J. GOODISON.

PNEUMATIC STACKER.

APPLICATION FILED JULY 22, 1909.

974,483. Patented Nov. 1, 1910.

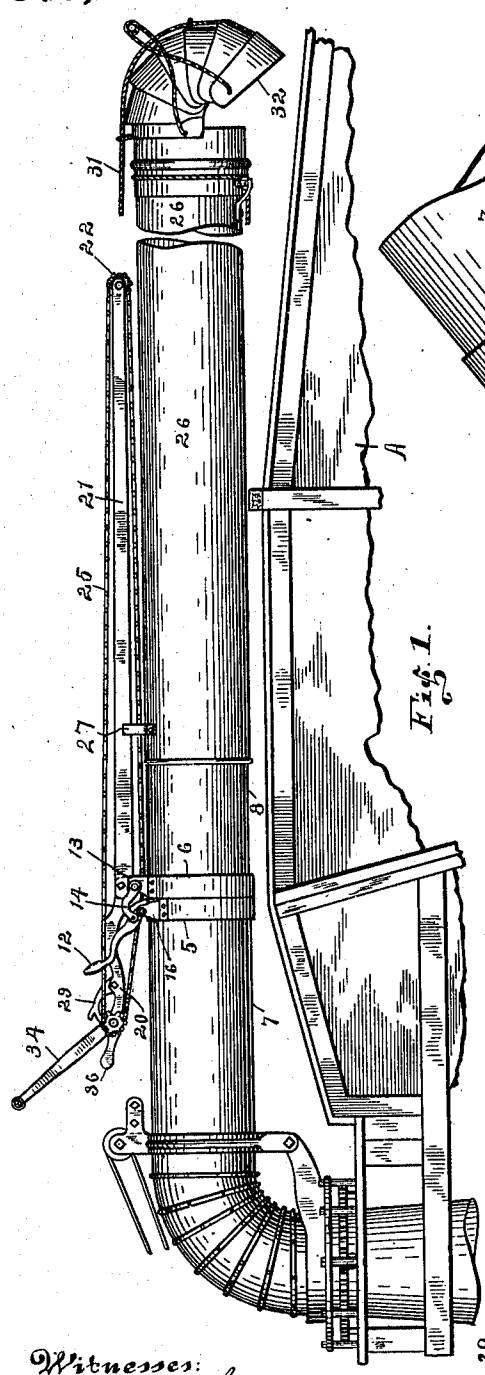

Fig. 1.

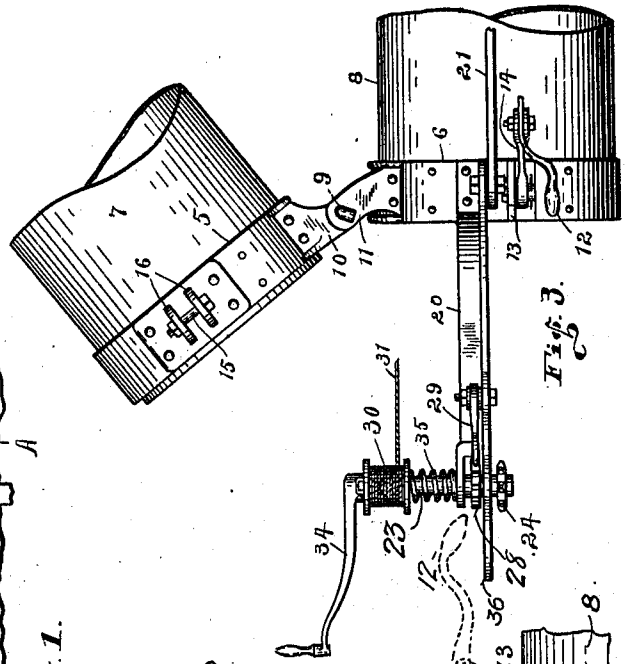

Fig. 3.

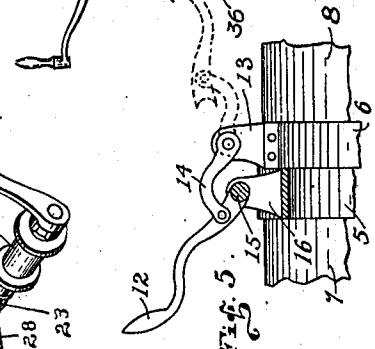

Fig. 5.

Fig. 2.

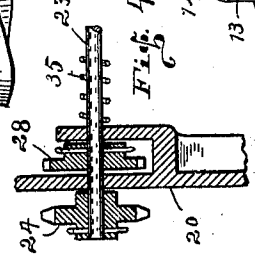

Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN GOODISON, OF SARNIA, ONTARIO, CANADA, ASSIGNOR TO THE INDIANA MANUFACTURING COMPANY, OF INDIANAPOLIS, INDIANA, A CORPORATION OF WEST VIRGINIA.

PNEUMATIC STACKER.

974,483. Specification of Letters Patent. Patented Nov. 1, 1910.

Application filed July 22, 1909. Serial No. 509,021.

To all whom it may concern:

Be it known that I, JOHN GOODISON, a subject of the King of Great Britain, residing at Sarnia, in the county of Lambton and Province of Ontario, Canada, have invented certain new and useful Improvements in Pneumatic Stackers, of which the following is a specification.

My invention relates to improvements in folding pneumatic stacker chutes, and consists in a hinge provided with clamping means, and also with means for supporting and operating mechanism for telescoping the outer chute section, as well as other features, all as will be hereinafter more particularly pointed out.

In the accompanying drawings, which form a part hereof, Figure 1 is a side elevation of a stacker chute equipped with my improvement and mounted on a separator, which latter is shown in fragment; Fig. 2, a perspective view of said hinge as seen when looking from the side opposite to that indicated in Fig. 1; Fig. 3, a plan showing said hinge, with fragments of chute sections attached thereto, swung apart; Fig. 4 is a detail section of a portion of the telescoping and hood-operating mechanism; and Fig. 5 a detail section of the hinge and clamping device.

In said drawings the portion marked A indicates the separator to which a stacker chute embodying my invention is attached.

My improved folding stacker chute comprises two hinge bands, 5, 6, adapted to receive the adjacent ends of two pipe sections, 7, 8, which bands are hinged together at one side by a pintle, 9, running through ears, 10, 11, which project from each of said bands. At the upper side of band 6 I mount a locking lever, 12, preferably by connecting the same to a lug, 13, by a link, 14, which lever is notched at its lower end to engage a pin, 15, preferably mounted in lugs, 16, on the inner band 5. The outer band 6 is provided with an arm, 20, to which I secure a telescoping pole, 21, provided with a sprocket, 22, at its end, as usual. Also in said arm 20 I mount a shaft, 23, having a sprocket, 24, at its end, and connect said two sprockets 22 and 24 by a chain, 25, which travels about pole 21 for the purpose of telescoping the outer chute section, 26, inwardly and outwardly, (Fig. 1) and to which section said chain is also attached by means of lug 27. Shaft 23 is also provided with a ratchet, 28, controlled by a pawl, 29, for positively arresting its movement, and in addition a drum, 30, is mounted thereon and upon which a cord, 31, is wound and extends out and is attached to the hood or deflector, 32, for adjusting the same. Said drum 30 is preferably clutched to crank-arm, 34, and is controlled by a spring, 35, so that said drum may be revolved independently of or with shaft 23 as cord 31 is being operated. Arm 20 may terminate in or be provided with a suitable handle, as 36, for the convenience of an operator when swinging the chute on its hinge.

In operation, especially in barn threshing, when it is desired to swing the chute on its hinge the operator disengages locking lever 12 from pin 15, when the hinge becomes unlocked, and by pulling upon handle 36 the outer chute structure with its telescoping mechanisms may be readily swung around alongside the stump portion, and in the same manner swung back to locked position. As will be readily understood, by manipulating crank 34, chain 25, which travels about pole 21 and is secured to outer chute section 26, will cause said outer section to telescope inwardly or outwardly on chute section 8; while drum 30 may be thrown into or out of engagement with said crank-arm 34 to manipulate hood 32 as desired. It will thus be seen that I provide a simple hinged arrangement for freely breaking and swinging a telescoping stacker chute without in any manner interfering with the telescoping mechanisms of the latter.

I claim as my invention:

1. The combination, in a pneumatic stacker, of a horizontally-arranged turntable, a chute having a curved lower end mounted on said turntable and comprising an inner section and an outer swinging section, arms supporting said chute, hinge bands connecting said sections, means for locking said bands, a telescopic chute section mounted on said swinging section, and telescoping mechanism communicating with said telescopic section and supported by the band on said swinging section whereby said mechanism and sections when said bands are unlocked may be simultaneously swung alongside said inner section.

2. The combination, in a pneumatic stacker, of a horizontally-arranged turntable, a

chute having a curved lower end mounted on said turntable and comprising an inner section and an outer swinging section, pivoted arms supporting said chute, hinge bands connecting said sections, a telescoping section mounted on said swinging section, an arm on the band of said outer section, a pole affixed to said arm and provided with a sprocket, a shaft mounted in said arm and provided with a sprocket, a chain connecting said sprockets and communicating with said telescoping section, means for rotating said shaft to actuate said chain to project and retract said telescoping section, and means for releasing said bands to permit said swinging section and parts associated therewith to swing alongside said inner section.

3. The combination, in a pneumatic stacker, of a horizontally-arranged turntable, a chute having a curved lower end mounted on said turntable and comprising an inner section and a swinging section, arms supporting said chute, hinge bands connecting said sections, a chute section telescopically mounted on said swinging section, means connected to the band of said swinging section and communicating with said telescopic section to project and retract the latter section, and means for releasing said bands to permit said swinging section and parts associated therewith to swing alongside said inner section.

4. The combination, in a pneumatic stacker, of a horizontally-arranged turntable, a chute having a curved lower end mounted on said turntable and comprising an inner section and a swinging section, arms supporting said chute, hinge bands connecting said sections, a telescoping section mounted on said swinging section, a deflector on said telescoping section, means connected with the band on said swinging section for projecting and retracting said telescoping section, means associated with said telescoping means for adjusting said deflector, and means for releasing said bands to permit said swinging and telescoping sections and said telescoping and adjusting means to swing alongside said inner section.

5. The combination, in a pneumatic stacker, of a turntable, a chute mounted on said turntable and comprising an inner section and a swinging section, means for supporting said chute, hinge bands connecting said sections, a telescoping chute section mounted on said swinging section, means connected to the band of said swinging section and communicating with said telescoping section for projecting and retracting the latter, a locking lever pivotally connected to one of said bands, and means on the opposite band with which said lever engages to lock and release said bands to permit said swinging and telescoping sections and parts associated therewith to swing alongside said inner section.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN GOODISON.

Witnesses:
W. T. Goodison,
S. V. Goodison.