No. 855,281. PATENTED MAY 28, 1907.

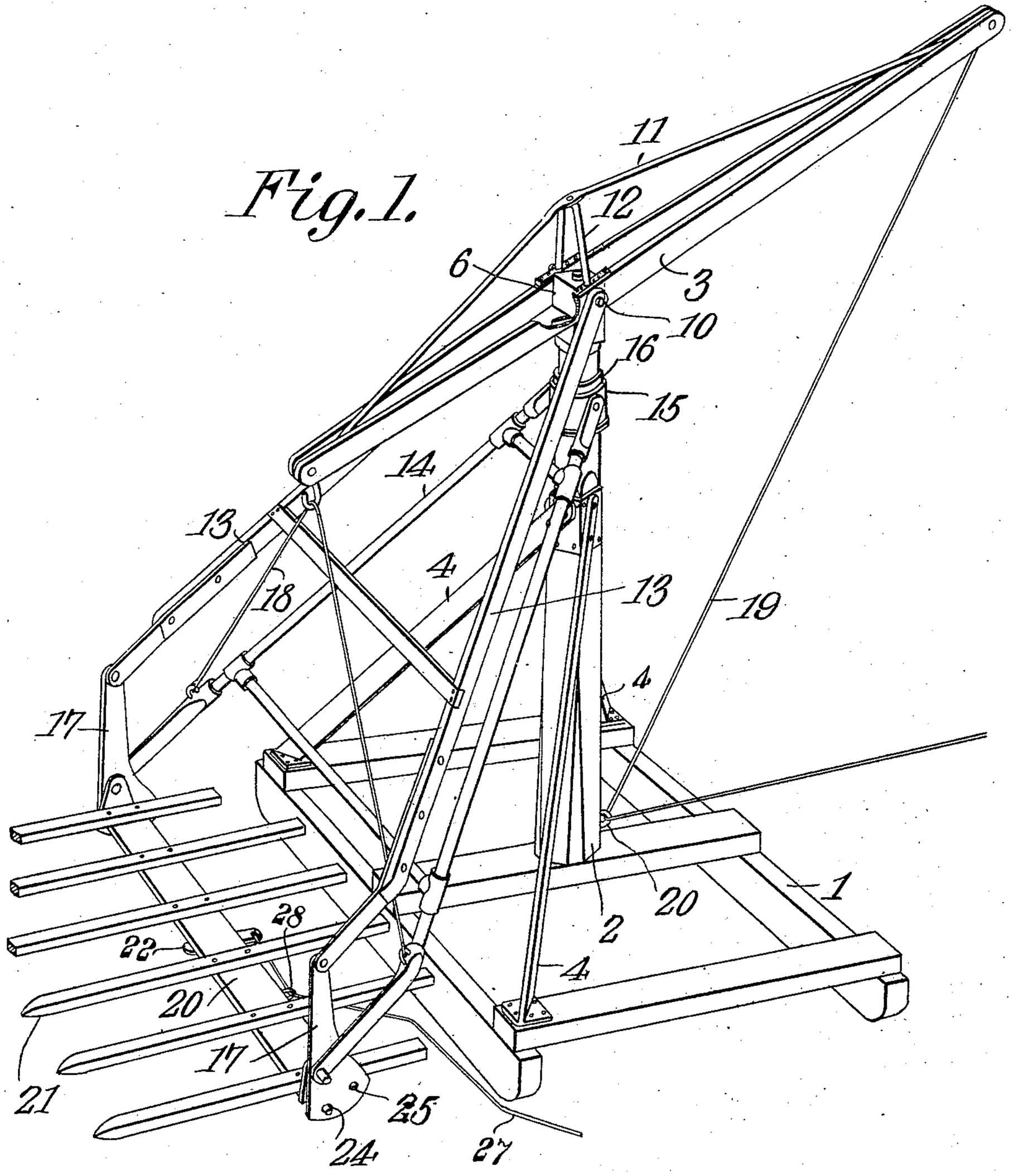
W. E. CARTER.

HAY STACKER.

APPLICATION FILED NOV. 12, 1906.

2 SHEETS—SHEET 1.

Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 2.

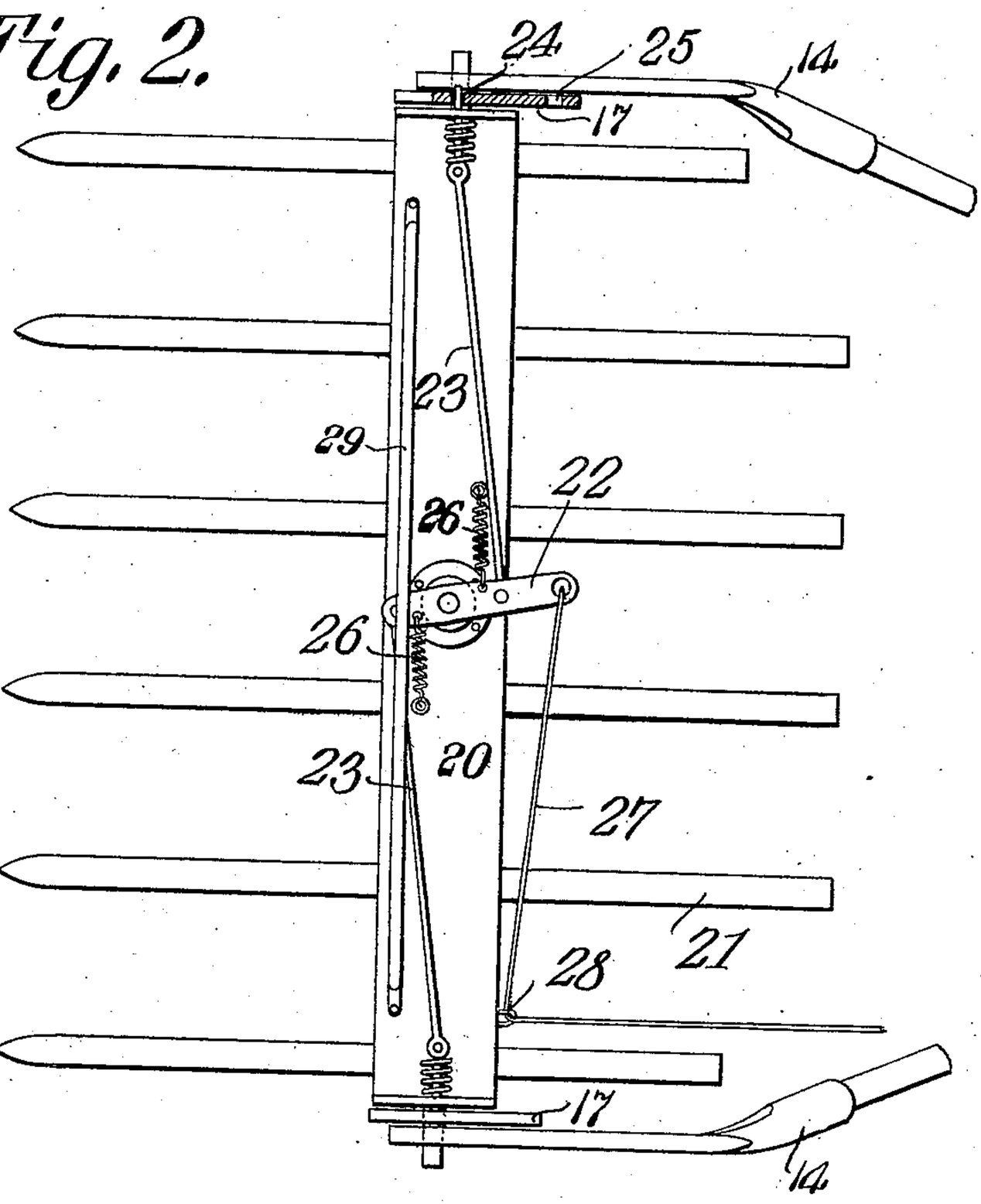
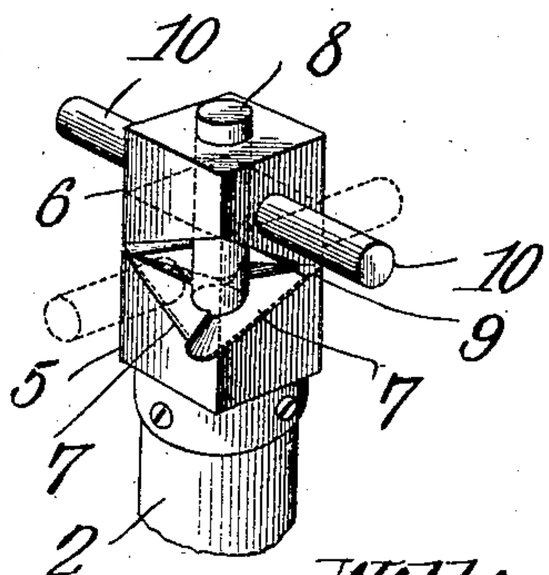


Fig. 3.



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WILLIAM E. CARTER, OF HUNTINGTON, OREGON.

HAY-STACKER.

No. 855,281. Specification of Letters Patent. Patented May 28, 1907.

Application filed November 12, 1906. Serial No. 343,074.

To all whom it may concern:

Be it known that I, WILLIAM E. CARTER, a citizen of the United States, residing at Huntington, in the county of Baker and State of Oregon, have invented a new and useful Hay-Stacker, of which the following is a specification.

This invention has relation to hay stackers and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a stacker of the character indicated which is of special and durable construction and consists primarily of a sled foundation upon which is erected an upright. A lever or boom is fulcrumed at the upper end of said upright and a coupling between said lever and upright is provided whereby the said lever will swing or turn laterally by force of gravity as the working end thereof is elevated. A hay receiving cradle is pivotally attached to parallel arms which in turn are pivotally connected with the upright and are arranged to swing laterally with the said lever. Said cradle is adapted to tilt in its bearing and means is provided for retaining said cradle against tilting.

In the accompanying drawing:—Figure 1 is a perspective view of the hay loader with parts broken away. Fig. 2 is a bottom plan view of the cradle with parts in section; and Fig. 3 is a detail perspective view of the coupling between the uprights and the lever.

The hay loader comprises the sled or platform 1 upon which is erected the upright 2. The lever 3 is fulcrumed at the upper end of the upright 2. The upright 2 is held in position by the braces 4, 4 which attach at their upper ends to the said upright and at their lower ends to the platform 1. The coupling between the lever 3 and the upright 2 consists of the members or blocks 5 and 6. Block 5 is attached to the upper end of the upright 2 and is provided with the inclined surfaces 7. The stud 8 extends vertically from the middle of the block 5. The block 6 is journaled upon the stud 8 and at its under side is provided with lugs 9 which operate upon the inclined surfaces 7, 7 of the block 5. The block 6 is provided with the laterally extending pintles 10, 10 to which the lever 3 is fulcrumed. Said lever 3 is reinforced by the truss rod 11 which is secured at its ends to the end portion of the said lever and at an intermediate point passes over the stud 12 which is attached at its end to the said lever in the vicinity of its fulcrum. The blocks 5 and 6 are so arranged with relation to each other that when the working end of the lever 3 is in its lower position the lugs 9 are at the highest points of the inclined surfaces 7, consequently, as the working end of the lever 3 is elevated the said lugs 9 will by a force of gravity slide down along the inclined surfaces 7 and the said lever and its attachments will be turned laterally upon the stud 8 as a pivot.

The upper ends of the arms 13 are pivotally attached to the pintles 10 while the upper ends of the arms 14 are pivotally attached to the sleeve 15 which is journaled upon the bearing 16 attached to the upright 2. The opposite ends of the said arms 13 and 14 are pivotally connected together by means of the links 17. Thus, the said arms 13 and 14 always maintain parallel relation with each other. The hanger 18 is connected at its upper portion to the working end of the lever 3 and at its lower portion to the bars 14. Thus, the free ends of the bars 13 and 14 are caused to move in unison with the working end of the lever 3. The tackle 19 is attached at one end to the power end of the lever 3 and passes through an eye or block 20 fixed at the base of the upright 2 and may be provided with any suitable means (not shown) for drawing the same. The cradle 20 is pivoted between the links 17, 17. The pivots of the said cradle are in alinement with the pivots whereby the ends of the arms 14 are connected with the links 17. The said cradle 20 is provided with a number of tines 21.

Upon the under side of the cradle 20 is fulcrumed a lever 22 and the bolt rods 23 are pivoted to said lever at points equidistant from the fulcrum thereof. Said rods 23 pass through the ends of the cradle 20 and are adapted to enter the perforations 24 and 25 provided in the lower ends of the links 17. The coil springs 26 are attached at their inner ends to the lever 22 and at their outer ends to the cradle 20. The tension of the said springs is such as to have a tendency to keep the ends of the rods 23 in extended position. The tackle 27 is attached at one end to the free end of the lever 22 and passes through the eye 28 attached to the cradle 20, near the end thereof, and then depends to the ground or the vicinity thereof.

From the foregoing description it is obvious that when hay is to be deposited upon

the cradle 20 the parts will be in the positions as illustrated in Fig. 1. When the said cradle is sufficiently loaded the tackle 19 is drawn and the power end of the lever 3 is pulled down. At the same time the said lever turns laterally upon the stud 8 as a pivot as above described. Thus, the loaded cradle 20 is carried around over the top of the stack (not shown). The tackle 27 is then pulled and the ends of the rods 23 are consequently withdrawn from the perforations 24 of the links 17. Thus, the cradle 20 will tilt upon its pivotal support and deposit the load of hay upon the stack. When the ends of the rods 23 come opposite the perforations 25 the springs 26 will force the ends of the said rods into said perforations and the cradle 20 will be held in tilted position. The said table is so weighted, however, or counterbalanced, that it will, by gravity assume a horizontal position as soon as the ends of the rods 23 are disengaged from the perforations 25. A pull upon the tackle 27 is all that is necessary to disengage the ends of the rods 23 from the said perforations.

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

1. A stacker comprising an upright, a lever fulcrumed thereon and adapted to swing laterally with relation thereto, a cradle connected to the working end of said lever, means for depressing the power end of the lever and means located at the fulcrum of the lever for automatically turning the lever as the power end thereof is depressed.

2. A stacker comprising an upright, a lever fulcrumed thereon, a cradle connected with the working end of said lever, means for depressing the power end of the lever, means for automatically turning the lever as the power end thereof is depressed, comprising two members, one carried by the lever and the other by the upright and being capable of horizontal rotation with relation to each other, one member having inclined surfaces which are engaged by the other member.

3. A stacker comprising an upright, a member having an inclined surface and a stud mounted thereon, a second member journaled upon said stud and engaging said inclined surface of the first member, said member having a laterally extending pintle, a lever fulcrumed upon the pintle, a cradle connected to the working end of said lever and means for depressing the power end of the lever.

4. A stacker comprising an upright, a lever fulcrumed thereon and adapted to swing laterally with relation thereto, parallel bars supported by the upright and adapted to swing laterally with the lever, links spacing the free ends of said bars apart, a cradle carried by said parallel bars and being connected with the working end of the lever and means for depressing the power end of the lever.

5. A stacker comprising an upright, a lever fulcrumed thereon, bars pivotally supported by the upright and being connected with the working end of the lever, a cradle pivotally supported by said bars, a lever fulcrumed to said cradle, bolt rods pivoted to said lever, springs engaging said lever, said bolt rods adapted to pass through registering perforations in the cradle and the cradle support, a tackle attached to said lever and passing through an eye located upon the cradle laterally with relation to the same.

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

WILLIAM E. CARTER.

Witnesses:

DAVE BARCLAY,

W. J. WOODS.