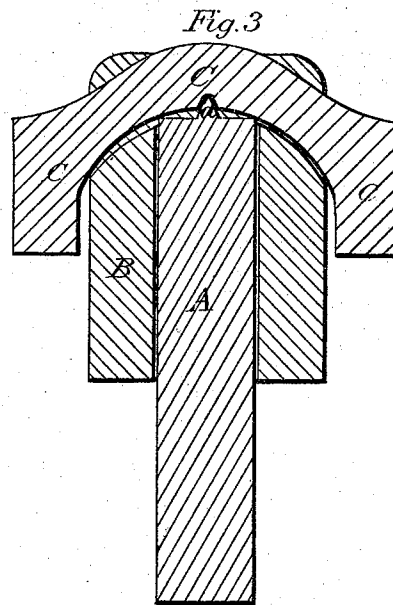
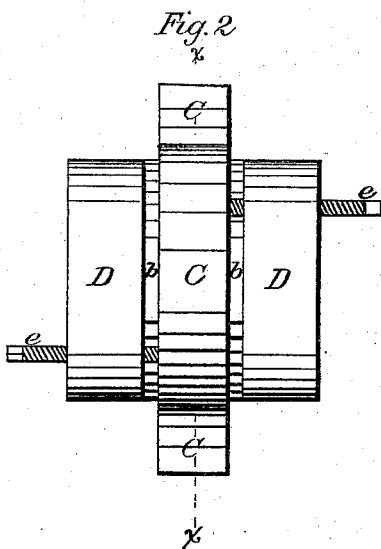
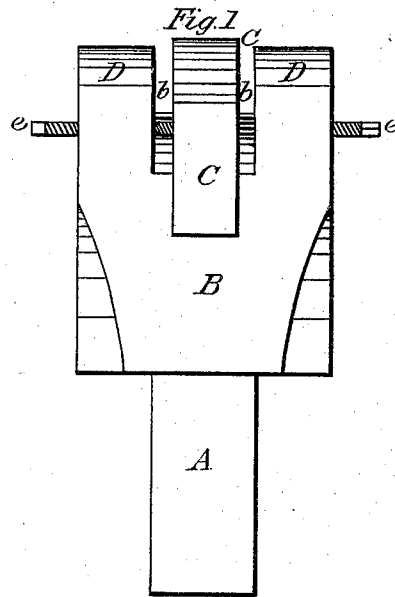


H. WILHELM.
MILLSTONE-DRIVER.

No. 171,459.

Patented Dec. 21, 1875.



Attest:
C. V. Snow.
Wm. Bagger.

Inventor:
Henry Wilhelm
by Louis Bagger
his Atty.

UNITED STATES PATENT OFFICE.

HENRY WILHELM, OF MINERVA, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT
TO FREMONT D. DAVIS, OF SAME PLACE.

IMPROVEMENT IN MILLSTONE-DRIVERS.

Specification forming part of Letters Patent No. **171,459**, dated December 21, 1875; application filed
August 21, 1875.

To all whom it may concern:

Be it known that I, HENRY WILHELM, of Minerva, in the county of Stark and State of Ohio, 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 the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a side elevation. Fig. 2 is a top plan, and Fig. 3 is a vertical transverse section after the line indicated by *xx* in Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

This invention consists in the peculiar construction of the driver, and its combination with the bail; and its object is to evenly balance the runner in all cases where a bail of the ordinary construction is used, without the necessity of changing the shape of either the millstone or its bail, so that this improvement may be readily applied to stones not originally prepared for it.

In the drawing, A is the spindle, which is squared off, and has a pivot, *a*, at its top. B is the driver, which has a vertical square recess, into which the spindle A is fitted, as shown in Fig. 3. The top of the driver B is recessed transversely, so as to form a deep groove, *b*, having walls D formed by two sides of the driver. Into these walls are inserted set-screws *ee*, which bear against the sides of the bail C, hung upon the pivot *a* within the recess *b*, thus forming adjustable bearing-points for the bail when the stone is in motion.

It will be observed that the bail C rests entirely within the recess *b* in the top of the driver, the pivoting-point *a* being also within said recess, and that the set-screws *e*, which penetrate the walls or sides D of the driver, work squarely against the broad sides of the bail.

By this construction of the driver any form of bail may be used; nor does the stone require any preparation or modification to be used with my invention. The construction of the driver, moreover, is such that it is readily applied upon the spindles now ordinarily in use.

When the upper stone or runner revolves at great speed it sometimes runs ahead of motion, and when it rebounds it must strike squarely on both sides of the driver. To effect this, and take up the "backlash," it may sometimes be found desirable to insert set-screws, similar to *ee*, diagonally opposite to these on opposite sides of the driver, so that when the stone, in running ahead of motion, suddenly rebounds, these screws will receive the shock evenly, and thereby prevent the rocking motion which would ensue if the stone did not strike simultaneously and squarely on both sides of the driver.

The manner of using this invention will be readily understood from the foregoing description. The driver B being adjusted upon the spindle, the bail C is inserted within the recess *b*, so as to rest upon its pivot *a*, and the set-screws *ee* are so adjusted as to bear evenly against the two sides of the bail.

If the runner gets out of "drive," the defect is easily remedied by adjusting one or both of the set-screws.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination of the driver B, recessed at *b*, and having the raised sides or shoulders D, with the set-screws *e* and bail C, when combined and arranged for operation as herein shown and specified.

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

HENRY WILHELM.

Witnesses:

S. F. LEYDE,
F. D. DAVIS.