S. BERNHEISEL.

Millstone-Balance.

No. 162,143. Patented April 20, 1875.

Fig. 1.

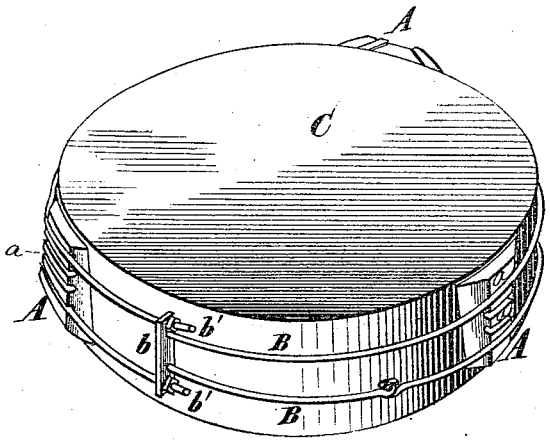
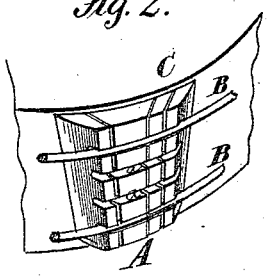


Fig. 2.



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UNITED STATES PATENT OFFICE.

SOLOMON BERNHEISEL, OF GREEN PARK, PENNSYLVANIA.

IMPROVEMENT IN MILLSTONE-BALANCES.

Specification forming part of Letters Patent No. **162,143**, dated April 20, 1875; application filed August 29, 1874.

To all whom it may concern:

Be it known that I, SOLOMON BERNHEISEL, of Green Park, in the county of Perry and State of Pennsylvania, have invented a certain Improvement in Millstone-Balances, of which the following is a specification:

The nature of my invention consists in the employment of tapering weights, so constructed and applied that they cannot only be adjusted both vertically and laterally, but can also be reversed to throw their preponderating ends either at the top or at the bottom of the stone.

It will be readily understood that, by reason of the wedge-shaped configuration of the weights and their reversibility, they possess greater balancing power, the mass being the same, than rectangular blocks within a given space or range of adjustability in a vertical direction, and this range being necessarily limited by the height or thickness of the stone, the importance of this quality of my improved balance-weights will be recognized by practical millwrights.

In the annexed drawings, Figure 1 is a perspective view of a millstone with my improved balance applied thereto. Fig. 2 is a perspective of a sectional balance-weight constructed in accordance with my invention.

The same letters of reference are used in both figures in the designation of identical parts.

The weights A are tapering both in thickness and in width, and are provided with a series of transverse horizontal grooves, *a*, on their exterior side for the reception of the rods B, by which they are clamped to the edge of the stone C in the ordinary manner, two rods being employed, carrying at one end a fixed plate, *b*, through holes in which the other ends are passed, and secured by nuts *b'*.

The grooves *a* form an essential feature of the weights, as they enable me to retain them in position whether the thicker or thinner end is uppermost.

A mere smooth wedge-shaped weight, without means for permanently holding it in an inverted position, cannot, of course, perform the functions of mine, and such a one I do not claim.

I prefer to put on each stone at least one sectional weight, such as shown in Fig. 2, composed of a number of comparatively narrow bars, for compensating for small differences.

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

The transversely or horizontally grooved tapering balance-weights A *a*, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SOLOMON BERNHEISEL.

Witnesses:

D. P. HOLLOWAY,

B. EDW. J. EILS.