Oct. 21, 1947. C. C. RODERY 2,429,488

MACHINE FOR CUTTING THE TOPS FROM VEGETABLES

Filed Nov. 15, 1944 3 Sheets-Sheet 1

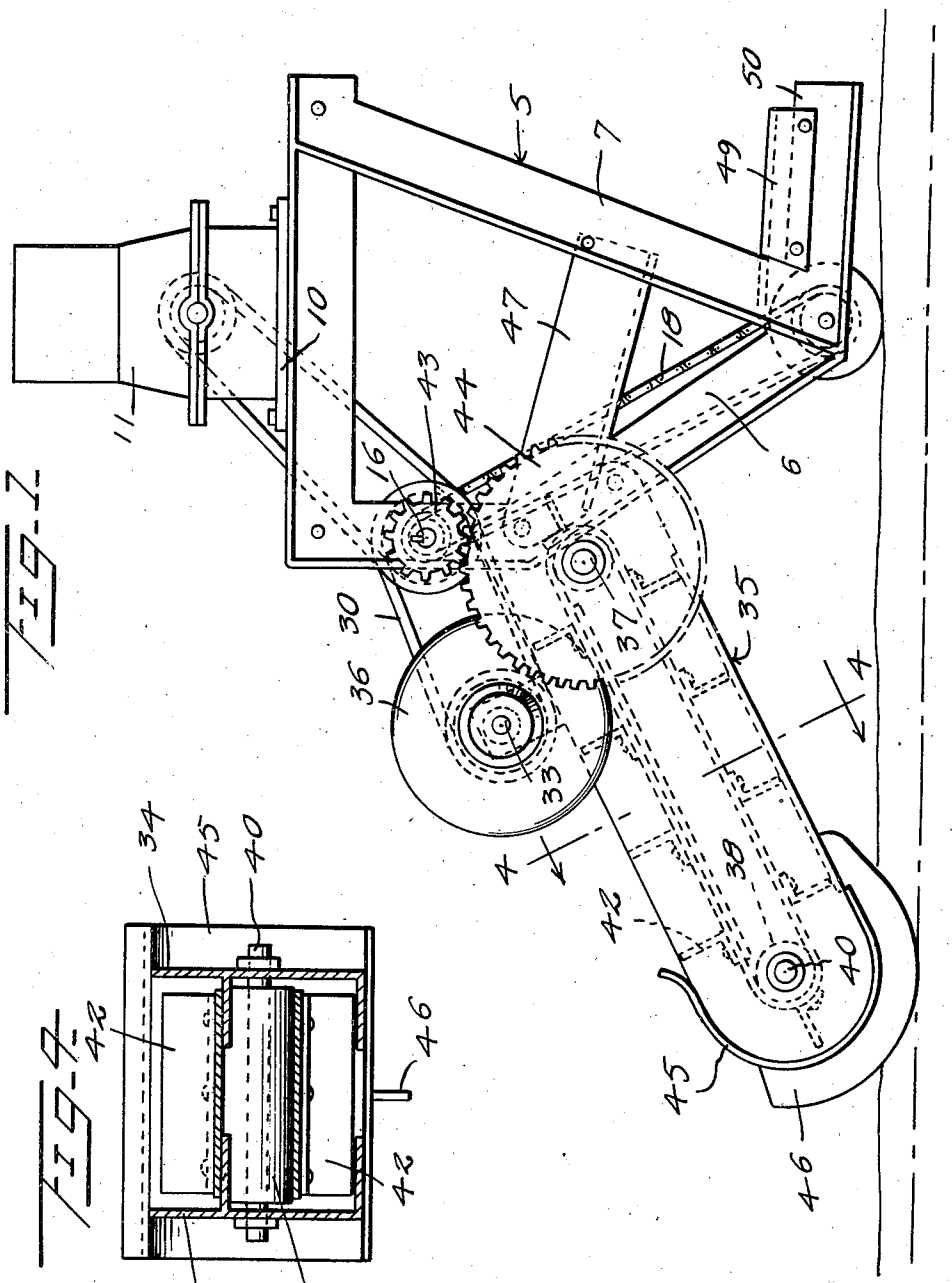


FIG. 1.

FIG. 4.

Inventor

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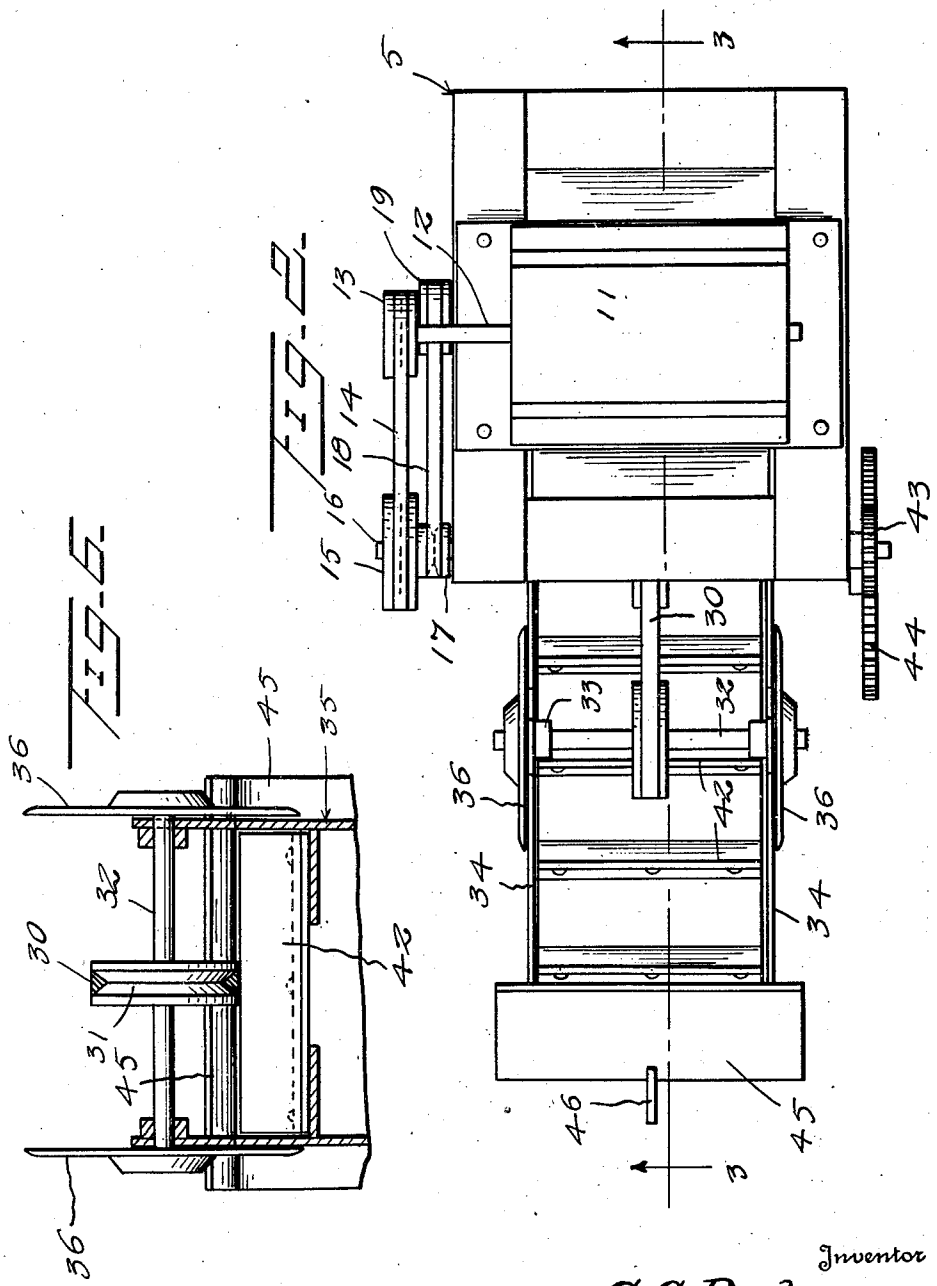
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MACHINE FOR CUTTING THE TOPS FROM VEGETABLES

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MACHINE FOR CUTTING THE TOPS FROM VEGETABLES

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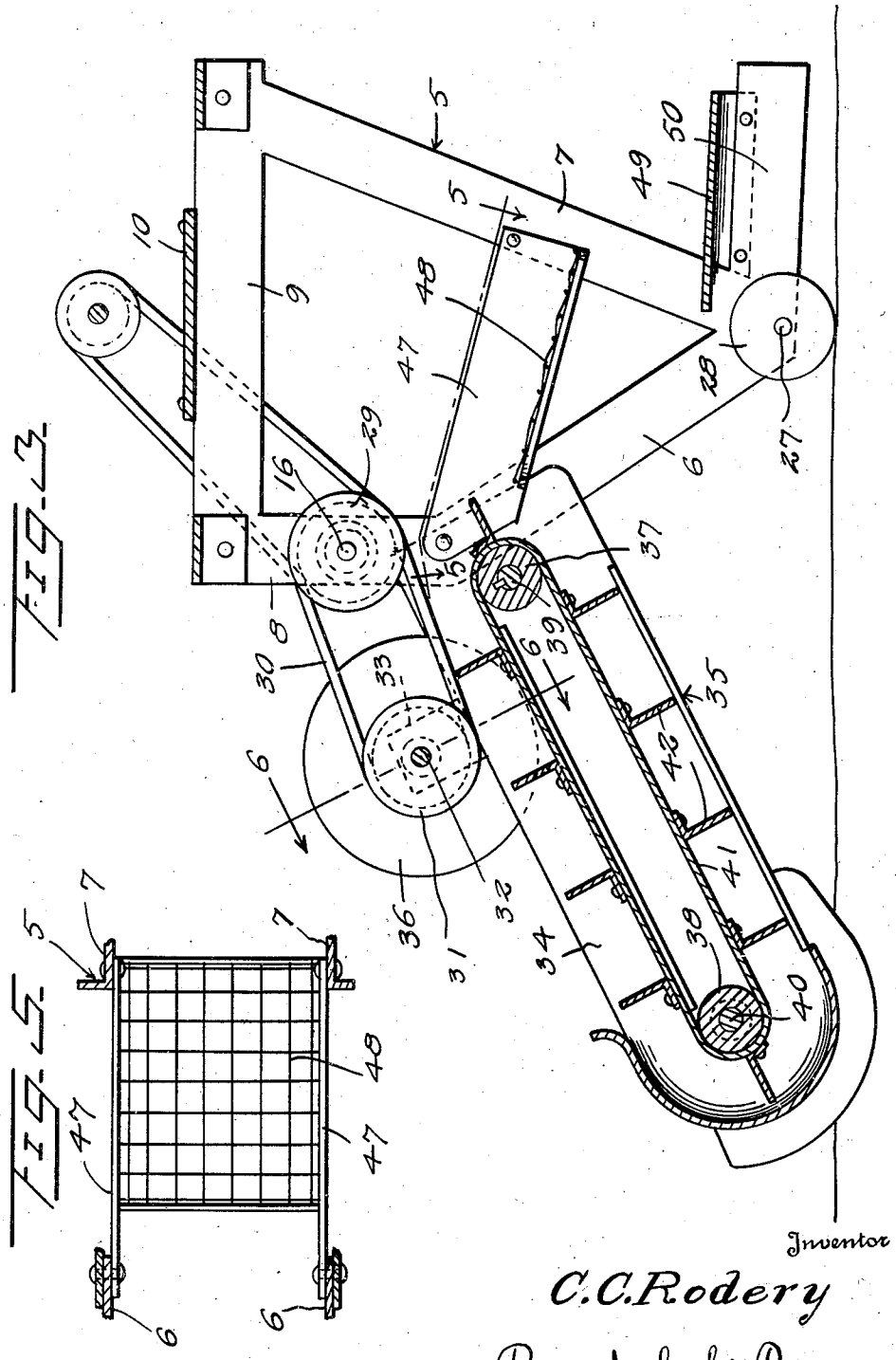


FIG. 3.

FIG. 5.

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MACHINE FOR CUTTING THE TOPS FROM VEGETABLES

Conoe C. Rodery, Leachville, Ark.

Application November 15, 1944, Serial No. 563,515

1 Claim. (Cl. 146—85)

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This invention appertains to new and useful improvements in topping machines such as may be employed for the topping of onions, beets, carrots, etc.

The principal object of the present invention is to provide a machine on to which beets may be placed, topped and boxed in a quick and satisfactory manner.

Another important object of the invention is to provide a simplified topper which can be moved along the row of dug beets without diverting toward one side or the other due to the provision of a ground cutting guide fin.

Other important objects and advantages of the invention will become apparent to the reader of the following description.

In the drawings:

Figure 1 is a side elevational view of the machine.

Figure 2 is a top plan view of the machine.

Figure 3 is a longitudinal sectional view taken on line 3—3 of Figure 2.

Figure 4 is a transverse sectional view taken substantially on line 4—4 of Figure 1.

Figure 5 is a horizontal sectional view looking down on the screen.

Figure 6 is a section taken on line 6—6 of Figure 3.

Numeral 5 generally refers to a frame structure made up of a pair of open side frames, each of which has a V-formation made up of upwardly diverging leg members 6, 7, leg 7 being longer than the leg 6. The upper end of the short leg member 6 has a vertical extension 8 and between the upper end of the extension 8 and the upper end of the leg member 7 a bridge member 9 is provided.

The bridge members 9 serve to support a platform 10 upon which a power plant 11 is secured.

The power plant 11 has a drive shaft 12 (see Figure 2) and this shaft is equipped with a pulley 13 having a belt 14 trained thereover.

The belt 14 is further trained over a pulley 15 located on a lower shaft 16 (see Figure 3) and in this manner the shaft 16 is driven.

The shaft 16 also has a smaller pulley 17 thereon from which a belt 18 extends to a pulley 19 on an axle 20 located between the lower portions of the side frames of the main frame 5. On this axle 27 are wheels 28 secured to rotate with the axle.

On the intermediate portion of the shaft 16 is a pulley 29 (see Figure 3). Over the pulley 29 is trained a belt 30 which extends to a pulley 31

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secured to a shaft 32, the shaft 32 being journalled through bearings 33 mounted on the sidewalls 34 of an elevator 35.

Cutting discs 36, 36 are provided on the end portions of the shaft 32 and employ the sidewalls as shear plates. These cutting discs 36, 36 are intended to top the beets as they are elevated by the elevator 35.

Between the upper and lower portions of the sidewalls 34 of the elevator 35 are rolls 37, 38 respectively secured to shafts 39, 40 respectively. Trained over the rolls 37, 38 is an elevator belt 41 outwardly from which cleats 42 project for the purpose of carrying the beets, onions or carrots up to the toppings 36.

As shown in Figure 1 a gear 43 is provided on the remaining end of the shaft 16 and this meshes with a large gear 44 located on the shaft 37 of the elevator 35. Thus the elevator is driven from the shaft 16 by way of the gears 43, 44.

The lower end of the elevator 35 is provided with a curved front wall 45 and depending from this wall and being disposed longitudinally of the machine is a ground cutting machine guiding fin 46 which in cutting the ground serves to guide the machine in a straight line.

Bridging the upper portion of each frame leg 6 with the intermediate portion of the corresponding frame leg 7 is a sidewall 47. Interposed between the sidewalls 47 is a screen 48 through which earth from the topped vegetables can fall onto the ground while the topped vegetables move down the screen 48 (which is inclined) to a box or other receptacle supported by rearwardly a projecting platform 49. The platform 49 is preferably mounted on arms 50 projecting rearwardly from the frame 5.

In the operation of the machine, it can be seen that the machine is set properly on a row so that it will progress straight along the row due to the guiding effect of the ground cutting fin 46. With the power plant 11 in operation, the shaft 16 in being driven will serve to drive topping discs 36 and cut off the tops of beets, carrots or onions that have been thrown into the pockets in the elevator 35 defined by the sidewalls 34 and the spaced cleats 42. As this operation takes place, the shaft 16 is driving the elevator by way of the gears 43, 44 and at the same time the shaft 16 by way of a sprocketing 18 is driving the axle 27 on the wheels 28 thereon.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without depart-

ing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention what is claimed as new is:

A topping machine comprising a wheeled frame, a power plant mounted on the frame, an elevator disposed forwardly from the frame, topping means mounted on the elevator, said power plant being adapted to drive the topping means and also the wheels carrying the frame, said topping means consisting of a pair of cutting discs, a shaft carrying these cutting discs, said elevator being provided with sidewalls serving as shear plates against which the cutting discs operate.

CONOE C. RODERY.

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