J. MILTENBERGER.

Mill-Staff Gage.

No. 211,922. Patented Feb. 4, 1879.

Fig. 1.

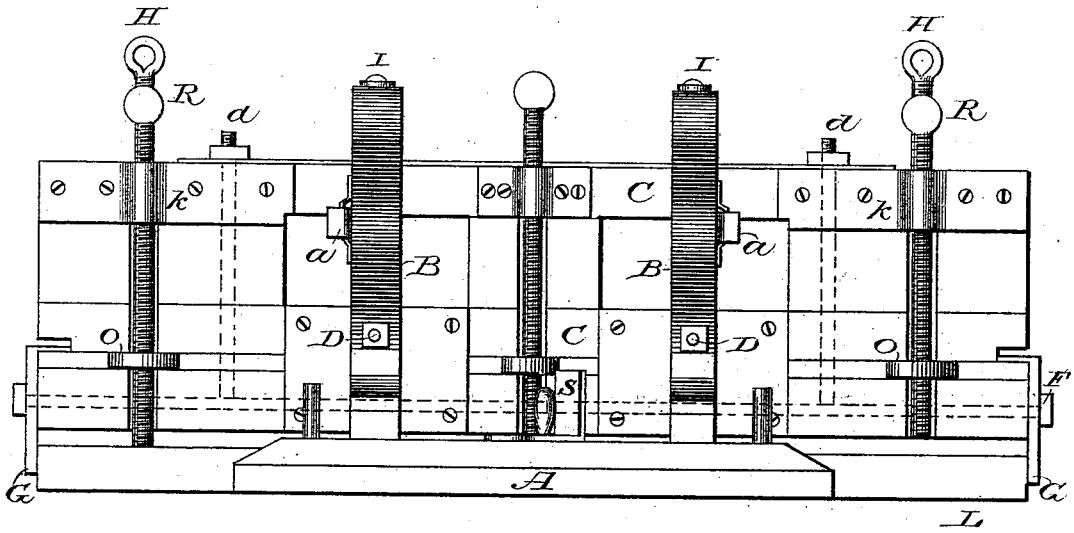
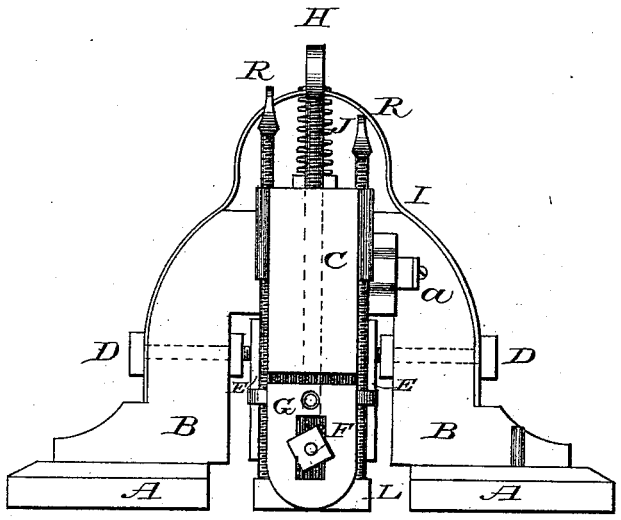


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN MILTENBERGER, OF PERU, INDIANA.

IMPROVEMENT IN MILL-STAFF GAGES.

Specification forming part of Letters Patent No. **211,922**, dated February 4, 1879; application filed November 1, 1878.

To all whom it may concern:

Be it known that I, JOHN MILTENBERGER, of the city of Peru, county of Miami, and State of Indiana, have made a new and useful Improvement in Mill-Staff Gages; 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 make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a side view of a device embodying my invention. Fig. 2 is an end view of the same.

The nature of this invention relates to gages for furrow-staffs to be used in dressing millstones; the object being to furnish a universal gage by means of which the depth, width, and bevel of the furrows in millstones may be accurately determined.

It consists in mounting a sliding bar upon suitable bearings, and having a furrow-staff appended at the lower edge, provided with set-screws, by means of which the furrow-staff may be raised or lowered and given any desired inclination to indicate the bevel of the furrow, as will be hereinafter more fully set forth.

A A represent the foot-pieces of the gage. These are placed parallel to each other, a short distance apart, and connected near each end by means of the bridges B B. These bridges are cut away on the top and under side, at the center, to receive the sliding bar C. This bar is provided with long mortises, through which the bridges pass, which allows the bar to be moved endwise, and is adjusted laterally by means of the set-screws D D. These screws have broad bearing-plates E E attached to their inner ends, to prevent or reduce the friction on the sliding bar C. This bar is made equal in length to the furrow-staff, and for convenience I make it in two parts. The lower part is grooved in the under edge to receive the tension-rod F. This rod secures the plates G G to the ends of the bar C, and passes through eyes in the suspension-rods *d d*. By means of these rods the tension-rod may be raised or lowered, and is firmly secured at any desired point by means of the temper-screws H H. The upper part of the bar C fits loosely in gains in the upper edges of the bridges B B, and is held down in the gains by means of the guard-plates I I and the springs J J.

The plates G G are provided at their lower ends with sharp-pointed pivots. These pivots enter the ends of the furrow-staff L, and allow the staff to be turned to any desired inclination to give the necessary bevel to the bottom of the furrow, and is firmly held in position by the set-screws R R R R. These set-screws pass through lugs O O O O on the sides of the lower part of the bar C, and through guides K K K K near the top of said bar, with their lower ends resting upon the staff C. S represents a center rest, for the purpose of holding the bar C up while the furrow-staff is being adjusted, and is then turned out of the way.

a a represent sliding rests, on which the bar C is supported when paint is being applied to the staff. These rests are simultaneously withdrawn when the staff is lowered for work.

To operate this gage the furrow-staff is first set in the desired position by the means described above, and the paint is then applied to the face of the staff. The gage is then firmly held down upon the face of the millstone, with the staff placed vertically over the furrow, when the rests *a a* are withdrawn, allowing the staff to fall upon the stone. The bar C is then moved longitudinally back and forth, causing the painted staff to mark the place to be dressed, and this operation is repeated until the furrow is completed. Thus the operator will be enabled, by the use of this gage, to dress the furrows in millstones with great uniformity and perfection.

Having thus fully described my invention, I claim—

The furrow-staff gage consisting of the pieces A A, bridges B B, bar C, set-screws D D, having the plates E E, tension-rod F, rods *d d*, screws H H, plates G G, set-screws R R R R, rests S and *a a*, and furrow-staff L, when constructed, arranged, and combined as hereinbefore set forth.

JOHN MILTENBERGER.

Witnesses:

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