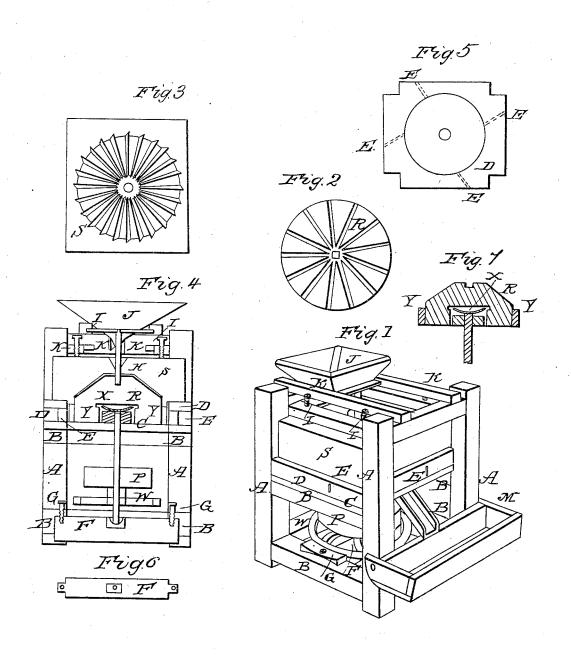
O. WYMAN.

Grist Mill.

No. 1,125.

Patented April 18, 1839.



UNITED STATES PATENT OFFICE.

OLIVER WYMAN, OF EAST CAMBRIDGE, MASSACHUSETTS.

GRIST-MILL.

Specification of Letters Patent No. 1,125, dated April 18, 1839.

To all whom it may concern:

Be it known that I, OLIVER WYMAN, of East Cambridge, Middlesex county, State of Massachusetts, have invented a new and useful Improvement in Mills for Grinding Grain and Other Substances, called "Wyman's Improved Grist-Mill," which is described as follows, reference being had to the annexed drawings of the same, making 10 part of this specification.

Figure 1, is a perspective view of the machine. Fig. 2, is a view of the runner. Fig. 3, is a view of the bed-stone. Fig. 4, is a vertical section. Fig. 5, section of the curb. 15 Fig. 6, section of the bridge-tree. Fig. 7, section showing the inverted bow-spring and the socket into which the upper end of the

spindle is inserted.

The letters of reference refer to the same

20 parts in the several figures.

This mill consists of a frame of suitable size and strength composed of four posts A, A, A, A, and four girts B, B, B, mortised and tenoned together. Between these 25 posts and upon the two upper side girts is placed a platform C, having an aperture in the center for the spindle to pass through and another aperture at the side through which the meal is discharged. Upon this 30 platform is placed a curb D in which the runner R turns, having four oblique apertures therein to admit air for cooling the meal. These air holes are made in the curb in the direction of the turning of the run-35 ner (which has rings on its circumference) so that as the runner revolves a draft is created inward which cools the meal as just mentioned. Each air hole is made of a rectangular or oblong shape of a size propor-40 tionate to that of the curb.

The runner is shaped conical on the upper or grinding surface and furrowed in the usual manner, it is about 24 inches in diameter, 14 inches in depth in the center, and 45 6 inches at the edge. A square socket is fit-ted into the center of the runner and secured by cement in the usual manner which receives the square end of the spindle by which they are connected and caused to

50 turn together.

The spindle turns in a step secured on the bridge tree F, which is raised or lowered by screws as required. These screws (one on

each end) pass through bars G supported on the two lower side-girts. The bridge-tree 55 being elevated or depressed at pleasure by said screws which raises or lowers the runner as required to suit the kind of grinding to be done. The ends of the bridge tree are tenoned and move in corresponding mor- 60 tises in the side girts causing the bridge tree and spindle to move vertically. The spindle turns in a box fixed in a cross girt under the platform and is provided with a driving pulley P and fly wheel W of the 65 usual construction.

The upper or stationary stone S is made in one or two pieces; concave on the under side corresponding in shape with the conical face of the runner which turns therein 70 and is furrowed in the usual manner. It has an opening in the center to admit the grain and also the shaking staff H for shaking the shoe; which staff passes into a square opening in the top of the runner and turns with 75 This upper or stationary stone rests upon the curb and is held down upon it firmly by means of screws I passing through movable cross binders E whose ends are tenoned and move in grooves in the inside 80 of the two upper end girts.

The hopper J and meal trough M are

made in the usual manner.

The runner R is suspended on the top of the spindle by means of an inverted bow 85 spring X which is let into a cavity made in the runner, so as to allow the runner to accommodate itself to the bed, in grinding. There are two or four wings Y placed on the periphery of the runner to create draft 90 for keeping the meal cool. The dimensions of the several parts may be varied to suit circumstances.

The invention claimed and desired to be secured by Letters Patent consists in—

Perforating the curb obliquely in the direction of the turning of the runner for the purpose of admitting air for cooling the meal and in combination therewith, the wings on the periphery of the runner for 100 producing a draft through the oblique opening in the curb.

OLIVER WYMAN.

Witnesses:

N. BENEDICT, WM. BISHOP.