No. 887,494. PATENTED MAY 12, 1908.

G. N. MULERTZ.

PRUNING SHEARS.

APPLICATION FILED AUG. 22, 1907.

2 SHEETS—SHEET 1.

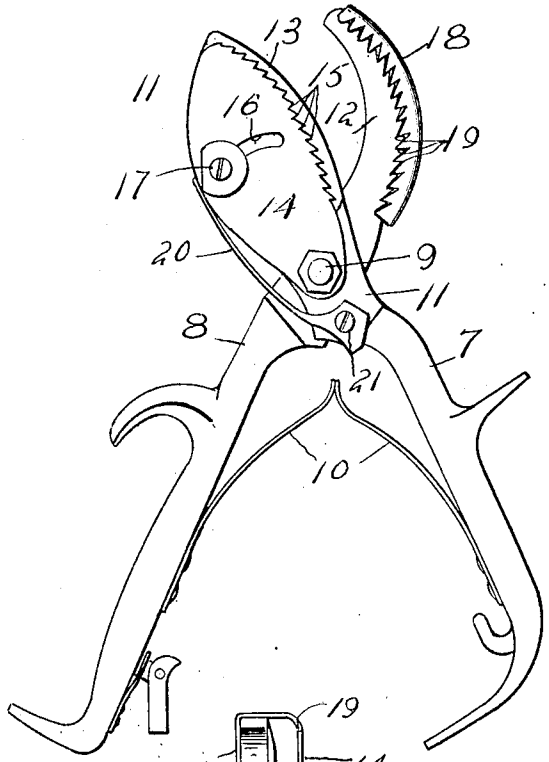

Fig. 1

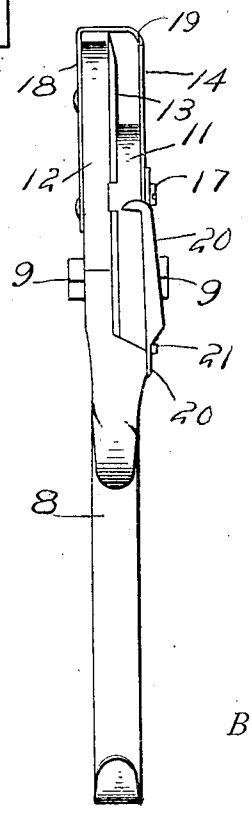

Fig. 2.

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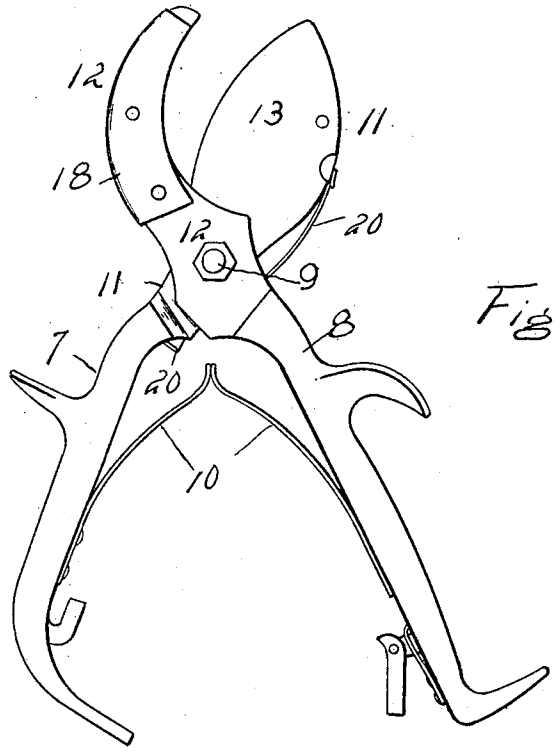
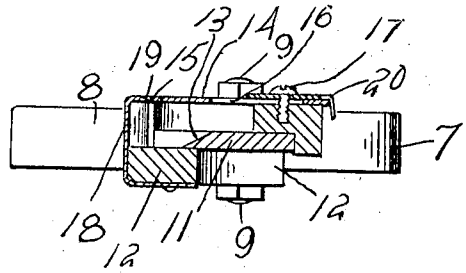


Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE N. MULERTZ, OF NORFOLK, NEBRASKA.

PRUNING-SHEARS.

No. 887,494. Specification of Letters Patent. Patented May 12, 1908.

Application filed August 22, 1907. Serial No. 389,690.

To all whom it may concern:

Be it known that I, GEORGE N. MULERTZ, a citizen of the United States, residing at Norfolk, in the county of Madison, State of Nebraska, have invented certain new and useful Improvements in Pruning-Shears; and I do hereby declare the following to be 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.

The present invention has reference to improvements in pruning shears, and it aims to provide an implement of that class carrying a gripping attachment operating in connection with the cutting jaws thereof, for engaging the severed twigs or branches and permitting the operator to remove them from a tree or shrub.

To this end the invention resides in the attachment to the cutting jaws of a pair of serrated gripping jaws, one of which is forced yieldingly towards the other under the action of a spring carried by the corresponding cutting jaw.

The invention further consists in the particular construction, combination, and arrangement of parts, all as hereinafter fully described, specifically claimed, and illustrated in the accompanying drawings, in which like parts are designated by corresponding reference numerals throughout the several views.

Of the said drawings, Figure 1 is a front elevation of a pair of pruning shears equipped with the improved gripping attachment, Fig. 2 is a side elevation thereof, illustrating the position of the spring for actuating the movable gripping plate. Fig. 3 is a rear elevation. Fig. 4 is a transverse section through the jaws and plates.

Referring more particularly to the drawings, the shears shown therein are, in the main, of the ordinary type and include the crossed levers 7 and 8 pivoted upon the fulcrum pin 9, the handle portions of the levers being normally separated by the springs 10. The operating ends of the levers are provided with the jaws 11 and 12, the former of which has riveted to one face thereof the usual cutting blade 13. Disposed against the opposite face of the jaw 11 is a plate 14 provided with a serrated inner edge 15, the shape of said plate being similar to that of the blade 13. This plate is pivoted at its lower end to the pin 9 and is provided centrally with a transversely-disposed arcuate slot 16 through which a headed bolt 17 carried by said jaw extends. The opposite jaw 12 has formed on its outer edge a laterally-projecting extension 18, whose free longitudinal edge is bent inwardly towards the plate 14, and lies in spaced relation to and parallel with the adjacent face of the said jaw. The bent edge of the extension 18 is also serrated, as indicated by the numeral 19.

The plate 14 is normally forced towards the serrated portion of the extension 18 by means of a leaf spring 20 secured at its lower end to a pin 21 set into the jaw 11 and bearing at its opposite end against the outer edge of the plate 14, the bearing end of the spring being laterally bent, as shown.

Owing to the provision of the spring it will be apparent that in gripping a severed twig or branch, the plate will yield slightly or move away from the serrated edge of the extension 18 against the action of the spring, thus adjusting itself to all sized branches, and gripping them firmly.

While, in the present instance, a leaf-spring has been shown, it is not intended that the invention be limited to this construction, as an expansible coil-spring connected to the plate and the adjacent handle might obviously be substituted. It will be apparent also that the extension 18 instead of being formed on the jaw 12, may be in the nature of an L-shaped plate which is secured to the outer edge of said jaw.

The plate 14 and extension 18 each form what may be regarded as a jaw, and the term "gripping jaws" occurring in the claims has reference therefore to these elements.

What is claimed, is,

1. The combination, with a pair of pruning shears, one of the shear jaws having a laterally-projecting extension formed thereon, said extension having its free longitudinal edge bent inwardly, of a plate carried by the other shear jaw, said plate being movable towards and from said extension.

2. The combination, with a pair of pruning shears, one of the shear jaws having a laterally-projecting extension formed thereon, said extension having its free longitudinal edge bent inwardly, of a plate carried by the other shear jaw, and provided with a transversely-disposed slot through which a bolt carried by the corresponding shear jaw extends, said plate being movable towards and from said extension.

3. The combination, with a pair of pruning shears, of a transversely slotted plate carried by one of the shear jaws and provided with a serrated inner edge, a bolt carried by said shear jaw and extending through said slot, a laterally-projecting extension formed upon the other shear jaw and having its serrated inner edge bent inwardly towards the serrated edge of said plate, and means for normally forcing said plate towards said extension.

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

GEORGE N. MULERTZ.

Witnesses:
GEO. H. FULLER,
JACOB KRAFT.