H. TSCHERNING.

COFFEE MILL.

APPLICATION FILED APR. 14, 1911.

1,032,635. Patented July 16, 1912.

Fig. 1.

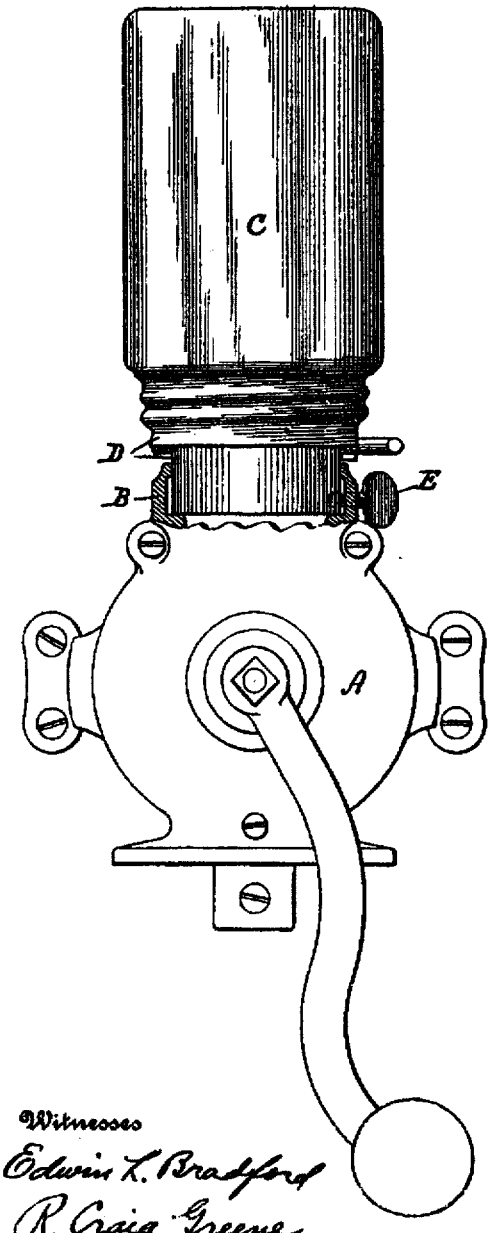


Fig. 2.

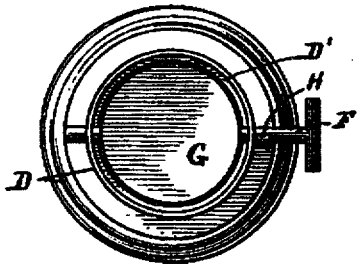


Fig. 3.

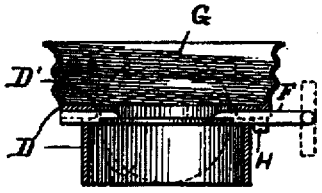
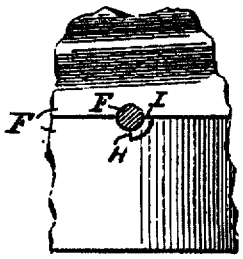


Fig. 4.



Witnesses

Edwin L. Bradford

R. Craig Greene

Inventor

Henry Tscherning

By Wallace Greene,

Attorney

UNITED STATES PATENT OFFICE.

HENRY TSCHERNING, OF FREEPORT, ILLINOIS, ASSIGNOR TO ARCADE MANUFACTURING COMPANY, OF FREEPORT, ILLINOIS, A CORPORATION OF ILLINOIS.

COFFEE-MILL.

1,032,635. Specification of Letters Patent. Patented July 16, 1912.

Application filed April 14, 1911. Serial No. 620,992.

To all whom it may concern:

Be it known that I, HENRY TSCHERNING, citizen of the United States, residing at Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Coffee-Mills, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to mills adapted to store material in a receptacle, above the grinding devices, the receptacle being closed above and so arranged that the entire stock may be ground from time to time without exposing the stock to the air.

It is desirable to use a transparent hopper open and openable below only, but refilling such a receptacle has presented difficulties. My invention avoids these difficulties and at the same time permits using as a hopper an ordinary fruit jar which always shows the stock on hand therein, and the construction is such that it may be quickly replaced by the user of the mill in case it should be broken.

In the accompanying drawings, Figure 1 is a front elevation of a mill involving my invention. Fig. 2 is an inverted plan view of a neck to be secured upon the mouth of the jar or hopper and to detachably connect the same with the mill proper. Fig. 3 is an axial section of the neck in normal or non-inverted position. Fig. 4 is a detail view of a stop device for a valve controlling the passage of material through said neck.

In these figures, A represents the body of the mill which is provided above with an open neck B. The hopper devices consist of an inverted glass jar C secured to a neck D which is in turn detachably secured to the neck B by means of a set screw E or other suitable device, so that the entire hopper device may be readily removed as a whole from the body of the mill. If desired, air excluding gaskets may be used at the joints for the more perfect exclusion of air. For illustration, the neck D is shown as having an offset and a diaphragm D′ provided with a large central opening to be closed when desired by a valve G mounted upon a rock shaft or the like F projecting on one side through the neck so that the valve may be conveniently adjusted by the hand. The shaft is provided with stops H, I, shown as integral, which limit the rocking of the shaft in either direction.

The parts being assembled, with material in the hopper, the valve may be opened whenever it is desired that the material shall pass to the grinding devices, and it may be so left until the whole stock of material has been ground. When the jar is to be refilled, the set screw is loosened and the hopper devices are detached as a whole and inverted. The valve then being open, material is placed in the jar and the valve is closed, and while it is closed the jar is inverted and again secured to the body of the mill, with no possibility of spilling the material. The valve being again opened, the material passes into the mill and is ground in such quantities as may be needed.

Obviously the exact construction shown need not be followed in embodying the invention, it being not indispensable, for example, that the jar should be in threaded engagement with the neck, nor that this particular type of valve should be used. It is however indispensable that the hopper closure should be removable with the jar and be operable whether the jar is attached to the mill or otherwise.

What I claim is:

1. The combination with a mill casing having an opening above and a discharge opening below, of an upwardly closed hopper, an open tubular neck detachably fixed to and carried by the hopper and detachably secured to the casing in registry with its upper opening, and a valve removable with the neck and hopper and controlling the passage from the latter into the casing, substantially as and for the purposes set forth.

2. In a mill of the class described, the combination with a casing for grinding mechanism, of an open tubular neck fitting and detachably fixed in an opening in the upper part of the casing, an upwardly and laterally closed hopper fitting in and supported by the upper end of said neck, and a valve carried by the neck for at will opening and closing the passage from the hopper to the grinding mechanism.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY TSCHERNING.

Witnesses:
REEVE BURTON,
OSCAR R. SEITZ.