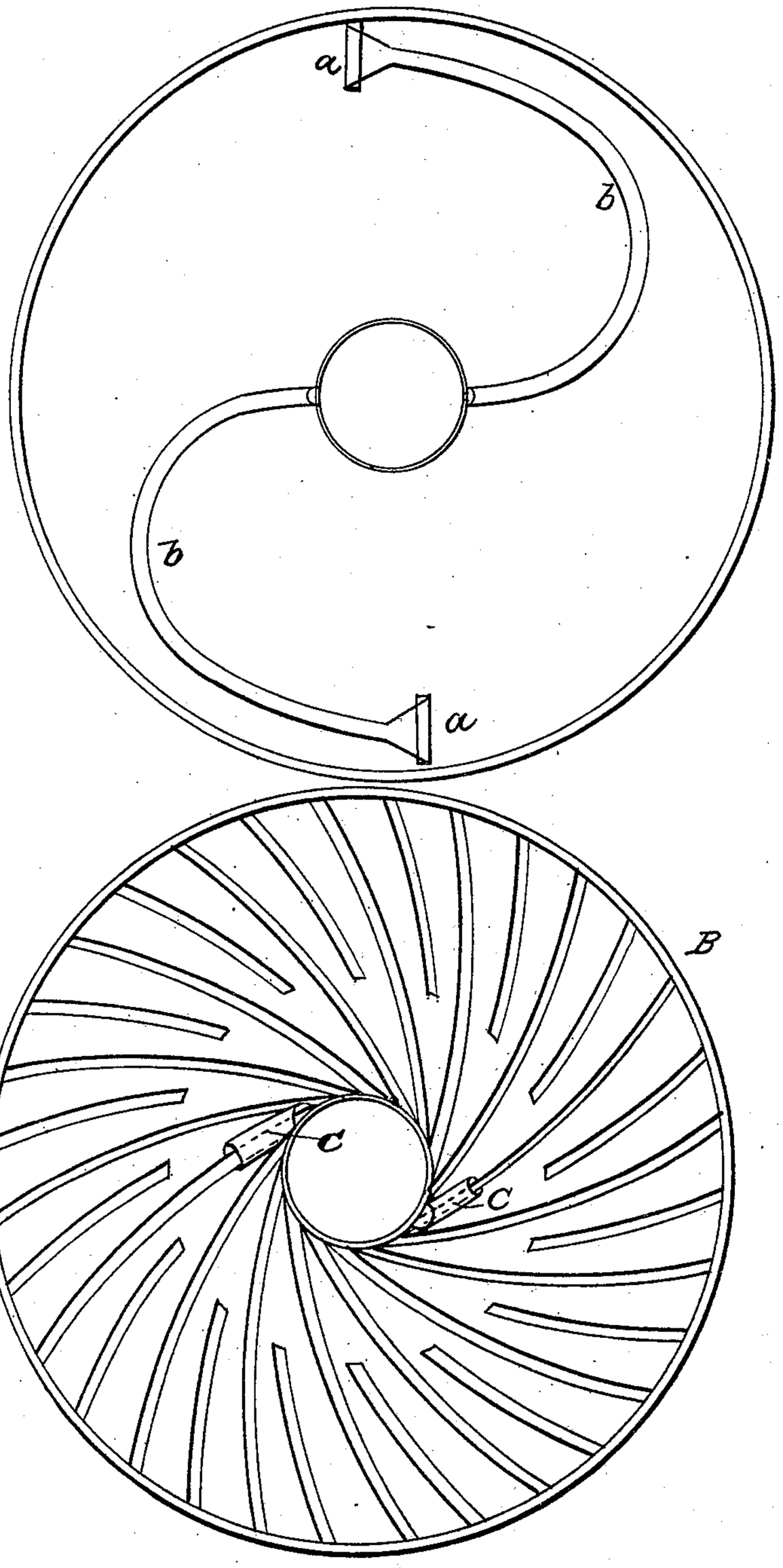
D. PADDACK.

Millstone.

No. 5,944. Patented Nov. 28, 1848.

A.



UNITED STATES PATENT OFFICE.

DAVID PADDACK, OF PONTIAC, MICHIGAN.

MILL FOR GRINDING.

Specification of Letters Patent No. 5,944, dated November 28, 1848.

To all whom it may concern:

Be it known that I, DAVID PADDACK, of Pontiac, in the county of Oakland and State of Michigan, have invented a new and improved mode of counteracting the heat caused by the friction of millstones in grinding, and of cooling and drying meal while in the process of grinding; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in providing the runner, or upper stone, with funnels and tubes, so constructed and arranged as to gather and force between the bed stone and the runner, currents of cool air, by the motion of the runner in grinding.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I cut any number of grooves desired, commencing near the skirt on the back, (represented by the drawing A,) of the runner, and extending in the direction opposite to that in which the stone is to run, nearly on a circle with the skirt of the stone, about one eighth of the circumference; and thence on an easy and convenient circle to the eye of the stone—through the eye to the face of the stone, (represented by the drawing B,) and thence diagonally following one of the principal furrows upon the face, to about one quarter of the distance from the center of the eye to the skirt. These grooves are cut from an inch to an inch and a half in depth, and of about the same width, and dovetailing, or widest at the bottom on the face. The depth of the groove from the skirt to the eye should be deeper when necessary, so that the bottom of the groove shall be as nearly level as may be. Into these grooves I insert tubes, *b*, *b*, *c*, *c*, of tin, copper, or any other suitable material, so fitted to the grooves as to be secure, and of the width and shape of the grooves, but of less depth, so that the tubes may be covered with cement, lead, or any other proper substance. Into the upper end of these tubes, on the back of the runner I affix square funnels *a*, *a*. By means of these funnels and tubes, the motion of the upper stone in grinding concentrates and casts between the two mill stones, so many currents of cool air as may be necessary, according to the size and speed of the stone, to counteract the heat caused by the friction of the stones in grinding, and to cool and dry the meal while in the process of grinding, so as to render it fit for bolting directly from the stones.

Any other practicable mode may be adopted, for conveying the cool air concentrated by means of the funnels, between the millstones, provided the blast or current so obtained is discharged in a horizontal direction, and toward the skirt or circumference of the stones.

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

The concentrating and throwing between mill-stones, of currents of cool air, by means of the action of the runner or upper stone, and funnels and tubes affixed to or inserted in the stone.

DAVID PADDACK.

Witnesses:

ELIJAH CARPENTER,

W. C. PALMER.