

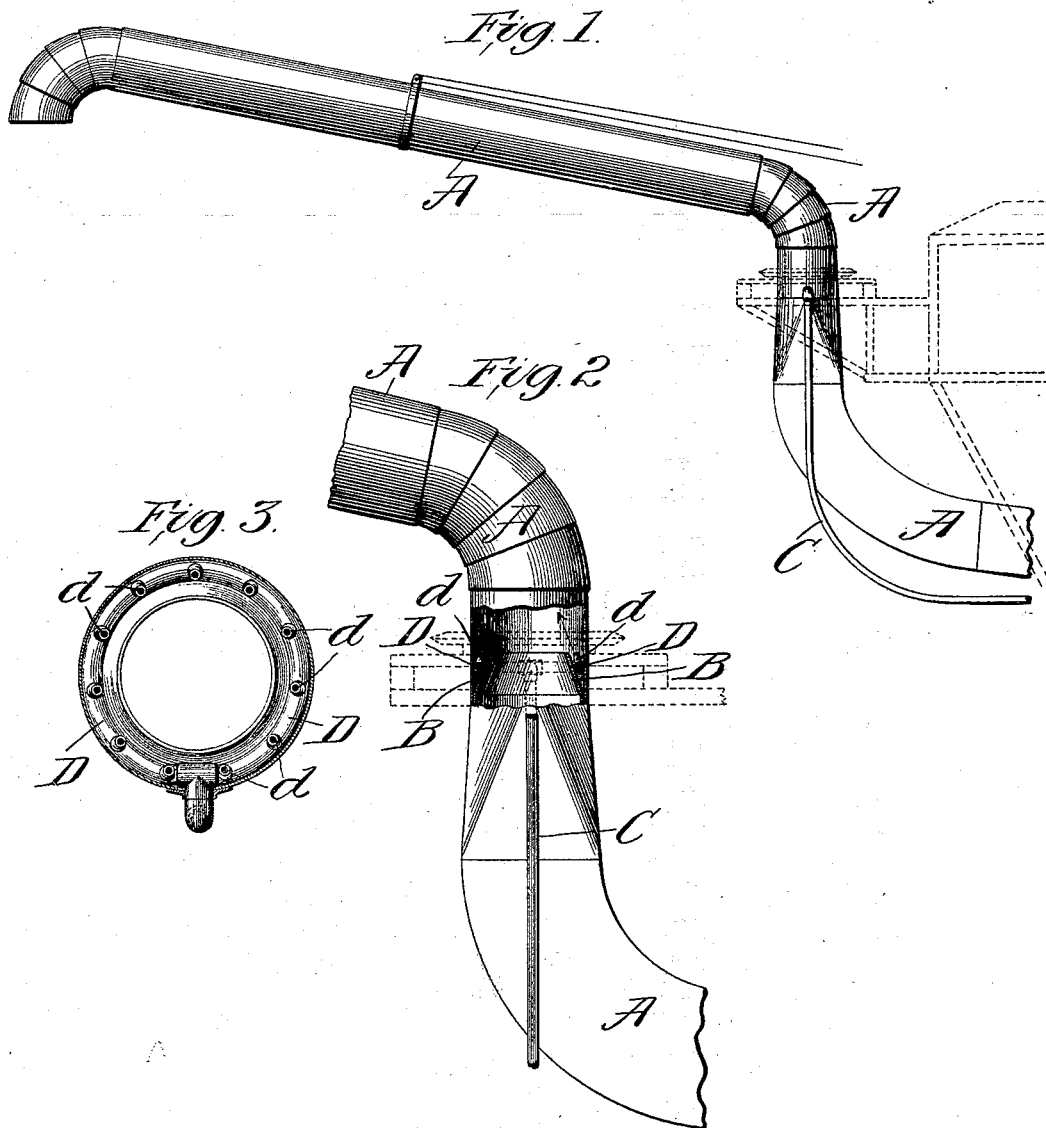
No. 648,412.

Patented May 1, 1900.

A. JEANS.
STRAW STACKER.

(Application filed June 12, 1899.)

(No Model.)



Attest:
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UNITED STATES PATENT OFFICE.

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STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 648,412, dated May 1, 1900.

Application filed June 12, 1899. Serial No. 720,186. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR JEANS, a citizen of the United States, residing at Turpin, county of Pike, State of Missouri, have invented a certain new and useful Improvement in Straw-Stackers, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevational view of my improved stacking apparatus, showing its relation to a threshing-machine. Fig. 2 is an enlarged detail-view, partly in section, showing my apparatus in position in the stacker conduit-pipe. Fig. 3 is an enlarged cross-sectional view through the conduit-pipe.

This invention relates to a new and useful improvement in straw-stackers designed for use in connection with threshing-machines or analogous devices, in which after the grain is threshed from the straw the straw is diverted into a conduit pipe or chute, where it is either conveyed by an endless belt or forced by an air-blast to a desired point of delivery, which is so arranged as to be moved from place to place to distribute the straw over a given area and at different heights.

The object of my invention is to arrange a pipe provided with a nozzle or nozzles so disposed in the conduit-pipe that they will create a suction to draw the straw or chaff into the pipe, after which the straw or chaff will be impelled onwardly through said pipe. The motive fluid used is preferably steam, either taken from the exhaust side of the engine or from the steam-dome, as desired.

In the drawings, A indicates the pipe or conduit of the straw-stacker, which may be of any usual construction, but which is preferably provided with flexible joints, whereby the delivery end may be swung from side to side or raised and lowered as desired. Located in this pipe, preferably a short distance beyond the point where the straw is received into the pipe, is a deflector B, consisting of a ring-plate, tapering throughout part of its length, whose function is to prevent the straw or chaff from lodging thereunder and also to contract said straw or chaff at a

certain point in its passage through the pipe in order to prevent back pressure and at the same time enable the blasts emitted from the nozzles to have as great an effect on the material to be impelled forward as possible.

C indicates the steam-pipe, leading from the exhaust side of the engine or from the steam-dome, as desired, said pipe entering the stacker-pipe A, preferably at a point above the junction of the deflector-plate B therewith. Pipe C connects with a circular pipe D, which is arranged in the annular V-shaped recess formed by the deflector B and the pipe A. This recess is open at its top, and nipples *d*, arranged around the upper face of the pipe D, point through this opening, said nipples being also arranged at such an angle that their emitted blasts are directed toward the center of the pipe A some distance above the deflector B.

The operation of the device is as follows: Steam being admitted into the pipe D will be discharged into the pipe A through the circular or converging nozzles or nipples *d* in a direction toward the discharge end of the stacker-pipe A. The action of this blast, or, rather, these numerous blasts, is to create a suction behind the same, which suction or enforced circulation is utilized to draw the straw up into the gradually-contracted suction of pipe A, beyond which point the nozzles, acting on the straw or chaff equally on all sides, will force the same onwardly beyond said contracted portion and outwardly through the discharge-mouth of the stack. The deflector B, in addition to serving to contract or concentrate the material at this point, also prevents the material from lodging against the under side of the nozzles, which would result in the choking of the stacker.

I am aware that minor changes in the arrangement, construction, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

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

1. The combination with a stacker-pipe, of a deflector arranged therein forming a contracted portion, and a series of nozzles be-

tween said deflector and said pipe for directing blasts beyond the open end of the deflector; substantially as described.

2. The combination with a stacker-pipe, of
5 a deflector arranged therein forming a contracted portion, and a series of nozzles arranged around said deflector; substantially as described.

3. The combination with a straw-stacker,
10 of a deflector B arranged therein, a steam-pipe C entering the stacker-pipe, a circular

pipe D to which said steam-pipe is connected, said pipe D surrounding the deflector B, and a series of nozzles arranged around the pipe D; substantially as described.

In testimony whereof I hereunto affix my
signature, in the presence of two witnesses,
this 7th day of June, 1899.

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ARTHUR JEANS.

Witnesses:

LESLIE EDWARDS,

WM. HOMER CLIFFORD.