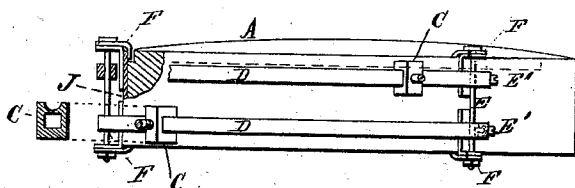


J. WALSH.
Mill-Stone Balances.

No. 150,639.

Patented May 5, 1874.



Witnesses.

Harry King.
Phil. T. Dodge

Inventor.

John Walsh.
by Dodge Munn
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UNITED STATES PATENT OFFICE.

JOHN WALSH, OF GALENA, ILLINOIS.

IMPROVEMENT IN MILLSTONE-BALANCES.

Specification forming part of Letters Patent No. **150,639**, dated May 5, 1874; application filed April 20, 1874.

To all whom it may concern:

Be it known that I, JOHN WALSH, of Galena, in the county of Jo Daviess and State of Illinois, have invented certain Improvements in Millstone-Balance, of which the following is a specification, reference being had to the accompanying drawings.

My invention consists in the construction of a millstone-balance, as will be hereinafter more fully set forth.

The figure in the drawings more fully represents my invention.

A represents an ordinary millstone, provided with one or more of the usual hoops, J. A narrow groove is left around the circumference of the stone, both at top and bottom, between the stone and the hoops, as shown. E represents vertical rods or bolts, which are connected to bent lugs or ears F, that catch into the groove, hereinbefore described. D represents one or more horizontal bars, which are perforated near each end, and through which the rods or bolts E are passed, so that the bars are secured on the rods or bolts on the exterior of the stone, and a short distance away from it.

The bar (or bars) can be moved up and down on the rods, and are provided with jam-nuts E', by which they may be fastened at any point thereon. The body of the bar is recessed or chambered nearly or entirely its entire length, as shown, so that instead of using the sliding weights C upon it, it may be rendered heavier at any point desired by casting lead into it at such point.

When the weights C are used, it is not necessary to recess or chamber the bars D. The said weights are provided with set-screws to hold them at any particular point on the bars, and the bars being set outside of the stone, the weights can be readily moved around on the bars without the necessity of moving the bars on the stone.

The bar or bars D may be either made to entirely or partially encircle the millstone, and when made entirely around the stone, the jam-nuts E' should be arranged on the outer face of the bars opposite to the rods E, instead of on the end of the bars, as now shown. The rods E, bars D, and bent lugs may be moved around the stone from one point to another by loosening the nuts on the ends of the bolts E, and sliding the lugs around the groove between the hoops and the stone.

Whenever the millstone runs unevenly, or higher on one side than on the other, it may be readily brought to a level by adjusting the bars or weights on the exterior of the stone.

What I claim is—

In a millstone-balance, the horizontally and vertically adjustable and chambered or recessed bar D, supported parallel and near to the periphery of the stone, as shown, in combination with the rods E, set-screws E', and adjusting-lugs F, as and for the purposes set forth.

JOHN WALSH.

Witnesses:

WM. H. LOTZ,
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