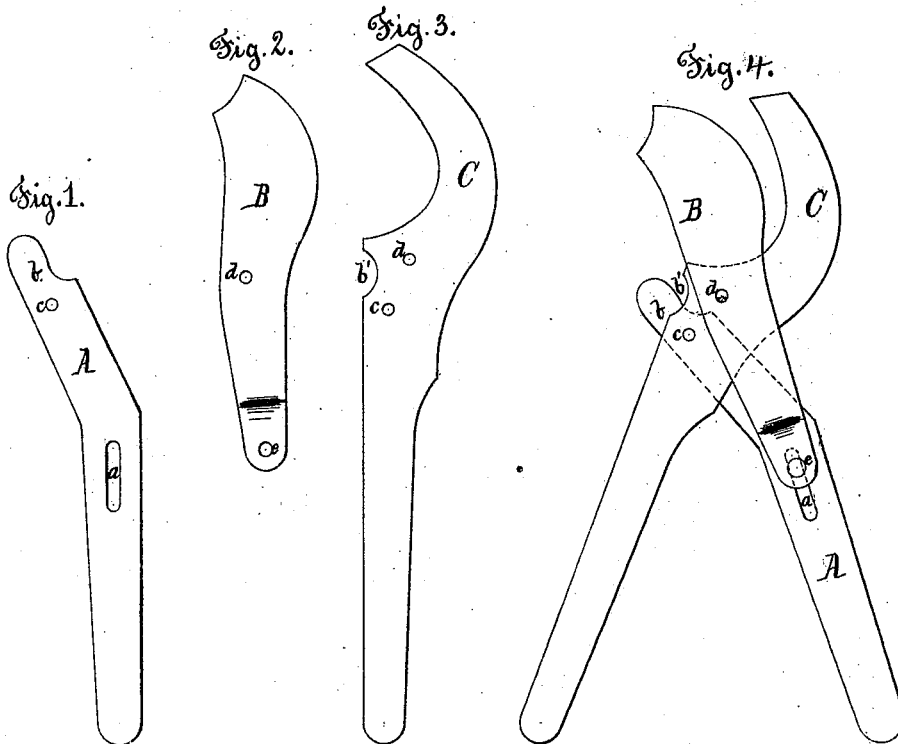


W. Richard,

Pruning Knife.

No. 107,542.

Patented Sept. 20. 1870.



Witnesses.

A. L. Hatfield.

A. W. Munson.

Charles J. Jowers.

Inventor.

William Richard.

United States Patent Office.

WILLIAM RICHARD, OF CLYDE, OHIO.

Letters Patent No. 107,542, dated September 20, 1870.

IMPROVEMENT IN PRUNING-KNIVES.

The Schedule referred to in these Letters Patent and making part of the same.

I, WILLIAM RICHARD, of Clyde, in the county of Sandusky and State of Ohio, have invented certain Improvements in Pruning and Grafting-Knives, of which the following is a specification.

Description of the Accompanying Drawing.

A, Figure 1, is a sweep.

B, Figure 2, is a knife.

C, Figure 3, is a jaw.

Figure 4 is a pruning and grafting-knife, complete.

Sweep A, fig. 1, is provided with a slot, *a*, and cutter, *b*, and is pivoted to jaw C, fig. 3, at *c*.

Blade B, fig. 2, is pivoted to jaw C, at *d*, and to sweep A at slot *a*, by a bolt passing through the slot, by which arrangement, when the knife is open, and when cutting, an increase of power is obtained in proportion to the decrease of distance between the pivots *c* and *e*.

Jaw C is provided with a concave edge, *b'*, figs. 3 and 4, and is more particularly used for grafting, where a perfectly smooth and square cut is required for grafting. The blade B may be removed by unscrewing bolts *d* and *e*, and only use the cutter *b*, of sweep and concave edge of jaw, fig. 3, by which weight is diminished.

Claim.

Sweep A, provided with slot *a*, and cutter *b*, blade B, and its connection with sweep A, jaw C, with concave edge, *b'*, pivoted and arranged as shown and described.

WILLIAM RICHARD.

Witnesses:

A. L. HATFIELD,
CHARLES F. FLOWERS.