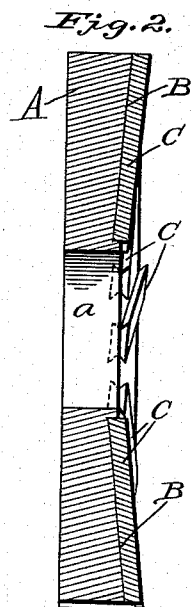
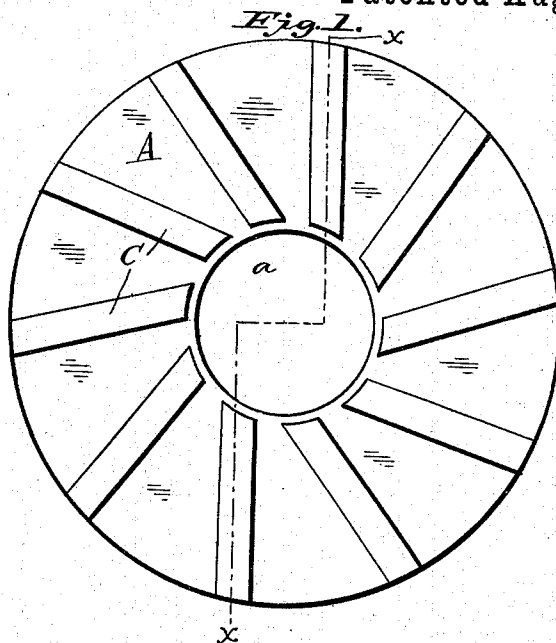


(No Model.)

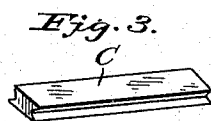
H. M. BARR.
MILLSTONE.

No. 565,873.

Patented Aug. 18, 1896.



Witnesses
Edwin G. M. Kee
K. A. Hare



Inventor
Henry M. Barr
By John Hedderburn
his Attorney.

UNITED STATES PATENT OFFICE.

HENRY M. BARR, OF ROULETTE, PENNSYLVANIA.

MILLSTONE.

SPECIFICATION forming part of Letters Patent No. 565,873, dated August 18, 1896.

Application filed January 31, 1896. Serial No. 577,565. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. BARR, a citizen of the United States, residing at Roulette, in the county of Potter and State of Pennsylvania, have invented certain new and useful Improvements in Millstones; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in millstones; and it has for its object, among others, to provide a simple and cheap improved millstone which shall be more durable and efficient in use and which will require less power to drive the same to accomplish the same amount of work. The teeth are made separate and detachable, so as to be readily inserted and so that any one can be removed and a new one placed in its stead when necessary. With these insertible teeth the stones can be renewed much cheaper than the other forms of stones could be dressed.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a face view of my improved millstone. Fig. 2 is a section through the same on line *xx* of Fig. 1. Fig. 3 is a perspective view of one of the teeth removed.

Like letters of reference indicate like parts in the various views.

Referring now to the details of the drawings by letter, A designates the stone, having the central opening *a*, as usual, but the teeth, instead of being formed integral with the stone or bur and in the acting face of this stone, are arranged in the grooves B, extending from the center to the outer edge, and the said grooves are preferably dovetailed, as shown, and the grooves thereof extend from the periphery to the central opening, or may terminate at a suitable distance from either, as may be found most expedient.

C are the teeth, preferably of steel, formed with four equal edges, which can in turn be brought to do the grinding, thus making one tooth serve the purpose of four, and the said teeth are dovetailed to engage the dovetailed grooves. They may be held therein in any suitable manner. Frictional contact will under ordinary circumstances be sufficient, but other means of fastening may be provided if desired.

In practice it is designed to manufacture the teeth all of a standard size, and the length can be varied to suit the different sizes of mill, and the teeth will thus be interchangeable and one can be removed and another placed in its stead when desired. The teeth are arranged at a tangent, as shown, so as to produce better results and lessen the tendency of the teeth to be thrown out of their grooves during the operation of the machine.

It will be observed that by the construction shown the double dovetail has the duplex function of a renewable undercut cutting edge projecting above the general plane of the disk and of a means of fastening.

Having thus described the invention, what is claimed as new is—

As an improved article of manufacture, a millstone having a central opening and grooves extending from the periphery toward the center, said grooves being dovetailed in form and teeth formed of steel with four equal edges, the opposite longitudinal sides of said teeth being dovetailed and engaged in the dovetailed grooves, whereby the double dovetail performs a double function of a renewable undercut cutting edge projecting above the general plane of the disk and of a means of fastening and by which each tooth may be adjusted to bring any one of its four edges into operative position for grinding and thus all four edges of a single tooth utilized, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HENRY M. BARR.

Witnesses:

JOSEPH MENSCHER,
ARTHUR B. MANN