2 Sheets--Sheet 1.

G. GENTZEL.

Straw-Carrier for Thrashing-Machines.

No. 162,545. Patented April 27, 1875.

Fig. 1.

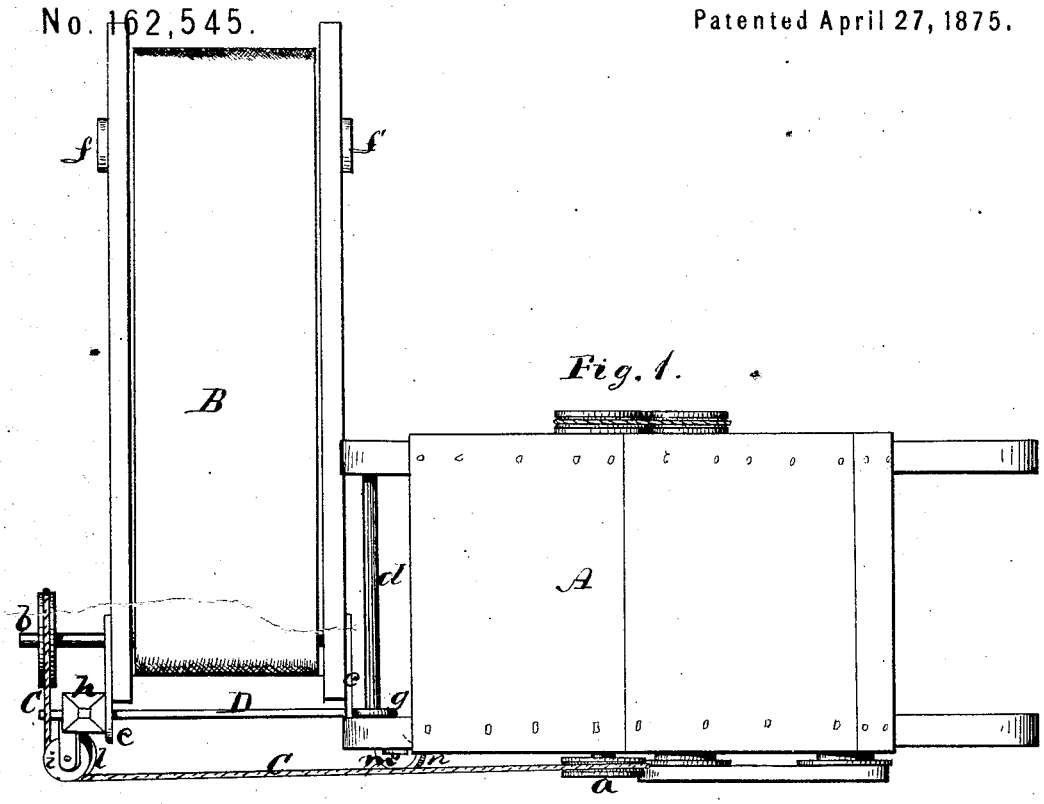
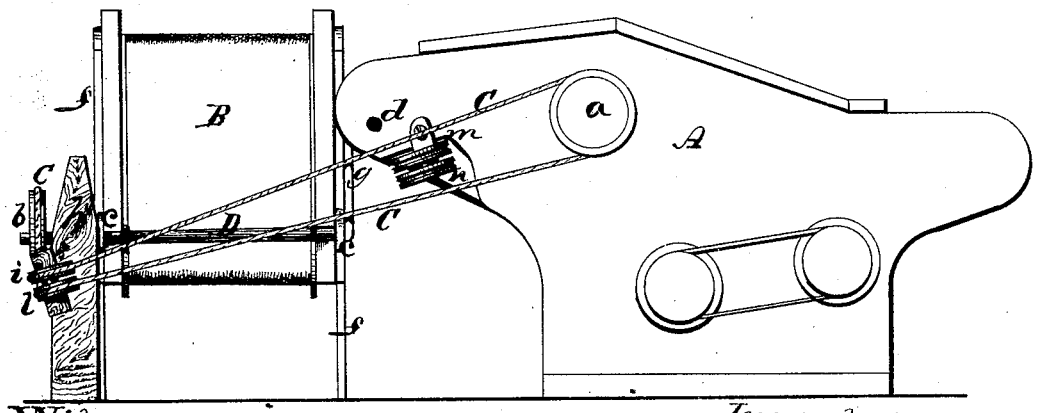


Fig. 2.



Witnesses,
R. D. Smith
C. Clarence Poole

Inventor,
George Gentzel,
By his Atty.
J. T. Brown.

2 Sheets--Sheet 2.

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Fig. 3.

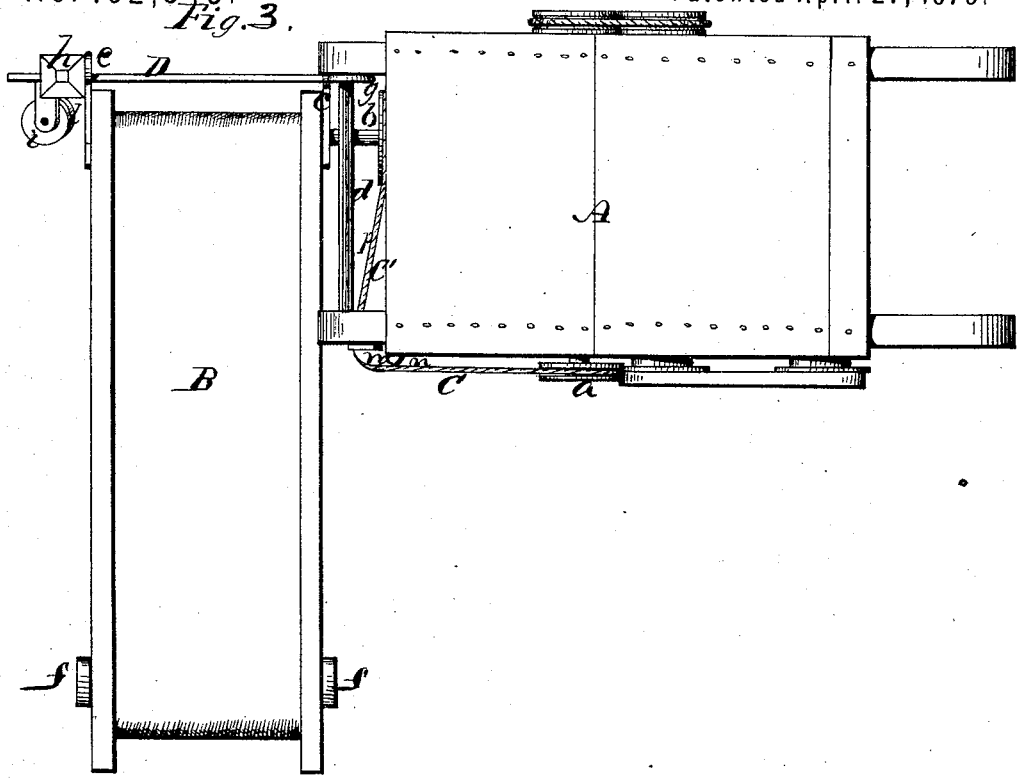
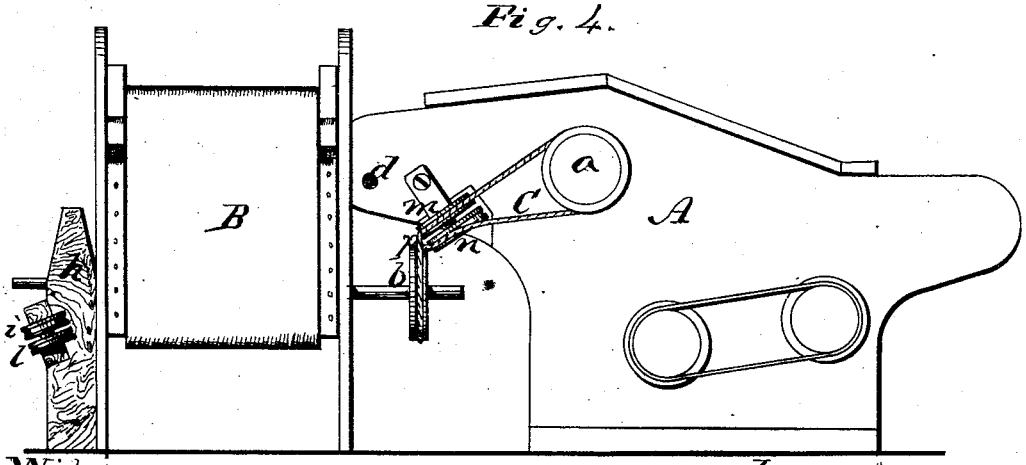


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE GENTZEL, OF SPRING MILLS, PENNSYLVANIA.

IMPROVEMENT IN STRAW-CARRIERS FOR THRASHING-MACHINES.

Specification forming part of Letters Patent No. **162,545**, dated April 27, 1875; application filed July 23, 1874.

To all whom it may concern:

Be it known that I, GEORGE GENTZEL, of Spring Mills, in the county of Centre and State of Pennsylvania, have invented an Improved Straw-Carrier for Thrashing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings making part of this specification—

Figure 1 being a top view of my improved straw-carrier arranged in connection with a thrashing-machine, so as to deliver the straw to the right from the thrashing-machine; Fig. 2, a side elevation of the same; Fig. 3, a top view of the straw-carrier and thrashing-machine, the carrier being arranged to convey the straw to the left from the thrashing-machine; Fig. 4, a side elevation of the same.

Like letters designate corresponding parts in all of the figures.

The nature of my invention consists in the construction and arrangement of a straw-carrier in connection with a thrashing-machine, in the manner hereinafter described, so as to take the straw coming from the machine and carry it either to the right or the left from the machine, as well as straightforward therefrom, as may be desired.

In the drawings, let A represent a thrashing-machine of any usual or desired construction, and B a straw-carrier. This carrier is represented as an endless-apron carrier, though I do not limit my invention to that, or any particular kind of carrier.

The power for driving the carrier B is communicated from the thrashing-machine from a suitable revolving shaft of the machine—the shaker-shaft, as shown in the drawings. From a pulley, *a*, on this shaft a driving belt or cord, C, extends to a pulley, *b*, on the driving-shaft of the carrier. This belt or cord, for the direct or usual arrangement of the carrier, extends directly from the pulley *a* to the pulley *b*. The receiving end of the carrier is provided with two sustaining-hooks, *c c*, for supporting that end of the same by hooking over a rod or bar. In the direct arrangement of the carrier these hooks are hooked over a horizontal cross-rod, *d*, mounted in the rear end of the thrashing-machine. The rear or delivery end of the straw-carrier is supported by legs *f f*, or by any other support that may be convenient where it is located.

For supporting the receiving end of the carrier when it is arranged to deliver the straw to the right from the thrashing-machine, either at right angles or obliquely to the longitudinal direction of the machine, I employ as a suitable means a movable rod or bar, D, provided, at one end, with a hook, *g*, on an upward extension of the rod, to hook over the cross-rod *d* of the machine, as represented in Figs. 1 and 2, and, at the other end, provided with a leg or support, *h*, of the proper length to hold the rod D in a horizontal position. Over this rod D thus arranged, the hooks *c c* of the carrier are hooked, the other end of the carrier being supported as above specified. In this arrangement of the carrier, Figs. 1 and 2, the belt or cord C has to change direction in its passage between the pulleys *a* and *b*, and to effect this two loose pulleys, *i* and *l*, are mounted on the leg *h* of the movable rod D, around which the forward and return parts of the belt or cord travel, respectively, as represented. For the arrangement of the carrier to convey the straw to the left, as in Figs. 3 and 4, the same movable rod D, with its leg or support *h*, is used, as shown, the hook *g* thereof also hooking on the cross-rod *d* of the thrashing-machine, in the manner represented; and the rear end of the carrier is supported as before described. In this case, also, the belt or cord C changes direction; and since the driving-pulley *b* is here brought near to the thrashing-machine, while the loose pulleys on the leg *h* are on the other side of the carrier, another pair of loose friction-pulleys, *m n*, are employed, being mounted on the side of the thrashing-machine, in proper position for the belt or cord to pass around to change direction. The belt or cord, in this case, is required to cross itself, as at *p*, in order to run the carrier-apron in the right direction.

The belt or cord C is required to be varied in length for the three different positions of the straw-carrier.

Three different ones may be conveniently employed, each precisely adjusted in length to the requirement of each respective arrangement of the carrier.

What I claim as my invention, and desire to secure by Letters Patent, is—

The movable supporting-rod D, provided with the hook *g* and leg or support *h*, in combination with the straw-carrier B and thrashing-machine A, substantially as and for the purpose herein specified.

GEORGE GENTZEL.

Witnesses:
D. F. LUSE,
JOHN BOOZER.