

No. 757,624.

PATENTED APR. 19, 1904.

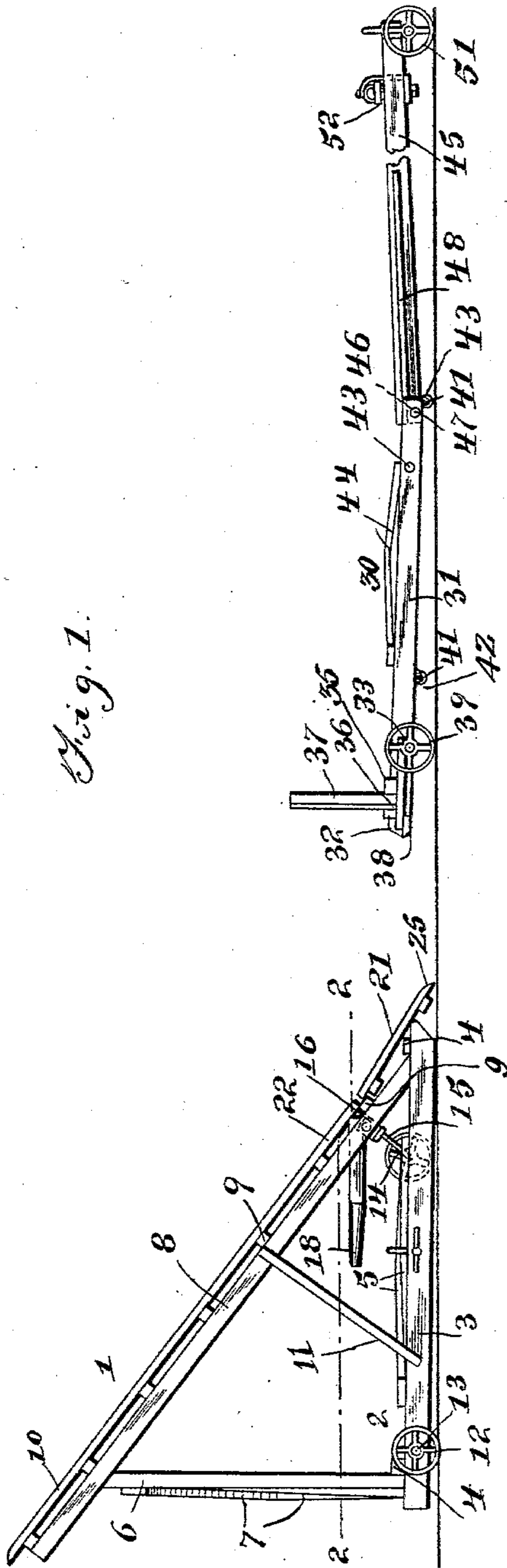
J. W. KENWORTHY.
HAY STACKER.

APPLICATION FILED NOV. 30, 1903.

NO MODEL.

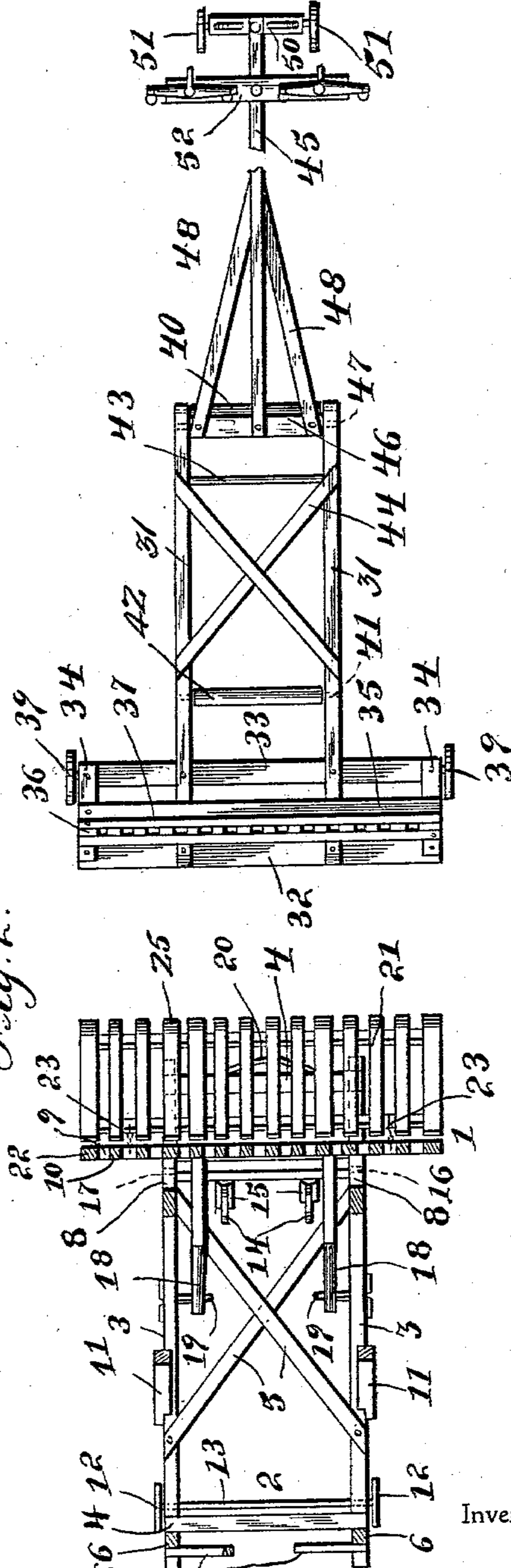
2 SHEETS—SHEET 1.

Fig. 1.



Witnesses
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Fig. 2.



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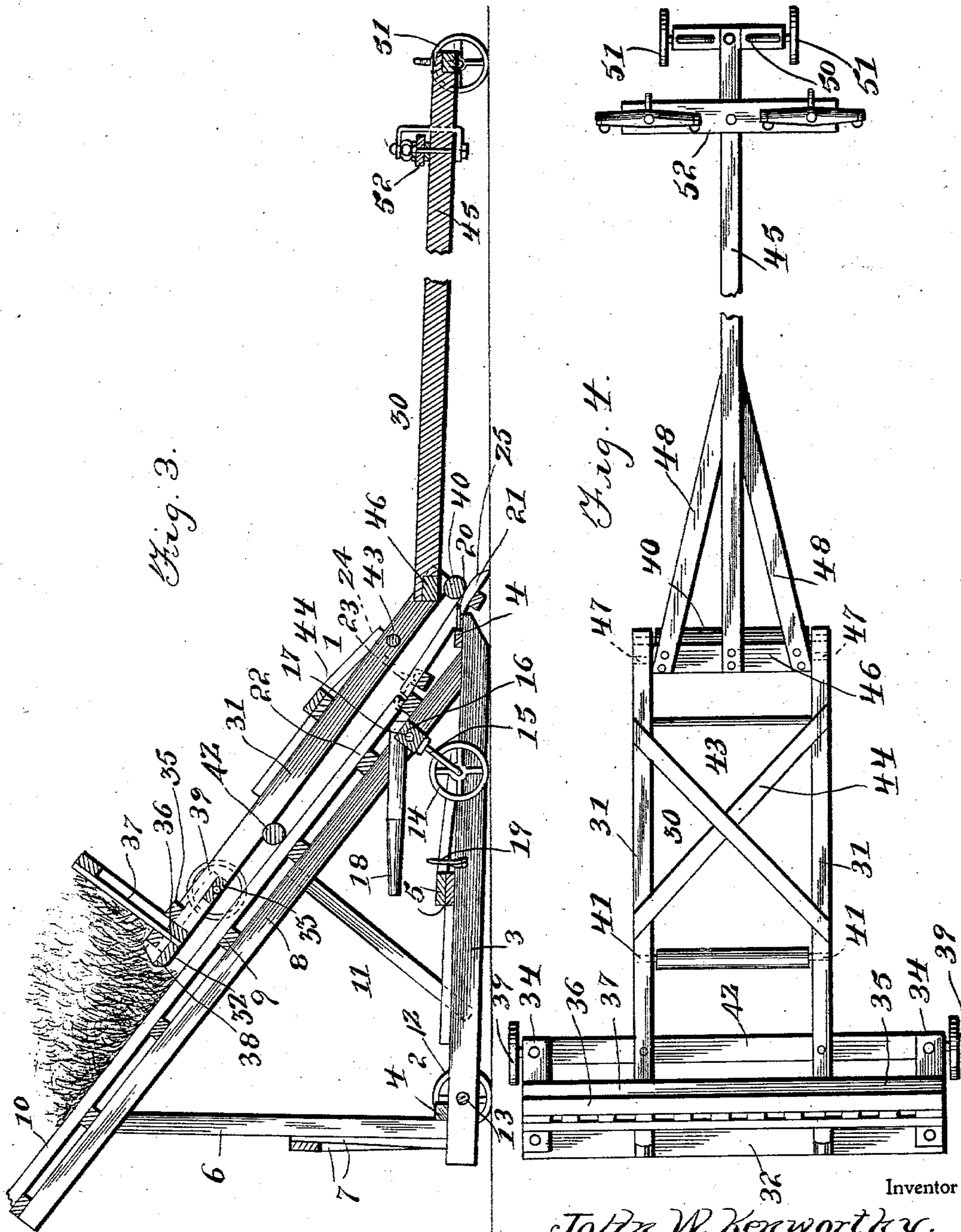
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2 SHEETS—SHEET 2.



Witnesses

W. H. Rockwell.

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Inventor

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UNITED STATES PATENT OFFICE.

JOHN W. KENWORTHY, OF MAXWELL, NEBRASKA, ASSIGNOR OF ONE-HALF TO A. W. PLUMMER, OF MAXWELL, NEBRASKA.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 757,624, dated April 19, 1904.

Application filed November 30, 1903. Serial No. 183,277. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. KENWORTHY, a citizen of the United States, residing at Maxwell, in the county of Lincoln and State of Nebraska, have invented certain new and useful Improvements in Hay-Stackers; and I do 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 ap-
 10 pertains to make and use the same.

My invention relates to improvements in hay-stackers of that class in which the hay is pushed up an inclined way or skid and then off of its upper end onto the stack or rick.

15 The object of my invention is to provide an apparatus of this character which will be simple in construction, durable in use, efficient in operation, and comparatively inexpensive to manufacture.

20 With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended
 25 claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved hay-stacking apparatus, the carrier or follower being upon the ground in front of the inclined way or skid. Fig. 2 is partly a top plan view and partly a horizontal section taken on the line 2 2 of Fig. 1. Fig. 3 is a vertical longitudinal section through the apparatus, the carrier or follower being partially elevated upon the
 30 inclined way or skid-frame. Fig. 4 is a top plan view, on an enlarged scale, of the carrier or follower.

Referring to the drawings by numeral, 1 denotes an inclined way or skid-frame supported
 40 upon a portable base-frame 2, which comprises longitudinal side beams or sills 3, connected adjacent to their ends by cross-beams 4 and braced adjacent to their centers by crossed diagonal braces 5. Said way or skid is sup-
 45 ported in an inclined position by having its lower portion secured to the ends of the side beams 3 and its upper portion secured to vertical posts or uprights 6, mounted adjacent to

the opposite ends of said side beams 3 and braced by crossed diagonal braces 7. 50

The inclined way or skid-frame 1 comprises longitudinal side bars 8, having their lower ends bolted upon the side beams 3 of the base-frame and their upper portions bolted upon the upper ends of the uprights 6, transverse tie- 55 bars 9, which connect and brace said side bars 8, and parallel longitudinally-disposed slats or bottom boards 10, which are secured upon said cross or tie bars 9. The skid-frame may be further braced by inclined braces 11, extend- 60 ing from the side beams 3 to the side bars 8.

The base-frame 2 is mounted at its rear end upon supporting-wheels 12, journaled upon the ends of an axle 13, passed through the side beams 3, and at its front end upon caster- 65 wheels 14, journaled in caster-frames 15, which are swiveled in a cross-bar 16, having its ends pivoted, as at 17, between the side bars 8 of the skid-frame. Secured adjacent to each end of said cross-bar 16 is a hand-lever 18, 70 by means of which the same may be oscillated to raise or lower the wheels 14. When said levers are elevated, the wheels are swung up to permit the front end of the base-frame 2 to rest upon the ground, and when they are swung 75 down and engage with catches 19, which are pivoted upon the side beams 3, the front end of the base-frame will be raised and supported by said wheels, so as to be readily transported from place to place by draft-animals, which 80 may be attached to a clevis or other attaching device 20, secured on the front cross-beam 4. A portion 21 of the front and lower end of the inclined way or skid-frame is mounted so as to be swung up over upon the fixed portion 22 85 when the device is moved from one point to another. Said swinging portion 21 is hingedly connected to the fixed portion 22 by short chains or other flexible connections 23, which are attached to eyes or staples 24 upon adja- 90 cent cross-bars 9 of the two portions 21 and 22. When said swinging portion 21 is in its lowered position, its upper edge rests upon one of the cross-bars 9 and its lower edge upon the ground. The ends of its slats or 95 bottom boards are beveled, as at 25, so that

they will lie close to the ground to permit the hay to be readily pushed onto the inclined way or skid.

In order to push the hay or other vegetation which is being stacked up the inclined way or skid-frame and to drop the same off of its upper end, I provide a carrier or follower 30. Said carrier comprises two longitudinal beams 31, connected at their front ends by cross-beams 32 and 33, which are secured in recesses upon the under sides of said beams 31. The ends of said beams 32 and 33 are connected by side bars 34, which in turn are connected by a transverse or cross beam 35, which is also secured upon the top of the beams 31. Said beam 35 is disposed above and in rear of the front end beam 32, so as to permit the stakes 36 of a rectangular hay-frame 37 to be inserted between them to brace said frame in a substantially vertical position, as clearly seen in Fig. 3. The front lower edge of the beam 32 is beveled, as at 38, to permit the same to slip over uneven places on the ground or the skid-frame as the carrier is pushed forwardly to collect and elevate the hay. The front end of the carrier is supported on wheels 39, mounted at the ends of the beam 33, and the rear end of the carrier is supported by a transverse roller 40, the journals of which are mounted in bearings 41, secured to the ends of the beams 31 upon their under sides. A similar roller 42 is similarly mounted between the beams 31 adjacent to their forward ends and is adapted to support the carrier when on the skid-frame, as shown in Fig. 3. The rear ends of the beams 31 are connected by a tie-rod 43, and they may be further braced by crossed diagonal braces 44. In order to move the carrier, a pushing device in the form of a draft pole or tongue 45 is provided. The front end of said pole is pivotally connected to the carrier by bolting it to the center of a cross-bar 46, the reduced cylinder ends 47 of which are journaled in openings in the ends of the beams 31. Its front end may be further connected to said cross-bar by diagonal braces 48. To the rear end of the pole is secured a cross-bar 49, in the ends of which are swiveled caster-frames 50, on which caster-wheels 51 are journaled to support said end of the pole. A doubletree 52 or any suitable draft appliance is connected to said cross-bar 49 or to the end of the pole for the attachment of draft-animals, which draw or push the carrier forwardly.

The operation of my invention is as follows: When the caster-wheels 14 support the front end of the base-frame 2 and the hinged section or portion of the skid-frame is folded back upon its fixed portion, the base-frame may be readily moved to the point where it is desired to form the stack or rick. The front end of the frame 2 is then lowered upon the ground

and the hinged portion of the skid-frame then swung down to form a continuous inclined way or skid. The carrier is then moved in front of this skid at some distance from the same, and the hay gathered from the fields by the usual rakes is deposited by them upon the ground between said carrier and said skid-frame. When sufficient hay has been thus deposited in front of the carrier, the latter is pushed forwardly toward the skid-frame to collect said hay and push it up the inclined way or skid, as shown in Fig. 3. The hay is collected against the removably-mounted frame 37 upon the carrier, and when the front portion of the carrier reaches the top of the skid the hay will drop over the end of the same onto the stack or into a wagon or the like.

It will be seen that the apparatus is simple, strong and durable in construction and very efficient in operation, permitting a great quantity of hay to be stacked in a very short period of time.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. In a hay-stacker, the combination with an inclined way or skid, of a carrier or follower comprising a collecting-frame, and a pusher-frame pivotally connected to said collecting-frame, and adapted to push the same up said inclined way or skid, substantially as described.

2. In a hay-stacker, the combination with an inclined way or skid, of a carrier or follower comprising a wheeled frame, and a pivotally-connected tongue or frame for pushing said wheeled frame up said inclined way or skid, substantially as described.

3. In a hay-stacker, the combination with an inclined way or skid, of a carrier or follower comprising a collecting-frame, rollers for supporting said frame, and a tongue or pole pivotally connected to said collecting-frame and adapted to push said frame up said inclined way or skid, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN W. KENWORTHY.

Witnesses:

FRED R. GINN,
M. HOAGLAND.