(No Model.) 2 Sheets—Sheet 1.

J. W. NETHERY.

PNEUMATIC STRAW STACKER.

No. 517,290. Patented Mar. 27, 1894.

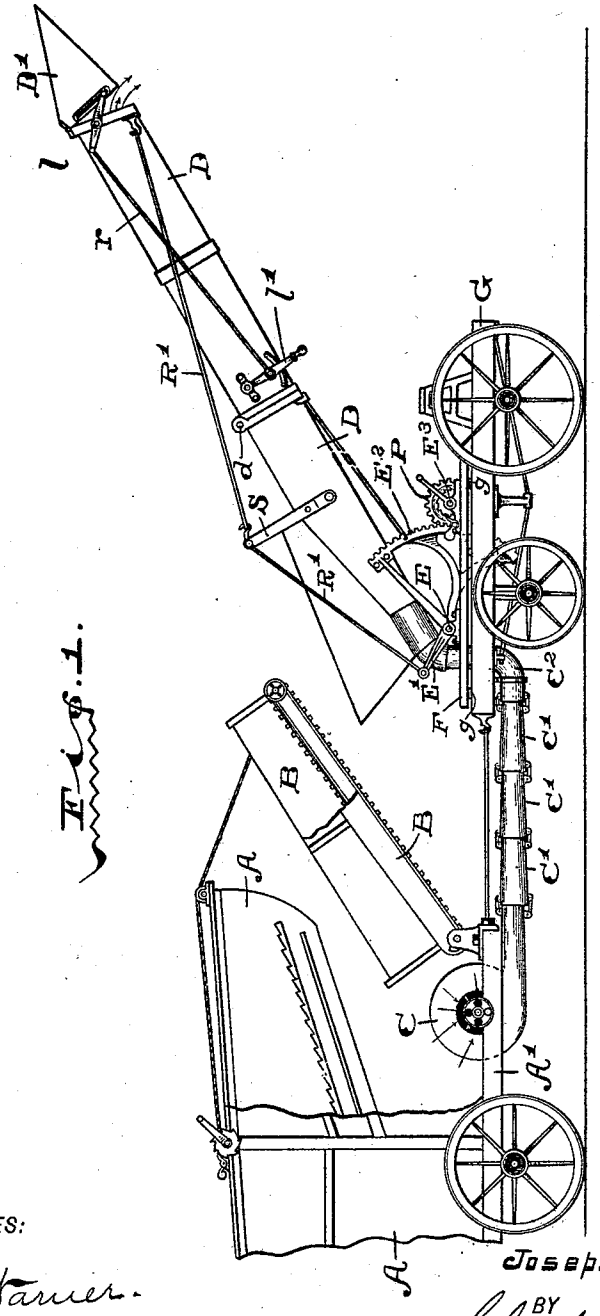


Fig. 1.

WITNESSES:

F. W. Warner.

J. A. Walsh.

INVENTOR

Joseph W. Nethery,

BY

Chester Bradford,

ATTORNEY.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

J. W. NETHERY.

PNEUMATIC STRAW STACKER.

No. 517,290. Patented Mar. 27, 1894.

Fig. 2.

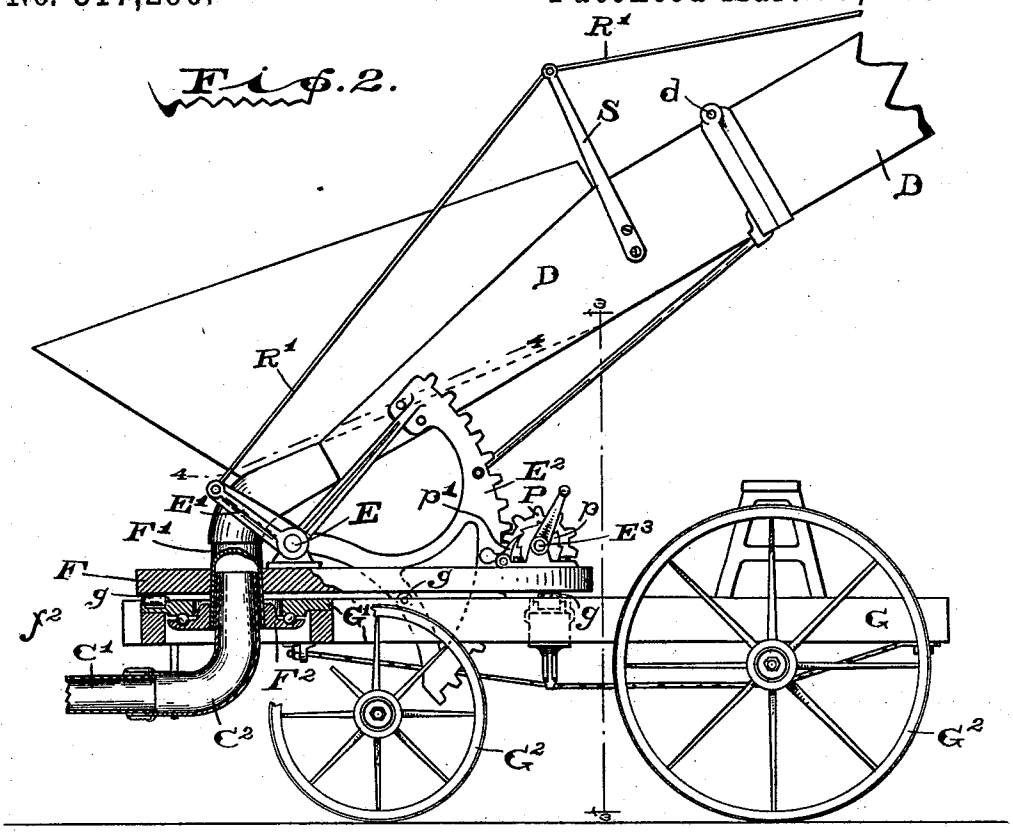


Fig. 3.

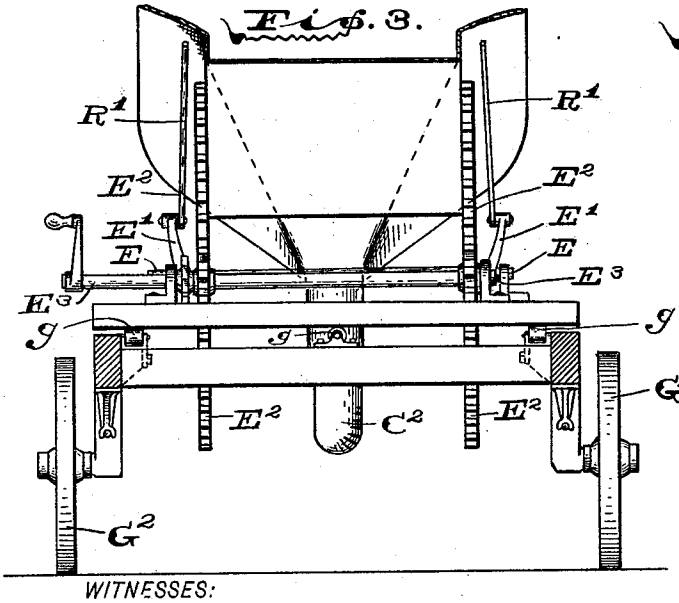
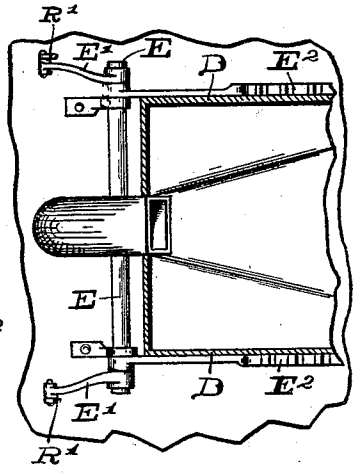


Fig. 4.



WITNESSES:

F. H. Warner.

J. A. Walsh.

INVENTOR

Joseph W. Nethery,

BY

Chester Bradford,

ATTORNEY.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH W. NETHERY, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE INDIANA MANUFACTURING COMPANY, OF SAME PLACE.

PNEUMATIC STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 517,290, dated March 27, 1894.

Application filed July 8, 1893. Serial No. 479,889. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. NETHERY, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Pneumatic Straw Elevators and Stackers, of which the following is a specification.

My said invention consists mainly in such a construction and arrangement of parts in that class of machines known as pneumatic straw elevators and stackers, that, while the fan and operating mechanism are mounted upon the thrashing machine where they can be driven from the usual thrashing machine power, the stacker itself is a separate structure and adapted to be handled and transported separately.

It further consists in certain details of construction incident to this general object.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of the rear end of a thrashing machine with a portion of the side broken away to show interior parts, and of a pneumatic straw elevator and stacker attached thereto embodying my said invention; Fig. 2 a detail view, partially in section and partially in side elevation, of the lower end of the stacker; Fig. 3 a transverse sectional view as seen from the dotted line 3 3 in Fig. 2, and Fig. 4 a detail view on the dotted line 4 4 in Fig. 3.

In said drawings the portions marked A represent the casing and frame-work of the thrashing machine; B an intermediate straw carrier between the thrashing machine and straw stacker; C the fan; D the trunk of the straw elevator and stacker; E the rock shaft upon which it is mounted and by which it is elevated and lowered; F the turn-table on which it is mounted, and G the running gear carrying the same.

The thrashing machine A is or may be of any usual or desired construction. Upon its sill A′ the fan C is mounted, as is also the intermediate straw carrier B. These are also, however, of any ordinary or desired construction.

The fan C has a long flexible tube, composed preferably of joints C′, which finally terminates in a curved neck or nozzle C^2, and which leads toward the lower end of the trunk of the straw elevator and stacker, as will be readily understood. The fan being positioned upon the thrashing machine frame, is driven from the thrashing machine mechanism, and is always in line with the other mechanism, irrespective of the position of the straw elevator and stacker, while the latter, being at some distance away and connected to the fan by the flexible tube, can set in such position relative thereto as may be desired, without in any way disturbing the operation of the mechanism. The tube may be made flexible in any desired manner.

The trunk D, generally speaking, is not peculiar to my present invention. It is made in two parts which are hinged together upon the hinge bolt or pivot *d*, and is thus capable of being folded up for packing or transportation. It is provided with a hinged hood or mouth-piece D′, as is usual, which is adapted to be adjusted to a more or less open position by means of the levers *l l′* and link or rod *r* engaging therewith, as shown in Fig. 1, and as will be readily understood.

The rock-shaft E is mounted in suitable bearings upon the turn-table F, and is the bearing whereby the trunk D is supported, and upon which it rocks when it is raised and lowered. Arms E′ extend out therefrom, and the outer end of said trunk D is supported by rods R′ and R^2 running from these arms E′, to the outer end of the trunk, over and supported by a strut S. Segments E^2 are also rigidly secured to said shaft, and preferably also to the sides of the trunk D, as shown, and said segments are toothed and operate by pinions P on a shaft E^3, which shaft is also mounted in the bearings on the turn-table F. A ratchet *p* and pawl *p′* serve the usual offices of such devices in connection with these parts. The turn-table F is mounted on anti-friction rollers *g* on the running gear G, and is adapted to revolve about the nozzle C^2 of the pipe leading from the fan, as shown most plainly in Fig. 2. An intermediate section of pipe F′ is secured to said turn-table and extends both down over the nozzle C^2 of the fan pipe, and up into the base or extreme lower point of the trunk D. This pipe section is not only firmly secured to the turn

table, but is also provided with a head F^2 firmly secured thereto, which extends below the center piece G′ of the frame of the running gear, and between these two parts F^2 and G′ are interposed balls f^2 or anti-friction rollers. The pipe F′ and its head F^2 thus serve as a means whereby the turn-table is held down onto the running gear, and prevented from tipping, notwithstanding that it may be overbalanced by the weight of the trunk thereon. Said intermediate pipe F′, therefore, acts as a connecting bolt or pivot between the turn-table and running gear, as well as a connection between the neck or nozzle of the fan-pipe and the base of the trunk or chute.

The running gear G consists of a frame-work mounted on wheels G^2, and may be of any suitable construction. It bears anti-friction rollers *g* upon which the turn-table F directly rests, and is, as before stated, provided with a center piece G′ by means of which, and an intermediate pipe F′ and its head, said turn-table is united thereto.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a thrashing machine, a blast fan mounted thereon, a straw elevator and stacker mounted on separate running gear, and a flexible pipe or tube running from said fan to said straw elevator and stacker, substantially as and for the purposes set forth.

2. The combination of a thrashing machine, a fan mounted on the frame-work of said thrashing machine, an intermediate straw carrier also mounted on the frame-work of the thrashing machine, and a straw elevator and stacker mounted on a separate frame-work, a separate pipe or tube running from the fan to the trunk or chute of the stacker, and a hopper mounted on said trunk or chute and positioned below the discharging end of the intermediate straw stacker, substantially as shown and described.

3. The combination, in a pneumatic straw elevator and stacker, of a frame-work, a turn-table mounted thereon, a trunk or chute mounted on said turn-table, a fan pipe or tube running from a fan to the lower end of said trunk or chute, an intermediate pipe or tube immediately connecting the nozzle of the fan pipe with the trunk or chute, and connected firmly to the turn-table, and provided with a head engaging with the frame-work on which the straw stacker structure is mounted, substantially as shown and described.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 1st day of July, A. D. 1893.

JOSEPH W. NETHERY. [L. S.]

Witnesses:
CHESTER BRADFORD,
JAMES A. WALSH.