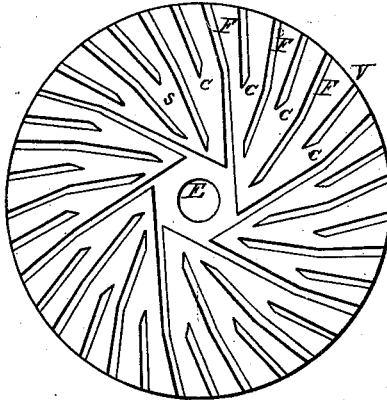


*R. M. Smith.*

*Millstone Dress.*

*Nº 1,488.*

*Patented Feb. 8, 1840.*



# UNITED STATES PATENT OFFICE.

ROBERT M. SMITH, OF RUTHERFORD COUNTY, TENNESSEE.

## MODE OF DRESSING MILLSTONES.

Specification of Letters Patent No. 1,488, dated February 8, 1840.

*To all whom it may concern:*

Be it known that I, ROBERT M. SMITH, of Rutherford county, State of Tennessee, have invented a new and Improved Mode of Dressing Millstones; and I do hereby declare that the following is a full and exact description, reference being had to the annexed drawing, to wit.

Face the bed stone S true from the eye E to the verge V, the runner in about two thirds from verge to eye, leaving one third throat, block the eye with a bit of plank, cut to fit. In said block find the center, set your compasses three fourths of an inch for each foot your stone is in diameter and describe a circle, which I will term the small draft circle, then set your compasses one and one fourth of an inch to the foot and draw another, which I will term the large draft circle, which will be on a four foot stone a six inch circle and a ten inch circle, then with a tram or strip with a gimlet in the end and center of the block describe a circle on the stone two thirds from the center to verge, which will be on a four foot stone 16 inches from the center. This may be done with a lead pencil or penciling brush. This last circle I will term elbow circle, from which all the furrows F make a small crook or elbow C and have from it to the verge one inch and a fourth to the foot draft, from the eye to the elbow circle three fourths of an inch to the foot draft. On the elbow circle divide your stone in two parts for each foot in diameter, which will be in a four foot stone 8 parts, three foot stone six parts, &c., each part to have six furrows, one of which to run into the eye and termed receiving furrows. For these receiving furrows make a strip of proper length and one and a half inch wide, lay it to the divisions on the elbow circle and to the small draft circle, (to the right or left of the draft circle, so as to suit the turning of the stone,) and mark to elbow circle, then turn it out to the large draft circle (taking care not to let it slip at elbow circle) and mark out to the verge, which gives to the furrows a small crook or elbow. After laying of the receiving furrows divide each part in three equal parts on the same circle, make a strip of proper length and one inch wide, lay it on the divisions and to the small

draft circle, mark the furrows to the elbow circle, then move your strip to the large draft circle and mark out as described for the receiving furrows, then cut off or point these furrows by laying a strip one and a half inch wide parallel with the receiving furrows, which runs two furrows nearly into the eye in each quarter and gives them the same draft and elbow as the receiving furrows. You will then subdivide on the verge of the stone between each furrow and lay your inch strip on the division and to the large draft circle. Mark out the furrows in each quarter running about one third the length of the receiving furrows. The receiving furrows should be cut round representing a gouge from the eye to the elbow or crook and from one half to three fourths of an inch deep at the eye and gradually run out to one fourth inch deep at the verge. All the others and the receiving from the elbow or crook are bezel or bevel furrows, cut about the same depth at the back or deep edge. The verge or flowering furrows are cut off or pointed at the inside end by laying a strip one inch wide parallel with the receiving and other short furrows, which forms three short furrows running about one third the length of the receiving furrows. Each stone should be laid off and furrowed the same and when put together for grinding every furrow from about half way between the eye and the elbow or crook is crossing each other at about thirty five or forty degrees, continuing the same angle out to the verge, the furrows being so arranged so as to commence the proper grinding angle near the eye and continuing out to the verge, and every furrow having precisely the same draft will grind faster and discharge more regular.

What I claim as my improvement in the mode of dressing mill stones is—

Giving to all the furrows the same draft as herein described, and also in giving the furrows a crook or elbow at a point about midway between the verge or periphery and the eye of the stone, for the purpose and in the manner described.

ROBERT M. SMITH.

Witnesses:

ISAAC MILLER,  
B. W. FARMER.