E. TAYLOR.

POTATO SORTER AND GRADER.

APPLICATION FILED JULY 20, 1901.

Inventor,
Edwin Taylor

Witnesses,
K. W. Emmons,
W. L. Lange

By Higdon & Higdon, Attys.
No. 725,172.

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NO MODEL.

Fig. 3.

Fig. 4.

Fig. 5.

Witnesses,

K. W. Imboden,
M. L. Lauge

Inventor
Edwin Taylor.

By Higdon & Higdon,
Attys.
To all whom it may concern:

Be it known that I, EDWIN TAYLOR, a citizen of the United States, residing at Edwardsville, in the county of Wyandotte and State of Kansas, have invented new and useful improvements in Potato Sorters and Graders, of which the following is a specification.

My invention relates to a combined potato sorter, grader, and sacker.

The object of my invention is to screen potatoes and to sort two sizes of potatoes at the same time and to sack the potatoes directly after the grading without further handling.

I will fully describe my invention, with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of the device embodying my invention, showing the two receiving-sacks. Fig. 2 is a longitudinal vertical section of the same omitting the sacks. Fig. 3 is a plan view of a tilting hopper and screens. Fig. 4 is a transverse section of the tilting hopper and screens taken on line IV of Fig. 2. Fig. 5 is an enlarged plan view of the hoppers, their supports being broken away.

The carrying-frame comprises four corner-posts 2, four longitudinal bars 3 3 4 4, bolted to said posts, two oblique braces 5 5, nailed to the posts, two cross-pieces 6 6, connecting the posts, and two upright tilting hopper-supporting standards 7 7, bolted to bars 3 3 and 4 4. The bars 3 3 extend beyond the posts 2 at one end of the frame and support two down-spouts 8 and 9, which are fed from the screens, as described hereinafter. The upper ends of the vertical standards 7 7 are notched to receive a pivot-rod 12, which extends through holes in the sides of the hopper 13, whereby the hopper is supported pivotally, so that it may be oscillated by the hand. The sides 13 of the hopper are connected at one end by an end plate 14 and at the opposite end by a cross-plate 15, which terminates below the upper screen 16. Screen 16 is supported by cleats 17, secured to the sides 15, (see also Fig. 4,) and the lower screen 18 is supported by cleats 19, secured to the sides. The upper screen is of larger mesh than the lower screen, so that the smallest potatoes fall through the former upon the latter. The lower screen 18 is cut off shorter than the upper screen to give room for the small-potato down-spouts 9. The ends of the hopper sides 13 adjacent to the down-spouts are made to converge, as shown in Fig. 3, as the screens will probably be wider than the mouths of the down-spouts. When the hopper is in the position shown in Figs. 1 and 2, the potatoes from screen 18 are received by down-spout 8, while those from screen 18 are received by down-spout 9. Sacks 21 are attached to the respective down-spouts to receive the two grades of potatoes. To support the receiving end of the tilting hopper 69, while it is being filled, I prefer to employ two stops 22 22, which are nailed to the bars 3 and braces 5, and as said braces pass outside of said bars the upper ends of the stops 22 will be inclined inwardly or together, thereby terminating under the sides of the hopper 13.

In operation the hopper 13 is tipped back to the position shown by dotted lines in Fig. 1 and a suitable quantity of potatoes is dumped therein. The tilting hopper is then oscillated back and forth until the potatoes roll off the screens 16 and 18, through the down-spouts, into the sacks 21, dirt falling through both screens to the ground.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

A potato sorter, grader and sacker, the combination of a suitable carrying-frame, the upper longitudinal bars extended, down-spouts adapted to engage the mouth of sacks supported on the extended ends of said bars, vertical standards secured to the supporting-frame, a tilting separating-hopper mounted on the vertical standards, one end thereof adapted to engage the down-spouts, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

EDWIN TAYLOR.

Witnesses:
O. M. VAN DORSTON,
M. L. LANGE.