

A. CREASE.

Improvement in Grinding Mills.

No. 125,791.

Patented April 16, 1872.

Fig. 1.

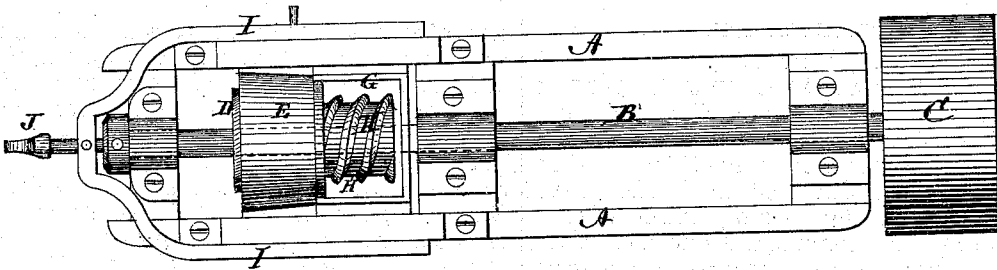


Fig. 2.

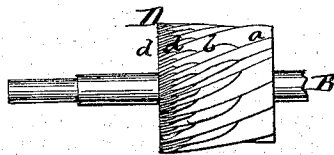
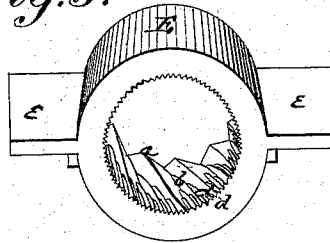


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

ALEXANDER CREASE, OF CLEVELAND, OHIO.

IMPROVEMENT IN GRINDING-MILLS.

Specification forming part of Letters Patent No. 125,791, dated April 16, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, ALEXANDER CREASE, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Feed-Mill; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a "mill for grinding feed," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of my entire machine; and Figs. 2 and 3 are detached views of the grinding parts thereof.

A represents the frame of my mill, constructed in any suitable manner to contain the working parts. In suitable journal-boxes, running longitudinally along the center of the frame A is a shaft, B, upon which is a pulley, C, to attach a belt from any convenient power so as to run the machine. The grinding parts of my mill consist of a cone, D, and concave or tapering hollow cylinder, E. The cone D is cast with three sets of teeth around its circumference. The first row, *a*, at the smaller end are called gathering-teeth; the next row, *b*, crushers; and the next two rows, *d d*, at the larger end, grinders. These gradually diminish in size and multiply in number from the smaller end to the larger. Around the inner

circumference of the concave E are cast corresponding teeth, and the teeth of both cone and concave are slightly curved, so that when the concave is drawn over the cone the teeth cross each other to facilitate the discharge of the grain. The concave E is provided with flanges *e e* resting upon the frame A. The feed-box G is provided with similar flanges for resting on the frame, and is placed at the smaller end of the cone, the shaft B passing through the same. On the shaft B inside of the feed-box G is a screw, H, for conveying the grain to the mill. I represents a stirrup or fork, the ends of which form hooks to catch on or be attached to said flanges, and through the head or center of said fork or stirrup passes a set-screw, J, into the frame. By the aid of this set-screw and fork the concave can be drawn over the cone and, adjusted to grind to any degree of fineness required.

This mill can be run either standing upright or in a horizontal position, and can be made to feed from the large end as well as from the small.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The cone D, concave E, screw H, stirrup I, and adjusting-screw J, all constructed and arranged to operate substantially as herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ALEXANDER CREASE.

Witnesses:

JAMES AITCHISON,
WILLIAM RUSSELL.