(No Model.)

L. PIKE.

MACHINE FOR DIGGING BEETS.

No. 601,904. Patented Apr. 5, 1898.

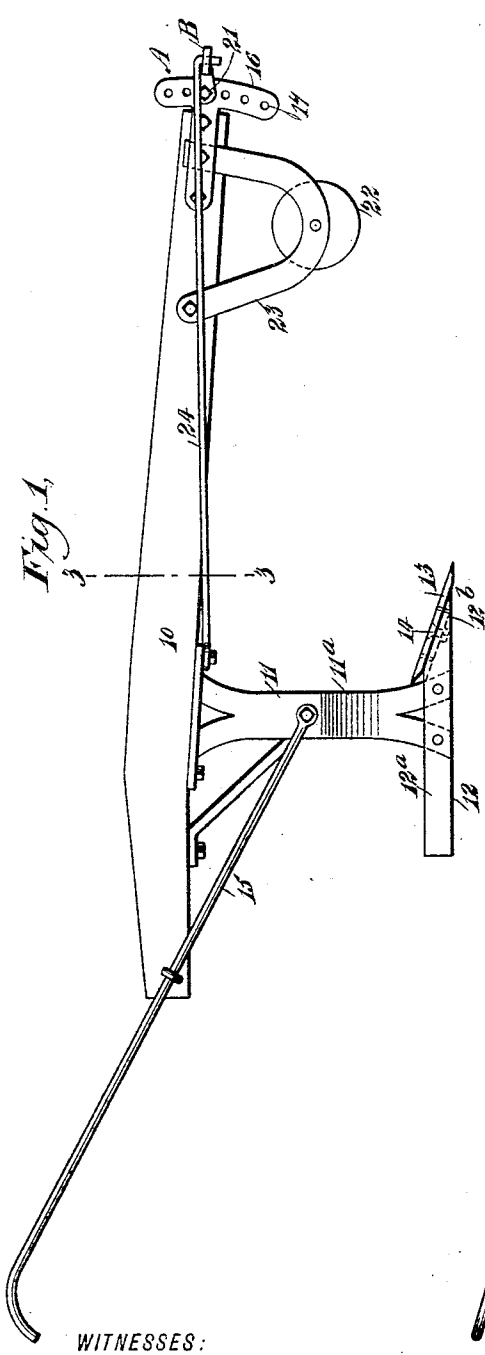


Fig. 1.

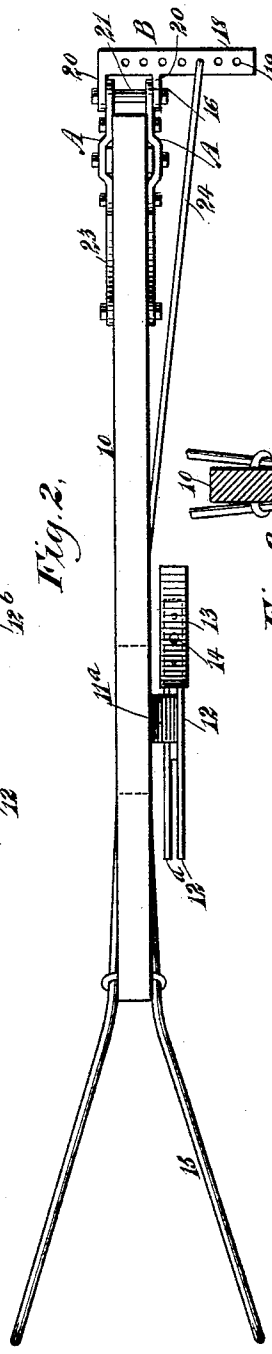


Fig. 2.

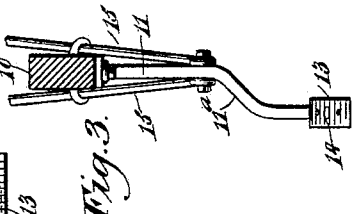


Fig. 3.

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UNITED STATES PATENT OFFICE.

LYMAN PIKE, OF ANAHEIM, CALIFORNIA.

MACHINE FOR DIGGING BEETS.

SPECIFICATION forming part of Letters Patent No. 601,904, dated April 5, 1898.

Application filed November 1, 1895. Serial No. 567,576. (No model.)

To all whom it may concern:

Be it known that I, LYMAN PIKE, of Anaheim, in the county of Orange and State of California, have invented a new and Improved Machine for Digging Beets, of which the following is a full, clear, and exact description.

My invention relates to a machine especially adapted for digging beets; and the object of the invention is to provide a machine which will not injure the roots of the beets when digging the same and which will not throw the beets to the surface, thereby exposing them to the influence of the sun, the said machine serving to loosen the beets in the ground in such manner that they may be readily drawn from the ground by grasping them at the tops or in any other desired manner.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improved machine. Fig. 2 is a plan view thereof, and Fig. 3 is a transverse section taken substantially on the line 3 3 of Fig. 1.

In carrying out the invention the machine consists, practically, of a beam 10, a standard 11, attached to the beam, a foot-piece 12, secured to the standard, and a point 13, attached to the foot-piece. The standard 11 is preferably secured to the bottom portion of the beam 10 and extends downward vertically from the said beam for a suitable distance, and is then carried in the direction of one side, providing thereby an angular section 11^a, as shown in Fig. 3, and is finally carried downward in a vertical direction, thereby producing two straight sections, an upper and a lower one, connected by an inclined or diagonal section 11^a, as above stated.

The standard 11 is secured to the foot-piece 12, and this foot-piece is preferably constructed with two horizontally-located and parallel plates 12^a, which extend rearwardly beyond the lower end of the standard for a suitable distance and likewise beyond the front of the said standard, and these plates at their forward ends are beveled in a downwardly and forwardly direction, and at their beveled front ends are connected by a bar or front plate 12^b. The point 13 is beveled at both ends, so that the said point is reversible, and the point is preferably attached to the foot-piece by means of a single bolt 14, as shown in dotted lines in Fig. 1, which bolt passes into and through the front block of the connecting-plate 12^b, and the point 13 is provided with any desired number of apertures in order that the aforesaid point may be shifted as found necessary on the foot-piece.

It is evident that by sharpening both ends of the point the point is readily reversible, and should one end become dulled the other end may be readily brought into action, it simply being necessary to loosen the bolt 14 connecting the point to the foot-piece, the said bolt serving when loosened as a pivot for the point.

Handles 15 are attached to the standard 11 and are carried upward and rearward in direction of the rear portion of the beam 10. A clevis A is employed for the forward end of the beam 10, and the said clevis preferably consists of two parallel T-plates 16, the shank members whereof are pivoted to the sides of the beam, and the head members are provided with a series of apertures 17. The draft-bar B is connected with the clevis and comprises a front horizontal member 18, having a series of apertures 19 made therein, and rearwardly-extending members 20, the said members being connected with the head or apertured portions of the T-plates of the clevis by means of a bolt 21 or the equivalent of the same. A guide-wheel 22 is located at the front of the said beam below its bottom face, and this wheel is preferably journaled in suitable U-shaped hangers 23, which hangers are pivotally connected at the upper end of their rear members to the beam 10 of the machine and are adjustably secured at their forward members to the forward portion of the beam, these latter members being usually passed upward between the side surfaces of the beam and the shank portions of the members of the clevis.

An equalizing-rod 24 is made to enter one of the apertures 19 in the draft-bar B and is carried rearward to an attachment to the un-

der face of the beam of the machine in front of the standard 11, as is shown in Figs. 1 and 2.

From the foregoing construction it will be observed that the foot-piece and the point of the machine are at one side of and out of the plane of the side surface of the beam, enabling the beam to travel in the space between two rows of beets and also enabling the point and foot-piece to enter the ground at one of the rows, loosening the beets. The foot-piece and point are so constructed that they do not throw the beets to the surface. Therefore the beets are not exposed to the rays of the sun or to the action of the atmosphere, and yet they are dislodged from their position in the ground to such an extent that they may be readily withdrawn by a person passing along the rows to top the said beets.

It will be understood that the guide-wheel 22 will travel upon the surface of the ground while the point and foot-piece have entered the same and that the distance at which the point and foot-piece shall enter the ground will be regulated by the adjustment of the said wheel with reference to the beam of the machine.

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

A beet digger or cultivator, comprising a beam, a standard bent intermediate its upper and lower ends so as to provide a lower vertical portion located at one side of the vertical plane of the beam and traveling beneath the soil, parallel horizontal plates secured to the opposite sides of the bottom of the standard and extending longitudinally in front and rear thereof, said plates being connected at their forward ends by an inclined and integral connecting-plate, and an inclined point of substantially rectangular shape having plane upper and lower surfaces and straight from its front to its rear edge, said point being bolted to the connecting portion of the parallel plates, substantially as described.

LYMAN PIKE.

Witnesses:
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