T. BROWN.

Tram Staff for Facing Millstones.

No. 23,074. Patented March 1, 1859.

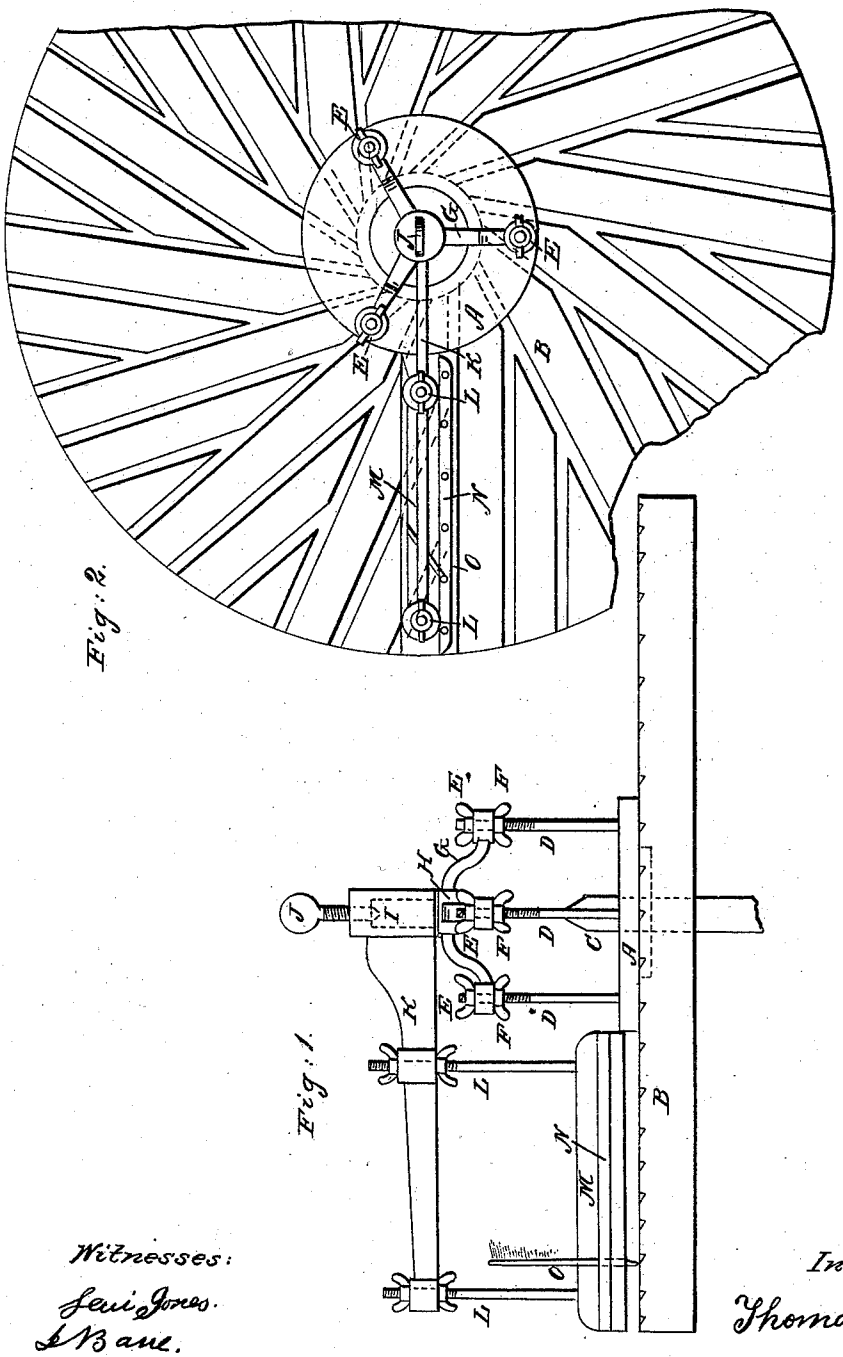


Fig. 1.

Fig. 2.

Witnesses:
Levi Jones.
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UNITED STATES PATENT OFFICE.

THOMAS BROWN, OF KENWOOD, NEW YORK.

TRAM-STAFF FOR FACING MILLSTONES.

Specification of Letters Patent No. 23,074, dated March 1, 1859.

To all whom it may concern:

Be it known that I, THOMAS BROWN, of Kenwood, in the county of Albany and State of New York, have invented a new and useful and Improved Tram-Staff or Instrument for Facilitating the Facing of Millstones; and I do hereby declare that the same is described and represented in the following specification and drawings.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and the mode of using it referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1 is an elevation of my invention applied to a millstone. Fig. 2 is a plan or top view.

The nature of my invention consists in the arrangement and combination of a supporting ring arranged to rest or lie on the face of the stone, with a triangular frame and adjustable staff to enable the miller to face the mill stones, more accurately and with greater facility either plain or with suitable concavity or bosom.

There have been several tram staffs made and used more or less, and found inefficient or defective, as none of them were so arranged as to stand and take a fair bearing on the surface of the stone entirely around the eye; and not interfere with the top of the mill spindle, when the spindle is in the stone. I have therefore been induced to bake an adjustable tram-staff, with a stand so constructed, as to have a solid bearing entirely around the eye of the stone upon its face when the mill spindle is in place; so that the staff will enable the miller to ascertain the exact condition of his mill stones with the greatest certainty; and show him where they need altering if they are not correct.

In the accompanying drawings A, is a metal ring lying on the mill stone B, around the spindle C, as shown in Fig. 1. In this ring the standards D, D, D, are firmly fastened, and they are provided with screw threads on their upper ends to which the thumb nuts E, E, E, and F, F, F, are fitted the latter below the arms of the frame G, and the former above them. This frame G, is made in the form shown in the drawing and its arms are perforated for the standards D, which pass through them.

In the center of the frame G, there is a hub H, to which the pivot I, is fastened, shown by dotted lines in Fig. 1. There is a conical cavity in the top of the pivot I, for the point of the screw J, in the arm K. This arm K, may be made in the form shown in the drawing. Its largest end is perforated and fitted to the pivot I, so as to turn freely and it may be raised or lowered on the pivot I, by turning the screw J.

The bolts L, L, are fitted to traverse freely through holes in the arm K, and are provided with thumb nuts to adjust them higher or lower in the arm as may be desired. The wooden staff M, is fastened to the lower ends of the bolts L, L, so as to swing entirely around over the face of the stone as the arm K, is turned. The staff M, has a cleat N, on its side which is perforated as shown in Fig. 2, to receive the quill *o*, in Fig. 1. The lower side of the staff M, next to the face of the stone should be perfectly straight to show any unevenness in the faces of the stones.

To use this staff the ring A, is placed upon the stone as shown in the drawing around the spindle, and if necessary some weights may be laid on it so as to prevent it from being tipped. The arm K, may now be swung around and the nuts E, E, and F, F, turned so as to adjust the pivot I, so that the quill will touch two or more of the highest points on the face of the stone.

The instrument being adjusted to the face of the stone, the lower side of the staff M, may be smeared with paint or some coloring matter and the quill drawn up and the nuts on the bolts L, L, turned to lower the staff M, so that when it is swung around the paint on it will mark the high places on the face of the stone and show the miller where to pick, and by turning the screw J, and lowering the arm and staff it will show where the stone is to be worked until it is perfected.

The staff M, may be adjusted by the bolts L, L, so as to make the face of the stone more or less concave as may be desired.

My apparatus can be used without removing the bail or balance rivet from the running stone.

I believe I have described and represented my invention so as to enable any person skilled in the art to make and use it.

I will now state what I desire to secure by Letters Patent viz.

I claim the arrangement and combination of the supporting ring A, arranged to rest or lie on the face of the stone with the triangular frame G, and adjustable staff M, by which mill stones may be faced more accurately, and with greater facility either plain or with suitable concavity or bosom.

THOMAS BROWN.

Witnesses:
LEVI JONES,
I. BANE.