

(No Model.)

R. G. RADER.
DEHORNING IMPLEMENT.

No. 503,617.

Patented Aug. 22, 1893.

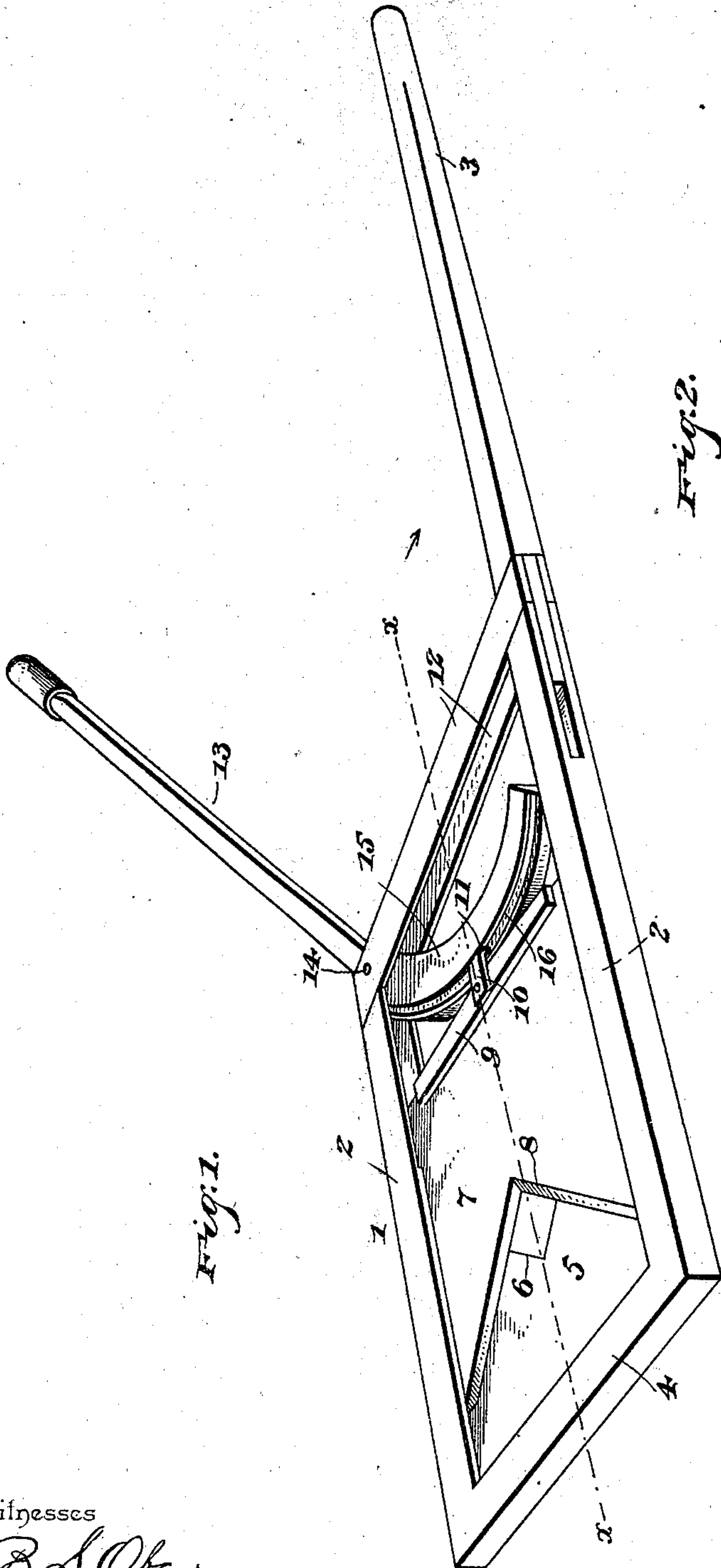
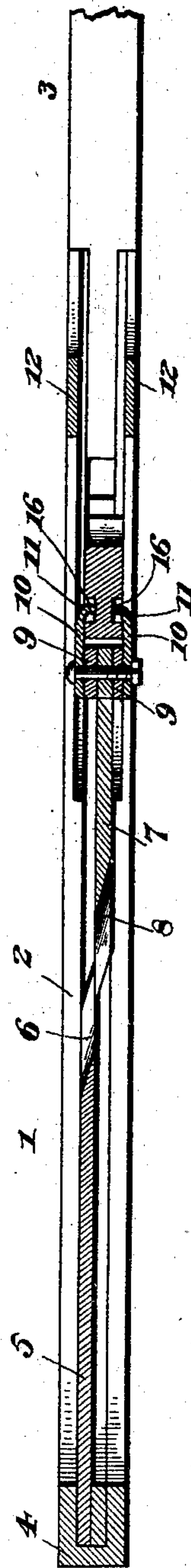


Fig. 1.

Fig. 2.



Witnesses

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DEHORNING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 503,617, dated August 22, 1893.

Application filed March 1, 1893. Serial No. 464,239. (No model.)

To all whom it may concern:

Be it known that I, REUBEN G. RADER, a citizen of the United States, residing at Cerro Gordo, in the county of Piatt and State of Illinois, have invented a new and useful Dehorning Implement, of which the following is a specification.

This invention relates to dehorning implements, and has for its object to increase the positive action of the cutters by causing the same to cut equally on all sides of the horn operated upon without crushing the same, and also to simplify the construction of the operating mechanism.

With these and other ends in view, the invention consists of the construction and arrangement of the parts thereof as will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is a perspective view of a dehorning implement contemplating the invention. Fig. 2 is a central longitudinal section on the line $x-x$, Fig. 1.

Similar numerals of reference indicate corresponding parts in both the figures of the drawings.

Referring to the drawings, the numeral 1 designates the frame of rectangular or analogous form and comprising parallel side bars 2, one of which is extended at one end to form a grip 3. The said bars 2 are connected at their front ends by a cross-bar 4 to form a closed front end to the frame, and to the said cross-bar 4 and the adjacent opposite parts of the said side bars, a stationary cutter 5 is secured having its rear edge with an entrant angular slot 6. The walls of said slot 6 are equal in length and slope and are sharpened from the under side upwardly to form a cutting edge. The opposite interior edges of the side bars 2 are recessed or slotted and therein is mounted a movable cutter 7, having a front rearwardly-entrant angular slot 8, similar to slot 6, and whose walls are sharpened from the upper side downwardly. The cutter 7 rides above and bears against the cutter 5 and the two entrant slots 6 and 8 with their sharpened walls form four directions of cut, two being at the front and two in the rear, thereby avoiding crushing of the horn being operated upon. The rear part

of the cutter 7 is thickened or formed with a back 9 on the upper and lower sides of the same, and to the center of the upper and lower parts of the same are pivotally connected arms 10, that are formed with rear hooked-ends 11 extending toward each other. The rear parts of the side bars 2 are connected by a pair of diagonally-disposed parallel bars 12, that are spaced apart and one superposed above the other. The recesses or slots in the side bars, at the rear parts of the latter, are increased in dimension, and at one side extend entirely through the side bar. Between the bars 12, at one end, is movably mounted an operating-lever 13, held in position by a transverse pivot 14 passing through the said bars 12. The forward end of the lever 13 is formed with a segmental head 15, that moves through the adjacent open part of the side bar, and is arranged to have its free end extend into the recess in the opposite side bar during its operation. The upper and lower sides of said head are formed with parallel segmental grooves 16, that are eccentric with relation to pivot 14 which are engaged by the hooked-ends 11 of the arms 10, and by this means the cutter 7 is connected to the movable arm. The forward movement of the knife is caused by the eccentric or cam-face of the arm riding against the rear thickened portion of the movable blade.

The device is positive in its action and is easily handled and operated, and it is obviously apparent that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having described the invention, what is claimed as new is—

In a dehorning instrument, the combination with the rectangular frame, the opposite sides of which are provided with ways, and one of said bars being continued to form a stationary handle, of the movable handle pivoted in an opening in the opposite inner corner of the frame, and terminating within the same in an eccentrically disposed curved arm or portion provided upon opposite sides with similarly disposed grooves, the sliding knife

mounted in the grooves of the frame and at
its rear end borne upon by the eccentric arm,
and the clips secured to the rear end of the
knife and at their rear ends inwardly bent to
5 engage loosely with the aforesaid grooves of
the eccentric curved arm, substantially as
specified.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

REUBEN G. RADER.

Witnesses:

J. M. SHIVELY,
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