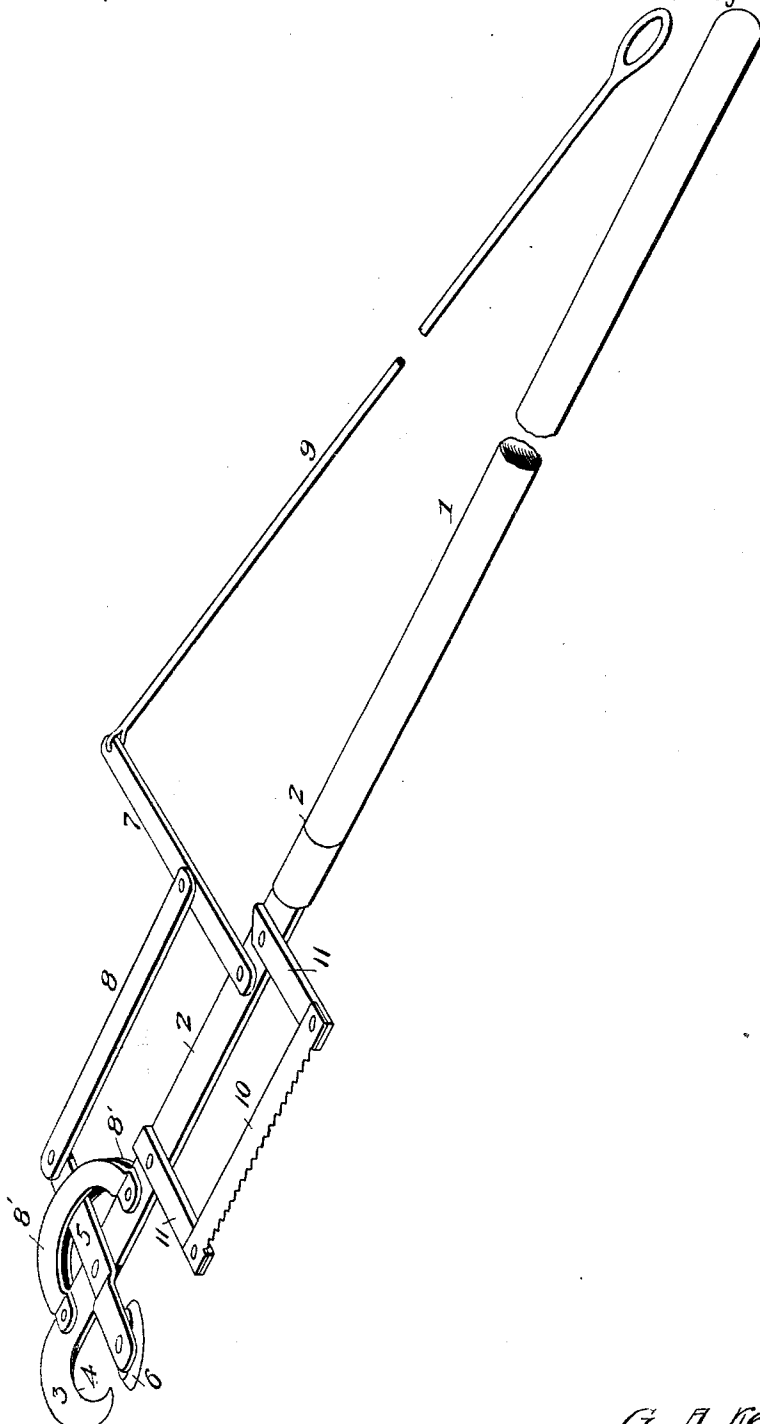


(No Model.)

G. A. KEMPER.  
PRUNING SHEARS.

No. 586,850.

Patented July 20, 1897.



Witnesses  
*Wm. E. Ashbee*  
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# UNITED STATES PATENT OFFICE.

GEORGE A. KEMPER, OF NEWBERNE, WEST VIRGINIA.

## PRUNING-SHEARS.

SPECIFICATION forming part of Letters Patent No. 586,850, dated July 20, 1897.

Application filed March 22, 1897. Serial No. 628,721. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE A. KEMPER, a citizen of the United States, residing at Newberne, in the county of Gilmer and State of West Virginia, have invented certain new and useful Improvements in Pruning-Shears; 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.

My invention relates to pruning-shears; and the object is to simplify the construction and provide a device of this character which will effectively perform its work in an efficient manner without requiring the expenditure of a great amount of strength in operating it.

With this object in view the invention consists of certain features of construction and combination of parts, which will be herein-after fully described and claimed.

The figure in the drawing is a perspective view of my improved shears.

1 denotes the handle, provided with a cutter-bar 2, the upper end of which is hooked, as shown at 3, and is formed with a sharpened edge 4. Pivoted to the bar near its hooked end is an oscillating cutter-bar 5, the inner edge of which supports a rotary cutter 6, which coacts with the hooked cutter aforesaid.

7 denotes a lever, one end of which is pivoted to the hooked bar near its lower end, and 8 denotes a link pivoted to the outer end of the cutter-bar and to the intermediate portion of the lever.

9 denotes an operating-rod connected to the outer end of the lever and by means of which the lever may be drawn downward to force the rotary cutter against the limb or twig to be severed. In cutting heavy limbs or dried limbs a considerable amount of pressure is required, and heretofore in devices of this character there has been a tendency to strain the cutter-bar, owing to the resistance offered to the cutter by the dried or thick limb to be severed. To overcome this difficulty, I provide two guide-plates 8', secured to opposite sides of the hooked bar near its upper end, and between which the end of the cutter-bar swings and by which the cutter is prevented from being strained or bent out of alinement.

10 denotes a saw which I secure to the

hooked bar by two plates 11, bolted to said hooked bar. The outer ends of these plates 55 are recessed to form seats for the ends of the saw, which are bolted in said recesses.

As the function of the saw is obvious to those requiring the use of tools of this character, further description is not thought to be 60 necessary.

The inner end of one of the plates that supports the saw is beveled and is secured to the hooked bar immediately below the pivot for the lever, so that when said lever is swung 65 downward in the act of forcing the rotary cutter through the limb to be severed the lever will contact with the beveled end of this plate, thereby limiting the motion of the lever and preventing the rotary cutter 70 being thrown too far upward, which would cause it to strike the upper end of one of the curved guide-plates and become dulled, or if such plates were not provided the cutter would be thrown vertically, and the link, cutter-bar, and lever would reach a dead-center, 75 in which position it would be difficult, if not impossible, to operate the device without lowering it and moving the parts to the proper position.

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

The combination with a handle and a bar secured thereto, and having its upper end 85 hooked and provided with a cutting edge, of two guide-plates secured on opposite sides of the bar, a cutter-bar pivoted to the hooked bar near its upper end and projecting between the guide-plates, a rotary cutter journaled to the inner end of the cutter-bar, an 90 operating-lever pivoted to the hooked bar, a link connecting the operating-lever with the outer end of the cutter-bar, plates projecting laterally from the cutter-bar, a saw supported thereby, the lower one of said plates having 95 a beveled end to form a stop for the lever for the purpose described, and an operating-rod secured to the outer free end of the said lever, substantially as set forth. 100

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

GEORGE A. KEMPER.

Witnesses:

GEORGE W. SWISHER,  
EDWARD N. BUSH.