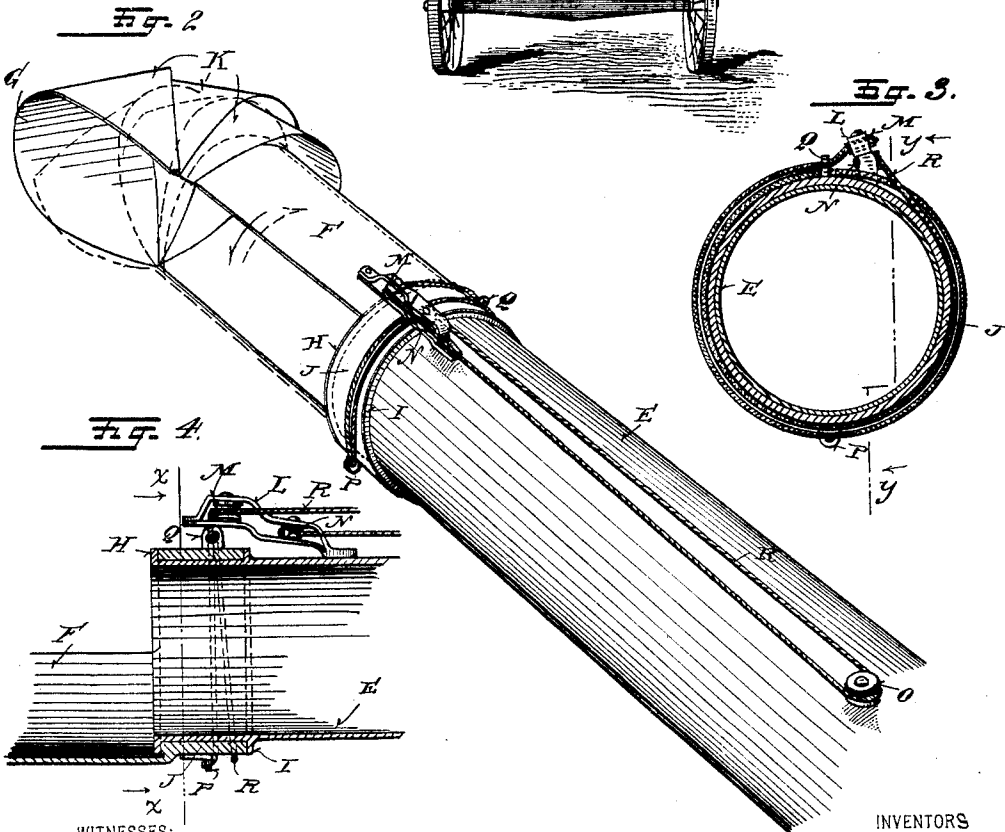
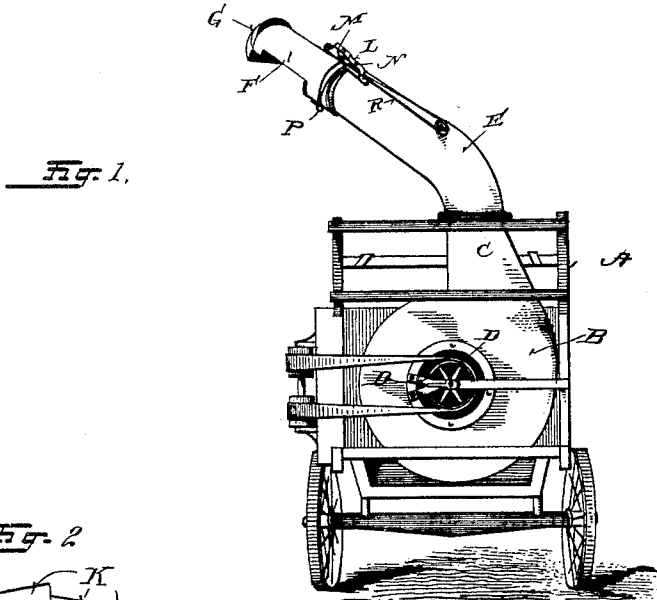


(No Model.)

E. HUBER & J. W. MILLER.
PNEUMATIC STRAW STACKER.

No. 586,728.

Patented July 20, 1897.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD HUBER AND JACOB W. MILLER, OF MARION, OHIO.

PNEUMATIC STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 586,728, dated July 20, 1897.

Application filed June 24, 1896. Serial No. 596,719. (No model.)

To all whom it may concern:

Be it known that we, EDWARD HUBER and JACOB W. MILLER, citizens of the United States, residing at Marion, in the county of Marion and State of Ohio, have invented certain new and useful Improvements in Pneumatic Straw-Stackers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has reference to an improved straw-stacker used, preferably, in connection with threshing-machines in which the straw is elevated in any approved manner either by a simple blast-fan or by the aid of a blast-fan and additional apparatus, said straw being discharged through pneumatic pipes which extend above the thresher. More particularly, however, the invention refers to a revoluble discharging-head combined with the delivery-pipe and mechanism for revolving said head into various desired positions for the purpose of discharging the straw in many directions in stacking it.

To this end the invention consists in the novel construction, arrangement, and combination of the various parts, all as more fully hereinafter described, and set forth in the drawings, in which—

Figure 1 is an end elevation of a threshing-machine embodying our improved stacker. Fig. 2 is an enlarged detached perspective view of the straw-stacker, showing the peculiar construction of the head. Fig. 3 is a cross-section on line *xx*, Fig. 4, illustrating the rotating devices for moving the head in various positions; and Fig. 4 is a vertical section taken on line *yy*, Fig. 3, further illustrating the actuating devices.

In the letters of reference, A represents a threshing-machine of any approved type, at the rear end of which is located the usual discharger-casing B, terminating at the top in the neck C. The casing is provided upon its interior with any suitable means for discharging the straw, such as a blast-fan, operated by means of the belted drive-pulley D, as plainly illustrated in Fig. 1.

Upon the neck C, secured to the same in such manner as to admit of rotation, is the delivery-pipe E. This pipe in turn is provided at its free end with a semicircular deflector-casing F, terminating in a hood G, ca-

pable of properly controlling and directing the discharge of the straw. This hood and casing, together with the connection with the delivery-pipe, constitute the revoluble discharging-head.

Upon the free end of the delivery-pipe is arranged the circular flange H. I is a similar flange arranged a short distance below the flange H, and J is a ring or collar secured between the two flanges and adapted to be rotated by suitable actuating devices, the flange I acting as the principal bearing for said collar. Stationarily secured to the collar J is the deflector-casing F, before referred to, adapted to rotate with the collar and provided at its end with a series of overlapping segments K, the lower segment being secured to the casing and the series forming the hood or cap in which the casing terminates. The head of the stacker thus formed is capable of any desired amount of rotation, thereby enabling the operator to change the direction of the delivery of the straw at will and with but little trouble.

The actuating means for rotating the head consist of the following instrumentalities:

L is a slotted arm one end of which is fixedly secured to the delivery-pipe E below the collar J, the free end of which extends upwardly and opposite said collar. Within the slotted arm thus described are pivotally secured, one above the other, two sheaves M and N, preferably for rope and cord. Some distance below the arm and in alinement with the same is secured a similar sheave O.

P and Q are apertured lugs secured, respectively, to the casing and collar J, preferably diametrically opposite.

R is a cord fixedly secured at one end to the lug P. This cord is adapted to pass from the lug once around the casing and collar, passing freely through the apertured lug Q, which acts as a support for the same, then over the lower sheave N to the sheave O, returning from the latter over the upper sheave M. Passing then from said sheave it is wound a second time around the casing and collar, passing loosely, as before, through the lug Q, and is returned and fixedly secured to the lug P. By this construction of actuating mechanism the operator is enabled by pulling on either side of the cord R as it passes over the

sheave O to rotate the head of the stacker into the position desired.

As it is obvious that other actuating devices may be employed than the type illustrated in the drawings without departing from the spirit of our invention we do not limit ourselves to the specific construction shown, although we consider it the preferable type.

In order that the parts may be operated freely and undue friction avoided, the slotted arm is bent or twisted at a point midway between the two sheaves, allowing the rope to pass over the middle of each of the said sheaves; also, the apertured lug Q is adapted to extend outwardly some distance from the collar to form a stop for the revoluble head, thereby preventing the ropes from being chafed or cut by the negligence of the operator in turning the head too far.

It will be seen that by thus constructing our improved stacker the usual deflector-pipe is dispensed with, and in the place of the same is provided a revoluble head which is capable of being revolved into such position as may be desired to discharge the straw properly.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a straw-stacker of the kind described, the combination with the discharging-casing, of a delivery-pipe connected therewith, a head consisting of a deflector-casing and a hood and revolubly mounted on the free end of the delivery-pipe, said deflector-casing being open along one of its sides and said hood being over the open end of said deflector-casing and itself open in line with the open side of said deflector-casing, sheaves mounted on said delivery-pipe near said deflector-casing, and a continuous cord connected to said deflector-casing, with one branch running in one direction on the deflector-casing and over one sheave, and the other branch running in the other direction on the deflector-casing

and over the other sheave, and thence both branches running to near the rear end of said delivery-pipe.

2. In a straw-stacker of the kind described, the combination with a delivery-pipe, of a head consisting of a deflector-casing and a hood revolubly mounted on the free end of said delivery-pipe, said deflector-casing being open along one of its sides, and said hood being over the open end of said deflector-casing and itself open in line with the open side of the deflector-casing so as to discharge in line with said open side.

3. In a straw-stacker of the kind described, the combination with the discharger-casing, of a delivery-pipe connected therewith, a revoluble head arranged upon the free end of the delivery-pipe, a standard secured to the pipe in proximity to the head, comprising a slotted arm, sheaves pivotally secured within said arm, and a sheave below the same, an extension or lug upon the revoluble head, and a continuous cord adapted to engage the lug and sheaves, substantially as and for the purpose set forth.

4. In a straw-stacker of the kind described, the combination with the discharger-casing, of a delivery-pipe connected therewith, a revoluble head arranged upon the free end of the delivery-pipe, a slotted arm secured to said pipe, said arm being twisted as and for the purpose described, sheaves pivotally secured within the arm, and a sheave below the same, a lug upon the revoluble head, and a continuous cord adapted to engage the lug and sheaves, substantially as and in the manner set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

EDWARD HUBER.
JACOB W. MILLER.

Witnesses:

JOHN J. CRAWLEY,
JOHN A. SCHROETER.