A. C. LODWIG.

BEET PLOW.

APPLICATION FILED OCT. 3, 1917.

1,279,733. Patented Sept. 24, 1918.

Fig. 1.

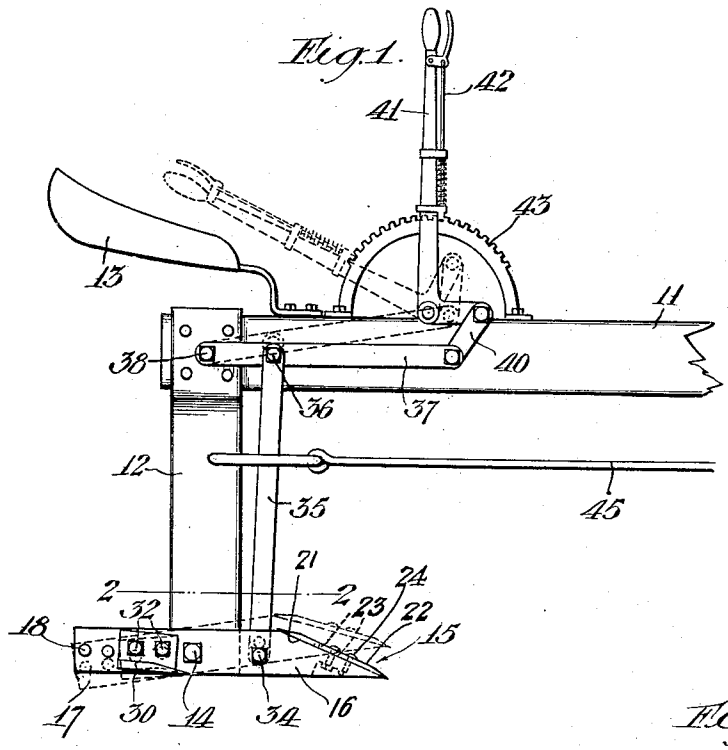


Fig. 5.

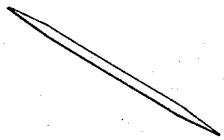


Fig. 2.

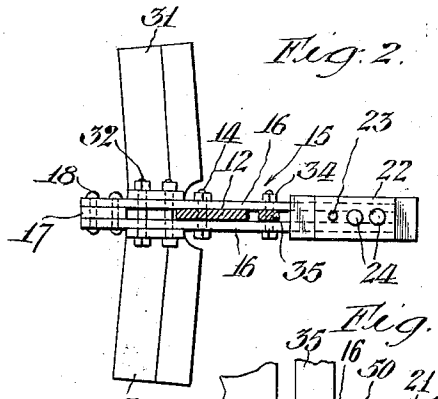


Fig. 4.

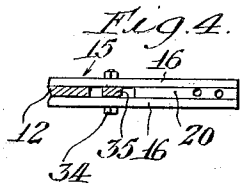
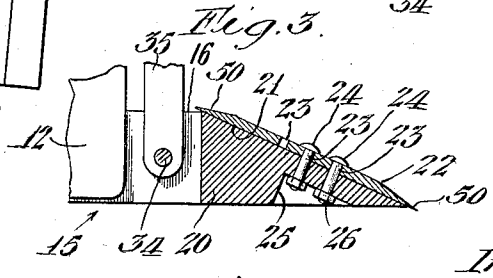


Fig. 3.



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UNITED STATES PATENT OFFICE.

AUGUSTUS CARL LODWIG, OF OXNARD, CALIFORNIA.

BEET-PLOW.

1,279,733. Specification of Letters Patent. Patented Sept. 24, 1918.

Application filed October 3, 1917. Serial No. 194,817.

To all whom it may concern:

Be it known that I, AUGUSTUS CARL LODWIG, a citizen of the United States, residing at Oxnard, in the county of Ventura and State of California, have invented a new and useful Beet-Plow, of which the following is a specification.

My invention relates to plows, being more particularly a plow designed for the purpose of breaking up the ground and removing beets, potatoes and similar vegetables therefrom.

The principal object of my invention is to make a plow of the class described of simple form and construction in which the plow proper may be easily adjusted during the working operation for the purpose of regulating the depth of the plow as may be required by the nature of the work being done, and also elevating the plow in turning corners and moving the plow when in inoperative position.

Other objects and advantages will appear hereinafter from the following description.

Referring to the drawings which are for illustrative purposes only,

Figure 1 is a side elevation of a plow embodying a form of my invention.

Fig. 2 is a sectional plan view on line 2—2, Fig. 1.

Fig. 3 is an enlarged vertical sectional view of the front end of the landside.

Fig. 4 is a plan view of the forward end of the landside.

Fig. 5 is a modified form of the directing plate.

11 designates a plow beam to the rear end of which is securely fastened the plow iron or standard 12, which together constitute the plow frame, a suitable seat 13 being secured to the plow beam as is ordinarily done. Pivotally connected to the lower end of the standard 12 by means of a suitable bolt 14 is a landside 15 consisting of two flat plates 16 which engage the standard 12 therebetween. 17 designates a block secured between the plates 16 at the rear end thereof by means of suitable rivets 18, the rear ends of the plate 16 and the block 17 therebetween constituting a heel upon which the plow rides when not in operative position as more fully hereinafter described.

The forward ends of the plates 16 are connected by means of a bridge 20 formed of steel or other suitable material welded to the plates 16, the plates and bridge 20 being beveled as indicated at 21 to receive the directing plate 22. The directing plate 22 is provided with three holes 23, two of which are engaged by means of suitable bolts 24 for attaching the plate to the landside, it being the purpose of the three holes to permit the plate to be reversed in the event of wear on the cutting end of the plate. The landside is recessed as indicated at 25 so that the nuts 26 on the bolts 24 are protected from engagement with the ground.

30 and 31 designate shares, there being one on each side of the landside and extending outwardly therefrom, the shares being connected to the landside by means of suitable bolts 32. Pivotally connected by means of a bolt 34 to the landside 15 is a link 35, the upper end of which is pivotally connected by a bolt 36 to an arm 37 which arm is pivotally mounted by means of a bolt 38 on the standard 12. The forward end of the arm 37 is pivotally connected by means of a link 40 with an operating lever 41, such operating lever being provided with suitable detent mechanism indicated at 42 which engages with a toothed rack 43 mounted on the plow beam 11. 45 indicates a draw bar by means of which the plow is drawn by horses or a suitable engine.

The plow is operated in the following manner:

In the full line position shown in Fig. 1, the directing plate 22 enters the ground and the shares 30, 31 follow the directing plate in the ground at such a depth that the beets are engaged by the shares under the body of the beet, thereby cutting the roots and bringing the beets to the surface of the ground. The regulation of the depth of the directing plate and the shares in the ground depends upon the angle of the directing plate and the pull on the plow, the angle of the plate being entirely controlled by the operating lever 41 by means of which the landside is swung about the bolt 14 on the standard, it being noted that this operation is done without any adjusment to the standard, such standard being fixed to the plow beam and the adjustment being accomplished simply by the changing of the angle of the landside.

When it is desired to run the plow over the ground as in the case of turning corners or moving the plow about in inoperative position, the operating lever is operated to bring the landside into the dotted line posi-

tion shown in Fig. 1 in which case the weight of the plow is taken on the heel and in which position the directing plate and the cutting edge of the plow shares are in elevated position.

When the directing plate has been worn, it is understood that the same may be reversed end for end and the unused cutting edge indicated at 50 used, or when a plate is used as shown in Fig. 5 the plate may be turned over and the opposite side of the same used.

It is understood that various forms of shares may be attached to the landside according to the work to be done and while I have shown and described a plow particularly suitable for plowing sugar beets, the plow may be used for other work such as breaking up the ground, for street work and the like.

What I claim is:

1. A plow comprising a beam, a standard secured to the beam in fixed relation thereto, a landside pivotally mounted on the standard, plow shares secured to said landside behind the pivotal connection to the standard and extending outwardly from each side thereof, a directing plate on the forward end of said landside and means attached to the standard in front of the pivotal connection of the landside and standard for varying the angular position of the landside on the standard.

2. A plow comprising a beam, a standard fixed to the beam, a landside pivotally mounted on the lower end of the standard, said landside consisting of two plates one on each side of said standard, plow shares mounted on the landside, a directing plate mounted on the landside, a heel formed on said landside extending behind said shares, and means for varying the angular position of the landside on the standard.

3. A plow comprising a beam, a standard fixed to the beam, a landside pivotally mounted on the lower end of the standard, a plow share mounted on the landside behind the pivotal connection of the landside to the standard, an arm pivotally mounted on the plow, a link connecting the landside to said arm in front of the pivotal connection of the landside and standard, and means on the beam for operating said arm to vary the angular position of the landside.

4. A plow comprising a beam, a standard secured to the beam and extending downwardly therefrom, a landside pivotally connected to said standard, means on said beam connected to the landside for varying the angular position of the landside on the standard, plow shares fixed to the landside, and a directing blade mounted on the forward end of the landside, said landside consisting of two plates one on each side of the standard and joined at their forward end, and a block between the rear ends of said plates forming a heel for the landside.

In testimony whereof, I have hereunto set my hand at Oxnard, California, this 24th day of September, 1917.

AUGUSTUS CARL LODWIG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."