J. A. ALTHOUSE.

Millstone-Balance.

No. 160,864. Patented March 16, 1875.

Fig. 1.

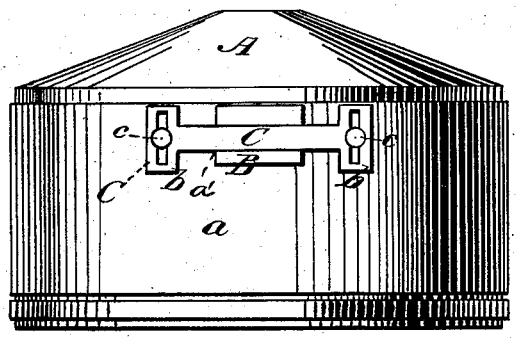


Fig. 2.

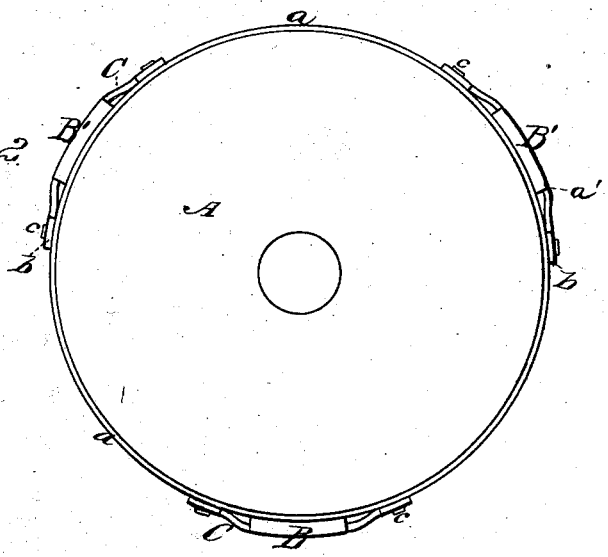
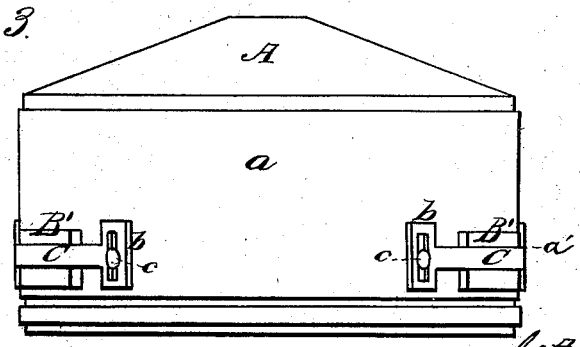


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN A. ALTHOUSE, OF NEW HARMONY, INDIANA.

IMPROVEMENT IN MILLSTONE-BALANCES.

Specification forming part of Letters Patent No. **160,864**, dated March 16, 1875; application filed November 28, 1874.

To all whom it may concern:

Be it known that I, JOHN A. ALTHOUSE, of New Harmony, in the county of Posey and State of Indiana, have invented a new and valuable Improvement in Millstone-Balances; and I do 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, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing, is a representation of front elevation of my millstone-balance. Fig. 2 is a top view of the same; and Fig. 3 is a side view of the same.

This invention has relation to an improvement in Letters Patent granted to me, No. 114,249, and dated May 2, 1871, for balancing millstones; and it consists in novel means of applying weights to the circumference of a runner-stone, whereby such weights can be adjusted, for causing the stone to run true, as will be hereinafter explained.

In the annexed drawings, A designates the upper stone or runner, which is surrounded by a band, *a*, in the usual well-known manner, and B B′ B′ designate blocks of iron or other metal, which are adapted to lie closely in contact with the band *a*, and which have grooves *a′* in their outer surfaces. C C C designate straps, which have T-shaped heads *b* on their ends, which heads have slots through them, and they are at right angles to the length of the straps. The weight B and its strap C are arranged near the upper edge of the band *a*, and the two weights B′ B′ and their straps C C are arranged near the lower edge of the band *a*. The straps are arranged equal distances apart, and are rigidly secured to the band *a* by means of set-screws *c c c*. By loosening the screws *c* the straps C with the weights B can be adjusted vertically, and, if desired, the weights can be adjusted in the direction of the length of their straps.

In applying my balance I first level up the bed-stone, tighten the spindle in the usual way, tram the spindle to the bed-stone, and then put on the runner-stone A. I put two thin boards of equal thickness between the burrs, let the runner down on them, fill up under the ends of the boards, and secure them so that they cannot fly out when the stone is in motion. I next put a rest across the back of it, high enough to allow the stone to run free. When this is done I stop the burrs, take the boards from between them, put the burrs in motion up to the grinding-speed, raised high enough to clear the bed-stone, then take a pencil and move it down on the rest so that it barely touches the back of the stone. I then stop the stone and find the center of the mark or line on the back of the stone, divide the circumference of the stone into three equal parts from the center of said line. Then put the upper weight B so that it comes even with the top of the burr opposite the center of the pencil-mark. The other two weights are put opposite the other two points, two inches from the bottom of the burr. The burrs are again started, and it will be found that the mark has changed. By raising or lowering the weights, as the case may require, the burr can be brought to a perfect running balance, and at the same time retain the standing balance.

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

The vertically-adjustable T-shaped slotted strap C, in combination with the horizontally-adjustable weight B, provided with the groove *a′*, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN A. ALTHOUSE.

Witnesses:

L. F. RUCHT,

D. ALTHOUSE.