No. 694,803. Patented Mar. 4, 1902.

B. STRITTMATTER.

AUTOMATIC CUT-OFF FOR MILL POWER.

(Application filed Feb. 15, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1

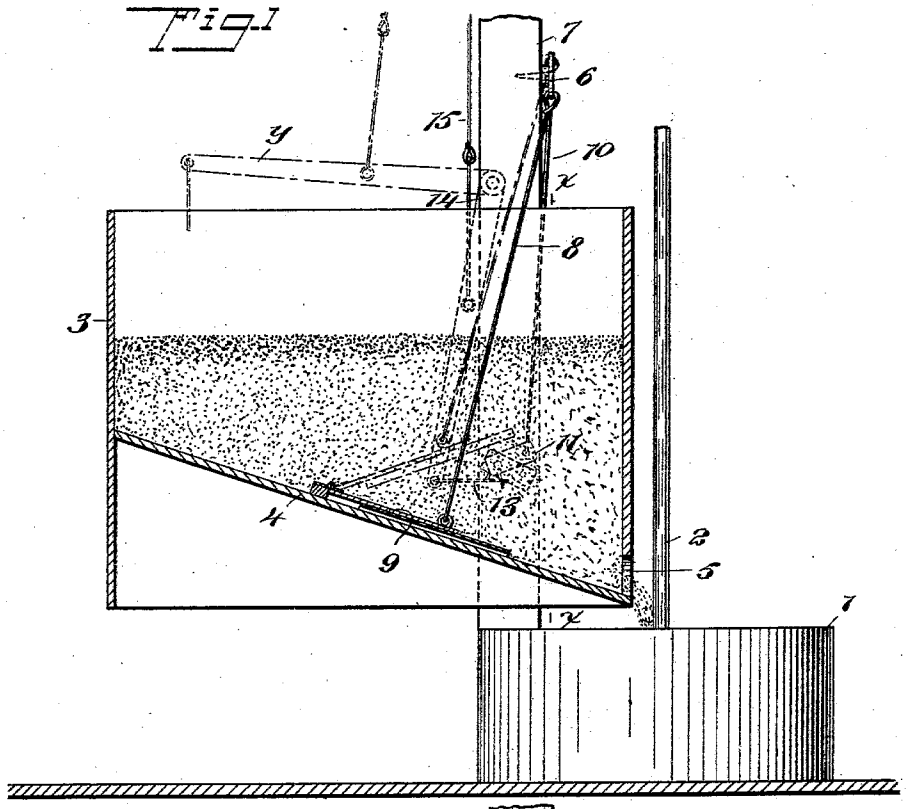


Fig. 2

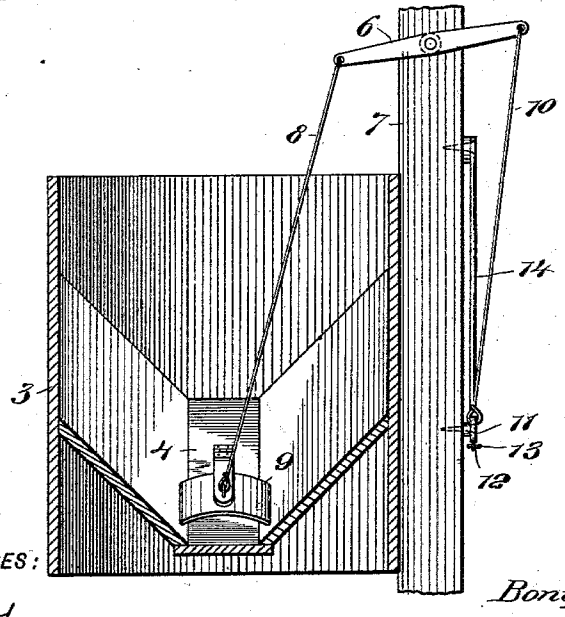
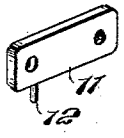


Fig. 3



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Fig 4

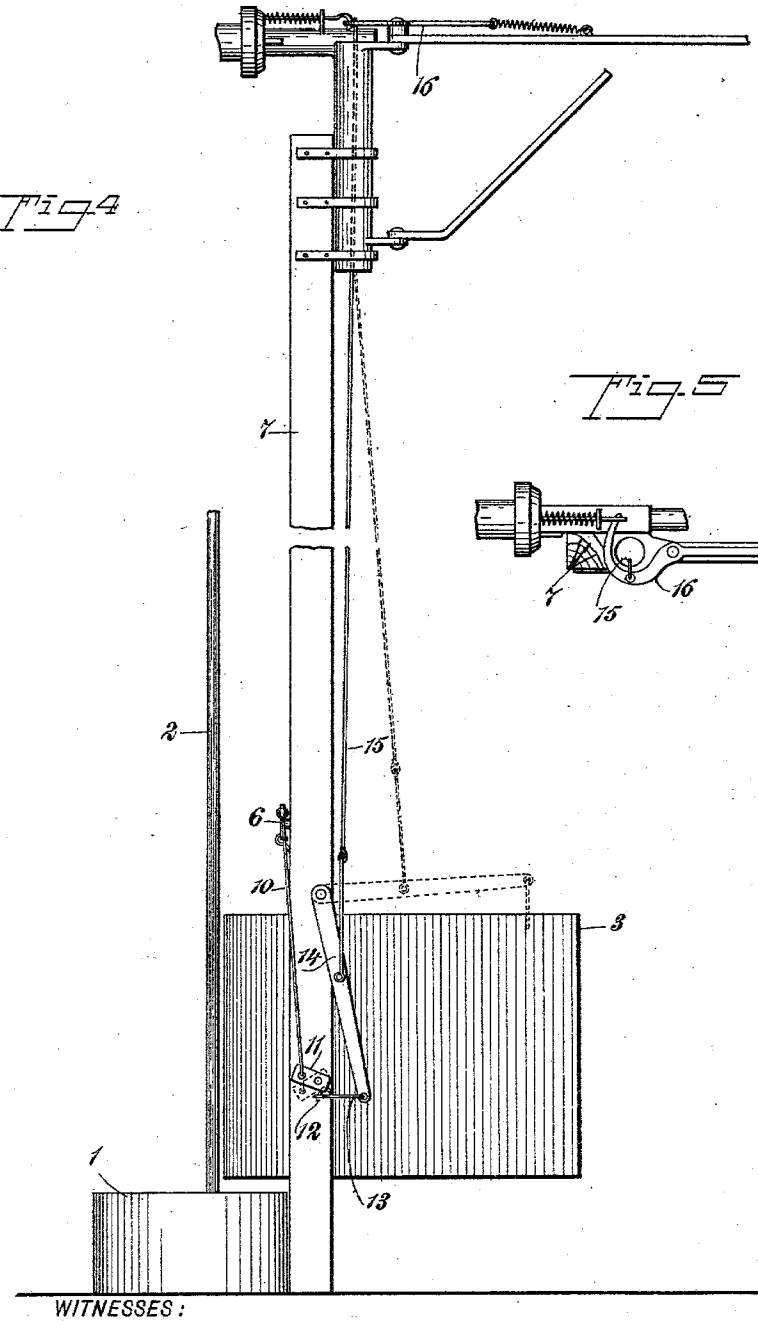


Fig 5

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UNITED STATES PATENT OFFICE.

BONIFACE STRITTMATTER, OF CARROLL TOWNSHIP, PENNSYLVANIA.

AUTOMATIC CUT-OFF FOR MILL-POWER.

SPECIFICATION forming part of Letters Patent No. 694,803, dated March 4, 1902.

Application filed February 15, 1901. Serial No. 47,447. (No model.)

To all whom it may concern:

Be it known that I, BONIFACE STRITTMATTER, a citizen of the United States, and a resident of Carroll township, in the county of Cambria and State of Pennsylvania, have invented a new and Improved Automatic Cut-Off for Mill-Power, of which the following is a full, clear, and exact description.

This invention relates particularly to improvements in devices for throwing out of gear or cutting off the power transmitted to the grinding-mill from a windmill or similar motor; and the object is to provide a simple device of this character that shall automatically operate to cut off the power when the grain or other material to be ground becomes low or nearly discharged from the feed-hopper, thus stopping the mill and preventing possible damage to the grinders.

I will describe an automatic cut-off for mill-power embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of a device embodying my invention. Fig. 2 is a section on the line $x\,x$ of Fig. 1. Fig. 3 is a perspective view of a latch employed. Fig. 4 is a side elevation showing the connection of the device with the clutch-operating mechanism of a windmill, and Fig. 5 is a plan view of said mechanism.

Referring to the drawings, 1 designates the casing of a grinding-mill, and from the grinders or a grinder of which a rod 2 extends upward to a connection with a windmill, which it is not deemed necessary to show herein.

Arranged over the casing 1 and adapted to discharge therein is a hopper 3 for containing grain or other material to be ground. This hopper has a downwardly-inclined bottom 4, which discharges through an opening 5. A lever 6 is centrally pivoted to an upright or post 7, and from one end of this lever a wire 8 extends downward to a connection with a paddle 9, which is hinged to the bottom 4 and is designed to be held closely against said bottom 4 by the material in the hopper. This paddle 9 is transversely curved or curved upward from its edges to its center, so as to permit the grain to pass freely underneath the same. From the other end of the lever 6 a rod 10 extends downward and engages with one end of a latch 11, pivoted to the post 7. At the opposite end of the latch 11 is a pin 12, designed to engage in a hook or eye formed in the end of a link 13, extended from a holding-lever 14, pivoted to the post 7 and having a connection 15 with the clutch or releasing mechanism of the windmill.

In operation when the lever 14 is drawn downward, as indicated by full lines in Fig. 2, and the link 13 engaged with the pin 12 the parts will be held in this position by the weight of the material in the hopper 3 resting on the paddle 9. At this time the windmill will be in gear with the rod 2. When the material becomes low in the hopper and the paddle 9 is relieved of its weight, the said paddle will swing upward, as indicated by dotted lines in Fig. 1, permitting the latch 11 to be rocked to disengage the pin 12 from the link 13. This will permit the lever 14 to swing upward to the position indicated by the dotted line y in Fig. 1, allowing the clutch or other device of the windmill to be separated by any suitable means, and thus the mill will be stopped from operation.

This cut-off device is particularly adapted for connection with the so-called "air-motor-power" windmills, which are held in gear by connection with the lever 14, this lever being held down by the material in the hopper, and when the paddle is relieved of weight the wind-wheel by the wind-pressure is moved out of gear.

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

1. The combination with a mechanism for stopping mills and a hopper, of a paddle mounted to swing in said hopper, a lever, a connection between said paddle and one end of the lever, a latch, a connection between said latch and the other end of the lever, a lever adapted for connection with a clutch or similar device of a mill, and a link on said last-named lever for engaging with the latch, substantially as specified.

2. The combination with a mill and a driving power therefor, of a hopper for discharg-

ing into the mill, a paddle arranged to swing in said hopper, a lever, a connection between said paddle and one end of said lever, a pivoted latch, a connection between the other end of said lever and the pivoted latch, a pin on said latch, a lever adapted for connection with a clutch or disconnecting device of a windmill, and a link on said last-named lever adapted for engagement with the pin on the latch, substantially as specified.

3. In a device of the character described, a hopper for discharging into a mill, a transversely-curved paddle mounted to swing on said hopper, the edges of said paddle being designed to engage with the bottom of the hopper, and means controlled by said paddle for operating a disconnecting device of a windmill or the like, substantially as specified.

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

BONIFACE STRITTMATTER.

Witnesses:
ALEXANDER GRIEFF, Jr.,
SYLVESTER STRITTMATTER.