

G. Miller,

Polishing Machine.

No. 105,711.

Patented July 26, 1870.

Fig. 1.

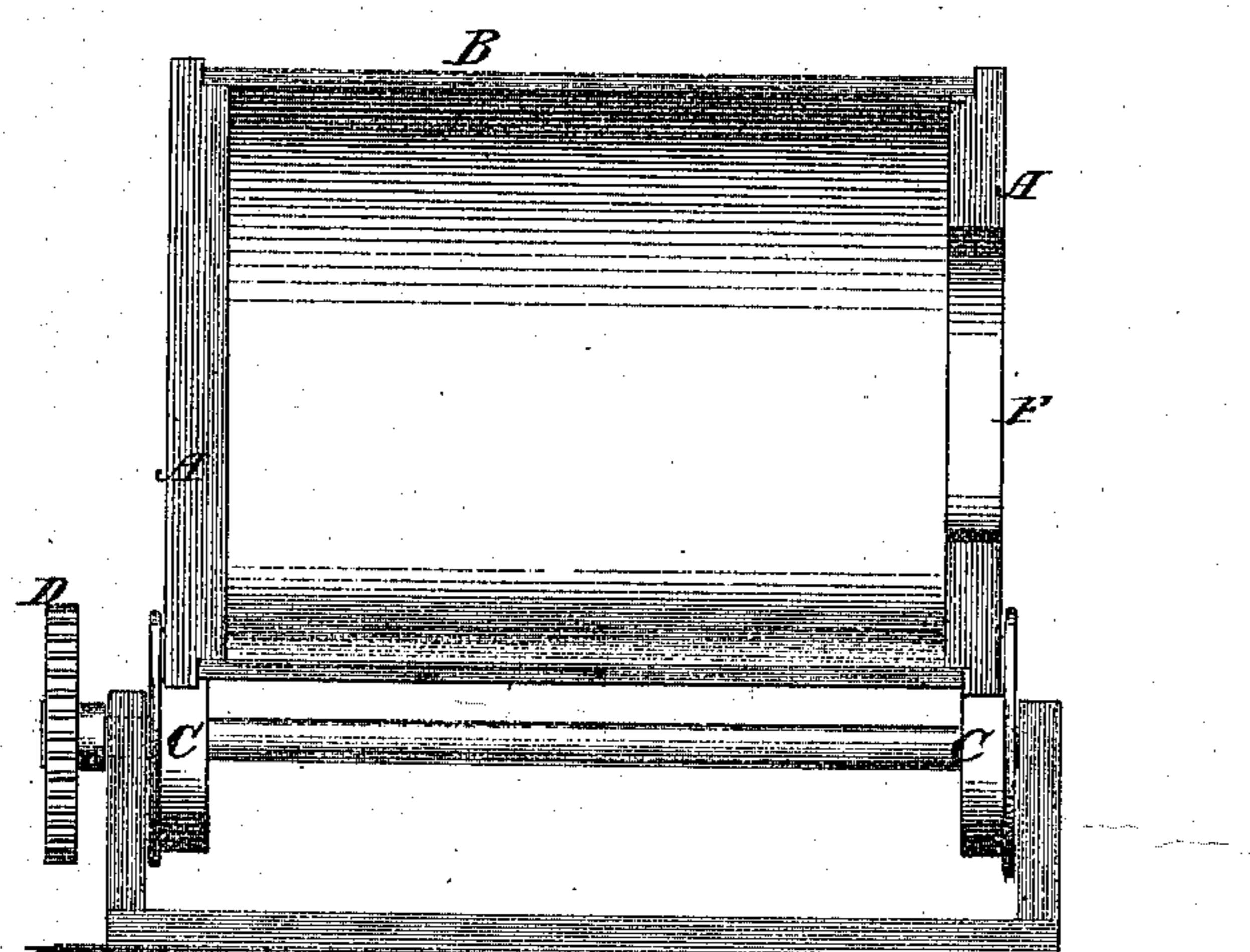
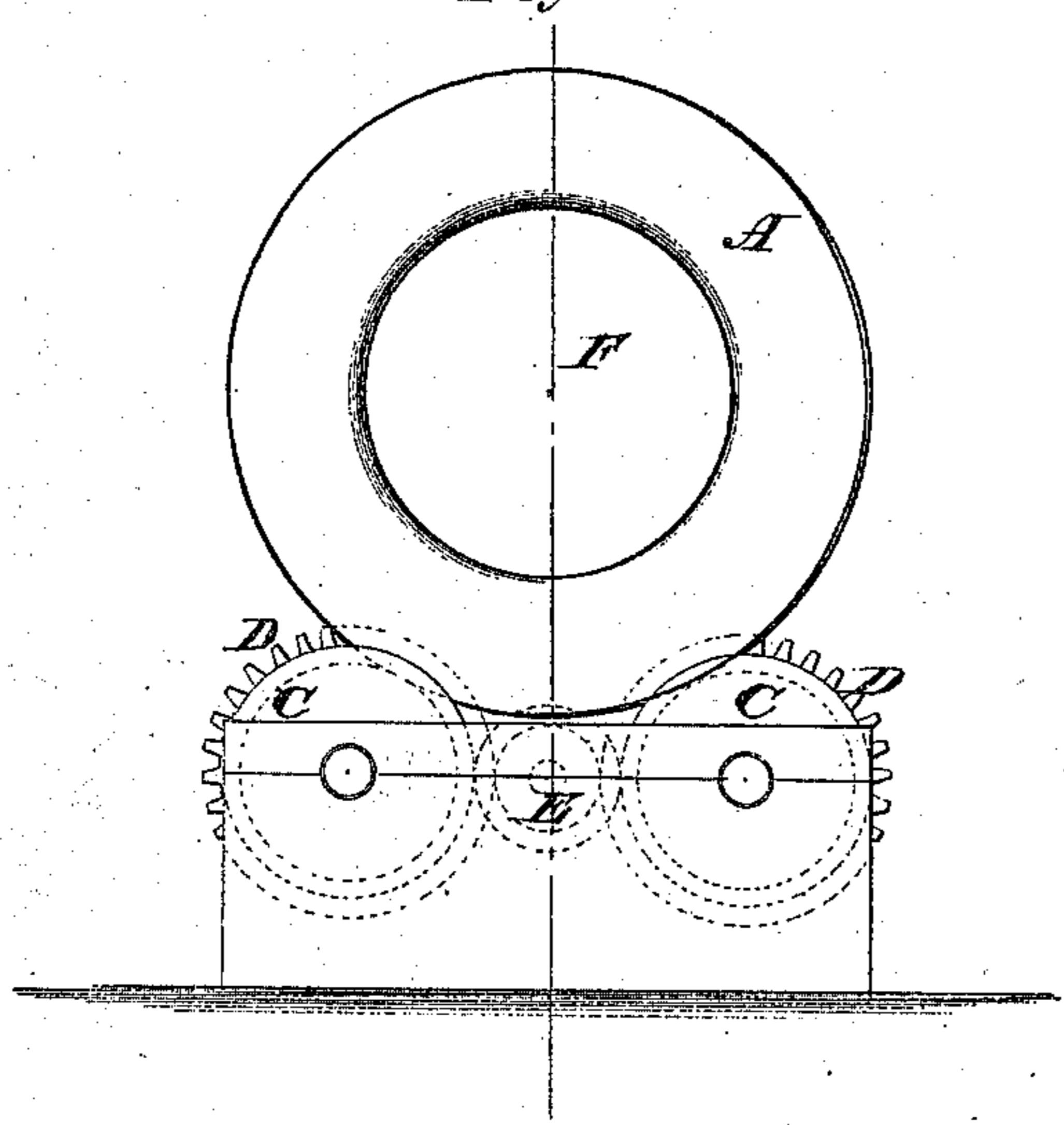


Fig. 2.



Witnesses:

Gustave Dietrich  
Geo. W. Mabee

Inventor:

Geo. Miller  
PER MMN/6  
Attorneys.

# UNITED STATES PATENT OFFICE.

GEORGE MILLER, OF PROVIDENCE, RHODE ISLAND.

## IMPROVEMENT IN GRINDERS FOR CLEANING CASTINGS.

Specification forming part of Letters Patent No. 105,711, dated July 26, 1870.

*To all whom it may concern:*

Be it known that I, GEORGE MILLER, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Grinders for Cleaning Castings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in the grinding or rattling machines used for grinding and polishing castings; and it consists in the arrangement of the cylinders when mounted on friction-rollers, as described in my Patent No. 100,175, February 22, 1870, with an opening in one end for loading and unloading them, so that the cylinders, which being arranged as they are on the friction-rollers, to have motion imparted to them, may be readily raised up and placed on end, may be filled or emptied while standing. This arrangement is also desirable, because the fastenings for the cover for closing the openings when made in the end, are not required to be so strong, and the sides of the cylinder, being permanently fastened to the ends, makes a simpler and cheaper construction.

Figure 1 is a sectional elevation of my improved apparatus, and Fig. 2 is an end elevation of the same.

Similar letters of reference indicate corresponding parts.

A represents the ends, and B the cylindrical shell, of the revolving grinder. C represents the rollers on which it is mounted, and

D the gear-wheels, mounted on the shafts of the said rollers, for gearing with the driving-wheel E, to turn them.

In the aforesaid patent I have described an arrangement of the shell A in plane sections, sliding out and in grooves in the end disks, A, for opening and closing, to put in or take out the castings. I now propose to attach these shells B permanently to the ends A, and make the opening for putting in and taking out the castings in one of the ends, as shown at F, whereby I may make the shells stronger and more cheaply, and I do not have to make strong fastenings to secure the cover for the hole F, because but little of the strain for confining the castings is expended on the ends, whereas, when the openings are made in the sides, the fastenings must be very strong to support the load, which at times falls mainly on the cover. Moreover, the arrangement of these grinders is particularly favorable for raising them off their supports to set them upon end for filling and emptying, in which position the work may be much more readily accomplished than when the same is done through the side, and this I propose to do especially in the case of small light grinders.

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

The cylinder of a grinder or rattler, mounted on the friction-roller C, and having the opening for putting in and taking out the castings arranged in one end, substantially as specified.

GEORGE MILLER.

Witnesses:

ROBERT WILSON,  
J. B. RANDALL.