F. STEIMMIG.

GRINDING-MILL.

No. 180,167. Patented July 25, 1876.

Fig. 1

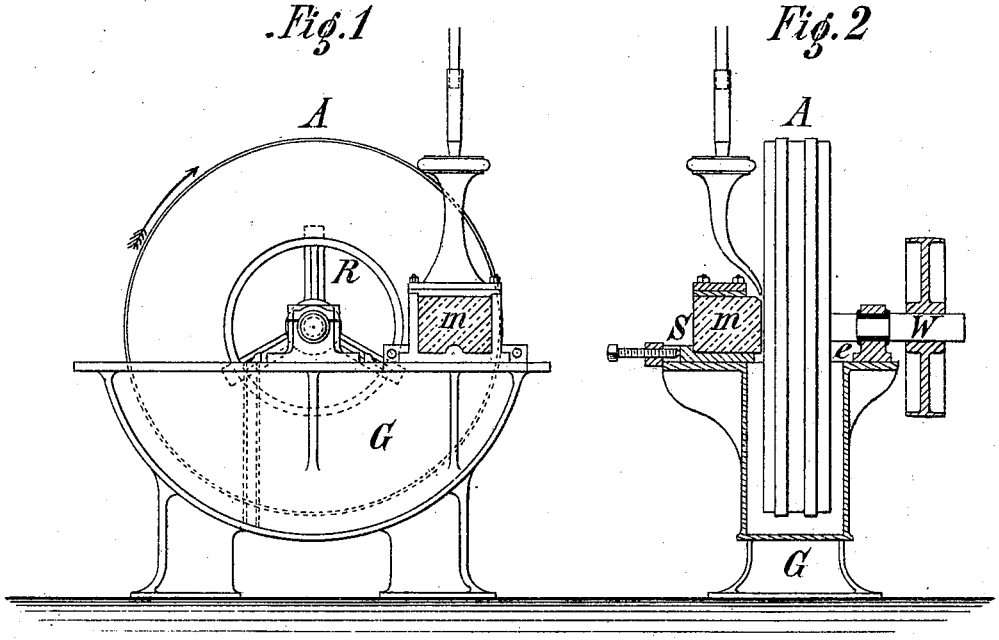
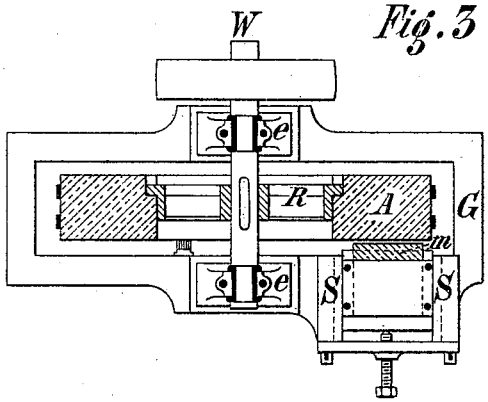


Fig. 2

Fig. 3



Witnesses.
Henri Guillaume
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per Henry Orth
atty

UNITED STATES PATENT OFFICE.

FRITZ STEIMMIG, OF EBENFURTH, AUSTRIA.

IMPROVEMENT IN GRINDING-MILLS.

Specification forming part of Letters Patent No. **180,167**, dated July 25, 1876; application filed May 8, 1876.

To all whom it may concern:

Be it known that I, FRITZ STEIMMIG, of Ebenfurth, Empire of Austria, have invented a new and useful Improvement in Machinery for Crushing, Bruising, or Grinding, of which the following is a specification:

This invention relates to an improvement in machinery for crushing, bruising, or grinding grain, bones, minerals, or other substances, but more especially to crushing or bruising grain. It consists of a ring-shaped stone mounted on a horizontal shaft, and so arranged as to rotate vertically with one of its sides opposite to a fixed crushing-piece. Substances introduced between this fixed crushing-piece and the side of the rotating stone will therefore be subjected to a crushing, bruising, or grinding action.

The accompanying drawings fully illustrate the invention.

Figure 1 is a side elevation, Fig. 2 a front elevation, and Fig. 3 a plan, of machinery constructed according to this invention.

In all the drawings similar letters indicate similar parts.

The ring-shaped stone A is mounted on the shaft W by means of the iron ring R, the shaft resting in the bearings *e* on the standard G. On the same standard the slide-rest S is arranged, by means of which the stone segment or crushing-piece *m* can be adjusted, so as to be fixed nearer to or farther from the stone ring A. The crushing-surfaces of the stone ring A and of the stone segment *m* are suitably hewn or dressed, the latter preferably in parallel lines of any number, and in any direction desired. An opening to admit the material to be crushed is also arranged in the stone segment.

The stone ring is rotated at any suitable speed in the direction shown by the arrow, and the material to be crushed is led between the stone ring and the fixed stone segment by means of a hopper, the crushed product escaping below.

If desired, both of the side surfaces of the stone ring may be utilized for crushing purpose by using two stone segments, one at each of the opposite sides of the stone ring.

In constructing the stone ring according to this invention, it is not necessary to confine one's self to the use of natural stone, as artificial stone, or the materials from which the well-known emery-wheels are made, may be used in its stead.

The segment or fixed crushing-piece *m* need not necessarily be made of any kind of stone, as chilled cast-iron or other suitable material may be employed.

I claim—

1. The combination of the crushing-ring A, crushing-piece *m*, and slide-rest S, essentially as described, and for the purpose set forth.

2. In a grinding or crushing device, the segmental fixed crushing piece or block *m*, having its upper face-edge beveled, so as to form an enlargement or throat between said crushing-block and the revolving stone, for the purpose of feeding the material to be ground between the two, substantially as described.

3. The vertically-revolving grinding-wheel and the adjustable fixed segment or block, having its upper face-edge beveled, as described, in combination with a feed-hopper or other feeding device, substantially as described, for the purpose set forth.

In witness that I claim the foregoing I have hereunto set my hand this 5th day of April, 1876.

FRITZ STEIMMIG.

Witnesses:
C. O. PAGET,
T. BARTA.