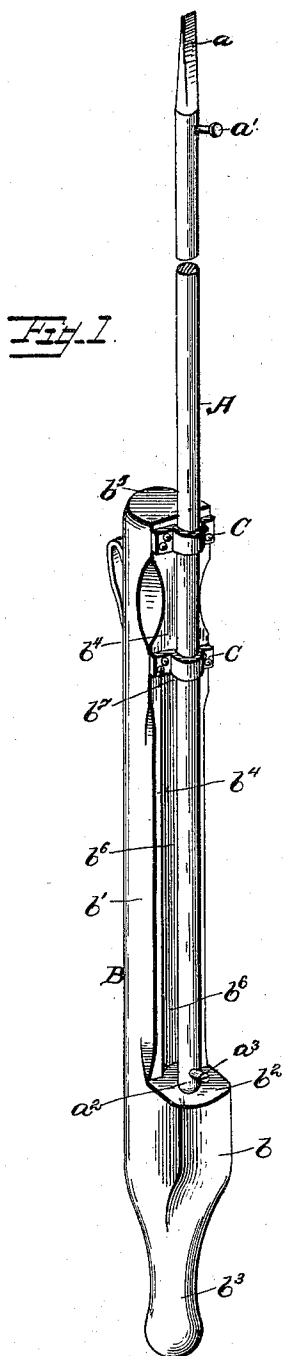


(No Model.)

C. S. MILLER.
INSTRUMENT FOR TRIMMING TREES.

No. 535,387.

Patented Mar. 12, 1895.



File

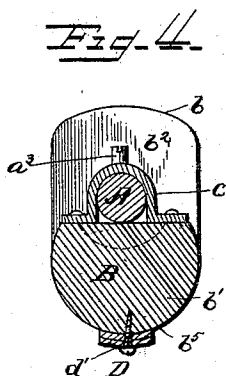


Fig. 2.

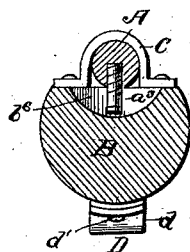
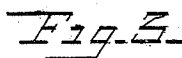
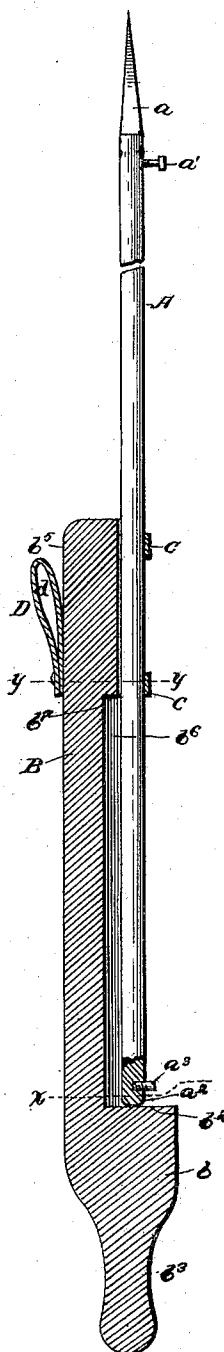


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHROLLMON SHANKLIN MILLER, OF ABINGDON, VIRGINIA.

INSTRUMENT FOR TRIMMING TREES.

SPECIFICATION forming part of Letters Patent No. 535,387, dated March 12, 1895.

Application filed May 16, 1894. Serial No. 511,462. (No model.)

To all whom it may concern:

Be it known that I, CHROLLMON SHANKLIN MILLER, a citizen of the United States, residing at Abingdon, in the county of Washington and State of Virginia, have invented a new and useful Instrument for Trimming Trees, of which the following is a specification.

This invention relates to that class of instruments for trimming or pruning fruit and other trees, which embody a bar having a chisel-shaped cutting end and provided with a sliding hammer or driver by the impact force of which the bar is operated.

The object of my invention is to provide an improved instrument of this character, which will possess advantages in point of simplicity and inexpensiveness, convenience in use, ease of operation, durability, effectiveness, and general efficiency.

In the drawings:—Figure 1 is a perspective view of my improved instrument. Fig. 2 is a longitudinal sectional view. Fig. 3 is a detail transverse sectional view, taken on the line $x-x$, Fig. 2, and looking forwardly. Fig. 4 is a detail transverse sectional view, taken on the line $y-y$, Fig. 2, and looking rearwardly.

Corresponding parts in all the figures are denoted by the same letters of reference.

Referring to the drawings, A designates a rod or bar, forming the handle of the chisel, which bar is of suitable length and is provided upon its outer end with a chisel or cutting edge, a , made in a separable detachable piece or integral with the bar, as desired. The rod forming the chisel handle is preferably cylindrical in cross section and may be provided near its outer end with a lateral pin or projection, a' , adapted to be used to engage and pull down any limbs or foliage which may hang after being cut off.

B designates a driver or hammer, which is of suitable length and weight with relation to the rod A and comprises a head, b , and an extension or body portion, b' . The head b forms a shoulder, b^3 , adapted to operate against the inner or rear end, a^3 , of the rod forming the chisel handle, and the end of the head b in rear of the shoulder b^3 is shaped to form a handle, as shown at b^3 .

The driver or hammer B is mounted upon the rod A, and is adapted to slide thereon, by means of two collars, C C, secured in trans-

verse position at the outer end of the body b' of the driver and embracing the rod A. These collars correspond to the cylindrical contour of the rod and are adapted to form a bearing thereon. They are mounted in front of the shoulder b^2 and may be formed of common hoop iron or any other adapted metal suitably secured.

Near the rear inner end a^3 of the rod A, is provided a lateral screw or pin, a^3 , adapted to engage the first bearing collar C and prevent the separation of the driver from the chisel rod. I prefer to make this screw or pin removable, as shown, to permit the separation of the driver and rod for purpose of substitution or repair, when desired.

The inner face, b^4 , of the extension or body portion b' of the driver is preferably flat, as shown, while the outer face or back, b^5 , is rounded or curved, as shown, for convenience in handling and using the instrument.

It will be noted that the chisel rod or handle is adapted to turn in the bearing collars C C with relation to the driver, so that the position of the chisel or cutting edge may be varied or adjusted as desired.

To enable a complete revolution of the rod or chisel handle, the extension or body portion b' of the driver may have its inner face b^4 cut away or recessed, as shown at b^6 , from the shoulder b^2 of the head of the driver to a suitable point near the outer end carrying the bearing collars, which recess provides for the passage of the laterally projecting stop-pin a^3 when the chisel rod is revolved. The recess b^6 forms a shoulder, b^7 , at its front end, which will provide a stop adapted to be engaged by the stop-pin a^3 when the latter is brought to that position by the turning or revolution of the chisel rod.

D designates a handle or strap, provided at the back b^5 of the driver near the front end of the latter. This is preferably in the form of a flexible strap forming a loop, d , and having its rear ends secured by a pin or screw, d' , to the body b' of the driver. A hand loop or handle projecting from the front portion of the driver is thus provided, through which the hand of the operator may pass when holding the driver at that point. This construction is especially convenient and available when the device is being used to cut low limbs,

and not only affords an effective support but also materially assists in making the stroke.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains.

The rod A forming the handle of the chisel is held with one hand of the operator and the chisel placed to the limb, the driver being held with the other hand of the operator, when, by operating the driver the impact of the latter against the rear end of the chisel rod will drive the chisel to the limb. The chisel rod may be readily turned or revolved as desired, to adjust the position of the cutting edge with relation to the limb, without altering the relative position of the driver.

It will be noted that the instrument may be used when standing on the ground or from up in the tree, that it is adapted to be readily shifted from one hand to the other, that it can be lowered or raised so as to be operated above, below or on either side, that it can be employed in positions and under circumstances where a saw or hatchet cannot be used, and that it is adapted to make a close smooth cut with a clean surface which will readily heal over.

The length of the rod forming the chisel handle, and the size and weight of the driver, may be varied according to the circumstances and conditions under which the instrument is designed to be employed.

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

The herein described instrument, comprising the cylindrical rod A carrying the chisel or cutting edge a and the stop pin or projection a^3 , the driver or hammer B having the head b forming the driving shoulder b^2 and the body portion or extension b' and provided with the recess b^6 extending longitudinally and adapted to accommodate the pin a^3 , the collars at the outer portion of the driver, and the supplementary handle or strap, D, arranged near the outer end of the extension b' , substantially as and for the purpose set forth.

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

CHROLLMON SHANKLIN MILLER.

Witnesses:

ARTHUR C. CUMMINGS,
L. T. COSBY.