A. McKENNEY.

Stump-Extractor.

No. 162,937. Patented May 4, 1875.

Fig. 1.

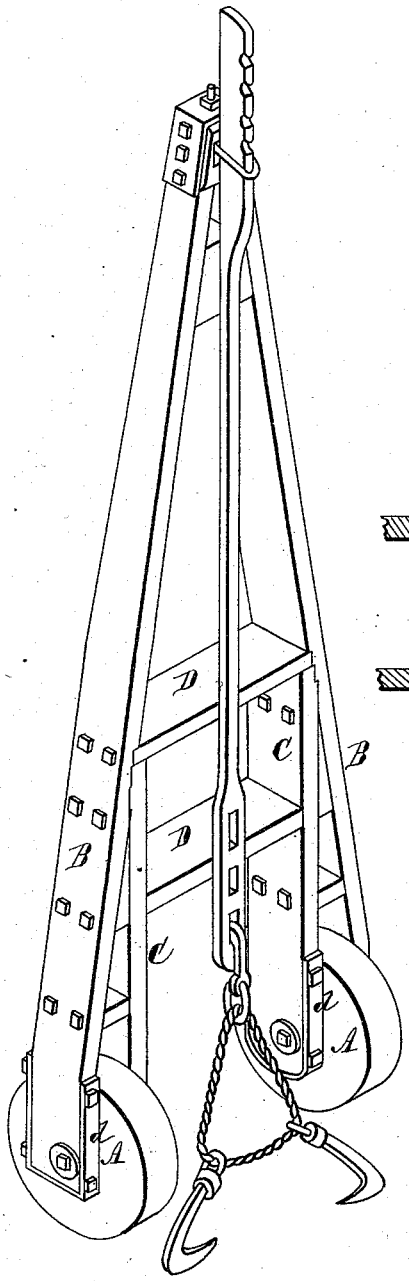
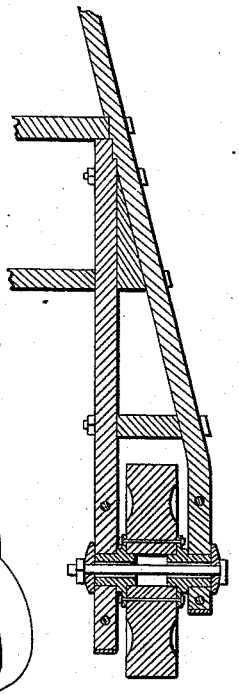


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALMERON McKENNEY, OF BERLIN, WISCONSIN.

IMPROVEMENT IN STUMP-EXTRACTORS.

Specification forming part of Letters Patent No. **162,937**, dated May 4, 1875; application filed April 1, 1875.

CASE B.

To all whom it may concern:

Be it known that I, ALMERON McKENNEY, of Berlin, in the county of Green Lake and in the State of Wisconsin, have invented certain new and useful Improvements in Stump-Extractor; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon making a part of this specification.

My invention relates to a stump-puller arranged for operating on large and high stumps mainly and rock of larger size than is practicable by a like machine represented in another application recently made by me, the distinction being in what may be called a double-crotched lever having independent wheels and axles, and the special object being to straddle the stump, the wheels passing by the same, near the back side thereof. By this means the bearings of the bottom of the wheels may be placed as near the point of hitching to the stump as desirable, thereby bringing the fulcrum and the weight to be raised near together, and thus giving the greatest amount of power on the start to break the strongest hold, the operation then being tipping the stump over, instead of attempting to lift the same bodily from the middle. In the construction and arrangement of my machine the wheels are made and provided with cog-wheels in the same manner, and locked by brace-hooks, the same as described in my former application. The frame of the double crotch-lever is formed, first, of two outside pieces of plank, say, two inches by eight, and, say, ten feet long, and being tapered from the middle to the top to four inches. These extend from a point a little below the journal of the axle, on the outside of the wheels, to the top, being inclined inward, each on the same angle, and being joined together and grooved at the top, the same as shown in another application referred to, and having cross-pieces with joint-bolts the same. These two outside pieces are bent near the lower ends to receive the journals of the axles, so that so much of the lower parts stand plumb and at right angles to the axles, and to such extent being parallel to the face of the wheels.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, of which—

Figure 1 is a perspective view of my invention; Fig. 2, a section of one wheel and its frame.

A A represent the wheels, B B represent the outside pieces, C C represent the inside pieces, and D D the cross-pieces, the whole forming a long lever. *d d* represent the bands around the ends of the pieces B B, the inside pieces of the lever-frame commencing near the bottom of the wheels and extending upward, parallel to the inside face of the wheels, to the point of connection with the outside pieces, the two parts being chamfered to form shoulders, and the ends of the inside pieces having also a bearing against cross-pieces which have joint-bolts for their support, and these inside pieces having also a cross-piece below this connection, the outside and inside pieces having intermediate supports below this connection also, all of which are strongly supported by joint-bolts. The two inside parts of this frame have two movable bent bars, with shoulders on the under side, extending across near the lower ends for the support of the stump when being moved, and also a platform-frame for raising and moving the rock, all as before referred to in the application recently filed.

These bars and platforms are to be removed and replaced as required. The outside and inside pieces all have band-irons extending along their edges and around the ends, and strongly bolted for support of the journal-bearings.

The tubes of the wheels before described in this case form the axle of each single wheel, and extend outward beyond the flanges, through the side pieces of the lever-frame, to form the journals upon which the wheels turn, and the rod extends through the hollow of the tube, having nuts at the ends which serve to hold large washers in their place against the side pieces.

In the use of the machine the bent bars are not absolutely necessary in pulling the stump, the power being just as available without them to break it loose and to tip it over. In this case the wheels are made to straddle the stump to get power to break the strong hold, and then these bars are placed in position to complete the work and hold it in place while moving.

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

The double-crotch lever, in combination with the independent wheels and axles, as and for the purposes herein shown.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of March, 1875.

A. McKENNEY.

Witnesses:
C. L. EVERT,
W. A. SKINKLE.