F. G. DORNER.
Millstone-Driver.

No. 209,961. Patented Nov. 19, 1878.

Fig. 1.

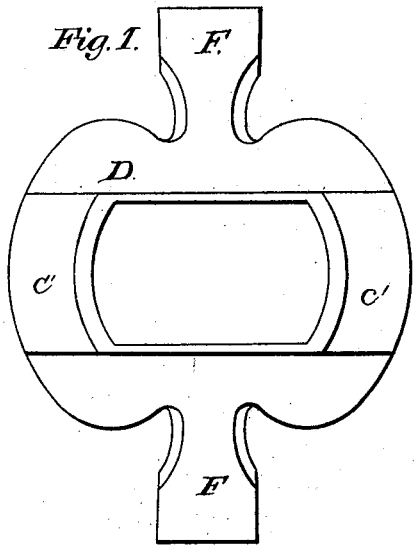


Fig. 2.

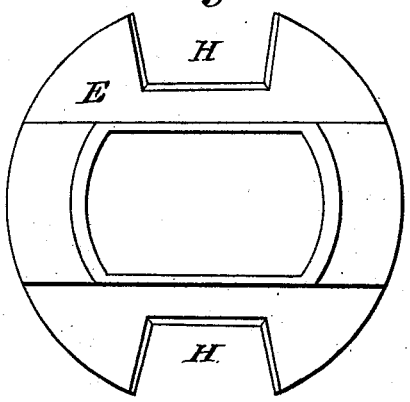


Fig. 7.

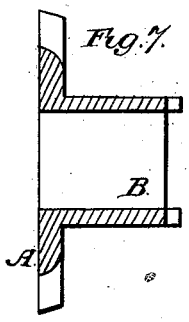


Fig. 3.

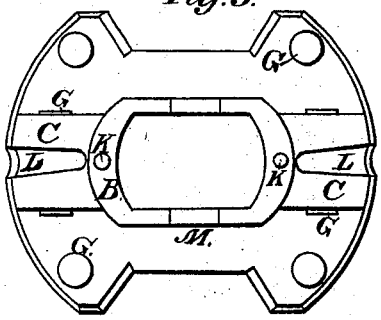


Fig. 4.

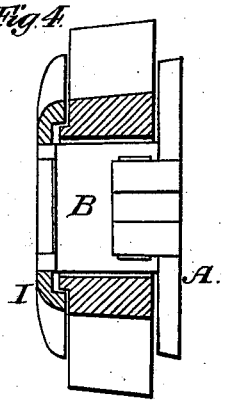


Fig. 5.

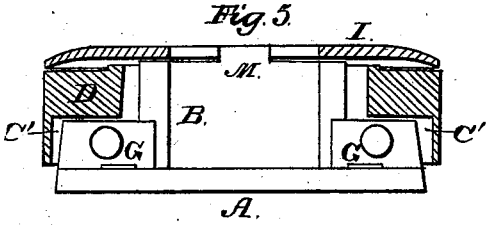
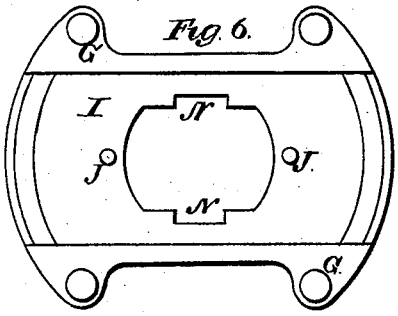


Fig. 6.



Attest:
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Atty.

UNITED STATES PATENT OFFICE.

FRED G. DORNER, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN MILLSTONE-DRIVERS.

Specification forming part of Letters Patent No. **209,961**, dated November 19, 1878; application filed July 15, 1878.

To all whom it may concern:

Be it known that I, FRED G. DORNER, of the city of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Millstone-Drivers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 represents a top view of the driving-rings adapted to be used with millstones having driving-boxes. Fig. 2 is a top view of the driving-ring used with the ordinary millstone-bails. Fig. 3 is a top view of the base-plate. Fig. 4 is an end view of all the parts together. Fig. 5 is a sectional side view of the same. Fig. 6 is the cap-plate detached. Fig. 7 is a sectional end view of the base-plate.

The object of my invention is to furnish improvements in millstone-drivers, by means of which the upper revolving stone adjusts itself automatically to the lower stone when running, and a steady uniform movement is obtained, and all tendency to a backlash motion of the stone is obviated, all of which is further explained by reference to the accompanying drawings, of which—

A represents the base-plate to the driver, which surrounds the spindle, and is provided with a box, B, and shoulders C, which serve as bearings for the driving-rings D and E. (Shown in Figs. 1 and 2.) G are friction-bearings for the driving-ring. They are constructed of either very hard wood or brass or other metal, and are inserted in the base-plate A, their ends projecting far enough only to prevent contact of the flat surfaces, that the driving-rings may move easily and readily adjust themselves. The driving-rings D and E have each longitudinal grooves C′ formed on the inner surface, which conform with the construction of the base-plate, and are each equally adapted to be used upon the base-plate A, as their interior construction is the same.

I have constructed two patterns of rings, that the driver may be more easily adapted to different millstone-hangings now in use, the base-plate and cap being adapted to all stone-hangings, while in some cases ring D will be more easily attached, and in others ring E is more easily attached.

Ring D is provided with horns F, which are adapted to be used on burrs which are provided with driving-boxes, while ring E is provided with recesses H, for the reception of the ordinary millstone-bails, the recesses H serving as an equivalent for the horns F on ring D. I is a cap-plate, which holds the ring in its place upon the base-plate. It is attached to the base-plate by screws J J, which pass through it into the edge of the box B, there being sufficient space between the cap and the base-plate for the ring to move backward and forward freely as the surfaces of the stones are adjusted.

K are screw-holes for the screws J, (shown in both cap and base plate.) L are grooves, through which the flour and dust escape from the surface of the shoulders C, that the bearings may not become obstructed therewith. M are shoulders, which extend through the slots N of the cap, and serve to secure it firmly to the box.

Having thus described my invention, I do not claim wood or brass friction-bearings, broadly, but only in the construction of this particular device; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. The base-plate A, having box B and shoulders C, provided with grooves L for the purpose of carrying off the flour and dust from the surface of the shoulders, substantially as set forth.

2. The combination of the driver E, having longitudinal groove C′, transverse to the axis of the recessed bearings H, with the base-plate A, provided with box B and shoulders C, substantially as and for the purpose set forth.

3. The base-plate A, having box B and shoulders C, provided with grooves L, in combination with the driver E, having longitudinal groove C′, transverse to the axis of the recessed bearings H, and cap-plate I, for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

FRED G. DORNER.

Witnesses:

JAS. B. ERWIN,

HENRY B. MCGARIGLE.