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E. & Z. DAWSON & B. HILTON.

Balancing Millstones.

No. 68,963.

Patented Sept 17, 1867.

Fig. 1.

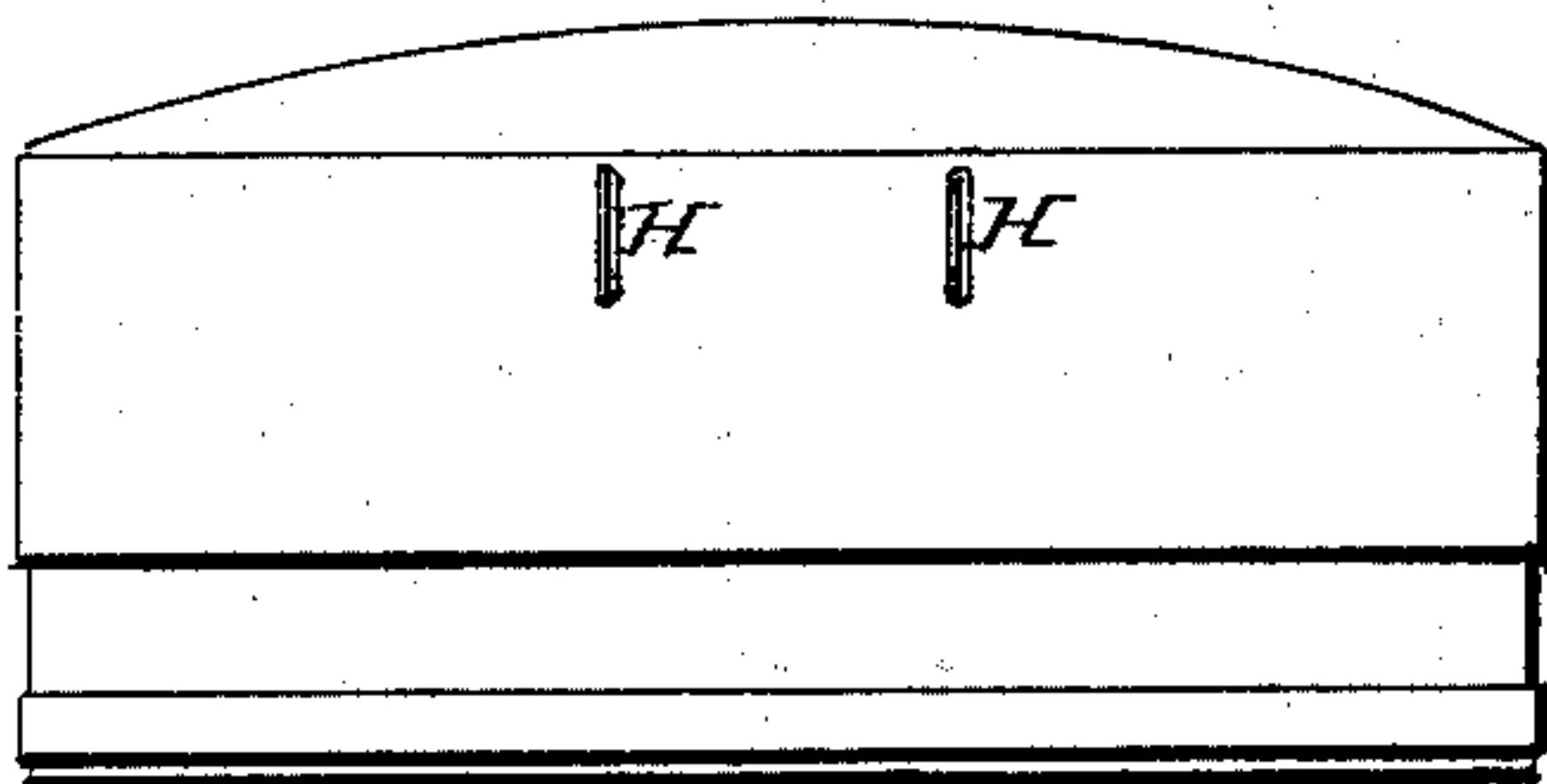


Fig. 2.

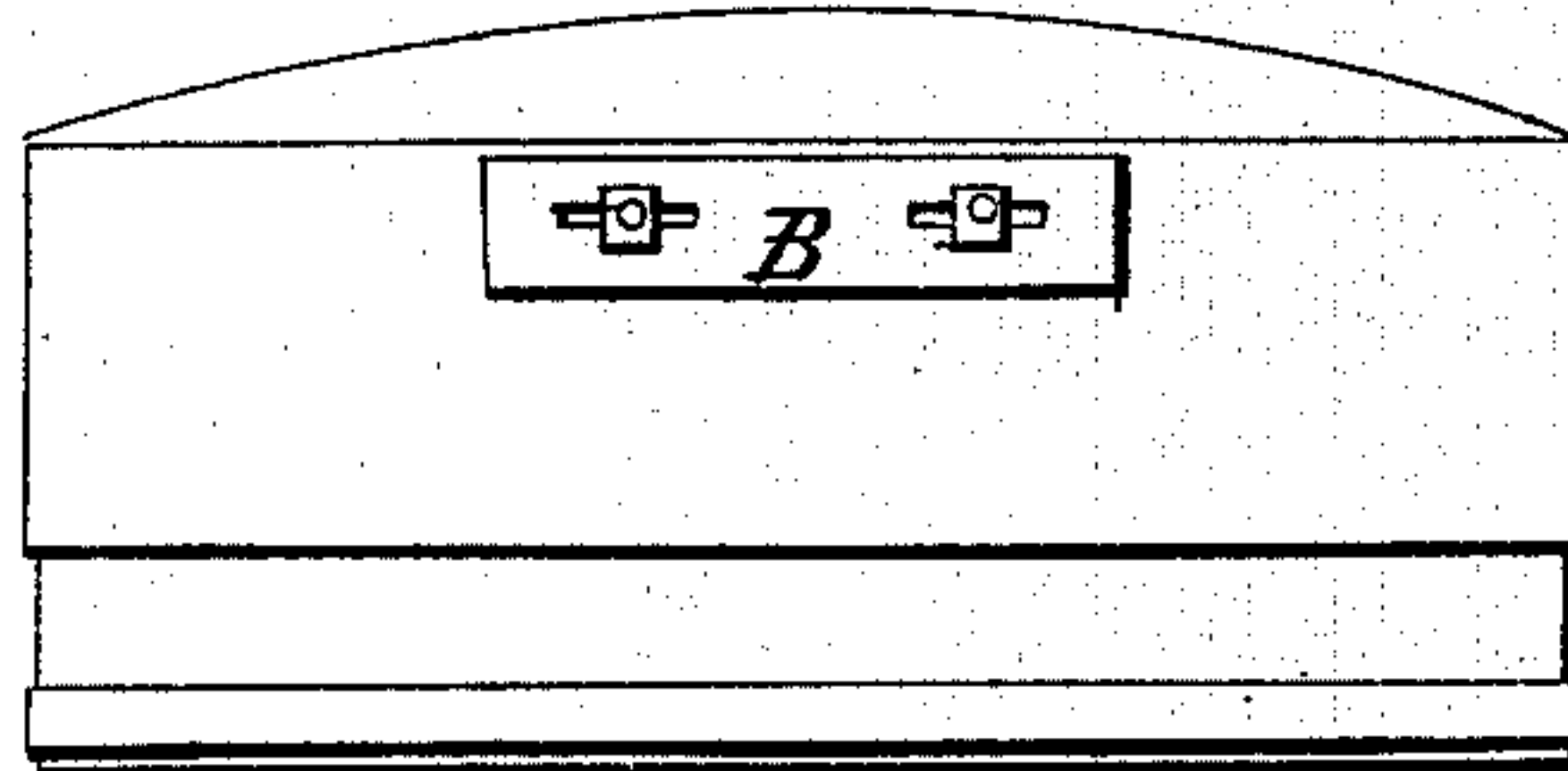


Fig. 3.

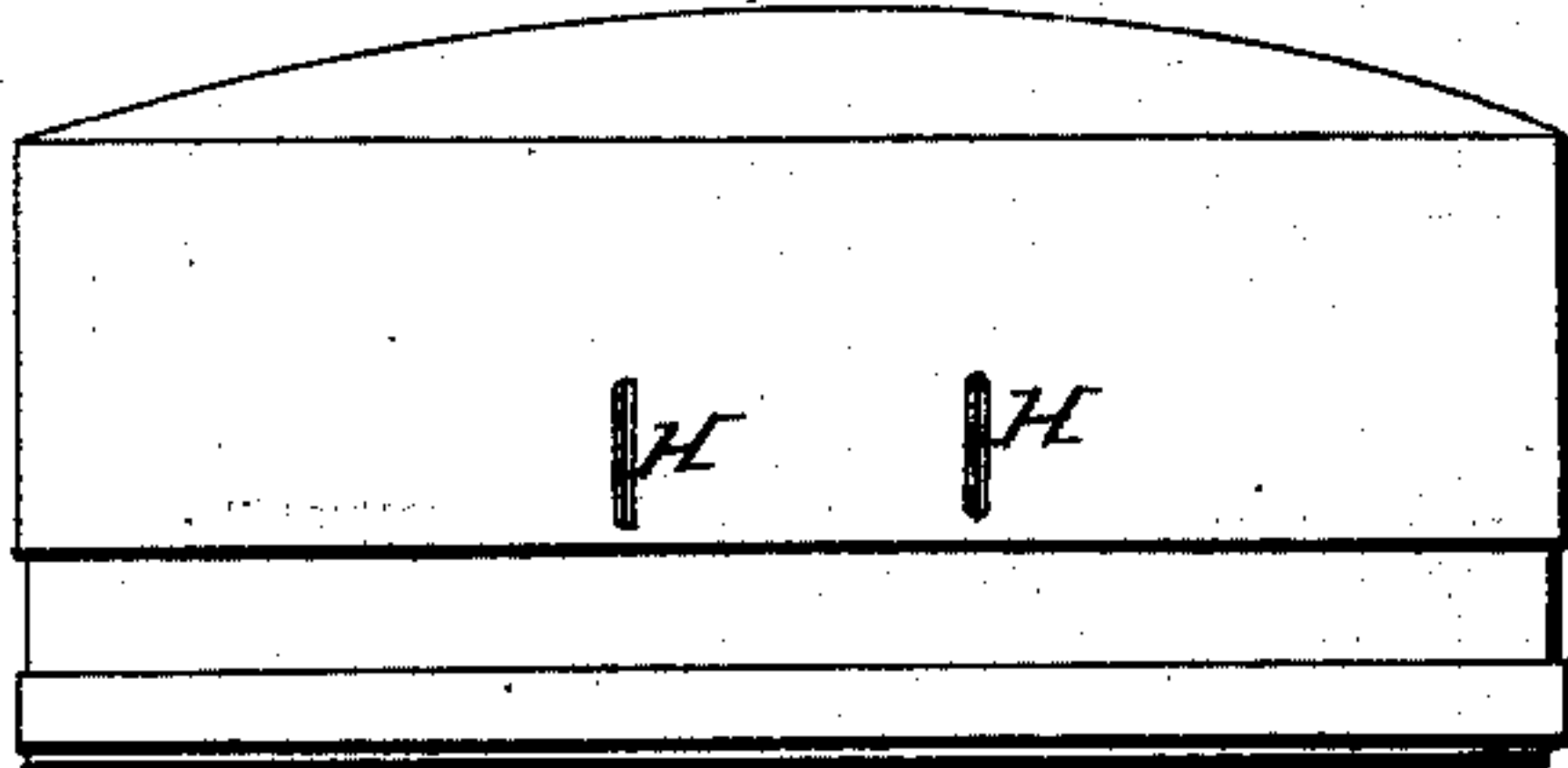


Fig. 4.

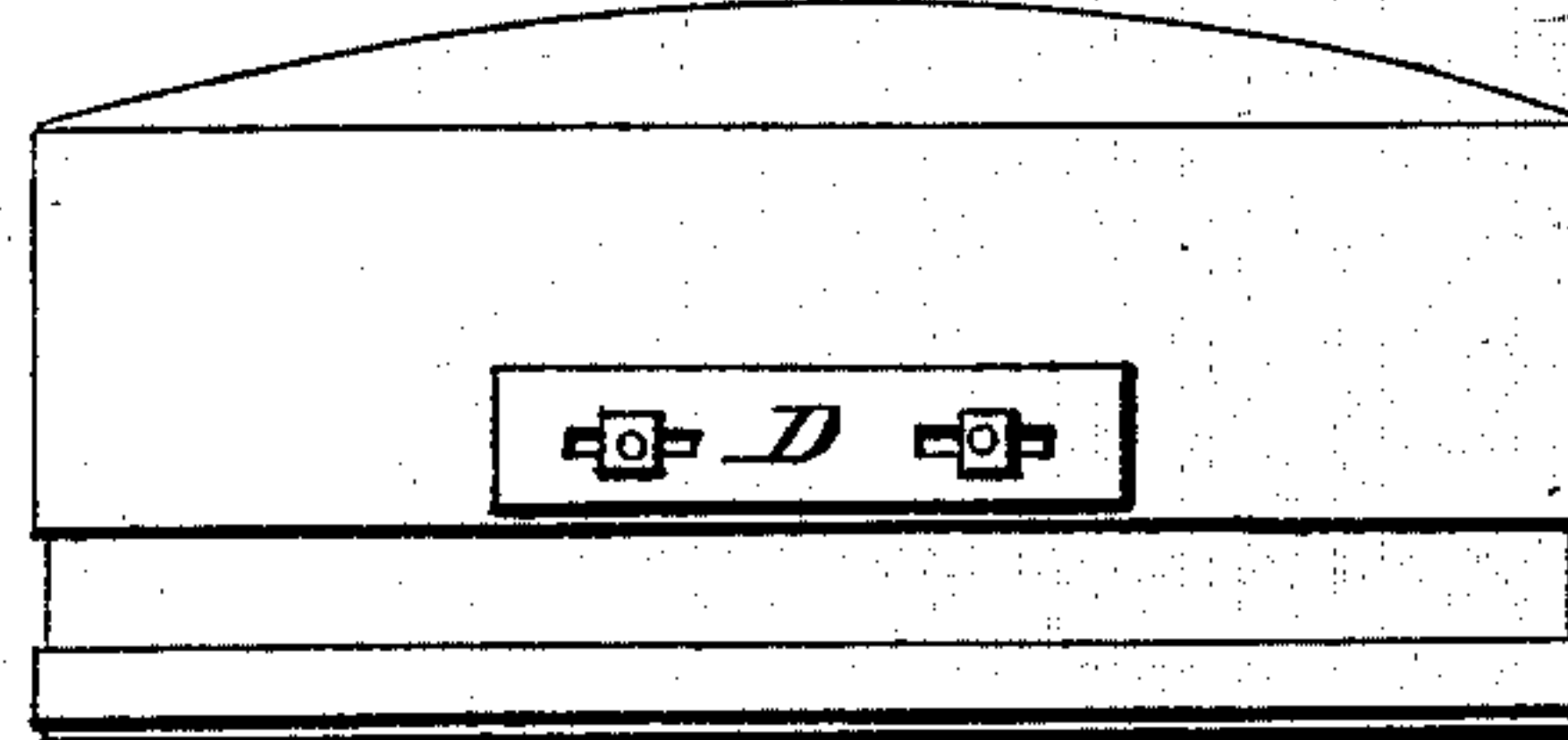
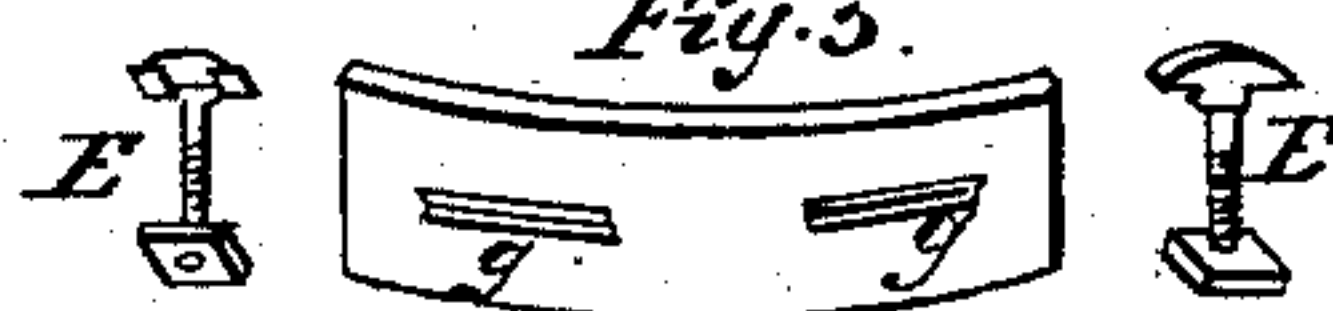


Fig. 5.



Witnesses.

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EPHRAIM DAWSON, ZEDAKIAH DAWSON, AND BRICE HILTON, OF BRUNERSBURG, OHIO.

Letters Patent No. 68,963, dated September 17, 1867.

IMPROVEMENT IN BALANCING MILLSTONES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, EPHRAIM DAWSON, ZEDAKIAH DAWSON, and BRICE HILTON, of Brunersburg, in the county of Defiance, and State of Ohio, have invented a new and useful way of Balancing Millstones; and we do hereby declare that the following is a full and complete description of the same, and of its operation, reference being had to the accompanying drawings, in which—

Figure 1 is a view of a millstone prepared to receive the running balance.

Figure 2 is a view of a millstone with the running balance adjusted.

Figure 3 is a view of a millstone prepared for the standing balance.

Figure 4 is a view of a millstone with the standing balance adjusted.

Figures 5 and 6 are views of iron weights, with slots *g g* cut lengthwise to admit of the weights being moved horizontally.

E E are views of bolts used for fastening the weights to the stone.

The nature of our invention consists in a new, cheap, and durable manner of applying weights for the purpose of balancing millstones.

Fig. 1 shows the slots H H cut in the band of the stones at the point where the running balance is to be placed. These slots are cut perpendicular to admit of the weights being raised or lowered, the upper end coming near the upper edge of the band. In securing the weights the heads of the bolts E E are inserted in the slots, and turned one-fourth of the way around, so that they catch on the band, the heads of the bolts being long, and passing easily through the slots, but when turned they lie lengthwise across the slots, as seen at E E, fig. 5. The weight is then put to its place, the bolts passing through the slots *g g* in the weights, the burs or nuts put on the bolts and tightened, thus forming an adjustable running balance, as represented by B in fig. 2. Fig. 3 represents the slots H H for fastening the standing balance to the stone. These slots are also cut perpendicular, the centre being at a point at right angles with the top of the spindle. The weight is secured in its place in the same manner as that in the running balance, as described in fig. 2, and when adjusted as represented at D, fig. 4, is a standing balance, and the two combined form a running and standing balance, whether the stone is standing or in motion, and at any velocity, the tendency of the running balance to move towards a point at right angles with the top of the spindle being counterbalanced by the tendency of the standing balance to remain at a point at right angles with the top of the spindle, both of which are in proportion to the motion of the stone.

What we claim as our invention, and desire to secure by Letters Patent, is—

The above-described arrangement of the balances B and D, and the horizontal and perpendicular adjustment thereof, as and for the purposes herein set forth.

Brunersburg, Defiance county, Ohio, March 29, 1867.

EPHRAIM DAWSON,
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Witnesses:

SHUBAEL GIBB,
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