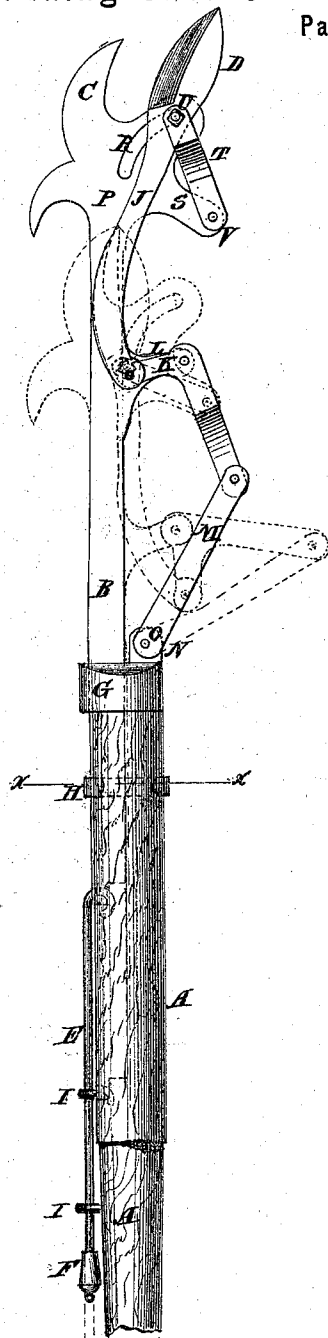


S. J. BEIGH & E. F. BEARD.
Pruning-Shears.

No. 131,808.

Patented Oct. 1, 1872.

Fig. 1.



Witnesses:
P. C. Dieterich
Geo W. Mabee

Inventor:
S. J. Beigh
E. F. Beard
PER *Wm. L. [Signature]*
Attorneys.

UNITED STATES PATENT OFFICE.

SAMUEL J. BEIGH AND ELI F. BEARD, OF REPUBLIC, OHIO.

IMPROVEMENT IN PRUNING-SHEARS.

Specification forming part of Letters Patent No. 131,808, dated October 1, 1872.

To all whom it may concern:

Be it known that we, SAMUEL J. BEIGH and ELI F. BEARD, of Republic, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Pruning-Shears, of which the following is a specification:

This invention relates to a new and useful improvement in shears for pruning trees, shrubbery, &c.; and consists in the construction and arrangement of parts hereinafter described.

In the accompanying drawing, Figure 1 is a side view of the shears, showing the cutting-blade drawn back ready for a cut, also showing, in dotted lines, the position after the cut has been made; and Fig. 2 is a cross-section of Fig. 1 taken on the line *x x*.

Similar letters of reference indicate corresponding parts.

A is the staff to which the cutting mechanism is attached. B is the shank of the hook C. D is the cutting-blade. The staff A is slotted or grooved, so that the shank B slides therein. E is a wire attached to the end of the shank, which extends down on the outside of the staff, as seen in the drawing. F is a knob on the end of the wire. The cutting is effected by pulling on the knob, thereby sliding the shank in the staff and operating the shears. The shank is confined to the groove in the staff by means of the ferrule G on the end of the staff, and the clip H which passes through the staff. The cross-section of the staff, seen in Fig. 2, shows this clip. The wire E is confined to the outside of the staff by the small staples I I. J is the shank of the cutter-blade, the end of which is attached to the short end of the bent lever K. This bent lever is pivoted at the elbow to the arm L of the hook-shank B. The long end of the bent lever K is connected with the ferrule G by the connection M, the forked ends of which receive the end of the lever and an ear, N, on the ferrule G, the pivot O of which is a fixed point. The hook C is the upper termination of a plate or enlargement, P, on the end of the shank B. R is a curved slot through this enlargement, and S is an arm projecting downward in a direc-

tion nearly at right angles with the slot. T represents a strap on each side of the arm S, which connects the arm with the upper end of the shank of the blade D, as seen at U. The pivot which completes the latter connection passes through the curved slot R. As the shank and hook B C are drawn down by pulling on the knob to the position seen in dotted lines, the blade D will also be drawn down, but, at the same time, it will be carried toward the hook by means of the curved slot R and pivot U. The connection T is the radius of a circle, whose center is the pivot V, and the slot R is an arc of the circle. The blade, it will be seen, has a compound motion, and gives a drawing stroke when applied to the limb or twig to be cut. This drawing cut severs the fiber in the easiest and most effective manner possible.

The manner of applying the shears will be readily understood from the drawing, the staff being held with one hand while the knob is pulled with the other. The wire E should be sufficiently stiff when confined by one or more staples, to throw the shears upward or into the position seen in the drawing by pushing.

We do not confine ourselves to the precise form or arrangement of the parts described, as they may be varied without departing from our invention.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The shank B having hook *c*, slot R, and arms L S, in combination with the blade and its operative mechanism, as described, and for the purpose set forth.
2. The radial connection T and pivots U V in combination with the arc or slot R.
3. The arrangement of the bent lever K, blade-shank J, and connection M, substantially as and for the purpose described.
4. The combination of the shank B, with the parts attached thereto, with the staff A, as and for the purposes described.

SAMUEL J. BEIGH.
ELI F. BEARD.

Witnesses:

G. M. OGDEN,
STEPHEN LAPHAM.