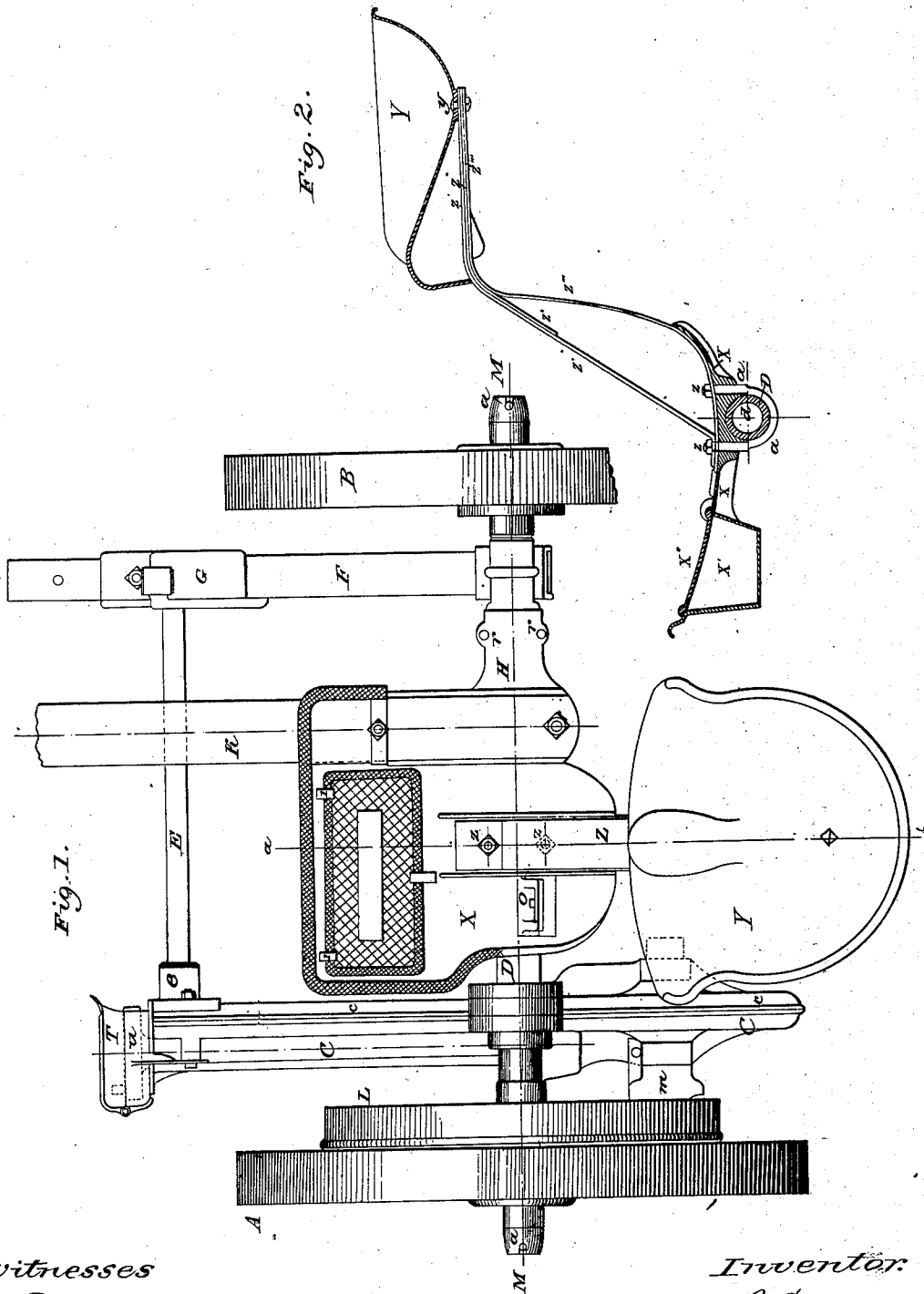


R. DUTTON.
HARVESTER.

No. 74,208.

Patented Feb. 11, 1868.



witnesses

J. D. Law
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United States Patent Office.

RUFUS DUTTON, OF NEW YORK, N. Y.

Letters Patent No. 74,208, dated February 11, 1868.

IMPROVEMENT IN HARVESTERS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, RUFUS DUTTON, of the city of New York, in the county of New York, and State of New York, have invented certain new and useful Improvements in the Construction of the Seat and Foot-Board of Harvesting-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, and of their mode or manner of operation, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and making a part of this specification.

The nature of my invention consists in a new arrangement or construction of spring-seat for the driver or operator, and also of the foot-board, to which the seat is connected, and from which it is supported.

Figure 1 is a top view of the frame of the machine, showing more particularly the seat and foot-board.

Figure 2 is a sectional view of the seat and foot-board, through the line *a b* of fig. 1.

Only so much of the machine is described as is necessary to explain what relates to the seat and foot-board.

In fig. 1, X is a top view of a metallic piece or plate, generally of cast iron, which forms the foot-board, and the rear extension, X', of which furnishes a rest or support for the principal spring, that sustains the seat Y. The axle-tree of the machine is shown at D, around which, between the driving-wheels, is a sleeve, D', fig. 2, which entirely encases the axle, protecting and strengthening it. The foot-board X rests, or is supported, upon such sleeve, and is fastened thereto by a clasp, *a*, fig. 2, which passes underneath such sleeve, the ends of such clasp extending up through the foot-board, and fastened thereto by the nuts *z z*. Such foot-board or metallic piece X extends forward, as seen more plainly in fig. 2, sufficiently far to give a suitable and convenient support for the feet of the driver, and to secure sufficient space for a tool-box, which is made in or a part of the foot-board, as hereinafter described. The same metallic piece also extends behind the sleeve and axle, and upwards, substantially as shown in fig. 2, to form a support and bearing for the seat-spring. Such metallic plate is usually made of cast iron, and has its upper surface roughened, so as to give suitable support to the feet. In this piece X, in front of the axle, is made a box or tool-box, *x*, which is sunk below the general plane of the upper surface of such plate, and which is so located as to occupy or partially fill the space beneath such plate, between the tongue K of the machine and the side casing *c*, which helps form one side of the frame. Such tool-box is protected by a cover, *x'*, which is hinged, at 1 1, to the foot-board, and such cover, when shut down, serves, like the rest of the piece X, as a support for the feet of the driver. Occupying such position, in respect to the other parts of the machine, such tool-box can conveniently be made of sufficient size to hold all the usual tools required in the use of the machine.

Y is the seat for the driver, which is placed behind the axle, and supported by the several springs, Z', Z'', and Z'''. Z''' is the main or principal spring for supporting the seat, and is generally made of steel, of about three inches wide by a quarter of an inch thick. The lower end of such spring passes over the ends of the clasp *a*, and is fastened thereto and to the foot-board by the same nuts that hold the foot-board to such clasp. Such spring is also bent or shaped so as to conform to the back part, X', of the foot-board, and the upper end of such spring is made to take a nearly horizontal position or direction, so as to furnish a suitable support for the seat Y, to the under side of which it is bolted by the nut *y*. A thin strap of iron or steel, Z', which I call the seat-spring brace, passes at its lower end over the forward end or extension of the clasp, *a*, and is fastened by the common nut *z*, and the upper end of such brace is laid parallel with the upper end of the spring Z''', and is secured with such spring to the seat by the nut and bolt *y*.

To strengthen the support of the seat, and give more elasticity to such support, there is put between the springs Z' and Z''' an intermediate spring, Z'', the upper end of which is secured to the seat, in connection with the other spring and the brace, and the lower end of which may be made thinner and wedge-shaped, such spring extending only part way to the foot-board, as shown in fig. 2. Such intermediate spring may, however, be omitted, or more than one may be used. A single one is, however, sufficient, and its use renders the seat more comfortable for the driver than it would be without it.

Such arrangement and combination of the several springs secure a sufficiently strong support for the driver's seat, and also render such seat easy and pleasant. By so arranging and placing such springs, also, that the position of the seat is brought behind the axle, the weight of the driver is made to balance the end of the pole, and relieve the pressure upon the horses' necks.

The pole K is supported upon the sleeve D, which covers the axle, by means of a pole-clamp, H, which is fastened by the clasp *a*, and a similar clasp near the side, F, of the machine, which clasps are secured by the nuts *z z*. These clasps serve as hinges, and permit the pole to move freely upon or around the axle-sleeve.

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

1. Making the foot-board and tool-box of harvesters of a single metallic piece, when such foot-board, at the same time, forms a support for the seat-spring and seat, substantially as and for the purposes set forth.
2. Supporting the seat, by means of a main spring, Z''', in combination with a spring-brace, Z', arranged, with respect to each other, substantially as described, both being rigidly attached to the frame or foot-board, and at their other ends to the seat, and having a short intermediate spring, Z'', between them, at their upper ends, and free at its lower end, substantially as and for the purposes set forth.
3. Extending back and upward the rear part of the foot-board, to form a support or brace for the main seat-spring, substantially as described.
4. Fastening the foot-board and seat-springs by one and the same clasp or fastening, passing around the axle or axle-sleeve of the machine, substantially as set forth.

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Witnesses:

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