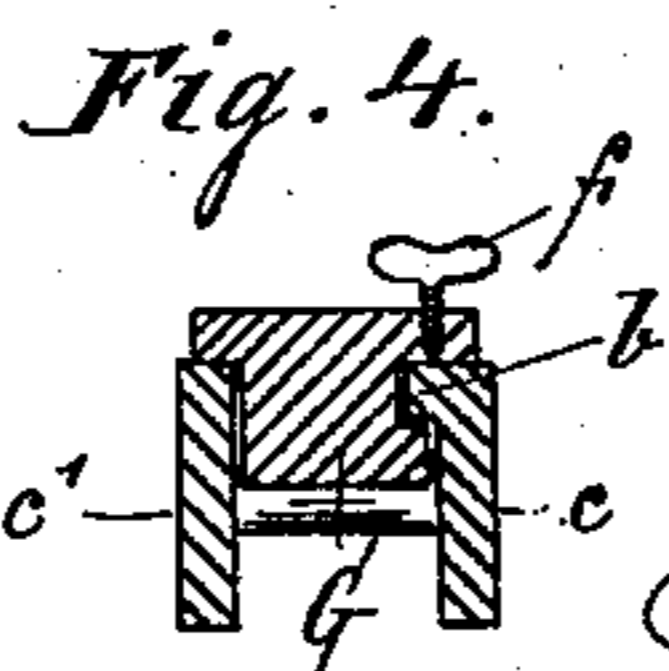
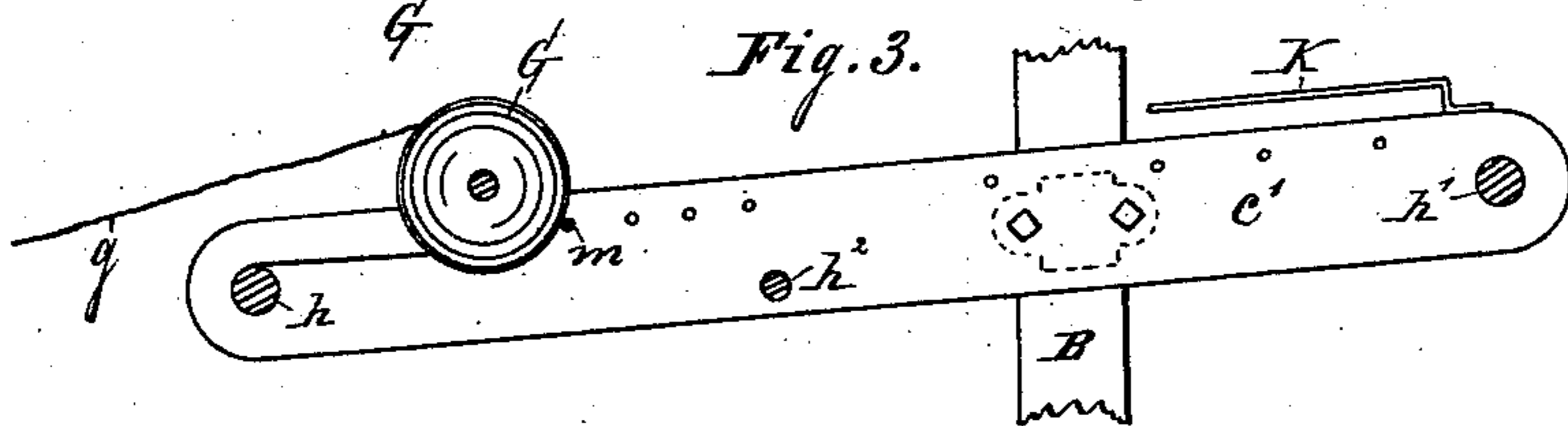
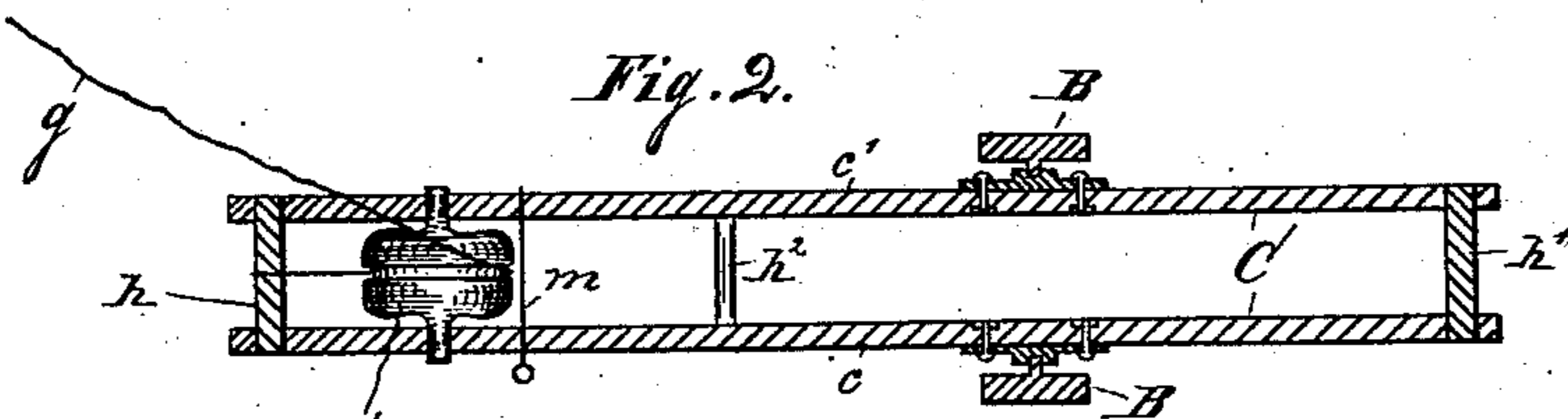
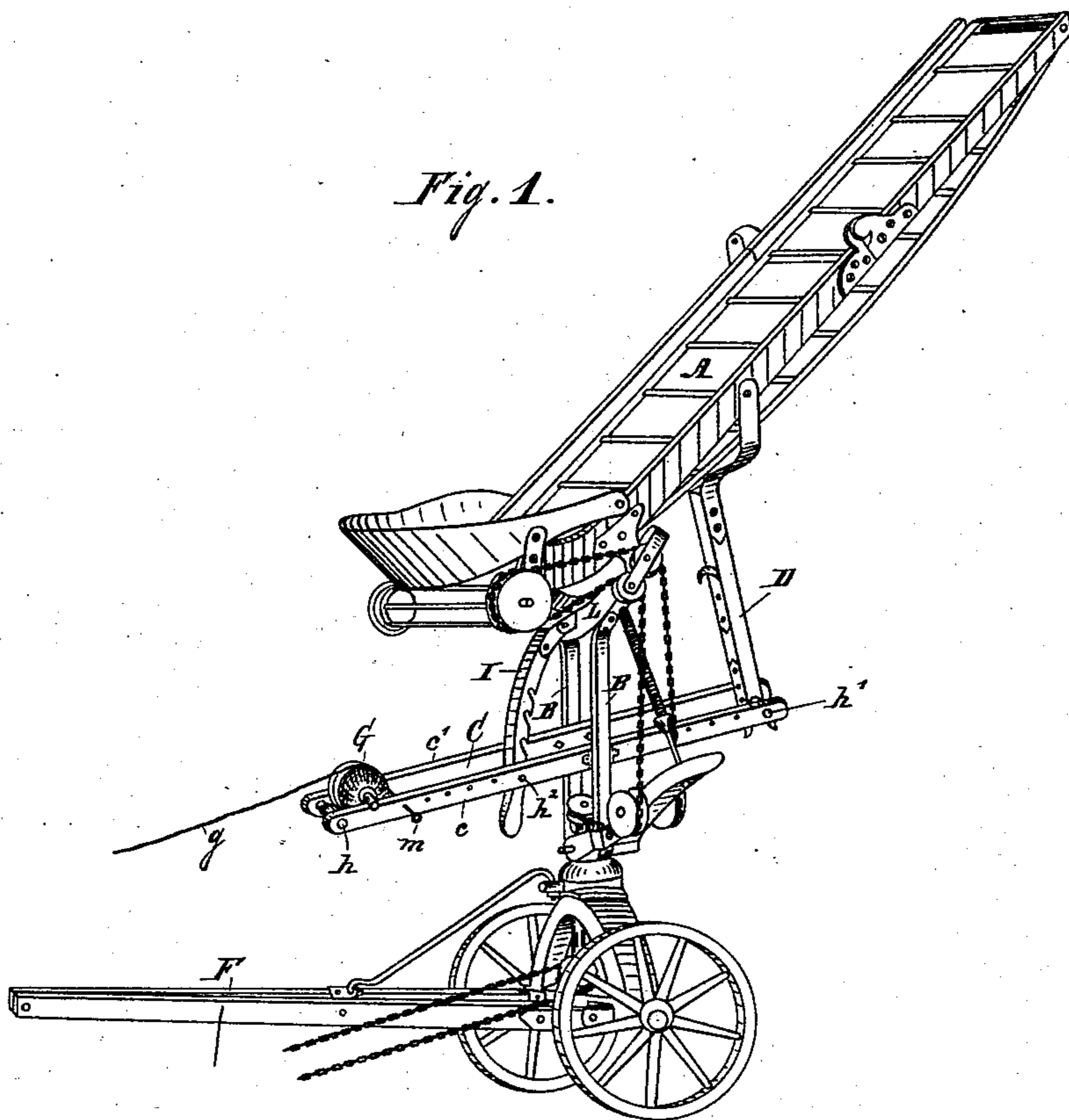


(No Model.)

G. W. WILLIAMSON.  
STRAW STACKING MACHINE.

No. 281,654.

Patented July 17, 1883.



WITNESSES:  
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INVENTOR:  
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Attorneys.

# UNITED STATES PATENT OFFICE.

GEORGE W. WILLIAMSON, OF NEW ROSS, INDIANA, ASSIGNOR OF ONE-HALF  
TO GEORGE W. WILLIAMSON, SR., OF SAME PLACE.

## STRAW-STACKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 281,654, dated July 17, 1883.

Application filed May 1, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE WARREN WILLIAMSON, a citizen of the United States, residing at New Ross, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Straw-Stacking Machines, of which the following is a specification.

My invention relates to improvements in straw-stacking machines, where the carrier-frame is raised, lowered, or held in any desired position by the aid of a lever and a counterbalance-weight. Heretofore said weight has been made stationary, requiring, when the machine had to be taken down, at least two men to hold the lever horizontal after it had been relieved of the weight of the carrier, until said carrier had been partially lowered, so that the rear end of the lever rested against the carrier; and when this precaution was not taken the weighted end of the lever would drop and break the machine, and the rear end would be raised and interfere with the convenient handling of the carrier. Further, when the machine was folded for transportation, the stationary weight of the lever rested on the fore end of the hounds instead of on the axle, as it should.

The objects of my improvement are, first, to dispense with extra men to hold the lever horizontally while the carrier-frame is set up for operation or taken down; secondly, to reduce the risk of breaking the machine while setting up or taking down the carrier; thirdly, to facilitate transportation by having the counterbalance-weight, when the machine is folded down, at the rear end of the lever, thus bringing the strain and weight upon the axle of the truck. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective of the machine ready for operation. Fig. 2 is a longitudinal horizontal section through my improved lever and rolling weight. Fig. 3 is a partial section and side view of the lever and weight; and Fig. 4 is a vertical cross-section through the lever, showing a differently-shaped sliding

weight, with a thumb-screw to secure said weight in any desired position. 50

The same letters refer to the same or corresponding parts throughout the several views.

Lever C is formed of parallel bars *c* and *c'*, with ties *h*, *h'*, and *h<sup>2</sup>*. Said lever C is pivoted to and between the standards B B, which standards support the carrier-bolster L. The standards B B are secured through a socket to an axle which is hinged to hounds F, thus allowing the machine to fold down upon the hounds. 60

On the bars *c* and *c'* of lever C operates the counterbalance-weight G. Said counterbalance-weight G can be round, in form of a pulley-wheel, and roll on the top flanges of bars *c* and *c'*, as shown in Figs. 1, 2, and 3, and be secured in any position desired by a rope, *g*, pins *m*, or other suitable means; or the counterbalance-weight can slide on top of and between said bars *c* and *c'*, in which case one of the bars should be provided with a flange, *b*, Fig. 4, to receive weight G, which could then be secured in any position desired by a thumb-screw, *f*, in conjunction with flange *b* on bar *c*, as shown in Fig. 4. When the carrier-frame is to be set up for operation or taken down for transportation, the counterbalance-weight G on lever C is moved to the center between standards B B, or to the rear end of lever C, holding, in conjunction with the ratchet-lever I, the lever C in any desired position without extra help. When the machine is made ready for transportation, by folding the same upon the hounds F, the counterbalance is moved to and rests at the rear end of lever C, thus bringing the weight and strain down upon the axle of truck, and relieving the fore end of the hounds. The ties *h* and *h'* prevent the counterbalance-weight G from leaving its run on bars *c* and *c'*, forming a stop at both ends. If necessary or desirable, a guide-rail, K, as partly shown in Fig. 3, can be secured to top of lever-bars *c* and *c'*, in order to make it impossible for the counterbalance-weight G to jump off from said bars. 95

The carrier-frame A is raised and lowered by lever C, in conjunction with the T-bearing

D, and held in any desired position by the ratchet-lever I, which is pivoted to carrier-support L, and hooked to tie  $h^2$  of lever C.

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

In a straw-stacking machine, the combination of the carrier-frame A, the T-bearing D, the ratchet-lever I, the standards B B, the lever C, pivoted to and between said standards B B, and formed of bars  $c$  and  $c'$ , and the ad-

justable movable counterbalance-weight G on said bars  $c$  and  $c'$ , substantially as described, and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of 15 two subscribing witnesses.

GEORGE WARREN WILLIAMSON.

Witnesses:

BERNH. J. LIZIUS,

GOTTF. KOEHLER.