

(No Model.)

J. M. TRIER.
HARVESTER AND BINDER.

No. 481,706.

Patented Aug. 30, 1892.

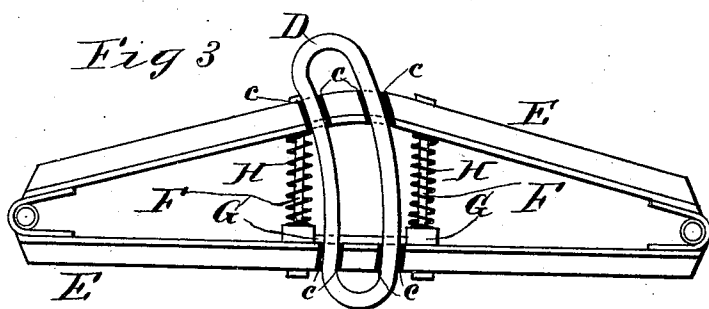
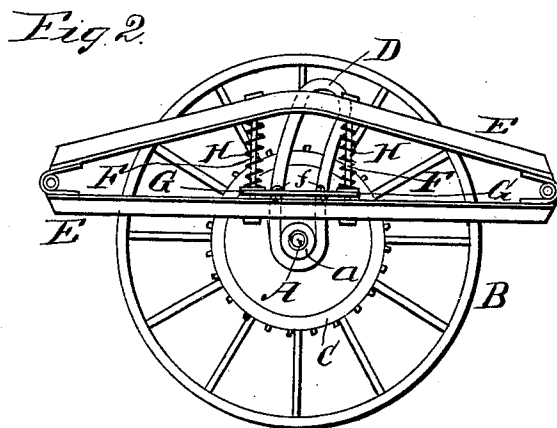
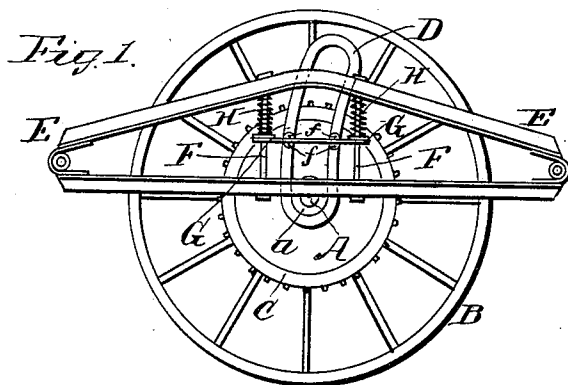
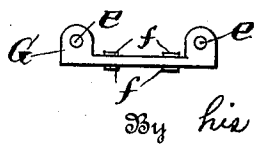


Fig. 4.

Witnesses
A. L. Watson
B. A. Slater



Inventor
John M. Trier.
By his Attorney
H. C. Hartman.

UNITED STATES PATENT OFFICE

JOHN MARTIN TRIER, OF JEFFERSON, INDIANA.

HARVESTER AND BINDER.

SPECIFICATION forming part of Letters Patent No. 481,706, dated August 30, 1892.

Application filed January 26, 1892. Serial No. 419,350. (No model.)

To all whom it may concern:

Be it known that I, JOHN MARTIN TRIER, a citizen of the United States, residing in Jefferson township, near the town of New Haven, in Allen county and State of Indiana, have invented certain new and useful Improvements in Harvesters and Binders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to make and use the same.

This invention relates to the class of harvesters and particularly to an attachment for the truss-frame which supports the main shaft and driving-wheels; and its novelty will be fully understood from the following description and claim when taken in connection with the annexed drawings.

The object of the invention is to provide means whereby the main shaft or axle and the side castings are relieved of any sudden pressure, heavy weight, or strain upon them.

A further object of the invention is to provide means for suspending the truss-frame upon either side of the driving or road wheels, so as to prevent sudden jolting of the machinery, the breaking out of the teeth of the gear and sprocket wheels, and the necessary strain upon the connected parts by the sudden starts and jars occasioned in running such machine.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of the main or driving wheel of a thrashing-machine with my device applied, showing the position of the truss-frame and springs when a heavy weight is upon the said truss-frame. Fig. 2 is a similar view showing the position of the parts when the machinery or weight is removed from the truss-frame. Fig. 3 is an enlarged view of the opposite side of the truss-frame from that shown in Fig. 1 with my device attached. Fig. 4 is a detached plan view of the perforated plate.

The same letters of reference denote the same parts throughout the several figures.

A refers to the main shaft or axle of a harvester-machine, upon which is secured the main driving or road wheel B, which is provided with the usual sprocket-wheel C. The shaft A is journaled in a box *a*, located in the segment-rack D, which keeps at one and the same position, while the truss-frame E, in which it is located, changes its position ver-

tically. The truss-frame E is provided with bolt-rods F, passing vertically therethrough upon either side of the slots *c*, so as to strengthen the truss where the slots occur and to accommodate a plate G, having apertures *e* in either end, through which the said bolts pass. This plate G has lugs *f* for securing it to the segment-racks D, and secured to either end of the said plate is a spiral spring H, the other end of the spring bearing against the inner surface of the top portion of the truss E, thus connecting the plate G with the segment-rack D, so that the truss-frame may be moved vertically and at the same time controlled by the spiral springs. By this arrangement the shaft and the wheels thereon are relieved of a great portion of the weight, it being transferred to the truss-frame.

When the machinery of the harvester is placed in position on the truss-frame, instead of the frame standing still and receiving with the axle and wheels the entire weight, it descends according to the extent of such weight and the spiral springs are compressed, leaving the weight suspended from the shaft or axle A and wheels.

I am aware that it is old to support car-trucks by the same devices I use to support the harvester-frame, and that the shape of such frame is old. I therefore lay no broad claim to the said support, nor to the shape or manner of connecting the parts of the said frame together.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with the harvester truss-frame having the slots *c* formed therein, of an attachment consisting of the segment-rack adapted to slide in the said slots, the plate G, extending across the rack and provided with lugs *f*, secured to the said rack, the spiral springs secured to the plate, and the rods F, passing through the truss-frame, the springs, and the plate, whereby the weight of the harvester is transferred from the segment-rack to the springs, substantially as shown and described.

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

JOHN MARTIN TRIER.

Witnesses:

ALBERT BAKER,
H. C. HARTMAN.