

RHOADES & HAMLIN.

Thrashing Machine.

No. 87,874.

Patented March 16, 1869.

Fig: 1.

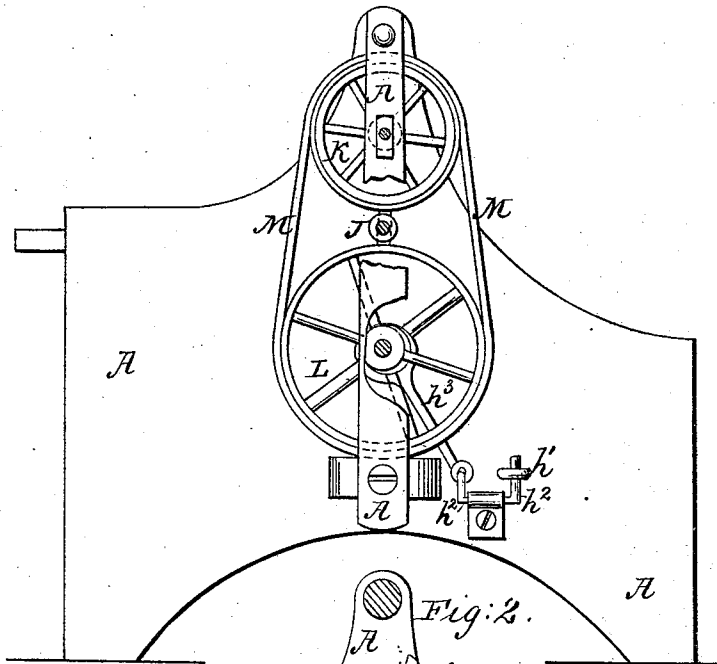
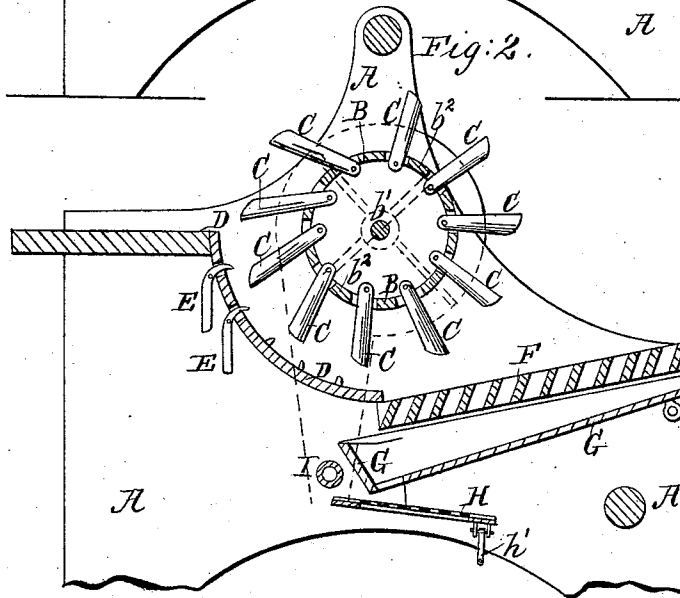


Fig: 2.



Witnesses.

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GEORGE M. RHOADES, OF HAMILTON, NEW YORK, AND GEORGE B. HAMLIN,
OF WILLIMANTIC, CONNECTICUT.

Letters Patent No. 87,874, dated March 16, 1869.

IMPROVEMENT IN THRESHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that we, GEORGE M. RHOADES, of Hamilton, in the county of Madison, and State of New York, and GEORGE B. HAMLIN, of Willimantic, in the county of Windham, and State of Connecticut, have invented a new and useful Improvement in Threshing-Machines; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of our improved machine, part being broken away to show the construction.

Figure 2 is a vertical longitudinal section of the same.

Similar letters of reference indicate corresponding parts.

Our invention has for its object to improve the construction of threshing-machines, so as to make them more efficient in use and less liable to get out of order or to be broken than the machines constructed in the ordinary manner; and

It consists in the construction and combination of various parts of the machine as hereinafter more fully described.

A represents the casing or frame-work of the machine.

B is the threshing cylinder, the shaft b^1 of which revolves in slots in the frame A, or in slotted bearings attached to said frame.

The cylinder B is formed by attaching a drum or shell, b^2 , to two wheels or disks attached to the shafts b^1 , said wheels or disks being made heavy, so as to act as fly-wheels.

C are teeth which pass in through slots in the drum or shell b^2 of the cylinder B, and have cross-heads formed upon their inner ends, by means of which the inner ends of the said teeth are pivoted to lugs formed upon or attached to the inner surface of said drum or shell b^2 .

D is the concave, which corresponds in curve to the curve of the drum of the cylinder B.

E are teeth, the upper ends of which project through slots in the concave D, and which are pivoted to lugs formed upon or attached to the lower or convex surface of the concave D.

The lower ends of the teeth E are weighted or made heavy, so as to counterbalance their upper ends sufficiently to support any loose heads of grain that may be passing down the concave, but not sufficiently to hold the said heads against the action of the teeth C.

F is the rack by which the straw is guided as it passes out of the thresher, and through which the grain falls to the vibrating spout G.

Through a hole in the lower end of the spout G the grain falls upon the screens H, which are rigidly connected with the spout G, and which are connected with and agitated from a cam upon the journal of one of the drive wheels by means of a system of connecting rods and levers, $h^1 h^2 h^3$.

To one end of the cylinder shaft b^1 are attached the fans of a fan blower, the blast from which is discharged through the pipe I upon the grain as it passes through the machine.

To the other end of the shaft b^1 is attached a friction pulley, J, which works between the faces of the wheels K and L.

The journals of the wheels K and L revolve in bearings in the frame-work of the machine.

The journals of one of the wheels, L, should revolve in slotted bearings, so that it may be held in contact with the friction pulley J by its own weight, or by the tension of the belt M.

The belt M passes around the wheels K and L, as shown in fig. 1.

The power by which the machine is driven is applied to the projecting end of the journal of the wheel L by any of the well-known means for such purposes.

By this construction and arrangement of the driving gearing there will be no more strain upon the shafts when the machine is working than there is where said machine is running free.

Having thus described our invention,

We claim as new, and desire to secure by Letters Patent—

1. The combination of pivoted teeth with the drum of the threshing cylinder of a threshing-machine, substantially as herein shown and described and for the purpose set forth.

2. The combination of pivoted and weighted teeth with the concave of a threshing-machine, substantially as herein shown and described and for the purpose set forth.

3. An improved driving gearing, formed by the combination of the friction-pulley J, attached to the shaft to be driven, the wheels K and L and belt M with each other, substantially as herein shown and described and for the purpose set forth.

The above specification of our invention signed by us, this 27th day of January, 1869.

GEORGE M. RHOADES.

GEORGE B. HAMLIN.

Witnesses:

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