No. 751,573. PATENTED FEB. 9, 1904.

J. F. TEMPLETON.

PNEUMATIC STRAW STACKER.

APPLICATION FILED SEPT. 12, 1903.

NO MODEL.

Fig. 1.

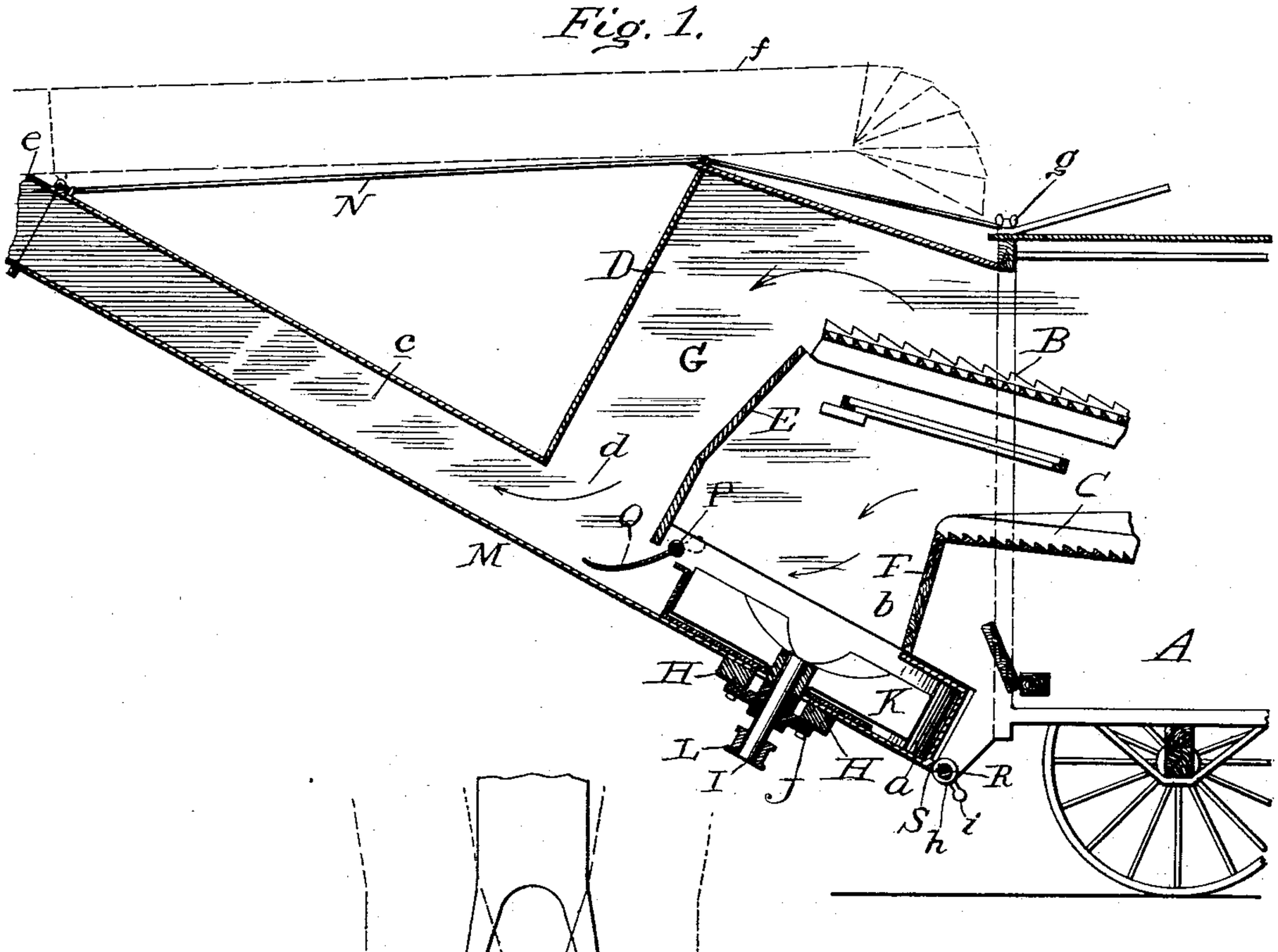
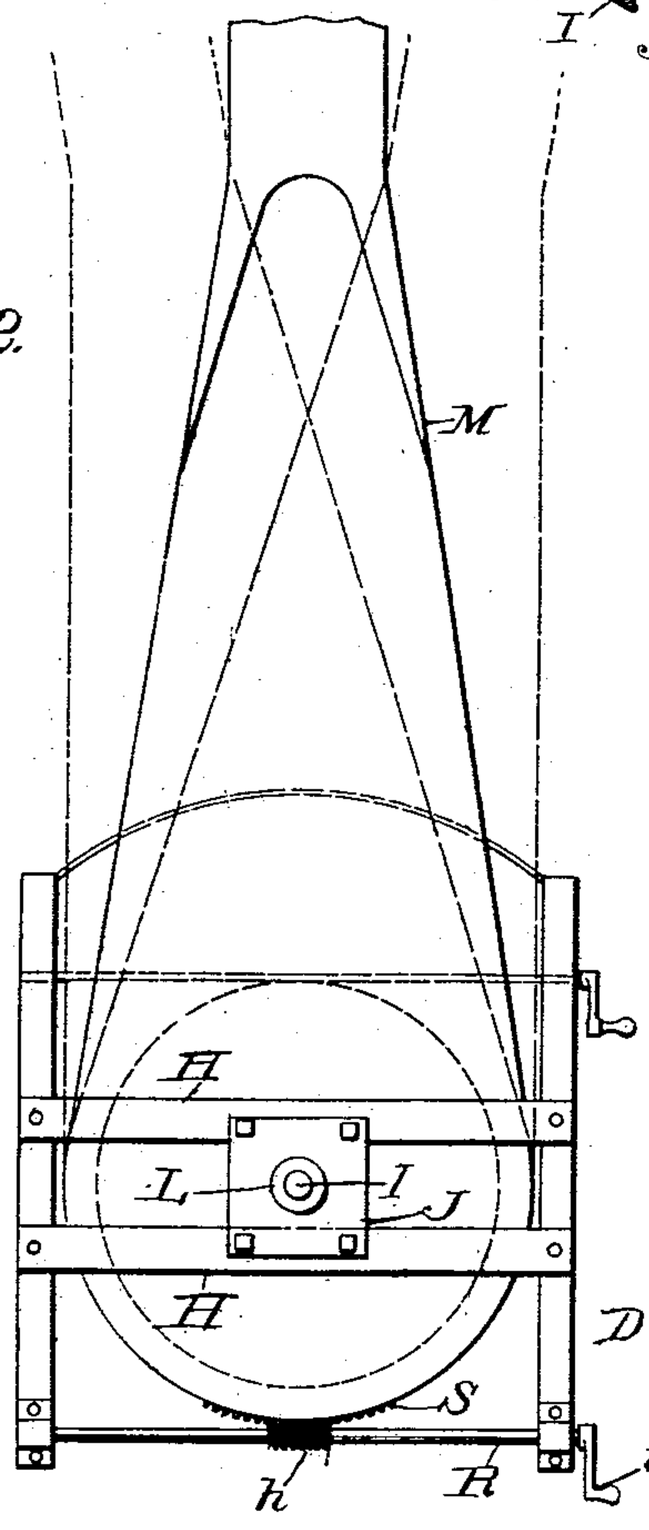


Fig. 2.



Witnesses

N. C. Healy

T. E. Turpin

Inventor

James F. Templeton.

by James J. Sheehy

Attorney

No. 751,573. Patented February 9, 1904.

UNITED STATES PATENT OFFICE.

JAMES F. TEMPLETON, OF WINNIPEG, CANADA.

PNEUMATIC STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 751,573, dated February 9, 1904.

Application filed September 12, 1903. Serial No. 172,953. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. TEMPLETON, a citizen of Canada, residing at Winnipeg, in the Province of Manitoba and Dominion of Canada, have invented new and useful Improvements in Pneumatic Straw-Stackers, of which the following is a specification.

My invention pertains to pneumatic straw-stackers; and it consists in the novel and advantageous construction hereinafter described, and particularly pointed out in the claim appended.

In the accompanying drawings, forming part of this specification, Figure 1 is a longitudinal vertical section of the pneumatic stacker constituting the preferred embodiment of my invention, and Fig. 2 an inverted plan view of the same.

Similar letters designate corresponding parts in both views of the drawings, referring to which—

A is the rear portion of the casing of a threshing-machine. B is a straw-rack arranged in the said casing and extending rearwardly therefrom, and C is a chaffer disposed in the casing below the straw-rack and also extending rearwardly beyond the casing. These parts may be of the ordinary or any other suitable construction without involving a departure from the scope of my invention.

D is the fixed casing of my improved stacker. This casing D is fixedly connected to and disposed in rear of the casing A, so as to receive the rear portions of the rack B and chaffer C, and in it are disposed a transverse apron E, which extends downwardly from a point adjacent to the rear end of the rack B, and a transverse apron F, which extends downwardly from a point adjacent to the rear end of the chaffer C. The apron E serves, in conjunction with the rear wall and side walls of the casing D, to form a straw-chamber G, which is open at its lower end, while the apron F serves to guide chaff from the chaffer C to the blower-fan, presently described.

H H are transverse bars connected to and extending between the lower edges of the side walls of the casing D. J is a bearing-block connected to said bars. I is a shaft bearing in said block J and having fixed to its upper end a blower-fan K and to its lower end a band-pulley L, and M is a transversely-oscillating casing, the lower portion of which is arranged above the cross-bars H and pivotally mounted on the shaft I. The said transversely-oscillating casing comprises a fan-chamber or drum *a*, which is open at its upper side, as indicated by *b*, and arranged to receive from the space between the aprons E and F and a pipe or chute *c*, which extends rearwardly and upwardly from the chamber containing the fan K and has an opening *d* in its upper side in rear of the said fan arranged to receive from the chamber G. In the preferred embodiment of my invention the pipe or chute *c* comprises a lower section fixed with respect to the chamber *a* and an upper hinged section *e*, which latter is adapted when the stacker is not in use to be laid back over the casing D after the manner illustrated by dotted lines in Fig. 1. The said pipe or chute *c* is by preference sustained in the position shown through the medium of a cable N, Fig. 1, which is connected to the lower section of the pipe or chute, passed over a sheave *f* on the casing D, and attached at *g* to the machine-casing A.

P is a transverse shaft journaled in the oscillating casing M and having a crank at one end, and Q is a valve fixed to said shaft and arranged in the casing M in rear of the fan-chamber *a* and designed to enable an attendant to regulate the volume of air forced by the fan through the pipe or chute *c*.

R is a transverse shaft journaled in suitable bearings fixed with respect to the casings A and D and bearing a worm-gear *h* and a handle *i*, and S is a gear on the lower portion of the fan-chamber or drum *a* of the oscillating casing and intermeshed with the worm-gear *h*. It will be readily observed than when it is desired to swing the pipe or chute *c* to the right or left after the manner illustrated by dotted lines in Fig. 2 in order to distribute the straw over the stack it is simply necessary for an attendant to turn the shaft R in the proper direction; also, that through the medium of the said shaft and the gearing described the desired movement of the oscillating casing may be effected with but a minimum amount of effort.

In the practical operation of my improved stacker it will be observed that the chaff will fall from the chaffer C on the fan K, while the straw, because of the apron E, will fall from the rack B into the chute *c* in rear and entirely clear of the fan; also, that both the straw and the chaff will be forced up the chute by the blast from the fan. It will further be observed that because of the chute *c* being straight and directly connected with the fan-chamber *a* and the straw being delivered to the chute separate from the chaff the liability of the chute becoming choked is reduced to a minimum.

Notwithstanding its advantages as pointed out in the foregoing it will be observed that my improved stacker is very simple and compact and therefore does not add materially to the cost and bulk of a threshing-machine.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and relative arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my invention as claimed.

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

In a pneumatic straw-stacker, the combination of a fixed casing, a straw-rack and a chaffer arranged therein, an apron extending downwardly from a point adjacent to the straw-rack, and serving in conjunction with walls of the casing to form a straw-chamber, a shaft journaled in suitable bearings at the bottom of the fixed casing, a transversely-oscillating casing pivoted on said shaft, and comprising a fan-chamber arranged to receive from the chaffer, and carrying a gear, and a chute or pipe extending rearwardly from the fan-casing, and having an opening arranged to receive from the straw-chamber at a point in rear and clear of the fan-chamber, a fan fixed on the shaft, and disposed in the fan-chamber, a valve arranged in the oscillating casing between the fan-chamber and the chute thereof, and a shaft journaled in bearings on the fixed casing, and having a worm-gear intermeshed with the gear on the fan-chamber of the oscillating casing.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES F. TEMPLETON.

Witnesses:

J. T. ROBARTS,

FRED. R. SPROUT.