B. C. STEPHENS.

Millstone Dress.

No. 84,971. Patented Dec. 15, 1868.

Fig. 1.

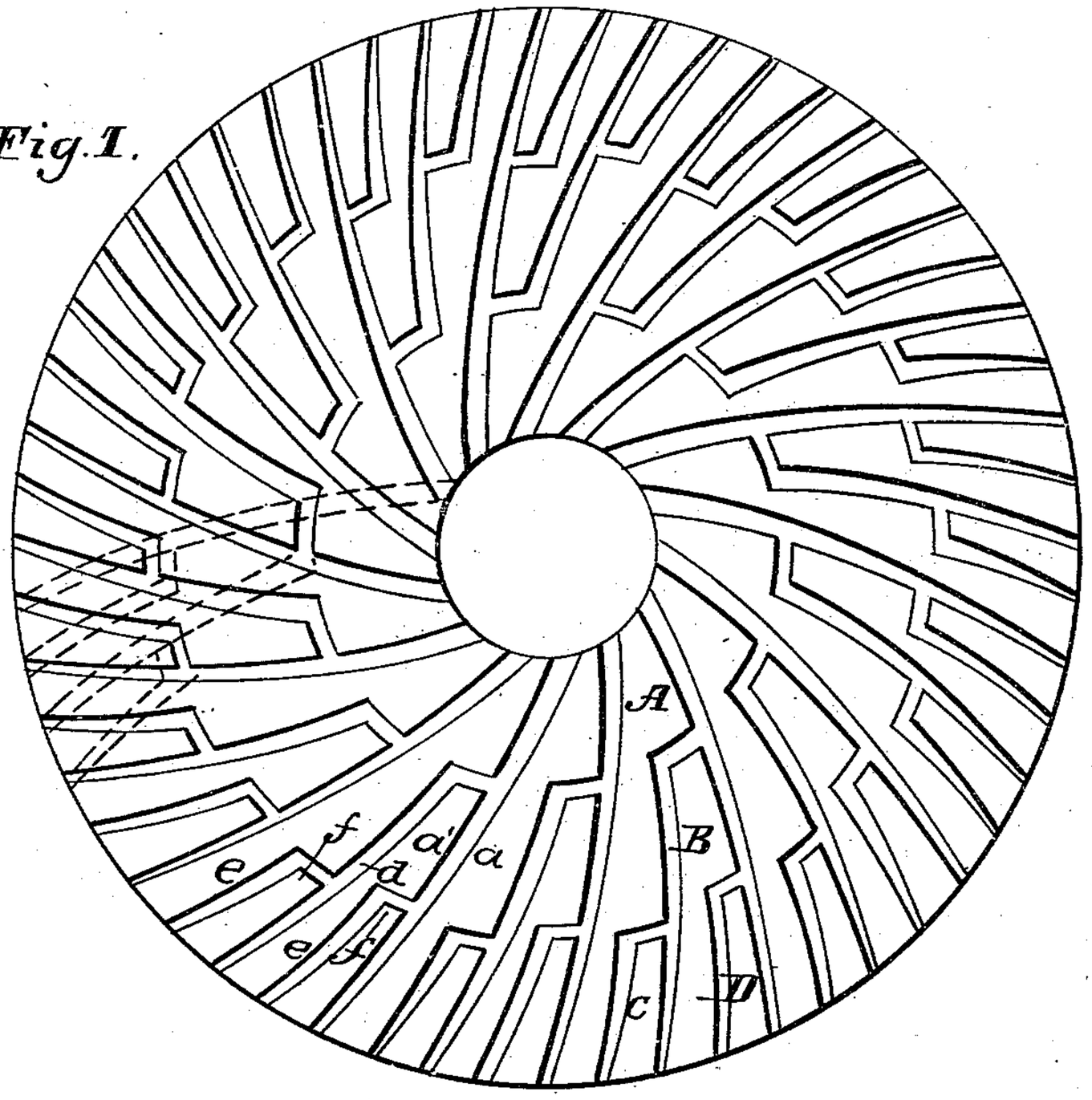
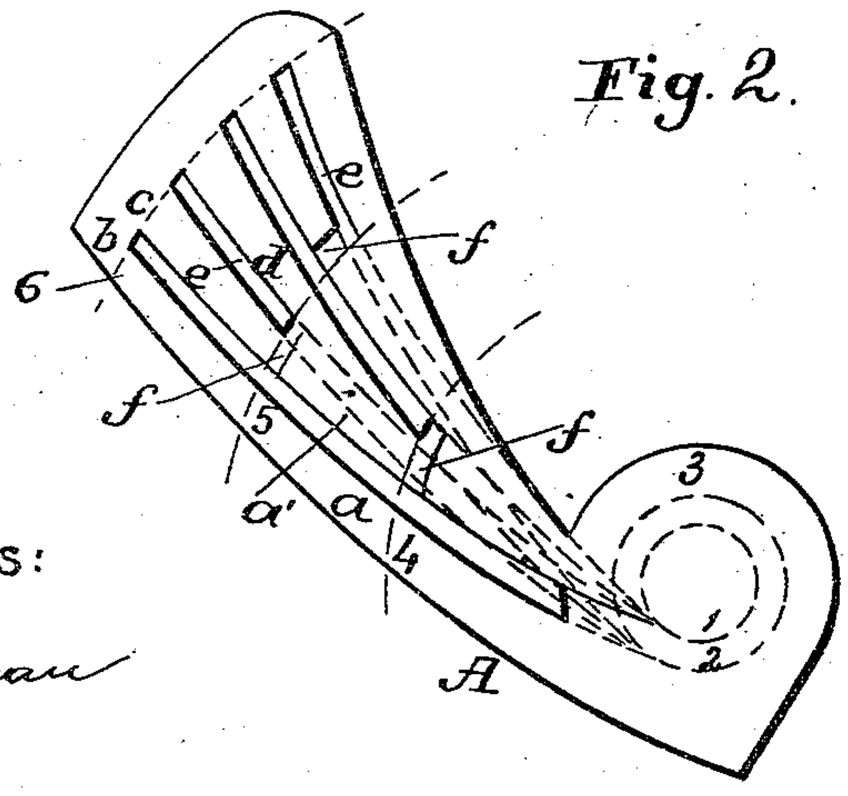


Fig. 2.



Witnesses:
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United States Patent Office.

BENJAMIN C. STEPHENS, OF HOUSTON, MISSOURI.

Letters Patent No. 84,971, *dated December* 15, 1868.

IMPROVED MILLSTONE-DRESS.

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, BENJAMIN C. STEPHENS, of Houston, in the county of Texas, and State of Missouri, have invented a new and improved Millstone-Dress; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to a new and improved millstone-dress, as hereinafter fully shown and described, whereby grain may be ground in a uniform and perfect manner.

In the accompanying sheet of drawings—

Figure 1 is a face view of my invention.

Figure 2, a view of the pattern by which the face of the stone is marked, in order to cut the desired dress in the stone.

Similar letters of reference indicate like parts.

The pattern is made as follows:

Upon a piece of sheet-metal or other suitable thin material, A, (see fig. 2,) I make a circle, No. 1, the diameter of which is proportionate to the diameter of the stone to be dressed, about one-twelfth, ($\frac{1}{12}$,) so that, for a stone four feet in diameter, the circle 1 would be four inches in diameter.

No. 2 is a circle made concentric with No. 1, the diameter of No. 2 being one and a half inch to every foot of the diameter of the stone.

No. 3 is a circle concentric with Nos. 1 and 2, and equal in diameter to the eye of the stone; and

No. 6 is a circle equal in diameter to the stone.

(The radius between the circles 3 and 6 is divided into three equal parts by two circles, 4 and 5.)

No. 7 is what I term the draught-circle.

No. 2, the furrow-circle.

No. 3, the eye-circle.

No. 4, the first-limb circle.

No. 5, the second-limb circle.

No. 6, the stone-periphery circle.

The circle No. 6 is divided into three times as many parts as the number of feet in the diameter of the stone. Add one division for every two feet of diamter. For a stone of four feet in diameter, the circle No. 6 would be divided into fourteen equal parts. Then, with a radius equal to the diameter of the stone, a curved line, *a*, is drawn from circle 2 to one of the division-points *b*, on circle 6. A point, *c*, is then made on circle 6, a distance from the point of intersection formed by the line *a* with 6 equal to one-eighth ($\frac{1}{8}$) of an inch for every foot of the diameter of the stone, which distance, for a stone four feet in diameter, would be half an inch, and another line, *a'*, is drawn from circle 1 to the point *c* in circle 6 thus made.

The centres between the division-points, on circle 6, are then formed, and limbs *d* made, which are similar to the curved lines *a a'*, between the circles 4 and 6, as shown clearly in the drawings.

The centres between these limbs *d*, and the division-points on both sides of them, are then found, and limbs *e* made, which are each connected with the larger limbs, as shown at *f*.

When the draught is thus made, the limbs are all cut out, forming a stencil-plate for each division of the stone, and the whole face of the upper stone is then marked off or painted, by means of the stencil, and the painted surfaces cut out, to form half-round furrows.

The letters A B C D show the canals or spaces between the furrows.

Having thus described my invention,

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

The forming or laying out of a millstone-dress, by means of a stencil-plate or pattern, made in the manner substantially as herein shown and described.

BENJAMIN C. STEPHENS.

Witnesses:

THOMAS D. GREEN,

JAMES H. MASSEY.