

(Model.)

J. J. ETHELL.

MILLSTONE.

No. 285,118.

Patented Sept. 18, 1883.

Fig. 1.

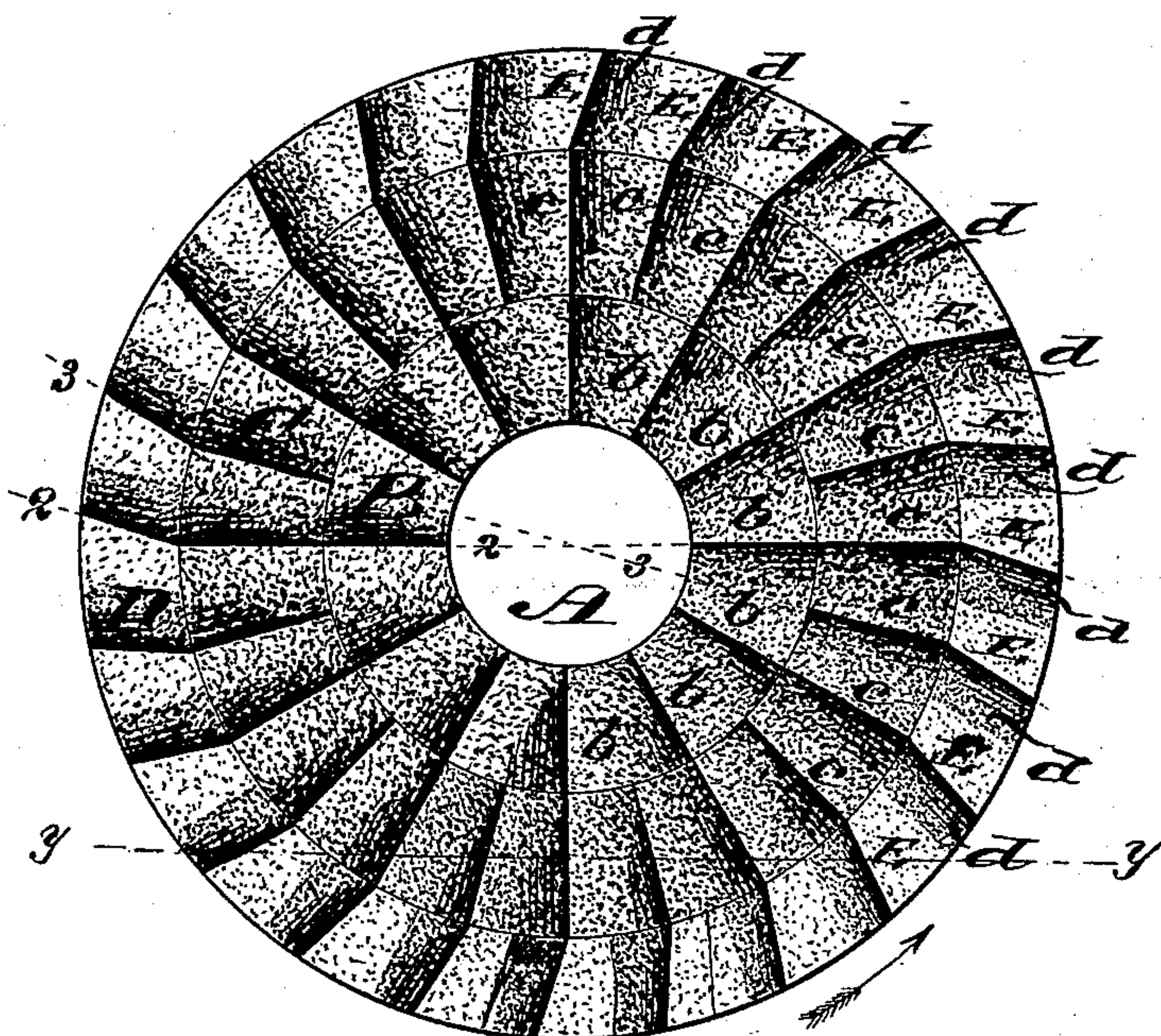


Fig. 2.

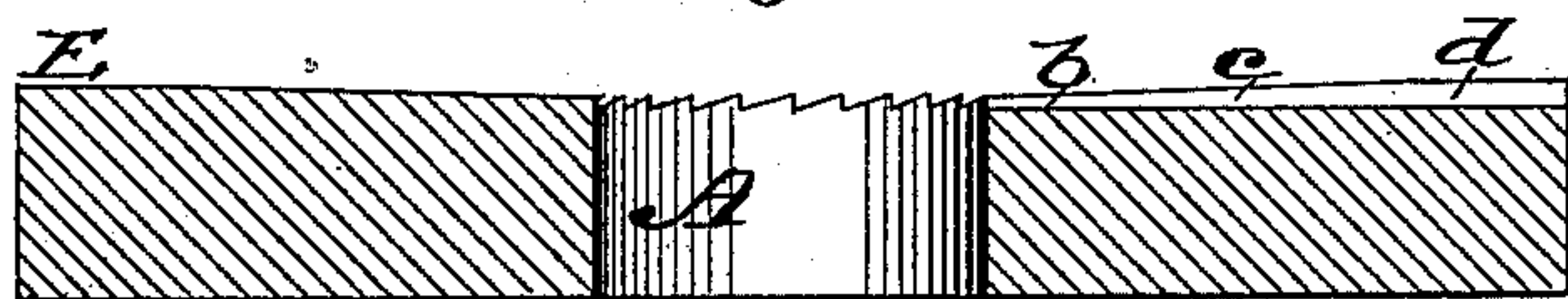
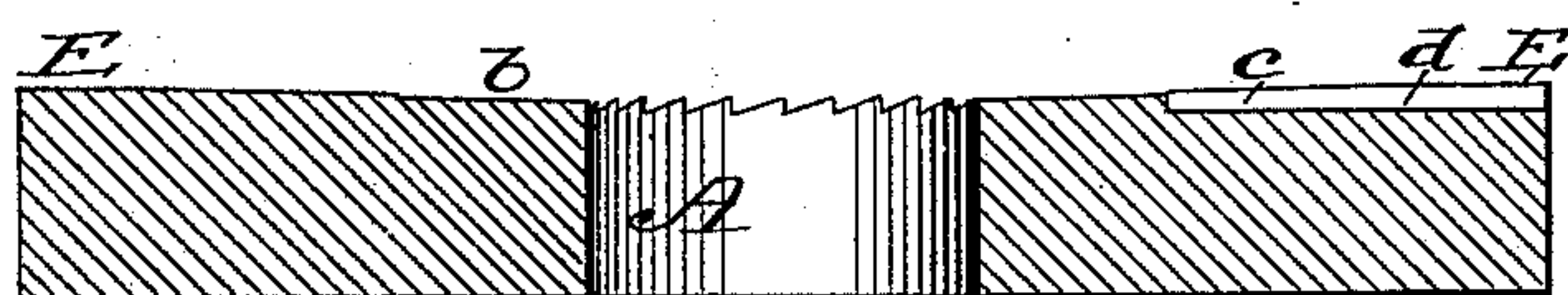
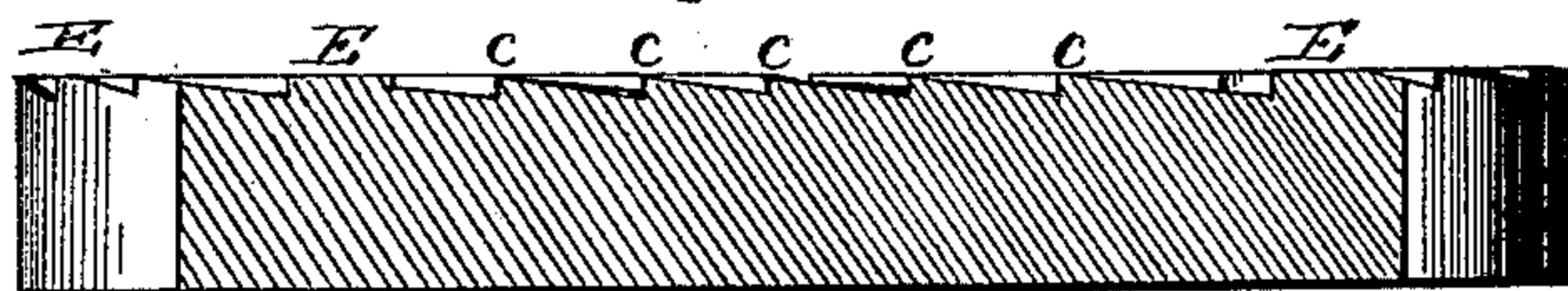


Fig. 3.



Attest:
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Fig. 4. by C. R. Moody
atty



UNITED STATES PATENT OFFICE.

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MILLSTONE.

SPECIFICATION forming part of Letters Patent No. 285,118, dated September 18, 1883.

Application filed May 11, 1883. (Model.)

To all whom it may concern:

Be it known that I, JOHN J. ETHELL, of St. Louis, Missouri, have made a new and useful Improvement in Millstones, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a face view of a millstone having the improvement; Fig. 2, a section on the line 2 2 of Fig. 1, and Fig. 3 a section on the line 3 3 of Fig. 1. Fig. 4 is a section through Fig. 1 in the plane indicated by dotted lines *y y*.

The same letters of reference denote the same parts.

This invention relates to millstone-dress; and it consists in a new and improved dress, which will be fully understood from the description, when taken in connection with the annexed drawings.

The working-surface of the stone is slightly concave, and centrally through the stone is the eye A. Surrounding the eye are radial furrows B, which are equidistant and concentric to the axis of the stone. These furrows are the shallowest of all the furrows on the face of the stone, and they have acute edges *b*, especially designed for crushing the wheat or other grains preparatory to the grinding process. Surrounding the furrows B is another series of furrows, C, which at their inner ends are one-half as wide as the outer ends of the furrows B, and deeper. In other words, the

series of furrows C number just double the furrows B, and they have acute edges *c*, which radiate from the center of the stone. Like the furrows B, the furrows C are planes inclining from the angles or edges *c*, as shown in Fig. 4. The last series of furrows, D, is tangent to a circle described within the circumference of the stone, and they are deeper than the two inner series of furrows. These furrows D perform the grinding operation, and they have acute edges *d*. They are continuous with the furrows B and one-half the number of furrows C, as shown in Fig. 1, forming obtuse angles at the junctions with the furrows C. This skirt series of furrows incline downward from the lands or grinding-faces E, as shown in Fig. 1, which faces are all in the same plane. The furrows are deeper than the furrows B, as well as series C.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A millstone comprising the two radial series of furrows B C, of different depths, the series C being deeper than B, the tangential series of furrows D, deeper than the two series B and C, and the lands E, the surfaces of which are all in the same plane, substantially as described.

JOHN J. ETHELL.

Witnesses:

C. D. MOODY,
THOS. L. JONES.