

(No Model.)

3 Sheets—Sheet 1.

T. A. BRYERLEY.
THRASHER.

No. 534,249.

Patented Feb. 19, 1895.

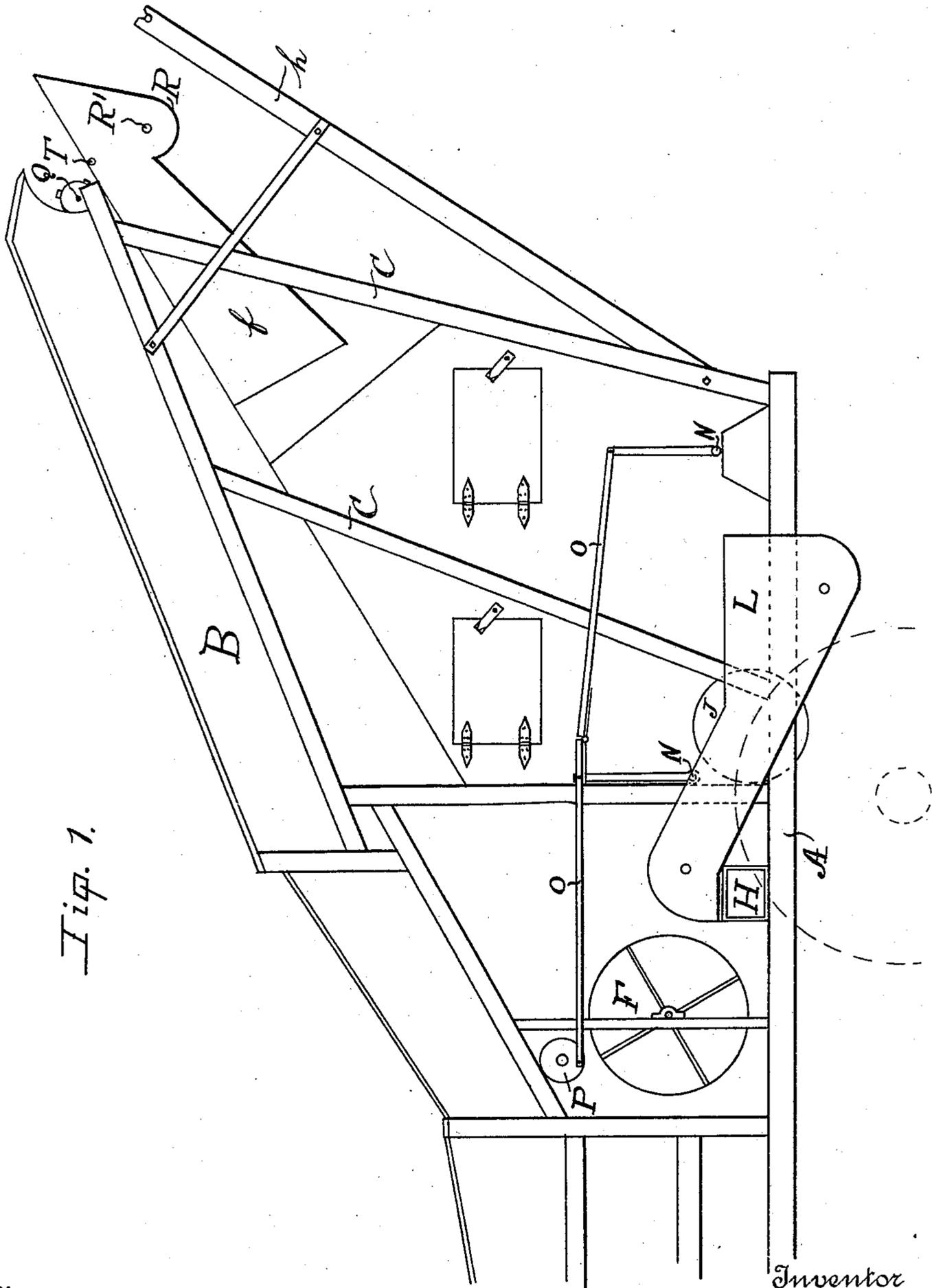


Fig. 1.

Witnesses
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L. B. Lodge.

Inventor
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By Joshua B. Webster
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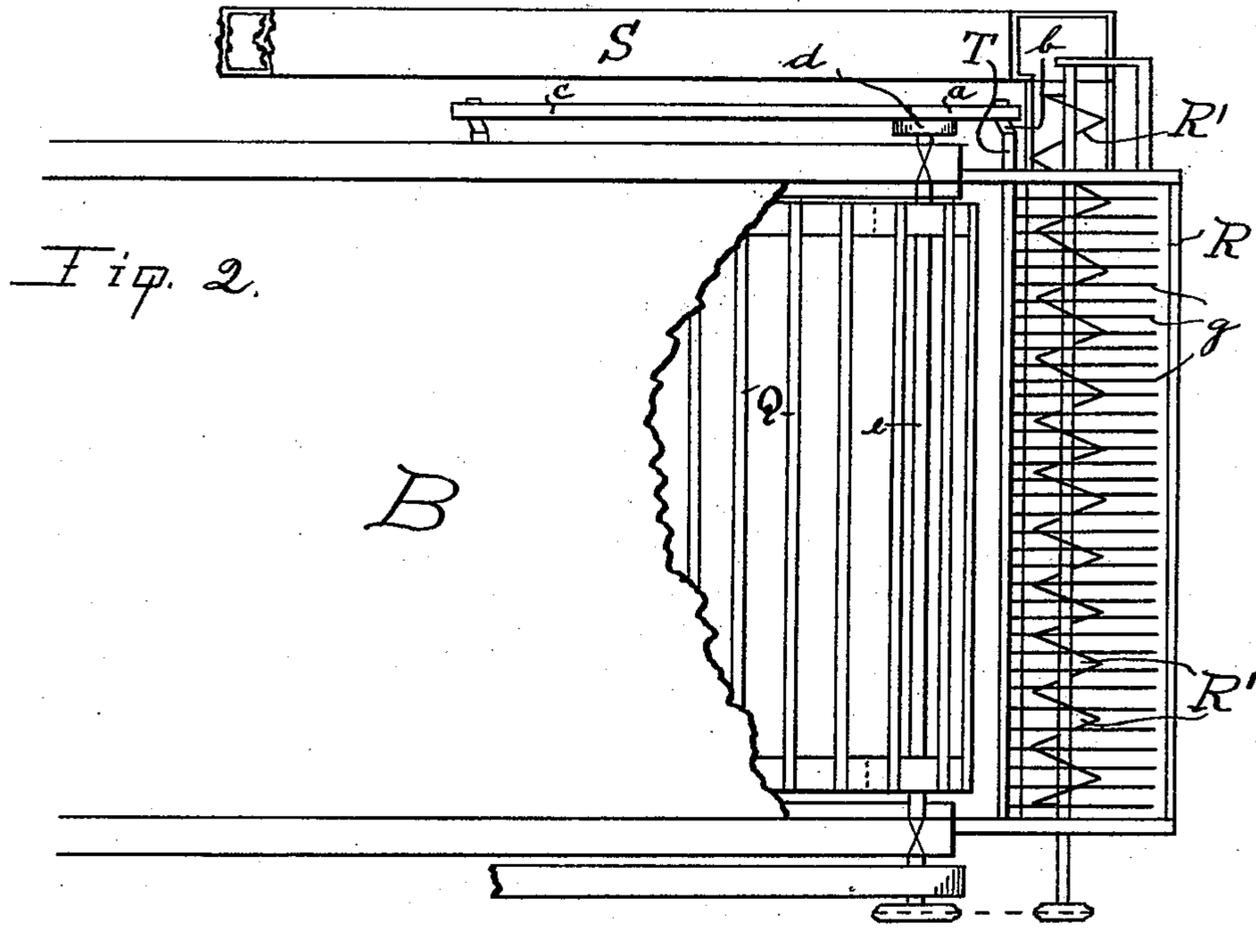
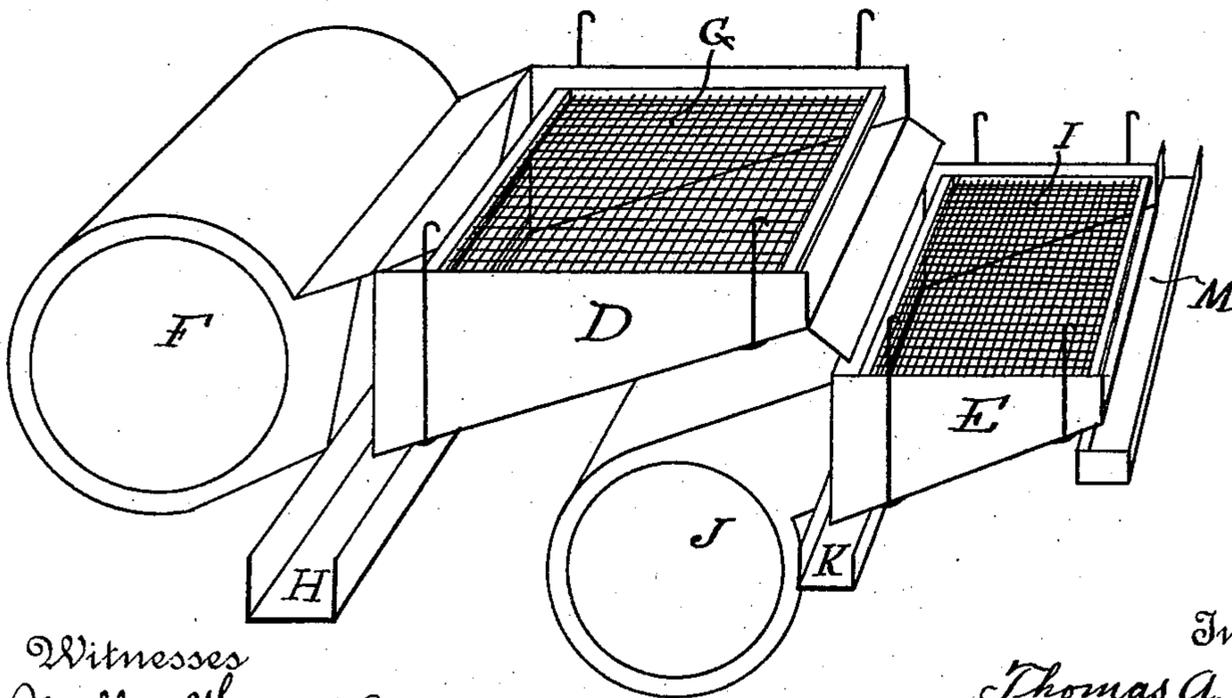


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

THOMAS A. BRYERLEY, OF STOCKTON, CALIFORNIA.

THRASHER.

SPECIFICATION forming part of Letters Patent No. 534,249, dated February 19, 1895.

Application filed May 29, 1894. Serial No. 512,878. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. BRYERLEY, a subject of the Queen of Great Britain, residing at Stockton, in the county of San Joaquin and State of California, have invented certain new and useful Improvements in Thrashers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of thrashers which are used specially for thrashing grain. Its object is to provide a thrasher which will expeditiously and effectually separate the grain from the chaff in large quantities and it consists in tandem shoes pivotally suspended in the rear end, two fans adapted to throw wind beneath such shoes; a separating device having a flaring pendent wind shaft, and consisting of a conveyer box which is provided with an auger; a horizontal rock shaft which is provided with fingers, and of such other devices and combination of devices as will be fully explained in the specification and specifically pointed out in the claim, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the rear portion of a thrashing machine having my improvement attached thereto. Fig. 2 is a top view of the same with a portion of the floor broken away. Fig. 3 is a detached perspective view of my improved tandem shoes, and Fig. 4 is a vertical longitudinal central section.

A represents the bottom bars of the rear end of a thrasher B of which I have shown only the rear portion and only enough of the old parts to illustrate the connection of my invention to such old parts.

C represents supporting posts for the purpose of supporting the rear end of the thrasher B.

D and E are tandem shoes which are pivotally suspended in the rear end of the thrasher B, of which D is the forward shoe and adapted to receive the grain and chaff as the same is deposited from the grain-carrier

(not shown). On the shoe D the grain is separated from the chaff by means of a blast of wind created by a fan F which is suitably located immediately below and in front of such shoe D and the grain falls through a sieve G, such as is usually employed in common thrashers, and is deposited in a spout H.

Should any grain be blown over the sieve G, by the blast of wind created by the fan F, it is deposited on the sieve I of the shoe E, which shoe E is immediately to the rear of the shoe D. The chaff is then eliminated from the grain, by means of a blast of wind created by a fan J, which is suitably located immediately below and in front of such shoe E. The grain is then deposited in a spout K by which it is conveyed to an elevator L which elevates such grain and deposits the same in the spout H.

Any grain that may be blown over the sieve I is deposited in a spout M which deposits the same in a return elevator (not illustrated) from which it is deposited in the front end of the thrasher and it again passes through the same operation.

The shoes D and E are agitated by means of rock shafts N which are operated by means of pitman rods O which are operated by a crank wheel P. (See Fig. 1.)

Should any grain be carried, with the straw, over the straw carrier Q, such grain is deposited into a conveyer box R from which it is deposited into a return spout S by means of a screw conveyer R' which is mounted in the conveyer box R, which spout S deposits such grain into the return elevator (not illustrated). T, is a rock shaft which is suitably located above the screw conveyer R', and is provided with horizontal rearwardly extending fingers, g, for the purpose of preventing green weeds and other like heavy matter from dropping into the conveyer box R.

Motion is conveyed to the rock shaft T by means of a pitman, a, which is attached at one end to a crank, b, formed on one end of the rock shaft and at the other end the pitman, a, is attached to a pitman, c, which is operated by means of a crank-wheel, d, which is attached to one end of a shaft, e, around which the straw-carrier passes.

The conveyer box R is provided with a flaring pendent wind conduit, f, which is

adapted to catch the blast of wind which is created by the fans F and J, after such wind has passed through and beyond the shoes D and E, such wind being conducted by the pendent wind conduit, *f*, to the fingers, *g*, where it prevents the straw and chaff from falling into the conveyer box R.

h, is a chaff elevator for elevating the chaff out of the way after it has been separated from the grain.

I am aware that many of the features I have described are not new in thrashers of this class, but

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

The herein described thrashing machine comprising the casing or frame, the forward shoe D, pivotally suspended in the frame and having the sieve G, the shoe E, pivotally suspended in the frame and arranged in rear of and below the shoe D, and having a sieve I, the fan chambers F, and J, communicating

with the forward ends of the shoes D, and E, respectively, fans arranged in said chambers, the straw carrier Q, arranged above the shoes D, E, the conveyer box R, arranged beneath the upper end of the straw carrier and having the pendent wind conduit *f*, increased in size toward its lower end and adapted to catch the wind from the fan chambers F, J, the return spout S, communicating with one end of the conveyer box, the screw conveyer R', arranged in said conveyer box, and the rock shaft T, journaled in the conveyer box and having the series of fingers *g*, extending over the screw conveyer, all substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS A. BRYERLEY.

Witnesses:

JOSHUA B. WEBSTER,
MOLBRY HAYNES.