L. NORTON.

Mill Spindle.

No. 5,826. Patented Oct. 3, 1848.

Fig. 4

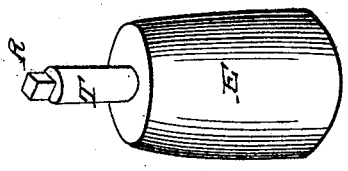


Fig. 3

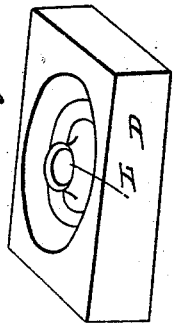


Fig. 2

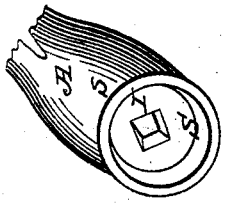
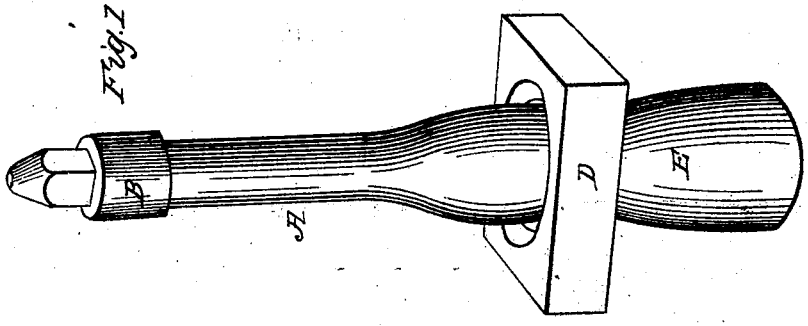


Fig. 1



UNITED STATES PATENT OFFICE.

LEWIS NORTON, OF MADISON, CONNECTICUT.

MILL FOR GRINDING.

Specification of Letters Patent No. 5,826, dated October 3, 1848.

To all whom it may concern:

Be it known that I, LEWIS NORTON, of Madison, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Grist-Mills, which is described as follows, reference being had to the annexed drawings of the same, making a part of this specification.

The nature of my invention consists in running grist mill stones without the intervention of gearing from the main shaft, but it is applicable only to those mills which employ wheels with perpendicular shafts. The usual mode is to place a gear wheel upon the shaft of the water wheel and that to match another similar wheel placed upon a suitable shaft to drive the stone called the runner. This shaft is made to rise or lower by being mounted upon a lever called the crosstree. The object of elevating and depressing this shaft is to set the two millstones farther apart or closer together as may be desired, for the runner is permanently attached to the top of this shaft. Now in lieu of the gearing and shaft above described I adjust a shaft upon the upper end of the wheel shaft to the upper end of which is attached the runner in the ordinary way—and from the peculiar mode with which I couple the two shafts together I can elevate or depress the stone as in the ordinary way.

In the accompanying drawings Figure 1, shows the two shafts as attached together. E, is the water wheel shaft and is represented as detached by Fig. 4, showing the bearings of the gudgeon T, and the square neck R, Fig. 2, shows the bottom end of the shaft which drives the stone, the upper end of which is permanently attached to the stone as in the ordinary way. The lower end is made concave, presenting a projecting rim, S, S, near the periphery of the bottom of the shaft, a socket I is made in the shaft at its center, just suited to receive the square neck on the gudgeon T, Fig. 4.

D Figs. 1 and 3 represents the box on which rests the shaft A. This box is represented by Fig. 3, is made in a form to receive the rim S, S, on the bottom of the shaft A and also to admit the upper part of the gudgeon T, to pass up through its center. The hole is shown at L. The box is made in a dish form that it may contain oil, and thus the bearings S, S, is constantly supplied with it. The box D is adjusted on a crosstree in the usual form, which acts the part of a lever to raise or lower the box and consequently the shaft A and the stone which is attached to the top of the shaft are also raised and lowered just the same distance as the box, which never needs to be over three quarters of an inch.

In constructing my mills—first the waterwheel shaft is made and mounted represented by Fig. 4, second the box Fig. 3, is placed upon a bridgetree, and is then adjusted astride the gudgeon T the square on the gudgeon protrudes above the center of the box about four inches.

Then the shaft A is mounted upon the top of the wheel shaft E the square neck R entering the socket I, and the rim S, S, stepping in the concave V. The upper bearing on the shaft A is the same as in the ordinary way, and the stone is thereto attached in any of the known forms.

The invention claimed and what I desire to secure by Letters Patent is—

The mode herein described of coupling shafts in grist mills, which admits the stones to be set close, or apart, without the use of gear wheels, constructed and operating substantially as herein set forth.

LEWIS NORTON.

Witnesses:

REUBEN SHALER,

RICHARD HULL.