J. C. KEPLER.

Proof-Staffs for Mill-Stones

No. 166,929. Patented Aug. 24, 1875.

Fig. 1.

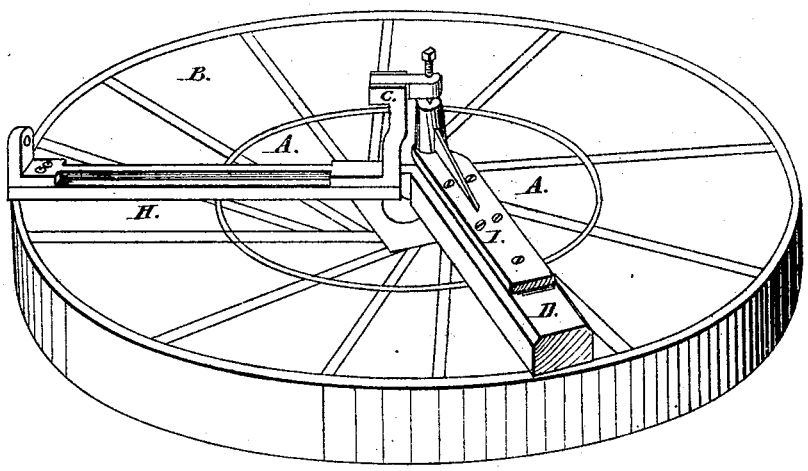


Fig. 2.

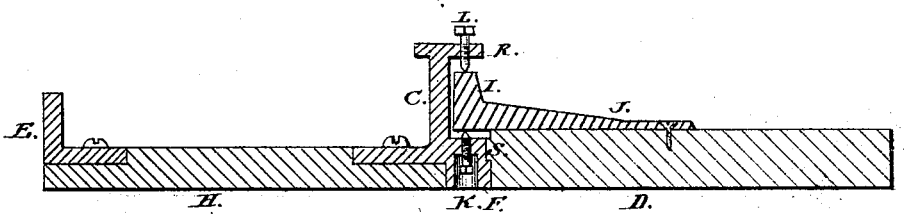


Fig. 3.

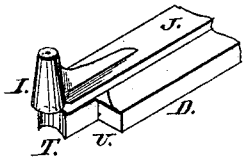
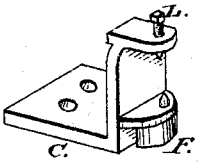


Fig. 4.



Witnesses:

Edw. W. Donn

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Inventor:

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By Theodore Munger,

His Attorney.

UNITED STATES PATENT OFFICE.

JACOB C. KEPLER, OF RICHMOND, INDIANA.

IMPROVEMENT IN PROOF-STAFFS FOR MILLSTONES.

Specification forming part of Letters Patent No. **166,929**, dated August 24, 1875; application filed March 9, 1875.

To all whom it may concern:

Be it known that I, JACOB C. KEPLER, of Richmond, in the county of Wayne and State of Indiana, have invented a new and useful Improvement in a Proof-Staff for Staffing Millstones; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a view in perspective of a proof-staff applied to a millstone. Fig. 2 is a longitudinal sectional view of the proof-staff; and Figs. 3 and 4 are detached views of the mechanism for connecting the two sections of which the proof-staff is composed.

This invention has for its object the production of a proof-staff for leveling the grinding-surfaces of millstones; and it consists, first, of a metallic bar having a lower level surface, provided with an articulate wooden arm having a lower level surface, and being capable of vertical adjustment to bring the level surfaces into the same horizontal plane; and it further consists of a metallic bar having a lower level surface, and a vertically-projecting stud provided with an upper and a lower lug, each having a set-screw, in combination with a wooden arm having a lower level surface and a vertically-projecting stud, the several parts being so arranged that the stud upon the wooden arm may be received between the lugs upon the stud of the metallic bar, and be held and adjusted by the set-screws, to bring the level surfaces of the arm and bar into the same horizontal plane, and to permit the wooden arm to swing horizontally in either direction to a right angle with the bar, all of which will hereinafter more fully appear.

In the accompanying drawing, A represents the central depressed portion, and B the grinding-surface, of a millstone. C is the vertical stud upon the metallic bar H, the lower surface of the bar H being perfectly level. The lugs R and S upon the stud C are provided with the set-screws K and L, the set-screw K being protected by the eye F. A finger-piece, E, is secured to the outer end of the bar H. The wooden arm D has a level lower surface, and is provided upon its upper face with the metal piece J, having the vertical stud I stepped in its upper and lower ends to receive the points of the set-screws K and L. The arm D has the projection T and the shoulders U on its inner end. The end of the projection T is concave, to receive the exterior of the eye F on the lug S of the stud C. The arm D is made of greater thickness than the bar H, which construction throws the bottom of the stud I a short distance—about one-half inch—above the top of the lug S, in order, when the level surface of the arm D becomes worn away by being dressed to keep it level after use upon the millstone, that the arm D may be lowered by adjusting the set-screws K and L to bring the level surfaces of the bar H and arm D again into the same horizontal plane; and the operations of dressing and adjusting the arm D may be repeated until the arm D has been worn away to that extent that the bottom of the stud I and the top of the lug S will come in contact, when a proper adjustment can no longer be made, and a new arm, D, must be provided.

The operation of the invention is as follows: The proof-staff is placed upon the millstone in the position shown in Fig. 1, except that the arm D need not necessarily be at a right angle with the bar H. The bar H rests upon a portion of the grinding-surface B of the millstone, is held in place by bearing down upon it, and the arm D, having been first painted upon its lower surface, is swung from side to side, its limit being one-half revolution of the stone and the projecting portions upon the grinding-surface of the stone marked by the paint and afterward removed by the use of the pick. The bar H is then removed to the finished side of the stone, and the operation of swinging the painted arm D again repeated.

The above-described operation is applicable to the upper or revolving stone. The spindle in the lower stone offers an obstruction to a half-revolution of the arm D, but the same result is obtained by changing the location of the bar H more frequently.

It will be seen that by this invention the stone can be perfectly and accurately proved, and every inequality marked by the paint; and as the sweep of the arm D can only be in a horizontal plane, the surface of the stone, if properly dressed, must also be in a horizon-

tal plane. After one portion has been dressed the arm H is removed to that portion and another portion is marked and dressed to the same plane, and this operation is repeated until the entire grinding-surface of the stone has been marked and dressed to the same plane.

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

1. The proof-staff for millstones, consisting of a metallic bar having a lower level surface, provided with an articulate wooden arm having a lower level surface, and being capable of vertical adjustment to bring the level surfaces of the bar and arm into the same horizontal plane, substantially as set forth.

2. The metallic bar H having its lower surface level, provided with the vertical stud C having the lugs R and S, provided with the set-screws K and L, in combination with the wooden arm D having its lower surface level, provided with the metal piece J having the vertical stud I, constructed and operating substantially as and for the purposes set forth.

In testimony that I claim the foregoing improvement, as above described, I have hereunto set my hand and seal this 8th day of March, 1875.

JACOB CHRISTOPHER KEPLER. [L. S.]

Witnesses:

JOSEPH FORREST,

JAS. T. CLOSE, Jr.