

W. S. ARMSTRONG.
MILLSTONE-DRIVER.

No. 191,745.

Patented June 12, 1877.

Fig 1

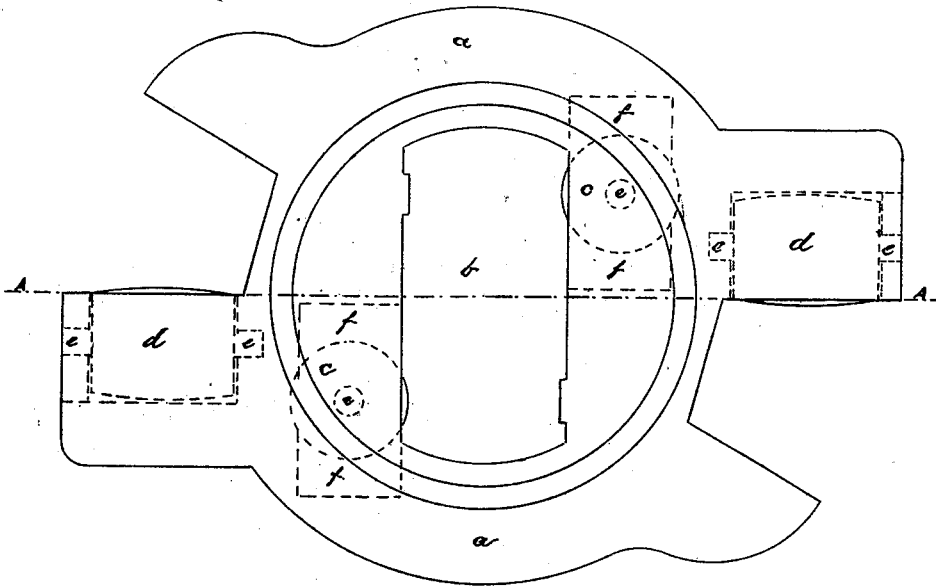
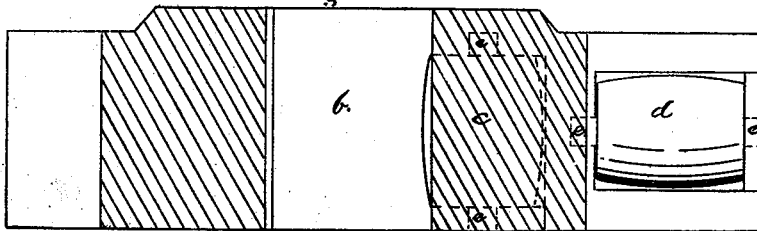


Fig 2



William Smith Armstrong

Witnesses
William H. Hull
C. Steiner

UNITED STATES PATENT OFFICE.

WILLIAM S. ARMSTRONG, OF LA CROSSE, WISCONSIN.

IMPROVEMENT IN MILLSTONE-DRIVERS.

Specification forming part of Letters Patent No. **191,745**, dated June 12, 1877; application filed April 10, 1877.

To all whom it may concern:

Be it known that I, WILLIAM SMITH ARMSTRONG, of the city of La Crosse, in the county of La Crosse and State of Wisconsin, have invented a new and useful Improvement in Millstone-Drivers; and I hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents the millstone-driver with the improvements.

Letter *a* represents the ordinary driver now in use. Letter *b* represents the space or slot where the millstone-spindle comes through. Letter *c* represents the perpendicular rollers. Letter *d* represents the horizontal rollers. Letter *e* represents the journals of the rollers. Letter *f* represents a steel plate for the journals of the rollers.

Fig. 2 represents a section of the millstone-driver, with the rollers and journals as lettered in Fig. 1.

The following is a description of the construction and operation of the improvement

claimed as my invention: The rollers *c* are for the purpose of allowing the driver to oscillate freely when the bail comes in contact with the driving-horn, and, by so doing, overcome the backlash which ordinary drivers have; and *d*, the horizontal roller, giving a line-bearing to the driving side of the bail, giving free action to the working of the driving sides of the bail and driver. By this improvement the millstone-runner is enabled to be balanced without friction, and is easily thrown into or out of balance, and the backlash of the ordinary slip-driver is overcome.

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

A millstone-driver having anti-friction rollers seated in the driving-horns and in the spindle-socket, either or both, for the purpose set forth, and substantially as described.

The above specification of my invention signed by me this 7th day of April, A. D. 1877.

WILLIAM SMITH ARMSTRONG.

Witnesses:

WILLIAM HULL,
E. ZEIDLER.