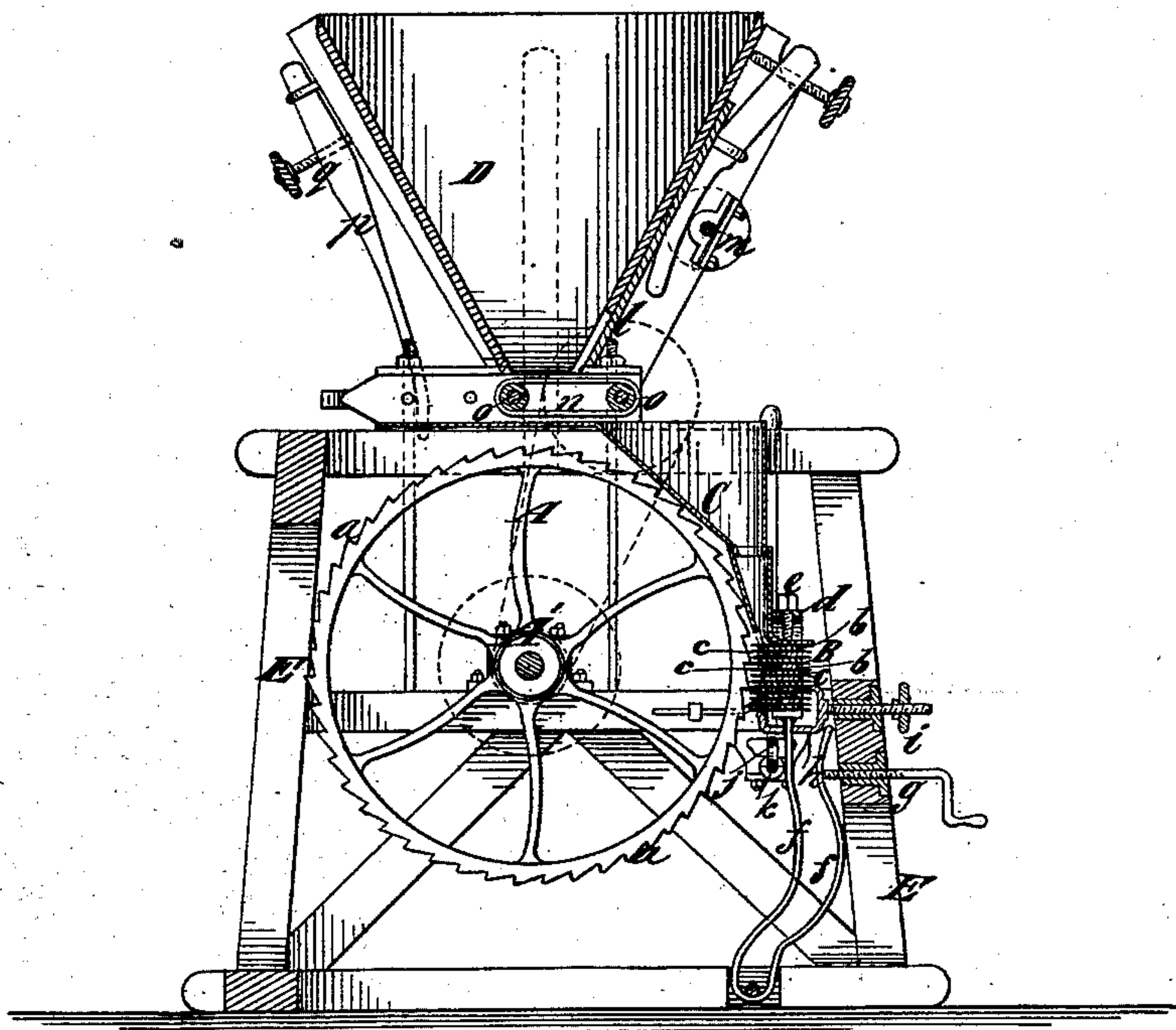


(No Model.)

M. MÖLLER.  
Corn Grinding Mill.

No. 232,536.

Patented Sept. 21, 1880.



WITNESSES:-

*Louis H. Whithead.*

*Fred. Haynes*

INVENTOR:-

*Martin Möller*  
*by his Attorney*  
*Rowntree*



# UNITED STATES PATENT OFFICE.

MARTIN MÖLLER, OF KOLLMAR, GERMANY.

## CORN-GRINDING MILL.

SPECIFICATION forming part of Letters Patent No. 232,536, dated September 21, 1880.

Application filed April 24, 1880. (No model.) Patented in Germany April 10, 1879.

*To all whom it may concern:*

Be it known that I, MARTIN MÖLLER, of Kollmar, in the German Empire, have invented a new and useful Improvement in Mills for  
5 Rough-Grinding Corn and the Like Materials, of which the following is a specification.

My invention relates to mills for grinding corn or other coarse materials in which a grooved roller or drum is rotated in proximity  
10 to a bed or jaw, so as to crack, crush, or grind the material between the roller or drum and bed or jaw.

The invention consists in the combination, with the grinding-cylinder, of the bed secured  
15 within a shackle, a vertical spring supporting the shackle which carries the bed, and a horizontal adjusting-screw arranged to regulate the tension of the spring; also, in the combination, with the grinding cylinder or drum,  
20 of the bed secured within a shackle by means of set-screws, a vertical spring supporting the shackle which carries the bed, a movable holder or casing for the shackle, and a hand-wheel for adjusting said shackle-holder, all as hereinafter set forth and claimed.

The accompanying drawing represents a partial section and side elevation of a mill embodying my invention.

A designates a roller or drum arranged upon  
30 an approximately horizontal axis, A'; and B designates the bed or jaw, which, in conjunction with the drum or roller, effects the grinding, crushing, or cracking of material. The drum or roller is grooved transversely across  
35 its face, preferably, so as to form ratchet-shaped teeth *a*, while the bed is composed of alternate plates of iron *b* and intermediate plates of steel *c*, projecting beyond the edges of the iron plates and forming the grinding-surface. The several plates of iron and steel are  
40 securely clamped in a shackle, *d*, by means of set-screws *e*, and the shackle is represented as attached to one end of a bent spring, *f*, the tension of which may be regulated by an adjusting-screw, *g*. The shackle *d* is shown as  
45 held in a holder or casing, *h*, and by turning the hand-wheel *i* the bed or jaw may be adjusted toward and from the drum or roller and held in any desired position.

50 When desired, the bed or jaw can be moved entirely away from the roller or drum by an eccentric or cam, *j*, upon a rotary shaft, *k*, which may be turned to bring the eccentric or cam to bear upon the spring *f*.

C designates a hopper, from which the material passes to the roller or drum A and bed or jaw B. In order to provide for a steady and uniform feed to the hopper C, I preferably employ a second hopper, D, the outlet of which is closed by an adjustable gate, *l*, which may  
55 be raised or lowered by a shaft, *m*. The open lower end of the hopper D is closed by an endless belt or apron, *n*, mounted upon rollers *o*, the tension of the belt or apron being maintained by a spring, *p*, acting to draw the rollers  
60 *o* apart, and provided with an adjusting-screw, *q*, by which its force may be regulated.

The several parts of my mill are mounted in or upon a suitable frame-work, E, and motion may be imparted to the several movable parts  
65 in any desired manner.

When the gate *l* is open the corn or other material to be ground, falling upon the belt or apron *n*, is carried forward and deposited in the hopper C, from whence it passes downward between the roller or drum A and bed B.  
75

The bed B, when constructed of plates of iron and steel, is very readily made. Any of the plates may be readily renewed, and as the steel plates become worn they may be moved  
80 outward and newly secured in the shackle, thus dispensing with the necessity of sharpening or dressing the surface of the bed.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the grinding cylinder or drum A, of the bed B, secured within a shackle, *d*, the vertical spring *f*, supporting the shackle which carries the bed, and the horizontal adjusting-screw *g*, arranged to regulate  
85 the tension of the spring, substantially as described.

2. The combination, with the grinding cylinder or drum A, of the bed B, secured within a shackle, *d*, by means of set-screws, the vertical spring *f*, supporting the shackle which carries the bed, a movable holder or casing, *h*, for the shackle, and a hand-wheel, *i*, for adjusting the said shackle-holder, substantially  
90 as described.

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

MARTIN MÖLLER.

Witnesses:

CLAUS MÖLLER,  
JOHANN MÖLLER.