J. C. DANE.

Millstone-Driver.

No. 212,199. Patented Feb. 11, 1879.

Fig. 1.

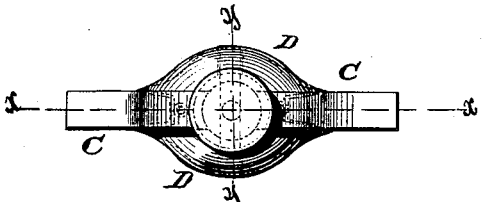


Fig. 2.

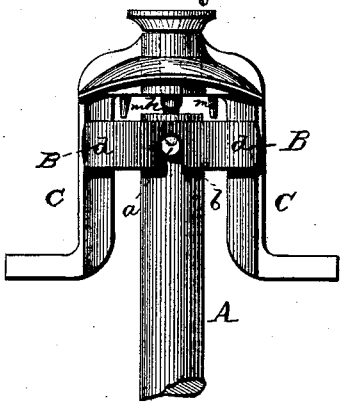


Fig. 3.

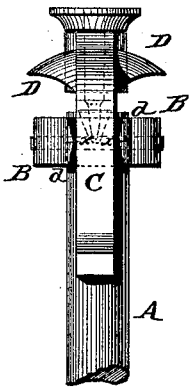


Fig. 5.

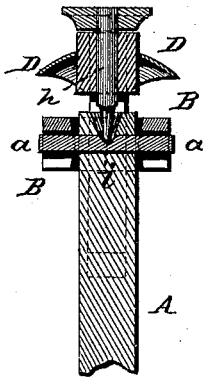


Fig. 4.

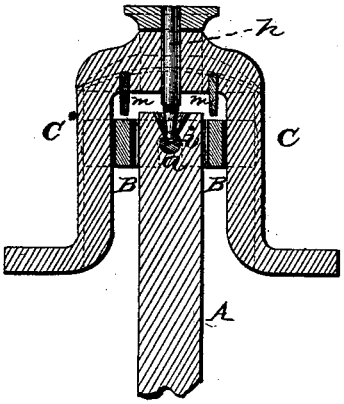


Fig. 6.

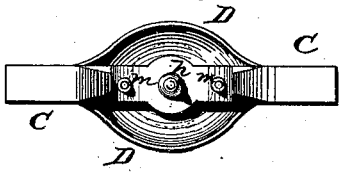
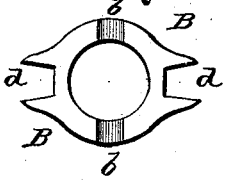


Fig. 7.



Witnesses:

P. C. Dieterich.

Frank S. Duffy

Inventor

Joseph C. Dane.

Per C. H. Watson & Co. Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH C. DANE, OF LA CROSSE, WISCONSIN.

IMPROVEMENT IN MILLSTONE-DRIVERS.

Specification forming part of Letters Patent No. **212,199**, dated February 11, 1879; application filed December 17, 1878.

To all whom it may concern:

Be it known that I, JOSEPH C. DANE, of La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Mill-Burr Drivers; and I do hereby declare that the following is a full, clear, and exact description of the invention, 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 the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a millstone-driver, as will be hereinafter more fully set forth.

In the annexed drawings, which fully illustrate my invention, Figure 1 is a plan view of my millstone-driver. Figs. 2 and 3 are side views thereof. Figs. 4 and 5 are vertical sections on the lines *x x* and *y y*, respectively, of Fig. 1. Fig. 6 is a bottom view of the bail, and Fig. 7 is a bottom view of the driver.

A represents the spindle, made of the usual form, and provided with the carrier-pin *a*, which is passed through it near the upper end, and upon which the driver B rests, said driver having a notch or recess, *b*, across the under edge on each side to fit over said pin. By this means the driver is carried around with the spindle as the same revolves.

The driver B is provided with jaws *d d* on opposite sides, which lap onto each arm of the bail C, said bail being of proper form to fit the eye of the burr or stone. The bail C is provided with a balance-pin or cock-head, *h*, which is passed down into an opening in the upper end of the spindle to the center of the carrier-pin *a*. The end of the pin *h* is pointed, and rests in a recess in the carrier-pin, as shown at *i* in Figs. 4 and 5, thus making the point of suspension and line of drive in the same plane.

The jaws *d* of the driver B are beveled off at *x x*, above and below the line of drive, for the purpose of allowing the bail to rock in the jaws without friction.

In order to keep the driver B level as it rests on the carrier-pin *a*, there are two pins, *m m*, inserted in the under side of the bail, and projecting down to and nearly touching the driver, thereby holding it in a level position. By these means I obtain an easy rocking motion on all points of the compass, giving an easy adjustment to the runner, so that it will present an even face to the bed-stone at all times, even when the spindle gets out of tram.

On the bail C is cast a hood, D, to protect the several parts from being filled up with the grain or substance that is being ground.

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

1. The pins *m m*, secured in the bail C, in combination with the driver B, for the purposes specified.

2. The pins *m m* and bail C, in combination with the balance-pin *a* and driver B, substantially as and for the purpose set forth.

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

JOSEPH C. DANE.

Witnesses:
WILLIAM HULL,
ALEX. W. THORNELY.