

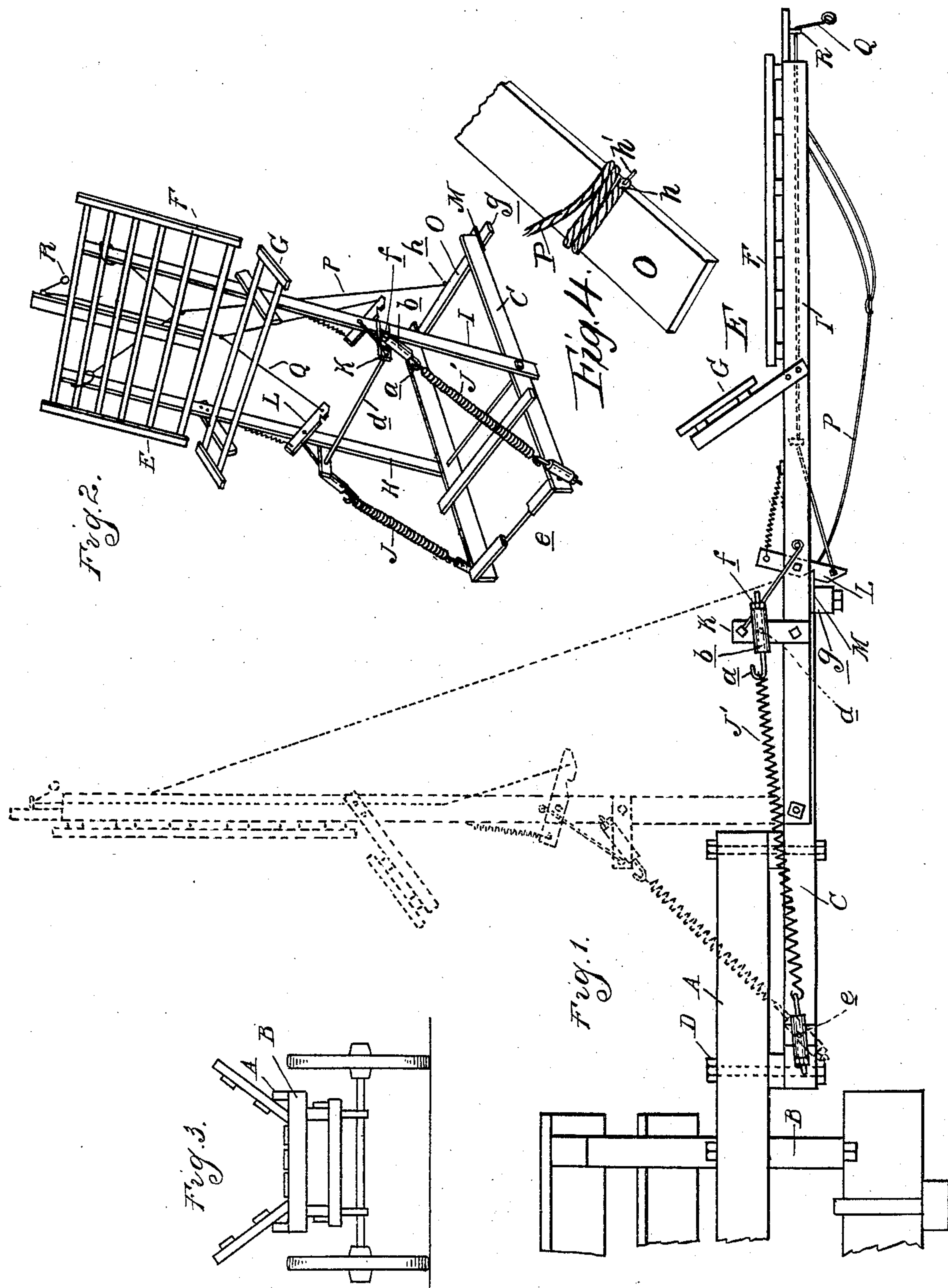
No. 773,990.

PATENTED NOV. 1, 1904.

C. L. SAMP.
HAY LOADER.

APPLICATION FILED MAR. 1, 1904.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES L. SAMP, OF CHELSEA, MICHIGAN.

HAY-LOADER.

SPECIFICATION forming part of Letters Patent No. 773,990, dated November 1, 1904.

Application filed March 1, 1904. Serial No. 196,076. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. SAMP, a citizen of the United States, residing at Chelsea, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Hay-Loaders, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to loading apparatus for hay or corn-shocks adapted to be attached to the ordinary style of wagon or vehicle; and it consists in the novel construction of the loader and the peculiar arrangement and combination of its parts, as will be hereinafter set forth and illustrated.

In the drawings, Figure 1 is a side elevation of my improved loader attached to a vehicle and adapted to receive the hay or corn-shocks, the loader being shown in dotted lines in its elevated position. Fig. 2 is a perspective view of the loader detached. Fig. 3 is an end view of the wagon, showing the attaching means for the loader; and Fig. 4 is a detail view.

The loader may be connected in any suitable manner to any type of wagon desired. The preferable connection I have shown in Fig. 1 as consisting of beams A, secured to the floor-beams B of the wagon and projecting rearwardly therefrom, as indicated. To these beams the stationary frame C of the loader is rigidly attached by suitable bolts D.

The loader proper, E, is composed of two skeleton frames F and G, rigidly attached to the rear ends of two connecting-bars H and I, which in turn are pivoted, respectively, to the frame C midway of its ends, as indicated in Fig. 2. J and J' represent spiral springs connected at their rear ends to uprights K on the connecting-bars and at their opposite ends to the stationary frame C. The preferable connections for the springs consist of hooks a, which extend through tubular bearings b at the extremities of the rods d and e and are adjustably retained in position within the bearings by nuts f. The springs serve to elevate the holder or loader automatically with the load thereon and discharge the contents of the loader within the wagon. The

tension of the springs may be varied as desired by means of the nuts f.

Means are preferably provided in the form of spring-locks for retaining the loader in a horizontal position to receive the load. These locks consist, preferably, of the spring-actuated latches L, pivoted to the inner face of the connecting-bars H and I, and latch-plates M, projecting beyond the rear portion of the stationary frame C, as shown in Fig. 2. The cross-bar O of said latter frame has its extremities projecting laterally beyond the connecting-bars, forming stops g for said connecting-bars, thus limiting the downward movement of the loader.

A cable P is connected to the skeleton frame F of the loader and passes therefrom over the bar O of the stationary frame and is provided with a ring or loop at h, which is adapted to be connected to a suitable retaining device h' on said bar O. This cable affords means for lowering the loader into its horizontal position and may further be utilized as a stop limiting the upward movement of the loader by the springs J and J'. This stop may also be made adjustable by shortening or lengthening the cable, as may be desired, a convenient manner of shortening said cable being by winding the lower end thereof one or more times about the bar O before engaging the ring at the end of the cable with the hook.

The preferable means employed for operating the latches, which act automatically to lock the loader in its lower position, is the cable Q, branched as shown in Fig. 2, the branches engaging the lower ends of the latches, while the main cable passes through the guide R in the frame F and depends slightly therefrom.

In operation, the parts being arranged in the manner indicated in Fig. 1, the hay or shocks are placed upon the skeleton frames, and when the loader is filled the operator by drawing down upon the cable Q releases the latches and the loader is lifted automatically by the springs J and J', the contents of the loader being discharged within the wagon or rack. The operator by then drawing down upon the cable P brings the loader into its re-

ceiving position, when it is automatically locked, as previously described.

As previously set forth, the throw of the loader contents may be regulated to a nicety
5 by means of the adjustable stop in the form of the cable, and when desired the entire apparatus may be detached from the vehicle in an easy and convenient manner.

While I have shown special attaching means
10 for connecting the loader to the vehicle, I do not desire to be limited thereto, as it will be obvious that the stationary frame which I preferably employ may be entirely eliminated, if desired.

15 What I claim as my invention is---

1. The combination with a wagon, of a loader thereon including a spring-actuated member pivoted thereto for vertical rocking
20 retaining the member in its lowered position, and releasing means for the lock.

2. The combination with a wagon, of a loader including a member having pivotal connections therewith, spiral springs for the
25 loader acting to elevate the latter to discharge its contents, and spring-latches for retaining the member in its lower position against the tension of the springs.

3. The combination with a wagon, of a
30 loader thereon including a spring-actuated member pivoted thereto for vertical rocking movement, an automatically-operating lock

for retaining the member in its lower position, releasing means for the lock, and a stop limiting the upward movement of the member. 35

4. The combination with a wagon, of a loader at the rear thereof including a spring-actuated member pivoted to the rear thereof for vertical rocking movement, spring-actuated latches carried by the member, stationary
40 latch-plates with which the latches are adapted to engage to retain said member in its lower position, and a releasing-cable connected to the latches and extending therefrom to the rear of said member. 45

5. The combination with a wagon, of a frame rigidly attached thereto, a loader comprising complementary skeleton frames, connecting-bars secured to said frames and having pivotal connections with the stationary
50 frame, spiral springs secured to the connecting-bars, and to the stationary frame in advance of the loader, spring-latches on the connecting-bars, latch-plates upon the stationary frame with which the latches engage to retain
55 the loader in its lower position, a releasing-cable for the latches, and means for limiting the upward movement of the loader.

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

CHARLES L. SAMP.

Witnesses:

P. G. SCHAIBLE,

T. E. WOOD.