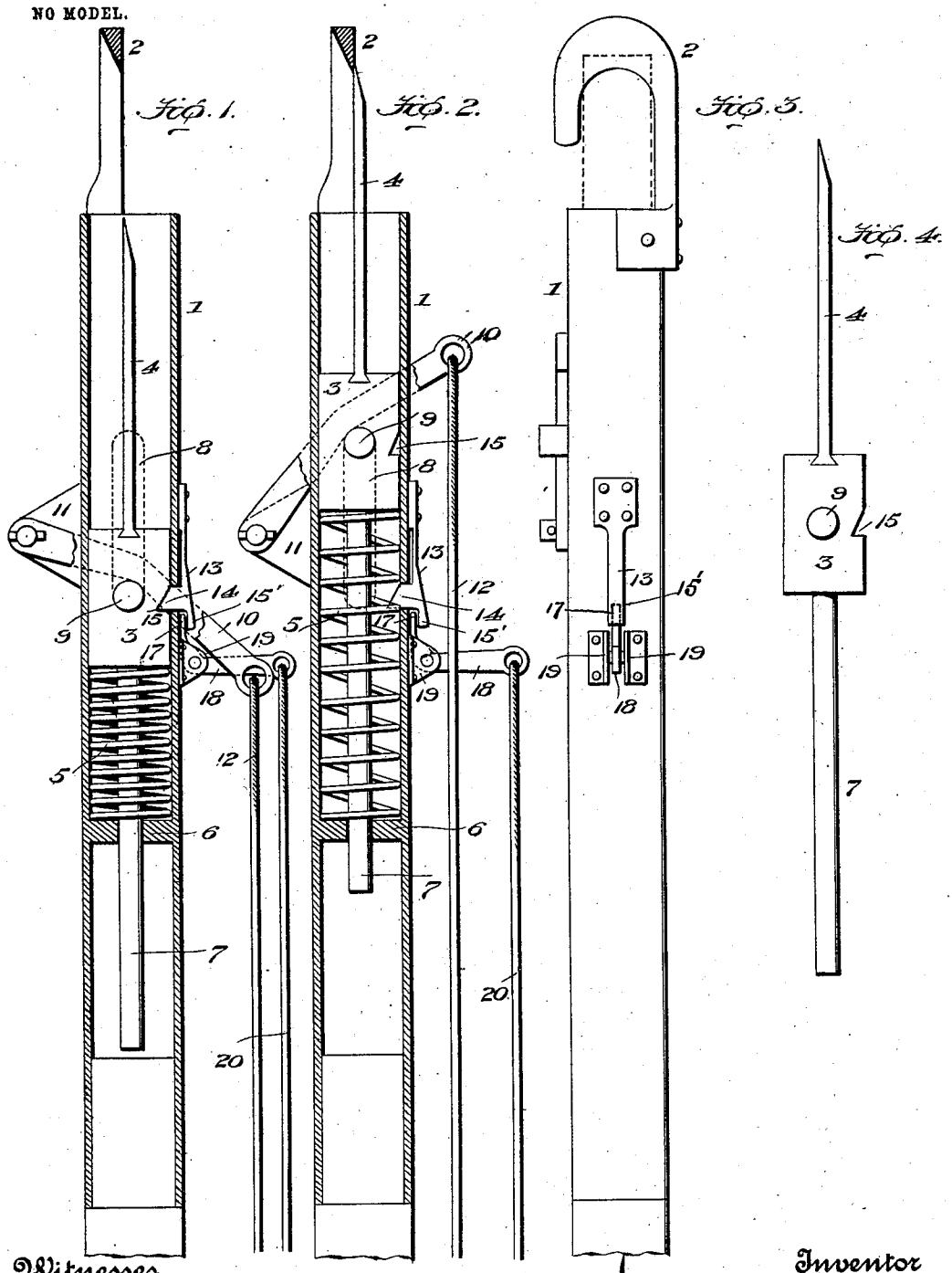
No. 727,263. PATENTED MAY 5, 1903.

J. BARRETT.

PRUNING IMPLEMENT.

APPLICATION FILED JAN. 6, 1903.

NO MODEL.



Witnesses

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No. 727,263. Patented May 5, 1903.

UNITED STATES PATENT OFFICE.

JAMES BARRETT, OF BROOKLYN, NEW YORK.

PRUNING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 727,263, dated May 5, 1903.

Application filed January 6, 1903. Serial No. 137,987. (No model.)

To all whom it may concern:

Be it known that I, JAMES BARRETT, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Pruning Implements, of which the following is a specification.

In an implement for pruning trees in which a slidable chisel-blade coacts with a gooseneck-knife and is projected to make the cut by the force of a spring I have produced a construction in which the slidable blade is automatically locked in a concealed position within its holder ready for use and in which the release of the locked slidable blade to make the cut is effected by a trigger, and in the claims appended hereto I will point out the parts and combinations of parts which constitute my improvements.

The accompanying drawings illustrate in Figure 1 a pruning implement embodying my invention, the slidable blade being shown in its concealed locked position within its tubular holder ready to be sprung to make the cut. Fig. 2 is a like section showing the slidable chisel-blade in the position having been sprung to make the cut. Fig. 3 is a side view of the implement, the slidable chisel-blade being concealed. Fig. 4 shows the slidable blade.

A metal tube 1, preferably cylindrical, has secured to its outer side a gooseneck-knife 2, so that it projects from and overhangs the open end of the tube, with its arched cutting-face standing transversely in the diameter-line of the tube and about two inches and a half beyond the end of the latter. The shank of this knife terminates in a concave part fitting and screwed to the outer wall of the tube. Within this tube is fitted to slide a metal block 3, having chisel-blade 4 fixed to and projecting from its end, so that it will make a flat shear cut with the gooseneck-knife edge, and for this purpose this chisel-blade stands across the diameter of the block. This block is supported upon a spiral spring 5, which is supported on a partition 6, through a central hole in which a rod 7, depending from the block, is centered to give true movement to the block and to its knife-blade to make the shear cut. A slot 8 in the wall of the tube (seen in dotted lines in Figs. 1 and 2) and a pin 9 in the block projecting through said slot limit the throw of the block-blade in making the shear cut and prevent the turning of the block. In its normal position the block holds its blade concealed within the open end of the tube against the tension of the spring, which for this purpose is compressed by pulling the block down by a lever 10, pivoted to a bracket 11, fixed on the outer wall of the tube and standing across the latter, engaging the pin of the block. A cord 12, hanging from the lever, serves to pull down the block to bring the knife-blade within the tube, at which point it will be held by the engagement of the block with a spring-catch 13, fastened on the outside of the tube and having its engaging part 14 projecting through an opening in the tube and adapted to engage a notch or recess 15 in the side of the block and hold it against the tension of the spring. The catch part is beveled, so that in pulling the block down to inclose its chisel-blade the end of the block will strike the beveled edge of the catch and push it outward, so as to hold it out until the notch or recess in the block comes opposite the catch, when it will spring into the notch and lock the block against the compressed tension of the spring. The catch consists of a plate-spring 13, fastened at one end to the tube, the other end having the beveled catch part 14 and terminating in an end 15', with which a finger 17 of a trigger 18 engages between the end of the catch and the tube. This trigger is preferably of bell-crank form, is pivoted to and between lugs 19, fastened to the tube, and has a rope 20, by pulling which rocks the trigger, and forcing outward its catch-engaging end 17 withdraws the catch 14 from the recess 15 in the block, when the spiral spring, compressed by the block, will project the block-blade to make the cut, and this locking and releasing of the slidable blade may be repeated, if necessary, to complete the severance of the tree-limb.

The cutting members are of steel, and the chisel-blade is secured in a slot in the end of the block.

It is important to note that the block-pin forces the chisel-blade's flat face to make a true shear cut with the flat shearing edge of the gooseneck-knife, while the rod depend-

ing from the other end of the block prevents it from binding in its movements within the tube.

I claim—

1. In a pruning implement and in combination, a tube, a knife secured to and overhanging its end, a chisel-blade, a coiled spring within the tube for sustaining and projecting the chisel-blade, a spring-latch engaging the chisel to hold the blade under the compression of the spring, and means for disengaging the latch for the projection of the chisel.

2. In a pruning implement the combination with a tube, a knife secured to and overhanging the open end of the tube, a block slidable within the tube having a recess in its side, and a chisel-blade projecting from its end, a spring supporting the block, a spring-catch on the tube adapted to engage the recess in the block, a trigger on the tube adapted to engage the spring-catch, and means whereby the lever and the trigger are to be operated.

3. In a pruning implement, the combination with a tube, having a knife, overhanging diametrically the open end of the tube, a slot in the tube-wall, a block within the tube having a chisel-blade diametrically projecting from its end, a pin projecting through the tube-slot, and a recess in the side of the block, a spring supporting the block, a lever on the tube engaging the block-pin, a spring-catch on the tube adapted to engage the recess in the block, and a trigger on the tube adapted to engage the spring-catch to release the block and means for operating the lever and the trigger.

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

JAMES BARRETT.

Witnesses:

GEO. B. BOLTON,

JOSEPH MCKEON.