Aug. 25, 1931. P. KITTAY 1,820,462

GRINDING MILL

Filed May 15, 1929

Fig.1

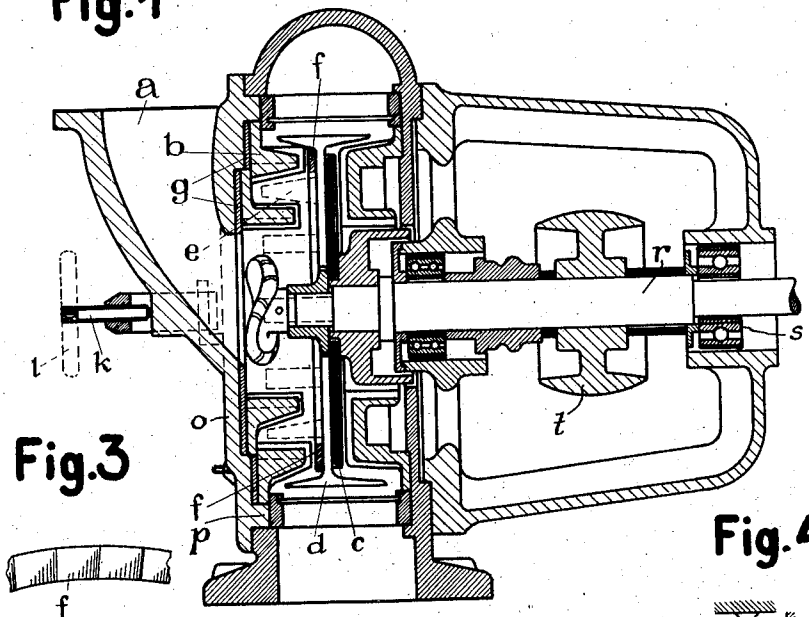


Fig.3

Fig.4

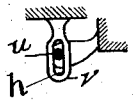
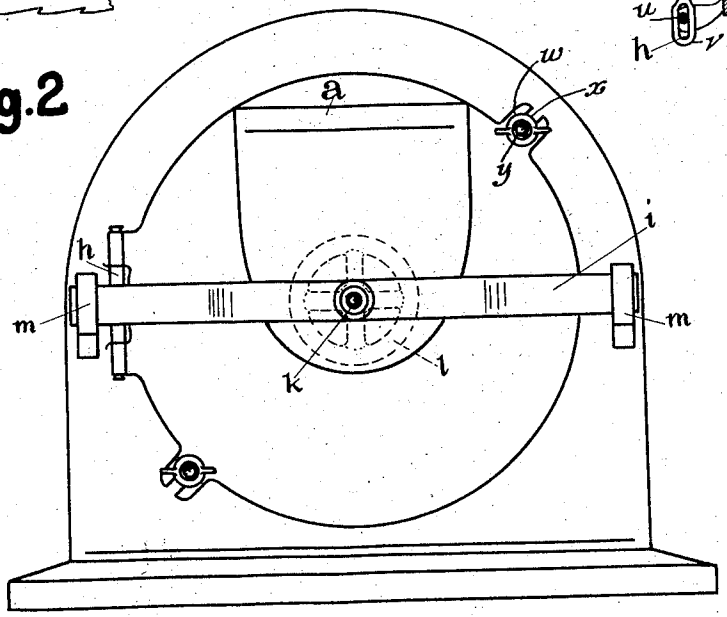


Fig.2



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UNITED STATES PATENT OFFICE

PAUL KITTAY, OF VIENNA, AUSTRIA

GRINDING MILL

Application filed May 15, 1929, Serial No. 363,241, and in Austria May 18, 1928.

This invention is an improved grinding and centrifugal drying mill, the object of the invention being to provide an improved mill of this type which is simple in construction, very compact, is efficient in operation and which enables the outlet bolter heretofore usually employed to be dispensed with and which is also adapted to regulate the granulating of the grist by ready adjustment of the parts.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings

Figure 1 is a vertical central sectional view of a mill constructed and arranged in accordance with this invention.

Figure 2 is a front elevation of the same.

Figure 3 is a detail diagrammatic view of the beating rim.

Figure 4 is a detail sectional view of the door hinge and its connections.

The casing of the mill is provided in its front side with an opening *a* and with a door *o* to close said opening and which is circular and provided on its inner side with an annular flange *p*, which flange fits in the opening and permits movement of the door. On the outer side of the door is a hopper *a*. On the inner side of the door are fixed grinding rings *b* which are arranged concentrically and which are substantially concentric with the discharge portion of the hopper. Each grinding ring bears on a foundation annular plate *g* which is recessed on the door, which forms part of the front wall of the casing, as shown. A shaft *r* is mounted in bearings *s* in the casing and has a drive pulley *t* and also has a revoluble disc *c* provided with beaters *e* which are arranged to pass between the fixed grinding rings *b*. A beating rim *f* is secured on said disc and is arranged opposite the outer grinding ring *b*. This beating rim is provided with teeth as shown in detail in Figure 3, which teeth are opposed to the outer ring *b* and said beating rim is also provided with teeth *d* on its opposed surfaces which are radial to the disc.

The door is provided on one side with a pintle *u* which is movable in slots *h* of an ear *v* which projects outwardly from the front wall of the casing and the door is also provided with radial lugs *w* at appropriate points on its periphery, which lugs have radial open slots *x*. Screws *y* which project from the front wall of the casing operate in said slots and hence the door is movable together with its grinding ring *b* so that said grinding rings may be adjusted toward and from the revoluble disc, as may be desired.

To effect such adjustment, I provide a screw *k* which is threaded in a bar *i* and has a hand wheel *l* to enable the screw to be turned. The ends of the bar are detachably mounted in brackets *m* with which the front wall of the casing is provided. It will be understood that the bar can be removed when desired to permit the opening of the door.

In the opening of the mill the grist is fed by the hopper to the grinding rings and the beating disc and is treated thereby, as will be understood.

Having now described my invention what I claim is:

1. A mill of the class described, comprising a casing having a feed hopper, fixed grinding rings in the side of the casing next the hopper, a revoluble disc having beaters arranged to pass between the fixed grinding rings, and a beating rim on said disc and opposed to one of said fixed grinding rings, said beating rim having teeth on its opposed surface.

2. A mill as claimed in claim 1, in which the teeth of the beating rim are radial to said disc.

In testimony whereof, I have signed my name to this specification at Vienna this 29th day of April, 1929.

PAUL KITTAY.