

(No Model.)

J. HOBART.
ALMOND HULLER.

No. 353,857.

Patented Dec. 7, 1886.

FIG. 1.

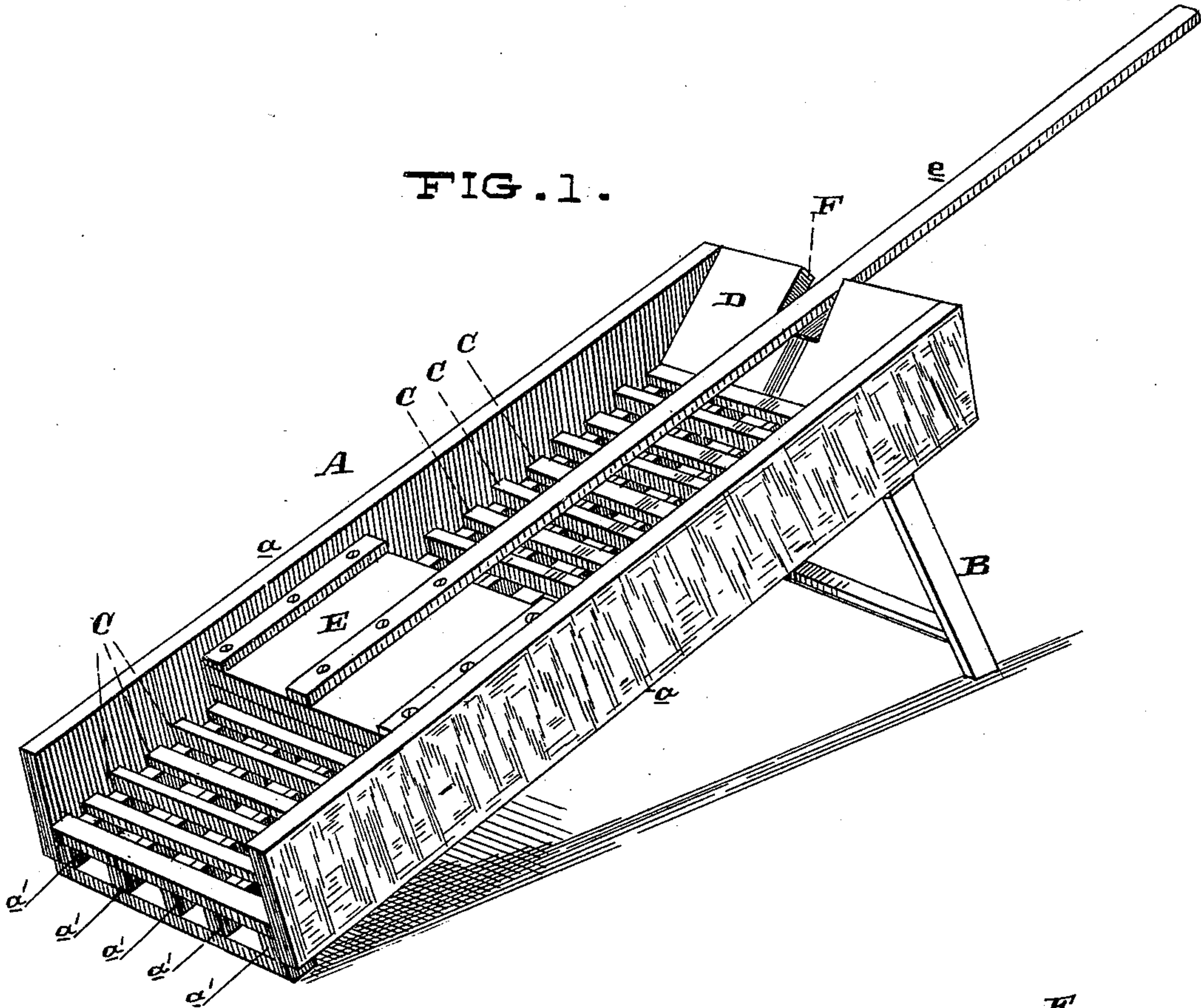
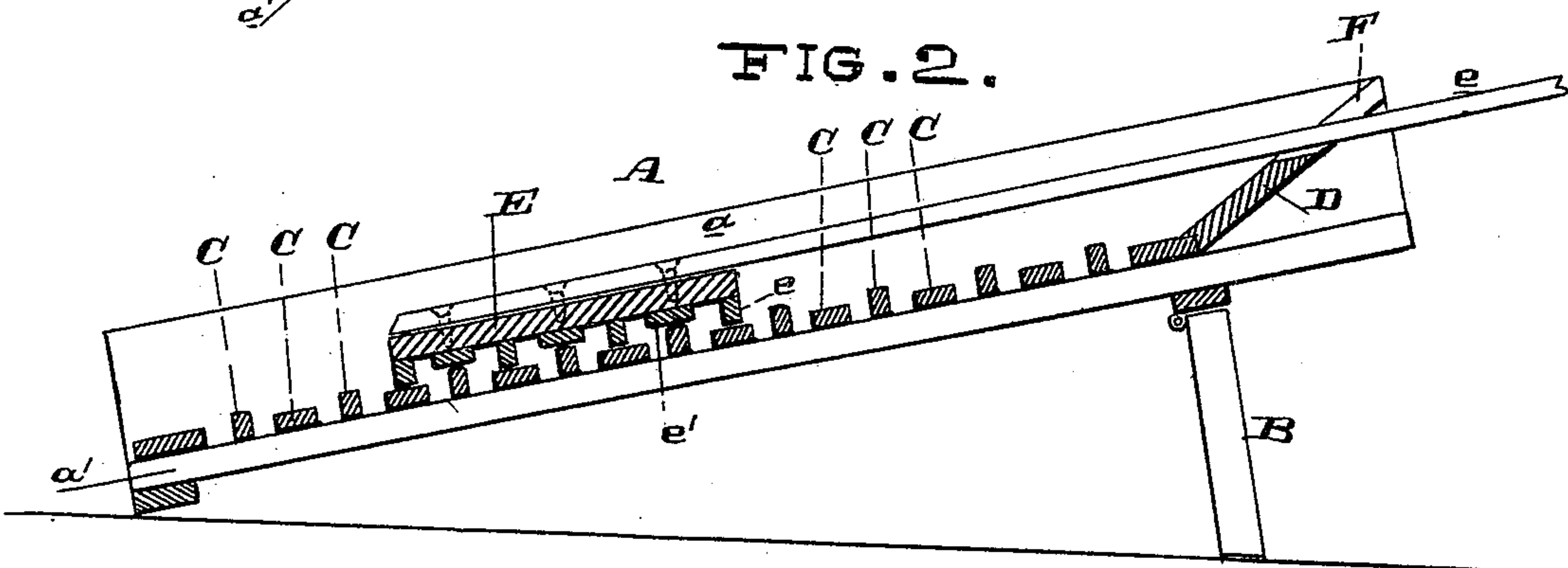


FIG. 2.



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UNITED STATES PATENT OFFICE.

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ALMOND-HULLER.

SPECIFICATION forming part of Letters Patent No. 353,857, dated December 7, 1886.

Application filed June 2, 1886. Serial No. 203,970. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HOBART, of Nordhoff, Ventura county, State of California, have invented an Improvement in Almond-Hullers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a new and useful machine for hulling almonds; and it consists in various details of construction and combinations of parts, all of which I shall hereinafter fully describe and claim.

The object of my invention is to provide a simple and effective machine for hulling almonds.

Almonds have usually been hulled by hand, and with a large crop this is a tedious and laborious operation; but with a machine such as I have invented the work of hulling is performed quickly, and at much less expense than by any other method of which I am at present aware.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my almond-huller. Fig. 2 is a vertical longitudinal section of the same.

A is the bed or frame. This consists of suitable side strips, *a*, and bottom longitudinal strips, *a'*, which are separated or spaced from each other. The frame is preferably set at an inclination, as shown, this being accomplished in any suitable manner, as by the legs B under its upper end.

Across the bottom longitudinal strips, *a'*, of the frame are laid the transverse parallel slats C, which form the bottom surface of said bed or frame. These slats are spaced or separated from each other, whereby openings are left between them. They may be arranged all at the same height, so as to give a smooth surface; but this I deem inferior to the arrangement by which a broken or uneven surface is made. This may be accomplished by using slats of different heights or thicknesses, or by having the slats all of the same dimensions, and turning some on edge, while the others are laid flat. The slats may be arranged thus in any suitable manner—as by placing them indiscriminately, or, as I have here shown, by alternating a flat one with one set on edge.

At the head of the frame or bed is a piece

or chute, D, the object of which is to direct the almonds to the surface of the bed in the proper manner.

E is the rubber, which consists of a piece having a handle, *e*, by which it is reciprocated. The rubber fits between the side strips of the bed or frame, and is of a width sufficient to permit its movement without undue friction, and yet snug enough to cover the width of the bottom of said bed or frame. The face of the rubber is corrugated or ribbed. This may be done by the parallel spaced slats *e'*, which may be arranged to form a smooth surface, or, as is preferable, an uneven one, in the same manner that the uneven surface of the bed or frame is made—that is to say, by arranging some of the slats on edge and some of them flat, either alternating or in any other manner. There is a groove, F, formed in the top of the inclined chute-piece D, which acts as a guide for the handle of the rubber.

The operation of my machine is as follows: The almonds are fed to the bed or frame A, and pass down upon the uneven surface of its bottom, and the rubber is then reciprocated over the almonds, whereby their hulls are broken and separated from the nuts. The hulls thus separated and broken fall down through the open bottom of the bed or frame, and the nuts pass down the incline to the base, where they are collected. In this operation some of the nuts will of course be broken; but these will fall through with the hulls and can be separated therefrom by any subsequent screening or sifting operation.

The advantage of making the surface of both the bed and the rubber uneven is that it facilitates the detaching and breaking of the hulls, because the almonds are caught between the elevated slats of the rubber and the bed, and meet with resistance enough to break their hulls.

It is obvious that the rubber may be driven by any suitable power mechanism as well as by hand, and that in connection with the machine a feed-hopper and such other accessories may be used; but these I have deemed it unnecessary to describe or to illustrate.

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

1. In an almond-huller, the combination of

a frame or bed having a bottom composed of transverse parallel spaced slats of unequal height, upon which the almonds rest, with a reciprocating rubber operating on the almonds
5 upon the slats of said bottom, substantially as herein described.

2. In an almond-huller, the combination of a frame or bed having a bottom composed of parallel transverse spaced slats, upon which
10 the almonds rest, and a reciprocating rubber operating on the almonds over said slats, and having its face composed of parallel spaced slats or strips of unequal height, thereby forming an irregular surface, substantially as herein
15 described.

3. In an almond huller, the frame or bed A, having a bottom composed of transverse parallel spaced slats of different height or thickness, whereby a broken or uneven surface is
20 formed, in combination with the reciprocating rubber E, having a face composed of parallel

slats or strips of different height or thickness, whereby a broken or uneven surface is formed, substantially as herein described.

4. An almond huller comprising the inclined
25 bed or frame A, having a bottom composed of the transverse parallel spaced slats C, having a different height or thickness, whereby a broken or uneven surface is formed, the inclined plane or chute D at the head of the
30 frame or bed A, the rubber E, having a face composed of parallel spaced slats or strips *e'*, of a different height or thickness, and a handle, *e*, by which it is reciprocated, substantially as herein described.
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In witness whereof I have hereunto set my hand.

JOSEPH HOBART.

Witnesses:

L. C. McKEELEY,
I. H. WARRING.