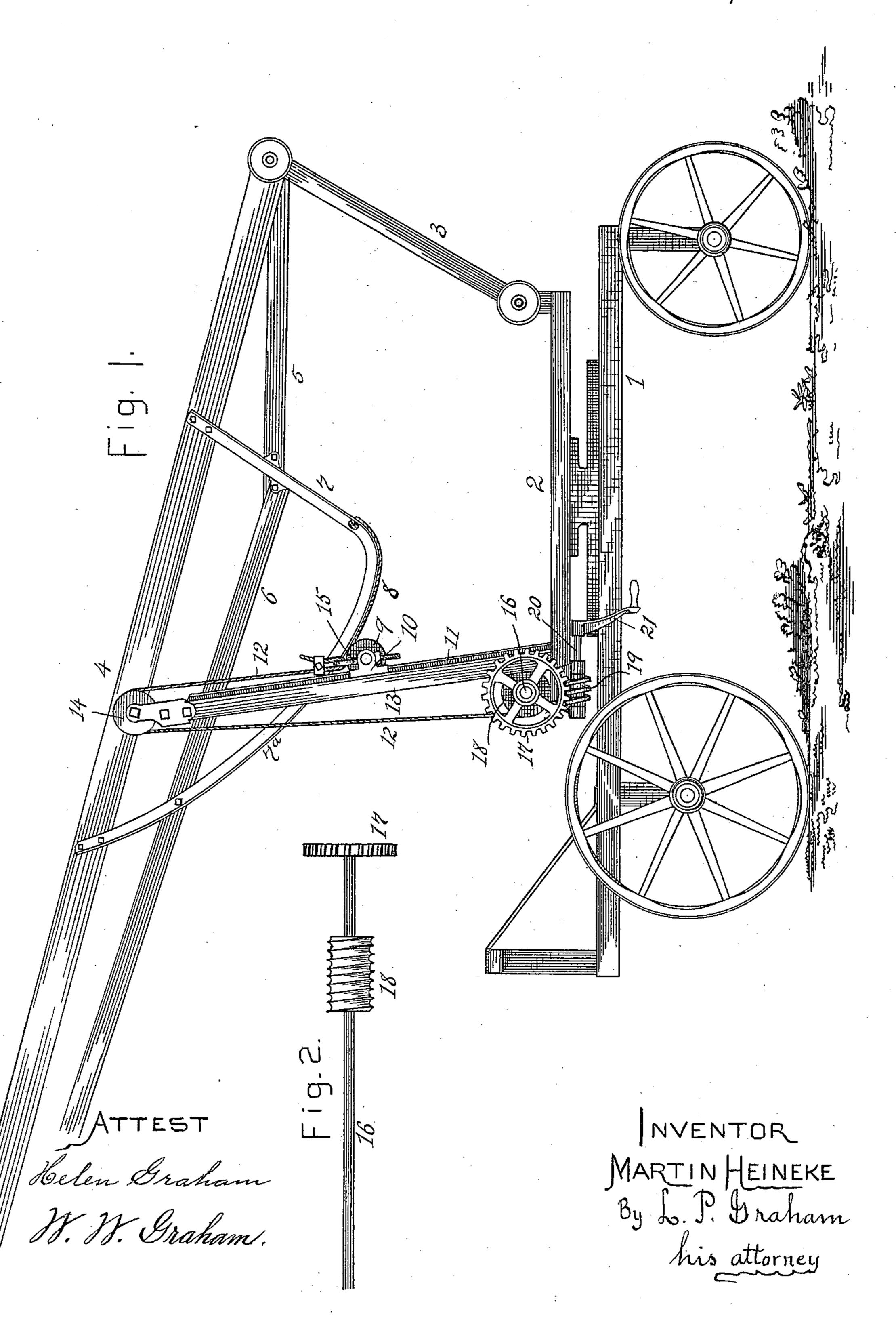
(No Model.)

M. HEINEKE. STRAW STACKER.

No. 442,748.

Patented Dec. 16, 1890.



UNITED STATES PATENT OFFICE.

MARTIN HEINEKE, OF SPRINGFIELD, ILLINOIS, ASSIGNOR TO THE SATTLEY MANUFACTURING COMPANY, OF SAME PLACE.

STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 442,748, dated December 16, 1890.

Application filed April 5, 1890. Serial No. 346,681. (No model.)

To all whom it may concern:

Be it known that I, MARTIN HEINEKE, of Springfield, in the county of Sangamon and State of Illinois, have invented certain new 5 and useful Improvements in Straw-Stackers, of which the following is a specification.

This invention is in the nature of an improvement on the device set forth in Letters Patent of the United States No. 384,974, 10 granted to me on the 26th day of June, 1888; and it consists in the details of construction and combinations of parts hereinafter set forth and claimed.

In the drawings accompanying and forming 15 a part of this specification, Figure 1 is a side elevation of the parts of a straw-stacker having relation to my invention, and Fig. 2 is a representation of a portion of the shaft car-

rying the spirally-grooved drums.

The main frame 1 is mounted on wheels in the customary manner. The rotary base 2 carries the swinging support 3, with the upper end of which the carrier-frame 4 is pivotally connected, and also carries standards 25 13, one on each side of the carrier-frame. Bars 7, made, preferably, of angle-iron, extend downward, one from each side of the carrier-frame, are intersected by braces 5 and 6, and extend rearwardly and upwardly to the carrier-30 frame, as seen at 7a. The guide portions 7a of bars 7 are regularly curved, and they describe segments of circles having radii approximately coextensive with the length of frame 3. Each standard 13 has a way 11 and 35 a pulley 14. On each way is a sliding block 10, carrying a roller 9. Ropes 12 connect with the blocks by means of the adjustable eyebolts 15. They extend over pulley 14 and they are secured to drums 18, one of which

40 is mounted on each end of shaft 16. The worm-wheel 17 is secured on shaft 16, and it meshes with worm 19. The shaft 20 of the worm has a crank 21, by means of which the worm is rotated and power is indirectly applied to the blocks 10. The guides 7° rest on | the presence of two subscribing witnesses.

the rollers, and they each have a rope 8 connected with bar 7, extended along the under surfaces of the guides, run over the rollers and connected with frame 2 or some other 50 relatively immovable part of the frame of the

stacker.

The discharge end of the stacker is elevated or depressed by turning crank 21 in one direction or the other, which operation may be effected with ease and with considerable 55 speed, and when the desired position is reached the worm will prevent shifting without the assistance of a stop-pawl or detent.

The spirally-grooved drums cause the ropes 12 to wind equally fast, thereby raising one 60 side of the carrier precisely as rapidly as the

other side.

The blocks 10 act on guides 7^a and ropes 8 in the manner set forth in the patent before mentioned, the result being that the carrier 65 is moved bodily over the standards as the end thereof is raised, and equilibrium is so maintained; but the form of the guides and the relative positions of the ropes 8 make the compensation more accurate and com- 70 plete, and also make the operation more effective and reliable.

I claim—

1. In straw-stackers, in combination, swinging frame 3, carrier-frame 4, pivotally sus- 75 tained at one end by frame 3 and having guides 7a, standards 13, having the movable rollers 9, adapted to the guides, shaft 16, carrying the drums 18 and the worm-wheel 17, worm 19, adapted to the worm-wheel and hav- 80 ing crank 21, and ropes 12, connecting the rollers with the drums and extending over pulleys in the tops of the standards, as set forth.

2. In straw-stackers, in combination with 85 the guides 7° of carrier-frame 4, standards 13, having vertically-movable rollers 9, adapted to the guides, shaft 16, having the spirallygrooved drums 18 and the worm-wheel 17, ropes 12, connecting the rollers with the spi- 9c rally-grooved drums and extending over pulleys in the tops of the standards, and a worm to impart motion to the worm-wheel, as set forth.

In testimony whereof I sign my name in 95

Attest:

JOSEPH M. GROUT, CHARLES E. SELBY.