(No Model.)

# C. A. SCHOEN.

## STRAW CARRIER FOR THRASHING MACHINES.

No. 312,661. Patented Feb. 24, 1885.

*Fig. 1.*

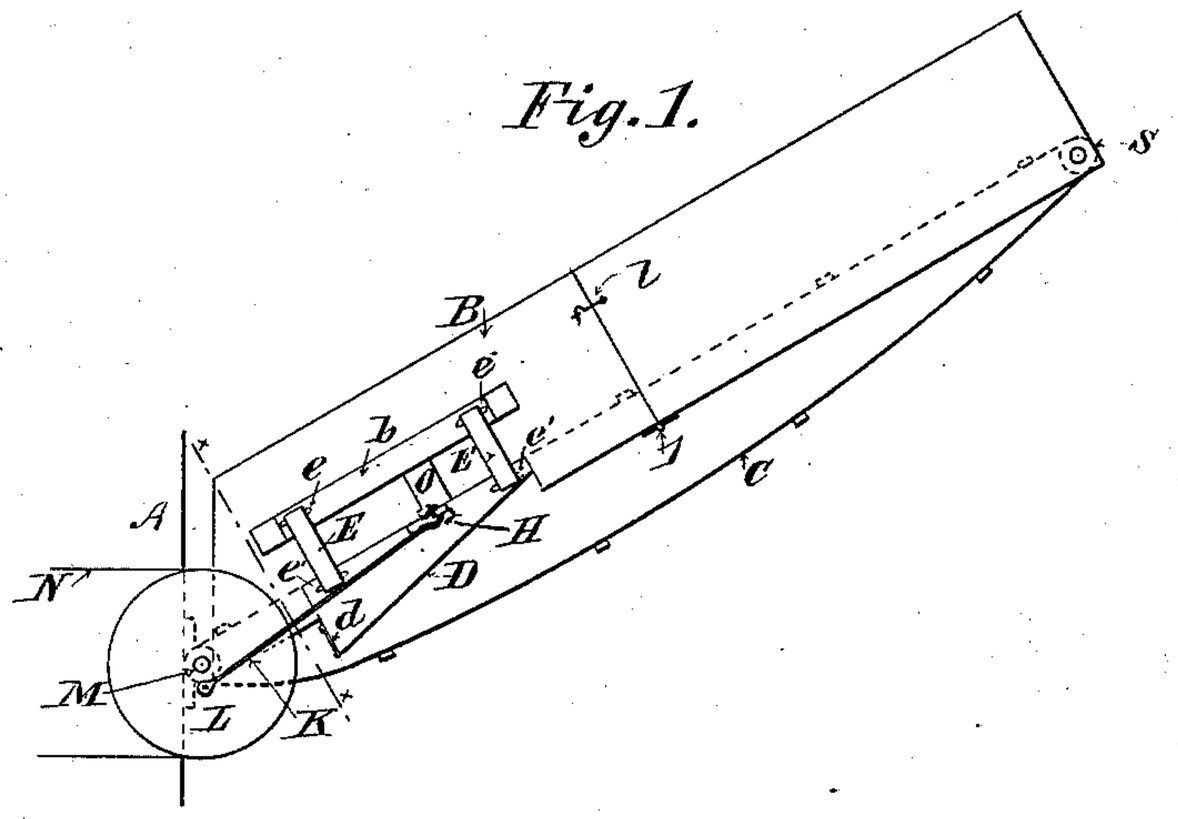



*Fig. 2.*

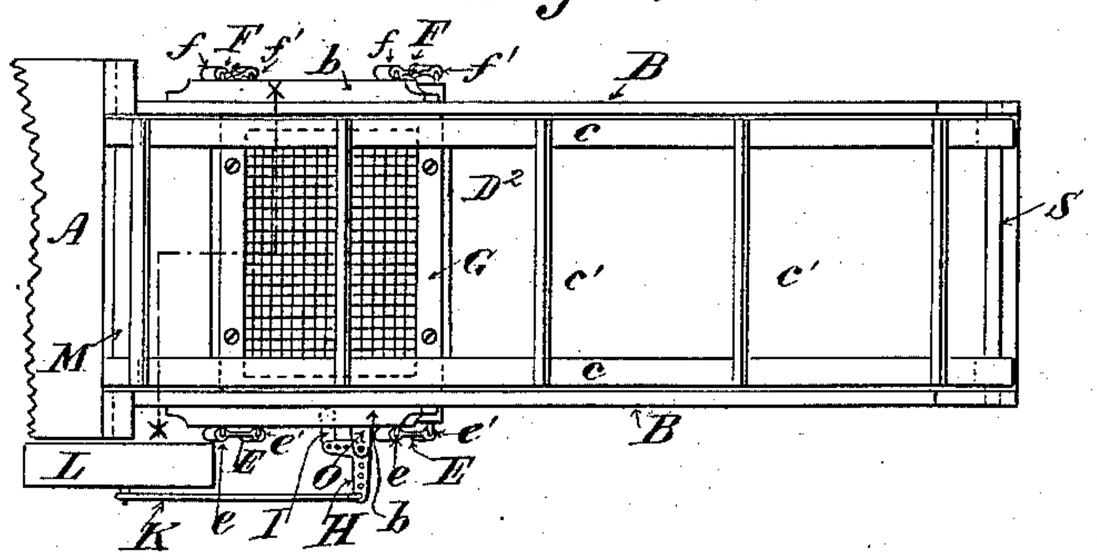
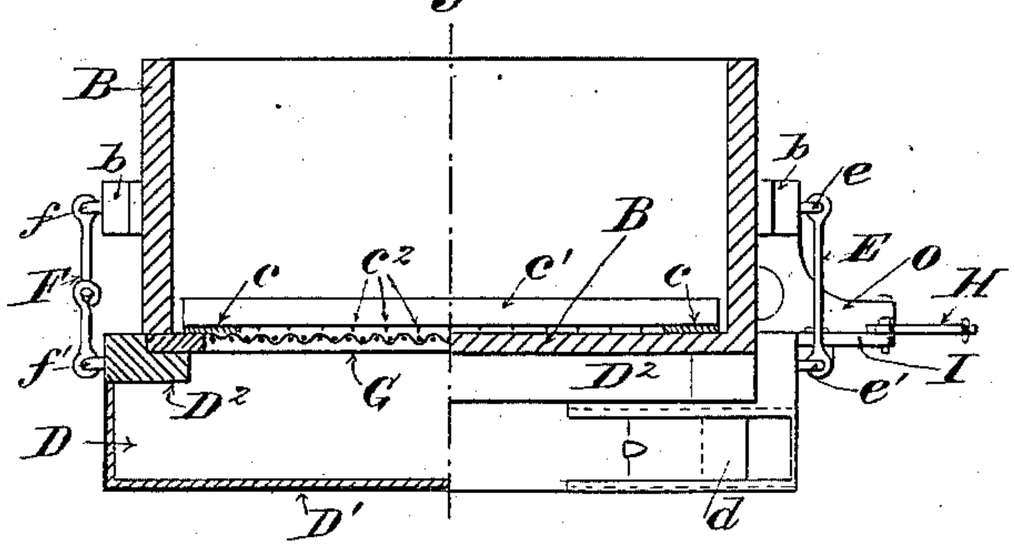



*Fig. 3.*




Witnesses
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# UNITED STATES PATENT OFFICE.

CHARLES A. SCHOEN, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF TO ADOLF OLANDER, OF SAME PLACE.

## STRAW-CARRIER FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 312,661, dated February 24, 1885.

Application filed September 5, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES A. SCHOEN, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Straw-Carriers for Thrashing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to that class of thrashing-machines in which the straw-carrier consists of two narrow endless belts connected by a series of transverse slats by which the straw is carried along an inclined trough or elevator-frame and allowed to drop onto the straw-stack. I have found that a great deal of grain is carried along with the straw into the elevator, and is carried up by the carrier with the straw and thrown into the stack, and thus wasted.

The object of my invention is to provide a device which shall collect the grain taken into the straw-carrier with the straw, and thus prevent the great loss heretofore experienced in using these machines.

My invention consists in the construction, combination, and arrangement of devices, hereinafter specified, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a straw-carrier having my improvement. Fig. 2 is a plan, and Fig. 3 is a section on line *x x*, Figs. 1 and 2.

A represents a portion of the frame of a thrashing-machine. B is the elevator for the straw. It is secured to and supported from the frame A in any suitable manner, and so that the outer end may be raised or lowered, as desired.

The elevator is usually made in two parts jointed together at 2, so that the outer part can be turned under the other part for convenience in transporting.

The straw-carrier C consists of two narrow endless belts, *c c*. These belts have secured to them a number of cross-slats, *c'*, by which the straw is moved along in the elevator B. The carrier runs over pulleys on a shaft, S, in the outer end of the elevator, and over pulleys on a shaft, M, supported in frame A. The shaft M has a pulley, L, which receives power through a belt, N, from a suitable shaft of the machine. A portion of the floor of the elevator B is removed or omitted, and a grain-collecting box, D, is put in its place, as shown. This collector consists of a frame, $D^2$, to which is secured a box having an inclined bottom, D', as shown. The frame $D^2$ is recessed at the top, as shown in Fig. 3, and a screen, G, is fitted into this recess. The elevator B has cleats *b* on its sides, and in these cleats are the staples *e* and *f*. The box D is provided with staples *e'* and *f'*, and by links E E and F F the box is hung to cleats *b b*. The links F F are jointed at the center. The lower part of the link may be unhooked from the upper and that side of box D dropped down, so that screen G may be removed and another screen substituted. The upper surface of frame $D^2$ and the top of the screen G are flush with the upper surface of the floor of elevator B. A stud, O, projects from one side of elevator B, and to this is pivoted the bell-crank lever H. One arm of this lever is connected to the box D by a link, I, and the other arm is connected to a pitman, K. This pitman receives reciprocatory motion from a crank-pin on wheel L on shaft M. By this means the box D is given a vibratory movement across the elevator B. The box D is provided at the lower side with a gate, *d*, through which the grain caught in box D may be run into any convenient receptacle. One or more of the slats, *c'*, of the straw-carrier is provided with a number of metal points, $c^2$ $c^2$. As the carrier passes over the screen, these points rake off any straw that may cling to the meshes of the screen.

The box D may be moved by any suitable mechanism instead of that described.

While the machine is in operation, the straw, after passing through the machine, is carried along the elevator B by the carrier C. As the straw passes over the vibrating box D, the loose grain in the straw falls through the screen and is collected in the box D.

I claim as my invention—

1. The combination, with the elevator-frame B and carrier C, of the box D, frame $D^2$, screen G, inclined bottom D′ and gate *d*, links E, and separable links F, substantially as described.

2. The combination, with the elevator-frame B and straw-carrier C, of the box D, having screen G, said box being arranged with the screen flush with the surface of the floor of the elevator-frame B, links E and F, and means for moving the box transversely to the line of travel of carrier C, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES A. SCHOEN.

Witnesses:
AMASA C. PAUL,
ELECTUS A. PRATT.