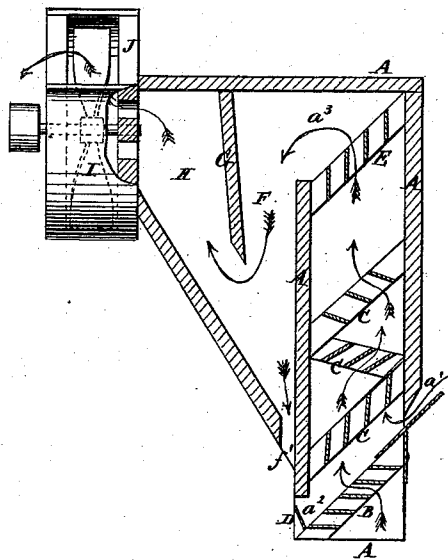


A. F. ORDWAY.
Middlings-Purifier.

No. 168,177.

Patented Sept. 28, 1875.



WITNESSES:

A. W. Almquist
A. F. Terry

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UNITED STATES PATENT OFFICE.

ALVIN F. ORDWAY, OF BEAVER DAM, WISCONSIN.

IMPROVEMENT IN MIDLINGS-PURIFIERS.

Specification forming part of Letters Patent No. **168,177**, dated September 28, 1875; application filed July 3, 1875.

To all whom it may concern:

Be it known that I, ALVIN F. ORDWAY, of Beaver Dam, in the county of Dodge and State of Wisconsin, have invented a new and useful Improvement in Middlings Scourer and Purifier, of which the following is a specification:

The figure is a vertical section of my improved machine.

The object of this invention is to furnish an improved machine for scouring and purifying middlings from the bran and specks that may be in them, and which shall be simple in construction and effective in operation.

The invention consists in an improved middlings-purifier, formed by the combination, with each other, of the air-trunk provided with the three openings, the lower inclined rack, the series of zigzag racks, the upper inclined rack, the air-chambers, separated in their upper parts by the partition, and provided with the discharge-opening, and the fan-blower, as hereinafter fully described.

A is the air-trunk, which consists of an upright rectangular box, into the open lower end of which the air enters, below the inclined rack B. The rack B is formed of a series of parallel slats, inclined in the opposite direction from the inclination of the rack. The middlings are admitted through an opening, a^1 , in the trunk A, just above the upper end of the inclined rack B, and as they slide down said inclined rack, they are spread out, so as to be properly operated upon by the air. In the trunk A, above the inclined rack B, is placed a series of inclined racks, C, formed of parallel inclined plates, set at different angles, so as to give the air and middlings a zigzag motion as they pass up through the trunk A,

which scours the middlings and checks the heavier particles of the flour, and causes them to fall down through the trunk A, from which they escape through an opening, a^2 , at the lower end of the inclined rack B, which opening may be regulated by a slide, D. At the upper end of the air-trunk A is placed an inclined rack, E, the slats of which are nearly vertical, so as, in connection with the top of the trunk A, to give the particles of the middlings, as they pass through the opening a^3 into the chamber F, a rotary movement.

As the current of air and the middlings enter the chamber F, they strike against the partition G, around the lower end of which the current of air, the specks, and particles of bran pass, while the particles of flour, being heavier, fall into the bottom of the chamber F, and escape through the opening f' . The air, specks, and particles of bran pass up through the chamber H into the fan-blower I, and are driven out through the spout J.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved middlings-purifier, formed by the combination, with each other, of the air-trunk A, provided with the openings a^1 a^2 a^3 , the lower inclined rack B, the series of zigzag racks C, the upper inclined rack E, the air-chambers F H, separated in their upper parts by the partition G, and provided with the opening f' , and the fan-blower I J, substantially as herein shown and described.

ALVIN F. ORDWAY.

Witnesses:

JOHN JENNINGS,
JOHN L. MILTGEN.