(No Model.) 2 Sheets—Sheet 1.

A. H. SEEBECK.

STRAW STACKER.

No. 492,113. Patented Feb. 21, 1893.

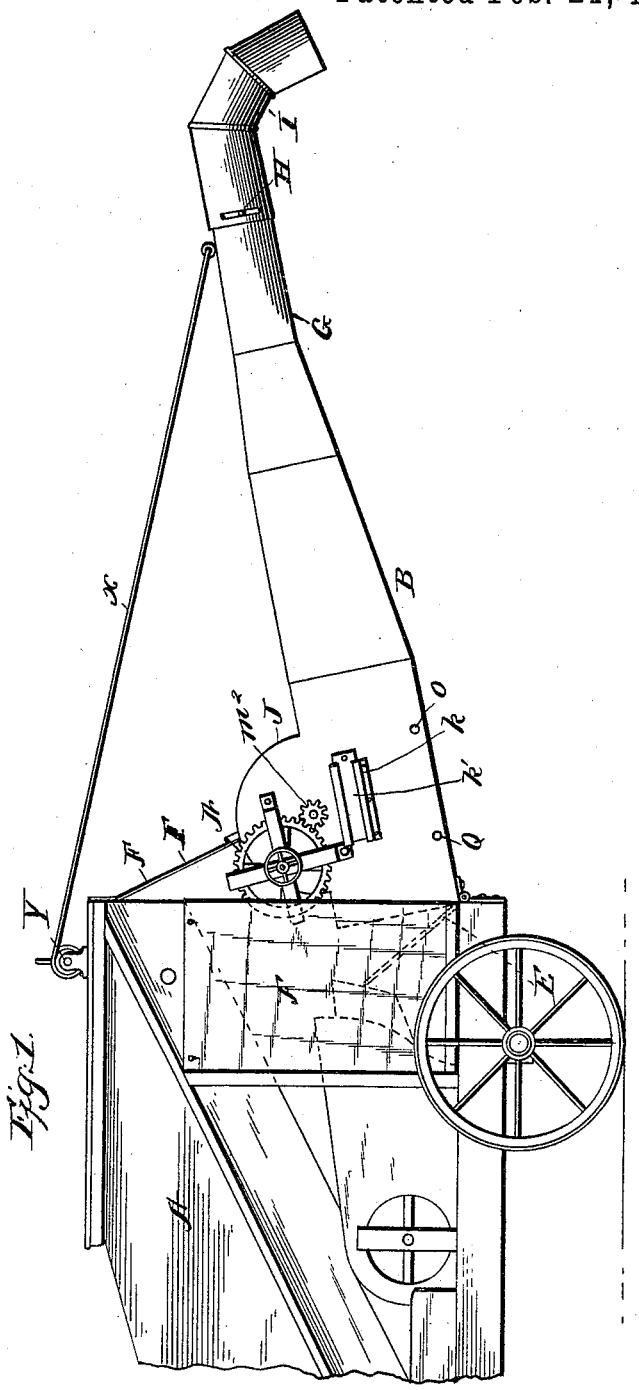

Fig. 1.

Witnesses

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(No Model.) 2 Sheets—Sheet 2.

A. H. SEEBECK.

STRAW STACKER.

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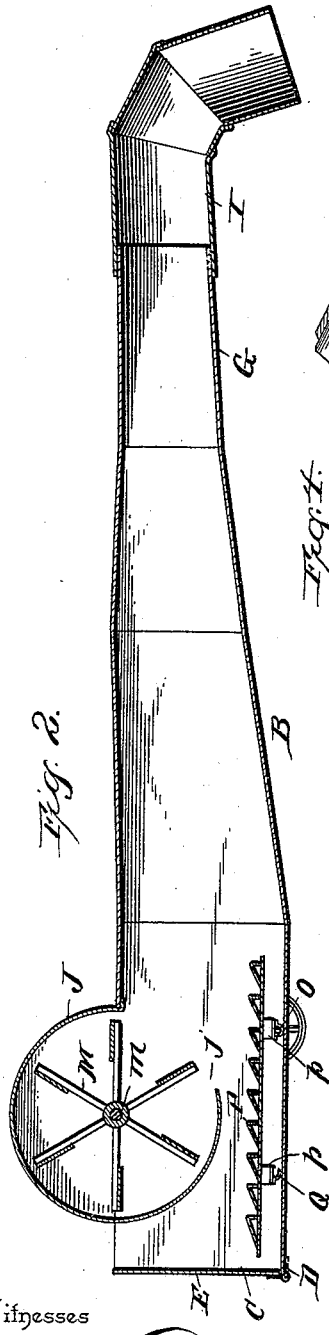

Fig. 2.

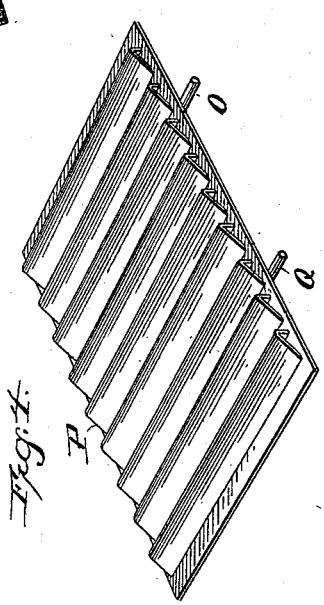

Fig. 4.

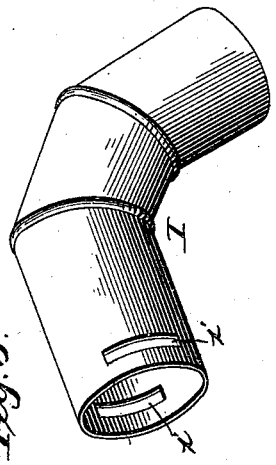

Fig. 5.

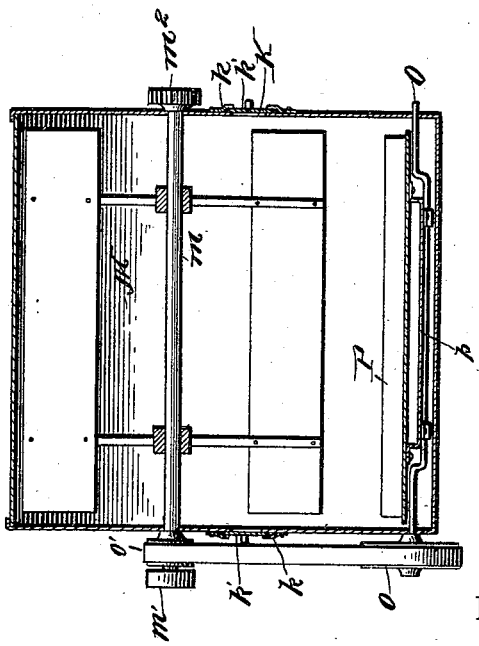

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

AUGUST H. SEEBECK, OF NORTH REDWOOD, MINNESOTA.

STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 492,113, dated February 21, 1893.

Application filed May 3, 1892. Serial No. 431,699. (No model.)

To all whom it may concern:

Be it known that I, AUGUST H. SEEBECK, a citizen of the United States, residing at North Redwood, in the county of Redwood and State of Minnesota, have invented a new and useful Straw Carrier and Stacker, of which the following is a specification.

This invention relates to straw carriers and blast elevating stackers for use in connection with thrashing machines; and it has for its object to provide an improved carrier and stacker, which, while subserving all the functions of ordinary stackers, at the same time confines the straw and chaff from its point of delivery from the thrasher to its discharge from the carrier and stacker, thereby avoiding the many disadvantages of the wind blowing the chaff and dust around the operators and interfering with the work while at the same time allowing the straw to be blown in all directions by the wind.

To this end it is the main object of this invention to avoid these objectionable features and at the same time to improve and simplify the construction of the straw carrier and stacker.

With these and many other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings;—Figure 1 is a side elevation of a straw carrier and stacker connected with a thrashing machine as contemplated by this invention. Fig. 2 is a vertical longitudinal sectional view of the carrier and stacker. Fig. 3 is a vertical transverse sectional view through the fan casing. Fig. 4 is a detail in perspective of the elevating shaker. Fig. 5 is a similar view of the adjustable discharging neck or spout.

Referring to the accompanying drawings;—A represents a thrashing machine of ordinary construction, to the delivering end of which is attached the improved tubular straw carrier and stacker B which receives the straw and chaff from the thrasher and carries and discharges the same at any point of elevation desired. The said carrier and stacker A is provided with the lower open end C, which is hinged at D to the rear end of the thrashing machine, and under the delivering end thereof, so that the straw and chaff may be directed into the lower open end of the carrier, which is further provided at this point with the drop door E hinged to the said lower end of the carrier, and designed to drop back at an incline within the thrasher when at work, so as to direct the straw, chaff, and dust into the said carrier and stacker, both sides of which are inclosed by the curtains F entirely inclosing the delivering end of the thrasher and the lower open end of the carrier so as to direct the straw, &c., into the carrier and prevent the same from blowing about. From the lower open end C of the carrier and stacker B, the same is extended into an elongated inclosed elevating spout G which is of a sufficient length so as to carry and elevate the straw to the point of stack and it will of course be understood that the said tubular carrying and elevating spout may be either round, square or of any convenient shape and material. The spout is provided at its extreme upper end with the opposite pins H over which work the adjustable nozzle I revolubly mounted over the extreme outer end of the spout and provided with the circular guide slots *i* working over said pins and providing means whereby the said curved nozzle may be turned to either side to discharge the straw freely according to the direction of the wind.

Located at the lower extremity of the discharging spout H is the fan casing J provided with the discharging opening *j* directing the blast up through the carrying and elevating spout, and with the side inlet openings K on each side of which are located the guide strips *k*. The said guide strips *k* receive the regulating slides *k'* which are designed to control the admission of air into the fan casing, to be driven therefrom by the revolving fan M mounted within said casing. The said revolving fan M is mounted upon the fan shaft *m* journaled in opposite sides of the fan casing and provided upon one end with the belt pulley *m'* and upon the opposite end with the pinion m^2. The pinion m^2 is driven by the large gear wheel N suitably journaled at one side of the fan casing and connected with belt pulley or wheel as illustrated, which may be connected by suitable belting with the driving devices of the separator, but it will of

course be readily understood that the belt pulleys described may be supplanted by ordinary sprocket wheels and chains employed in lieu of belts.

Journaled in opposite sides of the tubular straw carrier and stacker, directly under the discharging opening of the fan casing is the horizontal crank shaft O, carrying upon its outer end the belt or sprocket wheel *o* connected by a belt or chain with the wheel *o'* on one end of the fan shaft, and thus imparts a rotary motion to said crank shaft. A flat feeding pan P reciprocates and vibrates within the lower open end of the carrier and stacker up to a point beyond the discharge of the fan casing within the tubular spout, and is provided at its inner end within the casing with a depending bracket *p*, loosely mounted upon the rotating crank shaft O so that the said inner end is raised and lowered and reciprocated by the revolutions of said crank shaft. The outer end of said feeder near the open end of the carrier and stacker is provided with a corresponding depending bracket *p*, which is loosely connected with the swinging or oscillating crank shaft Q, also journaled in opposite sides of the carrier, so as to allow a free reciprocation and vibration of the feeder, said swinging crank shaft Q having the crank portion thereof larger than the crank portion of the rotating shaft O, so that as the crank of the latter shaft makes a complete revolution, the larger crank of the other shaft merely swings through a certain arc of movement and provides for the combined reciprocation and vibration of the pan. The said feeding pan P, which is operated as just described, is provided with a parallel series of transverse angular ribs, as illustrated, which serve to force the straw up to a point beyond the discharge of the fan for the purposes set forth.

It will be readily seen that when the carrier and stacker is connected with the thrashing machine and the reciprocating and vibrating shaker and the fan is in operation, that the straw and chaff dropping from the delivering end of the thrasher on said feeder, will be carried up into the tubular spout of the carrier in front of the blast of the fan, which will then quickly blow the straw chaff, and dust up through the spout and out of the discharging nozzle of the apparatus onto the stack, thereby providing means for rapidly handling the straw, &c., from the thrasher, while at the same time avoiding the many disadvantages and objections to the ordinary straw carriers and stackers.

In order to adjust the elevating spout H to any angle desired from the delivering end of the thrashing machine, I employ an adjusting cord X connected at one end to said spout and at the other end to a winding drum Y, mounted upon the body of the thrashing machine and thus providing means for the desired adjustment of the pitch or incline of said spout.

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

1. In a straw carrier, the combination of a tubular inclosed elevating spout hinged at its lower end to a thrashing machine, and having a blast fan and a drop door hinged at the lower end of said spout and adapted to drop at an incline within the thrasher to direct the straw, &c., into the spout, substantially as set forth.

2. In a straw carrier, the combination with a tubular spout, the fan casing located in the lower end of said spout and discharging into the same, and the fan; of a reciprocating and vibrating ribbed feeder pan arranged directly under the fan casing within said spout and working beyond the discharge of said fan casing, substantially as set forth.

3. In a straw carrier, a tubular inclined spout arranged under the delivering end of the thrasher, a fan located in the lower end of said spout, a rotating crank shaft journaled in the sides of said spout in front of the fan and below the same, a larger swinging crank shaft journaled in the sides of said spout below and in rear of said fan and a reciprocating and vibrating feeder pan having transverse angular ribs and depending brackets near each end thereof loosely connected with said rotating and swinging crank shafts respectively, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

AUGUST H. SEEBECK.

Witnesses:
E. D. FRENCH,
M. H. JONES.