

(No Model.)

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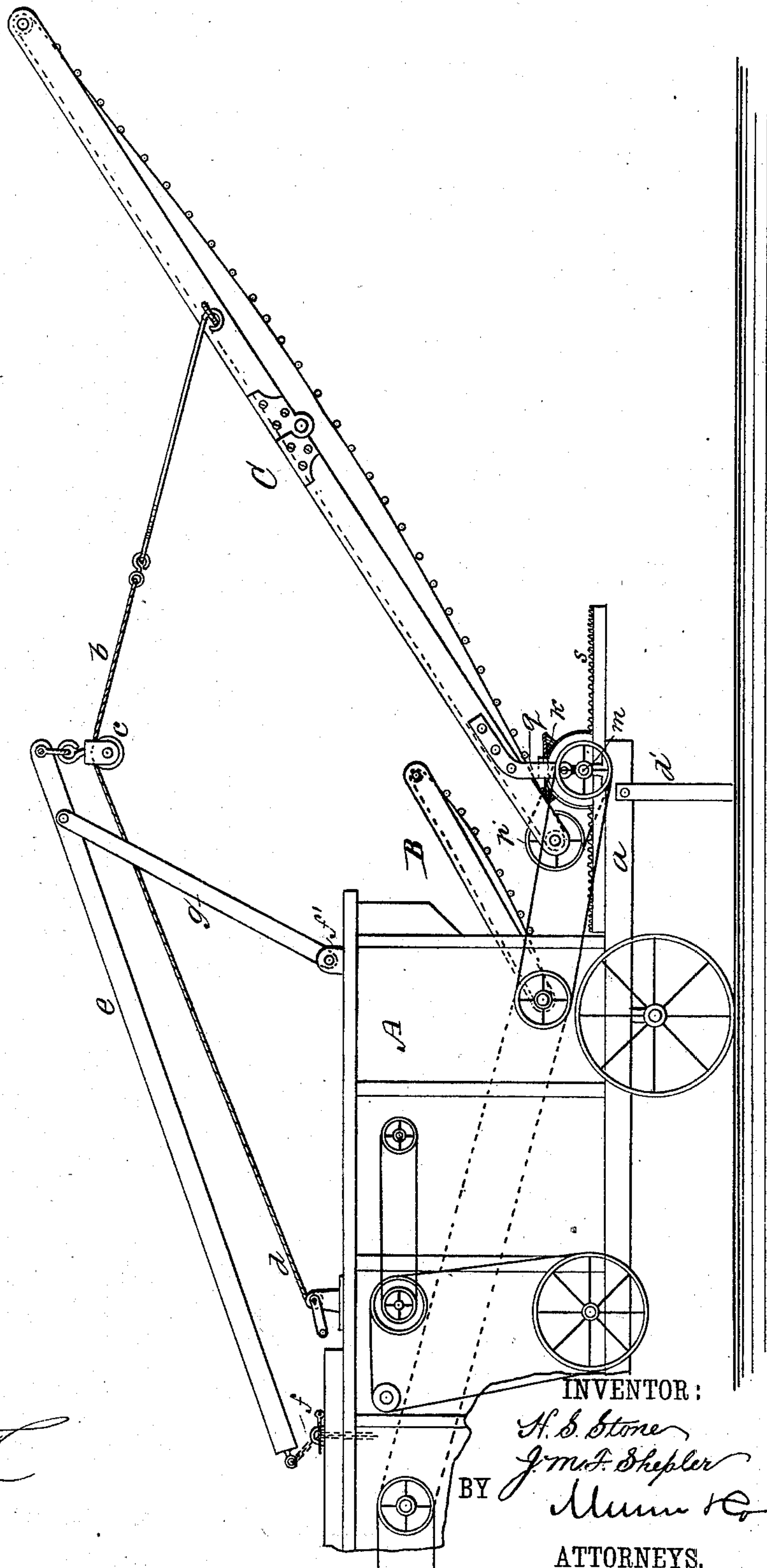
H. S. STONE & J. M. F. SHEPLER.

STRAW STACKING MACHINE.

No. 271,943.

Patented Feb. 6, 1883.

Fig. 1.



WITNESSES:

Theo. G. Norton
C. Sedgwick

INVENTOR:

H. S. Stone
J. M. F. Shepler

BY

Mum & Co

ATTORNEYS.

(No Model.)

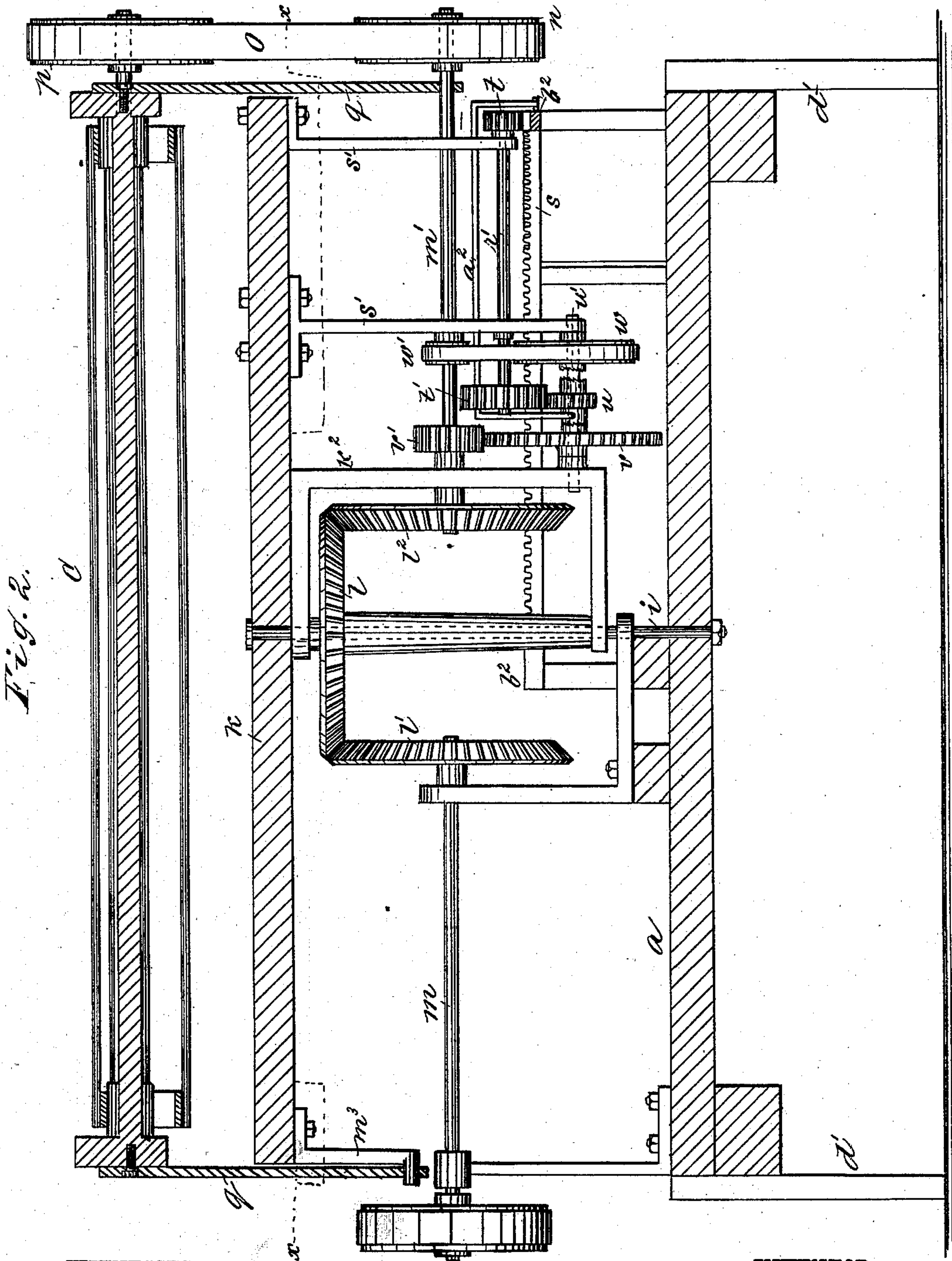
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WITNESSES:

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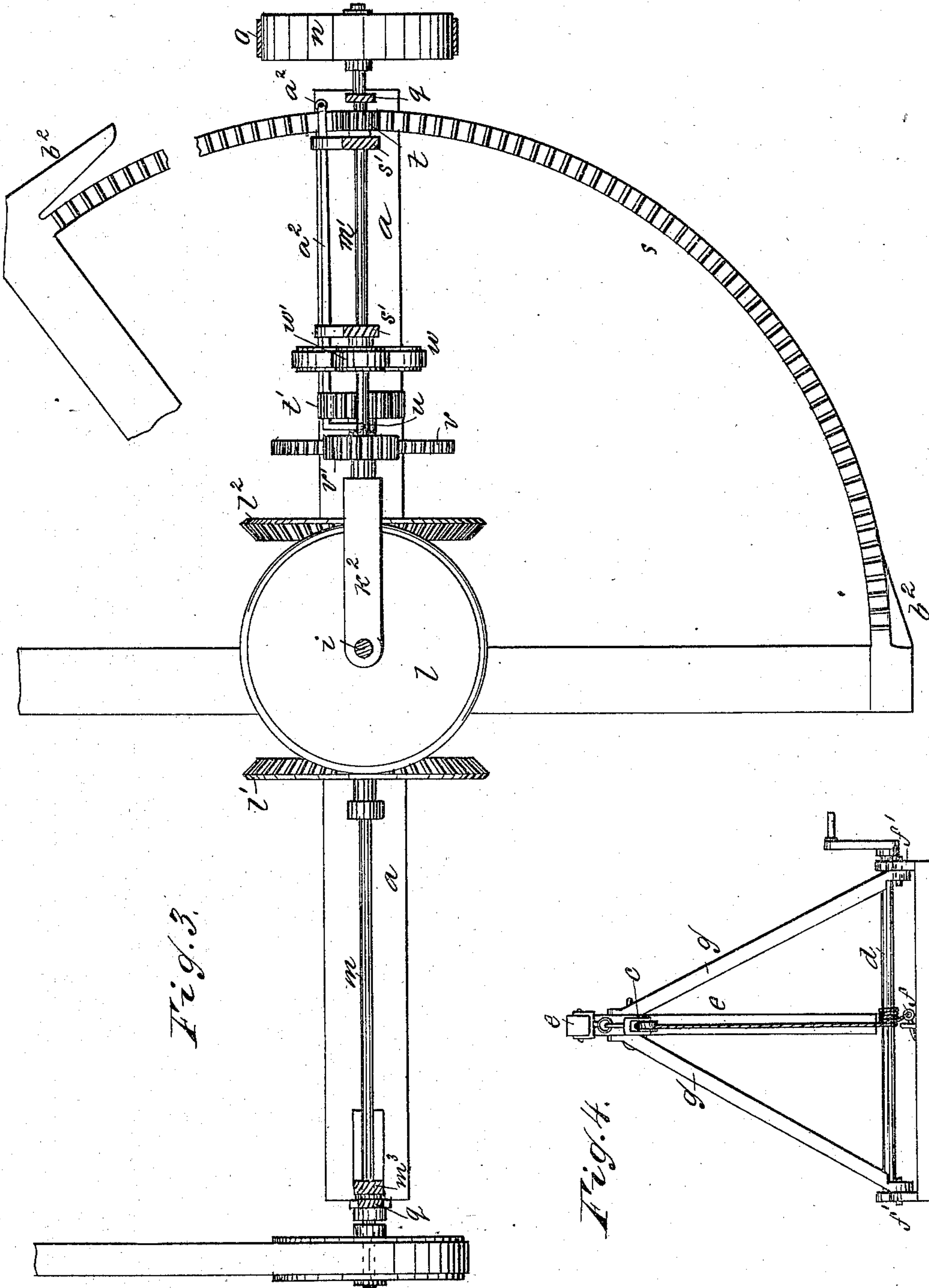
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WITNESSES:
Theo. G. Hooper
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INVENTOR:
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UNITED STATES PATENT OFFICE.

HENRY S. STONE, OF ORANGE, AND JAMES M. F. SHEPLER, OF LYON'S STATION, INDIANA.

STRAW-STACKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 271,943, dated February 6, 1883.

Application filed November 3, 1882. (No model.)

To all whom it may concern:

Be it known that we, HENRY S. STONE, of Orange, in the county of Fayette and State of Indiana, and JAMES M. F. SHEPLER, of Lyon's Station, in the county of Fayette and State of Indiana, have invented a new and Improved Straw-Stacking Machine, of which the following is a full, clear, and exact description.

Our improvements relate to apparatus for use with grain-separators or thrashing-machines for stacking the straw therefrom; and the invention consists in certain novel features of construction and arrangement, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which the same letters of reference indicate the same or corresponding parts in all the figures.

Figure 1 is a side elevation of our improved stacking-machine as applied to a thrasher. Fig. 2 is a transverse section, in larger size, showing the mechanism for operating the stacker. Fig. 3 is a plan view of the mechanism on line *xx* of Fig. 2. Fig. 4 is an end view of the devices used for raising and lowering the stacker.

A represents the thrashing-machine, at the rear of which is a short elevator or carrier, B, for taking the straw from the thrasher and carrying it to the elevator of the stacker.

C is the stacking-elevator, resting upon a platform, *a*, at the rear of the thrashing-machine. The elevator is suspended by a rope, *b*, passing over a block, *c*, to a windlass, *d*, at the top of the machine A. The block *c*, as shown in Figs. 1 and 4, is at the outer end of an arm, *e*, that is sustained by two braces, *g g*, which are hinged at their rear ends to the top of the machine at *f'*. The arm *e* is connected by a rope or chain at *f* to the top of the machine A, so that it may move back and forth as the side braces, *g*, rise and fall. This construction provides for the support of the stacking-elevator and its adjustment to any height required.

The attachments of the elevator to the platform *a* and the mechanism for operating the same are shown in Figs. 2 and 3, as follows:

i is a king-bolt connecting the platform *a*

and a cross-bar, *k*, which is sustained on bolt *i* by a bracket, *k²*. *l* is a beveled-gear wheel, carried by a loose sleeve on the bolt *i*, and engaged at one side by a beveled-gear wheel, *l'*, on the horizontal driving-shaft *m*. At the other side of the beveled wheel *l* is a similar wheel, *l²*, on a shaft, *m'*, which carries a pulley, *n*, connecting by a belt, *o*, to a pulley, *p*, by which the endless apron of the elevator is caused to move.

The frame of the elevator C is provided at its lower end with side arms, *q*, which are hung upon the shaft *m'* at one side, and a bracket, *m³*, attached to bar *k* at the other side, so that the elevator is free to be raised and lowered without disconnection of the beveled gear. At the same time the elevator is free to be swung to the right or left. For controlling this right or left movement of the elevator, the platform *a* is provided with a curved rack, *s*, and hangers *s'* on the under side of the cross-bar *k*, carrying a shaft, *r'*, upon which is a pinion, *t*, meshing with the rack *s*. At the other end of the shaft *r'* is a pinion, *t'*, which meshes with a toothed rim on a sliding clutch, *u*, that is fitted for movement on a shaft, *u'*, below the shaft *r'*. This shaft *u'* is connected to the shaft *m'* by gear-wheels *v v'*, so that the shaft *u'* is in continuous rotation, and there is also upon the shaft *u'* a loose pulley, *w*, which connects by a belt to a pulley, *w'*, on the shaft *m'*. By this arrangement of the mechanism, when the clutch *u* is moved into engagement with the gear *v*, the shaft *r'* is rotated in one direction, and the pinion *t* engaging the rack *s*, the elevator is caused to travel to the right or left, as the case may be; but when the clutch *u* engages the loose pulley *w* the shaft *r* is turned in the opposite direction, and the elevator thus caused to move in the contrary direction. For effecting the movement of the clutch automatically, we provide the trip-lever *a²*, which is connected to the clutch *u* and extends in front of the pinion *t*, for contact with beveled projections *b²*, placed at the ends of the rack; or pins may be fitted in the rack at any point to suit the length of stack. When the elevator reaches either end of the rack or the pins thereon by the contact of the trip-lever *a²* with the projection, the clutch is shifted, and the elevator is thus started

in the other direction. The platform *a*, supporting the elevator, is provided with legs *d'*, which serve as an additional support for the elevator, and are pivoted so that they may be
5 turned up when not required for use. By this construction the elevator can be raised and lowered according to the height of the stack, and, being fitted to move to the right and left, the straw will be equally distributed to form
10 a stack.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the elevator *C*, of
15 the adjustable supporting-arm *e*, braces *g*, pivoted to their support and to the arm *e*, and the rope *d*, connected to the elevator *C*, a windlass,

and a depending pulley, *c*, of the arm *e*, substantially as and for the purpose set forth.

2. The combination of the clutch *u*, the shaft
20 *r'*, the pinions *t t'*, the rack *s*, beveled projections *b²*, the gear-wheels *v v'*, the pulleys *w w'*, and trip-lever *a²*, substantially as described, for operation as set forth.

3. The combination of the pivot-bolt *i*, beveled gearing *l l' l²*, shafts *m m'*, pinions *v v' t t'*,
25 clutch *u*, pulleys *w w'*, projections *b²*, trip-lever *a²*, rack *s*, arms *g*, and elevator *C*, as set forth.

HENRY S. STONE.

JAMES M. F. SHEPLER.

Witnesses:

CHARLES ROEHL,

GEORGE ADDLEMAN.