G. M. COPELAND.

Mill Bush.

No. 2,313. Patented Oct. 11, 1841.

Fig. 1.

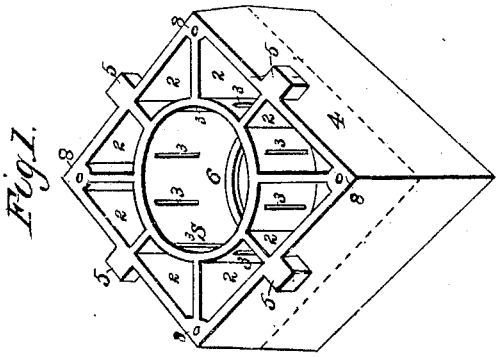


Fig. 3.

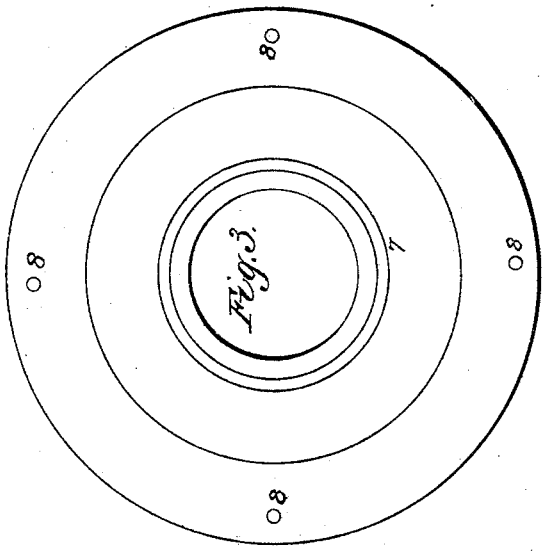


Fig. 2.

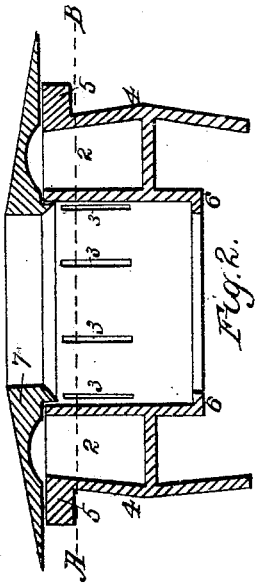
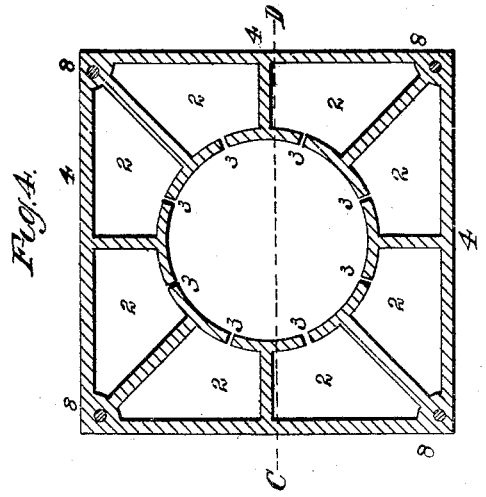


Fig. 4.



UNITED STATES PATENT OFFICE.

GEORGE M. COPELAND, OF GENOA, OHIO.

BUSH FOR GRIST-MILLS.

Specification of Letters Patent No. 2,313, dated October 11, 1841.

To all whom it may concern:

Be it known that I, GEORGE M. COPELAND, of Genoa, in the county of Delaware and State of Ohio, have invented a new and useful Improvement in Cast-Iron Grist-Mill Bush, which I call the "Self-Oiling Cast-Iron Bush for Grist-Mills;" and I do hereby declare that the following is a full and exact description of the same.

For the purpose of a more perfect explanation of my improvement, I pray that the accompanying drawings may be taken and received as a part of this specification, the figures in each view and section referring to the same part of the bush.

Figure 1 is a perspective view of the bush with the cover removed, the better to explain the interior arrangement. It is made of various sizes to suit the eye of the bed stone and may be somewhat varied in its proportions the circular curb marked 1 in each separate figure is about three fourths of an inch larger in diameter than the collar of the spindle which carries the stone so as to admit a coiled rope, cord or other proper material saturated with oil and black lead, to be driven in between the collar of the spindle and the interior of the curb to serve as packing. The curb has a flanch or collar marked 6 in the drawings projecting inward at the bottom so as nearly to fit the spindle which serves as a shoulder to sustain the packing when driven firmly down. The spaces around the curb marked 2 in the drawing are caps or reservoirs to contain oil, which is communicated to the packing around the spindle through the narrow apertures marked 3, in the drawings, the packing being properly put in its place, no more oil will pass through these apertures than is necessary to keep the spindle in good working order. The projections or horns marked 5, are for the purpose of fastening the bush more securely in its seat in the bed stone. The holes in the corners of the bush marked 8 are female screws by which with the aid of screw bolts the cover marked 7, in figures 2 and 3 is fastened down keeping the packing around the spindle securely in its place. Fig. 2 is a vertical section through the line C, D, of the plan Fig. 4, showing the manner in which the cover is fitted upon the top; this cover is convex upon its upper surface by which the grain is made to slide equally into the furrows of the stone. Fig. 3 is a plan of the cover marked 7 in Fig. 2 with the holes marked 8 for screw bolts to fasten it to the bush. Fig. 4, is a horizontal section through the line A, B, of Fig. 2, and shows the shape of the oil cups or reservoirs marked 2 as also the apertures marked 3 through which the oil is communicated to the packing around the collar of the spindle.

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

Making a space within the curb to admit packing around the spindle, as herein described, and in combination therewith the openings from the reservoir or cups to supply oil to the packing as described.

GEO. M. COPELAND.

Witnesses:

BRAINERD DICKINSON,

JAMES FERSON.