

(No Model.)

D. BROWN.  
OATMEAL MACHINE.

No. 380,177.

Patented Mar. 27, 1888.

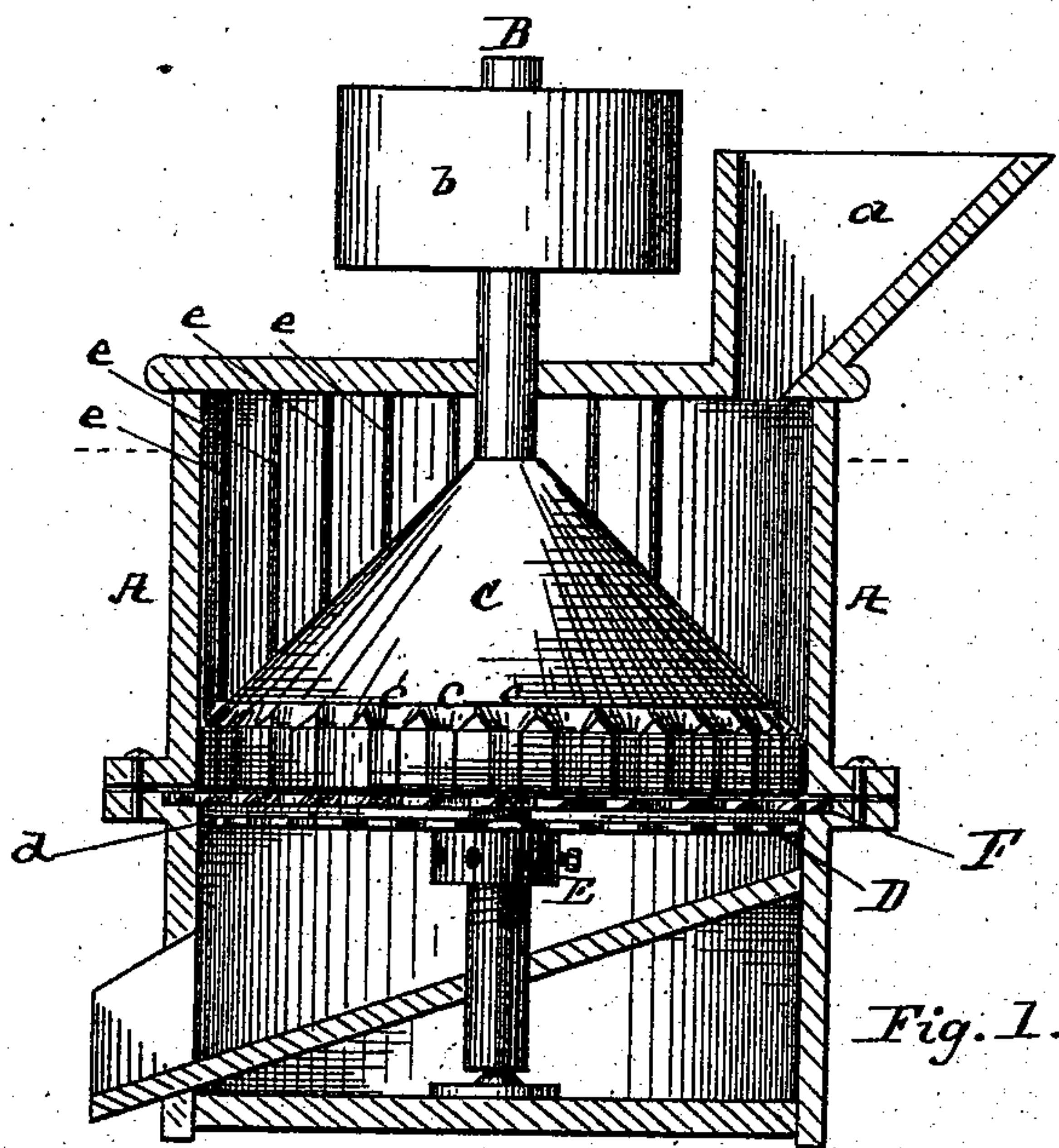


Fig. 1.

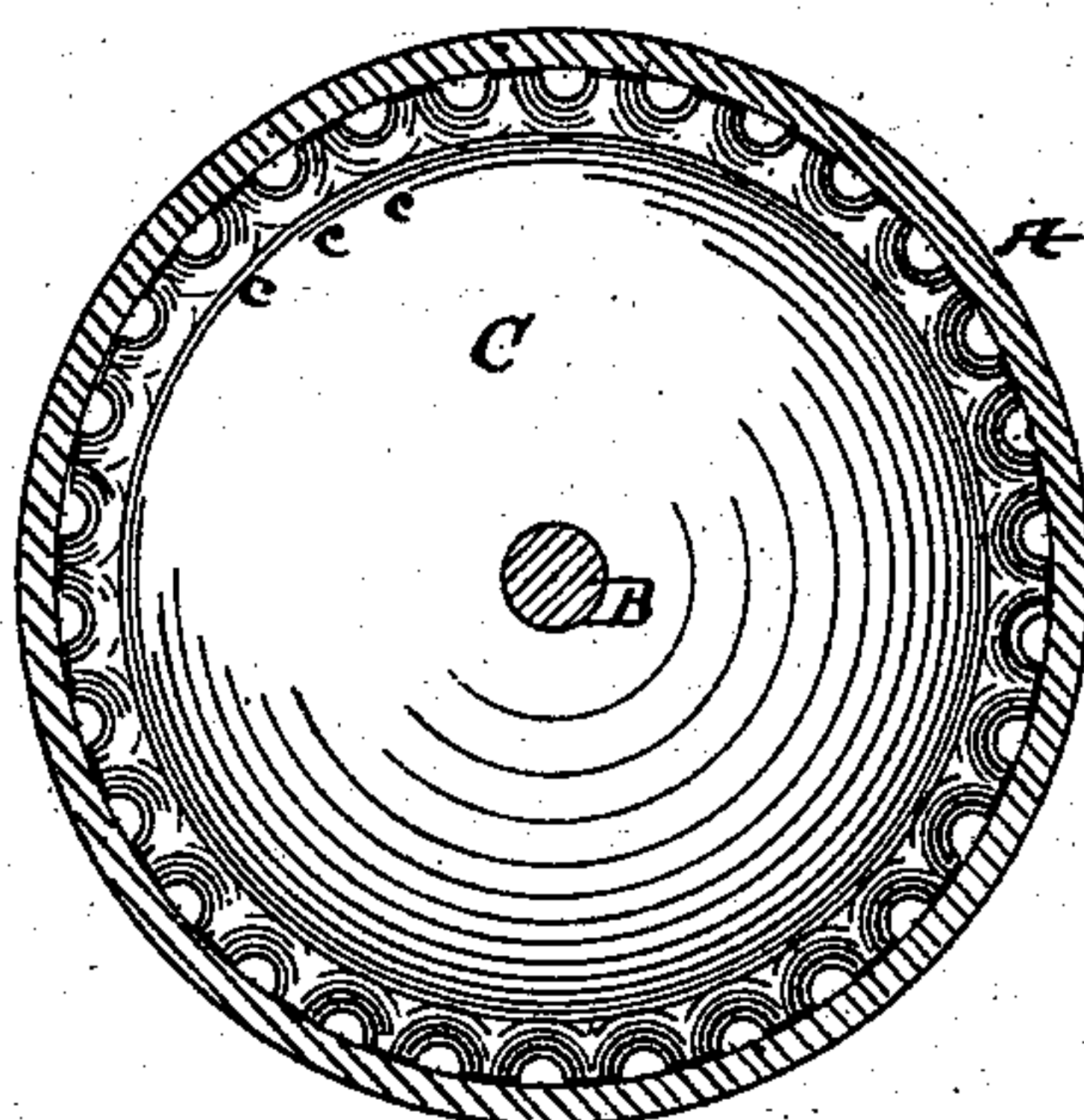


Fig. 2.

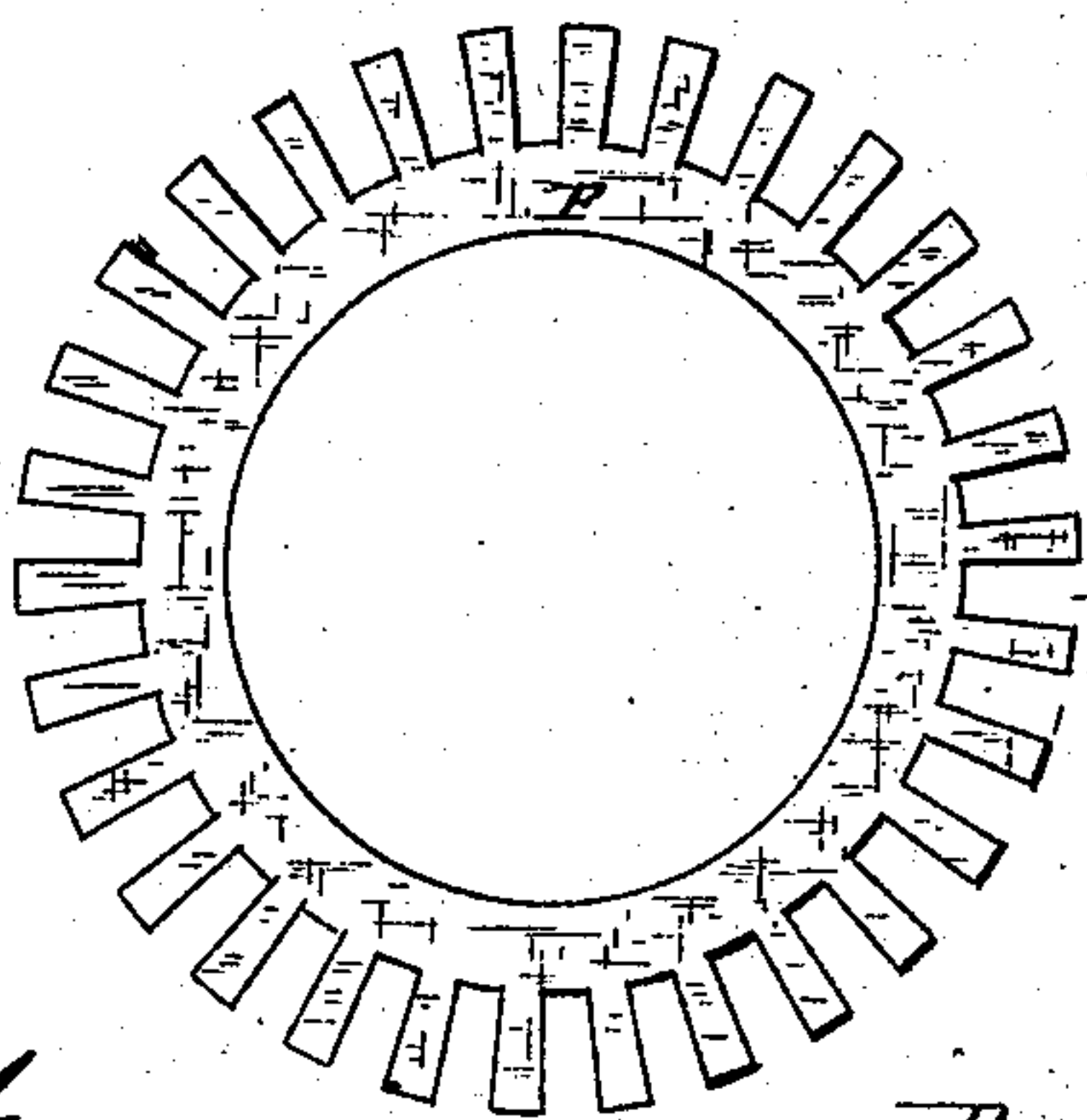


Fig. 3.

Witnesses:

*Dayton A. Doyle*  
*J. C. Boyer*

Inventor:

*David Brown;*  
*by C. Humphrey, Atty.*



# UNITED STATES PATENT OFFICE.

DAVID BROWN, OF CUYAHOGA FALLS, OHIO, ASSIGNOR OF ONE-HALF TO  
JAMES A. VAUGHN, OF SAME PLACE.

## OATMEAL-MACHINE.

SPECIFICATION forming part of Letters Patent No. 380,177, dated March 27, 1888.

Application filed April 24, 1886. Serial No. 199,992. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID BROWN, a citizen of the United States, residing at Cuyahoga Falls, 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 relates, generally, to improvements in oatmeal-machines, which embody three essential elements, viz: a metallic body containing apertures of such size that grain-kernels must enter them endwise, a device which permits or compels the grain-kernels to project beyond one face of the body which contains the apertures, and a knife or shear contiguous to the face from which the grain-kernels project, which is passed by said face and shears the projecting portions of grain. It has special relation to improvements in that class of oatmeal-machines in which the grain-holding apertures consist of semicircular grooves or notches in the moving body adjacent to a stationary plane face.

The objects of my invention are to increase the capacity of the machine by devices which will tend to feed the grain more readily into the apertures, to simplify the construction and lessen the number of parts, and thereby decrease the liability of breaking and disarrangement, and to decrease the cost of a machine for a desired product.

My invention consists in the construction and combination of devices illustrated in the accompanying drawings, as hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 is a vertical central section of my improved oatmeal-machine; Fig. 2, a plan of the conical grooved wheel, the shaft and case being shown in section; and Fig. 3, a plan of the knife-plate.

Within a cylindrical case, A, consisting of two parts bolted together, the interior of the upper part opposite the grooved face of the wheel C being accurately turned to a true circle, is centrally journaled a shaft, B, on which is mounted a conical wheel, C, the outer face of which is parallel to its axis and contains a series of semicircular grooves, *c*, beveled outward at their upper ends.

Mounted on the shaft B, beneath the wheel C, is a disk, D, of the same diameter as the

wheel C, notched in its outer edge, leaving a series of radial arms, *d*, equal in number with and arranged to register accurately beneath the grooves *c* and arrest the kernels of grain passing through said grooves. A nut, E, on the shaft B affords means to raise or lower the disk D.

Between the disk D and the lower face of the wheel C, and contiguous to the latter, is the knife F, which consists of an annular disk provided with radial blades which project across the line of the semicircular grooves and have their outer ends clamped between the upper and lower parts of the case A.

In operation, the shaft B is revolved by the pulley *b*, carrying the wheel C and disk D. Grain is fed through the hopper *a*, and the kernels, falling on the wheel C, enter endwise the grooves *c*, but are arrested from falling through by the arms *d* until the projecting parts are sheared by the radial blades of knife F.

The size of the particles of meal is regulated by raising or lowering the disk D by the nut E.

Attached to the top of the case A, near the inside of the same, is a series of rods, *e*, which project downward nearly to the wheel C, agitate the grain, prevent it being carried around by the wheel, and cause it more readily to enter the grooves.

I claim—

In an oatmeal-machine, the combination, with a cylindrical vertical case and a vertical shaft journaled centrally therein, of a conical wheel mounted on said shaft, having an outer vertical face close to the inside of said case and provided with vertical grooves, a disk mounted on said shaft beneath said wheel and provided with radial arms which register beneath said grooves, and a series of fixed blades between said wheel and disk, all constructed and arranged substantially as shown, and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of March, A. D. 1886.

DAVID BROWN.

Witnesses:

ORLANDO WILCOX,  
GEO. PARKS.