Feb. 15, 1927. 1,617,645

H. MADSON

POWER POTATO GRADER

Filed April 1, 1925

Fig. 1

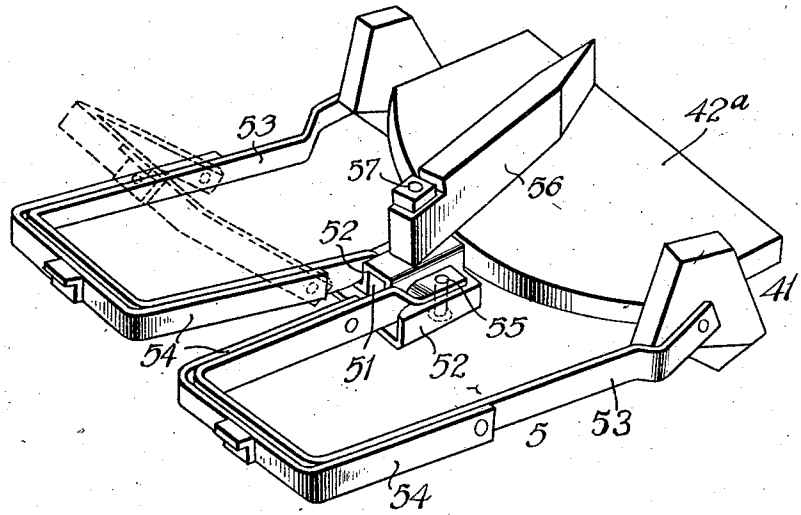


Fig. 2

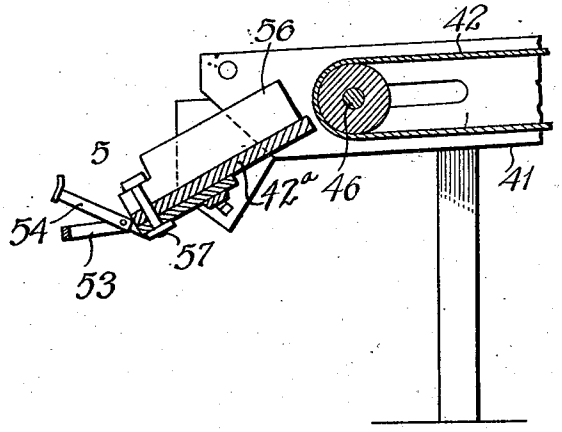
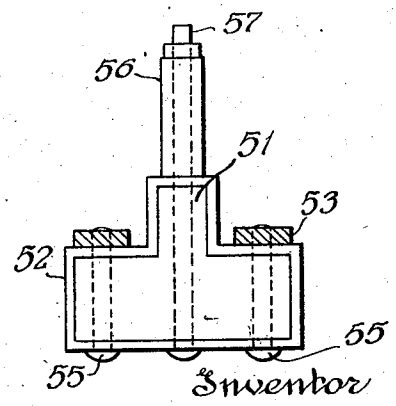


Fig. 3



Inventor

Henry Madson,

By E. E. Crooman & Co.,

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UNITED STATES PATENT OFFICE.

HENRY MADSON, OF PELICAN RAPIDS, MINNESOTA.

POWER POTATO GRADER.

Application filed April 1, 1925. Serial No. 19,906.

This invention relates to a power potato grader and more particularly to a bag holding device therefor.

The object of the invention is the construction of a power potato grader provided at its discharge end with an efficient and simple bag holder.

With the foregoing and other objects in view, my invention comprises certain novel combinations, constructions and arrangements of parts as will be hereinafter described, illustrated in the accompanying drawings and more particularly pointed out in the accompanying claims.

In the drawings:

Figure 1 is a perspective view of a bag holder device constructed in accordance with the present invention.

Figure 2 is a longitudinal sectional view of my bag holding device and a part of the discharge end of a power potato grader.

Figure 3 is a transverse sectional view of the bag holder taken in front of the inverted T-shaped block and the dividing tongue.

Referring to the drawings by numerals, the sack holder device 5 includes an inverted T-shaped block 51 fastened to the discharge end of a discharging conveyor frame 41 (Fig. 2). A metal band 52, conforming to the shape of block 51 is placed upon said block for reinforcing the same. The sack-holding frames comprise an inner fixed frame 53 and an outer pivoted frame 54.

It is to be noted that I have provided sets of the frames 53 and 54, but it will only be necessary to describe one set. The inner end of fixed frame 53 is fastened by bolts 55, upon the base of the T-shaped block 51, whereas the outer end of the frame is fastened to the outer face of the side of the conveyor frame 41. The pivotally mounted outer frame 54 is swung upwardly and then a sack is placed on the fixed frame 53, whereupon the pivoted, outer frame 54 is moved downwardly to clamp the sack in position upon the holder ready to receive the discharging articles from the conveyor belt 42.

A dividing tongue 56 is pivotally mounted on bolt 57, and by moving the upper, outer end of the tongue 56, the articles discharged from belt 42 on to platform 42[a] can be placed in the sack of either one of the holding frames. The belt 42, at the discharge end of frame 41, passes around roller 46, Fig. 2.

The swinging tongue 56 is a very efficient element of my sack holding device 5, because it enables the operator to permit the filling of one sack while another sack is being removed.

It is to be noted that the bag holders are at opposite sides of the block 51, and have portions resting flat upon the flat side portions of said inverted T-shaped block; the dividing tongue 56 is in direct engagement with the metal band 52, above the highest point of the T-shaped block.

While I have described the preferred embodiment of my invention, and have illustrated the same in the accompanying drawings, certain minor changes or alterations may appear to one skilled in the art to which this invention relates during the extensive manufacture of the same, and I, therefore, reserve the right to make such alterations or changes as shall fairly fall within the scope of the appended claims.

What I claim is:

1. In an apparatus of the class described, the combination of a conveyor frame, of an inverted T-shaped block provided with horizontal side extensions extending from said conveyor frame, sack-holders provided with flat, horizontal inner ends, said horizontal inner ends fastened to the top of said side extensions of said block, and a dividing tongue pivotally mounted upon the highest portion of said T-shaped block, and extending over and resting flat upon a portion of said conveyor frame.

2. In an apparatus of the class described, the combination with a conveyor frame, of an inverted T-shaped block attached to said frame, a reinforcing metal band extending around said block, sack-holders including a fixed frame and a pivotally mounted frame supported partly upon the sides of said block, a bolt extending through said block, and a dividing tongue pivotally mounted on said bolt above the side portions of the block.

3. In an apparatus of the class described, the combination with a conveyor frame, of a pair of sack holders extending across the discharge end of said conveyor frame, said sack holders having inner fixed frames fas-

tened at their outer ends to the sides of said conveyor frame, a block between said sack holders, the inner ends of said fixed frames being secured to said block, outer pivoted frames conforming to the shape of and mounted on said fixed frames, and a dividing tongue pivotally mounted on said block and extending into said conveyor frame.

4. In an apparatus of the class described, the combination with a conveyor frame, of a pair of sack holders extending across the discharge end of said conveyor frame, a block interposed between said sack holders, and a dividing tongue pivotally mounted on said block above said sack holders and extending into said conveyor frame for directing articles from the conveyor frame into a sack when carried by one of said sack holders.

5. In an apparatus of the class described, the combination with a conveyor frame, of a block extending beyond one end of said frame and provided with bag holder supporting side portions, bag holders at opposite sides of said block and having portions resting flat upon said bag holder supporting portions, and a dividing tongue pivotally mounted at its outer end upon said block and extending inwardly of the conveyor frame.

6. In an apparatus of the class described, the combination with a conveyor frame, of a block at the middle of the conveyor frame and extending beyond its discharge end, a pair of bag holders having their outer ends supported upon the conveyor frame and their inner ends supported upon said block, and a swinging dividing tongue pivotally mounted upon the top of the block between said inner ends of the bag holders.

7. In an apparatus of the class described, the combination with a conveyor frame, of an inverted T-shaped block secured to the center of said conveyor frame and extending beyond its discharge end, a plurality of bag holders fastened at their outer sides to said conveyor frame, their inner sides bent flat upon the sides of the inverted T-shaped block, means securing these flat ends to said block, and a dividing tongue pivotally mounted at its outer end upon the block between the inner ends of the bag holders and extending into said conveyor frame.

In testimony whereof I hereunto affix my signature.

HENRY MADSON.