No. 676,504.

Patented June 18, 1901.

M. B. KASSEL.

STRAW STACKER.

(Application filed Oct. 18, 1900.)

(No Model.)

2 Sheets—Sheet 1.

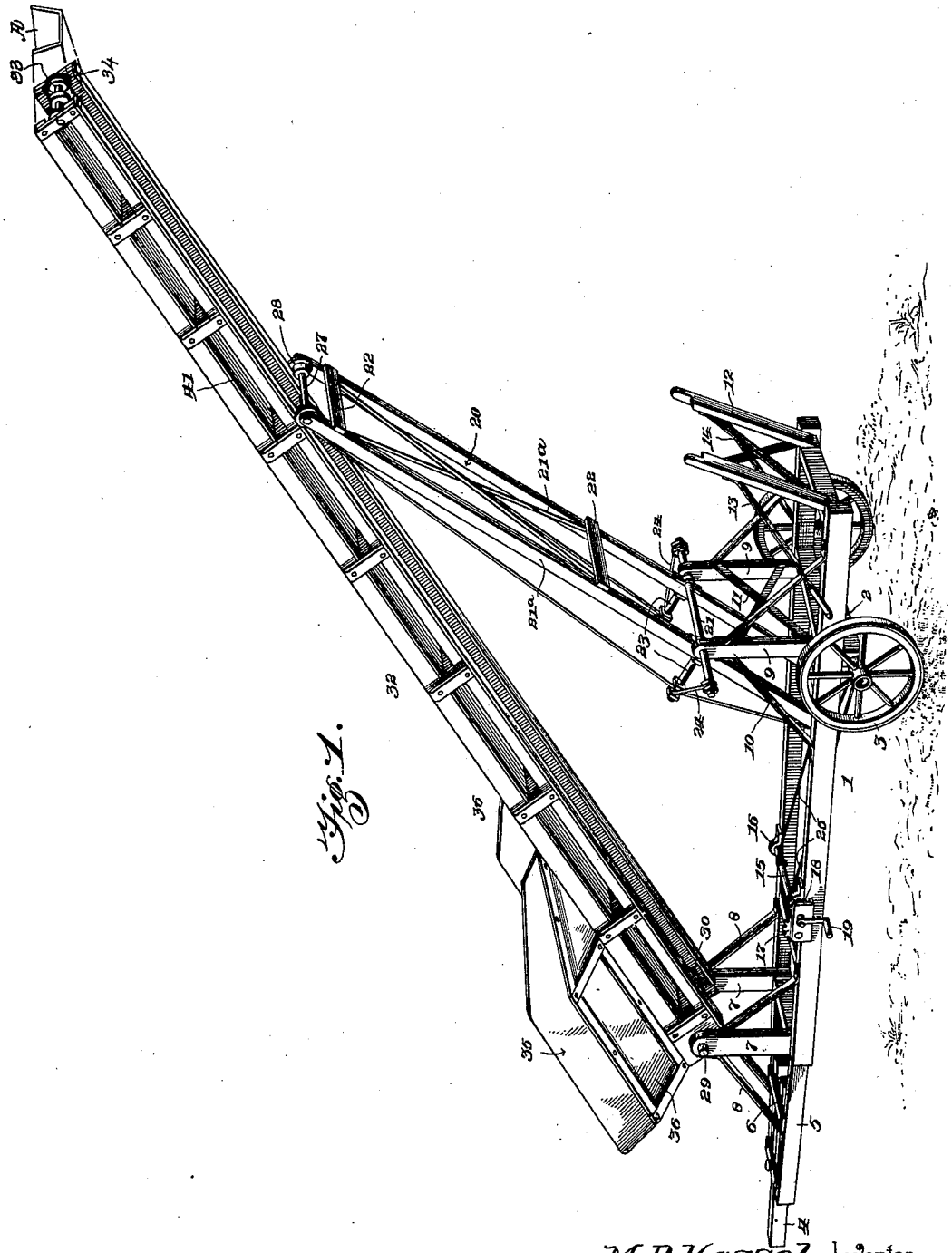

Fig. 1.

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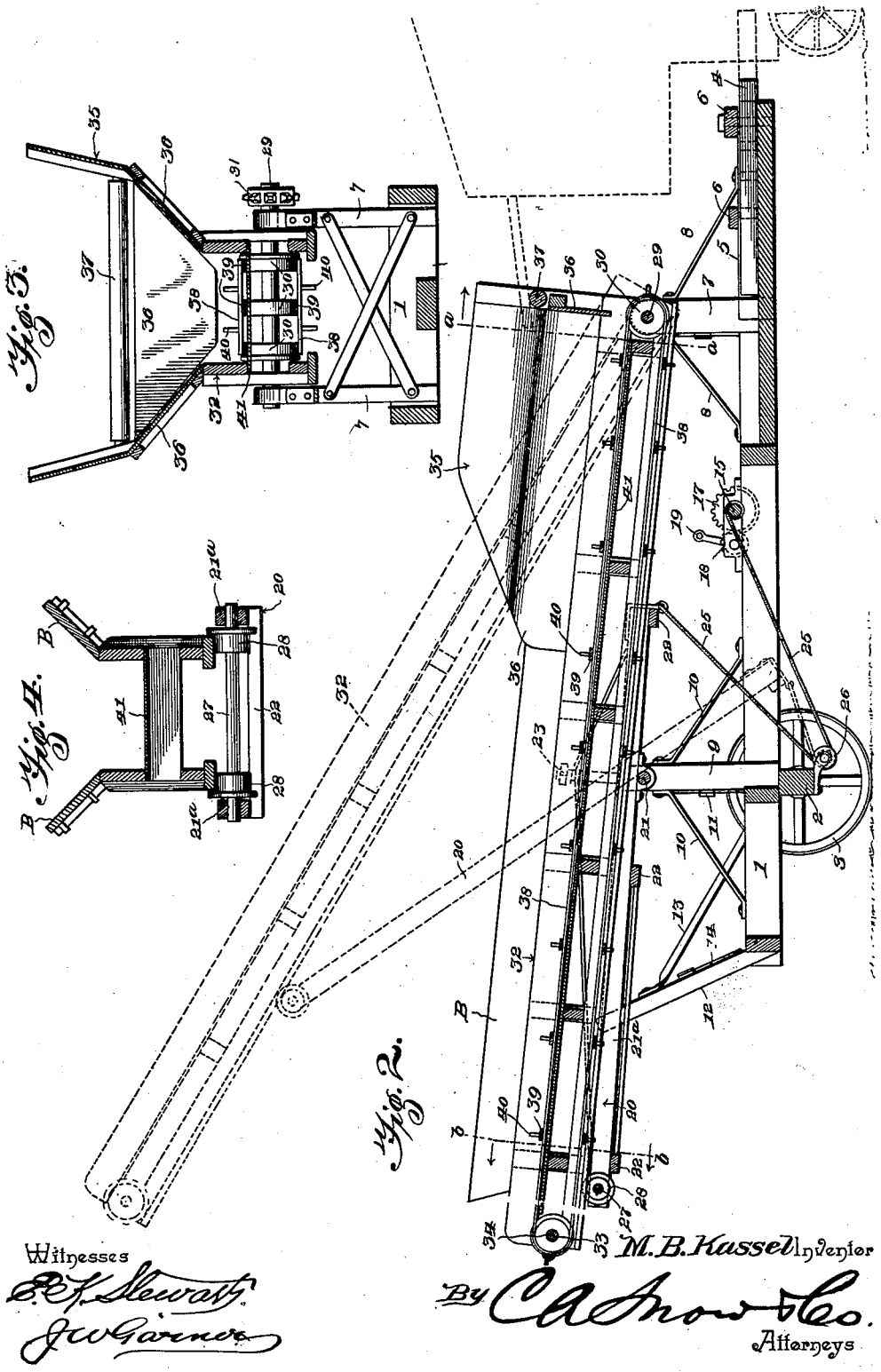

Fig. 3.

Fig. 4.

Fig. 2.

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UNITED STATES PATENT OFFICE.

MICHAEL B. KASSEL, OF POMEROY, WASHINGTON.

STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 676,504, dated June 18, 1901.

Application filed October 18, 1900. Serial No. 33,508. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL B. KASSEL, a citizen of the United States, residing at Pomeroy, in the county of Garfield and State of Washington, have invented a new and useful Straw-Stacker, of which the following is a specification.

My invention is an improved straw-stacker which is adapted to operate in connection with a threshing-machine and to convey the straw from the latter and discharge it upon a stack or rick.

My invention consists in the peculiar construction and combination of devices hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a straw-stacker constructed in accordance with my invention. Fig. 2 is a vertical longitudinal central sectional view of the same. Fig. 3 is a transverse sectional view of the same, taken on a plane indicated by the line *a a* of Fig. 2. Fig. 4 is a detail sectional view of the same, taken on the plane indicated by the line *b b* of Fig. 2.

A truck-frame 1, rectangular in form, is provided near its outer end with an axle 2, on which are supporting-wheels 3, and at the inner end of the truck-frame is a bar 4, supported by hounds 5 and guide-bars 6, which bar 4 is a draft-bar and is employed to attach the front end of the truck-frame to the rear end of a threshing-machine in any suitable manner. Hence when in operation or being transported together with a threshing-machine the truck-frame is supported in a horizontal position, as shown in the drawings.

I term the end of the truck-frame which is attached to the threshing-machine the "inner" end and the opposite end thereof the "outer" end. Near the inner end of the truck-frame are a pair of standards 7, which are provided with braces 8. At a point directly over the axle 2 the truck-frame is provided with a pair of vertical standards 9, which are provided with braces 10 and cross-braces 11, the latter connecting said standards 9 together. At the outer end of the truck-frame are a pair of outwardly-inclined standard-rests 12, which are braced, as at 13, and connected together by cross-braces 14.

A winch 15 is journaled in bearing-blocks 16 on the truck-frame at a point between the standards 7 and 9. The said winch has a spur-wheel 17, which is engaged by a pinion 18, the latter being provided with a crank 19, by means of which it may be manually rotated. A suitable dog or detent, which is not here shown, may be provided to engage the gear 17 or pinion 18, and thereby lock the winch against rotation.

A rocking elevating and supporting frame 20 is fulcrumed on a shaft 21, which is supported at the upper ends of the standards 9. Said frame 20 comprises the side bars 21 and the cross-bars 22 and is provided on one side with trusses 23. The ends of the shaft 21 project beyond the standards 9 and are connected to the trusses by rods 24. Thereby the frame 20 is braced both longitudinally and laterally. The inner end of the frame 20, which is the shorter end thereof, is connected to the winch by ropes 25, which pass over direction-sheaves 26, which are supported by the axle. The outer longer end of the frame 20 is provided with a transverse shaft 27, on which are antifriction-rollers 28, which are flanged, as shown. When the outer end of the frame 20 is lowered, the same is supported in substantially a horizontal position by the standards 12, as will be understood by an inspection of Fig. 1 and as shown in Fig. 2 of the drawings.

A shaft 29 has its bearings near the upper ends of the standards 7. The said shaft carries a series of rollers 30, is provided at one end with a power-pulley 31, and forms the pivot for the inner end of the conveyer-frame 32. The conveyer-frame is further supported by the frame 20, the rollers 28 bearing under the outer portion of the conveyer-frame, and hence by means of the frame 20 and the winch the outer end of the conveyer-frame may be raised or lowered, as will be understood. At the outer end of the conveyer-frame is a shaft 33, which is provided with rollers 34. The conveyer-frame is preferably constructed as here shown and is provided at its inner end with a receiving-hood 35, the sides of which are formed by the inclined wings 36. Transversely disposed at the inner end of the hood is an antifriction-roller 37. An endless traveling apron connects the rollers 30 34 and comprises endless belts 38, cross-slats 39, which

connect said belts, and spurs 40, which project from the outer sides of said cross-slats. In operation the endless conveyer-apron is driven by a power-belt on the pulley 31, and the discharge-riddle of the threshing-machine has its outer end supported by the roller 37. Thereby the straw as it is discharged from the threshing-machine is conveyed directly to the inner end of the conveyer-frame onto the conveyer-apron, the upper lead of which travels on a bottom plate 41, with which the conveyer-frame is provided, and it will be understood that the straw will be conveyed by the said endless conveyer-apron to the outer end of the conveyer-frame, which may be elevated and supported at any suitable height by the means hereinbefore described, and that the straw as it is discharged from the outer end of the conveyer-frame will fall directly onto the stack or rick. When the stacker is not in use, the frame 20 and conveyer-frame are lowered to the position shown in full lines in Fig. 2, and thereby compactly disposed on the truck-frame.

It will be understood that the outer end of the conveyer-frame may be raised or lowered, as may be required, while the stacker and the threshing-machine are in operation and without arresting or interfering with the operation thereof.

In practice the conveyer-frame is provided at its outer end with a suitable discharge-spout, as indicated at A in Fig. 1, and if found desirable, as when the stacker is used in connection with a threshing-machine of great capacity, inclined guard-boards B may be placed on the sides of the conveyer-frame to extend from the receiving-board to the spout.

Having thus described my invention, I claim—

1. In a straw-stacker, the combination of the truck-frame having the standards 7 and 9, the conveyer-frame having its inner end pivoted between the standards 7, the rocking elevating-frame pivoted between said standards 9, at a point intermediate its ends, the outer end of said rocking elevating-frame bearing, supporting and being free to slide under said conveyer-frame, a winch carried by said truck-frame and an operating-rope connecting said winch and the inner end of said rocking elevating-frame, substantially as described.

2. In a straw-stacker, the combination of the truck-frame having the standards 7, 9, and 12, the rocking frame fulcrumed between the standards 9, the conveyer-frame having its inner end pivoted between the standards 7, said rocking frame bearing under the outer portion of the conveyer-frame and adapted, when the same and said conveyer-frame are lowered, to rest on the standards 12 and means to operate said rocking frame and support the same in any required position, substantially as described.

3. In a straw-stacker, a supporting truck-frame, a conveyer-frame having its inner end pivoted on said truck-frame, said conveyer-frame having a hood at its inner end and the roller 37 and means to raise and lower and support the outer end of said conveyer-frame, 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.

MICHAEL B. KASSEL.

Witnesses:
EDWIN W. GIBSON,
A. E. DUKSON.