(No Model.)

W. DECKER & J. A. MARSHALL.

STRAW STACKER.

No. 292,628. Patented Jan. 29, 1884.

Fig. 1.

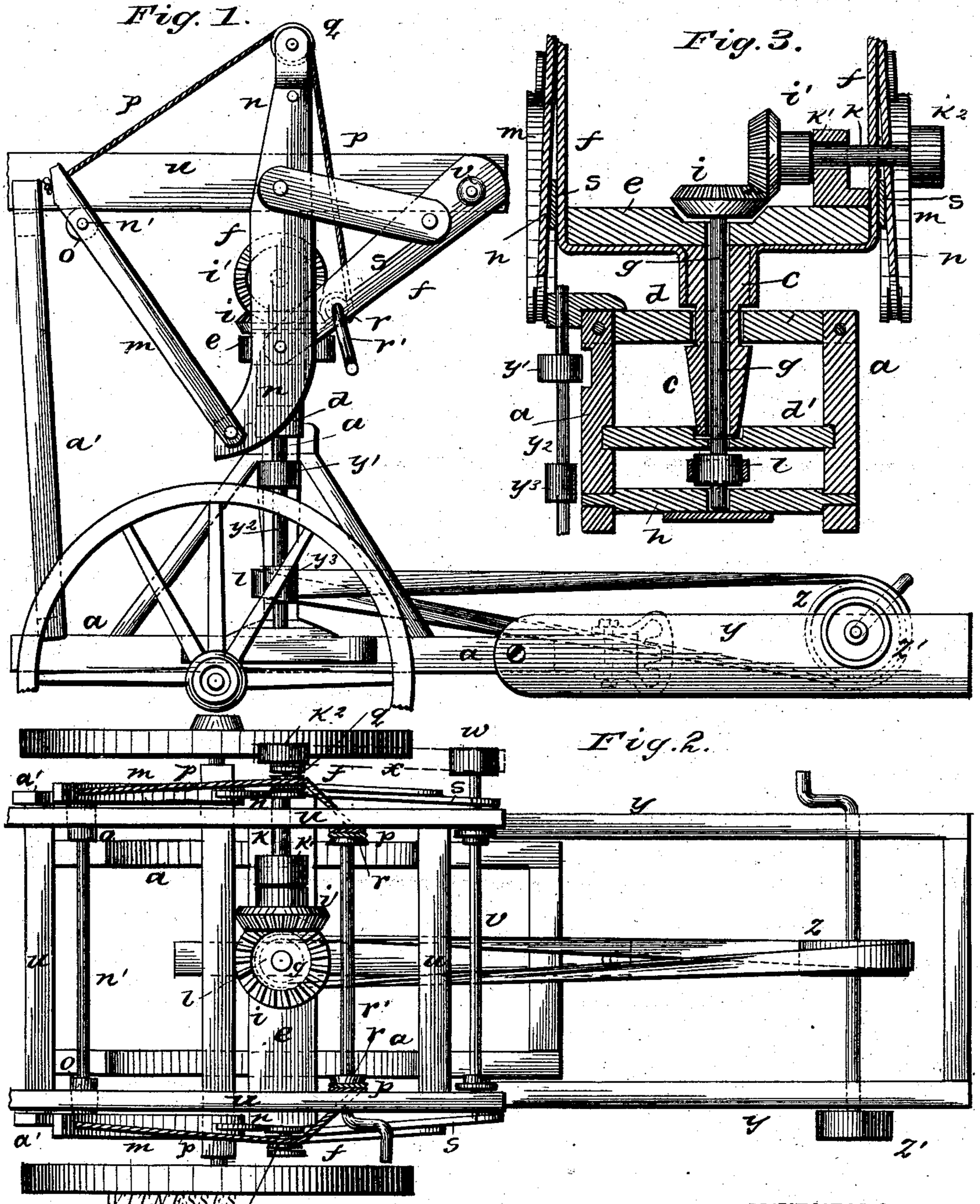

Fig. 3.

Fig. 2.

WITNESSES

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WILLIAM DECKER AND JOSEPH A. MARSHALL, OF DARLINGTON, INDIANA.

STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 292,628, dated January 29, 1884.

Application filed August 18, 1883. (No model.)

To all whom it may concern:

Be it known that we, W. DECKER and J. A. MARSHALL, citizens of the United States of America, residing at Darlington, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Straw-Stackers; and we 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side elevation of our improved straw-stacker. Fig. 2 is a plan view, and Fig. 3 is a sectional detail view.

This invention has relation to straw-stackers; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claim appended.

Referring by letter to the accompanying drawings, *a* designates the main frame of our improved stacker, which is mounted on two wheels, and attached by its tongue, through the medium of a clevis, to the rear end of the grain-separator, so that it does not need to be taken down to be moved from place to place, nor is it necessary to unbelt it from the separator.

c designates a hollow shaft, journaled in bearings in the cross-pieces *d d'* of the upright portion of the frame *a*, and provided with a cross-beam, *e*, to which the iron carrier-frame *f* is secured.

g designates the main shaft, which passes down through the hollow shaft *c*, and is stepped in a cross-beam, *h*, in the lower part of the upright portion of the frame *a*. The main shaft *g* is provided at its upper end with a miter-gear wheel, *i*, which meshes with a miter-gear, *i'*, on a horizontal shaft, *k*, having its bearings in a box, *k'*, on the cross-beam *e* and the iron carrier-frame, as shown. The other end of the shaft *k* is provided with a pulley, k^2.

l is a pulley at the lower end of the main shaft *g*.

The arms *m m*, for raising the carrier, are hinged to the lower ends of the arms *n n* of the iron carrier-frame, and are connected near their upper ends by a rod, *n'*, carrying friction-rollers *o o*, which engage the under edges of the carrier. Ropes *p p* are connected with the upper ends of the arms *m m*, and pass over pulleys *q q* in the upper ends of the arms *n n* of the iron frame *f*, and down to spools *r r* near the ends of a crank-rod, *r'*, having bearings in the lower ends of the arms *s s* of the iron frame *f*.

The carrier *u* is hinged upon the rod *v*, journaled in the upper ends of the arms *s s* of the iron frame *f*. The rod *v* is provided on the end nearest the horizontal shaft *k* with a pulley, *w*, and the belt *x*, which operates the endless apron of the carrier, passes from the pulley k^2 on the shaft *k* to the pulley *w*, as shown.

y designates a portion of the frame of the separator, which is represented as being both a center gear and a side gear, in order that it may be understood how the stacker is connected to each class of machines.

z designates the pulley of the center-gear separator. In this instance the belt that drives the stacker-gearing runs from this pulley to the pulley *l* on the main shaft *g* of the stacker.

z' designates the pulley for a side-gear separator, and to connect this kind of machine to the stacker the driving-belt runs to a pulley, *y'*, near the upper end of a vertical shaft, y^2, journaled in bearings at the side of the upright portion of the frame *a*, and a short belt is then run from the lower pulley, y^3, to the pulley *l* on the main shaft *g* of the stacker.

a' designates a stay or rest for holding the carrier when not being operated, and while the stacker is being driven from place to place.

To operate the machine the crank-rod should be turned to elevate the carrier to the proper incline, which may be any desired one, and when the power is applied the carrier-frame and carrier may be swung around a half-circle on the hollow shaft, directing the straw to any desired point on either side or the rear, as the endless apron operates all the time the carrier-frame is being turned.

This stacker is quite light, and, as it is attached to the separator, it does not require an extra team to transport it.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a straw-stacker, the combination, with the frame *a*, of the arms *n n*, pulleys *q q* at their upper ends, the arms *s s*, the shaft *v*, pulleys *r r*, the carrier *u*, hinged between the upper ends of the arms *s s*, the arms *m m*, hinged at their lower ends to the arms *n n*, the friction-rollers *o o* near their upper ends, and the ropes *p p*, connecting the arms *m m* and the pulleys *r r*, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM DECKER.
JOSEPH A. MARSHALL.

Witnesses:
T. E. BINFORD,
JOHN HUNT.