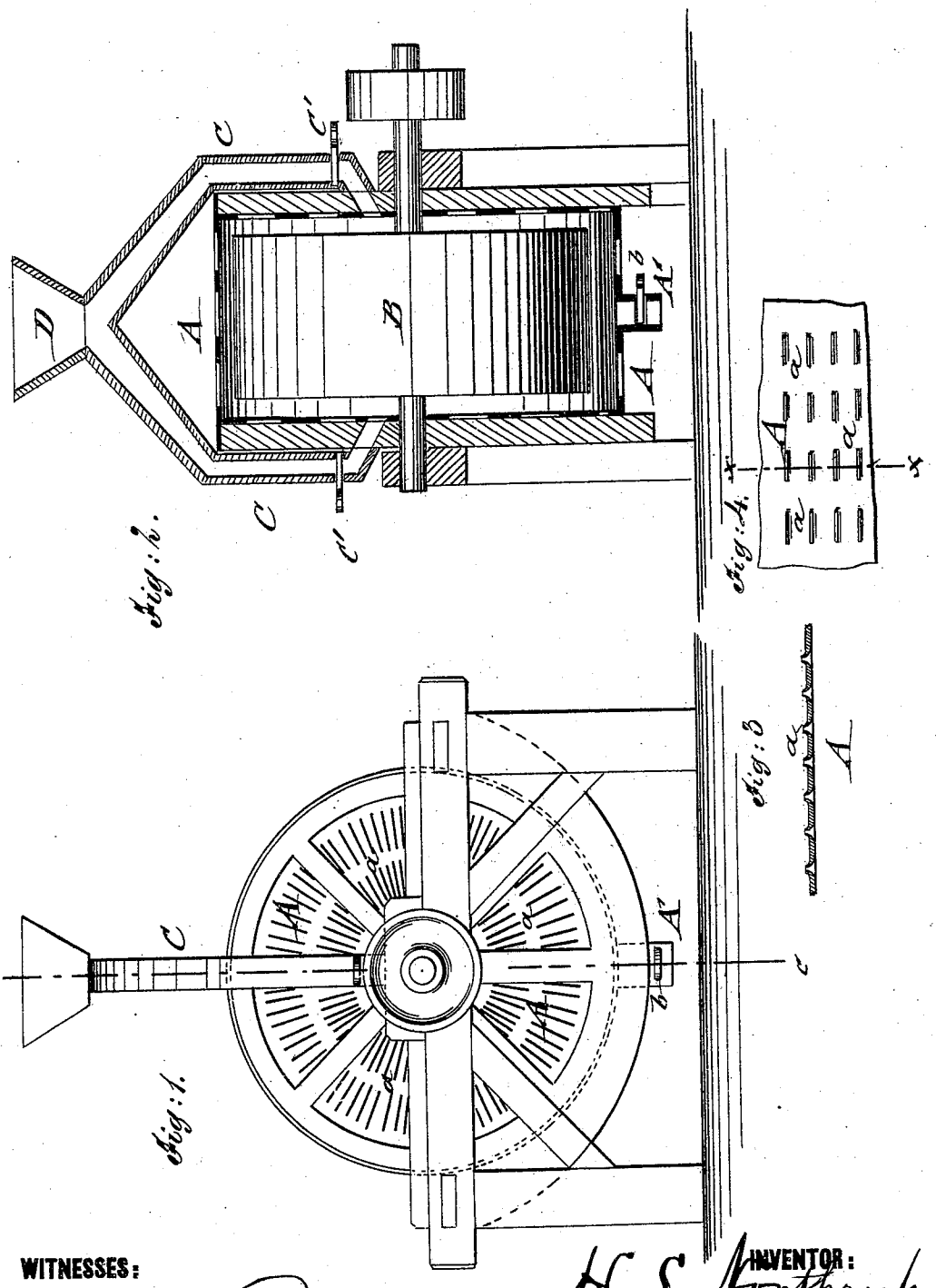
H. S. NORTHRUP.

PEARL BARLEY MILL.

No. 170,638. Patented Nov. 30, 1875.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY S. NORTHRUP, OF QUASQUETON, IOWA.

IMPROVEMENT IN PEARL BARLEY MILLS.

Specification forming part of Letters Patent No. **170,638**, dated November 30, 1875; application filed July 31, 1875.

To all whom it may concern:

Be it known that I, HENRY S. NORTHRUP, of Quasqueton, in the county of Buchanan and State of Iowa, have invented a new and Improved Pearl Barley Mill, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved mill for hulling and pearling barley and wheat. Fig. 2 is a vertical transverse section of the same on the line *c c*, Fig. 1; and Figs. 3 and 4 are, respectively, a detail section on the line *x x*, Fig. 4, and a side view of the slotted sheet-iron forming the casing of the mill.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described in connection with drawing, and then pointed out in the claim.

In the drawing, A represents the case of the pearl barley mill, which is made of cylindrical shape, and supported in stationary position on radial side frames. The stationary case A is made of sheet-iron, provided at the sides and circumference with slots *a*, of suitable length, that are punched from the outside toward the inside, so as to form raised convex edges, which hold the barley from being carried around, while the slots allow the hulls to pass out. The wheat or barley to be pearled passes to the inside of casing A, near the eye or shaft of the revolving grindstone B, being conducted by side channels C, with supply-regulating slides C′, from the hopper D at the top. The channels feed a continuous supply of barley to the casing, and keep the same packed full all the time, so that the stone may always act on a uniform quantity of barley, avoiding thereby the getting loose of the same in the case, and the increasing of the speed of the stone, which forms an objectionable feature in the old way of pearling, as the ends of the grain are ground off before the sides are white, causing thereby considerable waste. The stationary case has a spout, A′, with regulating-slide at the center of the bottom, through which the barley passes out slow or fast, according to the positions of the regulating slide-pieces.

As the partially-hulled barley passes out it is subjected to a suction-blast, and carried up by an elevator to another hopper above the mill, from which it is let into the mill again. As soon as the whole quantity has passed through the same it is then again exposed to the action of the mill, and passed up and down again until completely hulled and pearled.

The stationary case allows a greater quantity to be operated upon than the revolving case, while it renders also the construction of the mill less complicated, and its working more effective.

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

The combination of hopper D, having side channels C C, and stationary case A, having slots, raised edges, and bottom outlet, with the vertical grinder B, as and for the purpose specified.

HENRY SMITH NORTHRUP.

Witnesses:
JOHN NEWELL,
HIETT CORDELL.