

M. H. CHRIST.
POTATO ASSORTER.

No. 582,456.

Patented May 11, 1897.

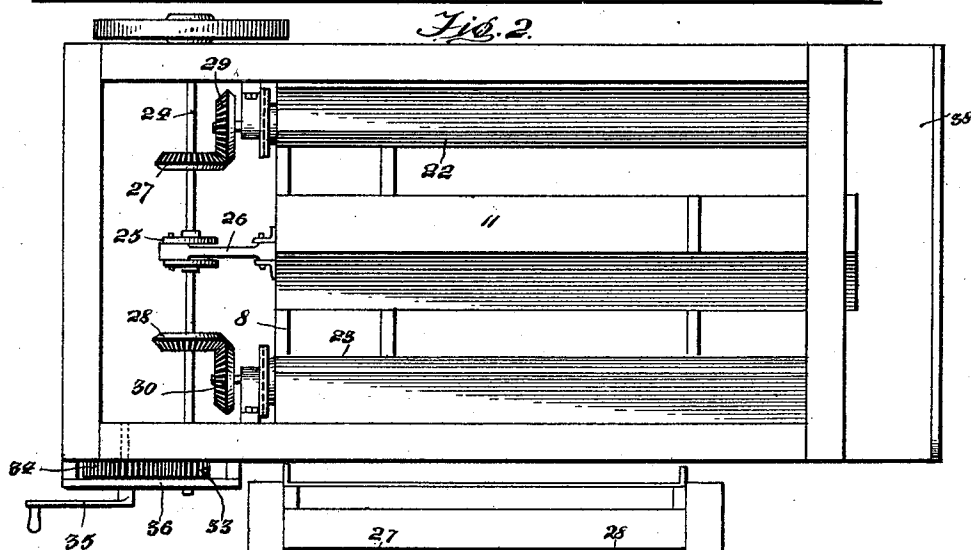
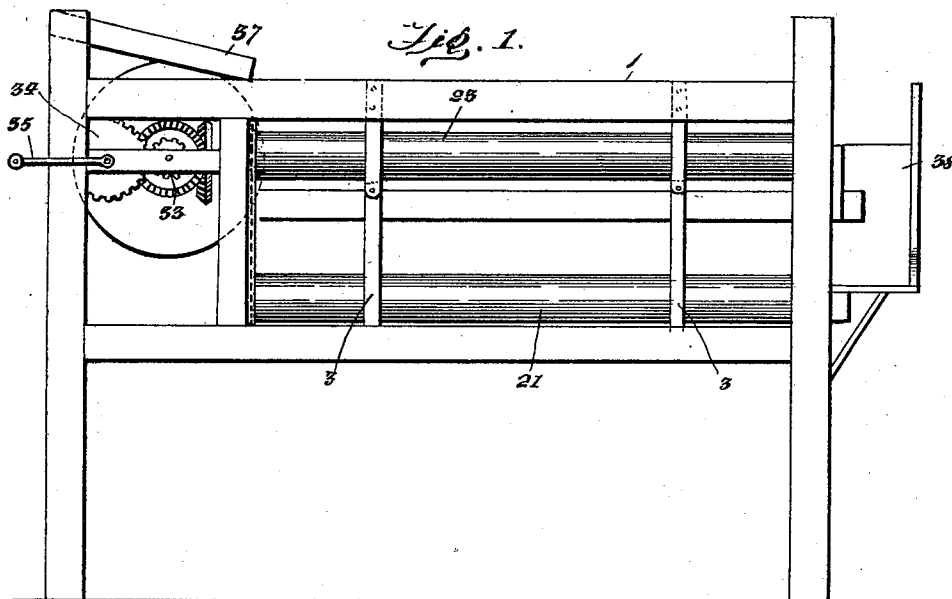
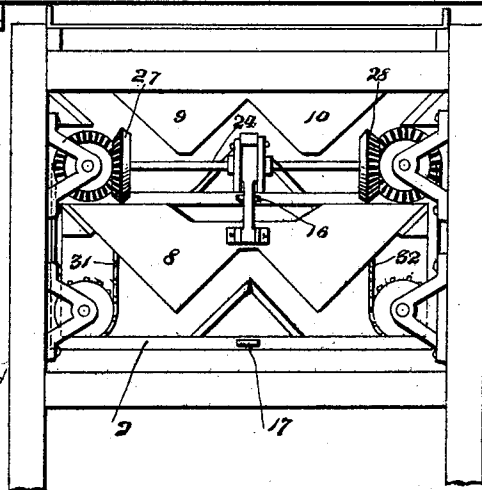


Fig. 3.

WITNESSES:

Colman L. Bradford
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INVENTOR,

Milton H. Christ.
BY *John Wedderburn*
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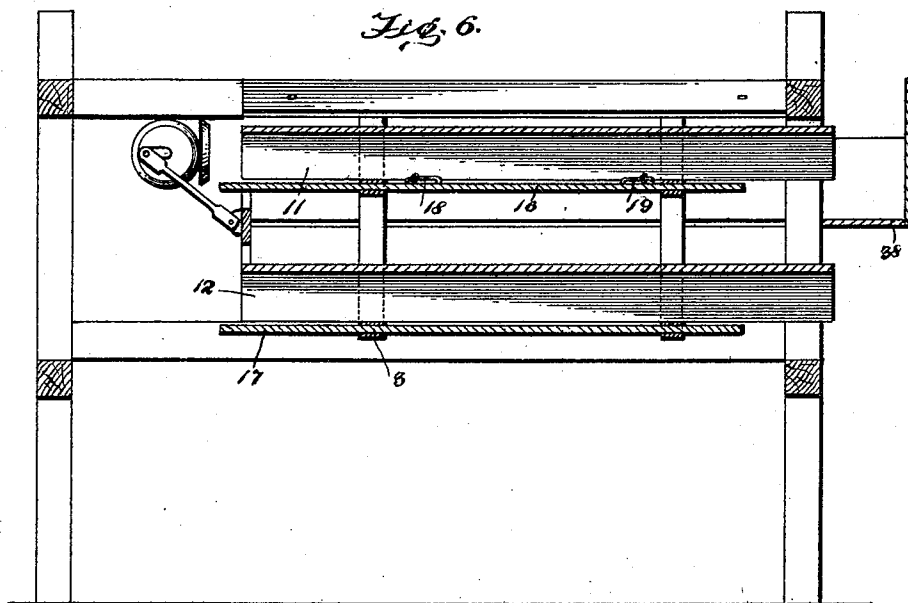
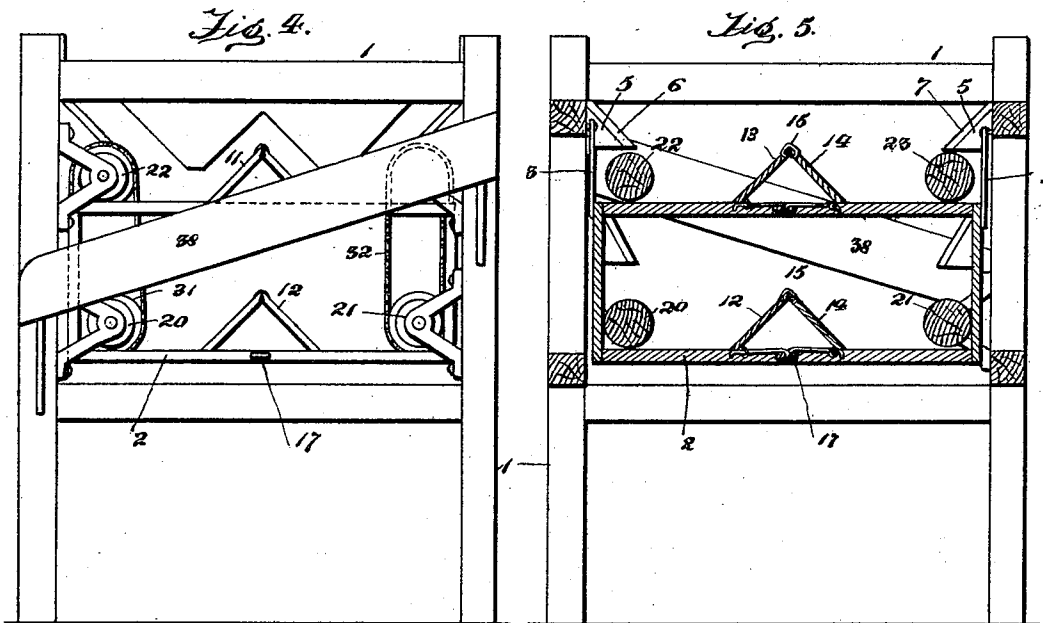
(No Model.)

2 Sheets—Sheet 2.

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WITNESSES.

Edwin L. Bradford
Alex. J. Wedderburn Jr.

INVENTOR,

Milton H. Christ,
BY John Wedderburn
ATTORNEY.

UNITED STATES PATENT OFFICE.

MILTON H. CHRIST, OF CENTREPORT, PENNSYLVANIA.

POTATO-ASSORTER.

SPECIFICATION forming part of Letters Patent No. 582,456, dated May 11, 1897.

Application filed November 23, 1896. Serial No. 613,164. (No model.)

To all whom it may concern:

Be it known that I, MILTON H. CHRIST, a citizen of the United States, residing at Centreport, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Potato-Assorters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to potato-assorting machines.

My object is to provide a machine of novel construction which will be adapted to assort potatoes rapidly and easily, so that all of a kind will be delivered together.

Having this object in view, the invention consists of a potato-assorter comprising the novel constructions, combinations, and arrangements of parts, all of which will be more particularly hereinafter pointed out and claimed, as well as shown in the drawings, in which—

Figure 1 is a side elevation. Fig. 2 is a plan view. Figs. 3 and 4 are end views. Fig. 5 is a cross-section, and Fig. 6 is a longitudinal section.

The main frame is designated by the numeral 1. There is a shaker-frame which is shown at 2, and links 3 hang this frame over the upper side bars of the main frame, the upper ends of the links being provided with hooks which engage with lugs 5, projecting inwardly. It will thus be observed that the shaker-frame can be removed at any time. Connected to this shaker-frame on opposite sides thereof are guards 6 and 7, which converge downwardly. The numeral 8 designates an end guard which is connected to the said side guards. There are similar side guards 9 and 10 connected to the uppermost side pieces of the machine-frame 1. There are upper and lower regulators 11 and 12, which are duplicates. Each consists of two boards 13 and 14, that are hinged together at 15, forming an upper apex from which the boards diverge toward the sides of the shaker-frame. There are two pull-bars 16 and 17, slidable longitudinally through the upper and lower cross-bars of the shaker-frame, respectively. Sets of links 18 and 19 pivotally connect each pull-bar with the boards of the regulator.

It will be observed that when the pull-bars are moved the hinged boards will have their lower ends either drawn together or spread.

The numerals 20 and 21 designate the lower rollers, and 22 and 23 the upper rollers, which are suitably journaled, as shown, to the machine-frame. The lower rollers are located on opposite sides and in line with the lower regulator, and the upper rollers are similarly disposed in relation to the upper regulator. The numeral 24 designates a power-shaft which carries a suitable fly-wheel and is provided with a crank-loop 25. The numeral 26 designates a pitman which connects this crank-loop with the central portion of the shaker-frame. There are bevel-gears 27 and 28 on the shaft, and these mesh with the bevel-gears 29 and 30 on the upper rollers 22 and 23.

The numerals 31 and 32 designate sprocket-chains which operatively connect the upper and lower rollers. On the shaft there is a gear 33.

34 designates a pinion. There is a crank-handle 35, which is connected with this pinion. The end of the power-shaft and the shaft which carries the pinion are journaled in a bracket 35, connected to the machine-frame. The feed-chute is designated by the numeral 37.

The numerals 38 and 39 designate the delivery-chutes, the former adapted to receive potatoes from the upper regulator and rollers and the latter from the lower regulator and rollers.

When the machine is in use, the operation is as follows: As the potatoes are fed down onto the upper regulator all the smaller ones drop through, while the larger potatoes are shaken down to the upper delivery-chute, from whence they pass off into a suitable receptacle. The next size are shaken down along the lower regulator onto the lower delivery-chute, while the small potatoes are dropped through onto the ground. The rollers assist in feeding the potatoes and prevent any clogging. By regulating the pull-bars the regulator can be adjusted so as to allow any size of potato to fall through.

There are many slight changes which might be resorted to in carrying out the present invention without departing from any of the advantages thereof, and hence I consider my-

self entitled to all such changes as properly come within the spirit and scope of the invention.

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

10 1. In a machine of the class described, the combination with a main frame, of a shaker-frame, means for shaking said frame, and a regulator having inclined converging portions hinged together and adjustably connected to the shaker-frame, substantially as described.

15 2. In a machine of the class described, the combination with a main frame, of a shaker-frame, means for shaking said frame, rollers and a regulator having sides converging upwardly, which regulator is carried by the shaker-frame, substantially as described.

20 3. In a machine of the class described, the combination with a main frame, of downwardly-inclined guards connected to said main frame, a shaker-frame, a centrally-disposed regulator comprising upwardly-con-

verging members, rollers located below the guards and adjacent to the shaker-frame, and means for shaking said frame. 25

4. In a machine of the class described, the combination with downwardly - extending outer guards, of a regulator located between said guards and comprising converging members hinged together, and means for adjusting the members of the regulator toward and away from each other and in relation to the said guards. 30

5. In a machine of the class described, a regulator comprising the combination of converging members hinged together, a pull-bar, and links connecting the free portions of the members to the pull-bar, whereby said members may be simultaneously adjusted. 35 40

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

MILTON H. CHRIST.

Witnesses:

JOHN A. ZERBY,

WARREN A. BAGENSTOSE.