(12) **United States Patent**
Noble

(10) **Patent No.: X3799**
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(54) **THRASHING MACHINE**

(76) Inventor: **Andrew Noble**

Andrew Noble.

Letters Patent

The Schedule referred to in these Letters Patent and making part of the same, containing a description in the words of the said Andrew Noble himself of his said Invention of the "Grain Washing Machine."

The machine frame, without the machinery is about 10 feet long, 3 feet and about 9 inches wide, and 2 feet 4 inches high - supported by four corner posts of hard wood, about 4 inches square, into which are mortised two side and one end pieces of the same size inches thick and about fifteen to nineteen inches clear from the top of the posts, and into these side pieces is framed or mortised a similar end piece, about 9 inches from the opposite end, which leaves a space for the rotation of the horizontal cylinder by which the grain is washed. On one side is framed into the two end pieces a similar side piece 6 inches within and parallel to that outer side piece, between which two contiguous side pieces play the pulley wheel or wheels on the axle of the cylinder, and another wheel on a different axle near the centre of the frame lengthwise.

The cylinder is about 3 feet 2 inches long (being the whole width between the inner and further side pieces) lying horizontally and is 13 inches diameter, made of hard wood, but hollow; into the outer surface of which are driven, at proper distances, four rows (lengthwise of the cylinder at each quarter of its circumference) of iron teeth, quarter of an inch square at the point, and third of

of an inch at the surface of the cylinder, projecting two inches outwards. Under the cylinder one third part of its circumference is a concave fall, made of hard wood commencing about two inches below the axis of the cylinder into which concave fall corresponding to the circle of the cylinder are driven at proper distances four rows of similar iron teeth, the rows two in length across the fall, and to project upwards two inches. These iron teeth in the cylinder, during its rotary motion, draw between the four rows of stationary teeth in the concave fall leaving the space of about three sixteenths of an inch on either side them.

The straw containing the grain in the ears or the separate heads of the grain is laid upon the surface of about one inch and an half above the side of the cylinder, and is held by hand against the cylinder during its rotation, and passes over the concave fall by which the grain is separated and cleanly separated from the stalks. Under and in front of the cylinder and fall is placed the riddle, to separate the grain from the straw, and at the farther end of the axle of the cylinder is fixed the machinery which set in motion the riddle and turn the fanners that winnow the grain. The winnowing apparatus may be attached to, and detached from the Thrashing Machine at pleasure. Over the upper half of the cylinder is a screen turning forwards to protect the teeth in and prevent the straw from raising over the cylinder during its rotation.

The cylinder has a wood shaft, into each end of which is driven an iron axle, which extend through the three side pieces of the frame and play

play on composition boxes fixed therein. On the cylinder axle between the two contiguous side pieces of the machine frame, is a pulley wheel or whirl, eight inches in diameter and about 2 inches wide, filling the width between said contiguous side pieces.

At the other end of the frame from the cylinder there is a wood shaft across the three side pieces, lying horizontally at the end of which on the outer side of the frame and on the same side of the pulley wheel or whirl upon the axle of the cylinder there is fixed the principal perpendicular wheel, two feet in diameter, which is turned by hand having a handle on the arm of the wheel, and a crank at the opposite end of the shaft, or to be turned by horse power to which it is adapted.

Between the shaft of the large wheel and the axle of the cylinder pulley wheel three fifths of the distance from the former is a second iron axle running from composition boxes; which axle passes through the outer and inner side of the frame, on the outer end of which is attached a pulley wheel or whirl 13 inches diameter over which band is fastened around the large wheel and on the same axle between the contiguous sides of the frame is a second wheel two feet diameter and about 6 inches wide, over which a broad walk is band passed around the pulley wheel on the cylinder axle. The three shafts or axles are horizontally across the top of the frame and all the wheels and whirls stand perpendicular thereto, by turning the large wheel by hand, horse or

or water power, the whole machinery is put in operation and the cylinder by which the grain is thrashed, performs nine revolutions to one of the great wheel. The cylinder revolutions can be multiplied in a greater ratio, if required.

The thrashing machine, to be turned by hand including the winnowing apparatus, can be furnished to purchasers from 90 to 100 dollars and to be put in operation by one horse power, and 50 dollars additional price. One person can turn it by hand to thrash and winnow ten bushels of grain in a day, and two hands to turn, and two to attend it can thrash and winnow sixty bushels in a day. The machinery for thrashing by a single horse power consist of an upright shaft with a horizontal wheel on the head connected with the large perpendicular wheel of the machine by bands and pulleys or by cog wheels and pinions.

Done at Alfred in the County of York, and State of Maine, this 6th day of December 1823.

Andrew Foote.

Witnesses.
Loyd Corkin
Lathl Littlefield

Rec'd
Rec'd
Exam'd
1852.

DRAFTSMAN'S DIVISION.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

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DEPARTMENT OF THE INTERIOR,

United States Patent Office,

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SIR:

The printed copies *of Patent No.* A Noble

are *exhausted.* Jan 12 1824

As soon as printed a copy will be mailed you to complete your order.

By direction of the Commissioner:

Very respectfully,

Chief Clerk.

514366-97-5m

United States Patent

Patent No.: X3799