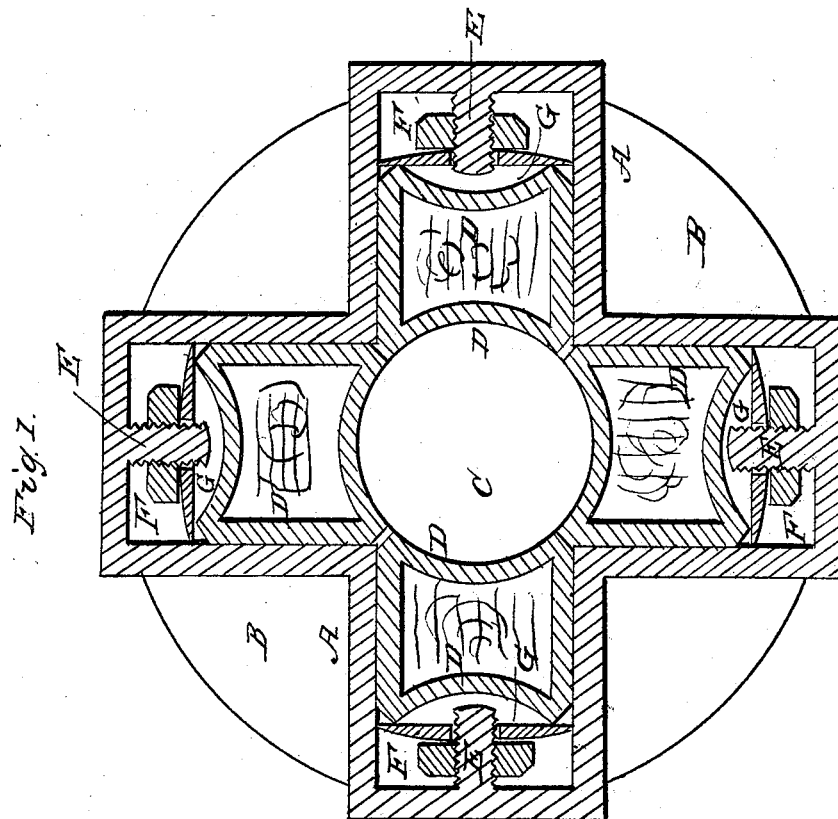
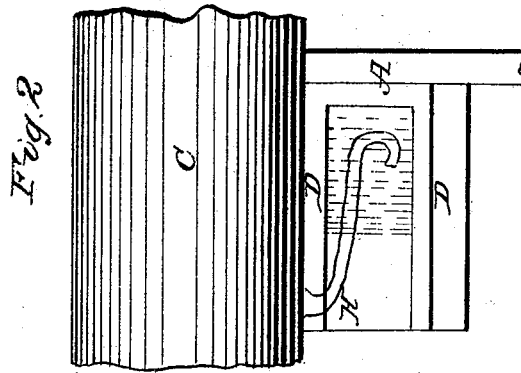


S. MOORE.

Mill Bush.

No. 1,541.

Patented April 8, 1840.



# UNITED STATES PATENT OFFICE.

SAMUEL MOORE, OF CHAMBERSBURG BOROUGH, PENNSYLVANIA.

## SELF-REGULATING AND SELF-OILING MILL-BUSH.

Specification of Letters Patent No. 1,541, dated April 8, 1840.

*To all whom it may concern:*

Be it known that I, SAMUEL MOORE, of the borough of Chambersburg, in the county of Franklin and State of Pennsylvania, have  
5 invented an improvement in the manner of constructing bushes for sustaining the spindles of millstones, which improved apparatus I denominate the "Self-Regulating and Self-Oiling Mill-Bush;" and I do hereby  
10 declare that the following is a full and exact description thereof.

In the accompanying drawing I have given a representation of my mill bush, showing a horizontal section thereof through  
15 the center of the box, and its appurtenances, and a vertical section.

A, A, A, is an exterior case, or box, which I, in preference, make of cast-iron, in the form of a cross, its extreme length being  
20 usually about ten or eleven inches, according to the size of the eye of the stone within which it is to be received. The depth of this box should be about three inches and a half. Each of its ends is to be let into the  
25 stone, say to the distance of one fourth of an inch, and the spaces B, B, B, between it and the stone, may be filled in with wood, which will aid in keeping the box firm.

C, is the center within which the collar of  
30 the spindle revolves; D, D, D, are brass boxes, and oil cups, each of which will contain a gill of oil, for lubricating the spindle; these brass boxes are made concave at each end, their concavity being such as to adapt  
35 them to the collar of the spindle which they are to embrace and sustain; and from the form given to them, when one end becomes worn, the other may be turned inward, and the bearing is thus renewed. From these  
40 brass boxes, or oil cups, I carry the oil to the spindle by capillary attraction, and for

this purpose I drill a small hole through the upper edge of the curved end of each box, into which hole I insert a piece of cotton wick, or other fibrous material, one end of  
45 which touches the spindle, while the other descends into the oil, as shown in section, Fig. 2, H, being the wick. These brass boxes are borne up against the spindle, in the following manner. E, E, are studs, or  
50 bolts, firmly attached to the box A, A, at their outer ends, and tapped so as to form a screw along them, upon which screws work the nuts F, F; these nuts are made to bear against springs G, G, the ends of which act  
55 against the boxes D, D; the pressure of which against the spindle may be consequently regulated with precision.

To prevent dust from falling into the oil boxes, and other parts of the bush, I form  
60 a close cover consisting of a metallic plate, or other suitable material, through an opening in which the spindle may pass, and within it may revolve.

Having thus, fully described the mode in  
65 which I construct my improved mill bush, what I claim therein as constituting my invention, and which I desire to secure by Letters Patent, is—

The manner in which I have arranged and  
70 combined the double-faced brass boxes, or oil cups, with the nuts, studs and springs, so as to operate upon the spindle, in the manner, and for the purpose, herein set forth.

In testimony whereof I have hereto set my  
75 hand this 27th day of February one thousand eight hundred and forty.

SAMUEL MOORE.

Witnesses:

JOHN F. DENNY,  
ROBT. CRISWELL.