(No Model.)

G. A. ANDERSON.

PNEUMATIC STACKER.

No. 581,326. Patented Apr. 27, 1897.

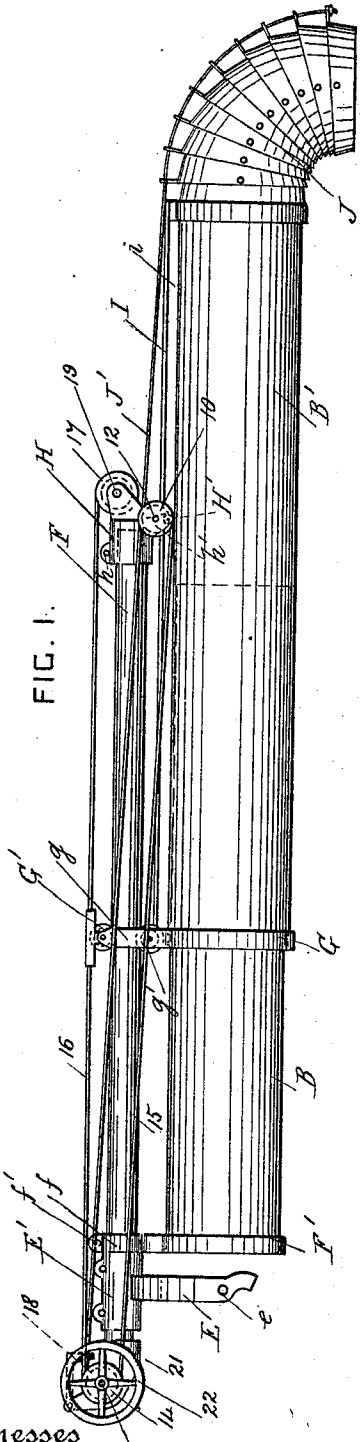


FIG. 1.

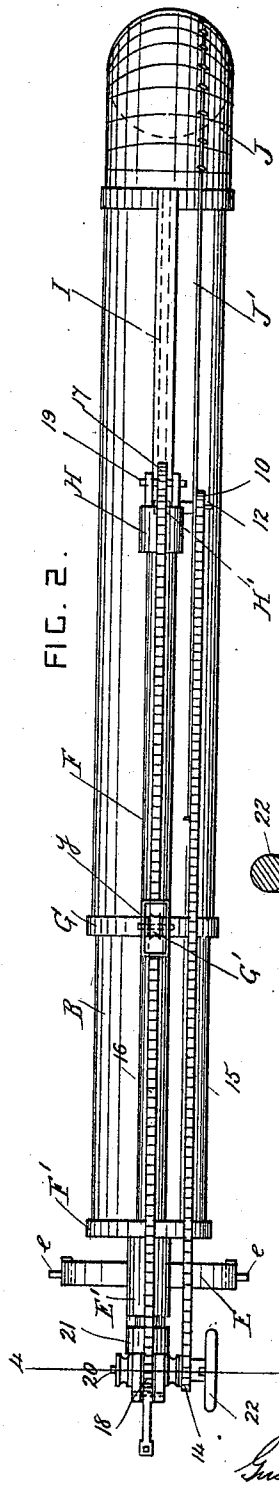


FIG. 2.

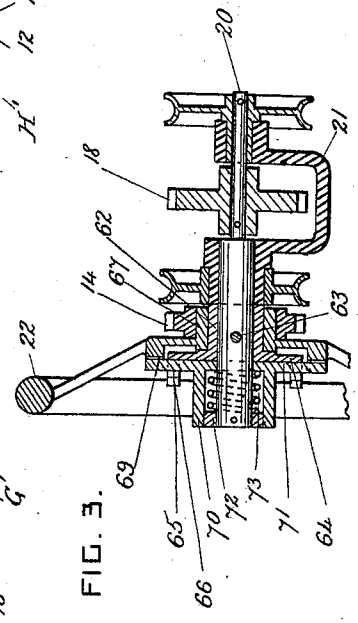


FIG. 3.

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UNITED STATES PATENT OFFICE.

GUSTAF ARVID ANDERSON, OF WAYNESBOROUGH, PENNSYLVANIA, ASSIGNOR TO THE GEISER MANUFACTURING COMPANY, OF SAME PLACE.

PNEUMATIC STACKER.

SPECIFICATION forming part of Letters Patent No. 581,326, dated April 27, 1897.

Original application filed April 20, 1895, Serial No. 546,526. Divided and this application filed October 30, 1896. Serial No. 610,564. (No model.)

To all whom it may concern:

Be it known that I, GUSTAF ARVID ANDERSON, a subject of the King of Norway and Sweden, residing at Waynesborough, in the county of Franklin and State of Pennsylvania, have invented certain new and useful Improvements in Pneumatic Straw-Stackers; and I do hereby 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.

This invention relates to pneumatic straw-stackers; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the discharge-pipe and its connections. Fig. 2 is a plan view of the same. Fig. 3 is a vertical section taken on the line 4 4 in Fig. 2 and drawn to a larger scale.

The discharge-pipe is preferably formed of two sections, of which the outer section B' slides telescopically over the inner section B.

E is a forked bracket, the lower parts of which are provided with pins *e* for pivoting it to the base of the straw-stacker in any approved manner.

E' is a socket at the upper part of the bracket E.

F is a support, preferably tubular, which is secured in the socket E' by suitable clamping-bolts and which extends parallel with the inner pipe-section to a point a little beyond its end.

F' is a ring secured to the lower end portion of the pipe-section B and provided with the socket *f*, which is clamped to the support F by the bolt *f'*, close in front of the socket E'.

G is a ring secured to the lower end portion of the outer pipe-section B' and provided with arms *g*, which extend upwardly around and above the support F.

G' is a roller journaled between the arms *g* above the support F, and *g'* is a roller journaled between the arms *g* under the support F.

H is a cap clamped to the upper end of the support F by the bolt *h* and provided with downwardly-projecting arms *h'*.

H' are rollers journaled on pins projecting laterally from the arms *h'*, the rollers being arranged between the arms.

I is a plate secured parallel with the outer pipe-section B' by means of the distance-piece *i* and suitable rivets or bolts. The edges of the plate I project over the distance-piece *i* and engage with the rollers H'.

J is a deflector of any approved construction, such as pivoted articulated segments, attached to the upper end portion of the pipe-section B'.

J' is a connection, such as a cord, for bending the deflector-pipe. A guide-sheave 10 is journaled on a pin 12, projecting laterally from one side of the cap H. A sheave 14 is supported at the lower end of the discharge-pipe and is preferably a chain-sheave. An endless drive-chain 15 engages with the sheaves 10 and 14, and the cord J' is fastened to the upper part of the chain 15.

For the purpose of telescoping the outer pipe-section B' an endless flexible connection, such as the drive-chain 16, is provided. The lower part of the chain 16 is passed through the tubular support F, and its ends are carried by the sheaves 17 and 18. The sheave 17 is journaled between the arms 19, projecting from the cap H, and the sheave 18 is secured on the shaft 20, which is journaled in a bracket 21, secured to the lower end of the support F. A hand-wheel 22 is journaled concentric with the shaft 20 for operating the drive-chain 16. The upper part of the chain 16 is connected to the arms *g* of the ring G on the upper pipe-section.

The two sheaves 14 and 18 are operated by the same hand-wheel 22 and are connected together by clutch mechanism.

The shaft 20 has a sleeve 62 secured on it by a pin 63. The sleeve 62 has a flange 64 at one ond, and 65 are clutch-jaws projecting from the flange 64. Stops 66 project from the tops of the jaws 65 and have wider spaces between them than the clutch-jaws. The hand-wheel is journaled on the sleeve 62, and the chain-sheave 14 for operating the deflector-pipe is secured on the hub 67 of the hand-wheel. The hand-wheel is provided with projecting clutch-jaws 69, arranged in the same plane as the clutch-jaws 65.

A slidable sleeve 70 is mounted on the end of the shaft 20, and is provided with laterally-projecting arms 71, which engage with both the clutch-jaws 65 and 69. A collar 72 is secured on the end of the shaft 20, and 73 is a spring which holds the arms 71 in engagement with the clutch-jaws. When thus connected and the hand-wheel is revolved, both chain-sheaves are revolved and the discharge-pipe is telescoped without changing the position of the deflector, said chain-sheaves being equal in diameter.

When the position of the deflector requires to be changed, the sleeve 70 is pulled forward until the arms 71 are out of engagement with the clutch-jaws 69, and the sleeve is then turned around until the arms come against the stops 66 and rest upon the tops of the clutch-jaws 65. The hand-wheel can now be used to revolve the chain-sheave 14 and adjust the position of the deflector-pipe without turning the shaft 20 and the chain-sheave 18.

Certain features which are shown and described in this application are not claimed in it, as the said features are fully described and claimed in a separate application filed April 20, 1895, Serial No. 546,526, from which the subject-matter of this application has been divided.

What I claim is—

In a straw-stacker, the combination, with a telescopic discharge-pipe, and a deflector at its outer end; of two slidable connections, one connected to the slidable pipe-section and the other to the deflector; two driving devices for operating the said connections respectively, and clutch mechanism connecting the said driving devices, whereby they may be coupled together or uncoupled, substantially as set forth.

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

GUSTAF ARVID ANDERSON.

Witnesses:

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