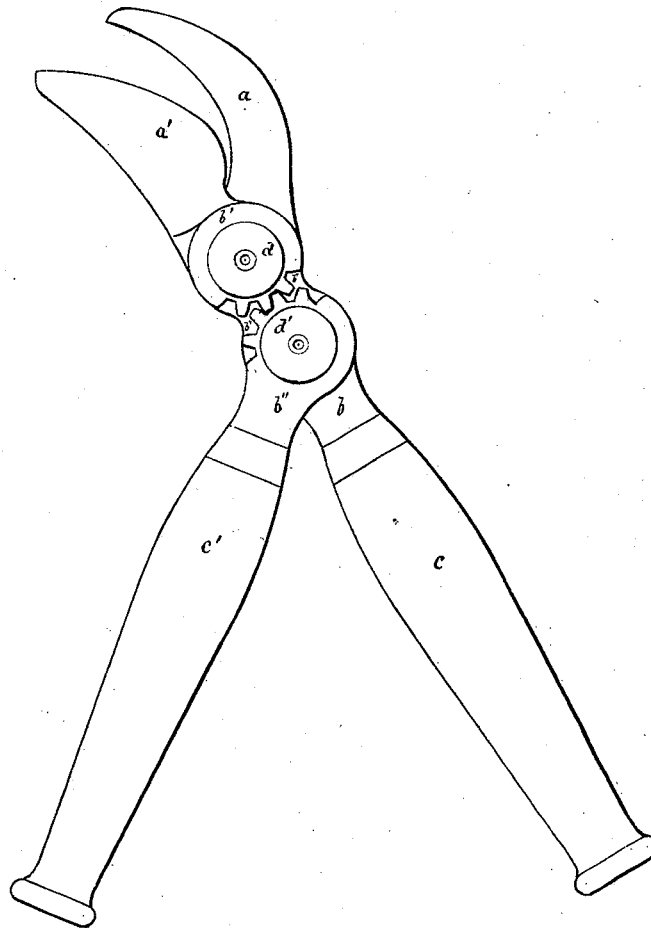


F.A. Will,

Pruning Shears.

No. 107,577.

Patented Sept. 20. 1870.



Witnesses:

C. W. Mumuth

E. M. Quast

Inventor:

Fredrick A. Will

UNITED STATES PATENT OFFICE.

FREDERICK A. WILL, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN PRUNING-SHEARS.

Specification forming part of Letters Patent No. **107,577**, dated September 20, 1870.

To all whom it may concern:

Be it known that I, FREDERICK A. WILL, of the city and county of San Francisco, in the State of California, have invented a new and useful Improvement in Pruning-Shears, of which the following is a specification.

My invention relates to a novel combination which provides the rigid cutting-back and the drawing out of the knife in such a manner that the limb may always be severed at exactly the desired point.

The drawing is a front elevation of my invention.

The back plate, *a*, is formed in one piece with the shank *b*, to which the handle *c*, of any desired length, is attached. The plate *a* is curved over toward the knife *a'*, whereby the limb or twig is held in the hook and prevented from slipping away from the knife.

The knife *a'*, the edge of which is made convex to correspond with the back plate, is provided at its inner end with the segmental gear *b'*, which oscillates upon a pivot, *d*, secured to the shank *b*. A similar segment is formed upon the shank *b'*, to which the handle *c'* is attached. The segment is pivoted at *d'* to the shank *b*.

The hooked back plate, *a*, is placed against the limb at the point where it is to be cut off, and the knife *a'* forced through it by swinging the pivoted handle *c*, which latter is not disturbed after being placed in position, and by this means the cut is always effected at the desired point.

In addition to the above-mentioned advantage, my invention embraces that of the "drawing cut," and both are accomplished by simple means.

What I claim as my invention, and desire to secure by Letters Patent, is—

The hooked back plate, *a*, and curved knife *a'*, in combination with the segments *b'* and *b''*, pivoted to the shank *b*, all arranged to operate in connection with handles *c* and *c'*, as and for the purposes set forth.

In testimony whereof I have hereunto set my hand and seal.

FREDERICK A. WILL. [L. S.]

Witnesses:

C. W. M. SMITH,
H. S. TIBBEY.