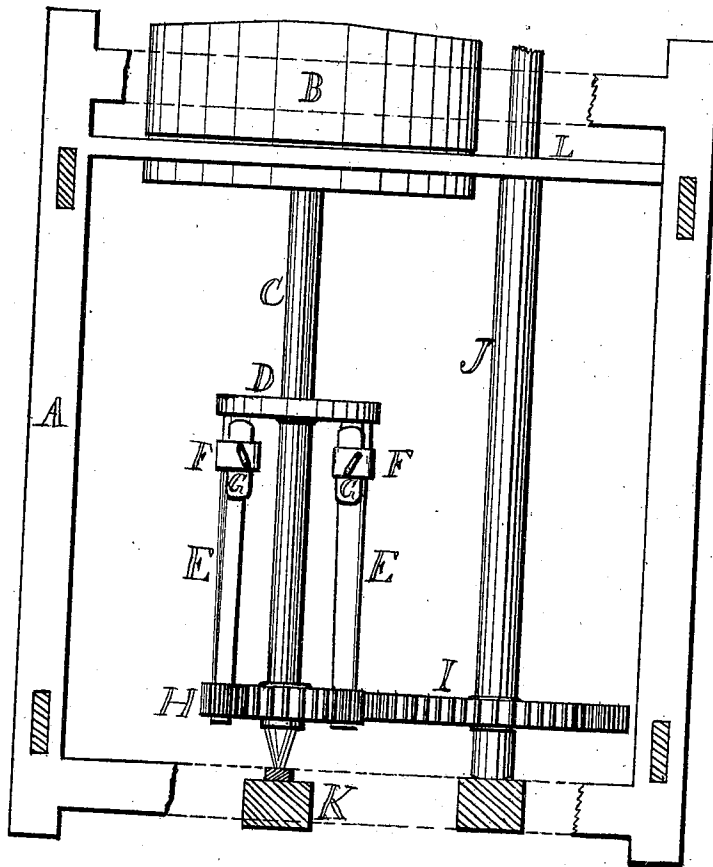


D. WEIMER.
GRINDING MILL.

No. 95,396.

Patented Sept. 28, 1869.



Witnesses
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G. H. Smart.

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United States Patent Office.

DAVID WEIMER, OF GETTYSBURG, OHIO.

Letters Patent No. 95,396, dated September 28, 1869.

IMPROVEMENT IN GRINDING-MILLS.

The Schedule referred to, in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DAVID WEIMER, of Gettysburg, in the county of Darke, in the State of Ohio, have invented an Improvement in Flouring-Mills; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in carrying the spindle-shaft by means of springs attached to the shaft, and connected with the spindle-pinion, the pinion moving freely about the shaft, and resting on a collar of the same, and the manner of adjusting the springs.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The figure represents a side elevation of the machine.

The drawing shows clearly all the novel features of the invention.

A represents a quadrangular frame, and

L, part corresponding with the mill-floor.

B, burr-stone, suspended on the spindle-shaft in the usual manner.

C, spindle-shaft, having a spring-head, D, firmly keyed to the shaft or spindle.

Near the lower end of the spindle, the pinion H rests on a collar of the spindle, about which it moves freely.

The spindle, at its lower end, rests in a step on the "bridge-tree" K, in the usual manner.

The power to propel the burr-stone is communicated, through shaft J and crown-wheel I, to the pinion.

To the spring-head, I attach wooden springs E, which are secured within slots of the head, and the lower ends of which rest within the spaces between the arms of the pinion.

These springs I rip through, thus making several leaves, and thereby adding to their flexibility.

To adjust these springs, to obtain the required resistance, I use bands F and blocks G, they being secured to the springs by screws within these bands. The adjustment is effected by moving the bands up and down on the springs.

Metallic springs may be substituted for the wooden ones, and arranged similarly. The object sought is to prevent "backlash," or the cogs striking back and forward as the speed or power required changes.

The power is communicated to the spindle through the springs, instead of directly through the pinion, permanently keyed to the spindle, as is the usual manner.

This construction also prevents the driver striking forcibly the bail of the burr, and thereby prevents its wearing rapidly.

Experience has shown, that in this construction, the cogs never leave the driving-surfaces, only when the power is suddenly shut entirely off, and then the springs prevent any jar as a consequence; and that much of the jar, friction, and battering of the cogs is dispensed with; and that the grinding is more uniform, thereby producing more and a better quality of flour.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The springs E, and their arrangement, with reference to the spring-head D, spindle C, and pinion H, substantially as and for the purpose described.

2. The spring-adjusting device, composed of the band F, block G, and arranged, in connection with the spring E, substantially as and for the purpose described.

DAVID WEIMER.

Witnesses:

JOHN CLARK,
G. W. HORNER.