

W. B. DOLSEN.
Millstone Balance.

No. 104,283.

Patented June 14, 1870.

Fig: 1.

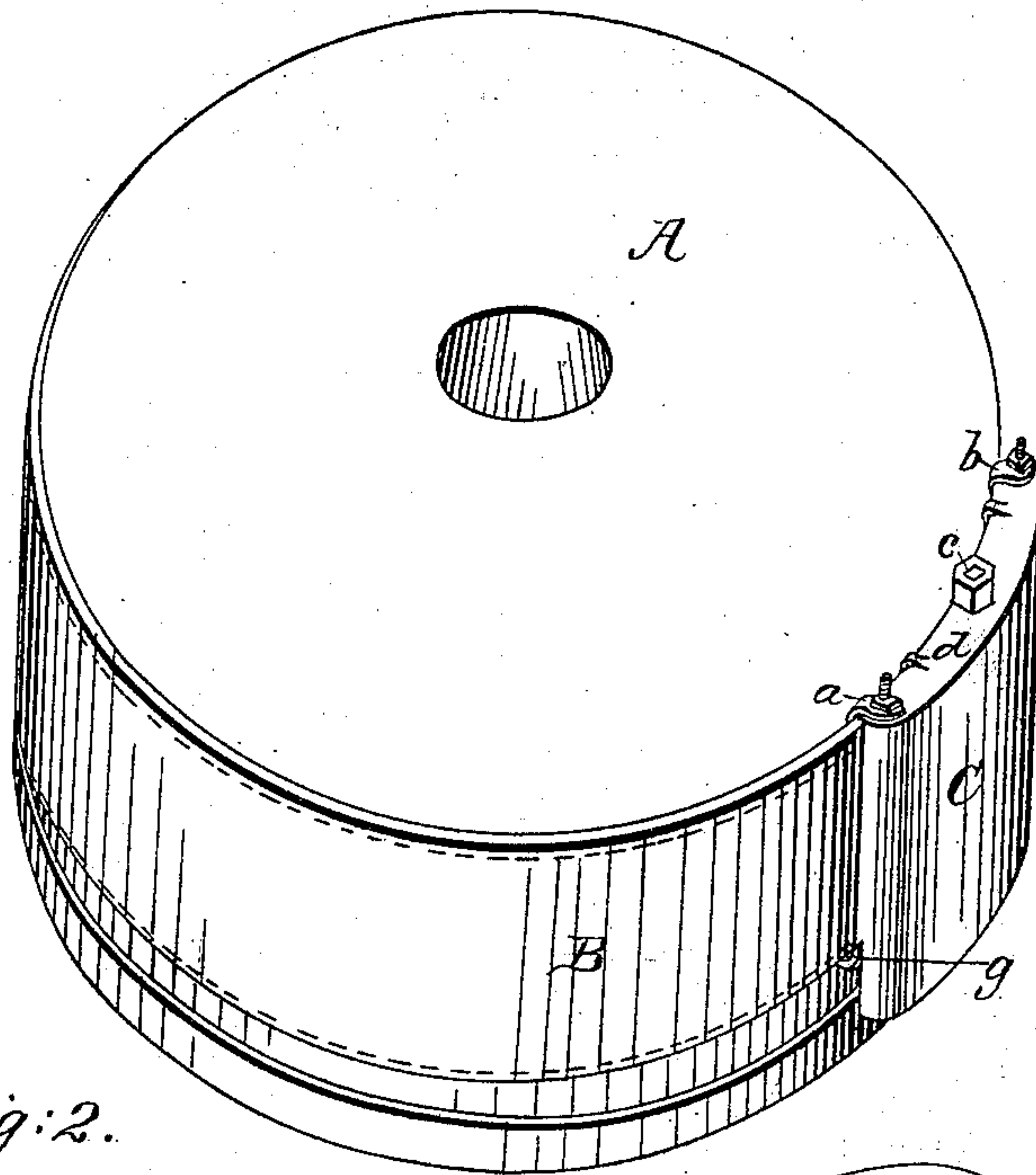


Fig: 2.

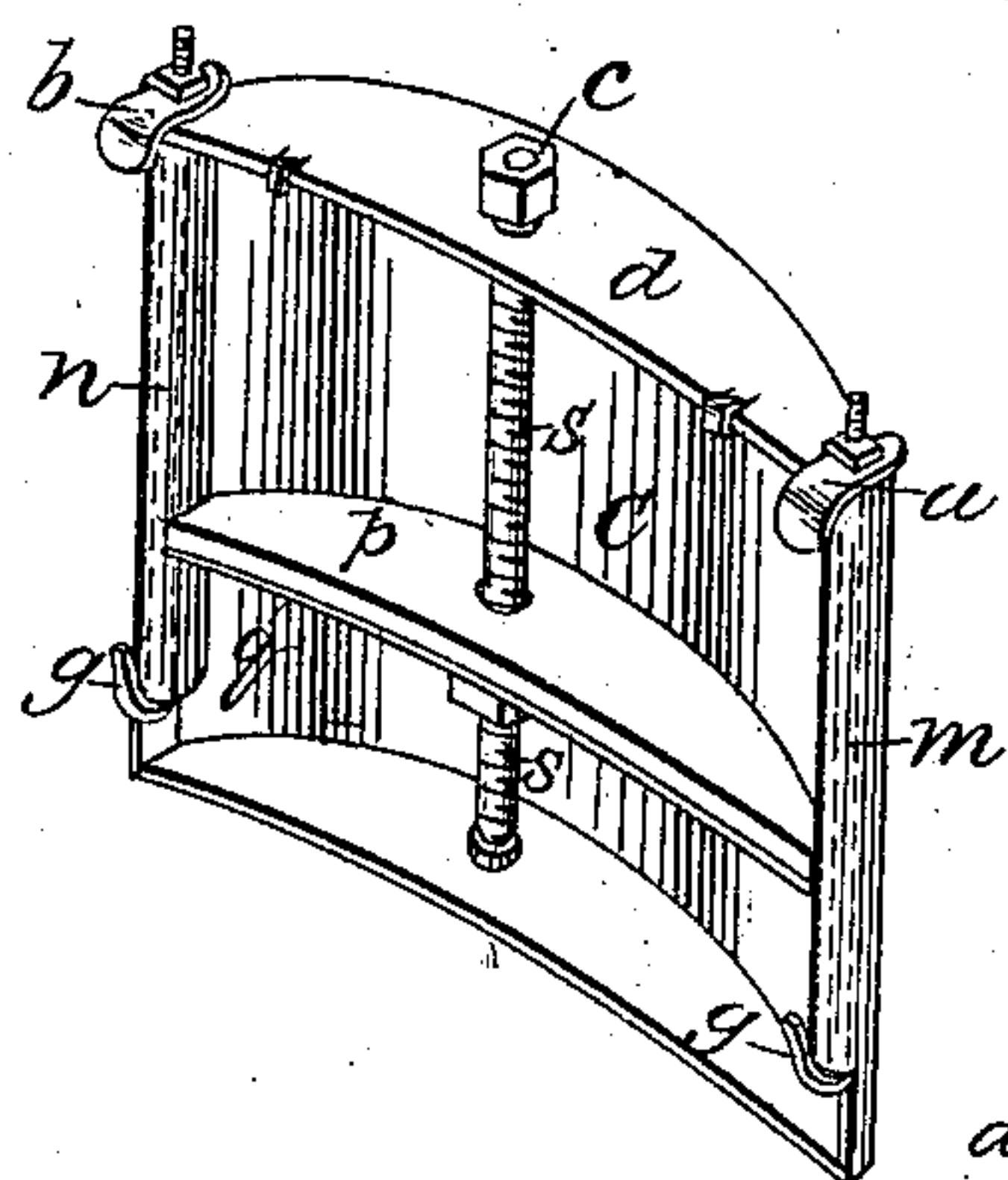


Fig: 5.

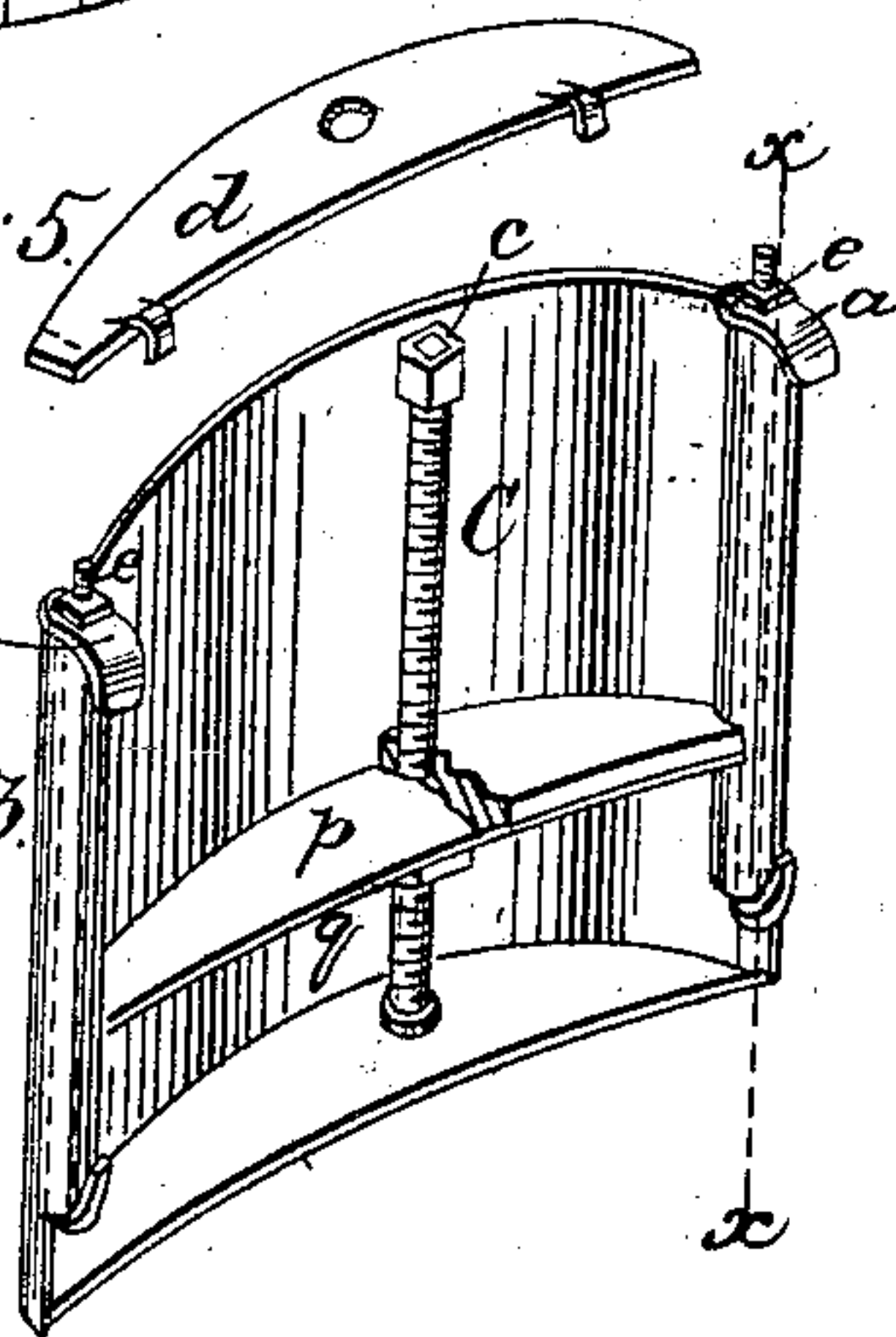
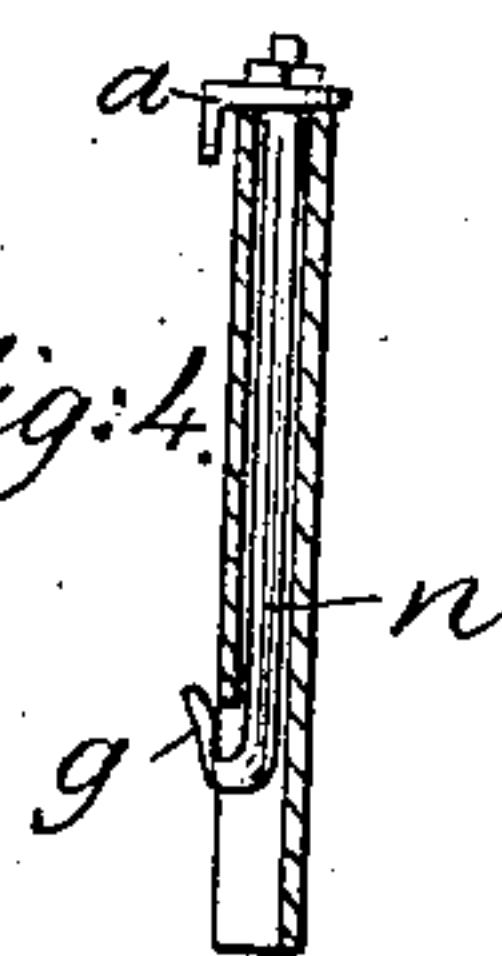


Fig: 4.



Witnesses
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United States Patent Office.

WILLIAM B. DOLSEN, OF WATERLOO, IOWA.

Letters Patent No. 104,283, dated June 14, 1870.

IMPROVEMENT IN MILLSTONE-BALANCE AND COOLER.

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

To all whom it may concern:

Be it known that I, WILLIAM B. DOLSEN, of Waterloo, in the county of Black Hawk and State of Iowa, have invented a new and useful Improvement in Balances for Millstones, so constructed that it also cools the meal as the latter passes to the chest.

The following is a full, clear, and exact description of my invention, reference being had to the accompanying drawing making a part of this specification.

Figure I is a perspective view of a millstone with my improved balance and meal-cooler attached.

Figure II is the inner side of the balance, showing the depository for the weights to be used.

Figure III is the same view, with the top removed therefrom, and showing the adjustable shelf ready for the reception of the weights.

Figure IV is a view of the top of the cup detached from the balance.

Figure V is a vertical sectional view through the line *x-x*, (see fig. II,) showing the upper and lower hooks for attaching my invention to the hoop or band of a millstone.

The object of my invention is, first, to overcome the difficulty heretofore experienced in readily adjusting balances to millstones, and to afford a cheap and easy mode of attaching the same; and, secondly, to secure a ready and convenient means of cooling the meal as it passes to the chest.

To enable others skilled in the art to make and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing—

A represents a millstone secured within the iron band B.

On the outer circumference, and attached to this band, are seen my improved balance and meal-cooler C, secured by the hooks *a b* at the top and *g g* near the bottom of the balance.

Figures II and III expose the internal arrangement of my invention, as the band B forms the inner wall of the balance when it is in position on the millstone. When removed from the stone the interior construction is thus necessarily exposed.

d is a removable top, secured in place by the nut *c* on the adjusting screw-rod *s*.

q is a sliding shelf, which is adjustable on the screw-rod *s*, by means of which the weights placed within the balance may be raised or lowered, and be brought into any relative position with the point of suspension.

p is a plate of lead, somewhat similar in shape to the shelf *q*, on which it rests. Any number of similar plates can be used to produce the required weight. The cup *c* of the balance, however, may be made sufficiently tight to hold shot, should it be desirable to use shot as a weight.

The screw-rods *n m*, secured at each side of the balance, do not extend to the bottom of the cup, (see fig. IV,) but are hooked at *g g*, at a distance from the bottom.

The tops of these rods pass through the hooks *f f*, which rest upon the top of the cup, and are held in place by the nuts *e e*.

To secure my improved balance to the millstone at any desired point of the circumference, it is but necessary to pass the hooks *g g* below and under the hoop B, and, at the same time, adjust the hooks *f f* over and behind the hoop, and turn the nuts *e e*, which will cause the hooks at the top and bottom of the balance to clamp firmly the hoop and hold the balance in position.

As many of these balances may be used as are desirable, but three are as many as I ever have found useful. My invention will maintain a true balance, as there is no chance for an accumulation of dirt or extraneous matter to collect and add to the weight necessary to be maintained.

The peculiar construction of my balance secures a constant current of air around the stone where the meal is distributed, and, as the cup comes down nearly to the face of the stone, and is always this low, regardless of the exact position of the weights inside, a steady blast is kept up, which cannot be done with any other balance now in use.

Claim.

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

The millstone-balance and meal-cooler C, constructed and arranged as herein described, in combination with the screw-rods *m n*, formed with hooks *g g*, hooks *a b*, and screw-taps *e e*, for fastening the same to the hoop or band of the stone, substantially as described.

WILLIAM B. DOLSEN.

Witnesses:

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