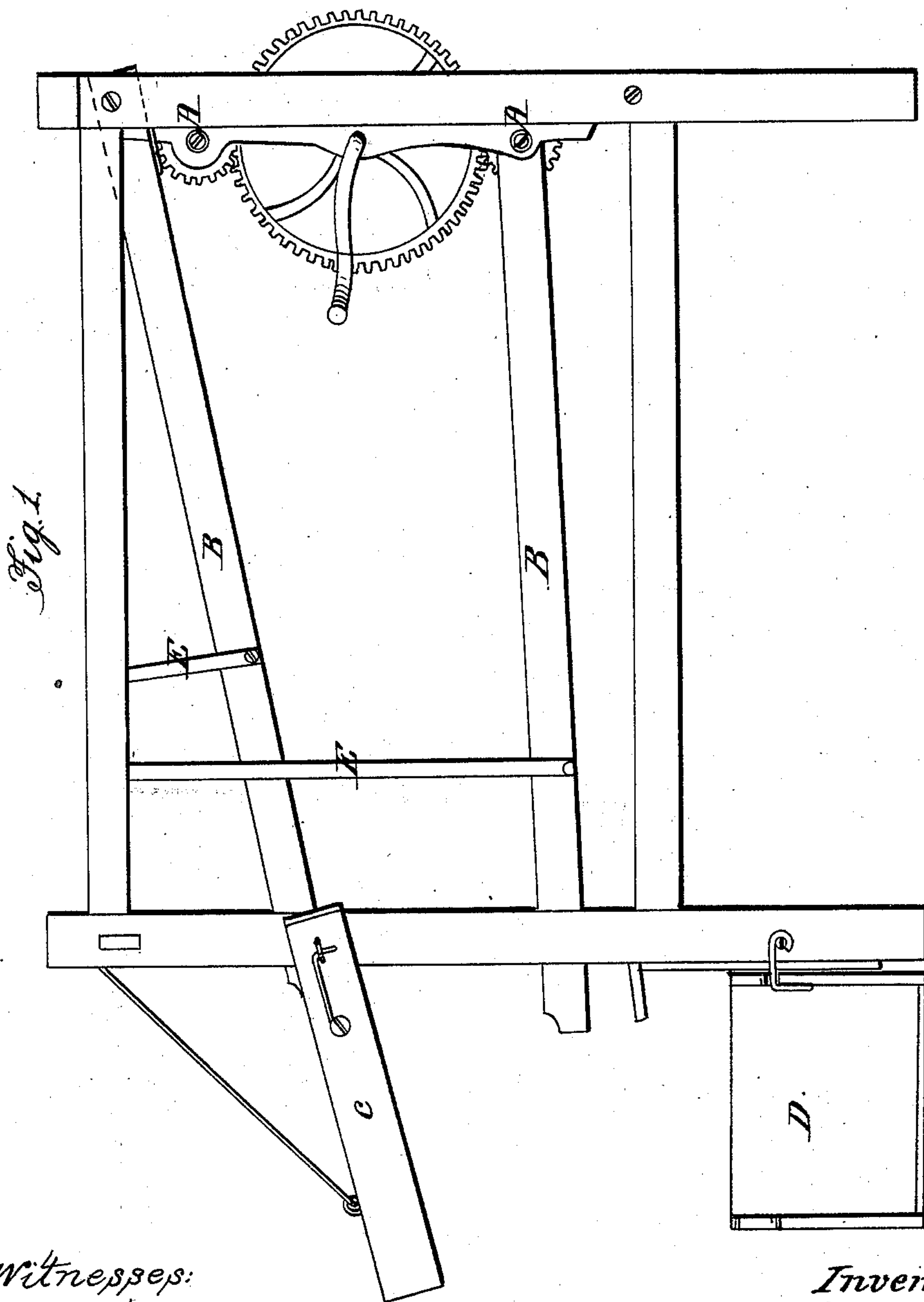


M. D. DICKINSON.

Machine for Assorting Potatoes and Coal.

No. 58,229.

Patented Sept. 25, 1866.



Witnesses:  
J. B. Smith  
J. H. Phelps

Inventor:  
M. D. Dickinson

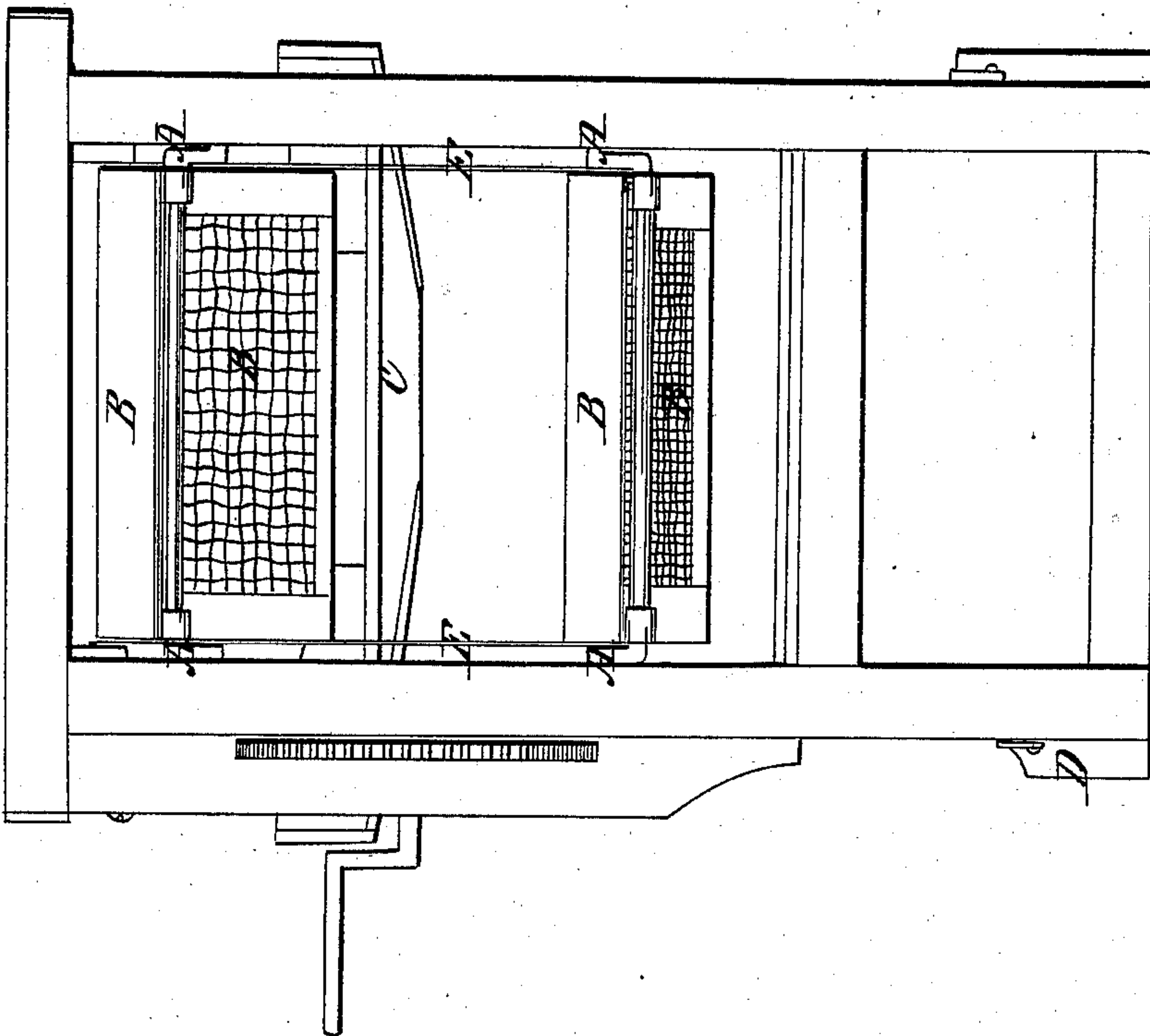
M. D. DICKINSON.

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Fig. 2.



Witnesses:

J. H. Phillips,  
C. H. Smith,

Inventor:

M. D. Dickinson

# UNITED STATES PATENT OFFICE.

MAHLON D. DICKINSON, OF PILESGROVE TOWNSHIP, SALEM COUNTY,  
NEW JERSEY.

IMPROVEMENT IN MACHINES FOR ASSORTING POTATOES, COAL, &c.

Specification forming part of Letters Patent No. **58,229**, dated September 25, 1866.

*To all whom it may concern:*

Be it known that I, MAHLON D. DICKINSON, of the township of Pilesgrove, in the county of Salem and State of New Jersey, have invented a new and useful Machine for Sorting Potatoes, and is equally useful in sorting coal or other articles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view; Fig. 2, an end view.

A, the shafts on which the riddles work, with square bends of one and a half inch; B B, the riddles; C, the chute or trough to convey the first-sized potatoes or other articles into a basket or box; D, the box into which the second size are conveyed from off the lower riddle; E, the straps of iron on which the lower ends of the riddles are hung.

The machine is constructed of two and a half by three inch scantling, and is four feet high, four feet six inches long, and two feet six inches wide. The frames for the riddles are one inch thick. The side pieces of the frames are three inches wide and four feet six inches long, the upper end pieces are three inches wide and one foot ten inches long, and the lower end pieces are six inches wide and one foot ten inches long. The waists or side pieces around the riddles are six inches wide and five-eighths of an inch thick. Inside of these side pieces are pieces beveled and screwed on the sides, and resting on the wire-work of the riddles, at the inner edge of the frame, so that no potatoes or other articles can pass down without going over the riddles.

The chute or trough is wide enough at the machine to span the frame, and is fastened

thereto by means of a hook and staple on one side and a strap and knob on the other, resting on blocks screwed on the front of both posts of the frame, and the outer end of the chute or trough is ten inches wide, being sloped on both sides, and so arranged by the strap and hook and staple that the narrow end slopes, so that the potatoes or other articles will pass out into a basket or box.

The box D, into which the second size are carried, is one foot ten inches wide, four feet six inches long, one foot high, with one end left open, so as to give an opportunity to shovel them up. The bottom of this box is of one-inch boards, and the sides three-quarters of an inch thick, and is fastened to the frame by one hook on each post hooking over the sides of the box.

On each of the shafts are cog-wheels, one of them meshing into the teeth of a larger cog-wheel on the driving-shaft above, and the other below the larger cog-wheel, having about five times as many teeth (more or less) as the smaller ones, which large wheel, being turned by a crank, gives equal motion to both riddles, one of which goes up as the other goes down, so that each tends to neutralize the jarring motion produced by the other, and thus doing away with the necessity of using a balance-wheel.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The crank-shafts A A, sieves B B, and suspension-rods E E, when combined and arranged as and for the purpose set forth.

MAHLON D. DICKINSON.

Witnesses:

JACOB F. CLARK,  
GIDEON S. LAYTON.