

(No Model.)

2 Sheets—Sheet 1.

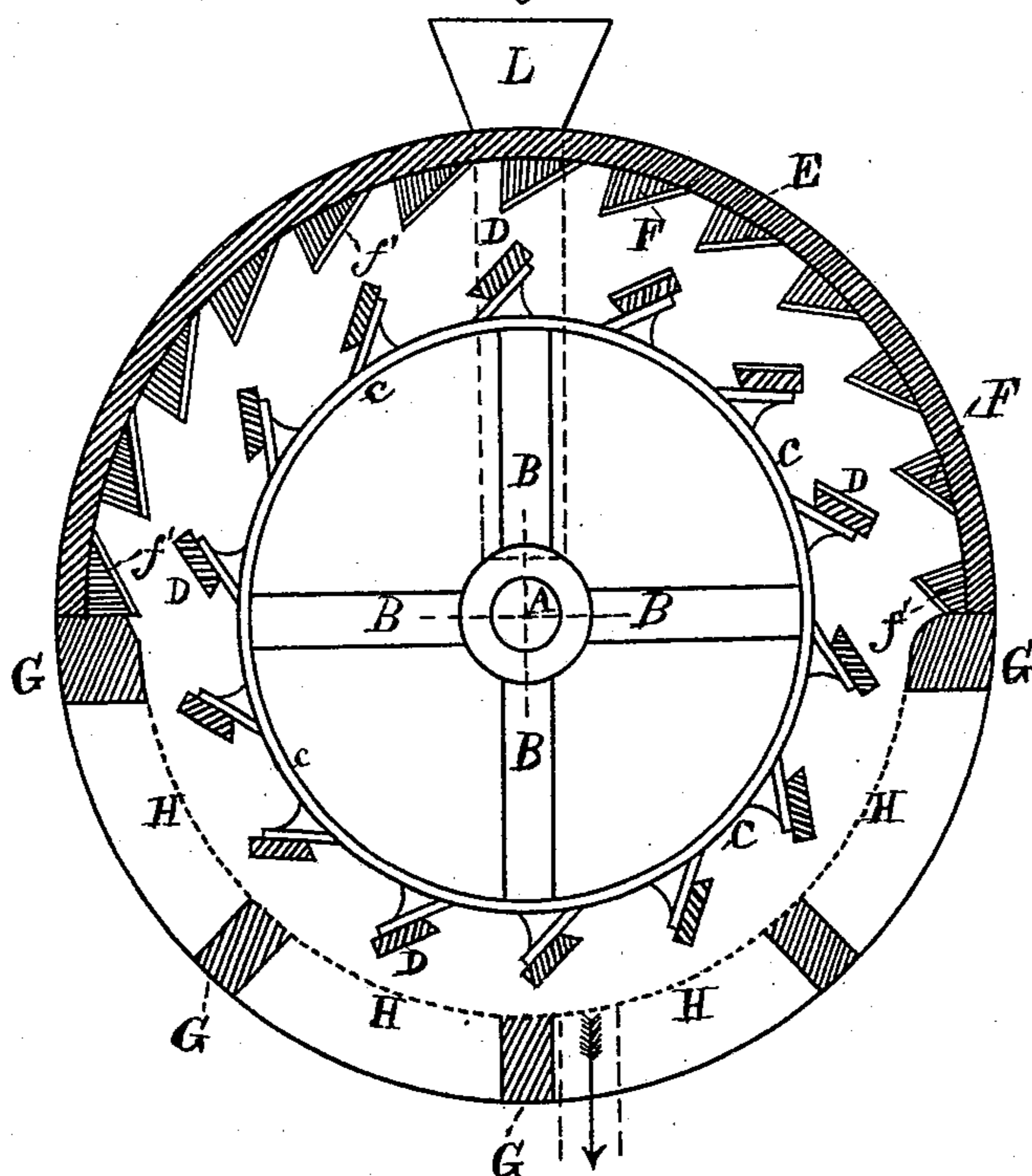
A. BESSER.

APPARATUS FOR PURIFYING MILLET SEED, &c.

No. 300,679.

Patented June 17, 1884.

Fig. 1.



Witnesses:
Percy White.
Alex. Scott

Inventor:
Anton Besser
by John J. Halsted & Son
his Attys.

(No Model.)

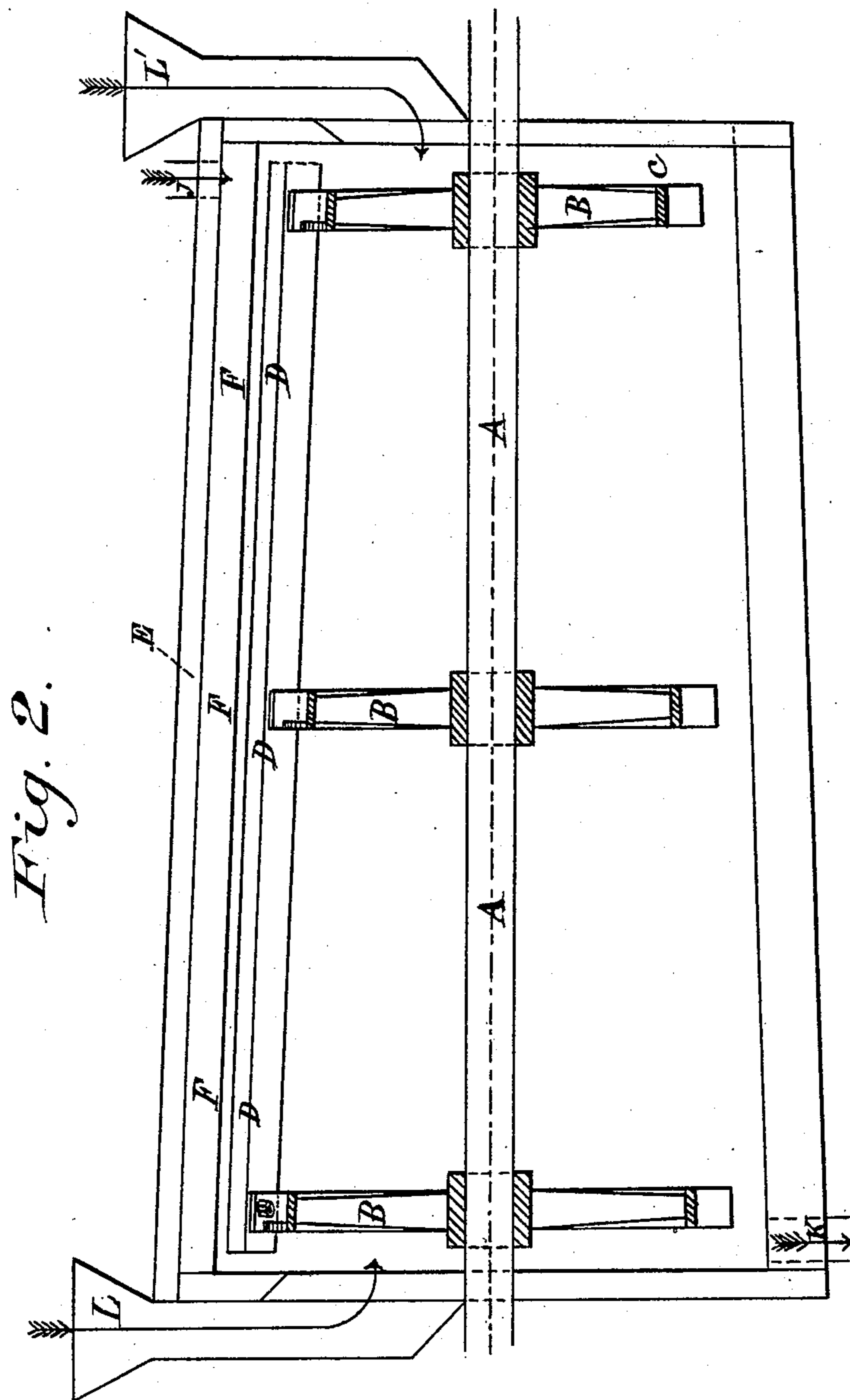
2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

ANTON BESSER, OF VIENNA, AUSTRIA-HUNGARY.

APPARATUS FOR PURIFYING MILLET-SEED, &c.

SPECIFICATION forming part of Letters Patent No. 300,679, dated June 17, 1884.

Application filed September 19, 1883. (No model.) Patented in Austria-Hungary November 7, 1881, No. 30,935 and No. 39,348, and in Germany March 6, 1882, No. 20,010.

To all whom it may concern:

Be it known that I, ANTON BESSER, of Vienna, in the Empire of Austria-Hungary, millwright, have invented new and useful Improvements in Apparatus for Purifying Millet-Seed and Similar Grain, which are fully set forth and described in the following specification.

My invention relates to the construction of an apparatus by means of which I am able to give to the peeled millet a brilliant golden-yellow appearance, and to clean it simultaneously from all impurities. For the same purpose special apparatus have been used hitherto; but these apparatus had the inconvenience that, in consequence of their construction, a great quantity of the treated millet-seed or grain was broken or ruptured, and that, further, the working of the apparatus was sometimes interrupted or stopped by obstructions in some of the interstices of the machine. In order to remedy these inconveniences I construct my machine or apparatus for polishing millet in the manner hereinafter described, and represented by the annexed sheet of drawings, in which—

Figure 1 is a cross-section, and Fig. 2 a longitudinal section, of it.

On a horizontal shaft, A, are mounted, at suitable distances, wing-arms B, carrying a crown, C, to which a desired number of wings, D, of wood, are fastened. The latter are applied substantially in the direction of a tangent to the crown, and covered with leather, india-rubber, or with a similar elastic material. On the inner surface of the upper half of the case or mantle E are placed fixed pieces or ribs F, of a triangular shape in their cross-section, at such distances from each other and with such downward inclination of their broader or acting surfaces f' that the force of the stroke of the wings D upon the millet-seed may not be violent, but shall allow a continuous gentle rubbing action, tending to roll them over and over upon themselves and upon or against the inclined surfaces f' , the downward direction of these surfaces permitting this; and these downward inclines also prevent any jamming or clogging of the millet into the spaces between the ribs F, and prevent the deposit of dirt or impurities between the ribs,

inasmuch as they will fall away by their own gravity, and be kept loose and free to fall by the continuous action of the wings D. Consequently no obstruction for any appreciable length of time can occur from any such deposit. For the same purpose I leave free spaces between the wings D, in order that the fatty, oily, or viscous dust which is deposited between them may fall off from time to time, and then be removed by the wings. The pieces or ribs F are likewise covered with leather, india-rubber, &c., and the object of this is to prevent the breaking of the millet-grains when thrown against their surfaces, such breaking and damage to the grain having been one of the serious objections to machines as heretofore constructed for treating millet-seed. The under half of the mantle is formed by brackets G. The spaces between the latter are occupied or filled with sheet-iron H, thus forming the bottom of the mantle, and this part H is slotted or perforated.

The mode of working my apparatus is as follows: The millet, having been previously peeled, is introduced into the machine through a funnel or similar device, J, and falls upon the wings D, and in consequence of the revolving motion of the latter, which motion may be given in any usual or desired way, the grain is thrown against the fixed rib pieces or brackets F, and becomes freed from any adhering impurities, whereby the millet gets a brilliant golden-yellow and clear appearance. The case or shell formed by the mantle E and by the parts G H is of conical form, and the wings D incline lengthwise from the larger to the smaller end of the case, (see Fig. 2,) and by means of this conical position or arrangement of the system of wings (see Fig. 2) the millet is driven forward, and falls finally through the aperture K out of the apparatus. This aperture is shown in the drawings as applied on the lowest point of the under half; but I reserve the right to apply this aperture at or on any convenient point of the under half, and even of the upper half of the mantle. In order to prevent the millet becoming heated in the apparatus during the winter-time, in consequence of the difference of the outer and inner temperature, whereby the function of the apparatus could be dis-

turbed, I provide the same with two conduits, L and L', through which air may be either pressed into the apparatus or sucked in by the mere action of the wings. By means of this arrangement I obtain a constant and equal temperature in the interior of the apparatus, and a continuous serviceable action of its constituent parts.

I beg to observe that I construct my apparatus of various sizes, and that the shaft may be in a vertical instead of a horizontal position, as described, and represented in the drawings.

Having now described and particularly ascertained the nature of my invention, I now declare that what I consider to be novel and original, and therefore claim as my invention, is—

1. In a machine for cleaning and polishing peeled millet-seed, the system of wings D, mounted at suitable distances apart, in combination with the crown C, arms B, and shaft A, the wings being applied with their working-faces nearly tangential to the crown, and covered with suitable elastic material.

2. In a machine for cleaning and polishing millet-seed, the fixed pieces or brackets F, made triangular in cross-section, covered or

faced with elastic material on their acting surfaces, and applied at intervals, in combination with the upper half of the mantle or casing, said fixed pieces or brackets having free spaces between them and arranged with their acting surfaces f' inclining downward, all substantially as shown and described.

3. In combination, the revolving system of wings D, constructed and applied as set forth, the case having its upper half or mantle E provided with the triangular ribs F, constructed and applied as set forth, and the air-conduits L L', as and for the purposes shown and described.

4. The apparatus for cleaning and polishing millet-seed, consisting of the outer case having the described system of triangular ribs F in its upper part only, its under part being slotted or perforated, as set forth, the revolving system of wings D, these wings and the ribs F having their working-faces constructed and positioned as set forth, and the air-conduits L L', all substantially as shown and described.

ANTON BESSER.

Witnesses:

ED. SCHMIDT,
CLARENCE M. HYDE.