

(No Model.)

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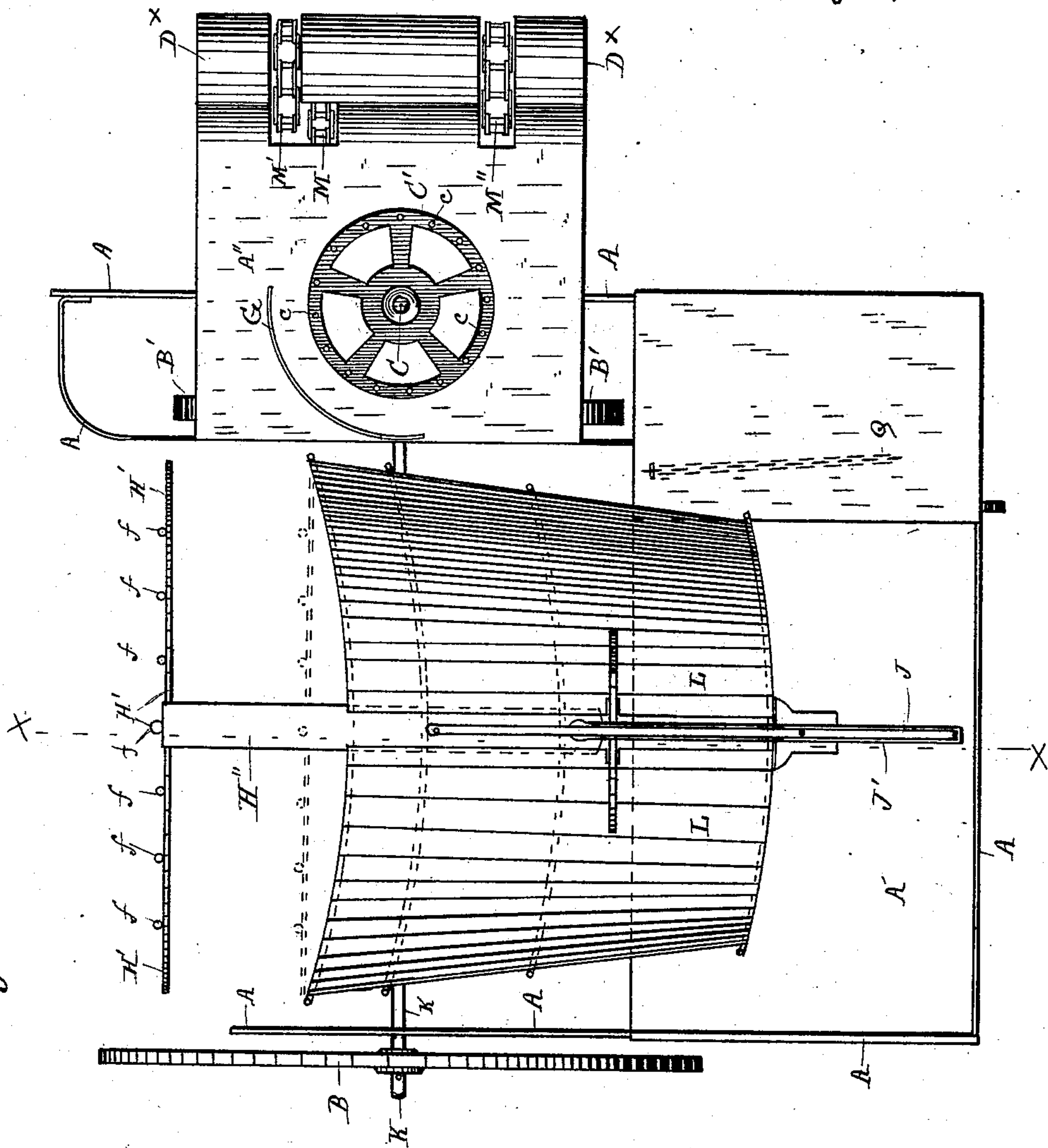
S. C. MINEAR.

SHEAF GATHERING AND SHOCKING MACHINE.

No. 298,107.

Patented May 6, 1884.

Fig. 1



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(No Model.)

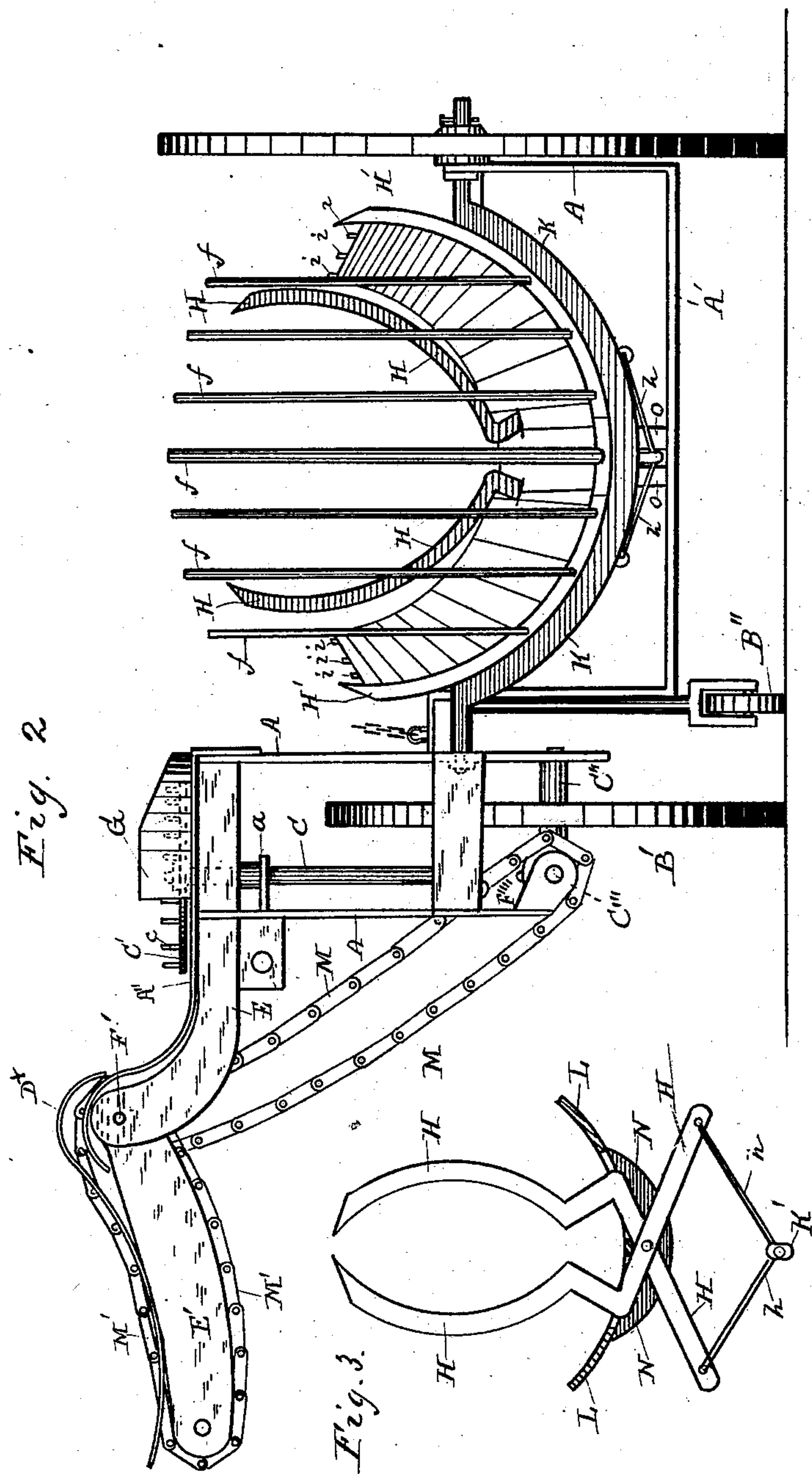
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Fig. 4

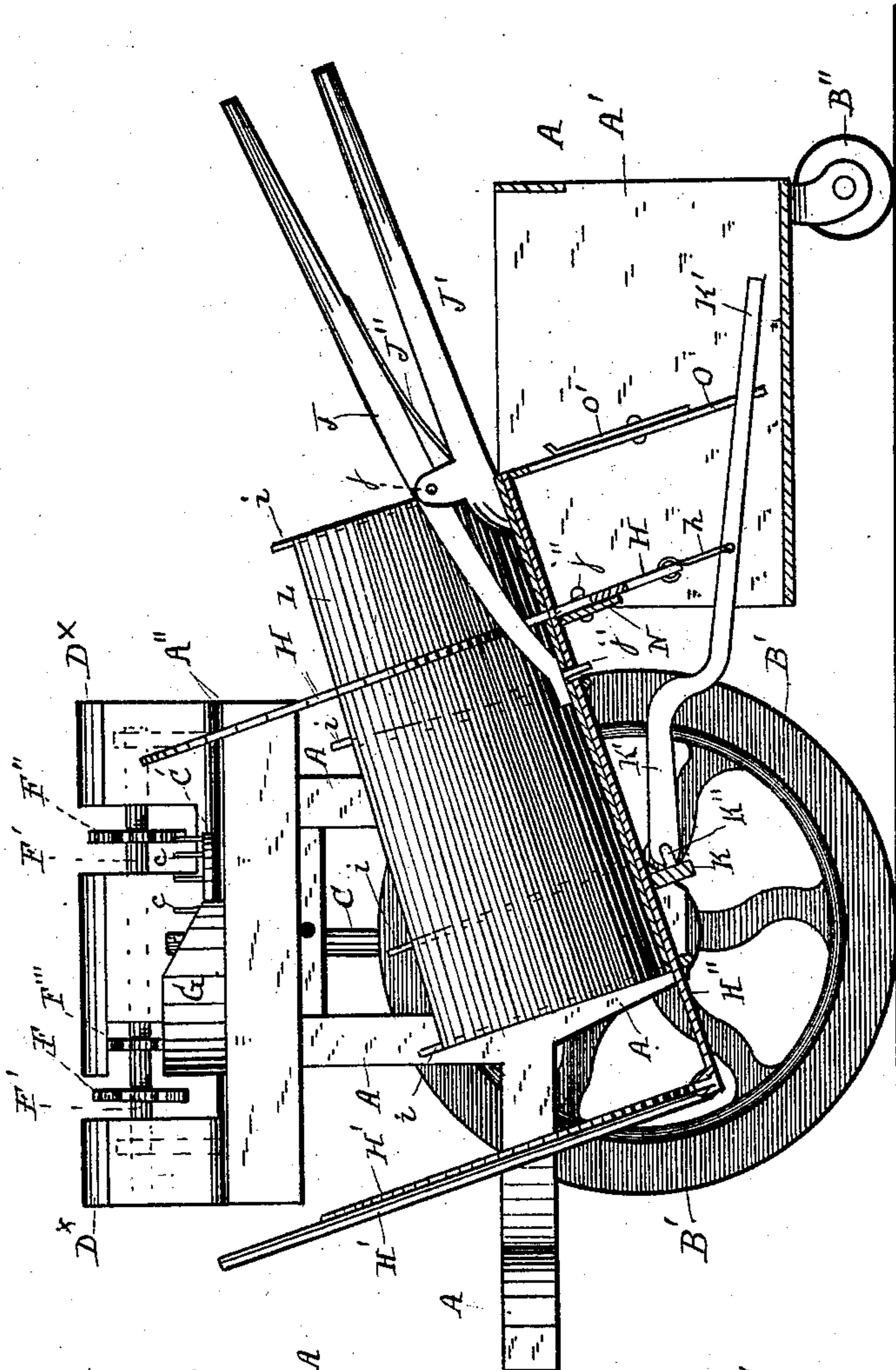
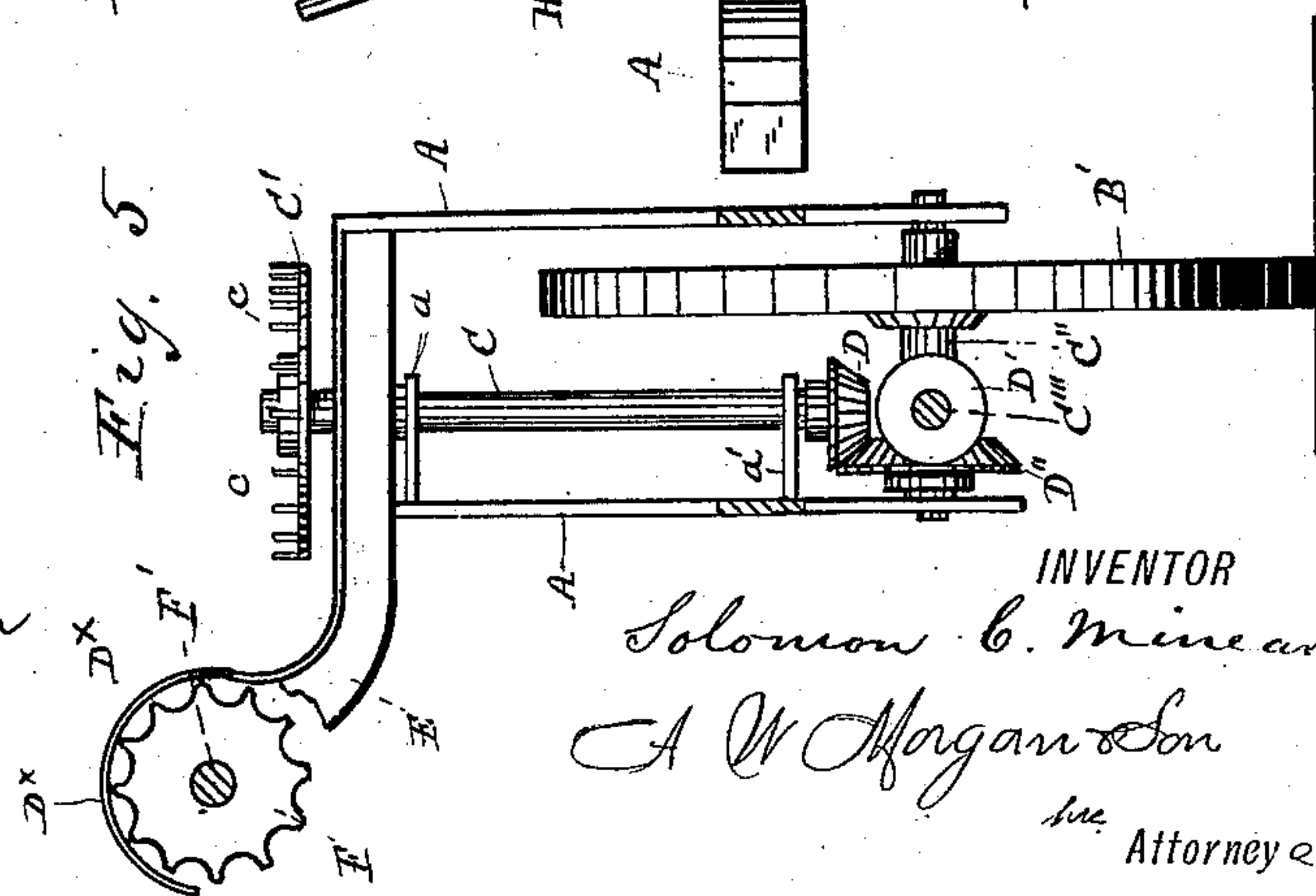


Fig. 5



WITNESSES

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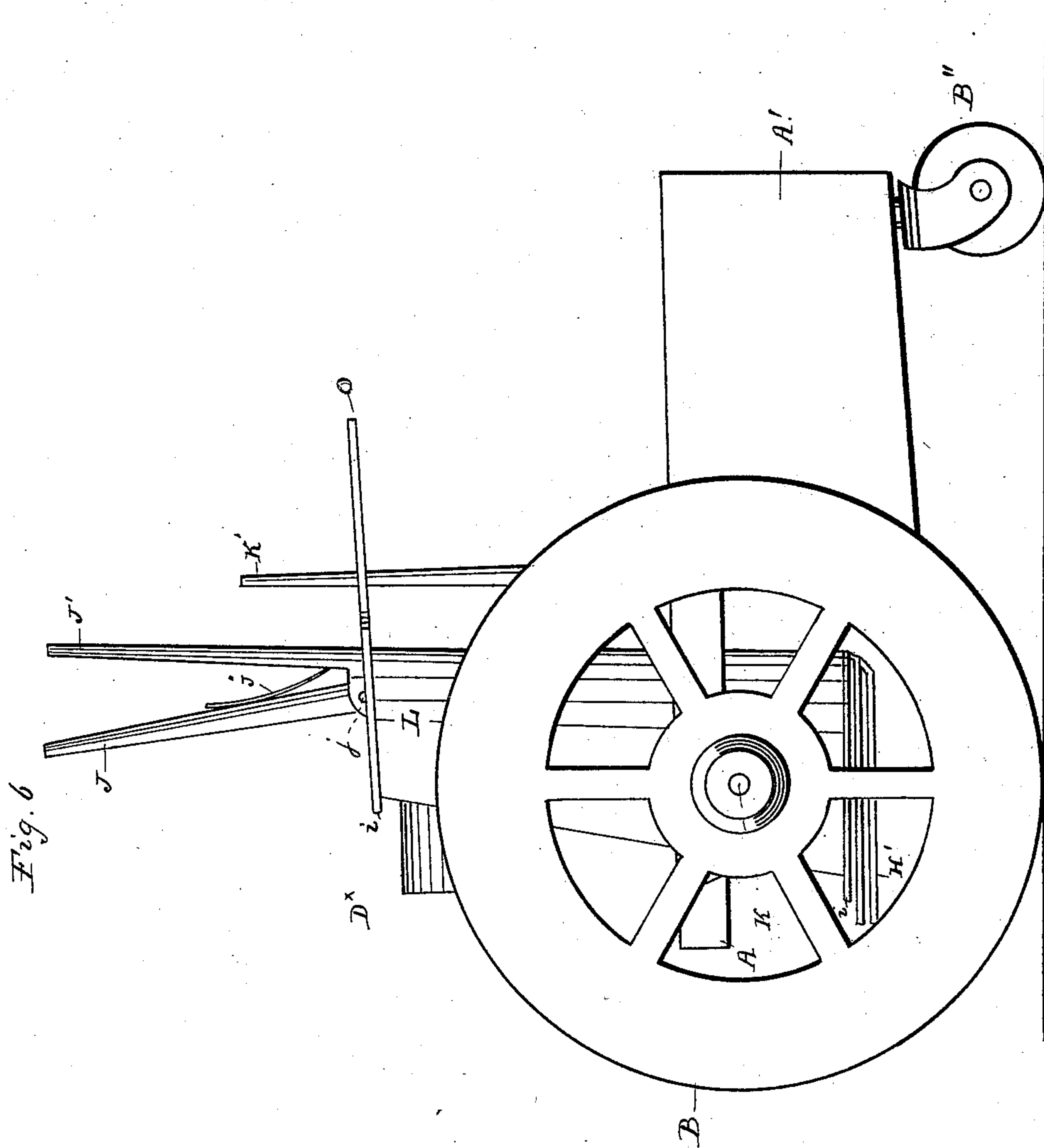
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UNITED STATES PATENT OFFICE.

SOLOMON CLEMENT MINEAR, OF CHILLICOTHE, OHIO.

SHEAF GATHERING AND SHOCKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 298,107, dated May 6, 1884.

Application filed August 22, 1883. (No model.)

To all whom it may concern:

Be it known that I, SOLOMON CLEMENT MINEAR, a citizen of the United States, residing at Chillicothe, in the county of Ross and State of Ohio, have invented certain new and useful Improvements in Sheaf-Gathering and Grain-Shocking Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming a part of this specification, in which—

Figure 1 is a plan. Fig. 2 is a rear elevation. Fig. 3 is a detailed view of the compressing-arms. Fig. 4 is a longitudinal section on the line *x x* of Fig. 1. Fig. 5 is a detached view of some of the parts of the elevating machinery. Fig. 6 is a side elevation, and shows the shock-forming trough tilted in a backward direction.

The nature of my invention consists in the construction and arrangement of a machine for gathering sheaves and shocking small grain, as will be hereinafter more fully set forth.

The letter A indicates the frame of the machine.

B is a large wheel.

B' is a smaller wheel, having a shaft, C'', journaled to the frame A, and provided with a bevel-gear, D'', which engages with and gives rotary motion to bevel-gears D and D', secured, respectively, to shafts C C'', the latter of which is provided with a sprocket-wheel, F''', having a chain, M, which is carried over a sprocket-wheel, F'', secured to shaft F', which is also provided with two sprocket-wheels, F and F'', which carry, respectively, sprocket-chains M' and M'', which may be provided with short pins, and are for the purpose of carrying or elevating the grain from the reaper or binder, or from the ground, from whence it is carried to the top of table A'' and of the revolving wheel C', where it is caught by the pins *c* and thrown over into the shocking-trough L, between the compressing-arms H. The lower part of vertical shaft C is provided with a bevel-wheel, D, which engages with wheel D'', by means of which it receives its rotary motion. This shaft has bearings in the brackets *a a'*, and has at the top a wheel, C', having

short vertical pins *c*, and is partly surrounded by a curved metal plate, G, one portion of which is slightly beveled, and serves the purpose to disengage the points of the pins *c* from the sheaves of grain, and also to cause them to fall into the shocking-trough L with their butt-ends toward the gate H'.

D* is a curved plate, of metal, secured to plates E, and has suitable openings for the passage of the elevator-chains M' M''. The plates E have suitable openings for the passage of the shaft F', upon which they rest, and may be elevated or depressed, as upon a pivot, for the purpose of adjustment.

K is a curved axle, at one end having a bearing in the wheel B and at the other in the frame A. The shocking-trough L is secured to this axle, and is preferably made of sheet metal, stiffened by the ribs *i*, which are placed on the outer side thereof.

Q is a chain intended to hook over one of the ends of the ribs *i*, to prevent the shocking-trough from turning too far.

H are compressing-arms, which pass through suitable openings in the bottom of the shocking-trough, and are pivoted to each other and to the plate N by a bolt or pivot, *j''*. Their lower ends are connected to a lever, K', by means of links *h*. The lever K' is attached to the axle K by a staple, K'', at one end. The other end passes through a slot in the plate O, having a pivoted plate, O', by means of which the lever K' may be fastened in a position to keep the arms H wide open to receive the sheaves as they fall down from the top of the table A'' and horizontal wheel C'.

At the bottom of the trough L is an opening extending the whole length of the trough, into which is fitted a sliding plate, H'', to the forward end of which is secured a handle, J', to which is pivoted by pivot *j* a lever, J, having a spring, J'', and a pin, *j'*, projecting from its lower side, which passes through the opening in the bottom of the trough L and an aperture in the slide H'', for the purpose of locking it in the positions shown in Figs. 1 and 4.

At the rear end of the plate H'' is secured a curved plate, H', to which are fastened rods *f*, which stand in nearly a vertical position, and serve the purpose of a gate, to prevent the sheaves from falling out of the rear end of the machine. The slide H'' enables the gate

to be adjusted to sheaves of different lengths. A seat (not shown in the drawings) is intended to be placed on the platform directly over the small wheel B".

5 The elevator is for the purpose of catching the sheaves as they fall from the binder and lifting them upon the wheel or turn-table C'. It works upon a shaft, F', so as to be raised or lowered to suit when attached to a binder, or
10 to lift the sheaves from the ground. Thills may be attached to the front of the machine, and a horse hitched thereto, if necessary.

To operate the machine it should be attached to the binder so that the elevator is held
15 stationary directly under where the sheaves drop, (from the binder.) When the sheaf falls on the elevator, it is lifted up and is thrown on the wheel C', (or turn-table,) thence into the shock-forming trough, with butt back against
20 the end-gate, until the required number of sheaves for the shock has been deposited therein. Then the operator on the machine takes hold of slide-handle J' with his left hand, and foot on lever K', and tilts the trough backward
25 on the axle K, binding the shock at the same time until the shock stands upright. Then as the sheaves come up from the binder, break and put on the caps or hudders. Then take the left hand and loosen the plate O' on the plate
30 O, and throw the compressing-arms back, and at the same time with the right hand press or loosen the slide-spring J'', and the shock drops to the ground, holding slide-handle until gate bars or rods are drawn out from under
35 the shock. Draw the slide back to its place and turn the trough back ready to receive the next shock.

All the above work can be done with this machine while the reaper is cutting and binding the sheaf.
40

Having described my invention, what I desire to secure by Letters Patent, and claim, is—

1. In a machine for shocking wheat, the
45 combination of the frame, the carrying-wheels, a curved axle having one bearing in the frame and the other in one of the wheels, and a shocking-trough secured to said axle, as described, and for the purposes set forth.

2. In a machine for shocking wheat, in combination with a shocking-trough, a gate sliding in said trough, and means to lock the gate in different positions, as shown and described, and for the purposes set forth. 50

3. In a machine for shocking wheat, a shocking-trough, L, in combination with the slide H'', curved piece H', and rods f, substantially as shown and described, and for the purposes set forth. 55

4. In a machine for shocking wheat, the shocking-trough L, the slide H'', having curved piece H', and rods f, in combination with compressing-arms H, lever J, handle J', links h, and lever K', substantially as described, and for the purposes set forth. 60 65

5. In a machine for shocking wheat, the frame A, in combination with wheel B', axle C'', bevel-gears D'' D, shaft C, and wheel C', having pins c, as shown and described, and for the purposes set forth. 70

6. In a machine for shocking wheat, the combination of the frame A, wheel B', axle C'', bevel-gear D'', shaft C'', having bevel-gear D', sprocket-wheel F''', chain M, the shaft F', having sprocket-wheels F''', F, and F'', and the
75 elevator-chains M' and M'', as described, and for the purposes set forth.

7. In a machine for shocking wheat, in combination with the frame A, the bars E, the pivoted bars E', the plate A'', and curved plate D'', as described, and for the purposes set forth. 80

8. In a machine for shocking wheat, the combination of the trough L, plate N, the compressing-arms H, links h, and lever K', as described, and for the purposes set forth. 85

9. In a machine for shocking wheat, the trough L, the slide H'', the handle J', the lever J, having spring J'', and pin j', the whole in combination as described, and for the purposes set forth. 90

10. In a machine for shocking wheat, in combination with the frame A, the table A'', the wheel C', and beveled plate G, as described, and for the purposes set forth.

SOLOMON CLEMENT MINEAR.

Witnesses:

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CHARLES FREY.