

M. H. WADHAMS.
BEET HARVESTER.
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975,586.

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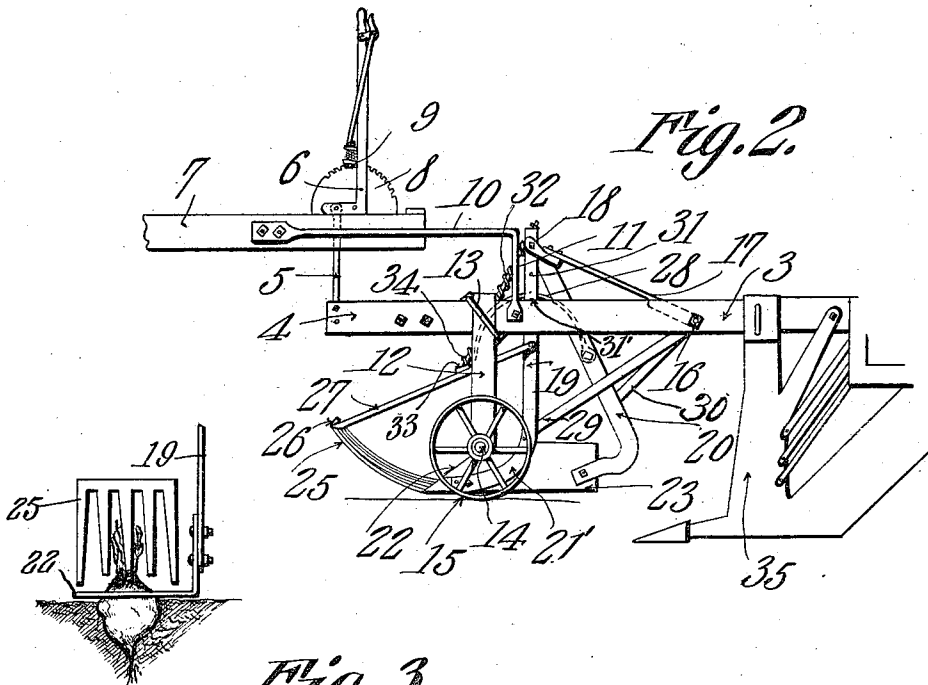
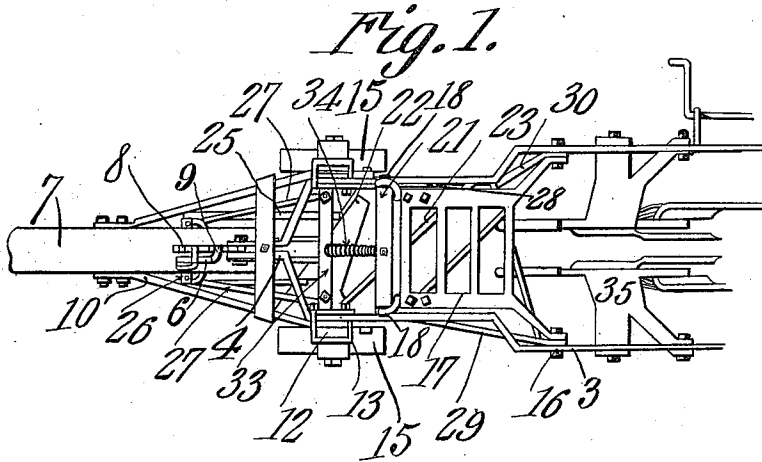


Fig. 3.

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UNITED STATES PATENT OFFICE.

MALKOM H. WADHAMS, OF LAS ANIMAS, COLORADO.

BEET-HARVESTER.

975,586.

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To all whom it may concern:

Be it known that I, MALKOM H. WADHAMS, a citizen of the United States, residing at Las Animas, in the county of Bent and State of Colorado, have invented a new and useful Beet-Harvester, of which the following is a specification.

This invention relates to machines for topping beets.

10 The object of the invention is to provide improved topping mechanism movable independently of the balance of the machine and which can be readily adjusted, said mechanism being designed to automatically
15 ride over all irregularities on the surface of the ground over which it passes.

With this object in view the invention consists in certain novel details of construction and combinations of parts hereinafter
20 more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

25 In said drawings, Figure 1 is a plan view of the topping mechanism. Fig. 2 is a side elevation thereof. Fig. 3 is a front elevation of a portion of the guide runners and of the topping blade.

Referring to the drawings by characters
30 of reference 3 designates the topper frame which is preferably formed of heavy strips of metal the front ends of which converge as indicated at 4 and are attached to a supporting
35 link 5 connected to the short arm of a bell crank lever 6. Said lever is fulcrumed upon the tongue 7 of the machine and the long arm thereof constitutes a handle whereby the lever can be conveniently manipulated, there being means, such as a toothed segment 8 and a spring controlled pawl 9, for
40 locking the lever 6 in any position to which it may be adjusted.

Diverging arms 10 extend rearwardly from the tongue 7 and are secured to opposite sides of said tongue, each of these arms
45 being provided at its rear end with a depending portion 11 which is bolted or otherwise secured to the top of the frame 3.

Standards 12 are adjustably connected to
50 opposite sides of the frame 3, preferably by means of U-bolts 13 and the lower ends of these hangers or standards are formed with studs 14 on which wheels 15 are journaled.

55 Studs 16 extend transversely within the topper frame or body 3 and pivotally mounted thereon is an upwardly and forwardly

inclined foot board 17 connected at its forward end to a rod 18 mounted at its ends within hangers 19 and 20 which are connected by a cross strip 21 integral therewith. The hanger 19 extends straight down
60 between the sides of the frame 3 and its lower end is curved forwardly as indicated at 21' and is secured to one side of the topping blade 22 which, as indicated particularly in Fig. 1 extends obliquely across the machine. Arranged back of the blade 22 is an obliquely extending deflecting blade 23
65 secured at its forward end to the blade 22 while its rear end is fastened to the forwardly curved lower portion 24 of the hanger 20. This blade 23 constitutes means for scraping the severed tops laterally off of the rows of beets.

Curved guide fingers or runners 25 are
75 secured at their front ends to a cross bar 26 and their rear or lower ends are designed to contact with the ground directly in front of the topping blade 22, there being upwardly and rearwardly diverging arms 27
80 which are rigidly secured to the cross strip 26 and are pivotally mounted upon the hangers 19 and 20, the arm which is attached to the hanger 20 being preferably bowed for a portion of its length as indicated at 28. As shown in Fig. 3 the intermediate guide fingers or runners 25 are preferably arranged with their lowermost portions above the plane occupied by the side
85 runners 25. It thus becomes possible for the topping mechanism to travel over a high beet top, as indicated in said Fig. 3. Braces 29 and 30 extend from the studs 16 and are attached to the hangers 19 and 20 respectively. The hanger 19 has a series of apertures 31 any one of which is designed to
90 receive a stop bolt 31' which limits the downward movement of the hanger by coming into contact with the sides of the frame 3. A rod 32 is connected to a cross strip 33
95 attached to the arms 27 and is slidably mounted within the cross strip 21, there being a coiled spring 34 upon said rod and bearing at its ends against the two strips 33 and 21 so as to hold the guide runners 25
100 normally pressed downwardly into contact with the ground. The digging mechanism 35 is arranged below the rear portion of the topper frame 3 as shown in the drawings.

When it is desired to use the machine
110 herein described the front end thereof is adjusted vertically with relation to the

tongue 7 by shifting the lever 6 so as to draw the front end 4 of the frame toward the tongue or to shift it away from said tongue. The parts can be locked by means of pawl 9 and segment 8. After this adjustment has been effected the standards 12 can be raised or lowered with relation to the topper frame 3 and a stop bolt can be placed in any one of the apertures 31 so as to limit the downward movement of the standard 19.

When the machine is moved forward the guide runners 25 travel along the ground and are held firmly pressed thereagainst by the spring 34. The advancing or cutting edge of the topping blade 22 will sever the beet tops and these severed tops will be deflected laterally away from the rows by the following blade 23. The digging mechanism 35 will then remove the topped beets from the ground. The feet of the driver rest upon the foot board 17 and the topper can thus be pressed downward at all times so as to hold the stop bolt in contact with the frame 3 and prevent the topping mechanism from riding over the beets without properly acting upon them.

It is of course to be understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:—

1. The combination with a frame, of a topping blade mounted to swing with relation thereto, forwardly and upwardly extended runners movably mounted in front of the blade, the intermediate runners being shorter than the side runners, and means for yieldingly pressing the runners upon the ground.

2. The combination with a supporting frame, of a topping blade, said blade being movable with relation to the frame, and a foot board movable with the blade.

3. The combination with a supporting structure, of a topping blade, a deflecting

blade in rear thereof and movable therewith, said blade being arranged to swing with relation to the structure, and a foot board connected to and movable with the blade.

4. The combination with a supporting structure, of hangers mounted to swing with relation thereto, a topping blade connected to one of the hangers, a deflecting blade connected to the other hanger in rear of and movable with the topping blade, means for limiting the downward movement of the hangers, and a foot board movable with said hangers.

5. The combination with a supporting structure, of a foot board mounted to swing thereon, hangers pivotally connected to and depending from the foot board, a topping blade secured to one of the hangers, a deflecting blade secured to the other hanger and movable with the topping blade, braces connecting the hangers with the pivotal portion of the foot board, and means adjustably engaging one of the hangers and cooperating with the supporting structure to limit the downward movement of the blade.

6. The combination with a supporting structure, of a foot board pivotally mounted thereon, hangers pivotally connected to the foot board, a topping blade secured to one of the hangers, a deflecting blade secured to the other hanger and movable with the topping blade, braces connecting said hangers with the pivotal portion of the foot board, pivoted arms carried by the hangers, runners supported by said arms and bearing at their lower ends upon the ground in front of the topping blade, and yielding means for holding the runners in contact with the ground.

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

MALKOM H. WADHAMS.

Witnesses:

WM. J. A. SCOTT,
GEORGE PURVIS.