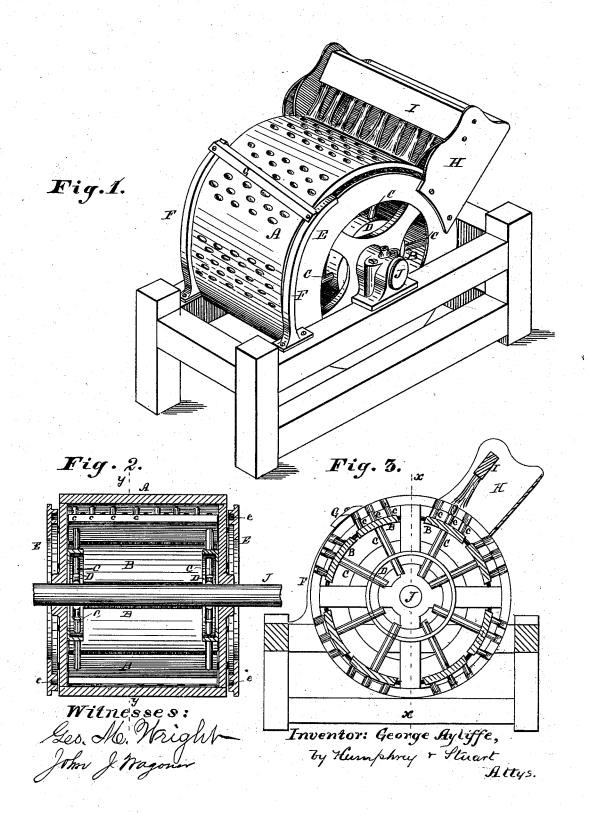
G. AYLIFFE.
Oatmeal Machine.

No. 207,152.

Patented Aug. 20, 1878.



UNITED STATES PATENT OFFICE.

GEORGE AYLIFFE, OF AKRON, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOSEPH HUGILL, OF SAME PLACE.

IMPROVEMENT IN OATMEAL-MACHINES.

Specification forming part of Letters Patent No. 207,152, dated August 20, 1878; application filed July 5, 1878.

To all whom it may concern:

Be it known that I, George Ayliffe, of Akron, in the county of Summit and State of Ohio, have invented a new and useful Improvement in Oatmeal-Machines, of which the following is a specification:

My invention has relation to that class of oatmeal-machines wherein the hulled kernels of oats are cut by cutting or shearing edges.

The object of my invention is to rapidly cut the kernels of oats into uniform particles of any desired size; and to that end it consists of a revolving hollow cylinder perforated with a series of holes, into which, upon the upper side of the cylinder, the grains fall endwise, and while standing therein are carried against the edge of a knife or knives and severed.

It also consists in appliances for causing the oats to enter said holes, and in devices for forcing the kernels above the surface of the cylinder such distance as it is desired to cut them.

In the accompanying drawings, Figure 1 is a perspective view of my machine; Fig. 2, a longitudinal vertical section of the cylinder at the line x x of Fig. 3, and Fig. 3 a transverse vertical section of the same at the line y y.

Journaled within a suitable frame upon the shaft J is the cylinder A. The shell of this cylinder is metallic, and of a thickness approximately equal to the length of a kernel of oats. This is pierced with groups of holes, as indicated, of a size only sufficient to permit such kernels to fall endwise into them. Within the cylinder are a series of segments, B B, of a smaller cylinder, and to these are attached guide-rods C C, which, sliding in holes in the flanged ring D, attached to the cylinder-head, control the movement of the segments B B, and enable them to move radially to and from the inner face of the cylinder A. Projecting from the outside of these segments B B are a series of pins, cc, corresponding in number

and position with and sliding in the holes in the cylinder A. At each end of the cylinder A is a flat ring, E, attached to the supporting-frame, having upon the inner face a circular channel, e, in which run pins projecting from the ends of the segments B B. This circular channel e is set eccentrically below and in front of the cylinder A, so that the segments B, following this channel, withdraw the pins e e from the holes at the upper back part of the cylinder, so that oats at that part may stand wholly within the holes, and thence they continually project into said holes until, at the lower front of the cylinder, they entirely fill the holes, with their ends flush with its surface.

Attached to two supports, FF, is a knife, G, with its edge close to the surface of the cylinder. The oats are fed into a hopper, H, and fall endwise into the holes in the cylinder. A brush, I, serves to turn back all kernels that do not so enter, and also tends to turn the oats into any vacant holes. The oats, standing in the holes, are carried toward the knife G. As they approach it they are by the pins ce partially forced outward, and the part projecting above the face of the cylinder is cut off by the knife G.

By having a succession of knives attached to the supports F F the kernels may be cut into a number of particles of any desired size.

I claim as my invention—

An oatmeal-machine consisting of a cylinder perforated with holes, in which the grain stands, a fixed knife lying close to the surface of the cylinder, and pins to force outward the grain to be cut, substantially as herein described.

GEORGE AYLIFFE.

Witnesses:

C. P. HUMPHREY, H. E. HOWARD,