H. B. MOORE.

Pulverizing Machines.

No. 198,993. Patented Jan. 8, 1878.

Fig. 2

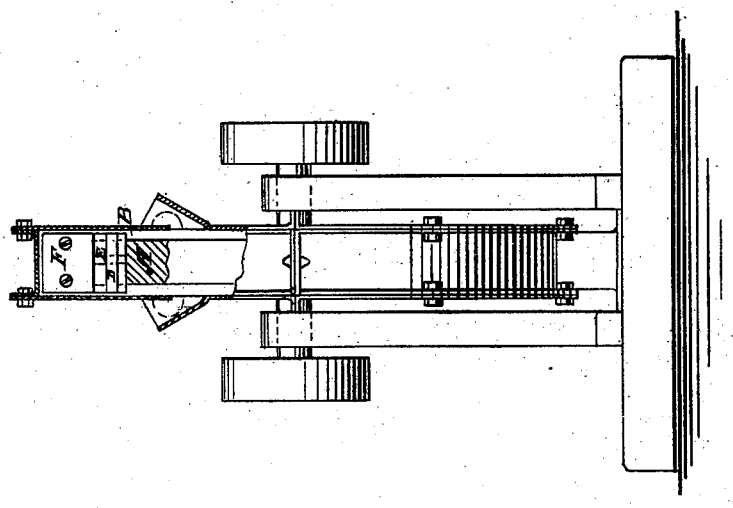

Fig. 1

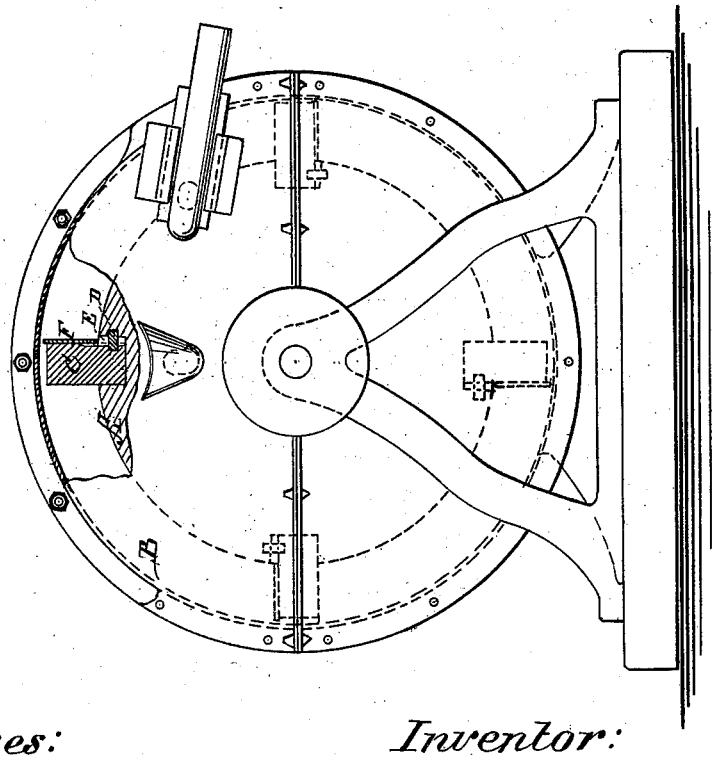

Fig. 3

Witnesses:

E. A. Thayer.

Wm. J. Morgan.

Inventor:

Harrison B. Moore,

By A. P. Thayer, atty.

UNITED STATES PATENT OFFICE.

HARRISON B. MOORE, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PULVERIZING-MACHINES.

Specification forming part of Letters Patent No. **198,993**, dated January 8, 1878; application filed March 21, 1877.

To all whom it may concern:

Be it known that I, HARRISON BRAY MOORE, of Brooklyn, Kings county, and State of New York, have invented an Improvement in Pulverizing-Machines, of which the following is a specification:

The improvement, in this case, consists of the method of fastening the beaters to the revolving center hub or disk, by which they are revolved within the case in which the work is performed.

Figure 1 is a side elevation of a pulverizing-machine constructed according to my invention, with a part sectioned to show the improvement. Fig. 2 is partly a front elevation and partly a section, and Fig. 3 is a detail in plan view.

A is the revolving hub or disk, which is made to revolve within the case B, to carry the beaters C, which do the work by beating the substances to be treated against the sides of the case. These beaters are required to run very fast, and hence it becomes a matter of considerable importance to fasten them securely, particularly as by the heating and expanding of the metal they are liable to become loose while at work, although perfectly tight when at rest, and when loose they are liable to be thrown off with such violence as to do great damage to life and surrounding objects.

I, therefore, now propose to employ a key, D, fitted partly in the beater and partly in the hub, and going through the hub laterally, which key I propose to fasten by another key, E, fitted partly in the hub and partly in the beater, and going radially from the periphery of the hub through a slot in the key D; and in addition thereto I secure the key E by bolting the steel wearing-plate F employed on the face of the beater on over the head of the key E, thus making a combined fastening, which is certain to keep the beater secure so long as the wearing-plate keeps its position.

In the event of the wearing-plate being thrown off no great damage occurs, because it is not very heavy; but it gives sufficient warning to cause the stoppage of the mill for repairs.

The key E prevents the beater from escaping lengthwise out of the slot in which it is fitted in the hub.

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

1. The combination, with the beater C and the hub A, of the key D, arranged laterally in the hub and the beater, and the key E, arranged radially in the hub and the beater, and going through the key D, substantially as described.

2. The combination, with the beater C and the hub A, of the key D, arranged laterally in the hub and the beater, the key E, arranged radially in the beater and the hub and going through the key D, and the wearing-plate F, bolted on the beater over the head of the key E, substantially as described.

HARRISON B. MOORE.

Witnesses:

WM. J. MORGAN,

F. A. THAYER.