No. 633,383. Patented Sept. 19, 1899.

# G. W. KRAMER.

## PNEUMATIC STRAW STACKER.

(Application filed Feb. 27, 1899.)

(No Model.)

Fig. 1.

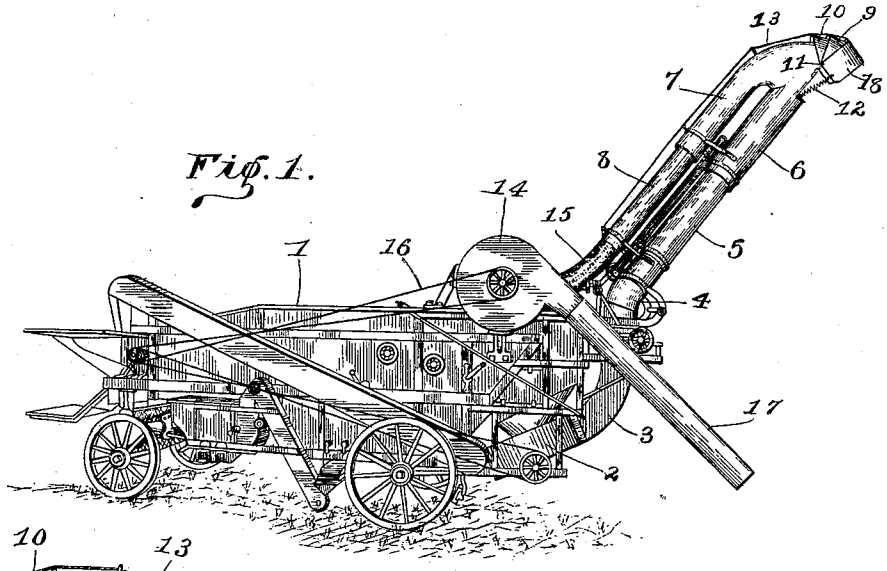



Fig. 2.

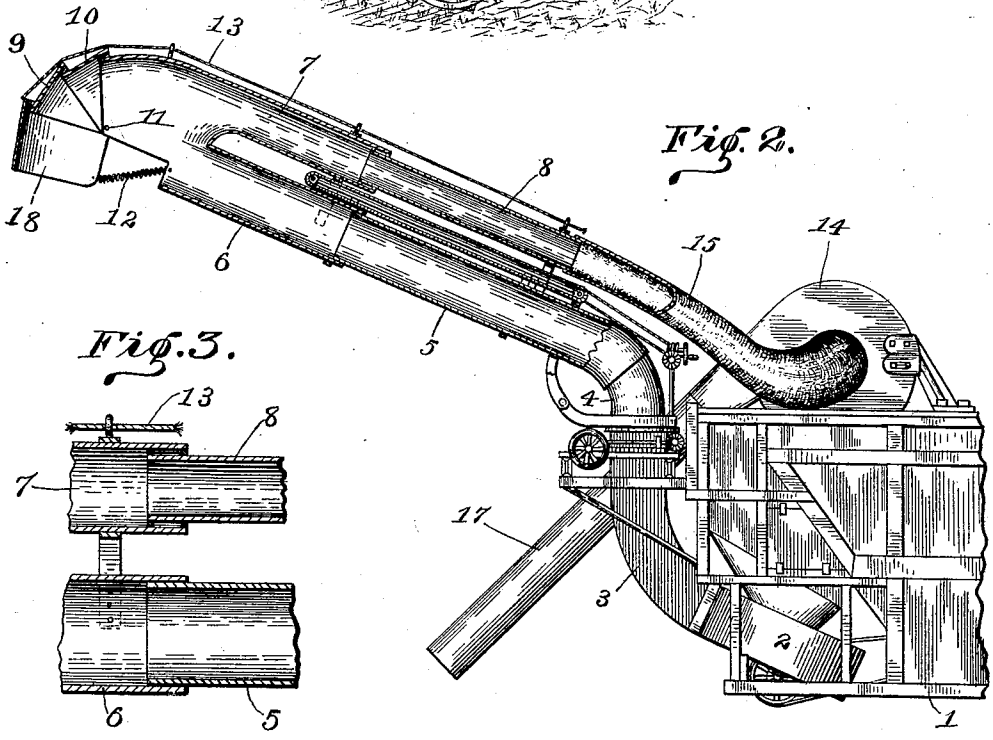



Fig. 3.




WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE W. KRAMER, OF PEORIA, ILLINOIS, ASSIGNOR TO THE INDIANA MANUFACTURING COMPANY, OF INDIANAPOLIS, INDIANA.

## PNEUMATIC STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 633,383, dated September 19, 1899.

Application filed February 27, 1899. Serial No. 707,046. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. KRAMER, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Pneumatic Straw-Stackers, of which the following is a specification.

One object of my present invention is to provide a means by which the dust and chaff may be separated from the straw in the operation of a pneumatic stacker.

A further object is to take off a part of the pressure from the straw at or just before the point of delivery, so that it will be thrown out onto the straw-stack with less force when this is desired.

Said invention consists in the use of a suction-fan connected to the trunk or chute of the pneumatic straw-stacker at a suitable point at or near its outer end and provided with a discharge orifice or conduit by which the dust and chaff may be delivered at some other point, as may be desired.

A machine embodying my said invention will be first fully described, and the novel features thereof then pointed out in the claim.

Referring to the accompanying drawings, which are made a part hereof and on which similar numerals of reference indicate similar parts, Figure 1 is a perspective view of a threshing-machine having a pneumatic straw-stacker provided with my present invention; Fig. 2, a view, partly in side elevation and partly in central section, of a pneumatic straw-stacker and the attachment thereto embodying my present invention, together with a fragment of the separator upon which the same is mounted; and Fig. 3, a detail sectional view, on an enlarged scale, similar to a portion of Fig. 2.

The threshing-machine or separator 1 and the pneumatic straw-stacker, including the fan-housing 2 and the fan therein, the conduit 3, leading from said fan-housing, the neck 4, and the telescopic sections of the trunk or chute 5 and 6, together with the means for operating the same, are or may be, generally speaking, similar to the corresponding portions of a machine of an ordinary and well-known form and will not, therefore, be further described herein, except incidentally in describing the invention.

Connected to the portions 5 and 6 are the suction-tubes 7 and 8, which are correspondingly telescopic, as shown. The hood to the pneumatic straw-stacker, instead of being attached wholly to the section 6, as is usual, is widened out and comprehends and covers the ends of both the sections 6 and 7. Said hood may be of any ordinary or desired construction. It is shown as composed of the pivoted sections 18, 9, and 10, united by a pivot 11 and normally held downwardly by a spring 12 and adapted to be raised upwardly by a cord or rope 13. A fan 14 is mounted at some suitable place on the separator 1, and the eye thereof is connected to the lower end of the telescopic part 8 by a flexible tube 15. The fan-housing 14 contains an ordinary suction-fan, as will be readily understood, and this is driven by a belt 16 from some suitable point on the machine. The fan-housing 14 preferably has a delivery-tube 17, which generally leads down to the bottom of the straw-stack, where the dust and chaff, separated from the straw by means of my invention, are deposited in a pile by themselves.

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

The combination, with a pneumatic straw-stacker, of a supplemental exhaust-fan, and a tube leading from the eye of said fan to and connected with the trunk or chute of the straw-stacker, whereby a portion of the air driven through said trunk or chute may together with the dust and chaff intermingled therewith be drawn back and discharged at a separate point, while the straw is thrown out onto the stack in the ordinary manner, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Peoria, Illinois, this 23d day of February, A. D. 1899.

GEORGE W. KRAMER. [L. S.]

Witnesses:

B. E. GAYMAN,

J. K. NICKERSON.