2 Sheets—Sheet 1.

L. G. PEEL.

ADJUSTING DEVICES FOR GRINDING-MILLS.

No. 194,720. Patented Aug. 28, 1877.

Fig. 1.

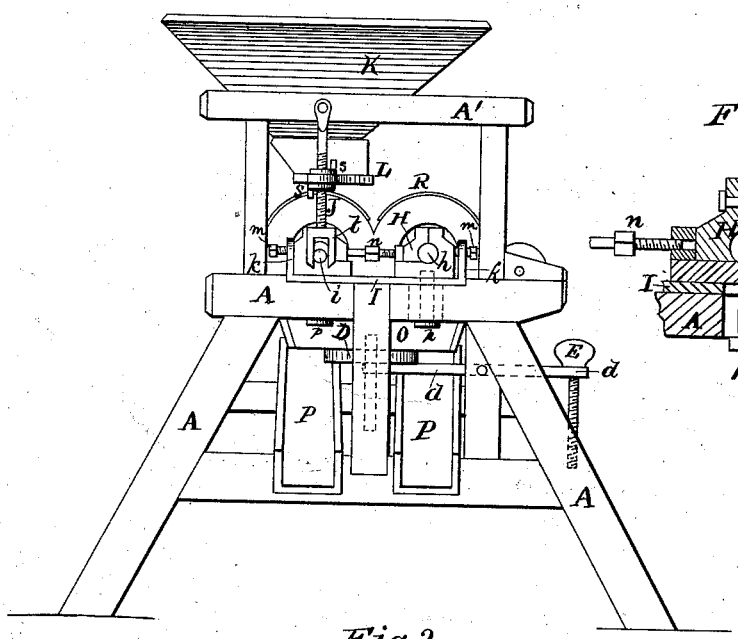
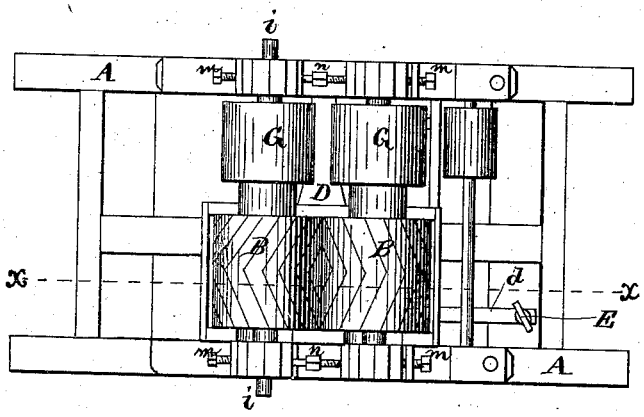


Fig. 4.

Fig. 2.



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2 Sheets—Sheet 2.

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Fig. 3.

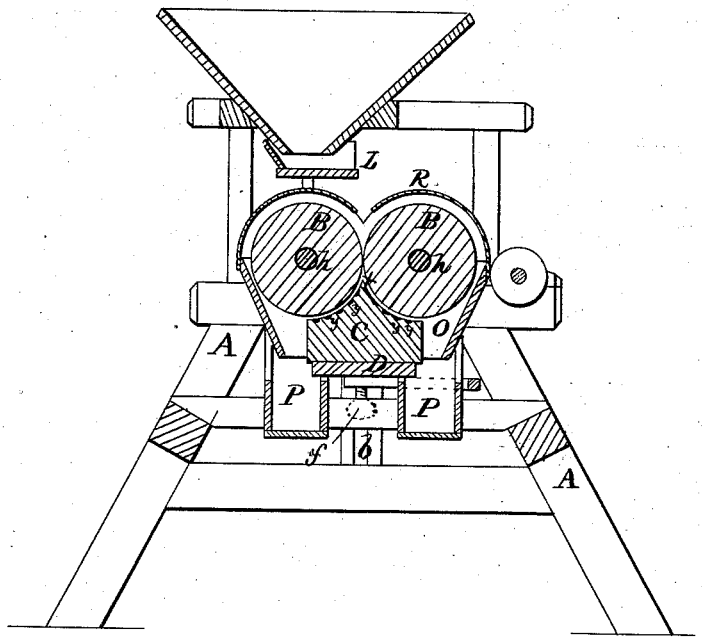


Fig. 6.

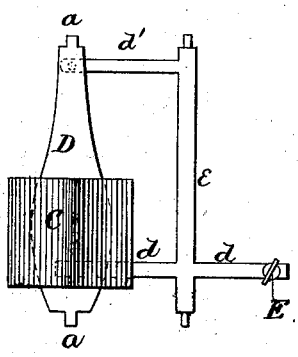
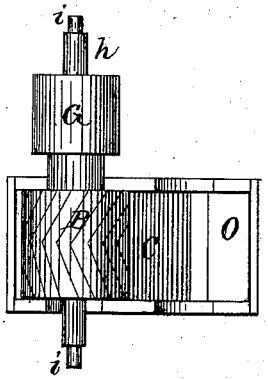


Fig. 5.



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LAWSON G. PEEL, OF HAZELHURST, MISSISSIPPI.

IMPROVEMENT IN ADJUSTING DEVICES FOR GRINDING-MILLS.

Specification forming part of Letters Patent No. **194,720**, dated August 28, 1877; application filed September 9, 1876.

To all whom it may concern:

Be it known that I, LAWSON G. PEEL, of Hazelhurst, in the county of Copiah, and in the State of Mississippi, have invented certain new and useful Improvements in Grist-Mills; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a grist-mill, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation of my mill. Fig. 2 is a plan view of the same, with the hopper and cover removed. Fig. 3 is a vertical section on the line *x x*, Fig. 2. Figs. 4, 5, and 6 are detached views of parts thereof.

A represents the frame of the mill, which may be made of wood, iron, or other suitable material. In this frame are three stones, B, B, and C. The stones B B are cylindrical, and revolve and roll together, and C is the bed-stone, which is flat on its under side, and supported on a bridge-tree, D. This bridge-tree has a tenon, *a*, at each end, which is held in a vertical guide, *b*, in the frame, and the bridge-tree is supported by means of two arms, *d d'*, projecting from a rock-shaft, *e*. The arm *d* projects on the opposite side of the rock-shaft also, and has a screw, E, through its outer end, entering a bar in the frame. The arm *d'* has a set-screw, *f*, through it directly under that end of the bridge-tree.

By these means the bridge-tree, with the lower stone, may be raised or lowered at will.

The upper side of the lower stone C rises almost to a sharp edge, *x*, in the center, and is hollowed out in a concave form on each side from the center, to suit the circular shape of the upper stones.

The upper stones are each supported and run by a shaft, *h*, passing through the center, each shaft also passing through a pulley, G, and the journals upon the ends of the shafts resting in suitable boxes. These boxes H H are each made in two pieces, as shown, and rest upon a bed-plate, I, the ends of which are turned up, forming end flanges *k k*. Through these flanges pass temper-screws *m*, which rest against the boxes, to bring the boxes closer together, as may be necessary. There is also a temper-screw, *n*, between the two boxes, to counteract the pressure of the belt.

The bed-plate I rests upon the frame A, and is there held securely by a bolt, *p*, passing through the frame and bed-plate into each box.

It will thus be seen that the rollers can readily be adjusted with reference to each other, and when so adjusted are rigidly held in the desired position.

One of the shafts *h* has an eccentric, *i*, upon each end, to work the rattle-staff J. This rattle-staff is simply a screw fastened at the upper end to the frame A', upon which the hopper K rests.

On the two shafts J J is placed the shoe L, which is adjusted up and down, to regulate the feed, by means of nuts *s s* above and below the shoe on each staff, and on the lower end of each staff is formed a cuff, *t*, which rests upon and is worked by the eccentric *i*.

The lower stone C is furrowed, as shown at *y*, and the upper or circular stones B B are simply rough-dressed.

The grain being fed in between the two stones B B, is first crushed by a rolling process, and then ground by the action of the stones B B upon the bed-stone C. By this means a much greater quantity of meal in proportion to the power applied is made.

Around the stones is a curb, O, with spouts P P, and the stones are covered by a cover, R, having a central slot, through which the grain passes down to the stones.

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

1. The combination, with the rollers B B and their shafts *h h*, of the boxes H, slotted plates I, with end flanges *k*, end screws *m m*,

center screws *n*, and bolts *p*, all constructed substantially as and for the purposes herein set forth.

2. In combination with the hopper, the pivoted depending staffs J, provided with screw-threads, the adjustable shoe L, cuffs *t*, shaft *h*, with eccentrics *i* and adjusting-nuts *s*, all constructed substantially as and for the purposes herein set forth.

3. The combination, with the rollers B B, of the bed-stone C, rising to a point, *x*, in the center, and concave on both sides, tenoned bridge-tree D, guides *b*, rock-shaft *e*, with arms *d d'* and set-screws E *f*, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 4th day of August, 1876.

LAWSON G. PEEL.

Witnesses:

F. L. OURAND,

CHAS. P. COOK.