

S. G. ROLLINS.

Improvement in Grinding-Mills.

No. 130,750.

Patented Aug. 20, 1872.

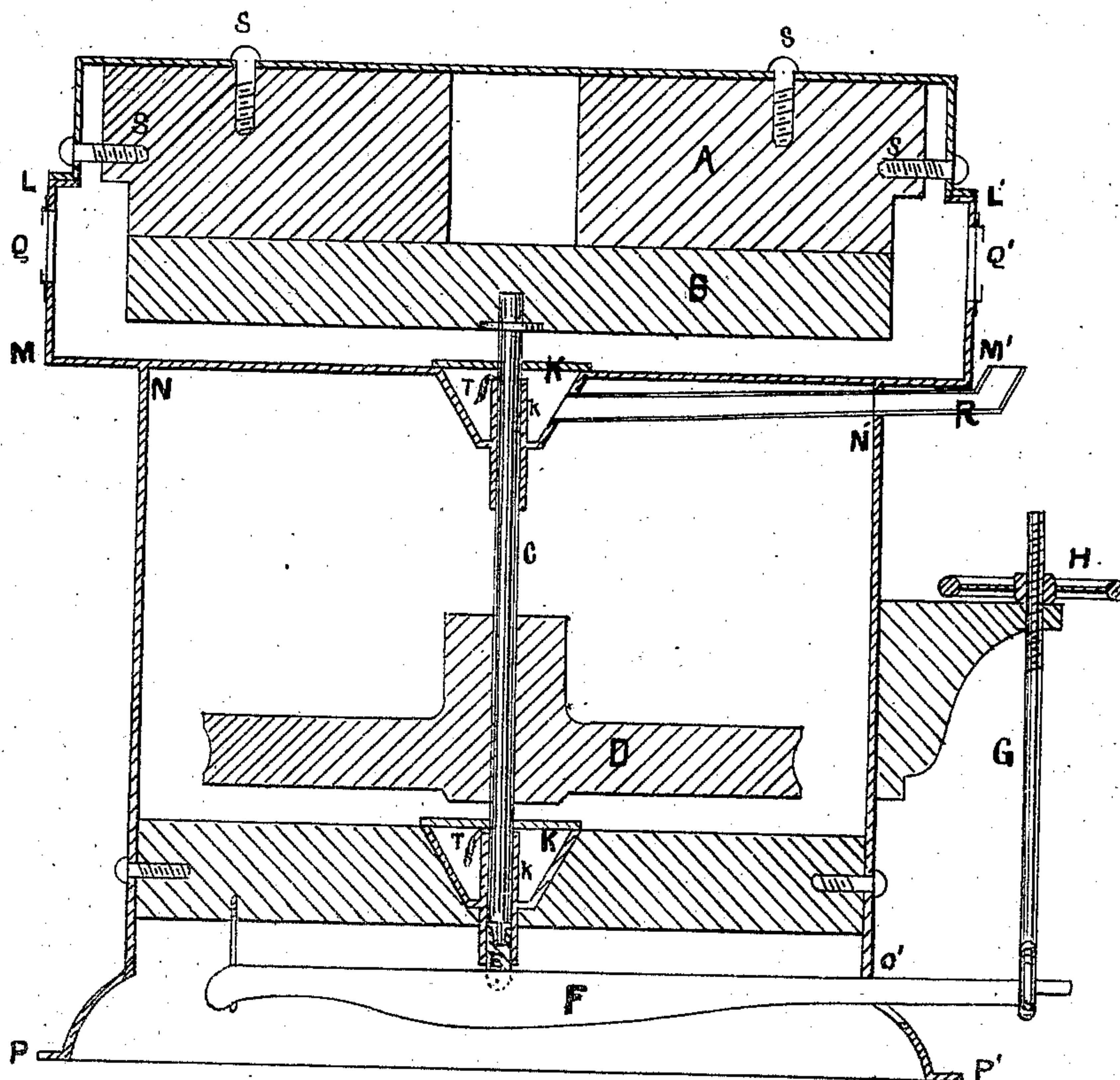


Fig. 1

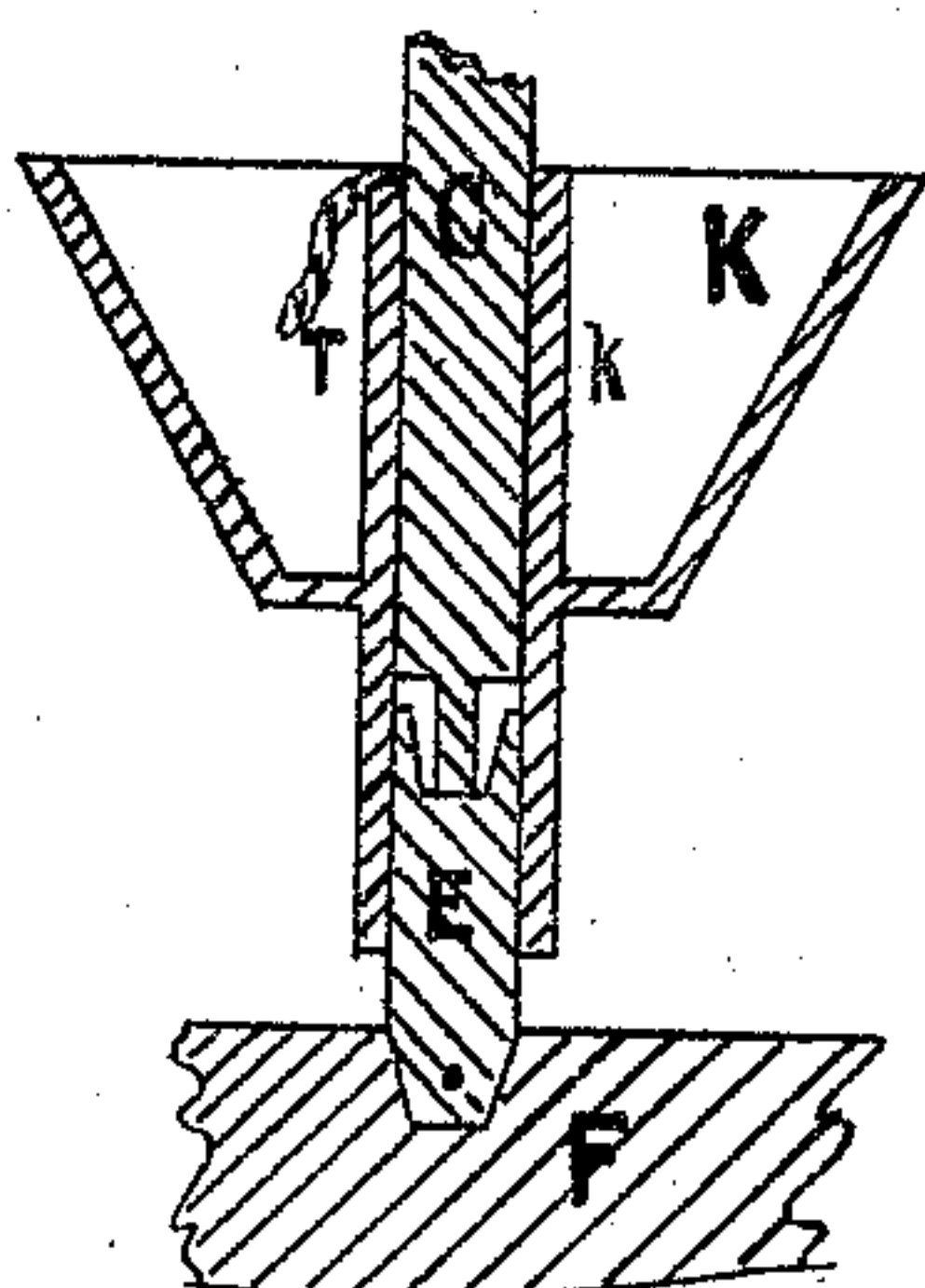


Fig. 2

WITNESSES

Frank C. Parker
N. M. Lowe

INVENTOR

Samuel G. Rollins
per William Edson atty

UNITED STATES PATENT OFFICE.

SAMUEL G. ROLLINS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN GRINDING-MILLS.

Specification forming part of Letters Patent No. 130,750, dated August 20, 1872.

To all whom it may concern:

I, SAMUEL G. ROLLINS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Burr-Mills, of which the following is a specification.

The Nature of the Invention.

The nature of my invention consists in a new method of supporting the driving or stone-carrying spindle of the mill, and embodies an oil-cup and housing cast into the upper plate of the casing, and a peculiar arrangement of the step and oil-cup and housing of the lower bearing, all of which will be best understood by reference to the specification.

Description of the Accompanying Drawing.

Figure 1 represents a vertical section through the center of my mill. The plan being circular, requires no drawing. Fig. 2 is a vertical section through the lower oil-cup and step.

General Description.

Let A represent the upper or fixed stone, which may be adjusted by the screws *s s s s*. B is the lower or running stone, and is supported on the shaft C, in the usual manner. D is the driving-pulley attached to the shaft C. E is a step made as hereinafter described, and resting upon the adjusting-lever F. This adjusting-lever F may be raised or lowered by the hand-wheel H, which operates through the screw-bolt G. The casing of my mill is made as shown in the drawing, and consists of the upper casing L M L' M', the top disk M M', the oiler K, the side casing N O N' O', and the lower flange O P O' P'. This casing is provided with two openings or doors, Q Q',

through which the operator may look when adjusting the stones. The oil-box K is cast into the upper plate M M', and is provided with a tube, *k*, and a wick, T, so that the journal will be provided with oil as long as there is any in the cup K. The step of the spindle C is made as shown in Fig. 2. The recess in the upper part of the step E is made much larger than the end of the spindle C, so that the recess may contain a quantity of oil, and also afford a firm bearing for the spindle. The lateral bearing for the spindle is furnished by the tube *k*, so that the step E acts only as a vertical support for the spindle, and as an oil-cup.

The advantages of my device are, first, the foot of the shaft rests in and upon a step that is independent of the oil-cup and housing that gives the lateral support, and consequently any wearing of the step does not affect the true running of the stone. The step being cup-shaped, as shown in Fig. 2, serves to catch the drip of the oil-cup that furnishes oil for the lateral bearing. Second, the upper housing of the shaft C, together with the oil-cup, is cast into the upper plate, and hence requires no extra fitting and adjustment.

I claim as my invention—

1. The housing L M N O P and oil-cup K, when the same are cast together and in one piece, as and for the purpose described.
2. The combination and arrangement of the foot of shaft C, tube *k*, and step E, as and for the purpose set forth.

SAMUEL G. ROLLINS.

Witnesses:

FRANK G. PARKER,
CHAS. J. BATEMAN.