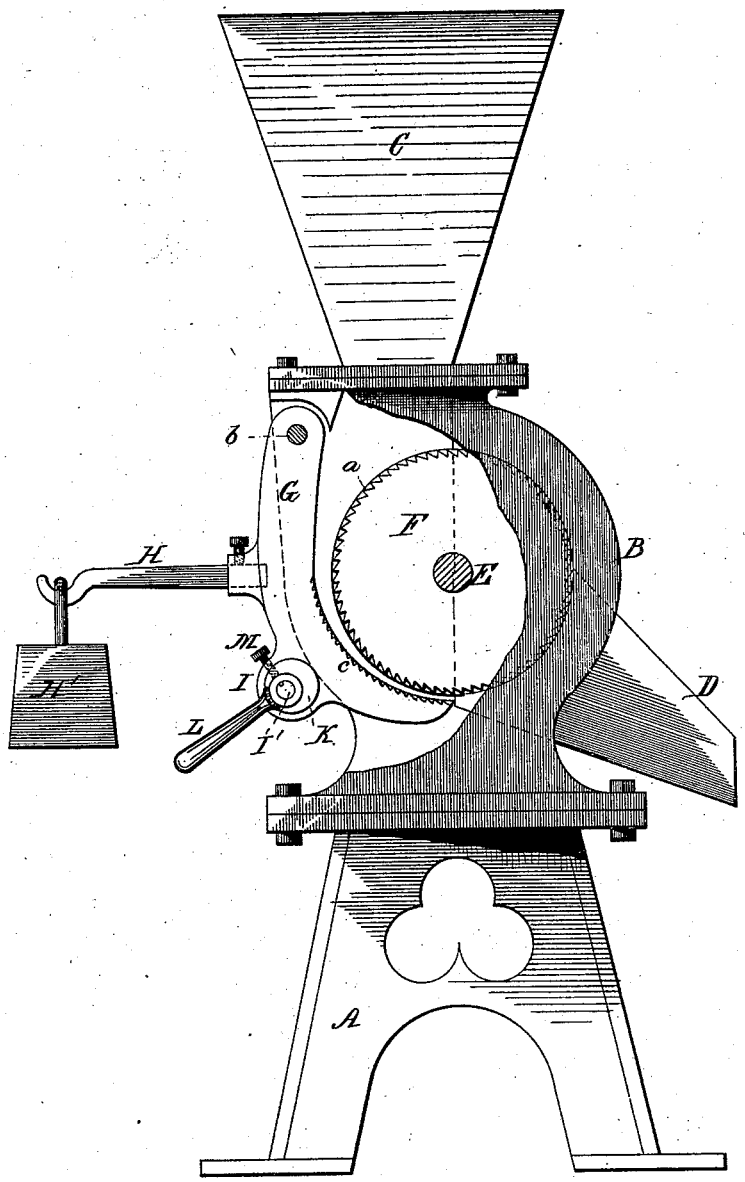
(No Model.) 2 Sheets—Sheet 1.

E. RHODES.

GRINDING MILL.

No. 294,673. Patented Mar. 4, 1884.

Fig. 1.



Witnesses:
W. C. Jordinston
John Adams.

Inventor
Ezra Rhodes
by Franck D. Johns
his Attorney.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

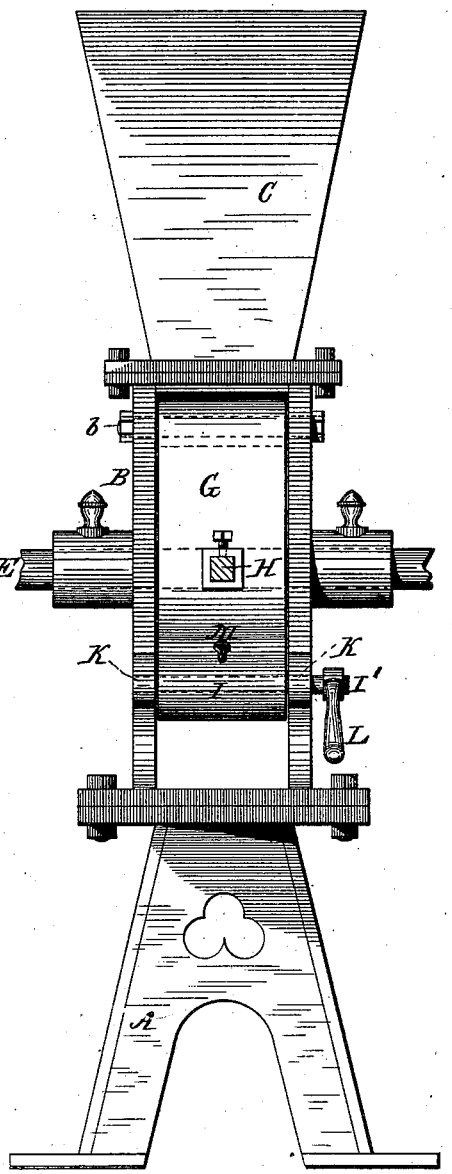


Fig. 4.

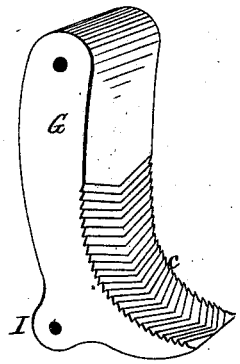
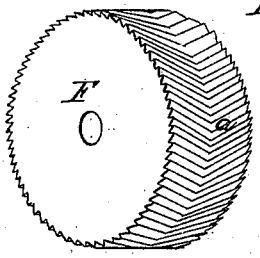


Fig. 3.



Witnesses:

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John Adams.

Inventor:

Ezra Rhodes

by Franck D. Johns

his Attorney.

UNITED STATES PATENT OFFICE.

EZRA RHODES, OF CLEVELAND, OHIO, ASSIGNOR OF TWO-THIRDS TO WILLIAM R. EYNON AND JAMES W. FIELD, BOTH OF SAME PLACE.

GRINDING-MILL.

SPECIFICATION forming part of Letters Patent No. 294,673, dated March 4, 1884.

Application filed November 28, 1883. (No model.)

To all whom it may concern:

Be it known that I, EZRA RHODES, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Grinding-Mills; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in mills for grinding corn, coffee, or other grains, in which the grade of grinding can be regulated as desired; and it consists in certain novel constructions and combinations of parts, all of which I will now proceed more particularly to describe and claim, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section. Fig. 2 is an end view; Fig. 3, a perspective of the cylinder; Fig. 4, a perspective of the concave.

Referring to said drawings, A is the base of the mill, B the casing, C the hopper, and D a discharge-spout leading from the casing.

E is a shaft journaled in the sides of the casing.

F is a metal cylinder mounted on the shaft E, the periphery of said cylinder being provided with teeth *a*, as shown in Fig. 3. One end of the casing is cut away, and in the opening thus made is hung the metal concave G. *b* is a bolt on which the concave is hung. Said concave is provided with teeth *c*.

H is an arm secured to the outside of the concave, on the end of which is hung a weight, H′, which serves to hold the concave against the cylinder and permits it to be forced away when any hard substance comes between the cylinder and concave.

I is a bearing on the back of the concave, in which is journaled the shaft I′.

K are eccentrics mounted on the shaft I′ and bearing against the outside of the casing, thus regulating the position of the concave with reference to the cylinder, said eccentrics being turned as it is desired to move the concave to or from the cylinder, and thus produce a fine or coarse grade of grinding.

L is a handle on the end of the shaft I′, by means of which said shaft is turned and the eccentrics adjusted to the proper position.

M is a set-screw for holding the shaft at the point of adjustment.

The operation of my machine is as follows: The eccentrics being set to regulate the grade of grinding desired, the weight forces the concave toward the cylinder until the eccentrics touch the casing and hold said concave in that position. The grain is then poured into the hopper, the cylinder revolved, and the grain fed between the cylinder and concave, where it is subjected to the grinding process and is delivered by the discharge-spout.

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

The herein-described grinding-mill, comprising the casing B, cylinder F, concave G, arm H, weight H′, shaft I′, provided with the eccentrics K and handle L, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

EZRA RHODES.

Witnesses:
GEORGE G. SOWDEN,
C. F. WHIPPLE.