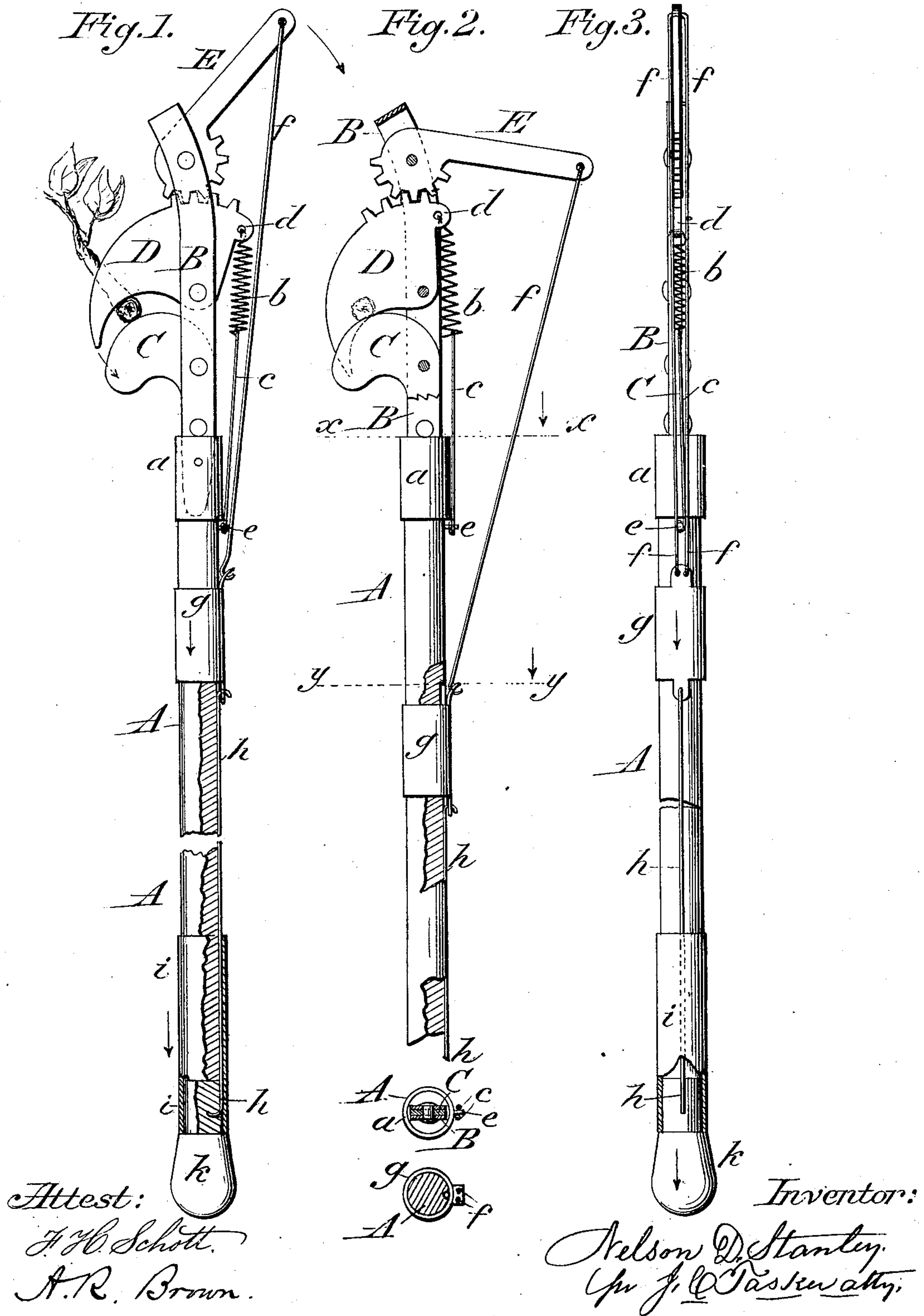


(No Model.)

N. D. STANLEY.  
PRUNING IMPLEMENT.

No. 247,128.

Patented Sept. 13, 1881.



# UNITED STATES PATENT OFFICE.

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## PRUNING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 247,128, dated September 13, 1881.

Application filed May 27, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, NELSON D. STANLEY, a citizen of the United States, residing at Essex, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Pruning Implements; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

The object of my invention is to provide for certain improvements in pruning-knives for trimming trees, whereby the efficiency and durability of such implements are greatly increased; and the invention consists in the construction and arrangement of parts, as hereinafter more fully described and claimed.

In the annexed drawings, Figure 1 is a side elevation of the implement, partly in section, showing the knives about to grasp a bough. Fig. 2 is a similar view, showing the knives closed, with sections taken respectively on the lines *xx* and *yy*; and Fig. 3 is a rear edge view, partly in section.

Like letters indicate corresponding parts.

A represents a pole, to the upper end of which is attached a curved head or bar, B, that is securely held in place by the ferrule *a*. This curved bar or head is slotted for the reception of the knives C D, the lower knife, C, being fixed, while the upper knife, D, is pivoted at or near its lower edge.

At the rear part of the movable knife D is a perforated lug or projection, *d*, to which is attached a coiled spring, *b*, the lower end of which is connected by means of a stout wire, *c*, to a pin, *e*, secured in the upper end of the pole.

To the upper curved end of the slotted head B is pivoted a rocking ratchet-lever, E, the lower or pivoted end of which is slightly enlarged and provided with teeth or cogs, that engage with similar teeth on the upper edge

of the movable knife D. The upper or free end of the lever E is connected by suitable wires, *f*, with a sliding ferrule, *g*, the lower end of which is provided with a wire rod, *h*, that lies in a groove formed in the back of the pole, and, passing under the lower sliding ferrule, *i*, is attached to a handle or knob, *k*, that fits in the lower end of the ferrule *i*.

It will be observed that when the handle *k* and ferrule *i* are drawn down the rods *hf*, which are held taut by the sliding ferrule *g*, operate to draw down the free end of the ratchet-lever E, and thus cause its teeth, which engage with the teeth on the movable knife D, to force the cutting-edge of the latter against the edge of the stationary knife C. A bough or limb placed between the knives is thus readily severed. The cutting-edges of the knives C D are so curved with relation to each other, the lower one being convex and the upper one concaved, that the point of the upper knife will strike the lower knife before the remaining portion of its cutting-edge, thus guiding the upper knife, D, to one side or the other of the knife C and preventing the edges of the two knives from crossing or being injured by coming in direct contact with each other when in operation.

By pivoting the movable knife D at or near its lower edge it will so operate that the limb will not be drawn in against the head-piece B, thus effecting a considerable reduction in the amount of power required to operate the implement, and also obviating danger of injury to the limb. When the handle *k* is released the tension of the spring *b* draws down the upper end of the knife D and opens the cutting-blades.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the curved slotted head B, of the stationary knife C, having convex cutting-edge, movable knife D, having concave cutting-edge, and ratchet-lever E, adapted to engage with cogs on said movable knife, substantially as specified.



2. The combination, with the pole *A*, curved  
slotted head *B*, lower stationary knife, *C*, and  
upper movable knife, *D*, provided with cogs on  
its upper part, and having a spring, *b*, adapted  
5 to open the cutting-blades, of the ratchet-lever  
*E*, rods *f h*, sliding ferrules *g i*, and handle *k*,  
all constructed and arranged substantially as  
shown and described.

In testimony whereof I affix my signature in  
presence of two witnesses.

NELSON D. STANLEY.

Witnesses:

E. A. BEACH,

A. H. BEACH.