

No. 709,506.

Patented Sept. 23, 1902.

C. L. PACKER.
FODDER LOADER.

(Application filed Feb. 27, 1902.)

(No Model.)

3 Sheets—Sheet I.

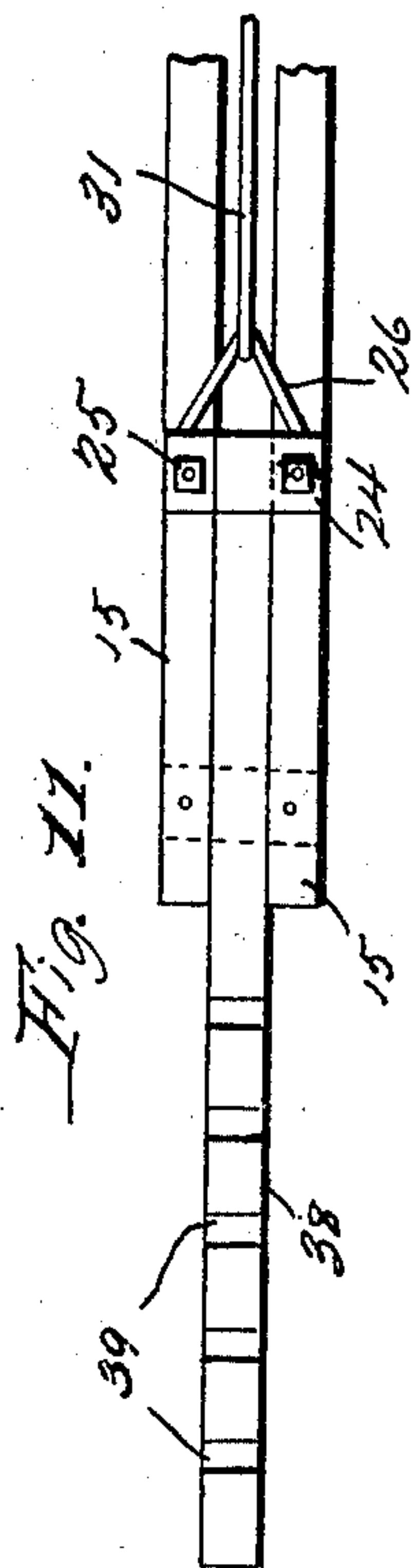
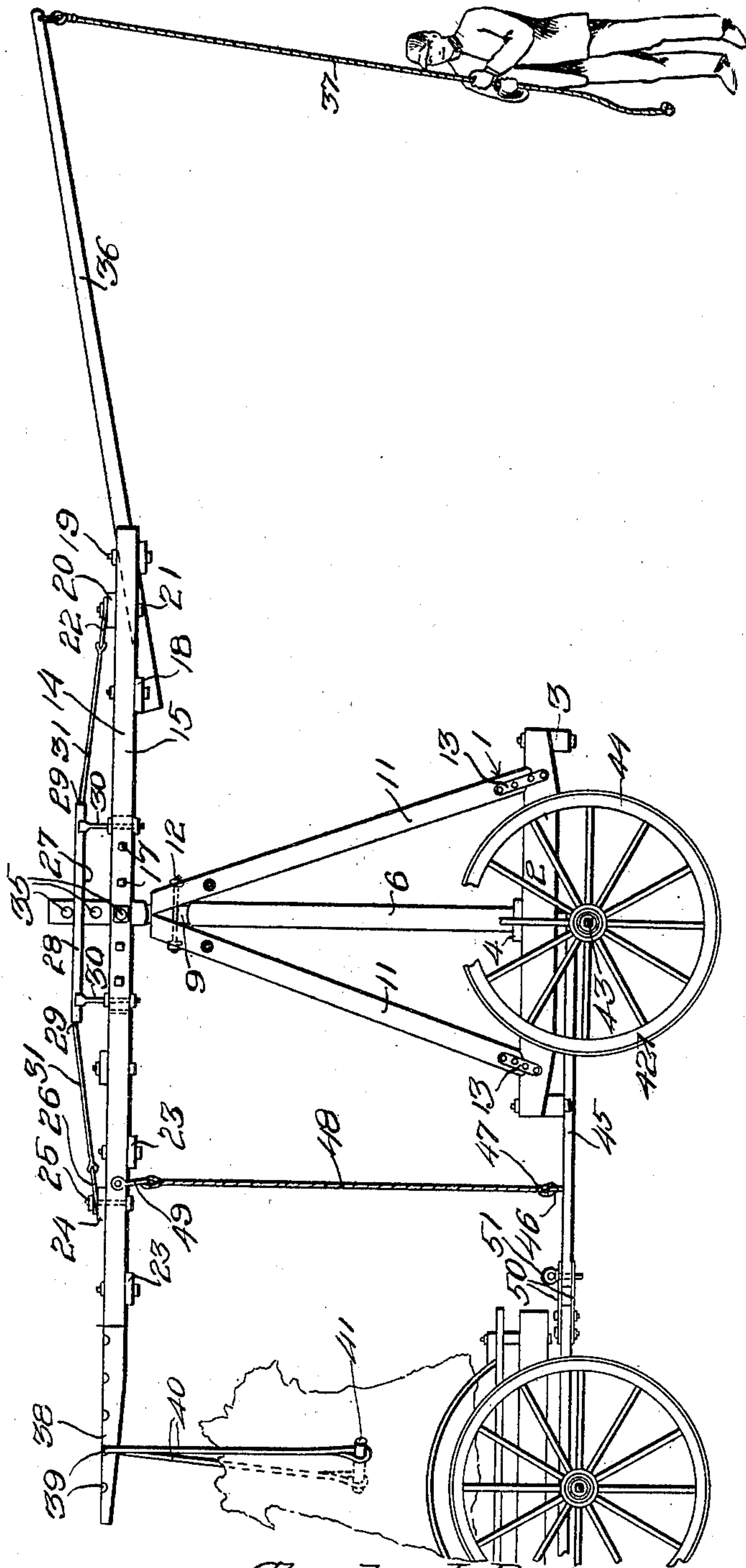


Fig. 1.



Witnesses
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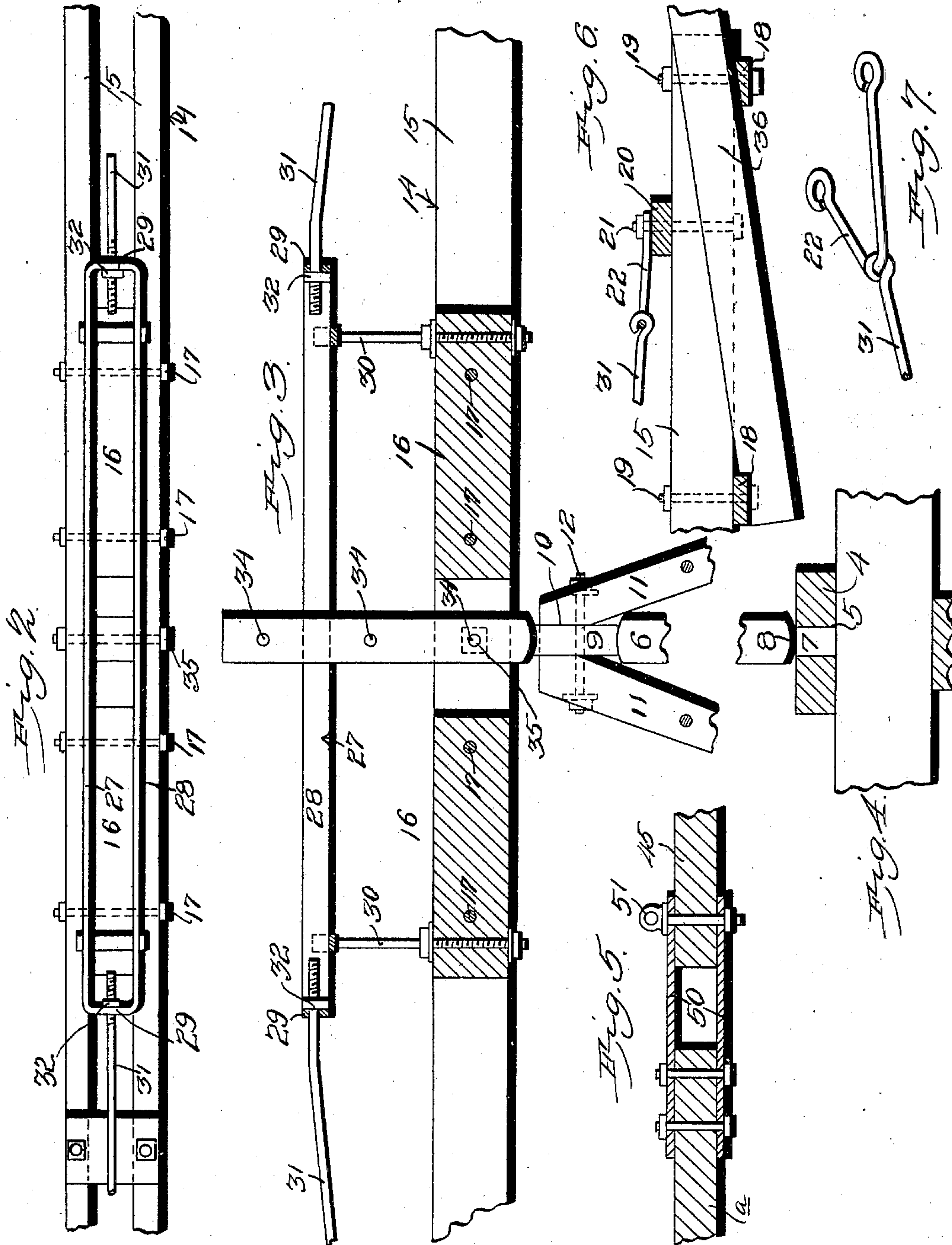
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3 Sheets—Sheet 2.



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3 Sheets—Sheet 3.

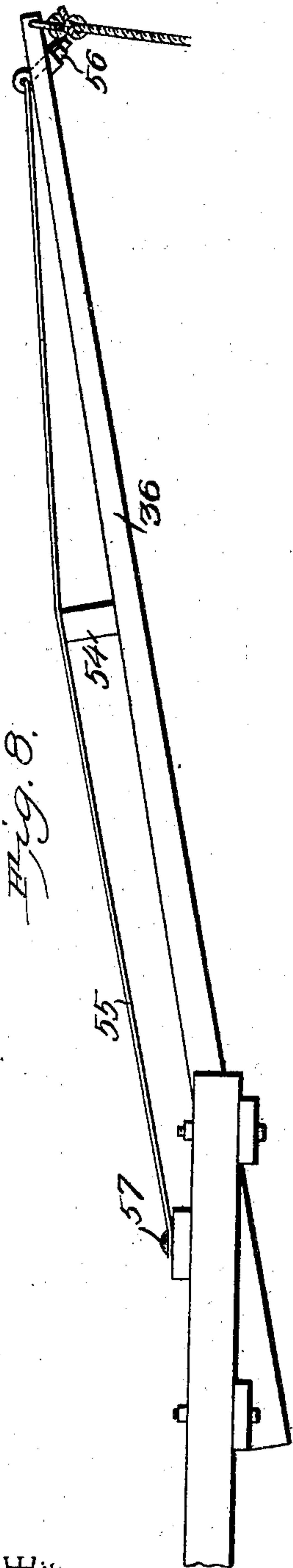


Fig. 8.

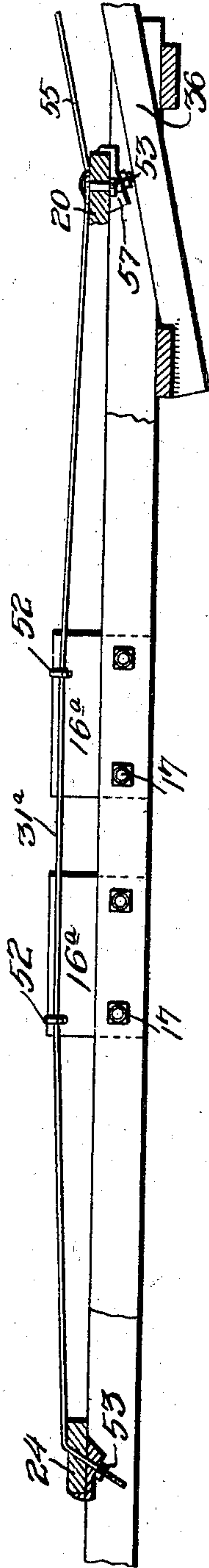


Fig. 9.

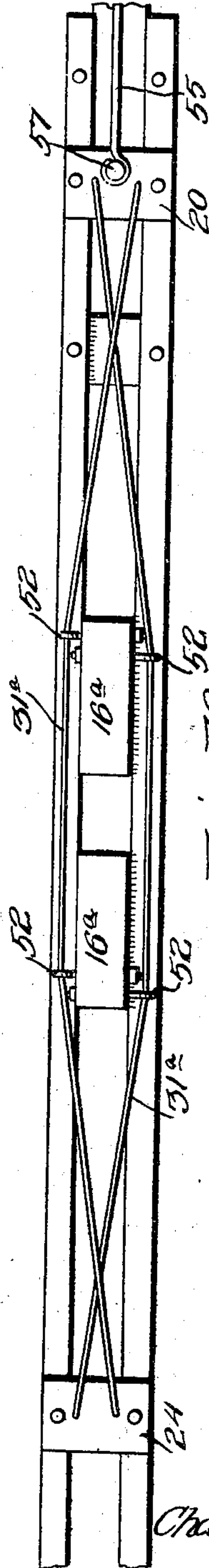


Fig. 10.

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UNITED STATES PATENT OFFICE.

CHARLES L. PACKER, OF WILTON JUNCTION, IOWA.

FODDER-LOADER.

SPECIFICATION forming part of Letters Patent No. 709,506, dated September 23, 1902.

Application filed February 27, 1902. Serial No. 95,979. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. PACKER, a citizen of the United States, residing at Wilton Junction, in the county of Muscatine and State of Iowa, have invented a new and useful Fodder-Loader, of which the following is a specification.

My invention is an improved fodder-loader especially adapted for use in lifting shocks of fodder from a field and loading them onto a wagon, but also adapted for use in other connections; and my invention consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a fodder-loader embodying my improvements, showing the same mounted on a supporting-truck, which is coupled to a farm-wagon and adapted to be trailed behind the same. Fig. 2 is a detail top plan view of the beam, showing the truss thereon. Fig. 3 is a detail sectional view showing the upper portion of the pivoted post, the brace-bars which form the upper bearing therefor, the beam which is pivoted to the post, and the truss on the central portion of the beam. Fig. 4 is a detail sectional view showing the lower end of the pivoted post, provided with its tenon, and the base-bar in which the tenon has its bearing. Fig. 5 is a detail sectional view of the coupling by means of which the pole of the supporting-truck may be coupled to the rear end of the wagon-reach. Fig. 6 is a detail sectional view showing the lever-bar connected to one end of the beam. Fig. 7 is a detail perspective view of the truss. Fig. 8 is a detail side elevation, partly in section, showing a modified construction of the beam. Fig. 9 is a top plan view of the same. Fig. 10 is a detail side elevation showing a modified construction of the lever-bar. Fig. 11 is a detail top plan view showing a portion of the pivotally-mounted beam and the extension-arm connected to one end thereof.

In the embodiment of my invention I provide a base-frame 1, which is composed of longitudinal sills 2 and cross-sills 3, bolted or otherwise suitably secured together at their ends. A support 4, here shown as a board of suitable width and thickness, is disposed transversely on the longitudinal sills 2 and

secured centrally thereon. The said support is provided with a central vertical cylindrical opening 5. On the said base-frame is mounted a vertical post 6, which in practice is made of wood and is provided at its lower end with a cylindrical tenon 7, which has its bearing in the opening 5, the shoulder 8, formed above the said tenon, bearing on the upper side of the support 4. The said post is provided at a suitable distance from its upper end with a cylindrical neck 9, which has its bearing in a cylindrical opening 10, formed directly in and at the upper ends of the braces 11. The said braces are of wood, have their upper ends secured together by bolts 12, and have their lower ends mortised or rabbeted in the longitudinal sills 2 and further connected thereto by straps 13, which are of iron or steel and are bolted to said sills and braces. It will be understood from the foregoing that by thus constructing the base with its support 4, the post with its tenon 7 and neck 9, and the braces 11 with the opening 10 in their upper meeting ends I am enabled to mount the post 6 for rotation and provide bearings and supports for the said post, which are formed entirely of wood, and hence I am enabled to dispense with the use of metallic bearings or castings, which are liable to crack and become broken in cold weather.

On the upper portion of the post 6 is pivotally mounted the beam 14. The said beam comprises a pair of bars 15, which are parallel with each other, and space-blocks 16, which are interposed between said bars. The said space-blocks are disposed near the central portions of the bars 15 and are secured to the latter by bolts 17, which pass transversely through said bars and space-blocks. Cross-blocks 18 are secured to the under sides of the bars 15, near one end of the beam, by bolts 19, and a cross-block 20 is secured on the upper sides of the bars 15 at a point intermediate the blocks 18 by bolts 21. The said bolts also secure a V-shaped link 22 on the said cross-block 20. A pair of cross-blocks 23, which are similar to the cross-blocks 18, are bolted to the under sides of the bars 15 at the opposite end of the beam, and a cross-block 24, which is similar to the block 20, is bolted on the bars 15 between the blocks 23. The bolts 25, which secure the block 24, also

secure a V-shaped link 26, which is identical in construction with the link 22 shown in Fig. 7. A strut-link 27, which is an iron or steel strap of oblong form with parallel sides 28 and the ends 29, is supported above the center of the beam 14 by bolts 30, the lower portions of which pass through the space-blocks 16. Iron or steel rods 31 have their outer ends connected, respectively, to the V-shaped links 22 26 and their inner ends, which are screw-threaded, passed through openings in the ends of the strut-link 27. Nuts 32 on the threaded inner ends of the said rods enable the latter to be adjusted. It will be understood from the foregoing and by reference to the drawings that the V-shaped links, longitudinal rods, and the strut-link constitute a truss on the upper side of the beam 14, which truss materially strengthens the beam. The upper portion of the post 6 extends through the central opening in the beam formed by the space between the bars 15 and the space-blocks 16 and passes upwardly through the opening in the strut-link formed between the sides thereof. The said post has in its upper portion a series of adjusting-openings 34, and the beam is pivotally connected to the post by a bolt 35, which engages one of said openings and is disposed in central openings with which the bars 15 are provided.

To one end of the beam, which I will call the "outer" end thereof, is attached the inner end of a lever-bar 36. The said lever-bar has its inner end inserted between the bars 15, bears under one of the cross-blocks 18 and upon the cross-block 18 at the outer end of the beam, and thereby the lever-bar is detachably secured to the outer end of the beam, is disposed at an angle with relation thereto, so that said lever-bar extends upwardly and outwardly when the beam is in a horizontal position, and, moreover, the lever-bar may be longitudinally adjusted with reference to the beam. An operating-rope 37 is attached to the outer end of the lever-bar and enables the latter to be depressed by a man standing on the ground, so as to raise the inner end of the beam. An extension-arm 38 has its inner end secured to the inner end of the beam by inserting the same between the bars 15, so that it bears under the cross-block 24 and upon the outermost cross-block 23. Hence the said extension-arm may be longitudinally adjusted with reference to the beam. Said extension-arm is provided on its upper side with a series of notches 39, adapted to be engaged by the bight of a yoke-rope 40, which in practice is attached to opposite ends of a bar or stake 41, thrust through a fodder-shock. It will be understood that the beam may be operated to raise the fodder-shock and turned to carry the same over a wagon, so that the fodder-shock may be lowered and loaded on the wagon. The beam may be thus operated manually very much more rapidly and with a great deal less trouble than by horse-power.

In Fig. 1 of the drawings I show my improved fodder-loader secured on a truck 42, which consists, essentially, of an axle 43, wheels 44, and a tongue 45. The base-frame 1 is disposed centrally over the axle, so that the post 6 is directly above the axle, and one side of the base-frame is bolted to the pole or tongue 45. The latter has a keeper 46, which may be engaged by a hook 47 on a rope 48, which rope has its upper end attached to the beam 14 at a suitable distance from the inner end thereof, as at 49. The function of the said rope, as will be understood, is to support and maintain the beam in a horizontal position when the fodder-loader is not in operation. The tongue 45 may be coupled to the rear end of a wagon-reach, so that the truck carrying the fodder-loader may be trailed in rear of the wagon. To thus couple the truck to the wagon, I provide a pair of iron or steel plates 50, which are bolted to the upper and lower sides of the wagon-reach a near the rear end thereof and project rearwardly therefrom. The front end of the tongue 45 may be inserted between the rearwardly-projecting ends of said plates, and a coupling pin or bolt 51 is then inserted in vertical aligned openings in said plates and tongue, as shown in detail in Fig. 5. By this means the truck may be readily coupled to and uncoupled from the wagon. The truck on which the fodder-loader is mounted greatly facilitates the operation of the fodder-loader, as will be understood. By unshipping the lever-bar and the extension-arm the fodder-loader when the same is not in use may be readily stored in a comparatively small space.

In Figs. 8 and 9 of the drawings I show a modification in the construction of the beam 14. In this construction the blocks 16 are provided with vertical extensions 16^a above the bars 15. The truss-rods 31^a have their intermediate portions secured by eyebolts 52 in said vertical extensions and their ends passed through openings in the cross-blocks 20 24 and secured by nuts 53, which may be tightened to the requisite extent. The respective truss-rods 31^a are crossed near their ends, as shown.

In Fig. 10 I show a modification in the construction of the lever-bar 36, in which the same has a block 54 thereon, and a truss-rod 55 is employed which has its intermediate portion disposed on the block 54 and its ends connected, respectively, to the outer end of the lever-bar and to the cross-block 20, as at 56 57. The truss-rod 55 in addition to strengthening the lever-bar by being detachably secured to the cross-block 20, as at 56, secures the latter when in use at one end of the beam 14, so that it will not become accidentally detached therefrom.

Having thus described my invention, I claim—

1. In a fodder-loader of the class described, the combination of a base-frame having a bearing, brace-bars secured to the base-frame

and having their upper ends secured together and provided with a bearing-opening formed directly in their inner opposing sides, a revoluble post having its lower end journaled in the base-bearing, and having a cylindrical neck near its upper end journaled also in the bearing-opening in the upper ends of the brace-bars, and a beam pivotally connected to the upper portion of the post, substantially as described.

2. In a fodder-loader, the combination of a post mounted for revolution, a beam pivotally connected to the post, and comprising side bars and cross-blocks connecting them, on their upper and lower sides, and a lever-bar and extension-arm adapted to be inserted between the bars and blocks at the opposite ends of the beam, and to be unshipped therefrom, substantially as described.

3. In a fodder-loader a pivoted beam comprising side bars, having cross-blocks secured on and under the bars at and near the ends of the beam, and a truss on its upper side having an element connected to the upper cross-blocks, in combination with a lever-bar having its inner end inserted between the side bars and cross-blocks at one end of the beam and provided with a truss-rod, the inner end of the latter being detachably secured to one of the cross-blocks.

4. In a fodder-loader, a pivoted beam com-

prising side bars, space-blocks between the same and secured thereto near the center of the beam, cross-blocks under the bars at and near the ends thereof, cross-blocks on the bars and intermediate of the first-mentioned cross-blocks, links on the upper cross-blocks, bolts securing said links to said cross-blocks and the latter to the bars, a strut-link, bolts engaging the space-blocks and supporting the strut-link above the center of the beam, and rods attached to the links and adjustably connected to the ends of the strut-link, substantially as described.

5. In a fodder-loader, a pivoted beam comprising side bars and having cross-blocks secured on and under the bars at and near the ends of the beam, in combination with a lever-bar having its inner end inserted between the side bars and cross-blocks at one end of the beam and provided with a truss-rod, the inner end of the latter being detachably secured to one of the cross-blocks, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES L. PACKER.

Witnesses:

H. WILDASIN,

A. W. BANNICK.