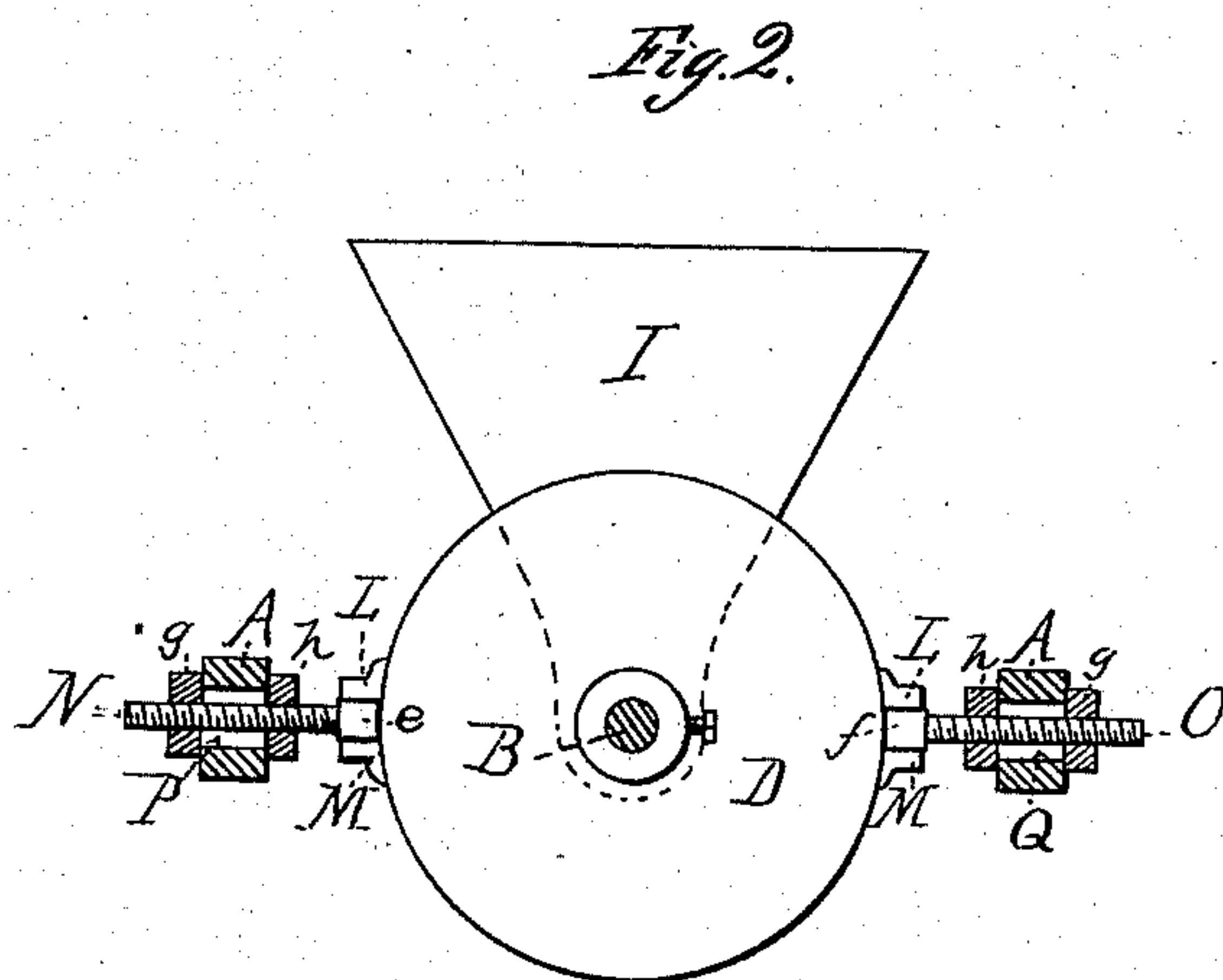
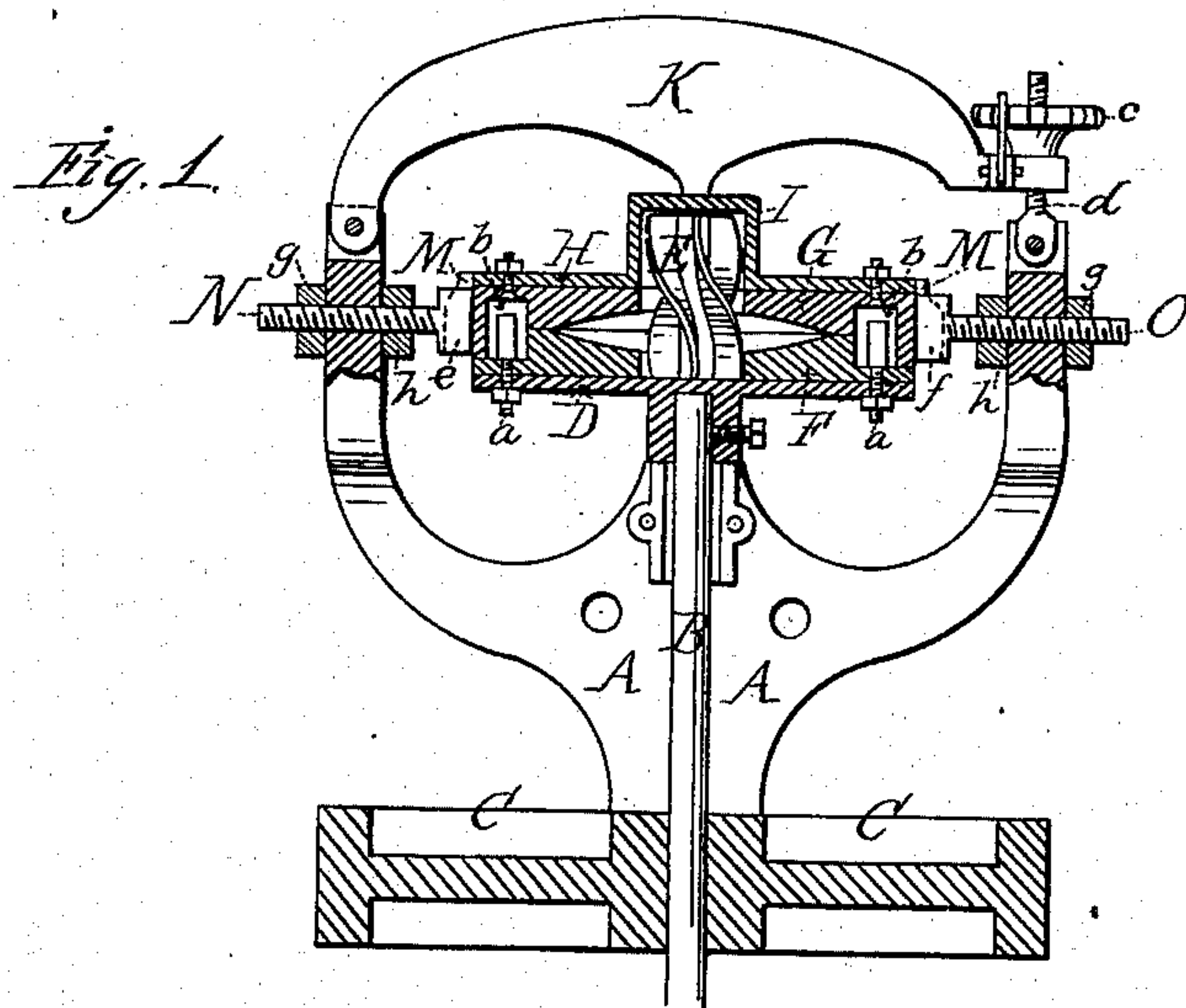


(No Model.)

A. S. BAKER.
Feed Grinding Mill.

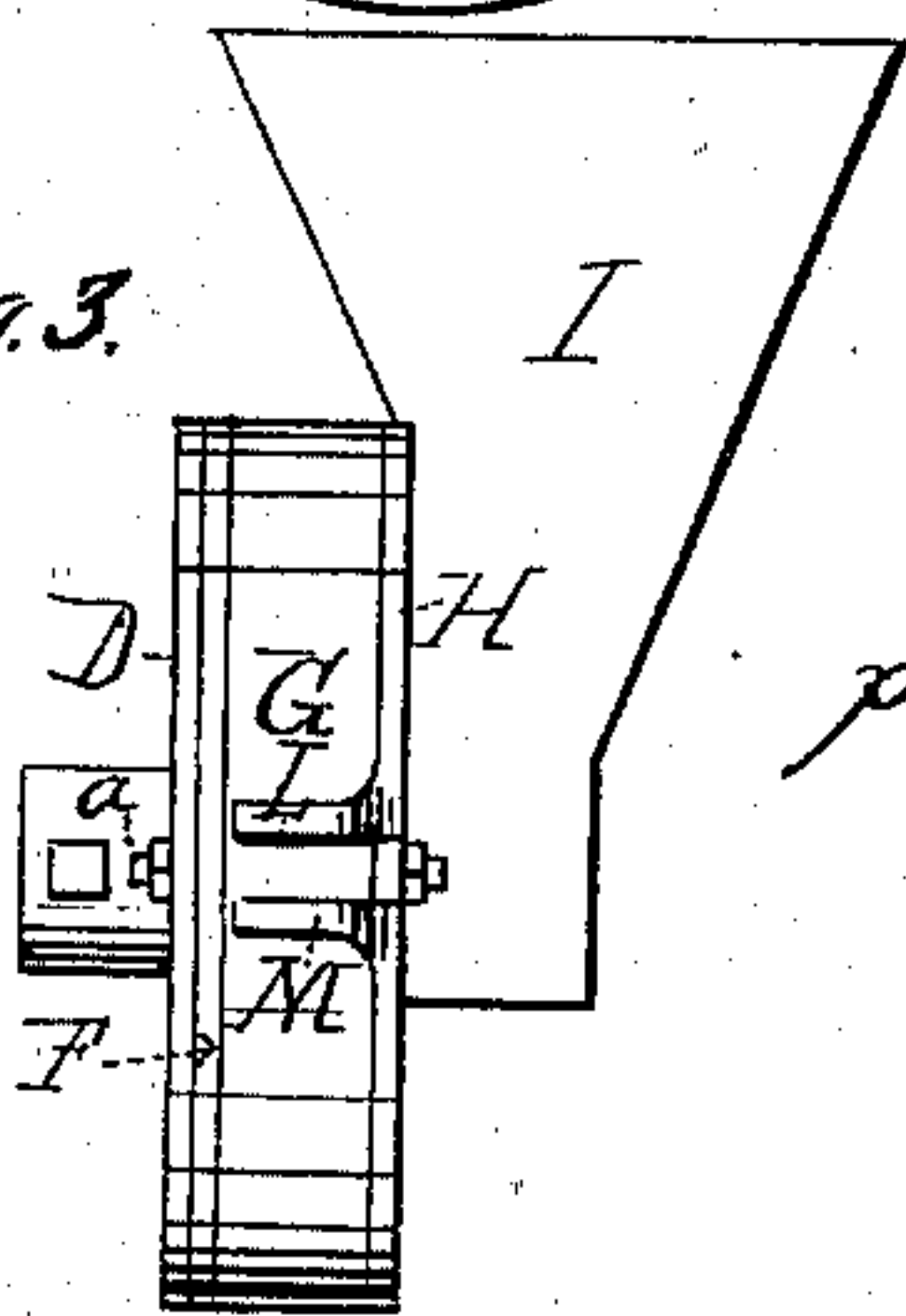
No. 239,638.

Patented April 5, 1881.



Witnesses:
F. B. Townsend
Emil H. Frommann

Fig. 3.



Inventor:
Allen S. Baker.

per Lotz & Dyer,

Attorneys.

UNITED STATES PATENT OFFICE.

ALLEN S. BAKER, OF EVANSVILLE, ASSIGNOR TO GEORGE AND ALBERT RAYMOND, OF WAUPUN, WISCONSIN.

FEED-GRINDING MILL.

SPECIFICATION forming part of Letters Patent No. 239,638, dated April 5, 1881.

Application filed July 15, 1880. (No model.)

To all whom it may concern:

Be it known that I, ALLEN S. BAKER, of Evansville, in the county of Rock and State of Wisconsin, have invented a certain new and useful Improvement in Feed-Grinders, of which the following is a specification.

The object I have in view is to produce means for centering the burrs of feed-grinders, which will be simple and cheap in construction, can be easily and quickly adjusted, and rigidly locked in place, and will allow the burrs to be removed and replaced in position without disturbing the adjustment of such devices; and my invention consists in the peculiar contrivances for accomplishing this object, as fully hereinafter explained, and pointed out by the claims.

In the accompanying drawings forming a part hereof, Figure 1 is a top view of the feed-grinder with the burrs in horizontal section; Fig. 2, an elevation from the inner side of the burrs, the frame being sectioned in front of the adjusting-bolts; and Fig. 3 a side elevation of the hopper and the burrs removed from the frame.

Like letters denote corresponding parts in all the figures.

A is the frame of the grinder; B, the driving-shaft, and C the wheel to which the power is applied. The grinder can be double or single; but since the double grinder is simply two sets of burrs mounted in opposite ends of the same frame and run by the same wheel and shaft, the description of the single feed-grinder will serve as well for the double machine.

To the end of the shaft B is secured, by a set-screw, a plate, D, which carries the screw-conveyer E and to which the revolving burr F is secured by bolts *a*. The heads of the bolts *a* project into the meal-chamber *b*.

G is the stationary burr, which is bolted to the plate H, which is cast in one piece with the hopper I. The arms of the frame, between which the burrs are located, are connected by a yoke, K, pressing at its center on the hopper. The yoke is pivoted to one of such arms, and at its other end is forked, and is held by a thumb-nut, *c*, turning on a swinging bolt, *d*, pivoted to the other of such arms. A device

is provided for locking the thumb-nut in any desired position.

I do not lay claim to any of the devices so far particularly described. It is essential, however, that the machine should be provided with means for centering the burrs. This I do by the following described novel contrivance.

The hopper-plate H has cast on each side, on its periphery opposite the center of the plate, two lugs, L M, located one above the other and projecting over the edge of the stationary burr G. These lugs form between them grooves, which inclose and slide on the flat heads *e f* of screw-threaded T-bolts N O. The flat heads *e f* serve as ways upon which the lugs slide. The screw-threaded bolts N O pass through vertical slots P Q in the arms of the frame, and are held therein by nuts *g h* on both sides of such arms. The slots P Q are horizontally just large enough to receive the bolts, but vertically they are elongated, so that the vertical position of the stationary burr can be adjusted by moving the bolts up or down in the slots. By adjusting the bolts lengthwise, the lateral position of the stationary burr can be regulated, while by means of the nuts *g h* the bolts can be clamped rigidly in the desired position. As usual in this class of machines, the yoke holds the stationary burr inwardly against the revolving burr.

In centering the burrs the clamping-nuts are usually turned back so as to allow the bolts to play loosely in their slots. The lugs L M are then slipped over the flat heads of the T-bolts and the stationary burr is carefully placed in the right position. The yoke is swung against the hopper and is secured tightly, so as to prevent any movement of the stationary burr. The bolts are then clamped in position by their nuts, and the position of the burrs is thereby fixed.

The burrs can be taken out at any time without disturbing the bolts or in any way affecting the adjustment, and when replaced will be correctly centered by the bolts.

I do not claim, broadly, guides to sustain a grinding-disk which are adjustable both laterally and vertically, being aware that such

guides were made by others prior to the date of my invention.

What I claim as my invention is—

5 1. In a feed-grinder, substantially as described, the combination, with a vertical revolving burr, of a vertical stationary burr, and screw-threaded bolts secured by nuts in vertical slots in the frame, the heads of such bolts forming adjustable ways upon which the stationary burr slides, as set forth.

10 2. In a feed-grinder, the combination, with a vertical revolving burr, of a vertical station-

ary burr, the hopper secured to the stationary burr, a yoke for holding the stationary burr inwardly, and screw-threaded bolts secured by 15 nuts in vertical slots in the frame, and having flat heads upon which the stationary burr and hopper slide, substantially as described and shown.

ALLEN S. BAKER.

Witnesses:

J. H. HOSKINS,
JOHN F. PHIFER.