No. 667,746. Patented Feb. 12, 1901.

E. TAYLOR.

POTATO SORTER.

(Application filed June 18, 1900.)

(No Model.)

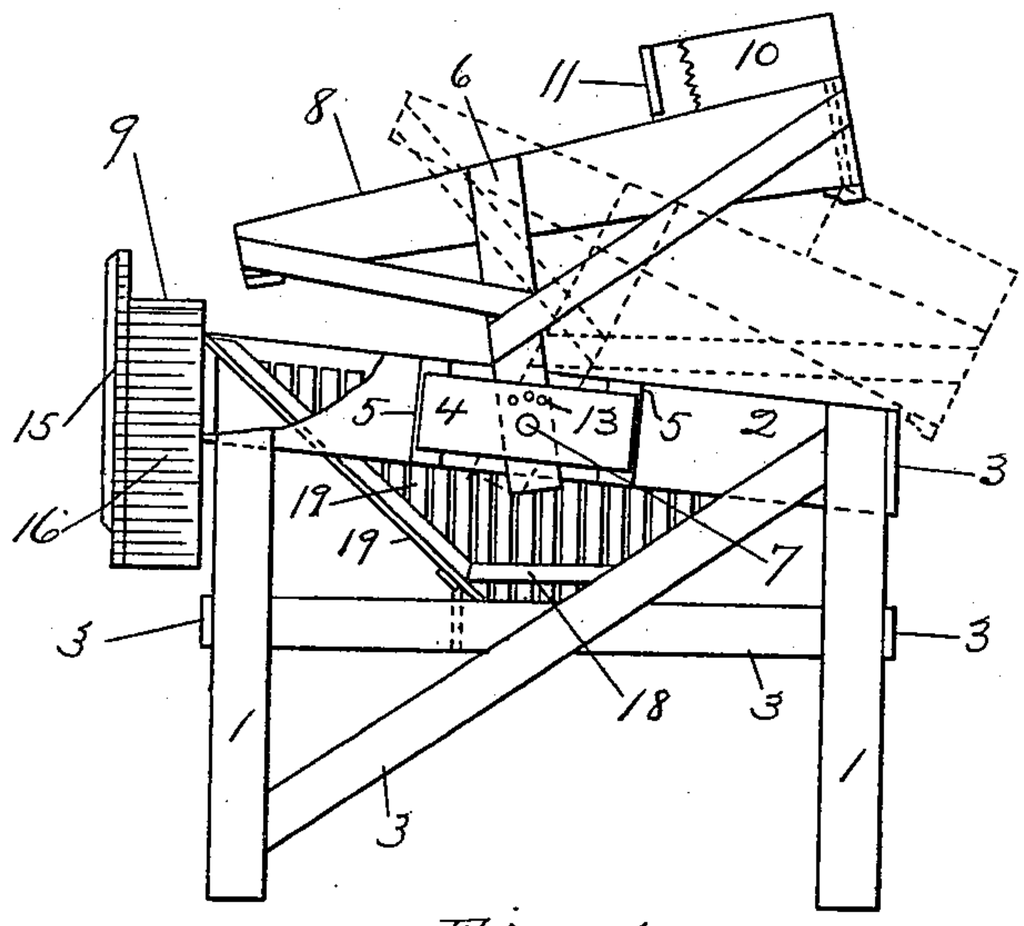

Fig. 1.

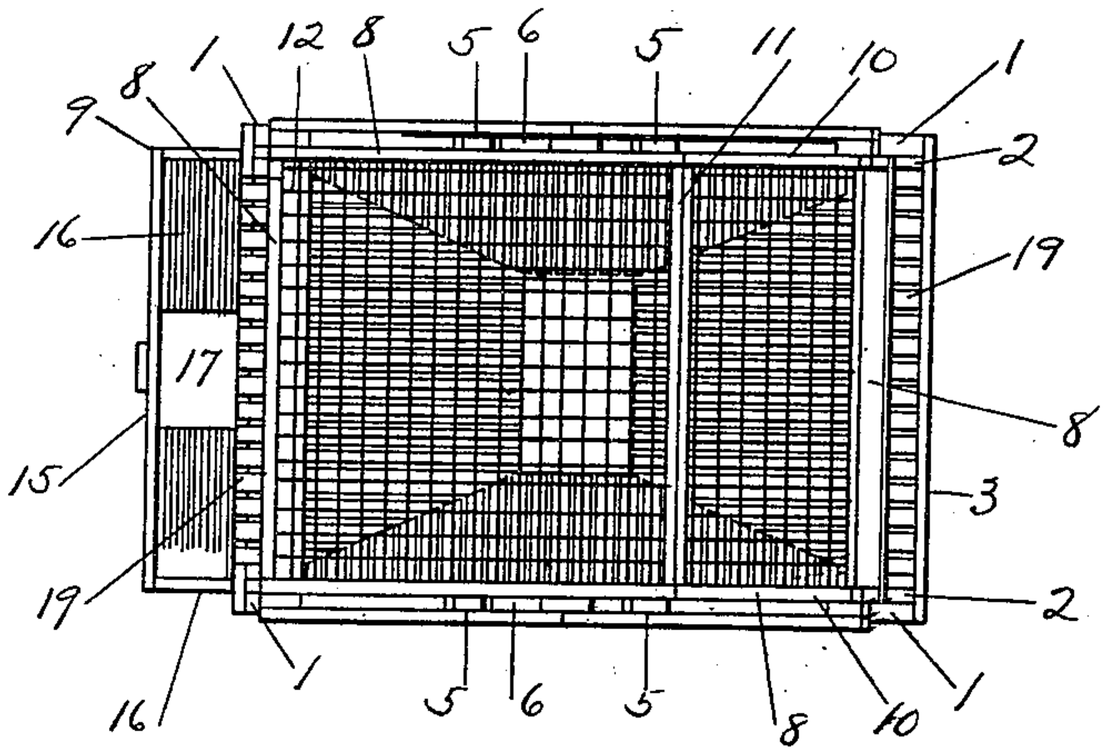

Fig. 2.

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EDWIN TAYLOR, OF EDWARDSVILLE, KANSAS.

POTATO-SORTER.

SPECIFICATION forming part of Letters Patent No. 667,746, dated February 12, 1901.

Application filed June 18, 1900. Serial No. 20,626. (No model.)

To all whom it may concern:

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

My invention relates to potato-sorters; and the object that I have in view is to produce a potato-sorter that shall be cheap of construction, easy of manipulation, and susceptible of durability and to provide a device of the kind that will separate small potatoes from the larger ones and at the same time separate the particles of earth which usually adhere to freshly-dug potatoes.

With this object in view my invention consists in the novel construction and arrangements of parts, which will be hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a side elevation of the sorter, showing the sorting-receptacle in discharge position in full lines and in receiving position in dotted lines. Fig. 2 is a plan view of the sorter with the sorting-receptacle in discharge position.

The frame of the apparatus comprises the legs 1, the side boards 2, and the braces 3. Secured to each of the side boards 2 is a wooden or metal plate 4, separated from the boards by blocks 5. The lower ends of a pair of supporting-arms 6 are mounted on pivots 7 between said side boards and plates 4. The upper ends of arms 6 are secured to the sides of the sorting-receptacle 8, which is a shallow rectangular box open at the end and adjacent to the hopper 9. The sides of said receptacle have upward extensions 10, shaped substantially as shown in Fig. 1. A transverse strip 11 has its ends secured to the inner sides of the extensions 10. Said strip 11 is set perpendicular to the bottom of the receptacle or at a small angle in either direction from the perpendicular. In Fig. 1 the rear extension 10 is partly broken away to show the end of strip 11.

The bottom of the receptacle 8 is a screen 12 of wire-netting, the wires of which are spaced at the desired distance apart. One or each of the plates 4 has a plurality of perforations 13 therethrough, arranged in the arc of a circle with the pivot 7 as a center. One or each of the arms 6 has a perforation which may be moved into alinement with any of the perforations 13. Thus the receptacle 8 may be held at several different angles by inserting a pin through the perforations 13 and through the perforation in the arm 6.

The hopper 9 is composed of a substantially vertically front portion 15 and two sides 16, which converge toward their lower ends, but do not meet, leaving an aperture 17 between them. The sides 16 are secured in any suitable manner to the end of the main frame. Supported within said frame in any suitable manner is a separable and removable cull-hopper 18, having four inclined side sections, two sections at the sides of said frame resting upon the other two sections at the ends of the frame, as shown in the drawings. Each of the sections of said hopper is formed of a plurality of slats 19, secured together by battens. Said slats are spaced a suitable distance apart to retain very small potatoes. The entire hopper may be removed from the frame by lifting the sections thereof up through the opening in the frame.

The operation of the sorter is as follows: The sorting-receptacle 8 is placed in the position shown by dotted lines in Fig. 1. The dirty and mixed potatoes are dumped into the lower end of said receptacle. The cross-piece 11 prevents the load from being thrown too far across the screen 12. At this time some of the smallest potatoes fall through said screen into the cull-hopper 18 and from it into a receptacle placed thereunder. The receptacle 8 is then tilted until it occupies about the position shown by Fig. 1. The large potatoes roll down the screen 12 and fall into the hopper 9, around which the mouth of a sack may be secured by hooks or otherwise, the sack being filled from the hopper. The potatoes that are small enough to pass through the openings in the screen 12 fall upon the slats 19, which knock part of the earth from the potatoes, the earth falling through the openings between the slats. The small potatoes also fall into a box or basket placed to receive them under the opening or mouth in the bottom of the cull-hopper. The receptacle 8 is then tilted to its receiving position, ready for the next batch, &c.

I do not restrict my invention to sorting po-

tatoes only, for it will apply as well for sorting fruits and other vegetables the same as potatoes.

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

In a potato-sorter, an elevated frame, a hopper secured to one end of the frame, a sectional cull-hopper, having substantially vertical slots in its sides, lying within and supported by the frame, a pair of upwardly-extending arms having their lower ends pivoted at the sides of the frame, perforations through said arms, registering perforations in said frame whereby said arms may be locked in different positions by plugging said perforations, a sorting-receptacle, supported by said arms, open at one end, and having its sides higher at the closed end than at the open end, and a stop-plate secured transversely of said receptacle, above the bottom thereof, for preventing the potatoes from covering the bottom of the receptacle until it is oscillated; substantially as shown and described.

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

EDWIN TAYLOR

Witnesses:
W. L. LAUGER,
K. M. IMBODEN.