2 Sheets—Sheet 1.

A. H. WAGNER.

Grinding Mill.

No. 37,796. Patented Feb. 24, 1863.

Fig: 1.

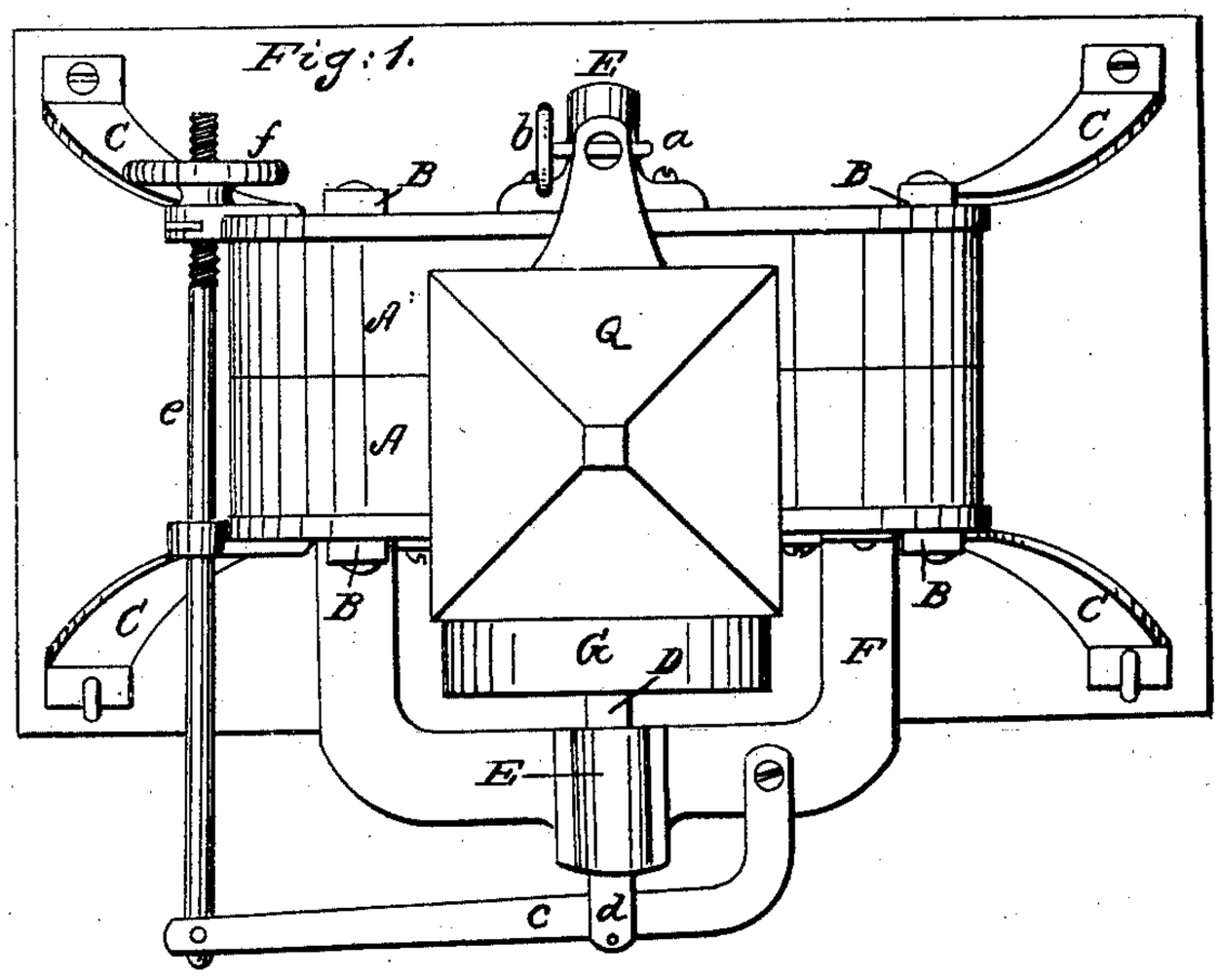
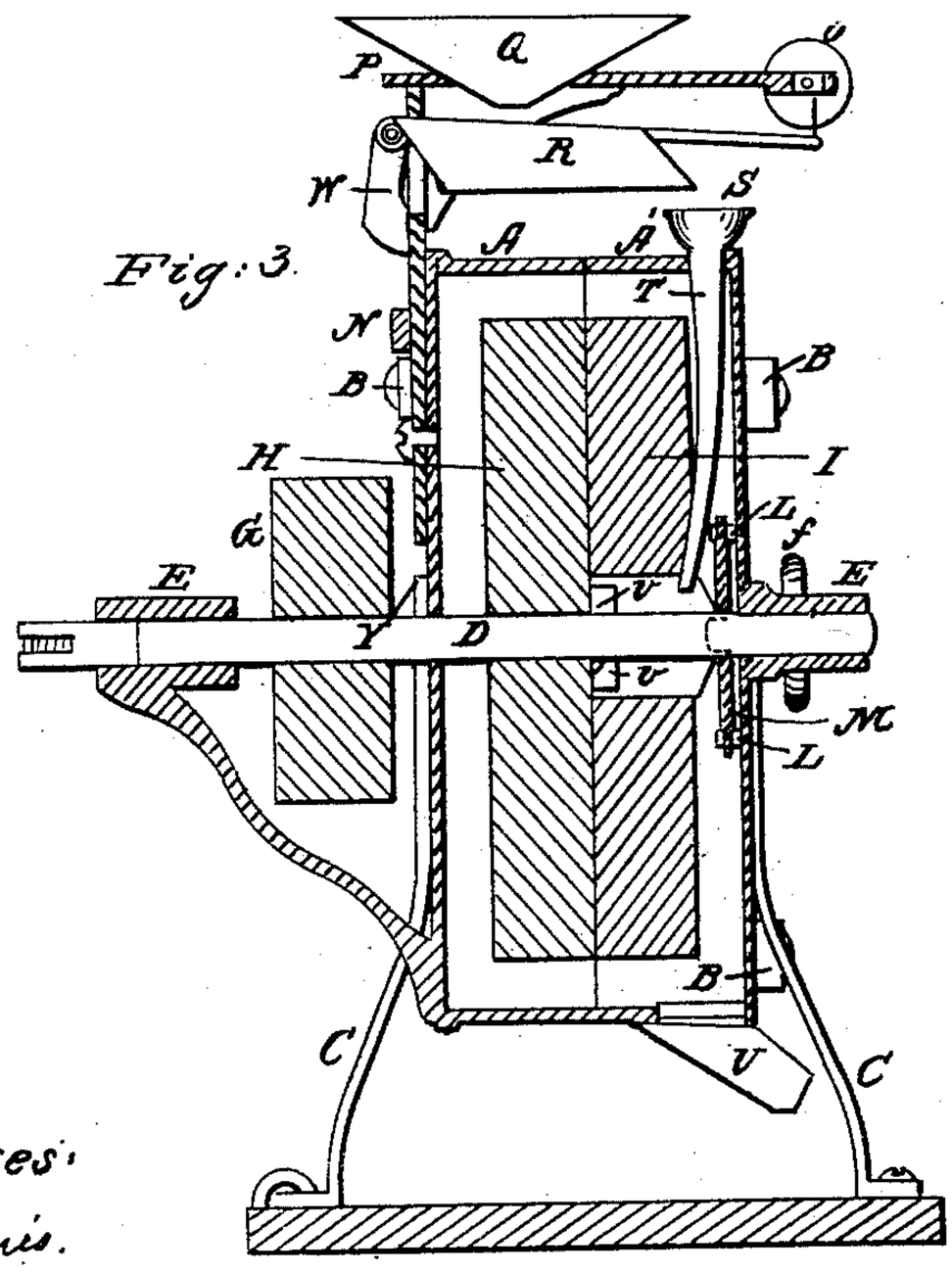


Fig: 3.



Witnesses:
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Chas. Hadaway.

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By his Atty:
J. Dennis Jr.

2 Sheets—Sheet 2.

A. H. WAGNER.

Grinding Mill.

No. 37,796. Patented Feb. 24, 1863.

Fig: 2.

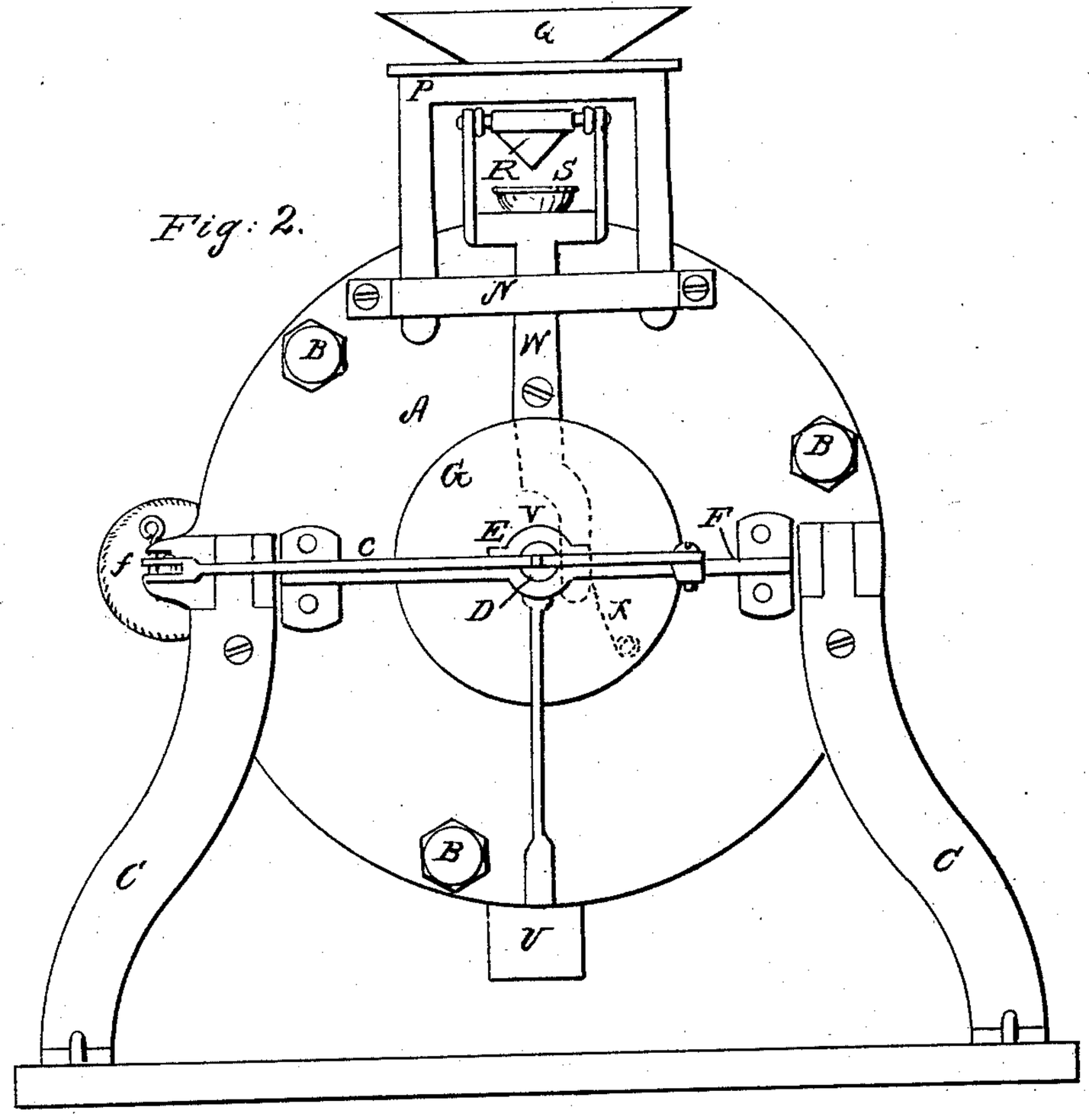


Fig: 4.

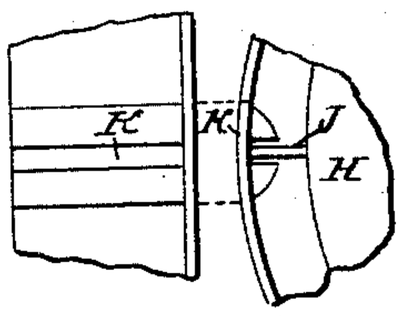
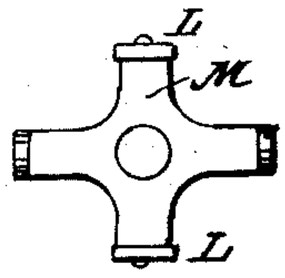


Fig: 5.



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UNITED STATES PATENT OFFICE.

AWSBENT H. WAGNER, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND CHARLES KAESTNER, OF SAME PLACE.

IMPROVEMENT IN GRINDING-MILLS.

Specification forming part of Letters Patent No. **37,796**, dated February 24, 1863.

To all whom it may concern:

Be it known that I, AWSBENT H. WAGNER, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Mills for Grinding; and I do hereby declare that the same are described and represented in the following specification and drawings.

To enable others skilled in the art to make and use my improvements, I will proceed to describe their construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

Figure 1 is a plan or top view. Fig. 2 is an elevation of my improved mill. Fig. 3 is a section on the line. Fig. 4 is a portion of the case, with pivot J and groove K. Fig. 5 is the stands L L and frame M.

The nature of my improvements consists in the construction and arrangement of a vibrating frame having four bearings, by which means the stationary stone I can adjust itself vertically and horizontally to the running-stone; also, in some grooves in the case and pivots on the stationary stone to support it, with devices for holding and shaking the shoe and for agitating the grain and throwing it into the grooves of the stone.

In the accompanying drawings, A A′ are the two parts of a metal case, which may be made in the form shown or in such other form as will answer the purpose, and provided with holes for the bolts B B, which hold the two parts of the case together. This case is supported by four legs, C C, two of which may be fastened to the floor with screws and the other two with staples, so that by removing the screws the staples form hinges on which the mill may be turned down and laid on its side, to open the case and sharpen the mill. The shaft D turns in the boxes E E, one of which is supported by the frame F, fastened to the case A, and the other is fastened to the case A′. This shaft D has the pulley G fastened upon it for a belt from some moving power to turn it and operate the mill. The stone H is fastened to the shaft D and is turned by it. The stone I is stationary, and is provided with two pivots, J J, on its periphery, opposite to each other horizontally, which move freely in two horizontal grooves, K K, in the case A′, which pivots and grooves support the stationary stone, as shown in Fig. 4. On the inside of the case A′ there are two stationary stands, L L, perforated for the pivots of the frame M, which frame is perforated for the shaft D, which passes through it. The perpendicular arms of this frame are between the stands L L, and the ends of the horizontal arms are bent out at a right angle and rounded, so that the stone I will rock freely on them, and as the stand rocks in one direction itself and the stone rocks on the stand in the opposite direction, the face of the stone I readily and easily adapts itself to the face of the running-stone H, so as to grind the grain supplied between them. The bracket N is fastened to the case A to hold the legs of the hopper-stand P, which supports the hopper Q over the shoe R, which conducts the grain from the hopper to the feeding-tube S, through which the grain runs into the tube T in the center of the stone I, where it is agitated by the floats V V and thrown out between the stones, to be ground, and after it is ground the meal escapes through the spout U on the case A′. One end of the shoe R is hung on a rod in the vibrating stand W, which swings on a screw in the case A, and is pressed against the spring X (shown by dotted lines) by the tappet Y in the shaft D, to agitate the shoe and shake the grain into the feeding-tube S. The lower end of the shoe R is supported by a strap from the adjusting-rod *a* in the stand P, which rod is turned by the hand-wheel *b*. The lever *c* is hung to the frame F, and acts on the rod *d* in the box E, which rod acts on the shaft D to press the running-stone toward the stationary one and adjust it to make the meal coarse or fine, as desired. One end of the lever *c* is connected to the adjusting-screw *e*, which traverses in stands on the case, and is operated by the hand-wheel nut *f*. (Shown in the drawings.)

I believe I have described and represented my improvements in mills for grinding so as to enable any person skilled in the art to make and use them without further invention or experiment.

I will now state what I desire to secure by Letters Patent, to wit:

1. The peculiar construction of the vibrat-

ing frame M, having four bearings, by which means the stationary stone I can adjust itself vertically and horizontally to the running-stone.

2. The pivots J J, grooves K K, for holding the stone I, when combined with my devices for holding and shaking the shoe R and the floats or agitators V V, arranged and operating as described.

AWSBENT H. WAGNER.

Witnesses:
CONRAD L. DIEHL,
CHARLES KAESTNER.