F. KELSEY.

Millstone.

No. 5,738 Patented Aug. 29, 1848.

Fig. 1.

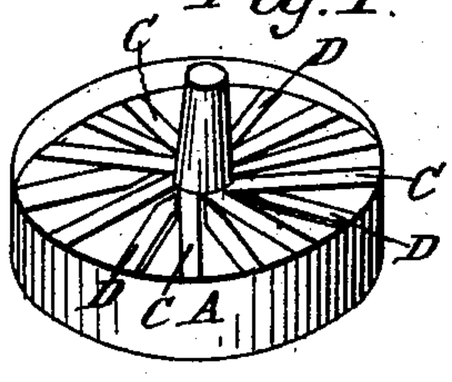


Fig. 2.

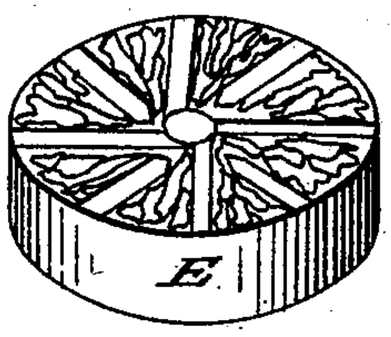


Fig. 3.

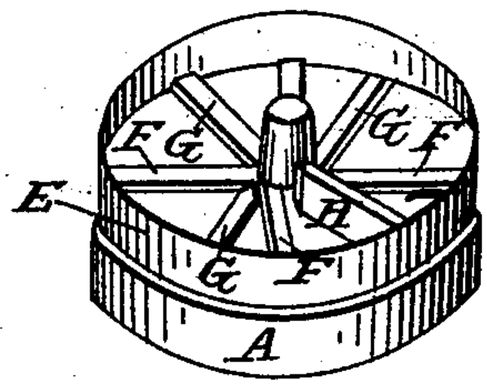


Fig. 4.

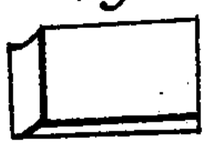
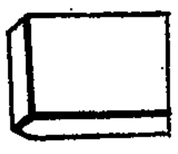


Fig. 5.



UNITED STATES PATENT OFFICE.

FRANCIS KELSEY, OF NEW YORK, N. Y.

MILLSTONE.

Specification of Letters Patent No. 5,738, dated August 29, 1848.

To all whom it may concern:

Be it known that I, FRANCIS KELSEY, of the city, county, and State of New York, have invented a new and useful Improvement in Millstones; and I do hereby declare that the following is a full and exact description of the construction and of the mode of constructing the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a perspective view of the mold in which the millstone is formed, Fig. 2 represents the millstone as it appears when finished and inverted: Fig. 3 represents the mold and the hoop partly filled with the composition; and in Figs. 4 and 5 are shown the two kinds of partition boards used in the process as hereinafter described.

A circular face plate A A A is made of wood or metal, with the face slightly elevated in the center; and on the center of the face plate is placed a block B of the form of a frustum of a cone.

Eight or more strips of wood or metal C C C, are nailed or otherwise attached to the face of the plate and extend from the block to the periphery. These strips are about one fourth of an inch thick at the centerward end, and one eighth or less at the outward end; other similar strips D D are placed intermediately between the first, in whatever position furrows are required in the face of the millstone: the use of all these strips, is to form furrows or grooves in the face of the stone, and to serve as guides in the arrangement of the stone facings. A hoop of iron plate E is placed upon the face plates, inside of the rim thereof, and the surface of the plate between the strips is nearly covered with flat pieces of flint or other similar hard stone, with the best faces down. Those pieces are generally placed edgewise with the smoothest edge to the plate, and arranged according to the radius thereof. Several partition boards F and G or strips of wood six inches wide and in form corresponding to those of the groove strips (as represented in Figs. 4 and 5,) are placed upon the groove strips and extend from the center block B, to the hoop. These are slightly attached to the groove strips by small dowel pins, to keep them in place, and a quantity of dilute cement made of a mixture of waterlime and water, or the ingredients of the common hydraulic or Roman cement, is poured over the arranged fragments of flint, so as to fill all interstices: and this cement is filled with other fragments of stone closely packed. The hoop is then filled with the cement and stone fragments nearly to the top of the partition boards; and a quantity of the dry water lime is sifted over the composition to absorb the water that may rise above the surface while the cement is becoming consolidated. When this composition has become hard, the partition boards are carefully extracted in the manner shown at H, Fig. 3, and the apertures or vacancies thus produced are filled with the liquid cement, or plaster of Paris mixed with water to a convenient consistence; and the hoop is also filled up with cement, and fragments of granite, or other stone, and dry water-lime is sifted over the whole to absorb the water that may rise to the surface. When this composition has become sufficiently hard, it is inverted, the face piece and center block removed, and the millstone is left to dry, which ordinarily requires three or four weeks.

What I claim as my invention and desire to secure by Letters Patent is—

The mode of constructing millstones by means of the face plate, groove strips, and partition boards, and the mode of arranging and securing the grinding fragments, substantially as herein set forth.

FRANCIS KELSEY.

Witnesses:

RUFUS PORTER,

JAMES DONAHOE.