(No Model.)

3 Sheets—Sheet 1.

J. BARLOW.

Hay Rake and Loader.

No. 230,222. Patented July 20, 1880.

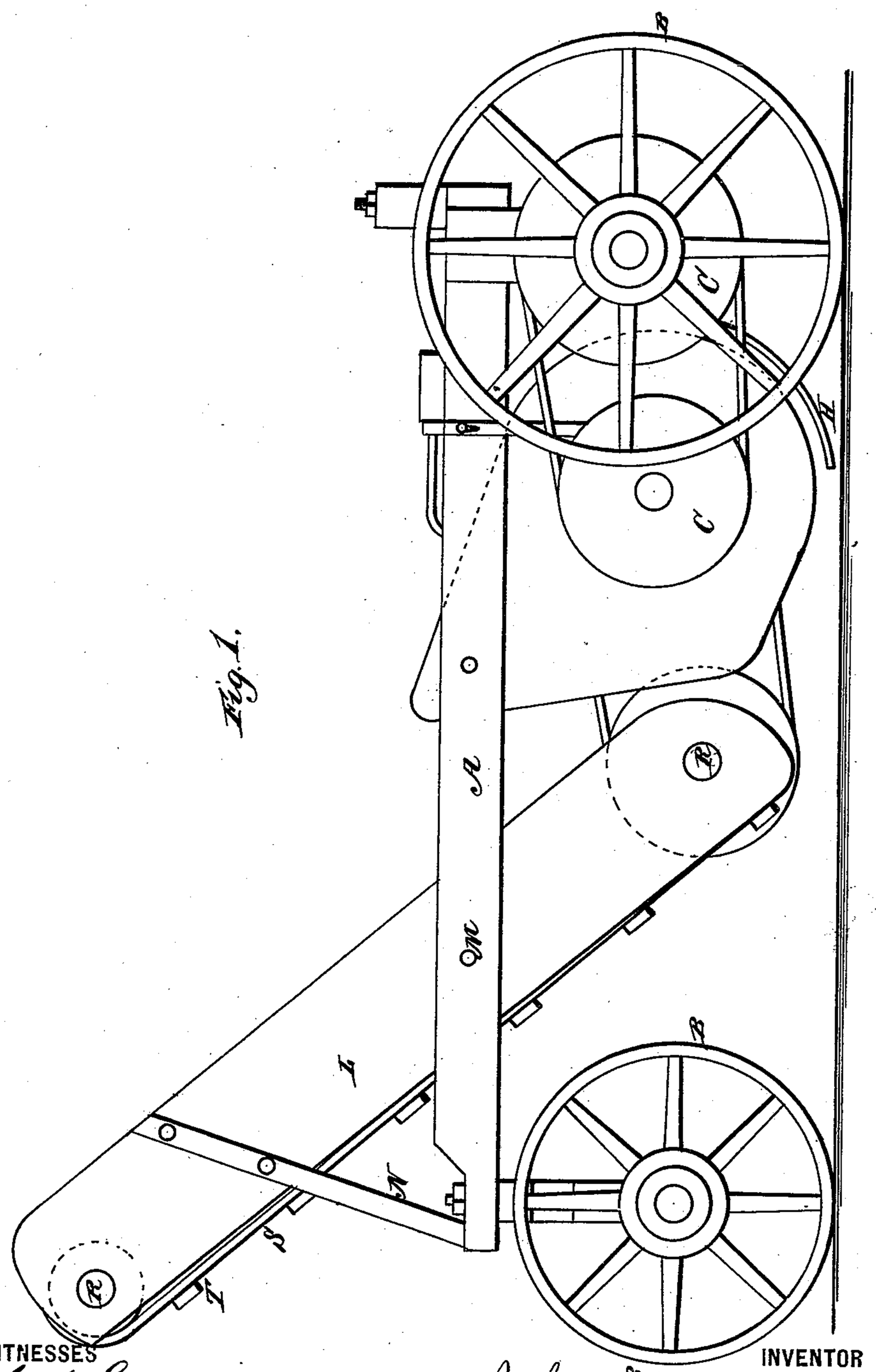

Fig. 1.

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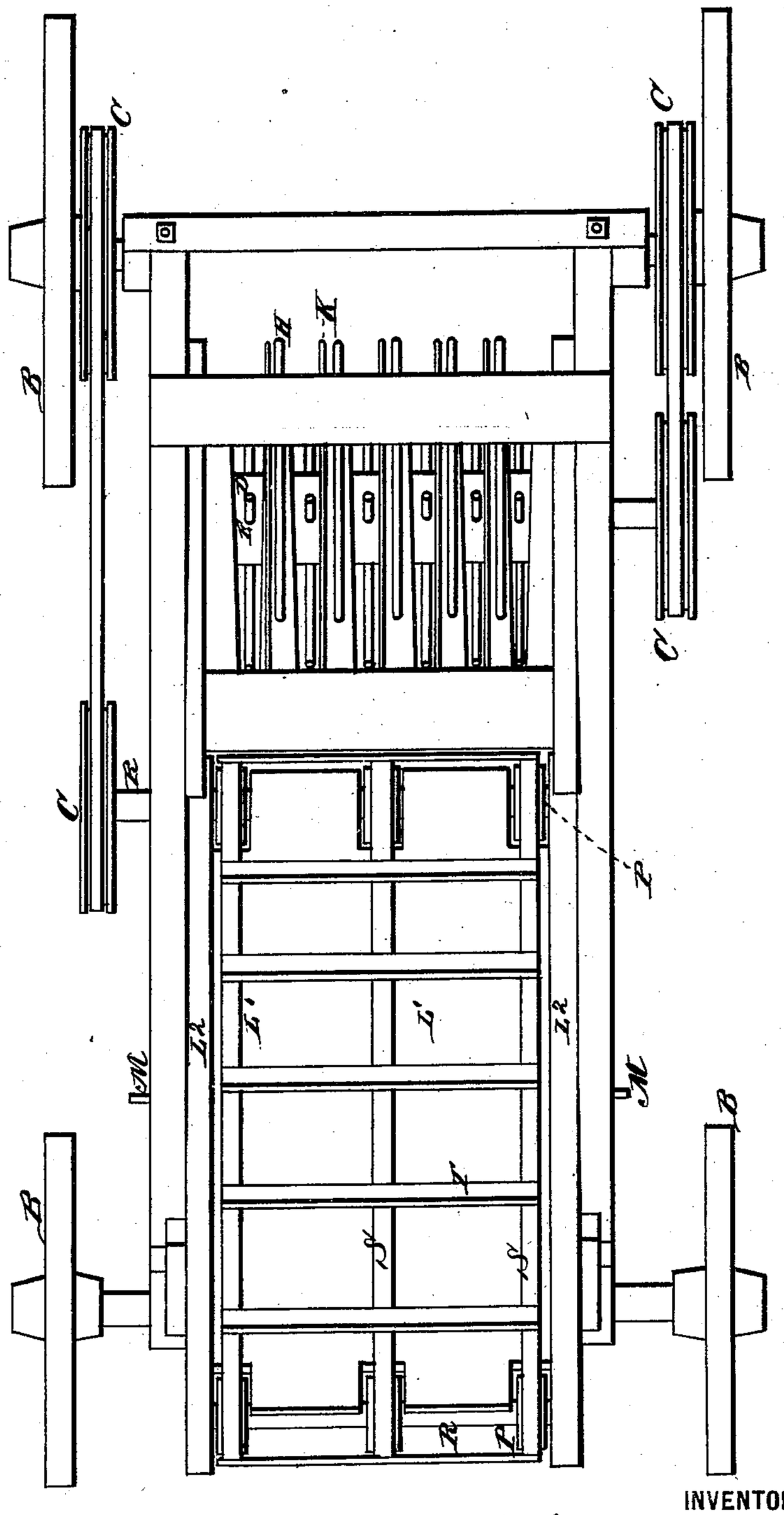

Fig. 2.

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Fig. 3.

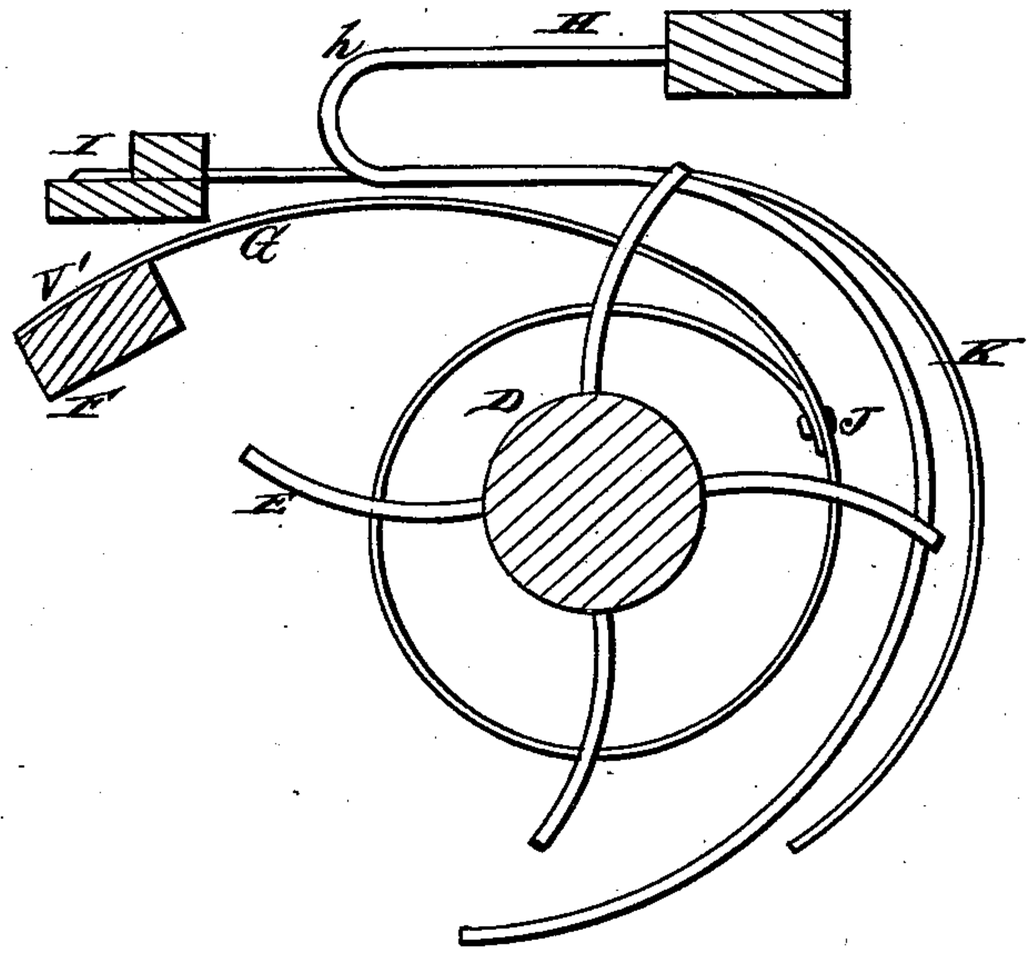
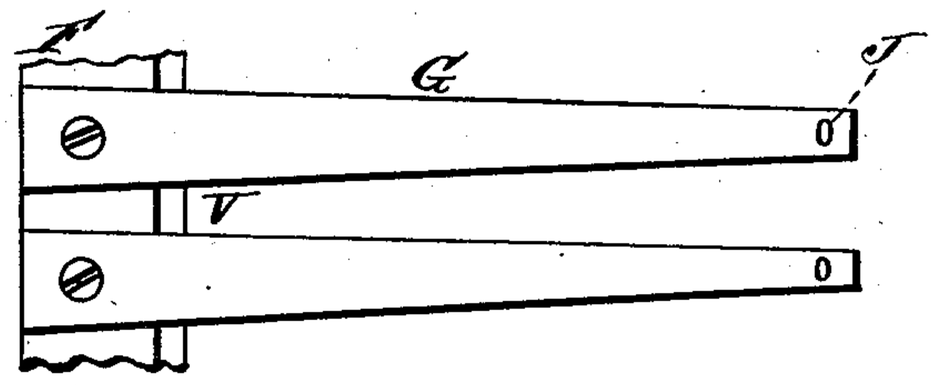


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN BARLOW, OF BUTLER CENTRE, IOWA.

HAY RAKE AND LOADER.

SPECIFICATION forming part of Letters Patent No. 230,222, dated July 20, 1880.

Application filed March 27, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN BARLOW, of Butler Centre, in the county of Butler and State of Iowa, have invented certain new and useful Improvements in Hay Rakes and Loaders; 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 drawings is a representation of a side elevation of my hay rake and loader. Fig. 2 is a plan view of the same. Fig. 3 is a sectional detail view, and Fig. 4 is a detail view.

My invention relates to a hay rake and loader; and it consists in the features of construction and combination, hereinafter set forth, and particularly pointed out in the claim.

A designates the main frame, which is supported by means of four wheels, B, the axles of the rear wheels being provided with driving-pulleys C for endless belts or chains, one of which belts or chains transmits motion to the pulley of the elevator, and the remaining belt or chain transmits motion to a shaft of the cylinder D, which carries the curved rake-teeth E.

To a cross-bar, F, of the main frame A a number of metal straps or slats, G, are secured. These slats are arranged with spaces between them for the passage of the rake-teeth E, the straps or slats being widened at their ends, which are secured to the bar F, whereby the spaces at their points of commencement near said bar will be narrower than at the other terminations of the said spaces.

The slats G curl around the toothed cylinder, between the teeth E, and at their inner ends are secured upon themselves, as shown at J in Fig. 3. These slats are made of flexible material, such as steel bands.

H H are rods, which are bent forward over the slats, as at *h*, and then bent backward and downward, so as to form stationary spring rake-teeth. The revolving rake-teeth pass between these stationary rake-teeth.

To a cross-bar, I, of the main frame are secured the spring-fingers K. These spring-fingers extend back and are curved downward, similarly to the rake-teeth H.

The inclined elevator L is attached to the main frame by pivots M, and it has legs N, which rest upon the forward ends of the side bars of the main frame. The elevator consists of a platform, L′, with sides L^2, and it is provided at each end with pulley-wheels P, mounted upon shafts R R. Endless bands S S, carrying slats T, travel upon these rollers, the lower roller-shaft being driven by a band or chain from one of the pulley-wheels upon the axle of one of the driving-wheels, as hereinbefore mentioned.

The operation is as follows: As the machine is drawn forward the stationary rake-teeth H rake up the hay from the ground. As it is thus raked up it is caught by the revolving teeth and carried up over the slats, and also between said slats and the spring-fingers. As the revolving teeth pass down between the slats at the points where the passages between said slats are narrow, as at U, the revolving rake-teeth will discharge the hay or straw upon the inclined parts U of the slats, which parts incline downward toward the foot of the elevator, thus discharging the hay upon the elevator, whereon it will be carried up by the traveling bands and slats, so as to bring it to the point where it is to be discharged from the elevator in order to load the wagon, which will be drawn in front of the machine.

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

The combination of a series of rotary rakes, in a combined hay raking and loading machine, with the stationary rake-teeth arranged for the passage of the rotary teeth between a series of slats arranged in cylindrical form around the rotary rake-teeth cylinder, with spaces between them for the passage of the rotary rake-teeth, and spring-fingers for holding the hay in its passage around said slats to the point where it is discharged from the slats upon the elevator, substantially as herein set forth.

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

JOHN BARLOW.

Witnesses:
JAMES BARLOW,
JAMES D. BARLOW.