J. T. & E. WARREN.

Thrashing Machine.

No. 4,115. Patented July 14, 1845.

Fig: 1.

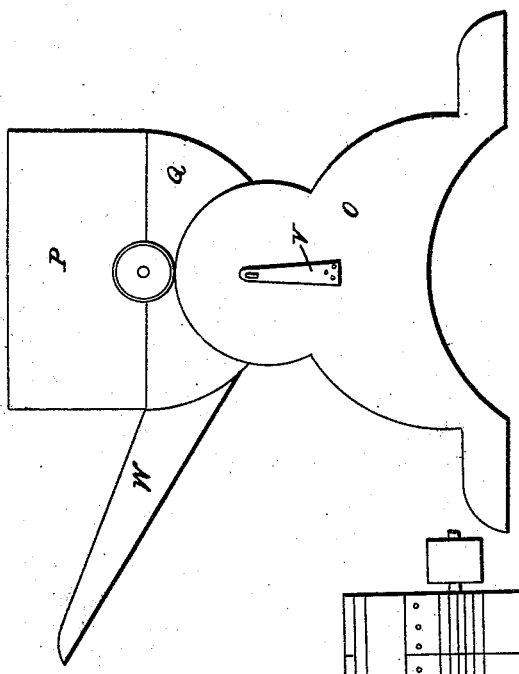
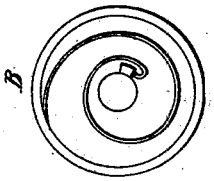


Fig: 4.



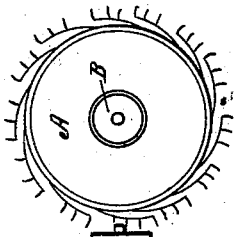
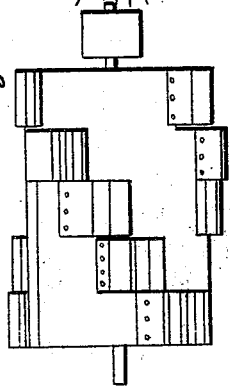


Fig: 2.



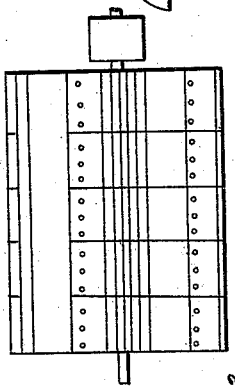
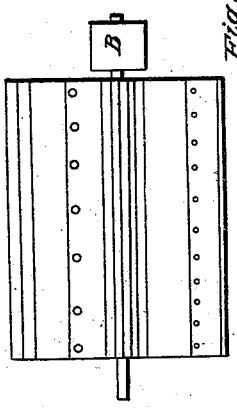
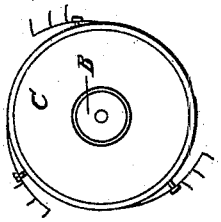


Fig: 3.





UNITED STATES PATENT OFFICE.

J. T. WARREN AND E. WARREN, OF NEW YORK, N. Y.

THRESHING-MACHINE.

Specification of Letters Patent No. 4,115, dated July 14, 1845.

To all whom it may concern:

Be it known that we, JOHN T. WARREN and EDMUND WARREN, of the city, county, and State of New York, have invented a new and useful Improvement in Threshing-Machines; and we hereby declare that the following is a full and exact description.

To enable others to make and use our invention we proceed to describe its construction and operation, reference being had to the drawings hereunto annexed and making part of this specification.

Figure 1 is a side elevation of the machine. Fig. 2 side and end of the cylinder; Fig. 3 different forms of the same; Fig. 4 the pulley.

The frame (Fig. 1) is made of cast iron. The sides are formed as represented in the drawing and connected by two pitch-boards, meeting at top near the point V in the drawing and extending to each side. It is held together by two bolts running from side to side. The top, P, or movable part is of the shape seen in the drawing—square at top (in the side view) and semicircular at botton—with the hopper, W, attached permanently to one side. The top, P, is hinged to the frame at a point just below the pulley so that it will vibrate. It is held in position by the spring, V, which has a pin in the top of it pointing inward, and entering into holes made in the side of the top, P. The object of this is to elevate or depress the outlet of the machine and thus throw the straw farther from the machine or nearer to it, as may be desired.

The cylinder, A, is made of two heads of plank fixed upon the shaft and turned true. On these is a covering of plate iron having upon the surface beaters or flanges attached to springs. The most approved mode is that like Fig. 3, that is, having but three springs on the cylinder, each spring consisting of a plate about one foot in width, riveted fast to the covering of the cylinder, its other edge standing out about an inch and a half or two inches, to give it room to spring in or yield when any hard substance gets into the machine. To keep the spring or plate from flying off, a screw with a stout head is set through it and into the covering of the cylinder. This screw however is seldom used and only when the plate iron of which the springs are made, is very broad or very heavy.

The pulley is of cast iron and hollow. It is put loosely upon the shaft and is made to turn it by the friction of a spring coiled inside the pulley. The spring is firmly attached to the shaft and presses hard upon the inside the pulley, so that it will with difficulty move around the shaft but sufficiently easily to allow of its yielding when any sudden strain is made upon it. See B, Fig. 4, for a section of the pulley. The object of this pulley is to enable a horse to start right off when attached to the power, even though the cylinder be too heavy to move to its full speed at first.

What we claim as our invention and desire to secure by Letters Patent is—

1. The combination of the spring pulley, B, with the cylinder of the threshing machine as above described.

2. We also claim the spring beaters as above described.

3. By the changeable or movable frame as described.

Given under our hands this 16th day of May 1845.

JOHN T. WARREN.
EDMUND WARREN.

Signed in presence of—
OWEN G. WARREN,
J. S. FERGUSON.