(No Model.) 2 Sheets—Sheet 1.

F. MOLINI.

PEA SHELLING MACHINE.

No. 302,515. Patented July 22, 1884.

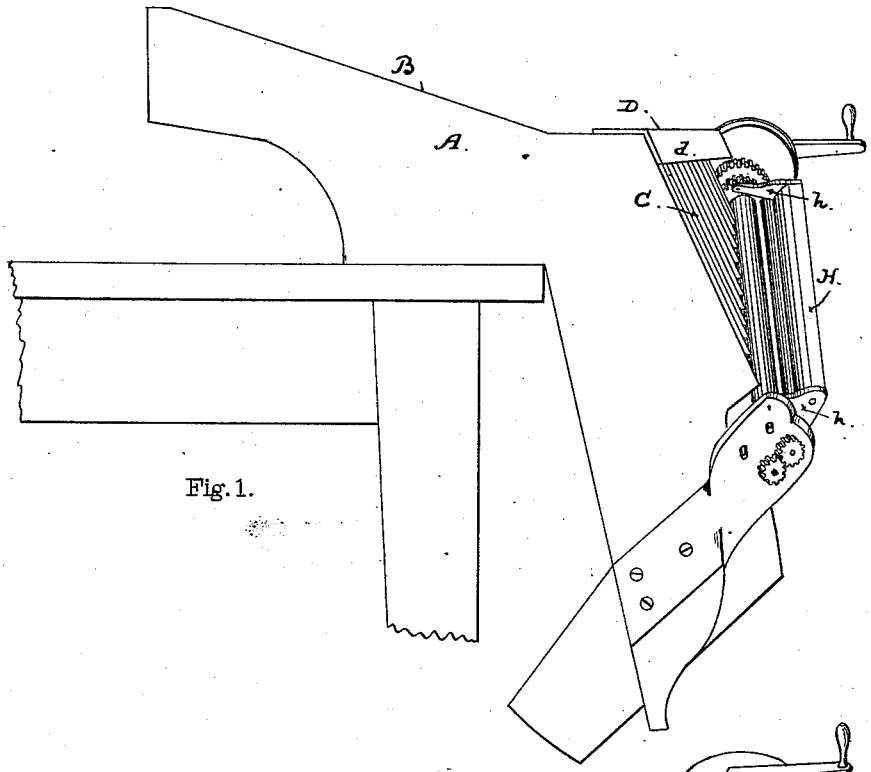

Fig. 1.

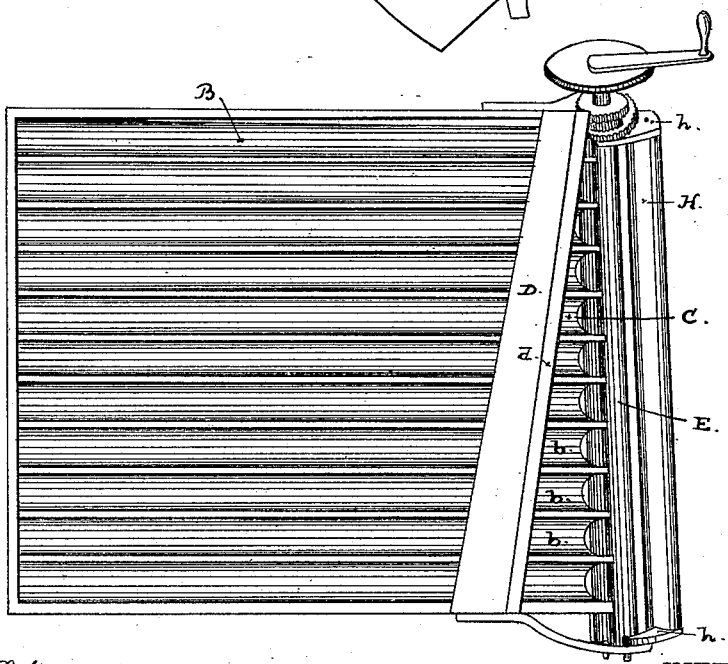

Fig. 2.

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INVENTOR:

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(No Model.) 2 Sheets—Sheet 2.

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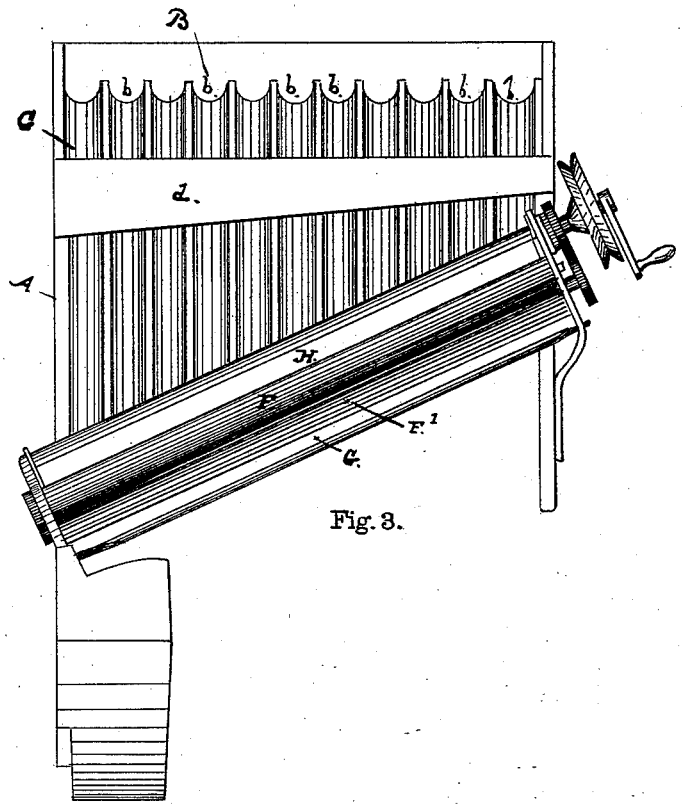
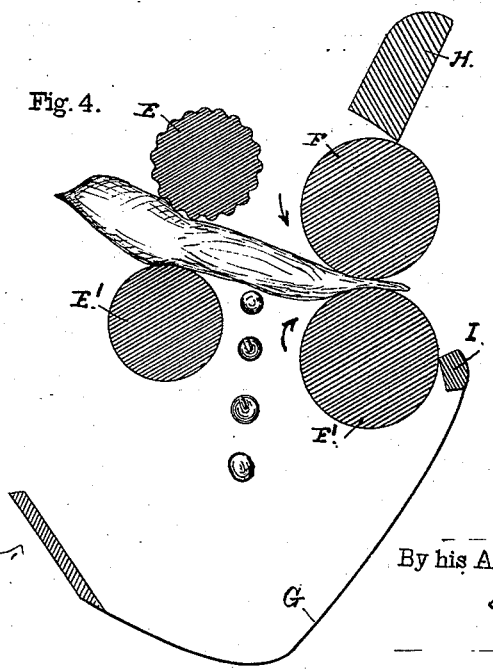


Fig. 3.

Fig. 4.



WITNESS:

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UNITED STATES PATENT OFFICE.

FELICE MOLINI, OF SAN FRANCISCO, CALIFORNIA.

PEA-SHELLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 302,515, dated July 22, 1884.

Application filed April 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, FELICE MOLINI, residing in the city and county of San Francisco, State of California, have made and invented certain new and useful Improvements in Pea-Shelling Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings.

My invention relates to machines for shelling peas; and it consists in the novel construction, combination, and arrangement of parts and devices hereinafter described and claimed.

In the drawings referred to, Figure 1 is a side elevation of the machine as affixed to the table or bench in position for use. Fig. 2 is a plan or top view of the inclined front of the machine; Fig. 3, a front view; and Fig. 4, a detail view illustrating the position and operation of the two sets of rollers that seize, advance, and open the shell and press out the peas.

A A are the two sides of the frame. B is a slanting feed board or table, upon which the pods are spread preparatory to being distributed into the inclined guide-troughs C. This board B and its inclined continuation C is grooved, so that a number of parallel gutters or channels are provided, into which the pods are distributed by the operator, and thus separated into separate streams or lines. Across the point where these channels turn downward is a fixed bridge, D, with an apron or strip, *d*, along the front, the office of which is to deflect the pods as they are pushed forward from the channels *b b*, and cause them to turn into the inclined guide-channels *c c*. At the bottom of this inclined surface are fixed two sets of rollers, E E′ F F′, one set slightly in advance of the other, and both sets at an angle across the front, so that an inclined trough, G, may be fixed beneath them to catch and conduct the shelled peas to one point of discharge. At the lowest point of the trough G is a hopper or spout to divide the shelled peas into a suitable receptacle. The first set of rollers are set wide apart, and perform the work of splitting and pressing forward the pods into the second set of rollers, that are set sufficiently close together to prevent the passage of the peas between them while they grasp and draw in the pods. The peas are discharged into the trough G from between the two sets of rollers, while the pods are thrown out at the front of the outer rollers. One of the feed-rollers, and preferably the upper or driving one, is corrugated; but the others are smooth face. The two sets are geared together to obtain regular motion and in the required direction. A scraping-edge, H, is mounted in swinging bearings *h h* over the outer rollers to bear against the face of the top one. A similar strip, I, but permanently attached, performs the double service of cleaning the face of the lower roller and of supporting the outer edge of the inclined trough G.

The operation of the machine is as follows: The pods to be opened are spread out by hand over the feed-board, so that they lie in single order—one behind the other—in all the channels, and these rows are then moved forward by the fingers of the operator with a rapid motion to push them down into the slanting channels leading to the inclined rollers. At the bottom of these guides they are caught by the first rollers and drawn in between them. The second rollers then seize the ends of the pods, and by compression operate to press out the peas and draw the pods through to the front. The peas are gathered at the lower end of the trough, where a drawer or permanent receptacle as a part of the machine may be provided.

This machine is adapted to be run by any suitable power—such as steam, horse, &c.—and to operate upon a large quantity of material, as the feeding or supplying of the peas is effected in a rapid manner through the agency of the corrugated or channeled surfaces.

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

1. A machine for shelling peas, comprising a feed-board or surface with parallel channels *b b*, an acutely-inclined continuation of said channeled surface C, a series of feeding and pressing rollers, E E′ F F′, a gathering-trough, G, with a spout, *g*, and mechanism for driving said rollers, substantially as hereinbefore described.

2. The combination, with the inclined surface having parallel channels, of the two sets

of rollers E E′ F F′, set at an angle across the front thereof, and the trough G below the space provided between the two sets of rollers, substantially as hereinbefore described.

3. The combination of the surface formed with parallel channels, as described, the rollers E E′, one corrugated and the other smooth, the compression-rollers F F′, the scrapers H I, and a collecting-trough, G, substantially as hereinbefore described.

FELICE MOLINI. [L. S.]

Witnesses:
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