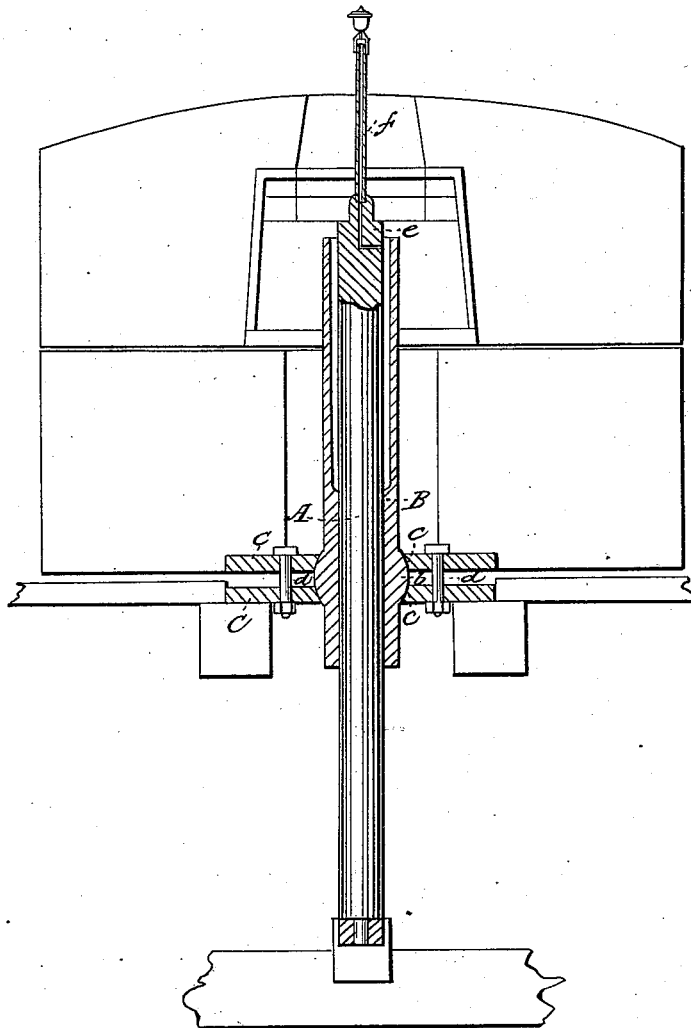


C. T. WESTON.
Mill Spindle.

No. 109,565.

Patented Nov. 22, 1870.



WITNESSES:

Fred. Haynes
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INVENTOR:

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United States Patent Office.

CHARLES T. WESTON, OF SCRANTON, PENNSYLVANIA.

Letters Patent No. 109,565, dated November 22, 1870.

IMPROVEMENT IN MILL-BUSHES AND OTHER SPINDLES.

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

To whom it may concern:

Be it known that I, CHARLES T. WESTON, of Scranton, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in Mill-Bushes and their Spindles, applicable also to other purposes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, and which represents a sectional elevation of a mill-spindle bush in its place, with spindle applied thereto, the whole being constructed in accordance with the invention.

My invention, although applicable to vertical revolving spindles of various kinds, is mainly designed, and here will only be described in such relation, to be applied to the spindles of grinding-mills, hullers, and other like machines in which horizontal stones or their equivalents are used, and the spindle is made to operate the upper stone by means of a driver.

My invention consists in combining with the bush, which is arranged to project through the eye of the lower stone, an upwardly-extending sleeve to contain oil to lubricate said bush, and at the same time to protect the latter from dust.

Referring to the accompanying drawing—

A represents the vertical mill-spindle, working in a step below and through a bush, B, above.

This bush, instead of being immovably secured to the frame of the mill, is made capable of adjusting itself into parallel positions with the spindle during all oscillations or deviations from truth of the latter, by constructing said bush, or surrounding it with a globe-joint, of which

b is the ball, and

c c the socket, the latter being made in plates, C C, which may be adjustable by bolts *d d* relatively to each other, and the lower one of which is secured to or rests on the frame of the mill.

The bush B projects, as usual, through the lower stone, and is formed with a sleeve extending up into the eye of the upper one, for reception of cotton-waste or other fibrous material, to hold the lubricating material supplied to it from above.

To feed in the oil without stopping the mill, or, of necessity, removing any of its working parts, the upper portion of the spindle A has a passage, *e*, made down it from the center at its top, and terminating in the side of the spindle below the upper edge of the bush B.

Connected with this passage down and through the spindle is an upper supply-tube, *f*, which may be mounted with an oil-cup or reservoir, to keep the spindle and bush supplied, in an automatic manner, with lubricating material, the revolving motion of the spindle, or heat generated thereby, causing the oil to run or be drawn down the spindle, as required.

What is here claimed, and desired to be secured by Letters Patent, is—

The upwardly-extending sleeve formed on the bush B, and surrounding the spindle A to near the point of attachment of the driver, forming an annular space around the spindle to be supplied with oil, and to exclude dust from the bush, as shown and described.

CHARLES T. WESTON.

Witnesses:

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