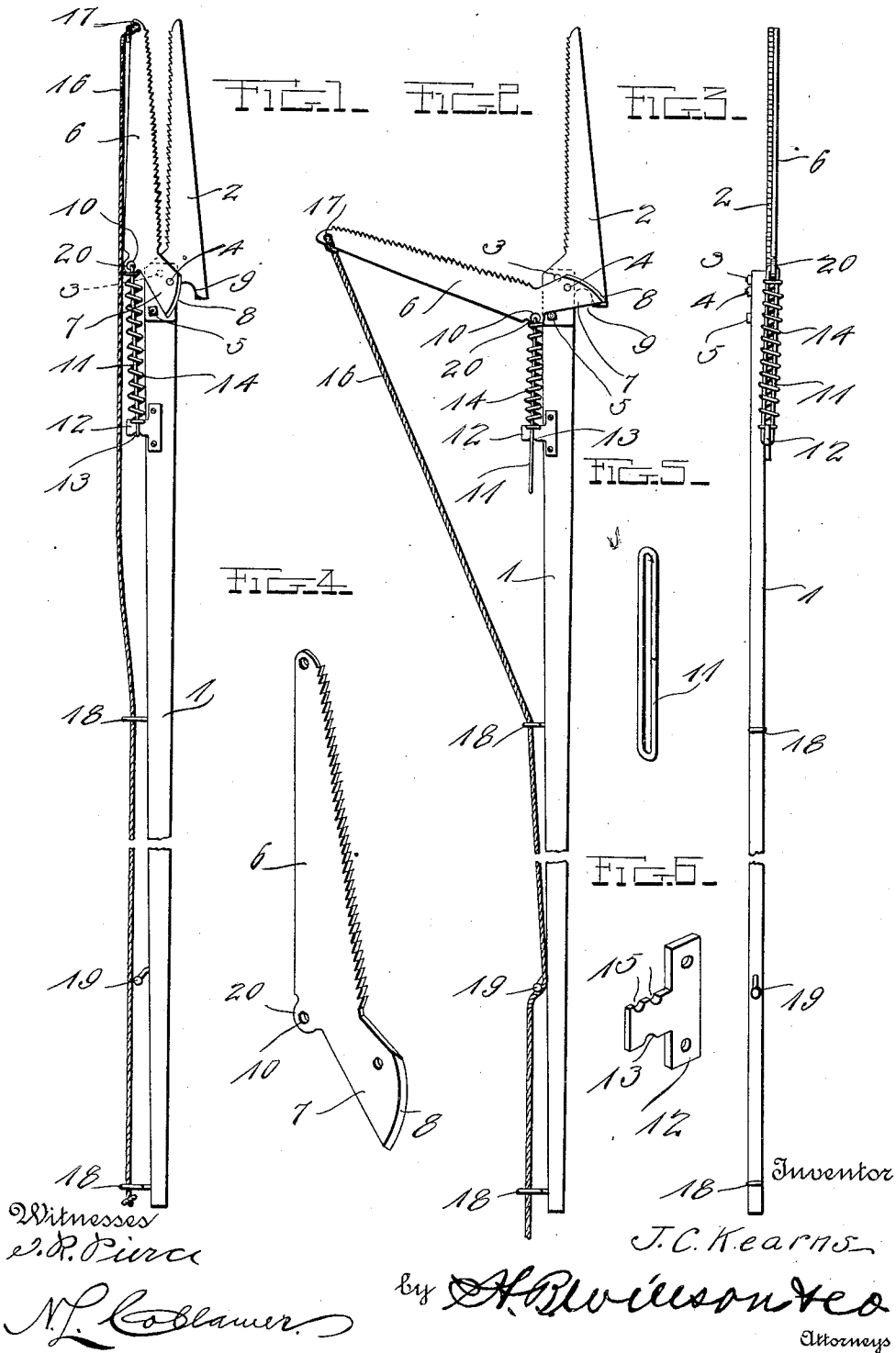


J. C. KEARNS.
PRUNING IMPLEMENT.
APPLICATION FILED FEB. 15, 1912.

1,042,559.

Patented Oct. 29, 1912.



UNITED STATES PATENT OFFICE.

JOHN C. KEARNS, OF LEWISTOWN, PENNSYLVANIA.

PRUNING IMPLEMENT.

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Specification of Letters Patent.

Patented Oct. 29, 1912.

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To all whom it may concern:

Be it known that I, JOHN C. KEARNS, a citizen of the United States, residing at Lewistown, in the county of Mifflin and State of Pennsylvania, have invented certain new and useful Improvements in Pruning Implements; and I do 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.

This invention relates to cutlery, and more especially to pruning implements; and the object of the same is to produce an improved tool of this character whereby an overhead limb can be sawed conveniently by an operator standing on the ground.

To this end the invention consists in the details of construction hereinafter more fully described and claimed, and as shown in the drawings wherein—

Figure 1 is a side elevation of this tool complete with the jaws or saws in closed position, and Fig. 2 is a similar elevation with the jaws in open position. Fig. 3 is an edge view of the parts shown in Fig. 1, excepting the cord or rope. Fig. 4 is an enlarged perspective detail of the movable jaw or saw. Fig. 5 is a perspective detail of the link, and Fig. 6 is a perspective detail of the bracket as will be referred to hereinafter.

In the drawings the numeral 1 designates a handle or staff which is by preference made of rather light wood and as long as may be necessary, and the numeral 2 designates the fixed jaw or saw which has its heel end offset out of alinement with its body (although all parts are yet in one plane) as best seen in Fig. 2, and said offset portion is rigidly secured to the upper end of the handle by means of three bolts 3, 4 and 5 whose arrangement is about that shown and for the reasons set forth below.

The numeral 6 designates the movable jaw or saw whose blade is disposed in a plane alongside that of the fixed saw 2, and whose heel carries an oblique projection 7 which is pivotally mounted on the bolt 4, the extremity of the projection being struck on a curve eccentric to said pivot and sharpened to a knife edge 8. The bolt 4 is so disposed with reference to the offset heel of the fixed saw that as the movable saw is swung on its pivot said knife edge moves over a notch 9 formed in the heel of the fixed jaw, and coacts therewith as would the

blades of a pair of pruning shears. Thus when the operator has a small limb or bough to cut off, he hooks the notch 9 over it and draws downward and then swings the movable jaw by the means to be described below, and the knife edge 8 is moved across the notch with a shearing cut in a manner which will be clear.

At the angle between the movable jaw 6 and its projection 7 is formed a lug 20 having an eye 10 into which is engaged a link 11 best seen in Fig. 5, and the body of the link extends alongside the handle 1 while its lower end stands astride the bracket 12 shown in Fig. 6. This bracket may be carried by or attached to the handle in any suitable manner, but its lower edge is by preference provided with a single notch 13 for receiving the lower end of the link 11, and the latter is by preference of such length that when the movable jaw 6 stands adjacent the fixed jaw 2 as seen in Fig. 1 the extremities of the link will engage the eye 10 and the notch 13, whereas when the movable jaw 6 is turned to the position shown in Fig. 2 the link will slide down astride the bracket in the manner there illustrated. Around said link is coiled an expansive spring 14 whose upper extremity rests under the lug 20 and whose lower extremity by preference rests in a pair of notches 15 formed in the upper edge of the bracket 12; and the purpose of this spring is obviously to restore the parts normally to the position shown in Fig. 1.

For depressing the movable jaw a rope or cord 16 is led from any suitable point along the saw 6, such as the eye 17, and carried down through eyes or guides 18 along the handle and under a suitable fastening device 19 as shown; and obviously when the operator draws upon this cord the movable saw 6 will swing open to the position shown in Fig. 2 and can be held there by engaging the cord under the fastening device 19.

The parts are of the desired sizes, shapes, proportions and materials, and changes in details may be made without departing from the principle of my invention.

The use of this device as a pruning saw is as follows: Assuming that the limb to be cut off is too large to be trimmed by the shears above described, the operator will draw on the cord and open the jaws as seen in Fig. 2 and then throw the fixed saw 2 over the limb so that its teeth rest on the upper side

thereof; then releasing the tension on the cord 16 the spring 14 swings the other saw 6 around its pivot 4 to the position shown in Fig. 1 or nearly so and its teeth engage the lower side of this limb. Thereafter the operator, by longitudinal reciprocation of the handle 1, causes the teeth of both saws to engage the limb simultaneously, and it is sawed on its upper and lower sides and at nearly opposite points. Soon the limb becomes weak and begins to sag, and this would close up the lower kerf so that the blade 6 would be caught therein unless it were removed, and hence the operator pulls on the cord 16 and throws this blade open to the position shown in Fig. 2 and continues to saw with the fixed blade 2 on the upper side of the limb only until the latter falls.

It will not be necessary to illustrate and describe in detail the manner in which the saw teeth are made.

The bolt 5 is preferably located about as shown in Fig. 1 so that its nut prevents the saw 6 from opening too wide.

I consider it essential that some such means as the link and bracket be employed to reliably guide the spring in its movement, because a device of this character necessarily is used among the thick branches and leaves and almost any form of spring would be liable to displacement if such contingency is not carefully guarded against.

What is claimed as new is:

1. In a pruning implement, the combination with a handle, and a fixed saw blade whose heel end is offset out of alinement with its body and secured to said handle and

is notched alongside the latter; of a movable saw blade having an oblique projection at its heel end overlying the heel of the fixed saw and pivoted to said handle, the extremity of said projection being provided with a knife edge adapted to move across said notch when the movable blade is swung on its pivot, means for limiting the movements of said blade in either direction, and means for swinging it from the lower end of the handle.

2. In a pruning implement, the combination with a handle, a blade secured to the upper end thereof, a bolt through said handle, and a swinging blade having an oblique projection at its heel end pivoted to said handle alongside the fixed blade and in such position that said bolt checks the movements of the swinging blade in either direction; of a bracket carried by the handle and having two notches in its upper edge and one notch in its lower edge, a slotted link connected at one end to the projection on the movable blade and with its slotted portion sliding over said bracket, an expansive spring coiled around said link and resting at one end in the two notches of the bracket and at the other end against said blade, and means for swinging the latter against the tension of the spring.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN C. KEARNS.

Witnesses:

WM. S. SETTLE,
JAMES H. RUEBLE.