

No. 708,377.

Patented Sept. 2, 1902.

N. W. LYON.  
CORN SHOCK CARRIER.  
(Application filed May 28, 1902.)

(No Model.)

Fig. 2.

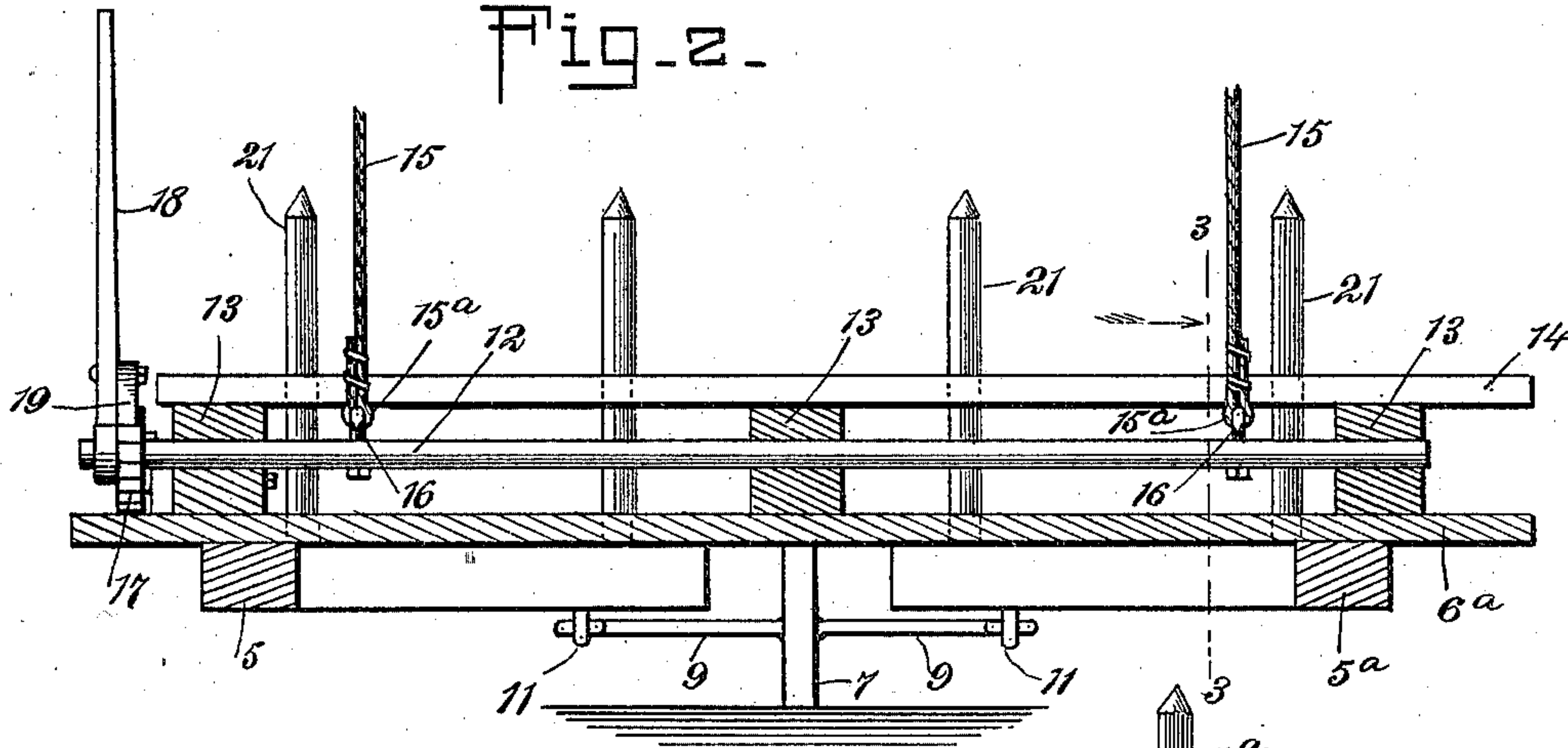


Fig. 3.

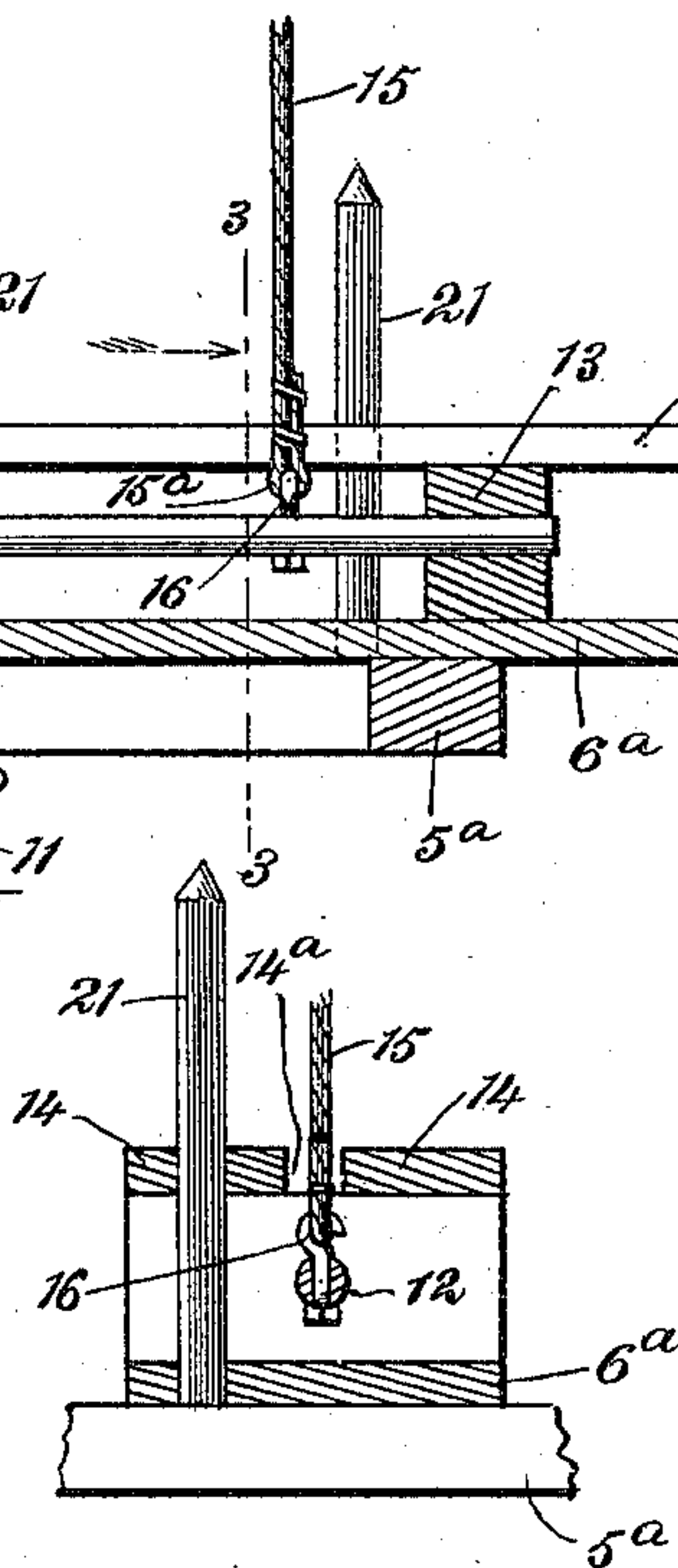


Fig. 1.

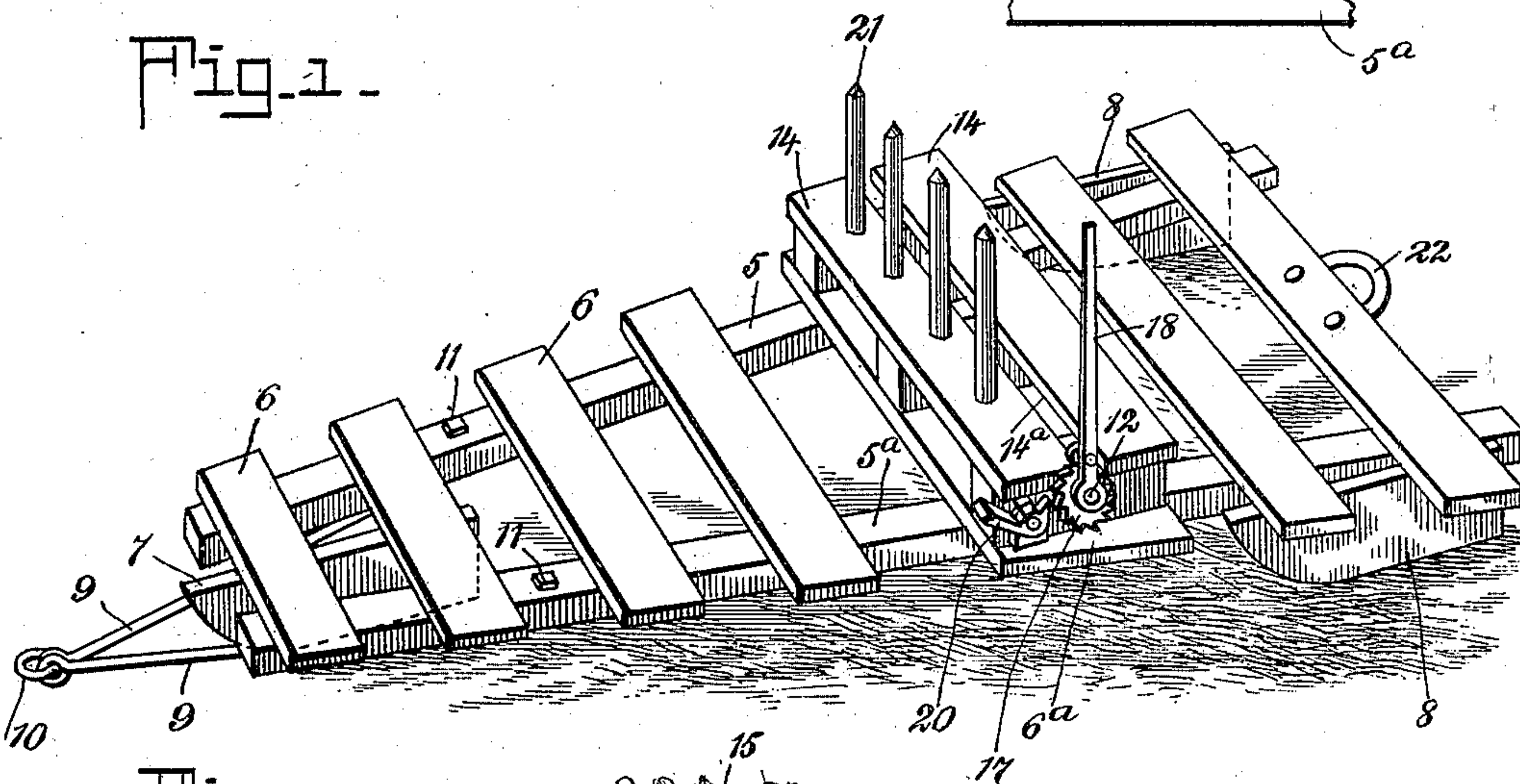
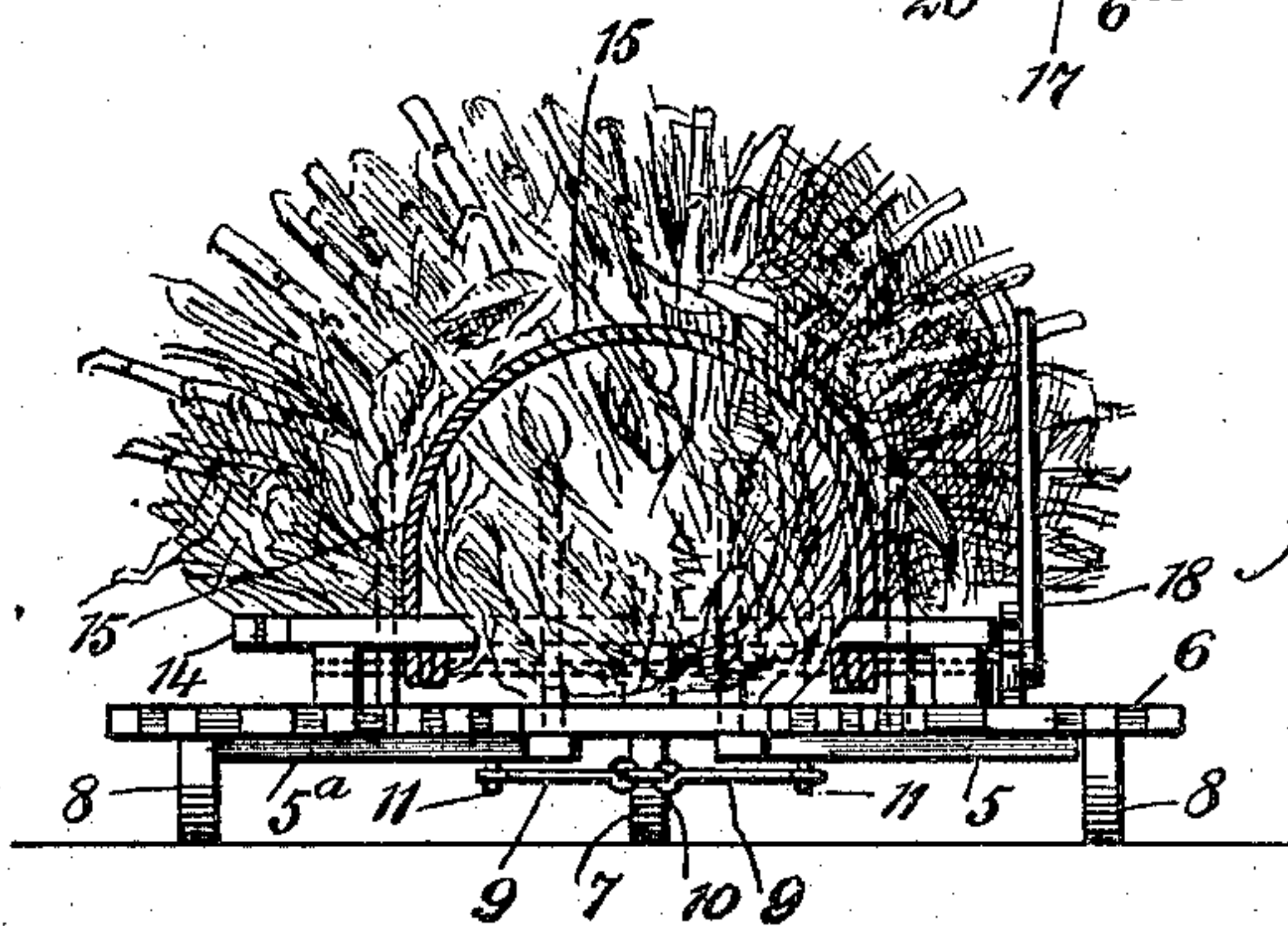


Fig. 4.



WITNESSES:

*Charles F. Wilcox,*  
*H. J. Beaulieu*

INVENTOR

*Newton W. Lyon*

BY

*Munn*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

NEWTON W. LYON, OF BRIGHTON, IOWA.

## CORN-SHOCK CARRIER.

SPECIFICATION forming part of Letters Patent No. 708,377, dated September 2, 1902.

Application filed May 28, 1902. Serial No. 109,310. (No model.)

*To all whom it may concern:*

Be it known that I, NEWTON W. LYON, a citizen of the United States, residing at Brighton, in the county of Washington and State of Iowa, have invented a new and useful Corn-Shock Carrier, of which the following is a full, clear, and exact description.

My invention relates to improvements in vehicles for transporting shocks of corn, fodder, or other materials; and the objects that I have in view are, first, the provision of a simple and strong construction adapted to be turned up on end for the ready loading of an upright or standing shock on the vehicle; secondly, to provide means for binding the shock to the vehicle in an easy and expeditious manner, and, thirdly, to provide impaling devices adapted to cooperate with the binding devices and to securely hold the shock on the vehicle against any tendency to become displaced therefrom.

Further objects and advantages of the invention will appear in the course of the subjoined description, and the novel features of the invention will be defined by the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a shock-carrier or vehicle embodying the features of my invention. Fig. 2 is a vertical transverse sectional elevation taken substantially in the plane of the shock-binding devices and representing the impaling devices in elevation. Fig. 3 is a vertical detail sectional view in a plane at right angles to Fig. 2 and indicated by the dotted line 3 3 in Fig. 2. Fig. 4 is an end elevation of the shock-carrier adapted to receive a load.

In carrying my invention into practice I employ a suitable load-platform, which may be equipped with runners or wheels, as desired. This platform is preferably tapering in shape, and the dimensions of the platform are larger than the shock with which it is designed to be loaded. As shown by Fig. 1, the platform consists of the longitudinal sills 5 5<sup>a</sup> and the transverse boards 6, all of which are united together by any suitable means in order to produce a substantial light construction. The sills 5 5<sup>a</sup> converge or incline from

the rear toward the front end of the machine, and the boards 6 are bolted to the sills in spaced relation in order to produce an open-work platform. As hereinbefore mentioned, the platform may be mounted on wheels or casters; but for simplicity of construction I have shown the platform as equipped with the runners 7 8. The runner 7 is disposed at the front of the machine in a longitudinal position between the sills 5 5<sup>a</sup>. The other runners 8 are near the rear end of the machine and on the outside of the sills, said rear runners being disposed parallel to each other and to the front runner 7. The runners may be secured to the parts of the platform by any suitable means, and these runners extend down below the sills for suitable distances in order to raise the platform clear of the ground.

The machine may be drawn by horse-power through the medium of a draft appliance which consists of the links 9, which are inclined rearwardly from an eye or loop 10. Said diverging links lie on opposite sides of the front runner 7 and extend to suitable eyebolts 11, which are fastened to the converging sills 5 5<sup>a</sup> at points in rear of said runner 7. (See Figs. 1 and 2.) Said converging links are made to swing in order that when the platform is raised the eye loop or hook will hang down for convenience of attaching the draft-animal for the purpose of drawing the platform and the shock over and upon the ground, ready for moving.

I will now proceed to describe the means by which the shock may be bound to the platform; reference being had more particularly to Figs. 2, 3, and 4 of the drawings.

A winding-shaft 12 extends transversely across the platform at a point intermediate of its length, and this shaft is journaled in proper openings provided in a series of bearing-blocks 13, three of which are shown by Fig. 2 as being arranged in transverse alignment, although the number of bearing-blocks is not material. These bearing-blocks are secured firmly to a wide platform-board 6<sup>a</sup>, the latter being attached directly to the inclined sills 5 5<sup>a</sup>, as shown by Fig. 2. The bearing-blocks are quite long, and they are adapted to serve as the means for supporting the cross-pieces 14. These cross-pieces are



secured to the bearing-blocks by any suitable means, and they are spaced apart to leave an intermediate slot or opening 14<sup>a</sup>, as shown by Figs. 1 and 3. The winding-shaft 12 is jour-  
 5 naled in the bearing-blocks so as to lie in the vertical plane of the slot or opening 14<sup>a</sup>, thus making provision for the free passage of the binding rope, cable, or chain 15. (See Fig. 4.) This winding-shaft is provided with eye-  
 10 bolts or hooks 16, which have their shanks passed through openings in the shaft and are adapted to receive suitable nuts that serve to securely fasten the bolts to said shaft. (See Figs. 2 and 3.) The end portions of the  
 15 binding cable, rope, or chain are intended to be detachably connected to the winding-shaft, and this is attained by providing loops or eyes 15<sup>a</sup> at said ends of the cable or chain, said loops or eyes adapted to engage with the  
 20 bolts 16 of the shaft. One end of the shaft is extended or carried beyond one of the bearings 13, as shown by Fig. 2, and on this end of the shaft is rigidly secured a feed-ratchet 17. A hand-lever 18 is loosely fitted on said  
 25 projecting end of the shaft at a point adjacent to the feed-ratchet, and this lever carries a feed-pawl 19, the latter being pivoted to said lever and arranged to engage with the ratchet. The ratchet is held from rotation  
 30 in one direction by means of a locking-pawl 20, the latter being pivotally supported on one of the bearing-blocks 13 and adapted to engage with said ratchet in order to lock the shaft from rotation after the cable or chain  
 35 shall have been wound for the purpose of binding the shock firmly upon the load-platform.

To more securely hold the shock against displacement on the platform, I employ a series of impaling pins or spikes 21, the same  
 40 being firmly fastened to the platform and adapted to cooperate with the binding devices. These pins or spikes extend transversely across the platform substantially parallel to the shaft and the slot 14<sup>a</sup> in the cross-  
 45 pieces 14. They are fastened in the wide platform-board 6<sup>a</sup> and one of the cross-pieces 14, and said teeth or spikes extend a suitable distance beyond the platform in order to penetrate the shock for quite a distance.  
 50

In using my improved shock vehicle or carrier it is drawn up to a standing shock of corn, fodder, or other material, and the vehicle is then raised to an upright position along-  
 55 side of the shock, the wide rear end of said vehicle being adjacent to the base of the shock. One end of the cable or chain 15 is connected to the winding-shaft by engaging the loop or eye 15<sup>a</sup> with one of the hook-bolts  
 60 16, and the other end of this chain or cable is carried around the shock, said free end being finally connected to the other hook-bolt of the winding-shaft. The operator now works the lever 18 back and forth, so that the feed-  
 65 pawl will turn the feed-ratchet, and thereby rotate the shaft 12 in a direction to wind the end portions of the cable or chain 15 on said

shaft. The operation of binding the shock to the platform by winding the end portions of the cable on the shaft causes the pins or  
 70 spikes 21 to impale the shock, and after the shock shall have been secured firmly on the platform the pawl 20 is adjusted to engage with the ratchet, thus locking the shaft 12 against backward rotation and keeping the  
 75 cable or chain 15 tightly in engagement with the shock. The location of the rear runners 8 a short distance in advance of the rear end of the platform is advantageous, because the platform can be tilted over in order to start  
 80 the operation of lowering the platform and the shock simultaneously. The vehicle is drawn or pulled to its lowered position, with the shock bound and impaled thereon, and when lowered the entire apparatus is sup-  
 85 ported by the runners 7 8 or their specified equivalents.

It is evident that the apparatus and its load may easily be drawn over the ground by one or more horses, and during transporta-  
 90 tion the shock is not liable to become displaced, because it is impaled by the pins or teeth and bound by the tightly-held cable or chain.

The rear cross-piece 6 of the platform is  
 95 equipped with a coupling eye or loop 22, and the draft appliance may have a hook in lieu of the link 10, thus making provision for coupling two or more vehicles together for the transportation of a number of shocks at  
 100 one time.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A shock-carrier, comprising a suitable  
 105 platform, a winding-shaft mounted on said platform, impalement-stems projecting from the platform and disposed near said shaft, and a binding cable or chain adapted to be coiled on the shaft and to cooperate with the  
 110 impalement-stems in holding a shock on the platform.

2. A shock-carrier, comprising a suitable  
 115 platform, a winding-shaft mounted thereon, a series of impalement-stems projecting from the platform and disposed in a position parallel to the shaft, a binding cable or chain detachably connected to said shaft and arranged to be wound thereon, said cable and chain being disposed in cooperative relation to the  
 120 impalement-stems, and means for rotating the shaft with a step-by-step movement.

3. A shock-carrier, comprising a suitable  
 125 platform, a winding-shaft mounted thereon and provided with a feed-ratchet, a series of impalement-stems fixed to said platform, a binding cable or chain detachably connected with the shaft and adapted to be wound thereon, said cable or chain being disposed in cooperative relation to the impalement-stems,  
 130 a lever having a feed-pawl adapted for engagement with the ratchet of said shaft, and a locking-pawl also arranged to engage with said ratchet.



4. A shock carrier or vehicle, comprising a suitable platform, a binding cable or chain, and impaling devices attached to the platform in coöperative relation to the binding devices.

5 5. A shock carrier or vehicle, comprising a platform having a front runner, rear runners located a short distance in advance of the rear end of the platform, a winding-shaft having a suitable binding cable or chain, and

impaling devices attached to said platform in coöperative relation with the binding devices.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NEWTON W. LYON.

Witnesses:

J. B. DEY,

W. L. KNERR.