

(No Model.)

F. SCHMIDT.
GRINDING MILL.

No. 501,106.

Patented July 11, 1893.

Fig: 1.

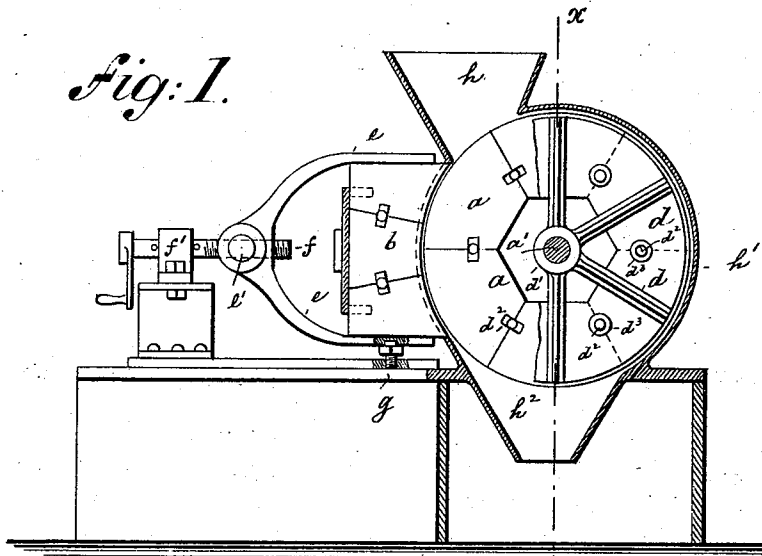


Fig: 2.

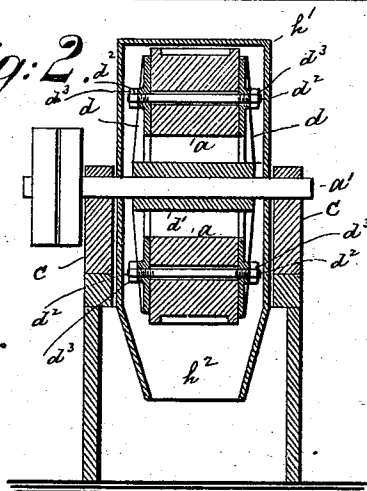


Fig: 4.

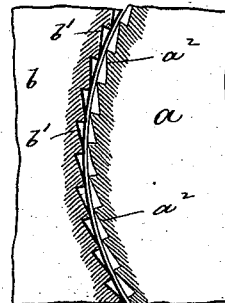
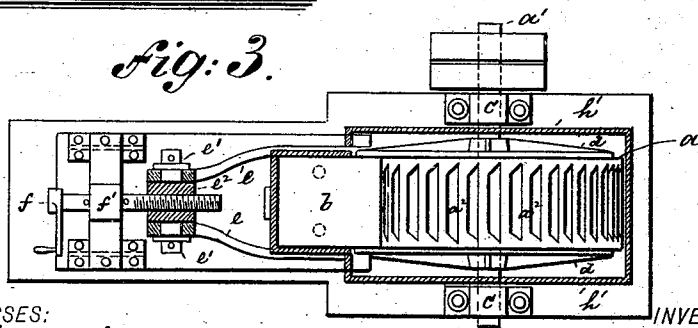


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRIEDRICH SCHMIDT, OF NEW YORK, N. Y.

GRINDING-MILL.

SPECIFICATION forming part of Letters Patent No. 501,106, dated July 11, 1893.

Application filed March 21, 1893. Serial No. 467,013. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH SCHMIDT, of New York city, New York, have invented an Improved Grinding-Mill, of which the following is a specification.

This invention relates to a mill for grinding flour, in which an upright runner having a dressed periphery acts in conjunction with an upright concave bed stone having a corresponding periphery, and rendered adjustable by certain novel mechanism.

In the accompanying drawings: Figure 1 is a longitudinal section, partly in elevation of my improved grinding mill. Fig. 2 is a vertical cross section on line x, x , Fig. 1; Fig. 3 a top view partly in section of the mill and Fig. 4 a detail section through the grinding surfaces of the stones.

The letter a , represents an upright runner and b , is the concave upright standard or bed stone. To the spindle a' , of the runner a , which turns in the frame c , there is secured a sleeve or hub d' , which connects two cheek plates d , placed to the right and left of the runner. The runner is composed of six, more or less, sector-shaped stones, which leave a free space in the center and they are attached to the cheeks d , by means of keys or bolts d^2 , having rounded ends for the reception of nuts d^3 . The free space at the center of the runner, serves to gain access to the stones in case of repair. The periphery of the runner a , is dressed in such a manner, that the furrows are formed between upwardly pointing teeth a^2 . These teeth extend not quite to the skirt (Fig. 3) so as to properly confine the corn.

The bedstone b , is also made of several sections which are keyed together. Its concave grinding periphery is formed upon the same radius as the runner a , and is provided with teeth b' , that correspond to the teeth a^2 . The stone b , which is also made in sections, is secured to a yoke e , that is free to turn slightly on a pivot e' . This pivot is provided with a tapped central section e^2 , through which passes a set screw f . The set screw turns in a frame f' , and by revolving the screw, the distance between the grinding faces of the stones may be adjusted, as will be readily understood. The yoke e , is supported at its free end, upon a set screw g , which, when turned, tilts the stone b . Thus the stones may be set slightly eccentric to each other, so that the grinding surfaces will gradually approach each other from top to bottom. The corn is through hopper h , fed between the stones, which are inclosed by a casing h' , while the meal is discharged through the spout h^2 .

My improved mill performs an increased amount of work, requires little power, and permits ready adjustment.

What I claim is—

The combination of an upright runner with a concave bed stone, a yoke secured to the bed stone, a perforated tapped pivot on which the yoke turns, and with a hand screw engaging the tapped pivot and a set screw which supports the yoke, substantially as specified.

FRIEDRICH SCHMIDT.

Witnesses:

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