(No Model.)

M. AMS.

MILLSTONE.

No. 523,320. Patented July 24, 1894.

Fig. 1

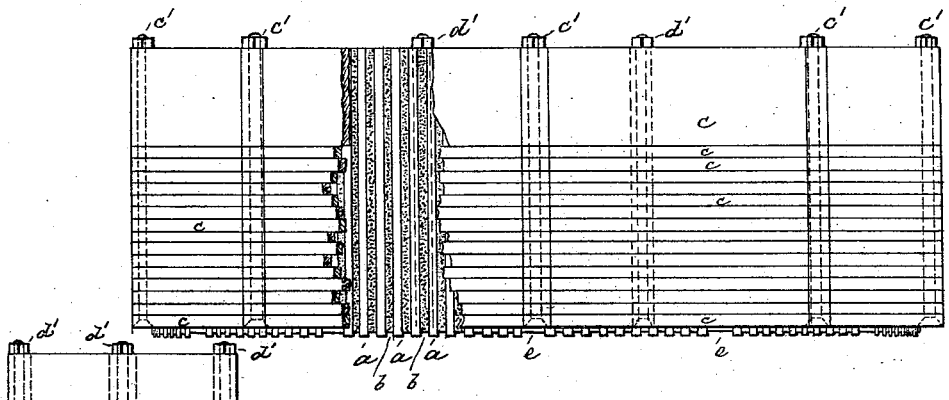


Fig. 3

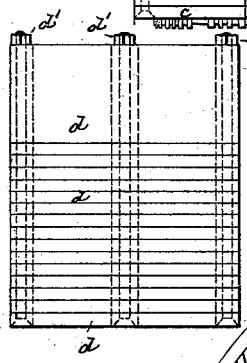
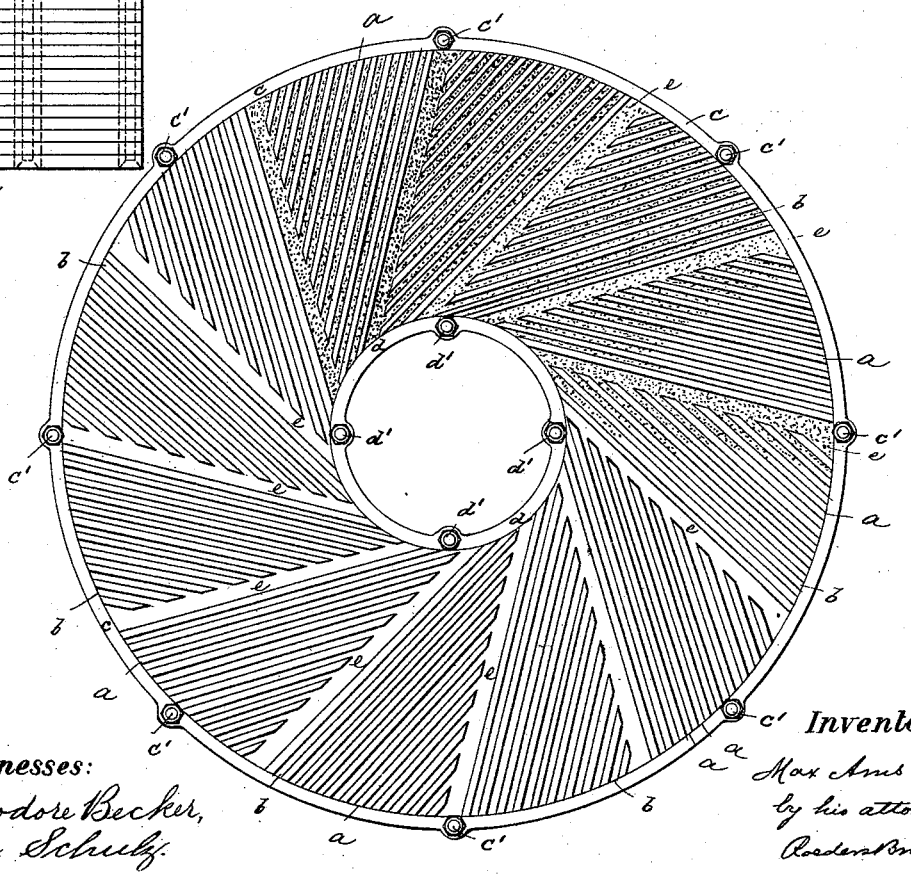


Fig. 2



Witnesses:
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UNITED STATES PATENT OFFICE.

MAX AMS, OF NEW YORK, N. Y.

MILLSTONE.

SPECIFICATION forming part of Letters Patent No. 523,320, dated July 24, 1894.

Application filed September 27, 1893. Serial No. 486,574. (No model.)

To all whom it may concern:

Be it known that I, MAX AMS, of New York city, New York, have invented an Improved Millstone, of which the following is a specification.

This invention relates to a millstone which is composed of a series of plates which are set on edge and are embedded in an annular filling or spacing body of cement or plaster of paris. The plates are confined at the eye and at the periphery by a set of concentric adjustable rings, which are reduced in height, as the plates become worn.

In the accompanying drawings: Figure 1 is a side view partly in section of my improved millstone. Fig. 2 is a face view thereof, and Fig. 3 a side view of the inner rings *d*.

The letters *a*, *a*, represent a series of upright plates, stones or tiles which are set on edge, that is to say, which are so set, that either their upper or their lower edge, forms the face of the stone.

The plates *a*, may be composed of various substances, selected with reference to the particular class of material to be ground. Thus they may be formed of porcelain, stoneware, glass, metal or similar hard substance. The plates *a*, are embedded and connected by a hardened annular filling or spacing body of cement or plaster of paris, the whole forming a compact mass. At the skirt, the artificial stone thus formed is confined by a ring or rings that may be reduced in height, as the stone becomes worn. I have shown a series of superposed rings *c*, having perforations for the reception of connecting bolts *c'*. At the eye, the artificial stone is similarly bound by the small superposed rings *d*, connected by the bolts *d'*.

Of course, either the runner or the bedstone or both, may be made in the manner described.

The plates *a*, may be either straight or bent and may be arranged to form any suitable pattern. I have shown them arranged in groups, to form a series of sectors, each composed of a series of parallel stones. Between the several sectors, the furrows *e* are formed.

In use, the material is attacked by the upright edges of the plates *a*, and will be rapidly reduced thereby. As the plates are worn down, the rings *c*, *d*, are reduced or taken off, to conform to the reduced height of the plates.

The advantages of my improved millstone are numerous. It will attack the material vigorously and reduce it in a comparatively short time. At the same time, the plates *a*, will always remain sharp, no matter how far they are worn.

What I claim is—

A millstone composed of a series of upright plates set on edge, an annular cement filling that connects the plates and of inner and outer concentric rings that are adjustable in height, substantially as specified.

MAX AMS.

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