

W. C. SWINDLER.  
STRAW STACKING MACHINE.

No. 277,080.

Patented May 8, 1883.

Fig. 2.

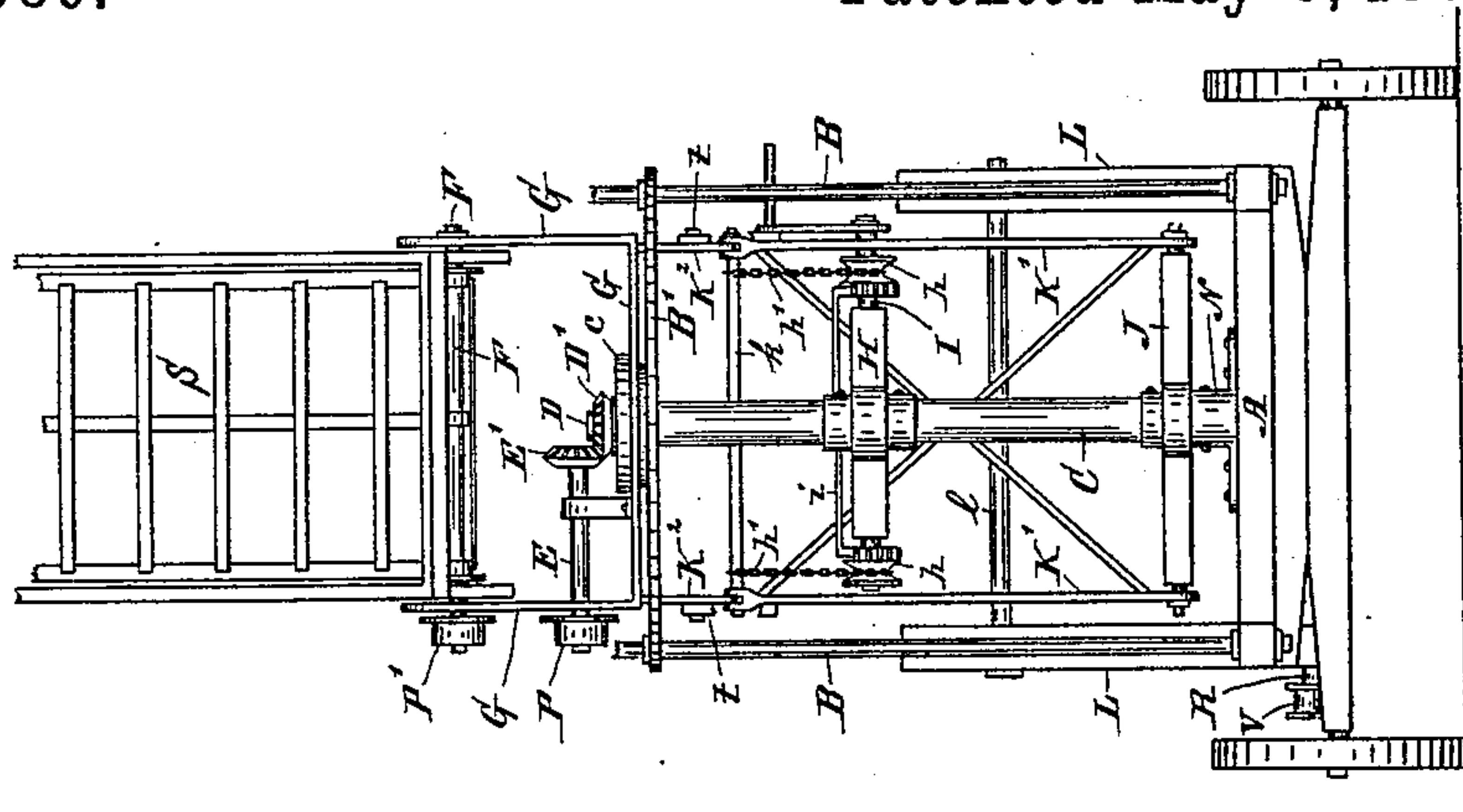
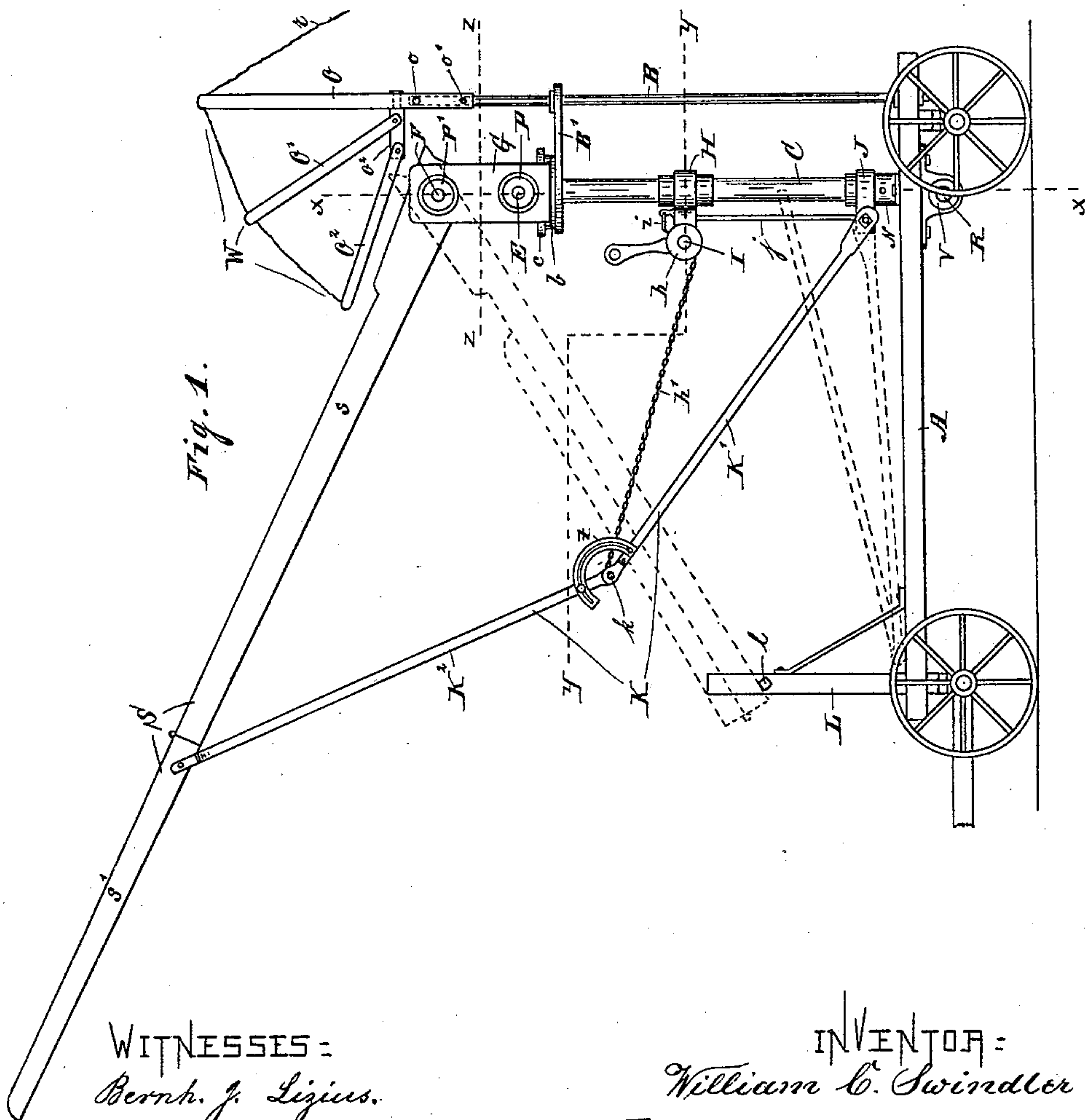


Fig. 1.



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Fig. 3.

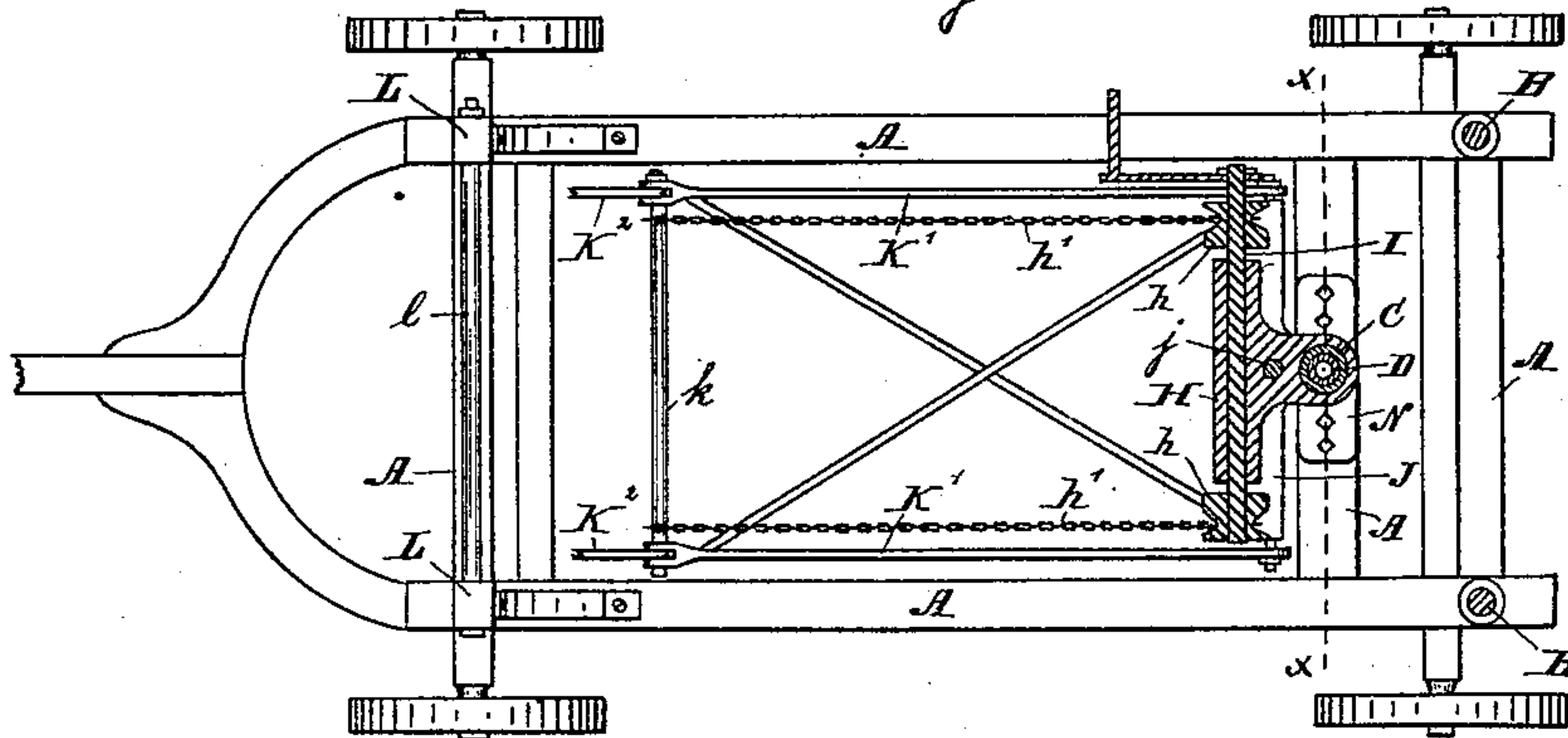


Fig. 6.

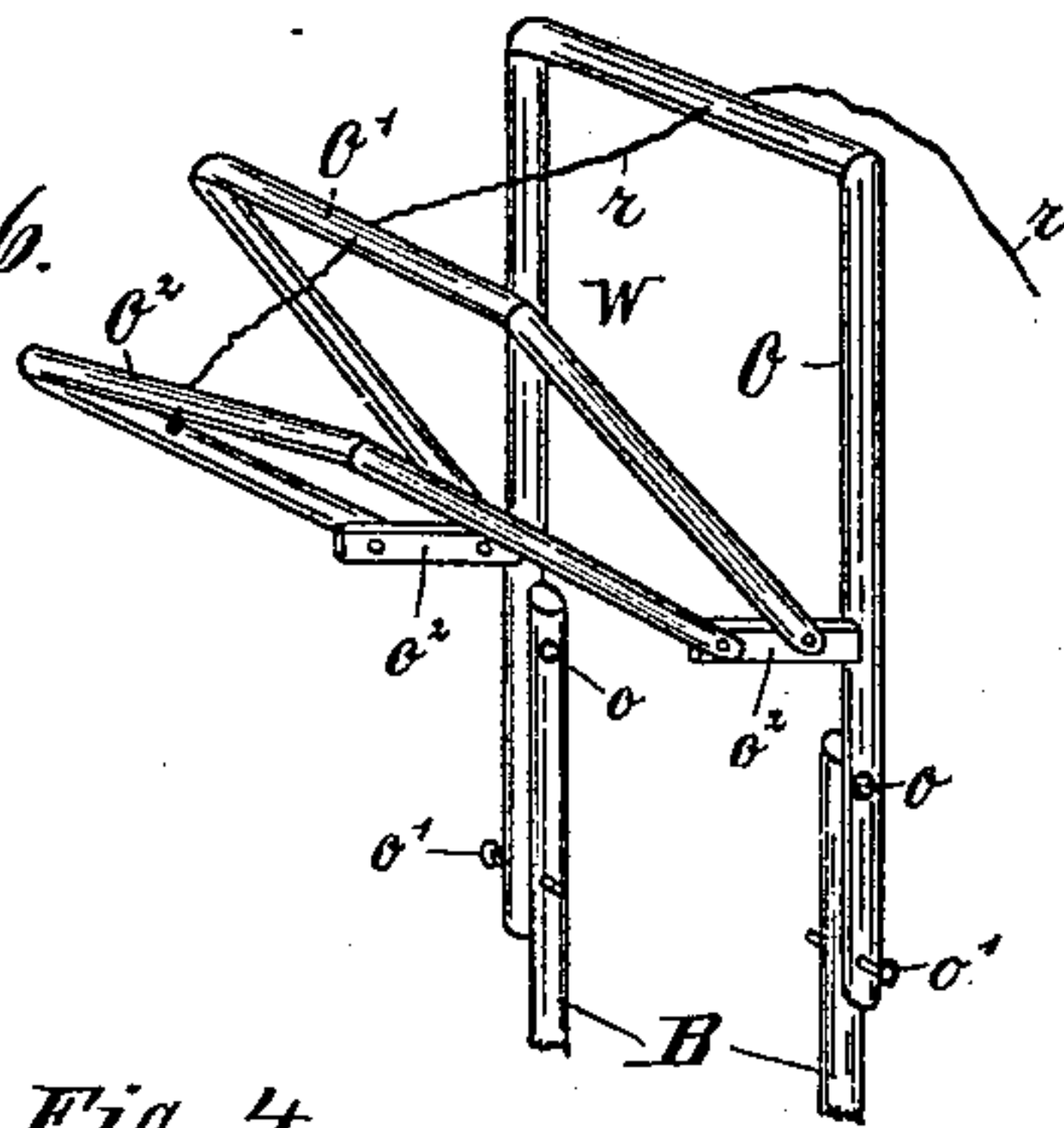


Fig. 4.

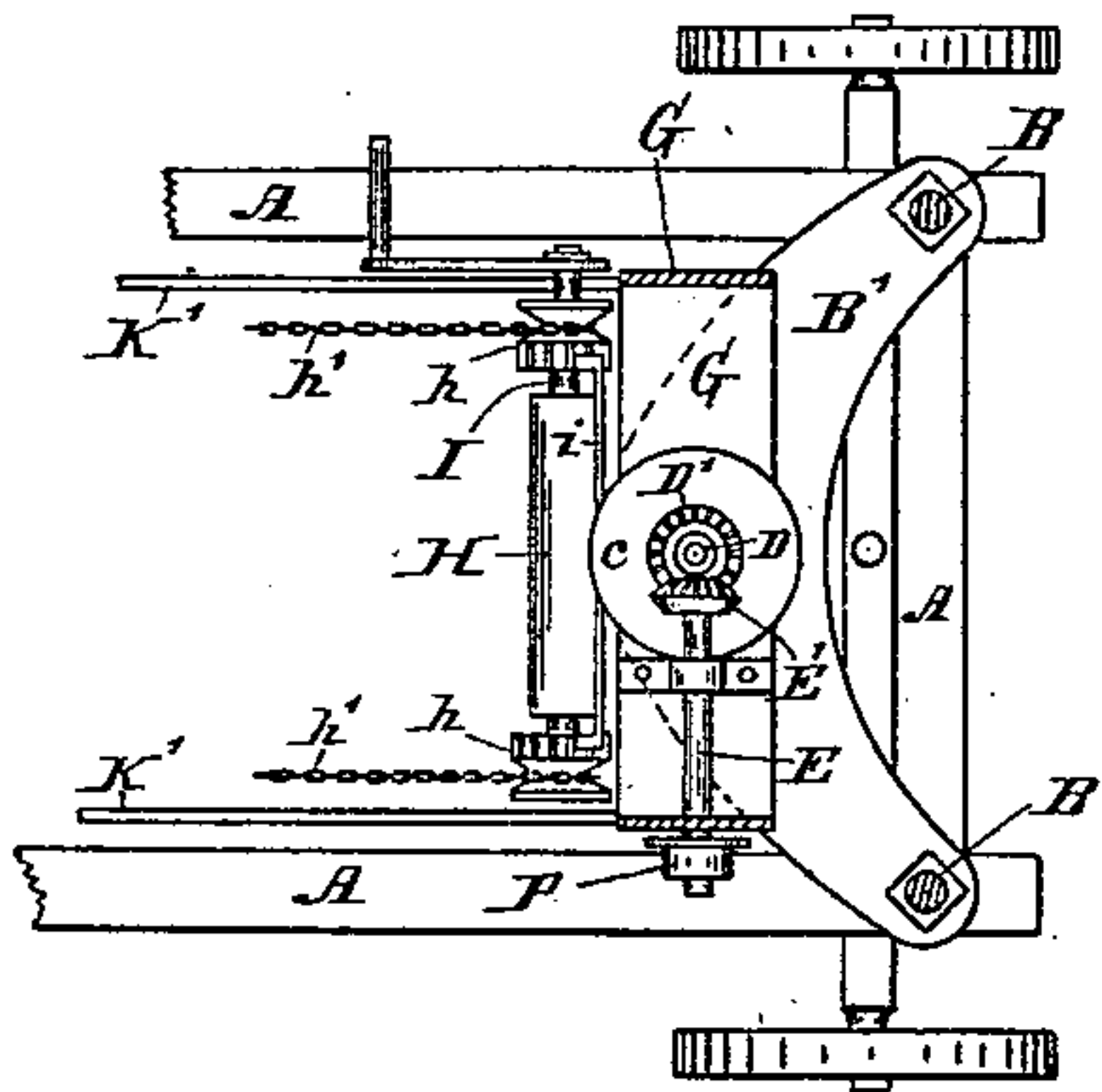
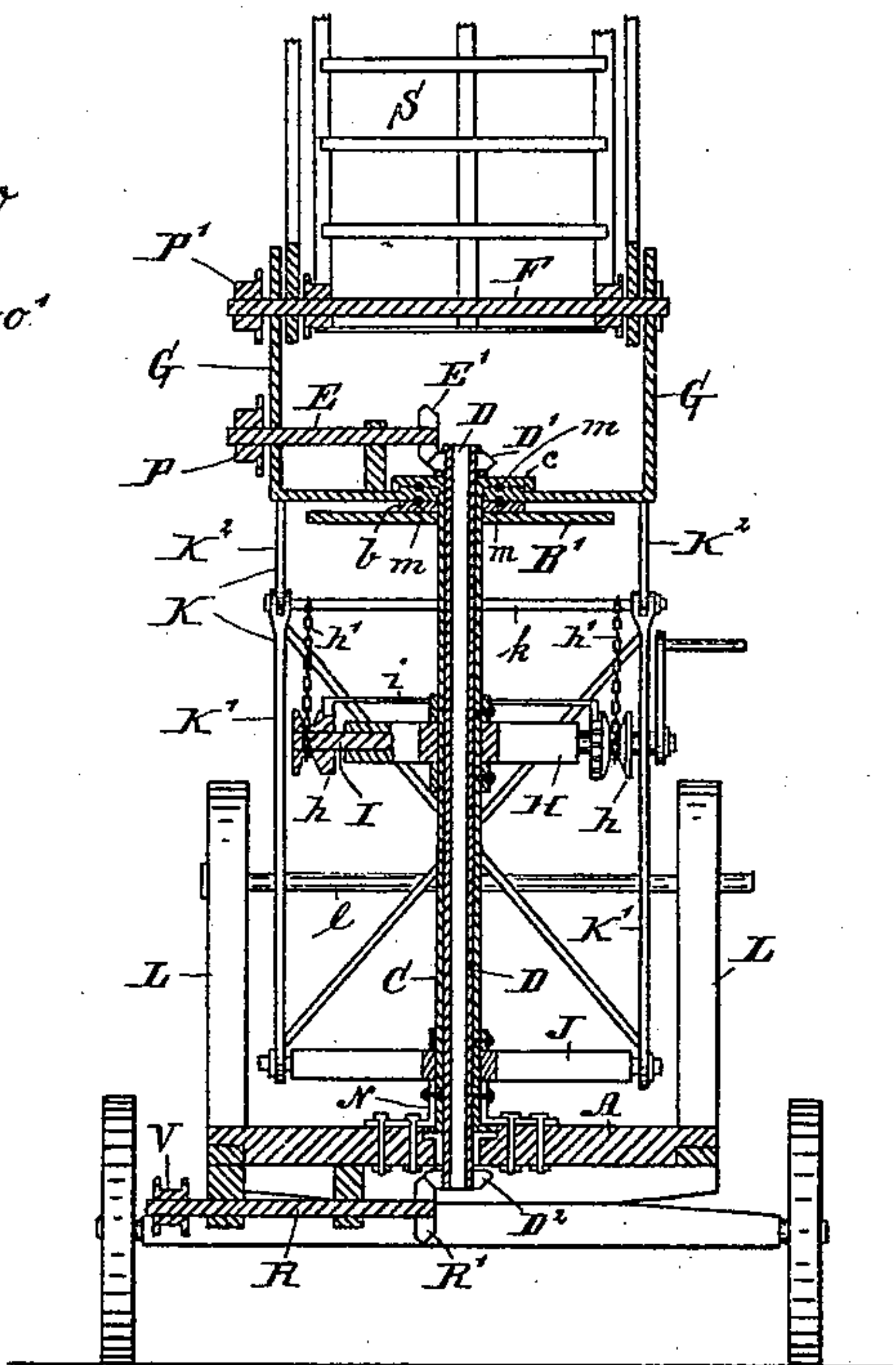


Fig. 5.



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# UNITED STATES PATENT OFFICE.

WILLIAM C. SWINDLER, OF BELLEVILLE, INDIANA.

## STRAW-STACKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 277,080, dated May 8, 1883.

Application filed February 5, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM C. SWINDLER, a citizen of the United States, residing at Belleville, in the county of Hendricks 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; and the objects of my improvements are, first, to dispense with the derrick used in raising and lowering the stacker; second, to dispense with all ropes; third, to dispense with the turn-table; fourth, to provide a machine simple in construction and operation and better adapted to fulfill the requirements of a straw-stacking machine than has heretofore been produced; fifth, to provide an adjustable hood to prevent the straw as it passes from thrashing-machine from being blown away, and thus insure the safe deposit of it on the carrier when the wind is blowing. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the machine ready for operation, the dotted lines showing the stacker folded, ready for transportation. Fig. 2 is a rear view of the machine with the adjustable hood omitted. Fig. 3 is a plan and section on line *y y* on Fig. 1. Fig. 4 is a plan and section on line *z z* on Fig. 1. Fig. 5 is a vertical cross-section on line *x x* on Fig. 1. Fig. 6 is a detail drawing of the adjustable hood.

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

To truck A is bolted hollow standard C by flanged socket N, and the standard C is kept in position by plate B' and stanchions B B. On plate B' is shoulder *b*, on which bolster G operates. In shoulder *b* is a channel to receive anti-friction rollers *m*, which operate in said channel and a corresponding channel in under side of bolster G. On bolster G is a shoulder in which is a channel to receive anti-friction balls *m*, which operate in said channel. On said balls is secured flange *c* of standard C. Flange *c* holds bolster G in its proper position. Stacker-frame S is operated on bolster G by shaft F, and is formed of two leaves, *s* and *s'*, hinged together. It is raised and lowered by crane K, formed of arms K' K' and K<sup>2</sup>

K<sup>2</sup>, hinged together by stay *k* and stiffened by braces *t t*. Each pair of arms is braced diagonally from each corner to stiffen arms of crane. Crane K is secured to and operates around standard C by shoulder J. The upper ends of arms K<sup>2</sup> K<sup>2</sup> are forked to receive frame *s'* of carrier S, and are bolted in place. Crane K is raised and lowered, and with it the carrier-frame S, by chains *h' h'*, connected onto stay *k* of crane K, and with drums *h h* of windlass I. Windlass I is kept from unwinding by clicks *i*, pivoted to shoulder H on standard C, and operating in ratchets on drums *h h*. Windlass I is secured to and operates around standard C by shoulder H. Shoulders H and J are held together, so that they shall operate in unison, by stanchion *j*. Stanchions B B extend above plate B', and to them is fastened bow-frame O of hood W by pivots *o o* and bolts *o' o'*. To bow-frame O are bolted arms *o<sup>2</sup> o<sup>2</sup>*. To arms *o<sup>2</sup> o<sup>2</sup>* are pivoted bows O' and O<sup>2</sup>. To bow O<sup>2</sup> is fastened rope *r*, which passes through an eye on bow O' and bow-frame O, by which hood W is opened or closed at pleasure. The frame of hood W is covered with canvas or the like. To under side of truck A is secured by journals the shaft R. On its outer end is pulley V, which is operated by a belt from the thrashing-machine. On the inner end of shaft R is beveled gear R', which operates beveled gear D<sup>2</sup> on vertical shaft D in hollow standard C. At the upper end of shaft D is beveled gear D', which operates beveled gear E' on shaft E. On the outer end of shaft E is pulley P, which operates pulley P' on shaft F by a belt. Shaft F operates the belts and slats of straw-carrier S. To each side of truck A are secured posts L L, with cross tie-rod *l*, on which leaf *s* of carrier-frame S rests during transportation.

To prepare the machine for transportation crane K is folded over onto truck A, stacker S is lowered onto tie-rod *l*, between posts L L, and folded, as shown by dotted lines on Fig. 1. Bolts *o' o'* of hood W are removed and hood folded onto carrier-frame S.

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

1. In a straw-stacking machine, the combination of truck A, hollow standard C, plate B', with shoulder *b*, bolster G, flange *c* on standard C, anti-friction balls *m m*, and stacker-

frame S, substantially as described, and for the purpose specified.

2. The combination, in a straw-stacking machine, of standard C, shoulder J, crane K, 5 formed of arms  $K' K'$  and  $K^2 K^2$ , tie  $k$ , braces  $t t$ , chains  $h' h'$ , shoulder H, with windlass I, clicks  $i$ , drums  $h h$ , and stanchion  $j$ , substantially as described and specified.

3. The combination of truck A, posts L L, 10 with tie  $l$ , and carrier-frame S, for the purpose specified.

4. The combination, in a straw-stacking ma-

chine, of standards B B, bow-frame O, pivots  $o o$ , bolts  $o' o'$ , arms  $o^2 o^2$ , bows  $O'$  and  $O^2$ , and rope  $r$ , substantially as described, and for the 15 purpose specified.

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

WILLIAM C. SWINDLER.

Witnesses:

GOTTF. KOEHLER,  
BERNH. J. LIZIUS.