

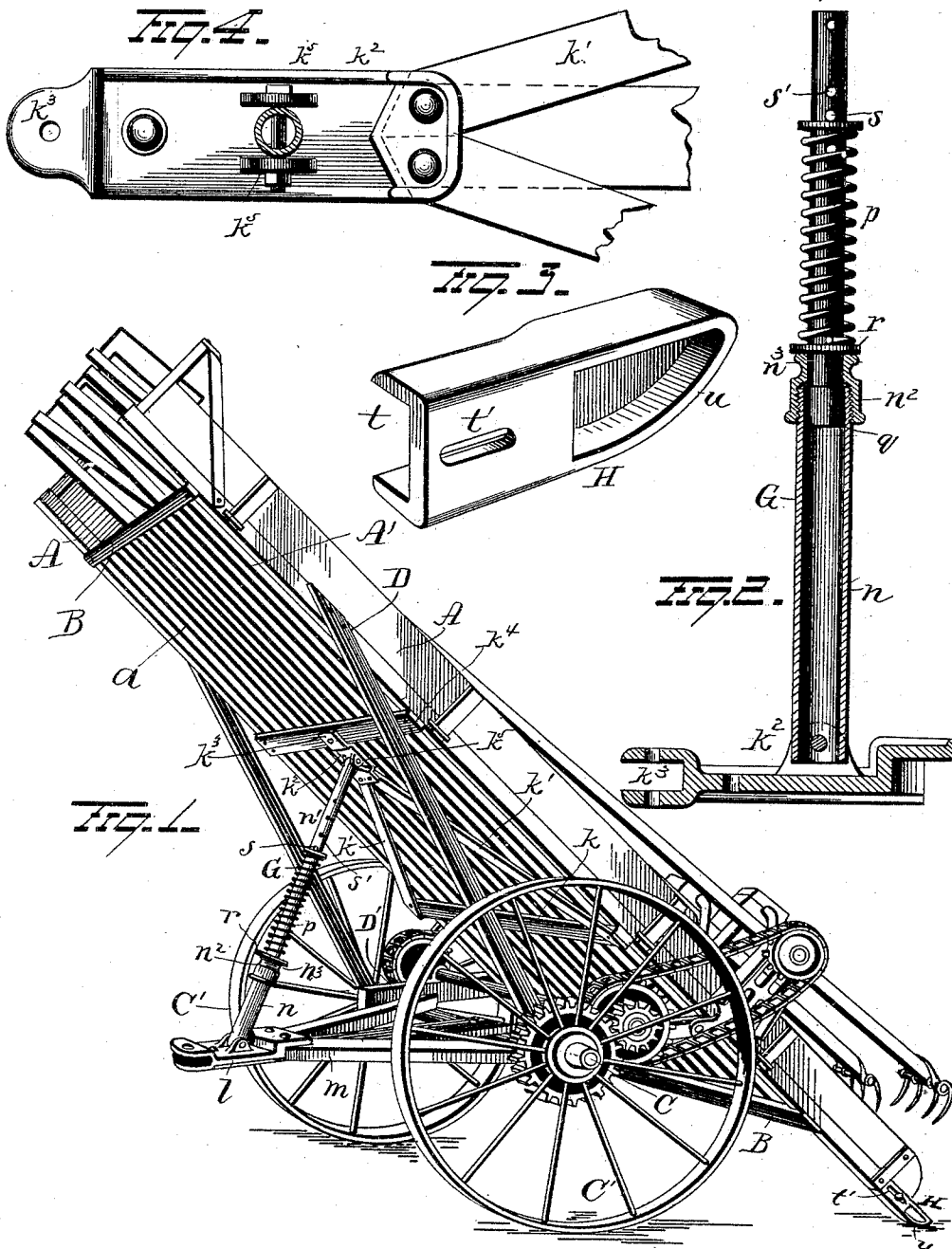
(No Model.)

E. B. CARTMELL.

HAY LOADER.

No. 491,636.

Patented Feb. 14, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

EDSON B. CARTMELL, OF LANCASTER, OHIO, ASSIGNOR TO THE HOCKING VALLEY MANUFACTURING COMPANY, OF SAME PLACE.

HAY-LOADER.

SPECIFICATION forming part of Letters Patent No. 491,636, dated February 14, 1893.

Application filed July 2, 1892. Serial No. 438,807. (No model.)

To all whom it may concern.

Be it known that I, EDSON B. CARTMELL, a citizen of Lancaster, in the county of Fairfield and State of Ohio, have invented certain new and useful Improvements in Hay-Loaders; 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 which it appertains to make and use the same.

My invention relates to an improvement in hay loaders, the object of the invention being to provide simple and efficient means for cushioning the frame of the loader.

A further object is to construct devices for cushioning the frame of a hay loader in such manner that said devices will also serve to maintain the tongue-hound in a horizontal position.

A further object is to provide a hay loader with simple, cheap and efficient shoes.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings: Figure 1 is a view of a hay loader showing my improvements applied thereto. Fig. 2 is a separate view of the cushioning devices. Fig. 3 is a separate view of one of the shoes. Fig. 4 is a view in detail.

A, A, represent the side bars of an inclined frame or platform A', said frame or platform being convergent from the rear to the forward end. The bottom of the frame or platform A' is preferably composed of a series of slats *a* secured to the cross bars B. The platform or frame A' is supported near its rear end by the ends of an axle C, on which suitable drive wheels C' are mounted. At or near the front end of the platform are attached two braces D, said braces being fastened at their lower ends to the rails D' and at their upper ends to the side bars A, of the frame or platform A'.

Secured to the bottom of the frame A' is a cross bar *k*, from the ends of which, bars *k'* project upwardly and terminate at their upper ends at a point located centrally between the side bars of the frame, where they are se-

cured to one end of a casting or bracket *k*². The upper end of the casting or bracket *k*² is made with ears *k*³, between which a cross bar *k*⁴ is secured, the ends of said cross bar *k*⁴ being secured to the side bars of the frame. The casting or bracket *k*² is also provided with ears *k*⁵, between which the upper end of my improved cushioning device is pivotally connected,—the lower end of said cushioning device being pivotally connected to a casting *l* secured to the tongue-hounds *m*.

My improved cushioning or spring upright G comprises a lower tubular portion *n*, a rod *n'* adapted to enter said tubular portion, and a coiled spring *p* encircling said rod. The upper end of the tube *n* is screwthreaded for the reception of a collar *n*² having a contracted upper end *n*³. Or if desired the collar *n*² may be dispensed with and the upper end of the tube *n* be contracted. The lower end of the rod *n'* (which may also be made tubular if desired) is provided with a head or enlargement *q*, adapted to bear against the contracted portion of the collar *n*², and thus prevent the escape of the rod *n'* from the tube *n*. A washer *r* is preferably placed on the rod *n'* and rests on the upper contracted end of the collar *n*², on which washer or disk *r* the lower end of the coiled spring *p* rests. The upper end of the spring *p* bears against a key or pin *s* which is passed through one of a series of perforations *s'* in the rod *n'*. The lower end of the tube *n* being pivotally connected with the tongue hounds and the upper end of the rod *n'* being connected with the frame A', it will be clearly seen that the said frame will be effectually cushioned. It will also be seen that, owing to the head or stop *q* coming into contact with the contracted upper end of the collar *n*², the tongue hounds will be maintained in a proper horizontal position. With my improved cushioning device the motion of the loader when passing over rough ground will be easily and effectually eased.

At the lower end of the side bars of the machine, my improved shoes H are located. Each shoe is made with a recess *t* for the reception of the lower end of the side bar, and with an elongated slot *t'* through which the

bolt which secures the shoe to the side bar passes, whereby said shoe may be adjustably secured to the side bar. The rearward end of the shoe is broadened or made with a flange 5 u, the lower rearward portion which rests on the ground being made curved as clearly shown in Fig. 3.

Having fully described my invention what I claim as new and desire to secure by Letters Patent is:

10 1. The combination with a platform or frame, and a main supporting frame, of a cushioning device composed of telescoping sections the outer ends of which are hinged 15 or pivotally connected with the two frames, and an interposed spiral spring bearing outwardly against the two sections, substantially as set forth.

20 2. The combination with a pair of frames hinged together, of a cushioning device composed of telescoping sections, a spring, and a collar having a contracted upper end, said collar screwed onto one section and adapted to prevent the removal therefrom of the other, 25 the outer ends of the sections of the cushioning device hinged to the two frames, substantially as set forth.

3. In a hay loader, the combination with the

main frame, and bars extending from the sides thereof to a point centrally between said sides, 30 of a bracket or casting to which said bars are secured, ears projecting from said bracket at one end thereof, a cross bar secured at its ends to the sides of the frame and at its center between said ears, ears projecting from one face 35 of the bracket, a cushioning device pivotally connected between the last mentioned ears, and a casting or bracket secured to the tongue-hounds of the loader, to which the lower end of said cushioning device is pivotally con- 40 nected, substantially as set forth.

4. In a hay loader, the combination with the side bars, of shoes having recesses to receive the lower ends of the side bars, each shoe having an elongated slot whereby to receive a bolt 45 to adjustably secure the shoe to the side bar, and a curved bearing face at the rearward end of each shoe, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscrib- 50 ing witnesses.

EDSON B. CARTMELL.

Witnesses:

ED. MITHOFF,
GEORGE P. RISING.