R. S. WILLIAMS.

MILLSTONE-DRESS.

No. 191,740. Patented June 5, 1877.

Fig 1.

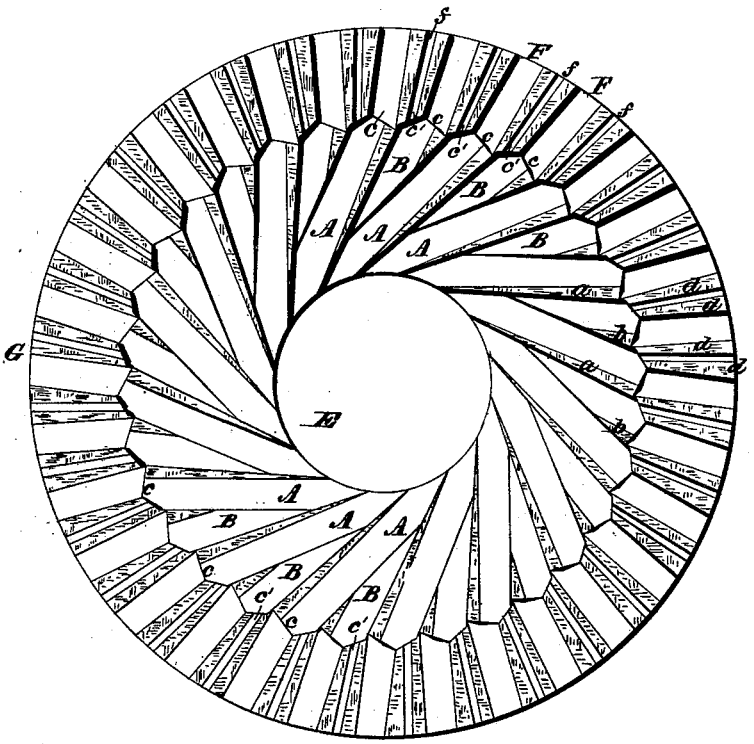
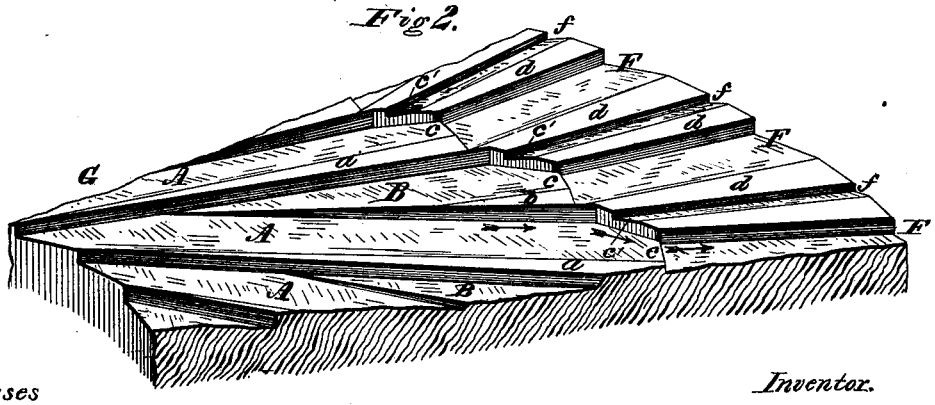


Fig 2.



Witnesses

Harry King

D. P. Lowe

Inventor.

Robert S. Williams,
By his Attorneys,
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UNITED STATES PATENT OFFICE.

ROBERT S. WILLIAMS, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF HIS RIGHT TO JAMES B. MARTIN, OF SAME PLACE.

IMPROVEMENT IN MILLSTONE-DRESS.

Specification forming part of Letters Patent No. **191,740**, dated June 5, 1877; application filed April 16, 1877.

To all whom it may concern:

Be it known that I, ROBERT S. WILLIAMS, of the city of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in 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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a top-plan view, and Fig. 2 is an enlarged view of a section or fragment of the same.

The nature of my invention consists in providing the stone with a novel dress, consisting of one series of furrows running tangentially from its eye about two-thirds of the distance to its periphery, with a second series leading from the first, and terminating at the same distance from the eye with it, and of two other series upon the skirt running almost radially, connecting at their inner ends with the series upon the bosom; but in such a manner as to retard the movement of the grain, or partially so, as hereinafter described.

The object of this invention is to distribute the grain evenly from the eye of the stone, granulate it uniformly, and facilitate its passage off from the skirt.

In the drawings, A represents a series of furrows running tangentially from the eye E, across the bosom of the stone G, about two-thirds of the distance to its periphery, and B a second series leading out of the first, at an angle to the tangent of the furrows A, and terminating at the same distance from the periphery with it, all as clearly shown in both figures.

Both of these series connect with two others, *f* and F, of different width and depth, running almost radially across the skirt. These are so arranged that the inner ends of one of the series, *f*, shall be above, while the inner ends of the other, F, shall be below, the connecting portion of the outer ends of the furrows A and B, as shown at *c* and *c'* in Fig. 2.

The outer ends of the furrows A and B terminate in an angle, the apex of which is shown at *c*. As this angle is embraced by the inner ends of the furrows on the skirt and the intervening lands, the grain, in passing along the deepest portion of the inner furrows, will take the course shown by the arrows in Fig. 2, in reaching the furrows F, through the angle at *c*, and be, of course, partially retarded just before reaching that point, as shown.

As each of the furrows B lead out of each of the furrows A, lands *a* and *b* are left between them, increasing in size from their inner to their outer ends. In like manner, lands *d* are left between the furrows on the skirt, all as shown in both figures.

The series of furrows A should be eighteen in number, more or less, while the number of the series B will, of course, be the same as those of A. The furrows upon the skirt may exceed those upon the bosom of the stone, and thus divide up the skirt with more lands than there are upon the bosom of the same.

The operation of this millstone-dress will be readily understood. As the second series of furrows, B, lead out of the first, A, and as both are arranged tangentially to the eye of the stone, the grain will be rapidly and evenly distributed over the bosom of the same; and as the deepest portions of the outer ends of the furrows on the bosom butt against, and form an angle with the inner ends of the furrows on the skirt, the grain will then be partially retarded. The furrows upon the skirt, being nearly radial and not tangential, receive the grain in its partially-arrested outward movement, and by their position, form, direction, and number, relieve the inner furrows, cause the grain to move rapidly enough to secure its thorough granulation, and at the same time facilitate its passage off from the skirt.

Having thus described my invention, what I claim is—

A millstone-dress, consisting of the tangential furrows A, with the furrows B leading therefrom, upon the bosom of the stone, and both connecting, in the manner described, with the furrows *f* and F upon the skirt, the whole being constructed and arranged as shown, and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ROBERT SAMUEL WILLIAMS.

Witnesses:
JNO. L. HATHAWAY,
WM. L. SIMMONS.