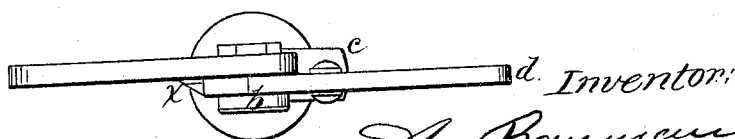
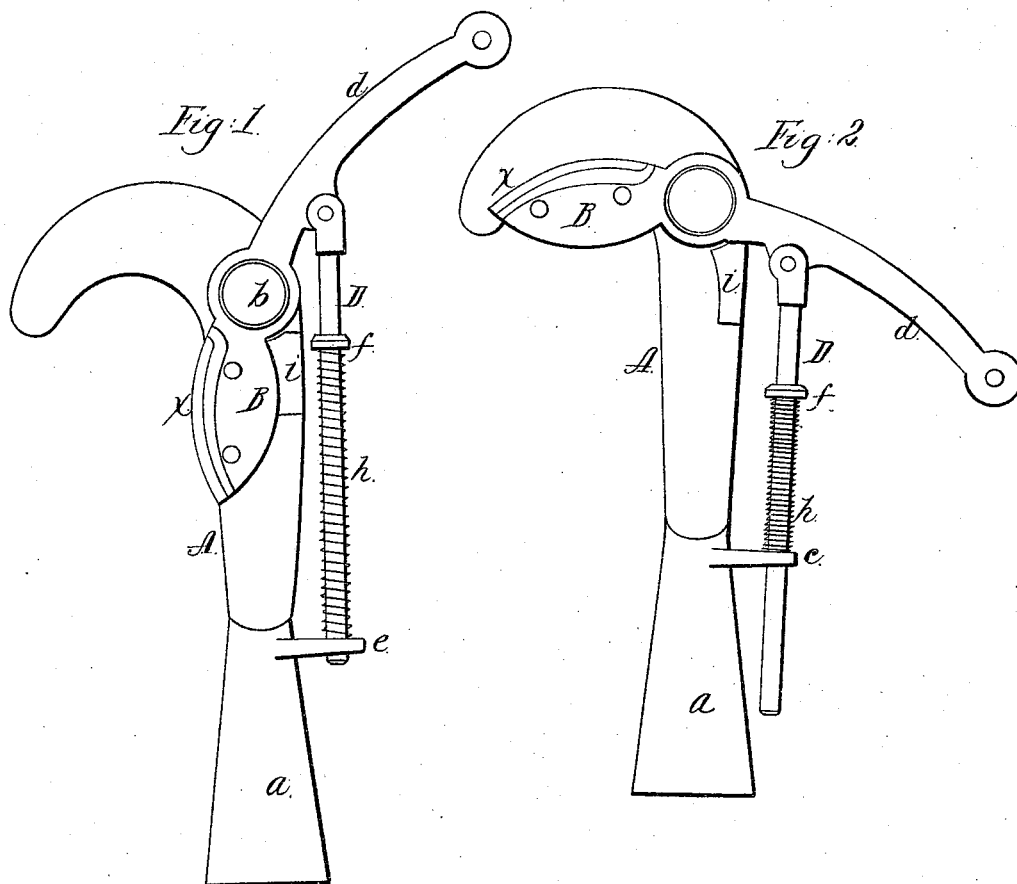


A. Baumann,
Pruning Implement.
N^o 55,043. Patented May 29, 1866.



Witnesses:

John Parker
S. H. Noxon Goddard

Fig. 3. Inventor:
A. Baumann
By his Atty
H. Howden

UNITED STATES PATENT OFFICE.

ADAM BAUMANN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PRUNING-SHEARS.

Specification forming part of Letters Patent No. 55,043, dated May 29, 1866.

To all whom it may concern:

Be it known that I, ADAM BAUMANN, of Philadelphia, Pennsylvania, have invented an Improvement in Pruning-Shears; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My invention consists of a rod and spiral spring combined with and adapted to the hooked portion and knife of pruning-shears, substantially as described hereinafter, the spiral spring having more elasticity than the flat or curved springs hitherto used, and permitting a more extended movement of the knife and the use of the instrument on larger branches.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figures 1 and 2 are side views of my improved pruning-shears, and Fig. 3 a plan view.

The hooked portion A of the shears is provided with the usual socket *a* for attachment to a suitable pole or handle, and to one side of the hook the knife B is hinged by means of a pin, *b*, the knife being provided with a steel cutting-edge, *x*, and having the usual arm *d*, to an eye at the end of which is secured the operating-cord. To a lug on this arm is jointed the upper end of a rod, D, the lower end of which passes through and is guided by a projection, *e*, at or near the upper portion of the socket *a*, and between this projection and a

collar, *f*, on the socket intervenes a spiral spring, *h*, which is coiled round the rod. On one side of the hooked portion of the instrument is a projection, *i*, which serves as a stop to limit the movement of the knife B and its arm *d*. In ordinary spring-shears the hinged knife is operated when the cord is released by a flat or curved spring, the elasticity of which is so limited that the movement of the knife must have a corresponding limitation. Hence it can be used only for severing the smaller branches of trees. As the spiral spring *h* is capable of yielding to a greater extent than a flat or curved spring, it will be evident that a more extended movement of the knife may be obtained, and that branches of greater dimensions may consequently be severed by the instrument.

The spiral spring is, moreover, less liable to breakage than the ordinary flat or curved spring.

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

The rod D and its spiral spring *h*, combined with and adapted to the hooked portion and knife of pruning-shears, substantially as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ADAM BAUMANN.

Witnesses:

CHAS. B. PRICE,
H. HOWSER.