

W. H. Straub,
Hay Loader.

No. 97.724.

Patented Dec. 7. 1869.

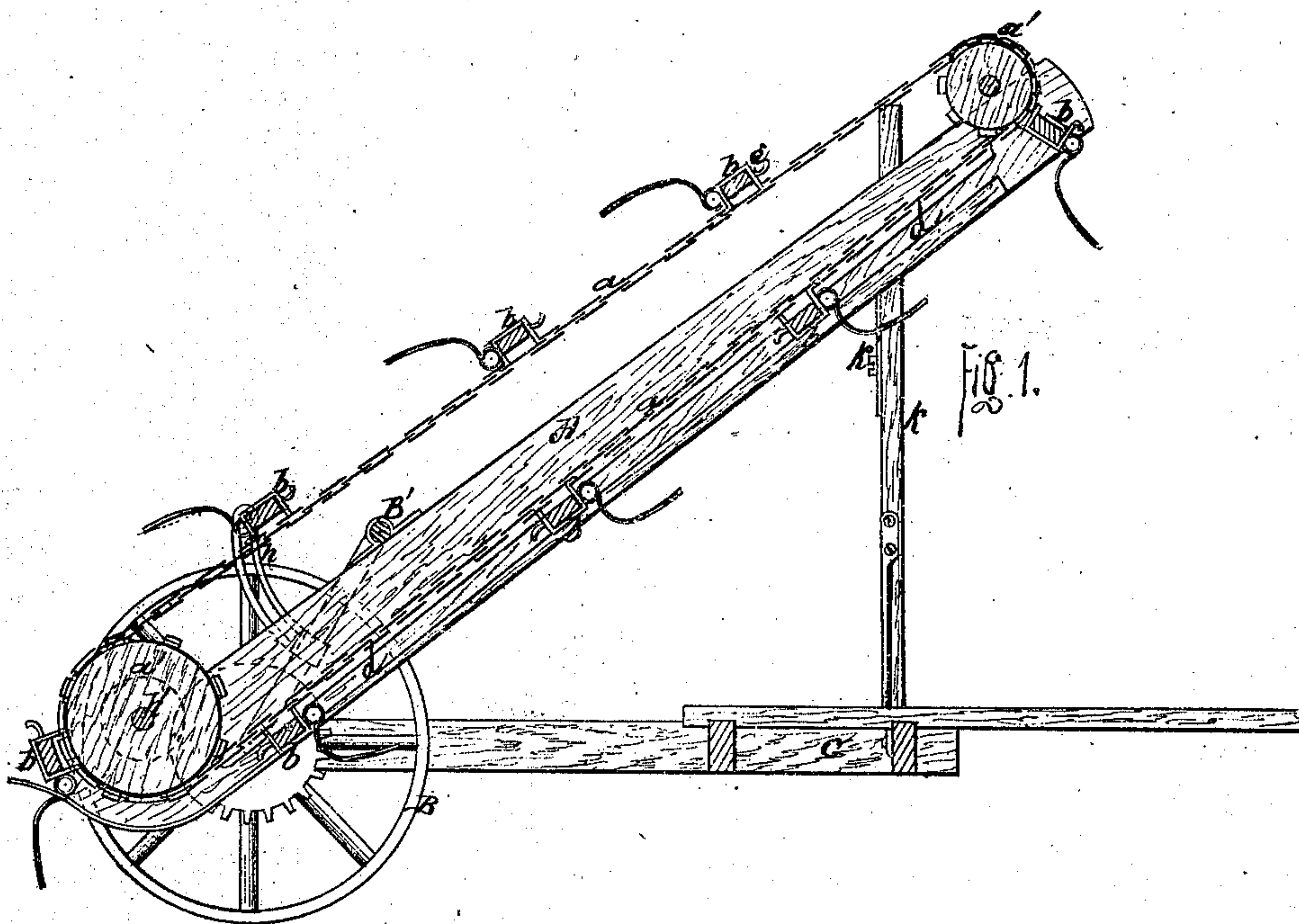
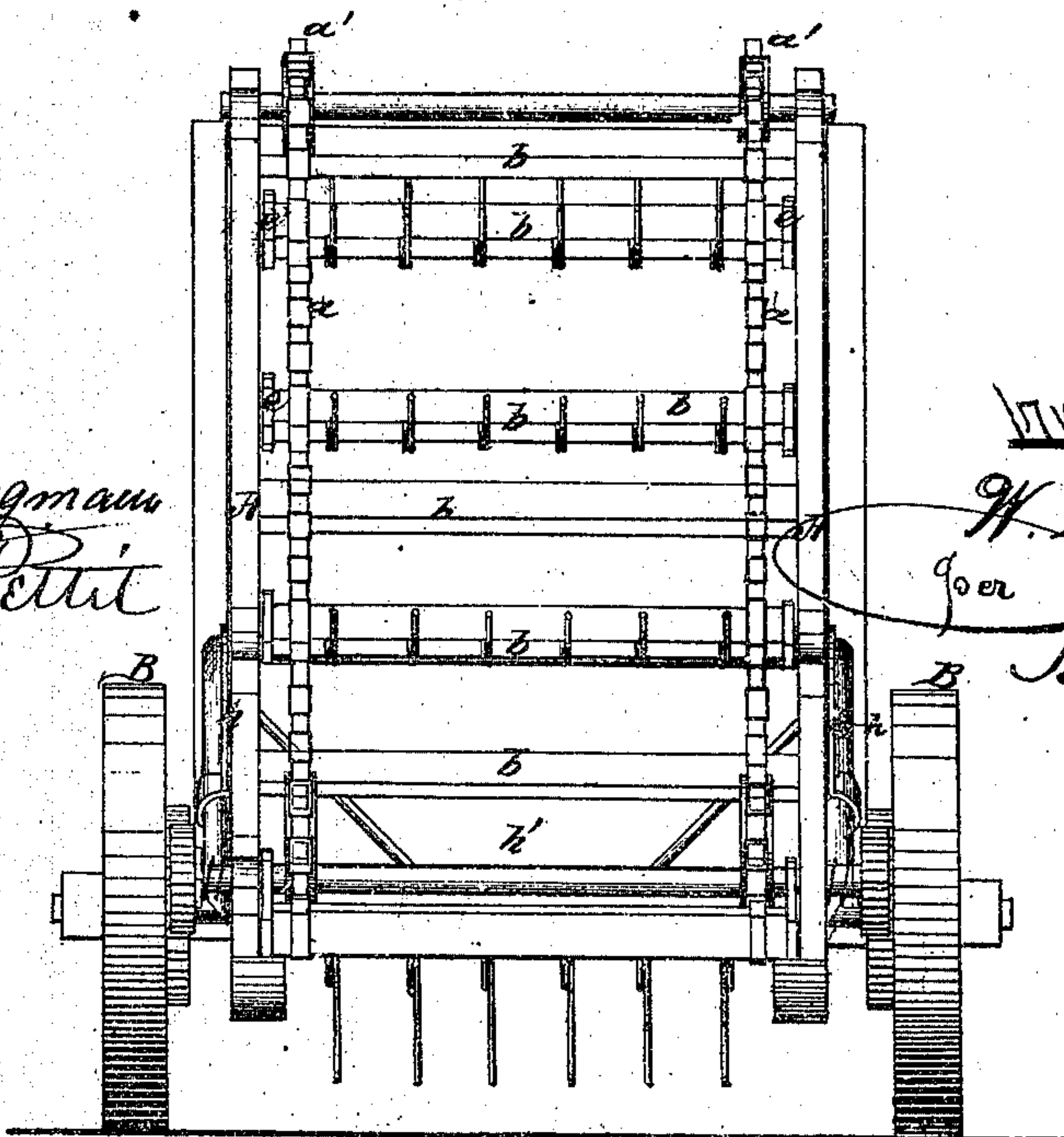


Fig. 2.



Witnesses:

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W. H. STRAUB, OF DANVILLE, PENNSYLVANIA.

Letters Patent No. 97,724, dated December 7, 1869.

IMPROVEMENT IN HAY-LOADERS.

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, W. H. STRAUB, of Danville, in the county of Montour, and State of Pennsylvania, have invented a new and useful Improvement in Hay-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 accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation, and

Figure 2 is a longitudinal vertical section.

This invention consists—

First, in making, in the inner sides of the inclined frame of the machine, longitudinal grooves, in which the ends of the cross-bars, to which the rake-teeth are attached, run, and by which said cross-bars are prevented from turning down on their pivots, under the pressure of the load on the rake-teeth, until the bars emerge from said grooves at the proper point for relieving the rake-teeth of their burdens.

Secondly, in providing the ends of the cross-bars which slide in the longitudinal grooves in the sides of the inclined frames, with metallic shoes, to keep said bars from wearing out, to reduce friction, and aid in preventing the tipping of the bars when the rake-teeth are loaded.

Thirdly, in providing the forward standards, which support the inclined frame of the machine, with adjustable brackets, by which the height of the front end of the frame may be regulated at pleasure, within certain limits.

This invention consists in various improvements in machines for taking hay from the field and loading it up on the rack, all hereinafter more fully described.

In the drawings, A is the inclined frame, pivoted near its rear end, under the crank-axle B' of the main driving-wheels BB, said frame sustaining the chains *a*, which run over two pairs of wheels, *a'* *a'*, one pair at each end of the frame, and bear the cross-pieces *b*, which carry the rake-teeth.

The rake-teeth take up hay from the field, and carry it upward along the lower side of the inclined frame, and drop it into the rack, to the rear end of which the loader is supposed to be attached by the tongue C.

To effect such dropping, the cross-bars are simply hinged to the chains *a*, so that the weight the teeth carry causes them to drop on their hinges the moment the ends of the cross-bars emerge from the grooves *d* made longitudinally of the inner side of the inclined frame, along their lower edges, which are of just sufficient width to receive the cross-bars, and permit them to slide easily, but not tip.

The extremities of the cross-bars are armed with metallic shoes *e*, which prevent friction in the grooves, and wear of the cross-bars, and tend to keep the latter steady in their motions.

The crank-axle B' has slotted arms *h*, either rigidly or loosely attached, which extend along the outer sides of the inclined frames. The frame, being hung to the axle, may be raised or lowered thereon, as on a pivot, so as to disconnect the cog-gearing, on the main axle of the driving-wheels, from the spur-wheels on the end of the shaft *k'* which sustains the lower wheels, on which the endless chains are supported, and thus render the latter inoperative in going to and fro, as well as keep the rake-teeth up out of harm's way.

By means of set-screws and the slotted arms *h*, the frame may be fixed at the required height.

The standards *k*, which support the upper front end of the frame, have slotted brackets, *k'* *k'*, on them, which may be raised or lowered, and fixed by set-screws at a height to suit the hay-rack, in connection with which the loader is used.

Having thus described my invention,

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

1. The pivoted cross-pieces *b*, grooves or track *d*, and shoes *e*, combined and arranged substantially as and for the purpose described.

2. The slotted adjustable bracket *k'*, standard *k*, inclined frame A, and tongue C, combined and arranged substantially as and for the purpose described.

3. The slotted arms *h*, combined with the crank-axle B' and frame A, in the manner and to discharge the function set forth.

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Witnesses:

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