

Millstone Dress.

Patented July 18, 1865.

The diagram shows a rectangular frame with vertical lines inside. A central label 'A' is positioned in the upper middle part of the frame. The top edge of the frame has several small, downward-pointing triangular shapes. The bottom edge is a solid horizontal line. The vertical lines are of varying thickness and spacing, creating a textured or segmented appearance.

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GABRIEL NATCHER, OF SIDNEY, OHIO.

IMPROVEMENT IN MILLSTONE-DRESSES.

Specification forming part of Letters Patent No. **48,831**, dated July 18, 1865.

To all whom it may concern:

Be it known that I, GABRIEL NATCHER, of Sidney, in the county of Shelby and State of Ohio, have made certain new and useful Improvements in Millstone-Dresses; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, which are made part of this specification, and in which—

Figure 1 shows a face view of the stone, and Fig. 2 the side or elevation of the stone.

Similar letters indicate like parts in the two figures.

The object of my improvement is to attain a more efficient dress, one which will grind faster and better, operating upon the berry or grain, of wheat for instance, to crack off the bran, and then by a shaving action to reduce the grain to flour and discharge it as soon as possible, avoiding rubbing flour on flour, which has the effect of heating it and causing it to form in dough-balls inside of the hoop and spout, as well as giving it a tendency to sour.

To enable one skilled in the art to which my invention appertains to make and understand my invention, I will proceed to describe it.

The stone shown in the drawings is the bed-stone; but the dress on the runner is substantially the same, and the runner dressed as shown is designed to revolve with the sun. The face of the stone is divided by furrows A into sections of "land," and the base-lines B of said furrows are tangential to the periphery of the hollow or cup C in the center of the stone. These furrows are of peculiar shape, the sides being inclined and meeting at the bottom or base line B at an angle. On the side on which the berry rises the inclined plane is divided into two inclines, D E, and two steps or cutting-edges, F G. The drag-edge H is made of such an angle with the plane of the stone as to be free from any tendency to retard the meal, which is a common fault in the old drag-edge, which is at right angles to the face of the stone. The upright drag-edge collects dead meal, retarding the progress of the grinding, causing friction, and generating heat. Two-thirds of the width of the furrow is occupied by

the planes D E and one-third by the incline plane or drag-edge H. The land or triangular space between the main furrows A is again divided by furrows I, which have the double incline D' E' and the drag-edge H', similar to the corresponding portions in the main furrow A, excepting that the drag-edge H' is cut with fine lines parallel to the base lines or sides of the furrow.

The lower planes, E E', of the furrows A and I, respectively, are marked with a diamond-pointed bit or steel pick. The outer three inches of their length is marked with lines at an angle of twenty-two and a half degrees ($22\frac{1}{2}^{\circ}$) front of the center of the stone—that is, bearing that angle with a line passing from the starting-point to the center of the stone. The exterior three inches of the face of the stone K is ruled or marked with fine lines bearing the same angle and the rest of the face with lines parallel to the drag-edges of the furrows. The portion of the lower inclines, E E', included between the periphery-lines J and the point of intersection of the furrows is marked with lines parallel to the base-lines.

The furrows are polished and straight, and are gaged to a depth and width, having sharp cutting edges and corners, making cleaner work and requiring less power, as there is but little friction, the line-edges answering as bits, and, in connection with those on the other stone, shaving the grain, making a better flour and a better yield than is attainable by a mere mashing process, which is all that many stones are capable of performing.

It is my aim to make clean work with the grain, and at once dispose of it without rubbing it over again and again and discharging it in a heated condition.

In case of the presence of garlic or wild onion in the wheat, which cannot be separated by smut-mill or separator, as its size and weight is so similar to that of the wheat, I have found that my method of reducing the grain by running it up an incline which is cut in fine lines shaves the garlic and to a considerable extent prevents its becoming mashed into and filling the porous parts of the stone.

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

1. A double-inclined plane on that side of the furrow on which the grain rises.
2. Marking with lines, substantially as described, the first inclined plane, extending from the base-line of the furrow to the first step.
3. Marking with lines of the angle described,

or thereabout, the outer portion of the face of the stone, as described.

To the above specification of my improved millstone-dress I have signed my hand this 8th day of March, 1865.

GABRIEL NATCHER.

Witnesses:

STEPHEN THOMPSON,
EDWARD H. KNIGHT.