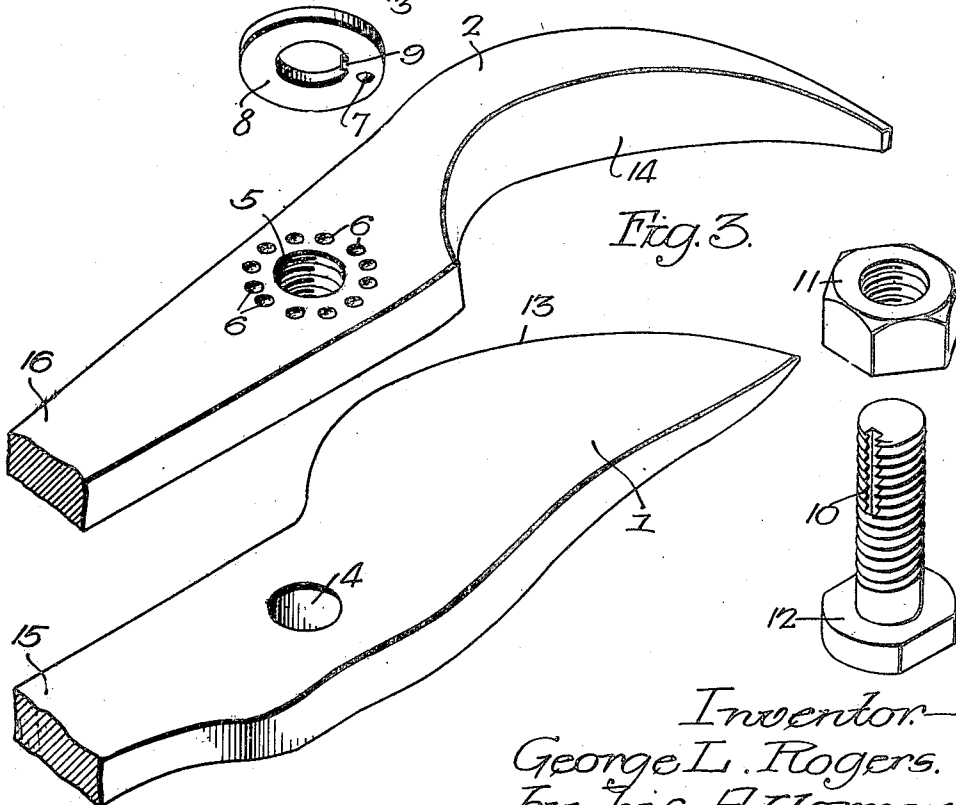
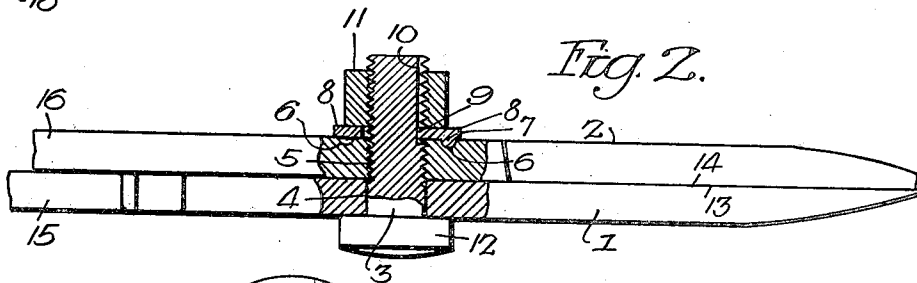
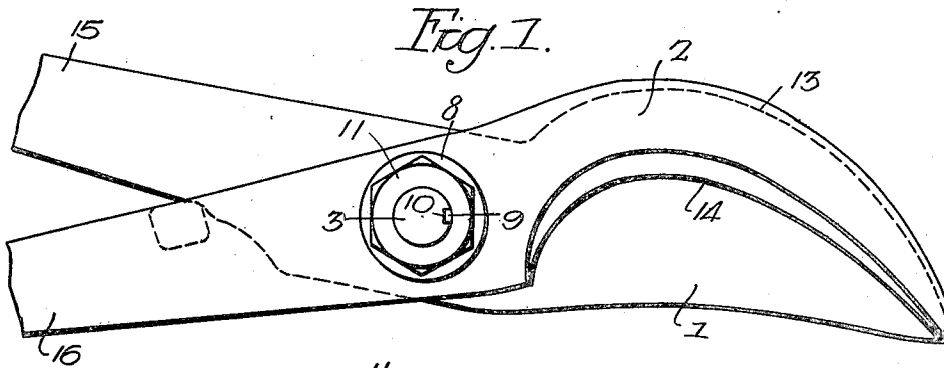


G. L. ROGERS.
SHEARS.

APPLICATION FILED MAY 11, 1921.

1,422,786.

Patented July 11, 1922.



Inventor—
George L. Rogers.
by his Attorneys.
Howson & Thum

UNITED STATES PATENT OFFICE.

GEORGE L. ROGERS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HENRY
DISSTON & SONS, INCORPORATED, OF PHILADELPHIA, PENNSYLVANIA, A COR-
PORATION OF PENNSYLVANIA.

SHEARS.

1,422,786.

Specification of Letters Patent.

Patented July 11, 1922.

Application filed May 11, 1921. Serial No. 468,510.

To all whom it may concern:

Be it known that I, GEORGE L. ROGERS, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Shears, of which the following is a specification.

The object of my invention is to improve the construction of the pivot of heavy shears so that the shear blades can be adjusted towards and from each other and can be held in the position to which they are adjusted.

The invention is especially adapted for use in connection with pruning shears, hedge shears, and metal shears, where the blades are heavy and rigid and where the spring of the blades is not relied upon to make a close cutting fit.

In the accompanying drawing:

Fig. 1 is a plan view of a pair of pruning shears illustrating my invention, the handles being discontinued;

Fig. 2 is a side view, partly in section, illustrating the pivot; and

Fig. 3 is a perspective view illustrating the several parts detached.

1 and 2 are the two blades of the shears. 3 is the threaded pivot bolt, which passes freely through the opening 4 in the blade 1 and is screwed into the threaded opening 5 in the blade 2. In one face of the blade 2 is an annular series of recesses 6 into which extends a projection 7 on a washer 8. This washer has a key 9 adapted to a longitudinal keyway 10 in the bolt 3. This construction prevents the washer turning on the bolt and when the projection 7 is in one of the recesses 6, the bolt 3 is locked firmly to the blade 2.

11 is a nut mounted on the threaded portion of the bolt for the purpose of clamping the washer 8 onto the blade 2. The bolt 3 has a head 12 and the blade 1 is free to be moved on the pivot between the head 12 and the blade 2. The blade 1 has a beveled and curved knife edge 13 and the blade 2 is in the form of a hook, which is beveled at 14. The shanks 15 and 16 of the handles are made integral with the blades and may be provided with suitable hand holds of any length desired.

While the drawing illustrates a type of shears known as "pruning shears", the in-

vention can be used in connection with hedge shears, or metal shears. In some instances, the pivot can be used on lighter shears, if found desirable.

By the above construction, it will be seen that the pivot bolt can be screwed into the threaded opening in the blade 2 to any distance desired. The washer is then placed in position with its projection in one of the recesses 6 of the blade 2 and the nut applied so as to fasten the washer rigidly to the bolt and to the blade 2. This allows the blade 1 to be moved freely on the bolt without the liability of the bolt becoming loose and as the blades of the shears wear, this wear can be taken up by adjusting the bolt and washer on the blade 2.

I claim:

1. The combination in a shears, of two blades, each blade having a hole for the pivot, the hole in one blade being smooth and the other hole having a screw thread therein; a headed bolt extending through the smooth hole in one of the blades, said bolt having a threaded portion adapted to the threads in the hole of the other blade so as to clamp the first mentioned blade between the head of the bolt and the second blade; the second blade having an annular series of recesses in the outer surface, the bolt having a longitudinal keyway; a washer mounted on the bolt and having a key adapted to the keyway and having a projection adapted to one of the recesses in the blade; and a nut on the bolt for clamping the washer against the said last mentioned blade so as to lock the bolt in a fixed position to the blade, allowing the first mentioned blade to turn freely on the bolt.

2. The combination of a bolt on which two parts are mounted, said bolt having a screw threaded portion adapted to the threads in one of said parts, said bolt having a longitudinal keyway therein; a washer mounted on the bolt and having a key adapted to the keyway; means adjustably connecting the washer with one of the parts; and means, on the bolt, for holding the washer to said part so that the part, which is not rigidly connected to the bolt, can turn freely on the bolt.

GEORGE L. ROGERS.