

J. WERNER, Jr.
Harvesters.

No. 150,916.

Patented May 12, 1874.

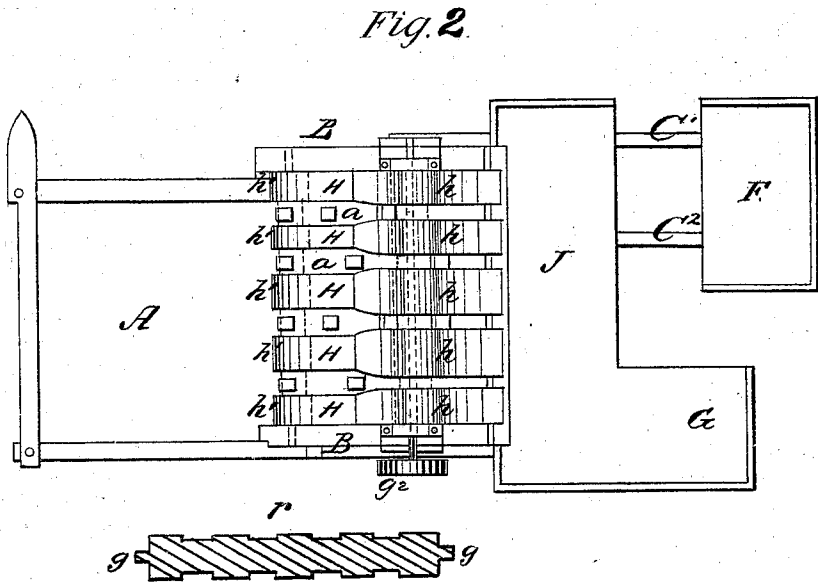
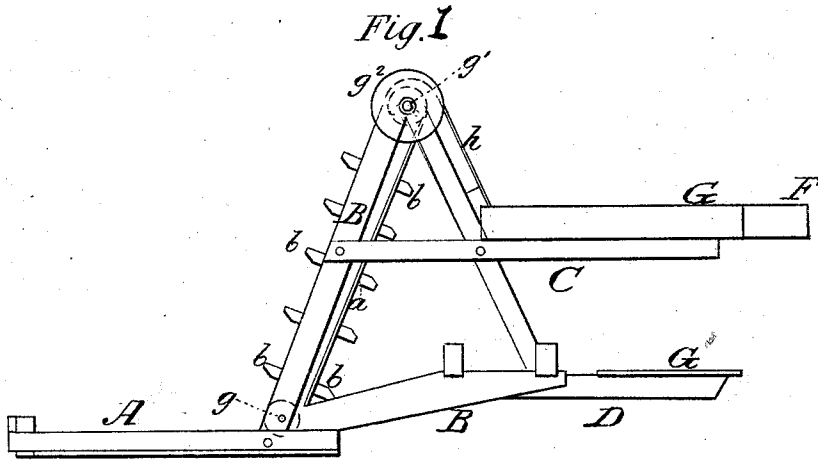


Fig. 3

Witnesses
George C. Upham.
Robert Everett.

Inventor
John Werner, Jr.
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UNITED STATES PATENT OFFICE.

JOHN WERNER, JR., OF PRAIRIE DU SAC, WISCONSIN.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **150,916**, dated May 12, 1874; application filed February 28, 1874.

To all whom it may concern:

Be it known that I, JOHN WERNER, JR., of Prairie du Sac, in the county of Sauk and State of Wisconsin, have invented a new and valuable Improvement in Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side view of my binders' attachment for harvesters. Fig. 2 is a plan view of the same. Fig. 3 is a sectional view of the lower roller.

This invention has relation to that class of grain-harvesters wherein the grain is bound into gavels by men riding on the machines. The invention consists in combining guards and divisions with endless toothed elevating-belts, which guards and divisions will allow the free escape of obstructing substances beneath the lower belt-roller, and also prevent the grain from being wound around the rollers, as will be hereinafter explained.

In the annexed drawings, A designates a grain-platform, to which an endless belt or carrier will be applied for moving the cut grain up to the foot of an inclined frame, B, which is constructed on one end of the platform. At the lower end of this frame B is a horizontal belt-roller, *r*, and at the upper end of this frame is a similar roller, *r'*, carrying on one end a pulley, *g'*, for receiving a driving-belt. The two rollers have annular grooves in their peripheries, arranged at suitable distances apart, into which grooves the narrow elevating-belts *a* are applied, on which belts the elevating-teeth *b* are secured. The belts *a* on the grain side of the frame B alternate with rigid pieces H, to the backs of which narrow strips are secured, as indicated in Fig. 4 by the letter *n*. These strips *n* afford back supports for the ascending sides of the belts *a*, and the pieces H afford guides for the belts, and also supports for the grain which is being elevated. The floor of the grain-platform extends well beneath the lower roller, *r*, so that the teeth *b* will nearly touch it as they revolve around.

The lower ends of the pieces H have curved guards *h'* secured to them, which slightly overlap the belts *a*, and prevent grain straw from becoming entangled with the roller *r*. The upper ends of the pieces H also have guards *h* secured to them, which are curved or arched over the upper roller *r'* and directed downward, their lower ends being secured to the back ledge of a grain-receiver, J. These guards also overlap the belts *a*, and are arched in such manner that the teeth *b* fall within them, so as to clear themselves of the grain at the highest point of the elevator-frame. The grain falls from the teeth *b* upon a receiver, J, which is secured upon arms C C¹ at the front and rear ends of the frame B. At the rear end of this receiver J, and at right angles thereto, a binder's table, G, is secured upon the arm C, at which the rear binder works; and in front of this table, at the front end of the machine, is another binder's table, F, which is secured upon arms C¹ C², so as to leave a space between it and the receiver for the front binder to work in. Beneath the tables G F, and supported upon arms D, is a platform, G', on which the two binders stand while at work at their respective tables. The two binder's tables may be hinged to the frame B, so that they can be folded up close thereto when the machine is not operating. The arrangement of the two tables G F with respect to the receiver is such that two binders can work from a single receiver without interfering with each other, and without changing their places in taking the gavels from the receiver and placing them upon their tables.

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

The curved metal guard *h'*, attached to the lower ends of the pieces H, extending around and covering the grooved roller *r* between the toothed belts *a*, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN WERNER, JR.

Witnesses:

ABM. WALDRON,
GEO. W. BALL.