R. STUART.
Oatmeal Machine.

No. 206,148. Patented July 16, 1878.

Fig. 1.

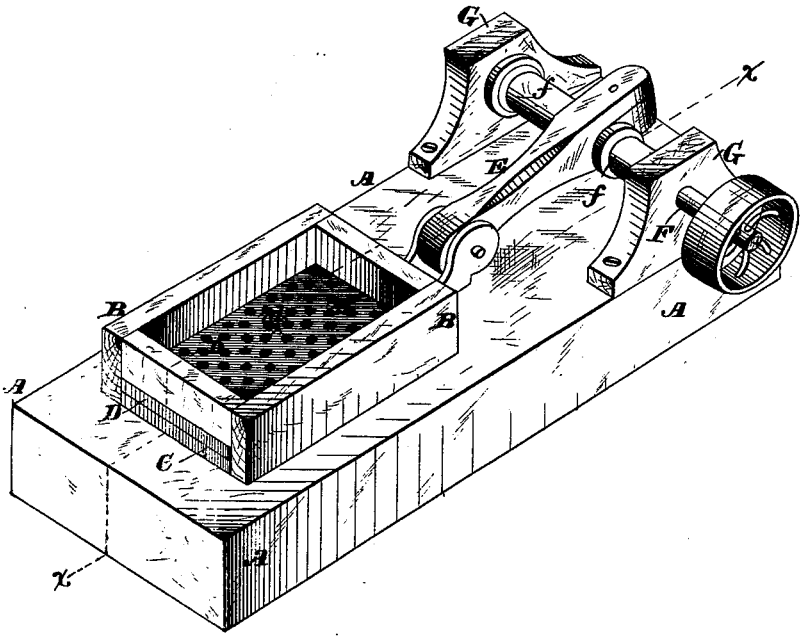
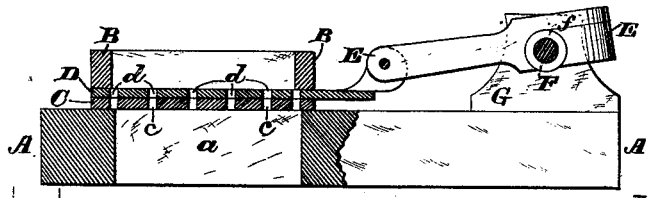


Fig. 2.



WITNESSES:
Jas. E. Hutchinson
Henry C. Hazard.

INVENTOR.
Robt Stuart, by
Prindle & Ly his
attorneys

UNITED STATES PATENT OFFICE.

ROBERT STUART, OF CEDAR RAPIDS, IOWA.

IMPROVEMENT IN OATMEAL-MACHINES.

Specification forming part of Letters Patent No. **206,148**, dated July 16, 1878; application filed June 24, 1878.

To all whom it may concern:

Be it known that I, ROBERT STUART, of Cedar Rapids, in the county of Linn, and in the State of Iowa, have invented certain new and useful Improvements in Machines for Preparing Oats and other Cereals for Table Use; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a perspective view of my machine as arranged for use, and Fig. 2 is a vertical section of the same upon line *x x* of Fig. 1.

Letters of like name and kind refer to like parts in each of the figures.

My invention relates to that class of mechanism which is employed in the preparation of oats and other cereals for table use, and has for its object the more perfect division of the grain into fragments of a suitable size; to which end it consists in the combination of two metal plates arranged to move upon or over each other, and each provided with perforations which coincide with the perforations of the other plate at one point of the movement, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents the base or frame of one machine, upon which, near one end, is secured a hopper, B, beneath which is provided an opening, *a*, that has substantially the shape and dimensions of the interior of said hopper. Over the opening *a*, within the hopper B, is placed a metal plate, C, which, at equidistant points, is provided with perforations *c*, each of which perforations has such dimensions as to permit of the passage of a kernel of oats, wheat, or other like grain when said kernel is presented longitudinally.

Resting upon the plate C is a second plate, D, which corresponds therewith in size and shape, and is provided with perforations *d*, that correspond in number, size, and location to the perforations *c* of said plate C, so that when said plates are arranged with their edges in line said perforations *c* and *d* shall coincide with each other.

The ends of the plates C and D extend through the ends of the hopper B, and to the rear end of the upper plate D is pivoted one end of a pitman, E, which from thence extends rearward, and has its opposite end journaled upon a crank, *f*, that is formed upon a shaft, F, which is, in turn, journaled within suitable bearings G, that are attached to the base A, the arrangement being such as to cause said plate D to reciprocate longitudinally upon said plate C whenever said shaft F is rotated.

If desired, the lower plate C may also be caused to reciprocate in a direction opposite to that of the upper plate D, in which event each of said plates will require to move but one-half the distance that would be necessary if but one of the same moved.

The operation of the machine is as follows: Grain, suitably prepared by the removal of all external covering, is placed in the hopper B, and, by the motion of the plate D, is caused to enter the perforations *d*, when, as each of said perforations passes over the corresponding perforation *c* of the plate C, the kernel contained within the former will pass partly downward into the latter, and, by the movement of said plate D, will be sheared off, the operation being repeated at each movement of said plate until said kernel has been divided into a number of parts having substantially equal size.

If desired, the plates C and D may be made circular, and caused to move upon or around an axis common to both, such movement being reciprocal or continuous.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

As an improvement in mechanism for preparing oats and other cereals for table use, the combination of two perforated metal plates arranged to move upon or over each other, and each provided with perforations which coincide with the perforations of the other plate at one point of the movement, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 1st day of June, A. D. 1878.

ROBERT STUART. [L. S.]

Witnesses:

GEO. B. DOUGLAS,

J. C. SHANON.