

E. L. Yancey.

Pruning Shears.

PATENTED JUN 27 1871

116387

Fig. 2.

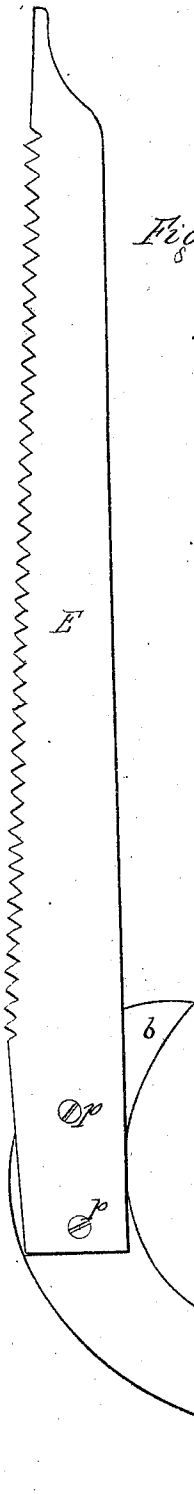
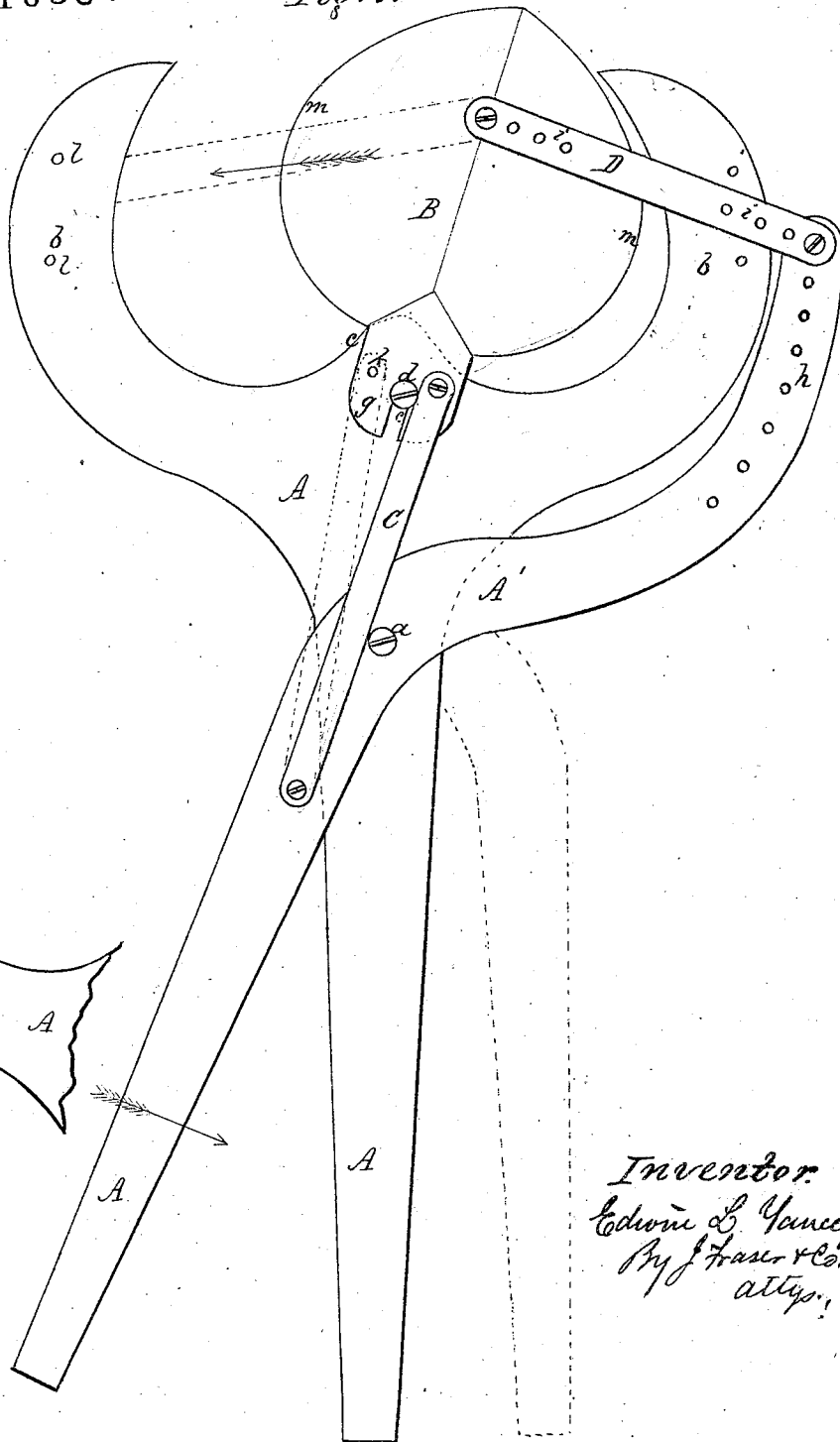


Fig. 1.



Witnesses.
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UNITED STATES PATENT OFFICE.

EDWIN L. YANCEY, OF BATAVIA, NEW YORK.

IMPROVEMENT IN PRUNING-SHEARS.

Specification forming part of Letters Patent No. 116,387, dated June 27, 1871.

To all whom it may concern:

Be it known that I, EDWIN L. YANCEY, of Batavia, in the county of Genesee and State of New York, have invented a certain new and useful Improvement in Pruning-Shears, of which the following is a specification:

This invention consists in the combination of a changeable cutter with a double-hooked jaw, whereby said cutter may be used in either direction. It also consists in the manner of mounting the cutter; and, furthermore, in the general arrangement of the parts.

In the drawing, Figure 1 is an elevation of my improved shears; Fig. 2, a similar view of the saw attached to one of the jaws.

A A' represent the jaws or levers, pivoted at *a* in the usual manner, and B represents the cutter. The main or stationary jaw A is formed with two reverse hooks, *b b*, with a central apex, *c*, between. To this apex is connected the cutter by means of a screw or pin, *d*, which rests in an open slot, *f*, of the tang *g*. The tang is also connected by a connecting-arm, C, with the jaw A', below its pivot, so that in ordinary use the slot cannot escape from its bearing *d*. The upper part of cutter B is also connected by a pivoted arm, D, with the upper end of lever A'. The lever is provided with a series of holes, *h*, by which the arm D may be changed to increase or lessen the leverage, and said arm is also provided with a series of holes, *i*, for shifting the position of the cutter relatively with the hook-blade with which it is acting to cut larger or smaller limbs. The tang of the cutter is also provided with holes *k k* on opposite sides, by which the upper end of arm C may be shifted from one side to the other. Furthermore, the hooks *b b* have holes *l l*, by which the trimming-saw E may be changed from one side to the other. These changes are necessary to adapt the cutter to use in either direction, as will presently be described. The cutter is preferably made in rounded, angular, or heart-form, as shown, to give a shearing cut upon the hooks, and it is made sharp-edged on both sides, as shown at *m m*.

To change the cutting action from one hook to the other the main pivot *a* is removed; also, the lower and outer ends of the arms C D; and the lever A' is then reversed or turned the other side out. The arm C is then applied upon the oppo-

site side of the tang *g* and the outer end of arm D carried over to the opposite hook *b*. The whole position is thus reversed, as indicated by the dotted lines in Fig. 1. This reversal is necessary when one cutting-edge becomes dulled; and it is also frequently desirable in working in different positions.

I claim as a special advantage in my invention the hanging of the double-acting cutter between the two hook-blades *b b*, by which it may cut in either direction by a simple vibration on its center. I also claim an advantage in the arrangement of parts by which the change is made to operate in either direction. To produce these results the double-hooked head of the jaw is essential, and, so far as I am aware, I am the first to use this form. A special advantage also results from the method of hanging the cutter. It will be noticed that the tang rests loosely upon the pivot *d*, which acts simply as a fulcrum, and the slot *f* rises and falls over the pivot as the cutter is thrown, which produces a shearing cut. The arm C simply holds the cutter from sliding off, while the arm D transfers the power from the lever. This arrangement of parts is peculiar, and acts equally well in either direction, which could not be the case with an ordinary pivoted cutter. I attach a saw, E, to either of the hooks of the jaw by means of a screw or screws, *p p*; when not in use this saw is removed from place.

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

1. In a pruning-shear, the jaw A, provided with the reverse hook-blades *b b*, when combined with a centrally-hung double-acting cutter, B, operating in the manner and for the purpose herein specified.

2. In combination with the cutter B, the fulcrum-pivot *d*, open slot *f*, and jointed arms C D, arranged as described, and operating conjointly, in the manner and for the purpose specified.

3. The arrangement as a whole, consisting of the double-hooked jaw A, lever A', cutter B, connecting-arms C D, pivot *d*, and open slot *f*, and the saw E attached to hook *b*, all as herein described.

In testimony whereof I have hereunto set my hand this 30th day of March, 1871.

Witnesses: EDWIN L. YANCEY.

O. C. PARKER,
H. BUFFINGTON.