

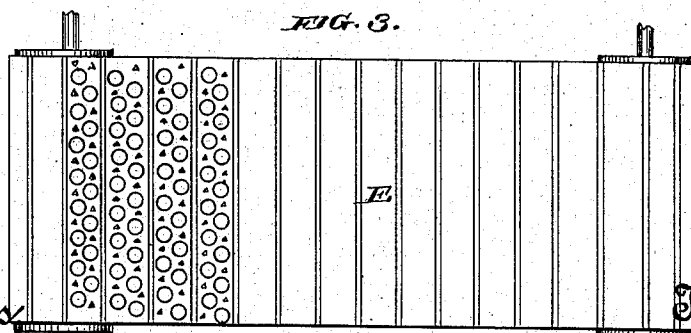
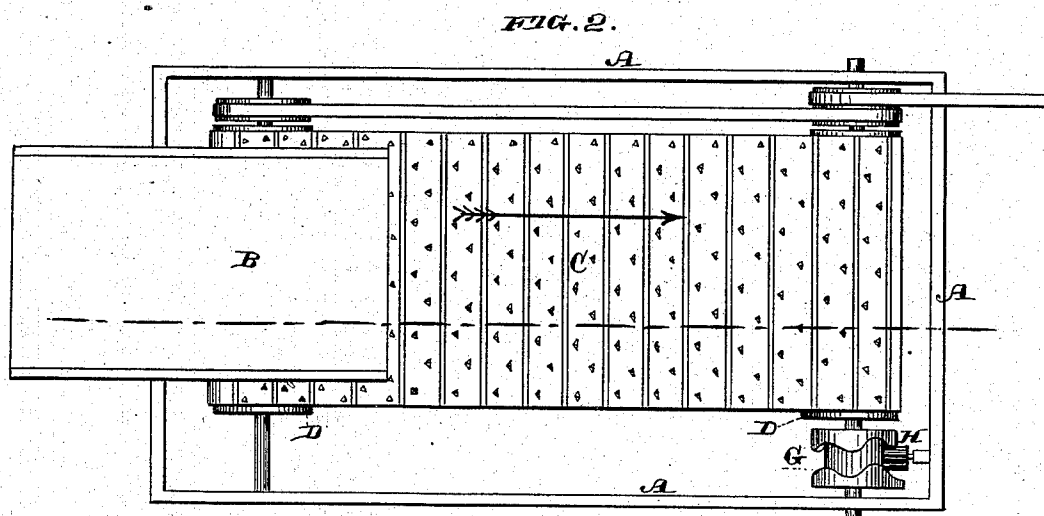
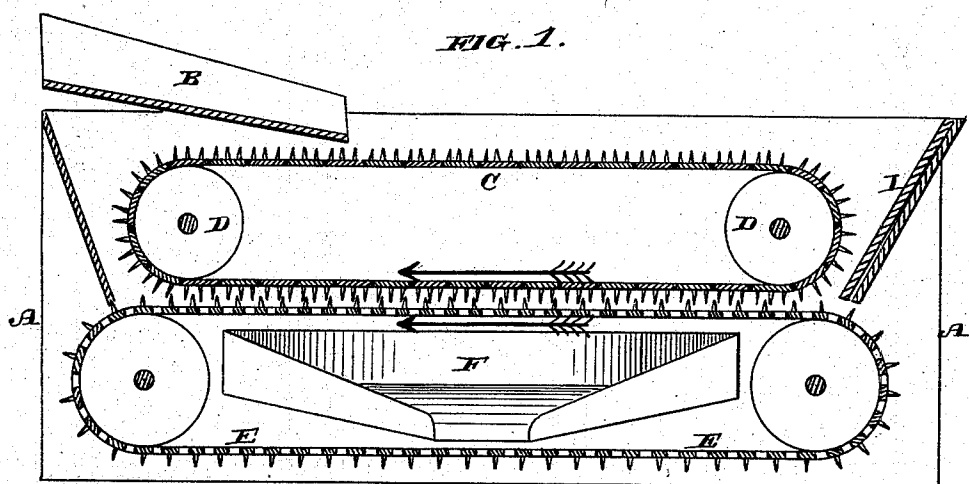
(No Model.)

A. SWINGLE.

MACHINE FOR SHELLING PEAS.

No. 288,743.

Patented Nov. 20, 1883.



Witnesses
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UNITED STATES PATENT OFFICE.

ALFRED SWINGLE, OF SAN FRANCISCO, CALIFORNIA.

MACHINE FOR SHELLING PEAS.

SPECIFICATION forming part of Letters Patent No. 288,743, dated November 20, 1883.

Application filed April 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALFRED SWINGLE, of the city and county of San Francisco, State of California, have invented an Improved Machine for Shelling Peas; and I hereby declare the following to be a full, clear, and exact description thereof.

Figure 1 is a longitudinal vertical section of my apparatus. Fig. 2 is a top view, and Fig. 3 is a plan, of the lower belt.

A is an outer casing, suitably constructed to inclose the moving belts and pulleys, and B is a hopper or trough adapted to discharge the articles to be treated upon the upper surface of the belt C. This belt is composed of transverse slats supported by endless belts or chains at each side of the machine, and these belts pass over friction-pulleys D D at each end. The slats composing the surface of the belt are provided with a considerable number of wire teeth similar to those of a card. Below this belt is another similar belt, E, having a slatted surface and wire teeth, but the slats are thickly perforated, the holes being sufficiently large to allow peas to fall through when disengaged from their outer coverings, and an inclined trough, F, between the surfaces of this belt receives the peas and directs them to the proper receptacle. Upon the outer end of one of the pulley-shafts of the upper belt, C, is fixed a cam, G, and an arm, H, projecting from the side of the casing or frame, supports an anti-friction pulley which runs in the serpentine groove of the cam, so that when the machine is in motion the upper belt has a forward movement by means of the rotation of the pulleys and a transverse movement by the action of the cam. The shaft-journals are fitted to their boxes so as to have an end movement to allow the cam to act. A directing-incline, I, at the rear end of the upper belt causes the peas or other articles to be treated to fall upon the lower belt, which is somewhat the longer, and its motion, produced by a larger driving-pulley and a crossed belt, is slower and in the

same direction with the lower part of the upper belt. The peas passing between the two belts are thus subjected to a rolling and rubbing movement which speedily divests them of their outer coverings, and they then fall through the holes in the slats of the upper side of the lower belt into the trough F, while the outer coverings are carried to the end of the lower belt and deposited in a suitable receptacle at the end.

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

1. In a machine for shelling peas, the combination of horizontal perforated traveling belt E, having projecting teeth, with the horizontal toothed belt C, means for moving the latter above the former in the same direction and at a higher rate of speed, and means for imparting thereto a transverse vibrating motion, as set forth.

2. The horizontal traveling toothed belt C, means for imparting thereto a transverse vibration, the hopper B, and the inclined directing-board I, in combination with the perforated traveling toothed belt E, and means for moving it below and in the same direction as, and at a slower rate of speed than, said belt C, as set forth.

3. The horizontally traveling and vibrating toothed belt C and the subjacent perforated toothed traveling belt E, in combination with the inclined trough F, fixed between the upper and lower parts of said belt E, as set forth.

4. The horizontal toothed traveling belts E and C, and means for moving one of them at a higher rate of speed than the other, in combination with the serpentine cam-roller G, the friction-roller shaft, stationary arm H, and frame A, as set forth.

In witness whereof I hereunto set my hand.
ALFRED SWINGLE.

Witnesses:

S. H. NOURSE,
J. H. BLOOD.