H. Mathew,

Almond Peeler,

No. 59,324, Patented Oct. 30, 1866.

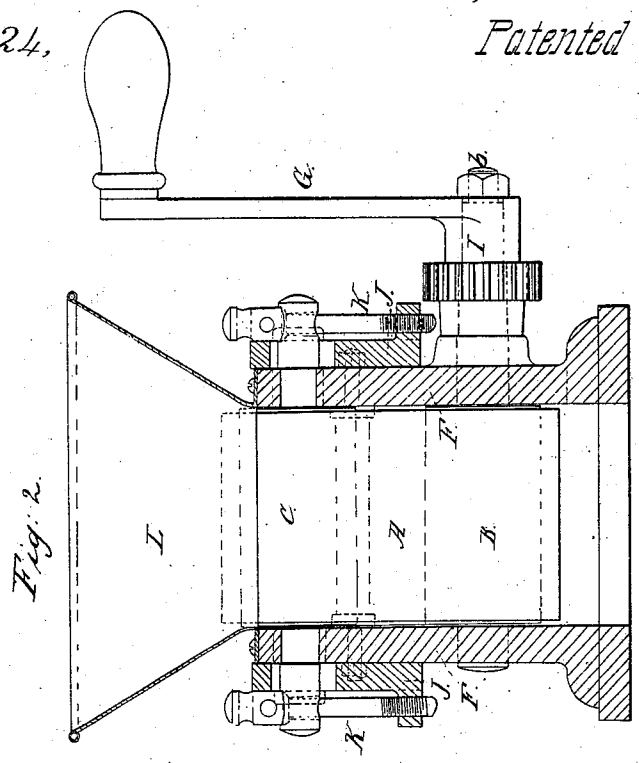


Fig. 2.

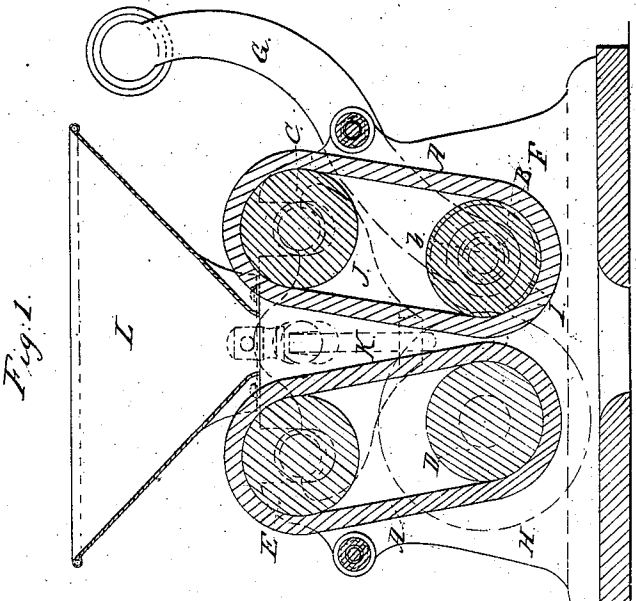


Fig. 1.

Witnesses.
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UNITED STATES PATENT OFFICE.

HENRY WATHEW, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THOS. AND GEORGE M. MILLS, OF SAME PLACE.

IMPROVED MACHINE FOR PEELING ALMONDS.

Specification forming part of Letters Patent No. **59,324**, dated October 30, 1866.

To all whom it may concern:

Be it known that I, HENRY WATHEW, of the city of Philadelphia and State of Pennsylvania, have invented a new and useful Machine for Peeling Almonds; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the figures and letters of reference marked thereon.

The method heretofore commonly practiced for removing the thin peels from almonds consists in first scalding them, and then stripping the peel from the almond by friction between the thumb and fingers. Where large quantities of almonds are used and have to be peeled this process is necessarily a very slow one, each almond requiring to be passed singly through the fingers; and therefore the object of my invention consists in providing for the use of confectioners, bakers, in hotel-kitchens, &c., an expeditious means of performing that operation.

The nature of my invention consists in subjecting the almonds to the action of two elastic bands of india-rubber, running side by side in the same direction, but at unequal velocities. Each of these bands runs upon a pair of rolls, in the manner of an ordinary machine-belt, and the two sets of rolls are so placed relative to each other that a sufficient space is provided between the bands at the top to admit the almonds between them as they fall from a hopper placed above. The lower pair of rolls, however, are so spaced that the almond is caught firmly by the bands immediately above these rolls and during its downward passage between them. At the same time the peel is torn asunder and removed from the almond by the differential velocities of the two descending bands, causing a frictional movement identical to that of the fingers in performing this work by hand. The almonds, when dropping from between the lower rolls, may be finally separated from the peels by allowing them to fall into a vessel containing water, upon which the peels will float, while the almonds sink to the bottom; or a very light elastic spring-board may be so provided that the almonds will rebound from it in a sideward direction to a suitably-placed receptacle, while the peels will merely slide off, and so become separated from the almonds.

And in order that my said invention may be fully understood, I will now proceed more particularly to describe the same.

On reference to the drawings making part of this specification, and in which similar letters of reference allude to like parts in both views, Figure 1 is a sectional side of the machine, and Fig. 2 a section transversely to Fig. 1.

A A are the elastic rubber bands, each running upon a pair of rolls, (marked B C and D E,) the lower set of which, B and D, have fixed bearings in the two frames F F, and are geared together by spur-wheels H and I, whose respective diameters are as two to one. The pitch-lines of these wheels are shown in red dotted circles at Fig. 1.

The whole is set in motion by means of a crank, G, attached to the shaft *b* of B, outside of the pinion I. In order to produce the requisite tension upon the bands A A, and to provide for taking up any slack from wearing, the adjustable double bearings J J are provided outside of the two frames F F by means of set-screws K K. These blocks J J can be drawn upward, as clearly shown in the drawings, the whole being so arranged that the strain of one band will counterbalance the other, so that both must always have the same tension.

L is the hopper, from which the almonds are fed to the space between the bands, there to be acted upon, as clearly set forth above.

Having thus described the construction and operation of my invention, I wish to be understood as not desiring to limit myself to the described arrangement of the various parts in every minutia, as the same may be modified or equivalents substituted without impairing my invention; but

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

The two elastic endless aprons A A, with their respective rollers and mountings, when constructed substantially as described, and for the purposes set forth.

HENRY WATHEW.

Witnesses:
THEODORE BERGNER,
DAVID JILLARD.