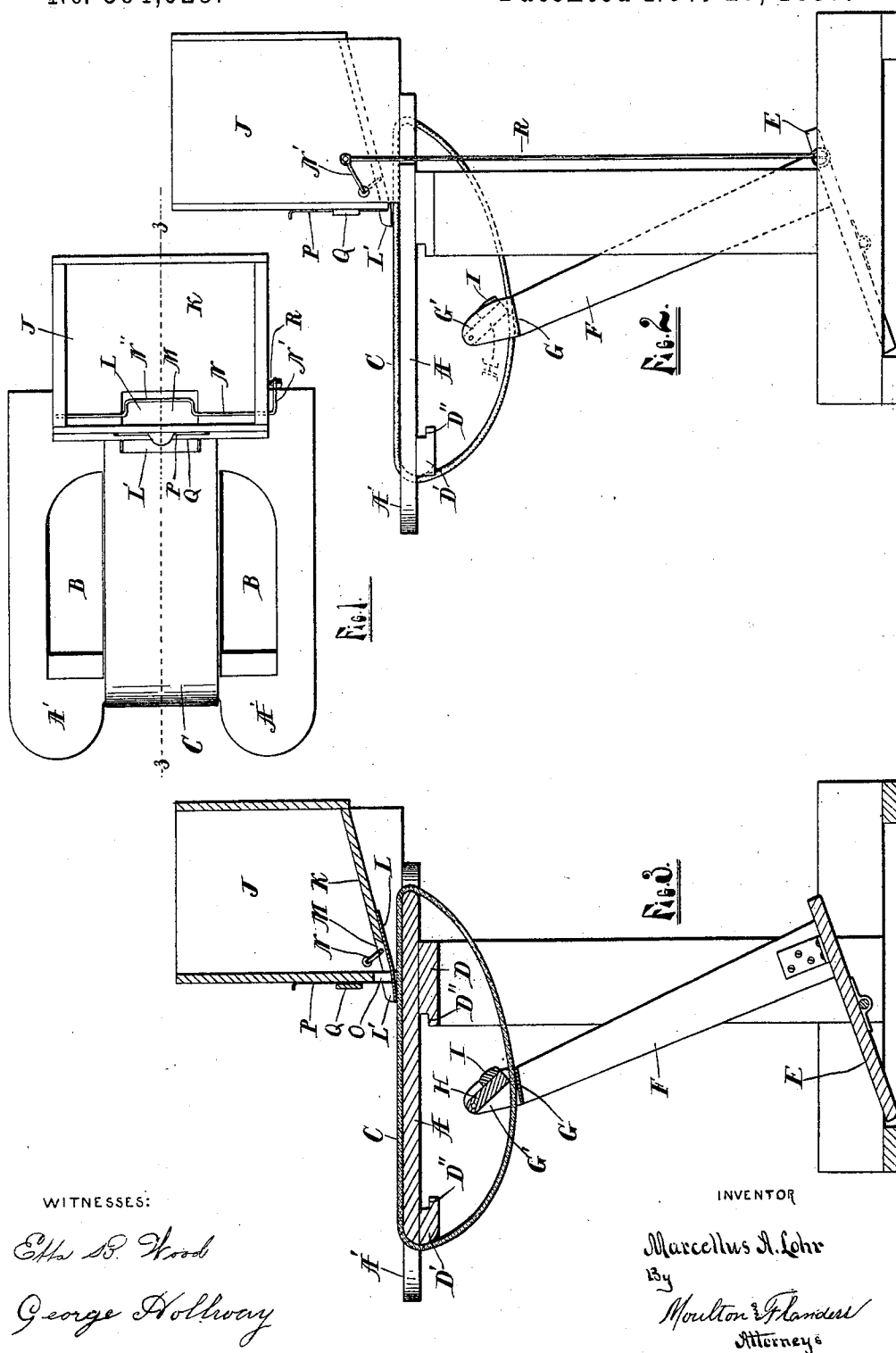


M. A. LOHR.
BEAN PICKING MACHINE.

Patented Nov. 23, 1897.



UNITED STATES PATENT OFFICE.

MARCELLUS A. LOHR, OF CHARLOTTE, MICHIGAN, ASSIGNOR OF ONE-HALF
TO WILLIAM WILDT, OF SAME PLACE.

BEAN-PICKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 594,028, dated November 23, 1897.

Application filed March 10, 1897. Serial No. 626,755. (No model.)

To all whom it may concern:

Be it known that I, MARCELLUS A. LOHR, a citizen of the United States, residing at Charlotte, in the county of Eaton and State of Michigan, have invented certain new and useful Improvements in Bean-Picking Machines; 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 improvements in bean-picking machines; and its object is to provide the same with certain new and useful features hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a device embodying my invention; Fig. 2, a side elevation of the same, and Fig. 3 a vertical section of the same on the line 3 3 of Fig. 1.

Like letters refer to like parts in all of the figures.

A represents a table-top supported on a suitable frame and having semicircular projections A' at the front corners, on which the operator may rest the arms, and oblong openings B B near the sides, through which the rejected beans pass.

D D' are transverse bars at each side of the openings B B and provided with grooves D'' D'' to engage and support a drawer or spout to receive the rejected beans.

C is a belt, preferably of heavy cloth or canvas, extending around the table and between the projections A' A' and resting on the upper surface of said table and extending in a downward curve or slack part below the same. The front of the table and bar D' and the rear of the table, where they respectively engage the belt C, are made half round to permit said belt to slide somewhat freely around the same. These rounded edges serve to dispense with rolls and at the same time afford frictional resistance enough to stretch and smooth the belt on the surface of the table and stop the same promptly at the end of the stroke. Said belt is intermittently moved forward at its upper side by means of a vibrating treadle or platform E, suitably pivoted upon the frame

and having an upwardly-projecting arm F, rigidly attached thereto and provided with a clamp to engage the belt C and move the same in one direction only, said clamp consisting of a transverse head G, engaging the under side of the belt C and having upwardly-projecting ends G' at each side of said belt, between which ends is pivoted a pawl H, having a rearward inclination and engaging and holding said belt firmly between its lower edge and the head G on the backward movement of the arm F and traversing said belt freely on the forward movement of said arm. I is a weight attached to said pawl to hold it down.

A hopper J is attached to the rear of the table A and has an inclined bottom K, having an opening M at its lower side and has attached a sheet-metal plate beneath the opening M, closing the same. Said plate extends outward at L' beneath the front of the hopper and yieldingly touches the belt C at its forward edge. In the front of the hopper and above the plate L is an opening O, which opening is more or less closed by a vertically-slidable gate P, held in place by a bar Q, extending across the same and attached to the hopper. A rod N extends across and within the lower angle of the hopper and is journaled in the sides thereof. Said rod is set off laterally opposite the opening M, as at N'', and its outer end is provided with a crank-arm N', to which arm is attached the upper end of a connecting-rod R, the lower end of which rod is connected to the rear of the treadle E.

The operation of my device is as follows: The gate P is adjusted to permit the beans to flow properly over the plate L, and as the treadle E is depressed at the rear the arm F moves backward. This moves the belt backward at the under side and forward at the upper side. The slight resistance due to the back edge of the table and the edge of the plate L serves to spread the belt smoothly on the upper surface of the table. At the same time the belt C agitates the edge L' of the plate and causes the beans to flow therefrom; also, at the same time the set-off portion N'' of the rod N is moved downward and forward, thus feeding the beans out through the opening O. The beans are thus spread evenly over the belt as it moves forward. After the

beans thereon are assorted and the rejected ones passed through the side openings B the treadle is reciprocated again, and as the belt moves forward the beans left thereon pass
5 over the front of the table and fall into any convenient spout or receptacle below.

Having thus fully described my invention, what I claim, and wish to secure by Letters Patent, is—

10 1. In a bean-picker, the combination of the belt, slack in its under part, the vibratory arm having a clamp which engages the slack part of the belt while moving in one direction and releases it when moved in the other di-
15 rection, and a table over which said belt moves, said table having rounded ends which form stationary supports for the belt and stretch the upper side thereof, for the purpose specified.

20 2. In a bean-picker, the combination of the table having rounded ends, the belt movable above and below said table and engaging the rounded ends thereof, the hopper having a feed-opening, and a plate, secured to said
25 hopper adjacent to said opening and having its free end engaged with said belt, whereby

the upper part of the belt is stretched and held taut, substantially as described.

3. In a bean-picker, in combination with a table and a movable belt thereon, a hopper 30 above said belt, having an opening in its lower side, a gate to adjust said opening, a plate projecting outward from said hopper below said opening and yieldingly engaging said belt, and vibrated thereby, substantially 35 as described.

4. In a bean-picker, the combination with a movable belt, a hopper above the same, a rod journaled in the hopper and having a set-off adjacent to the feed-opening in said hop- 40 per, and an arm on said rod, of an arm, having a clamp operating to move said belt intermittently, a treadle to which said clamp-arm is rigidly secured, and a pivoted rod connecting said treadle with the first-mentioned 45 arm, substantially as described.

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

MARCELLUS A. LOHR.

Witnesses:

DYER F. WEBBER,
ALBERT LOOP.