

(No Model.)

J. FIEGER.
DUMPING WAGON.

No. 501,998.

Patented July 25, 1893.

Fig. 1.

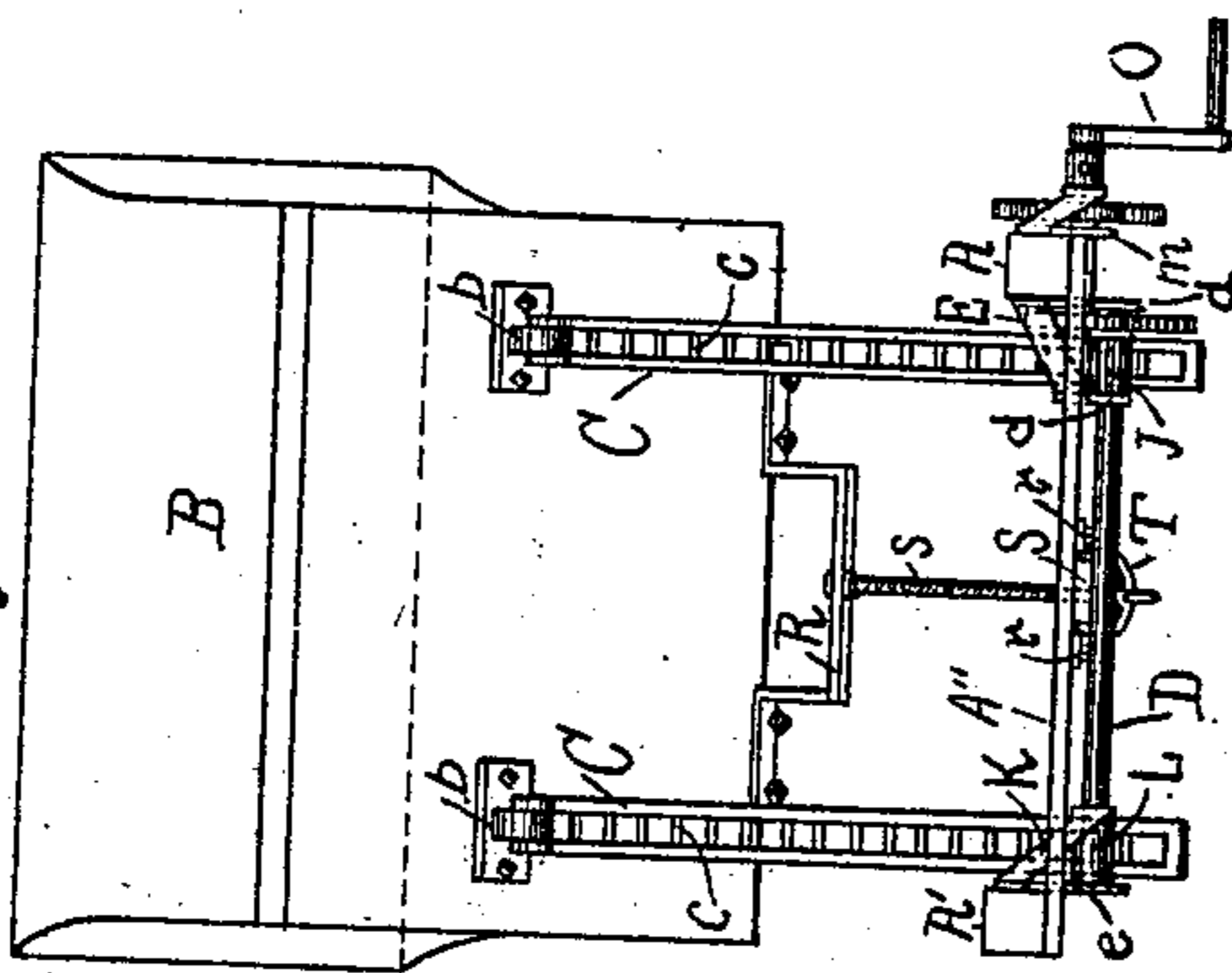


Fig. 2

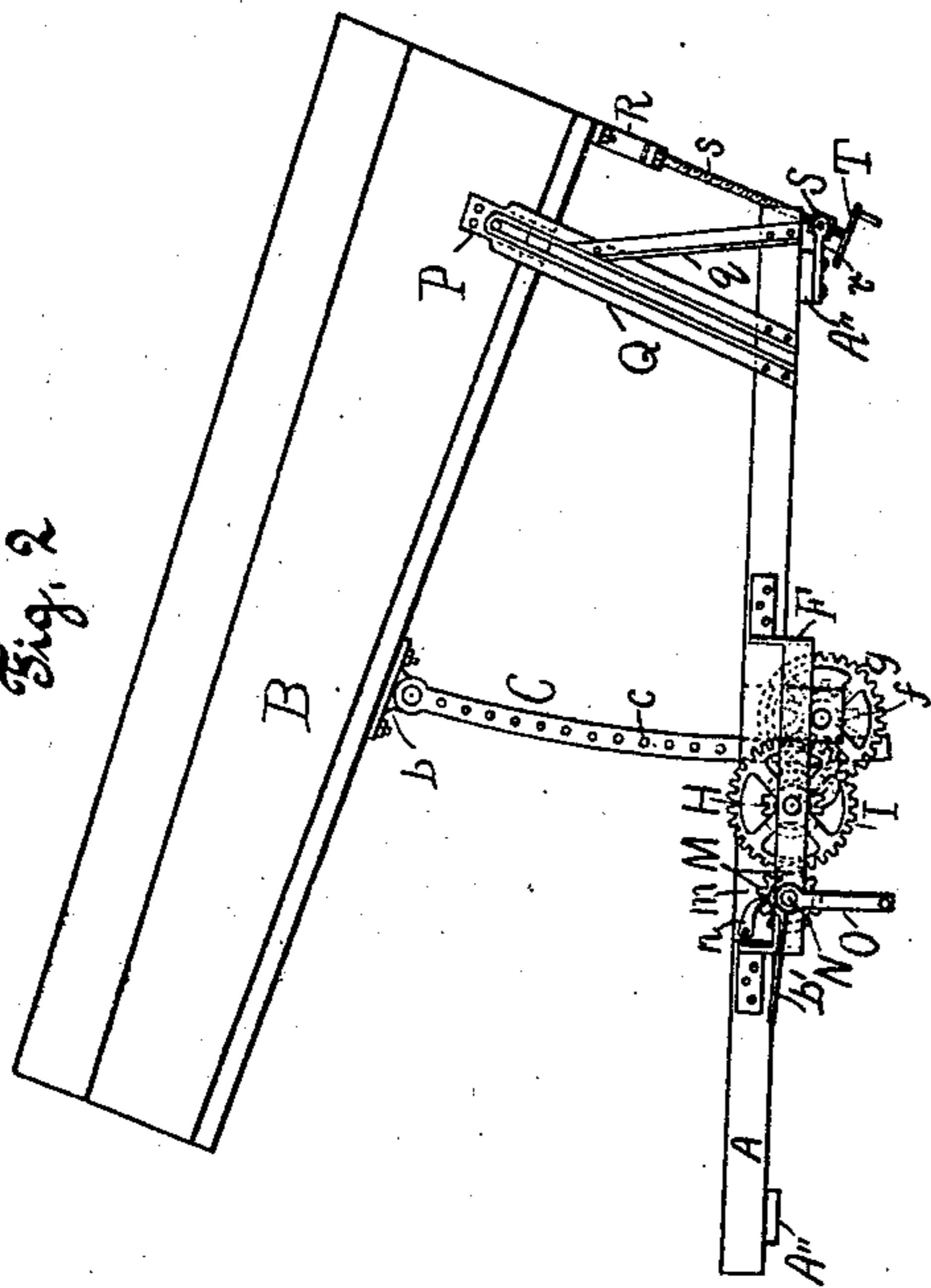


Fig. 3.

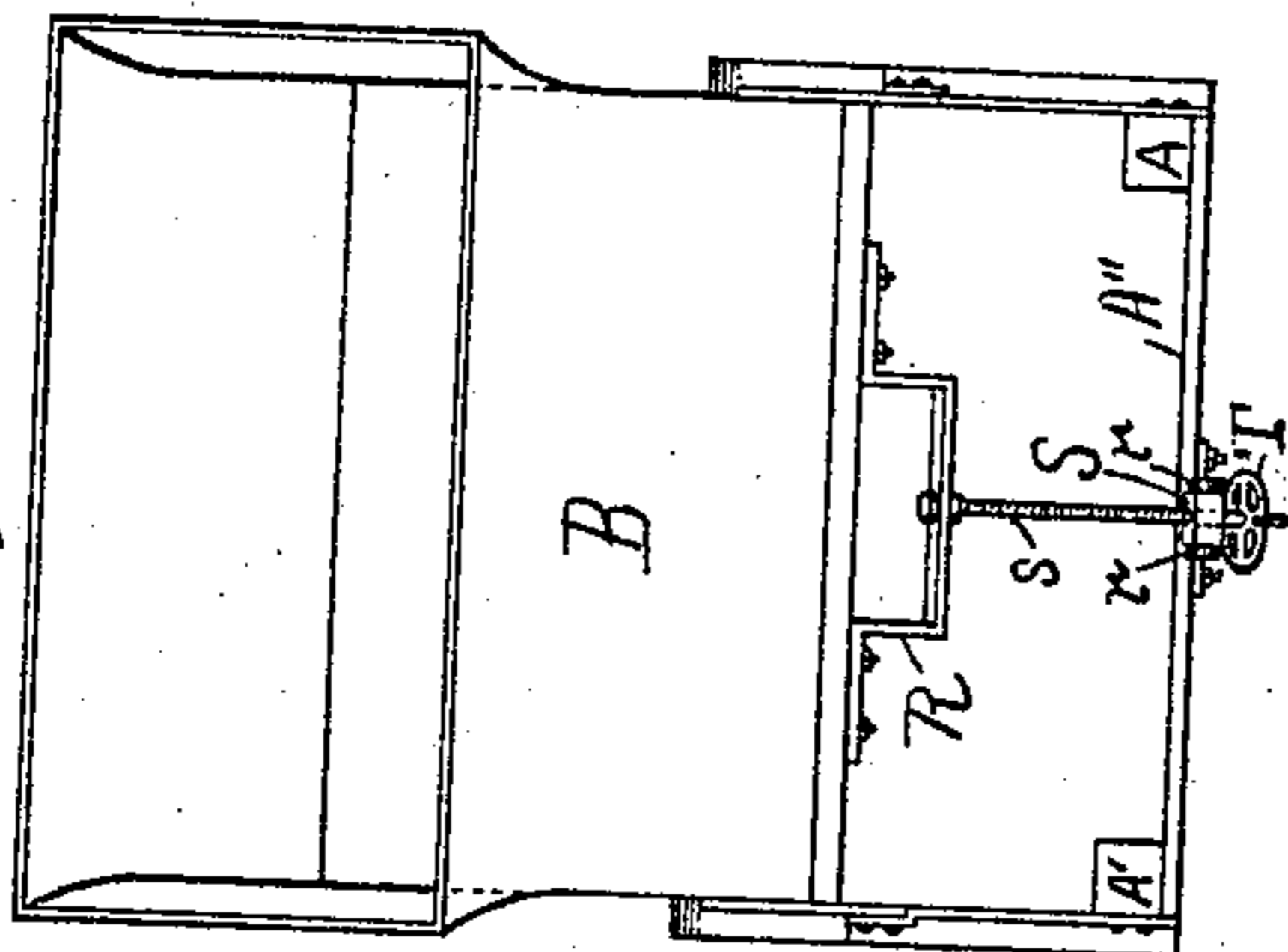


Fig. 4.

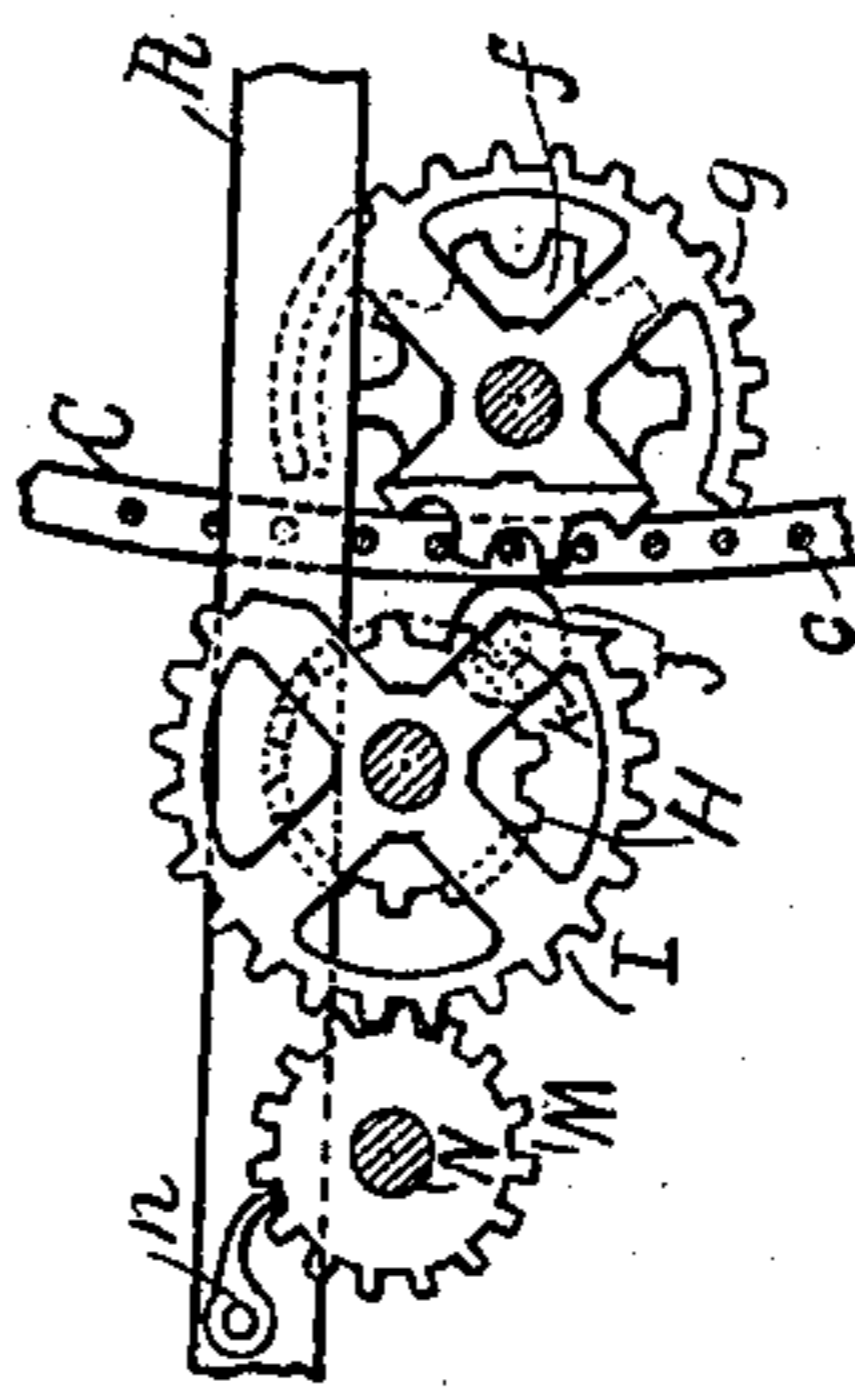


Fig. 5.

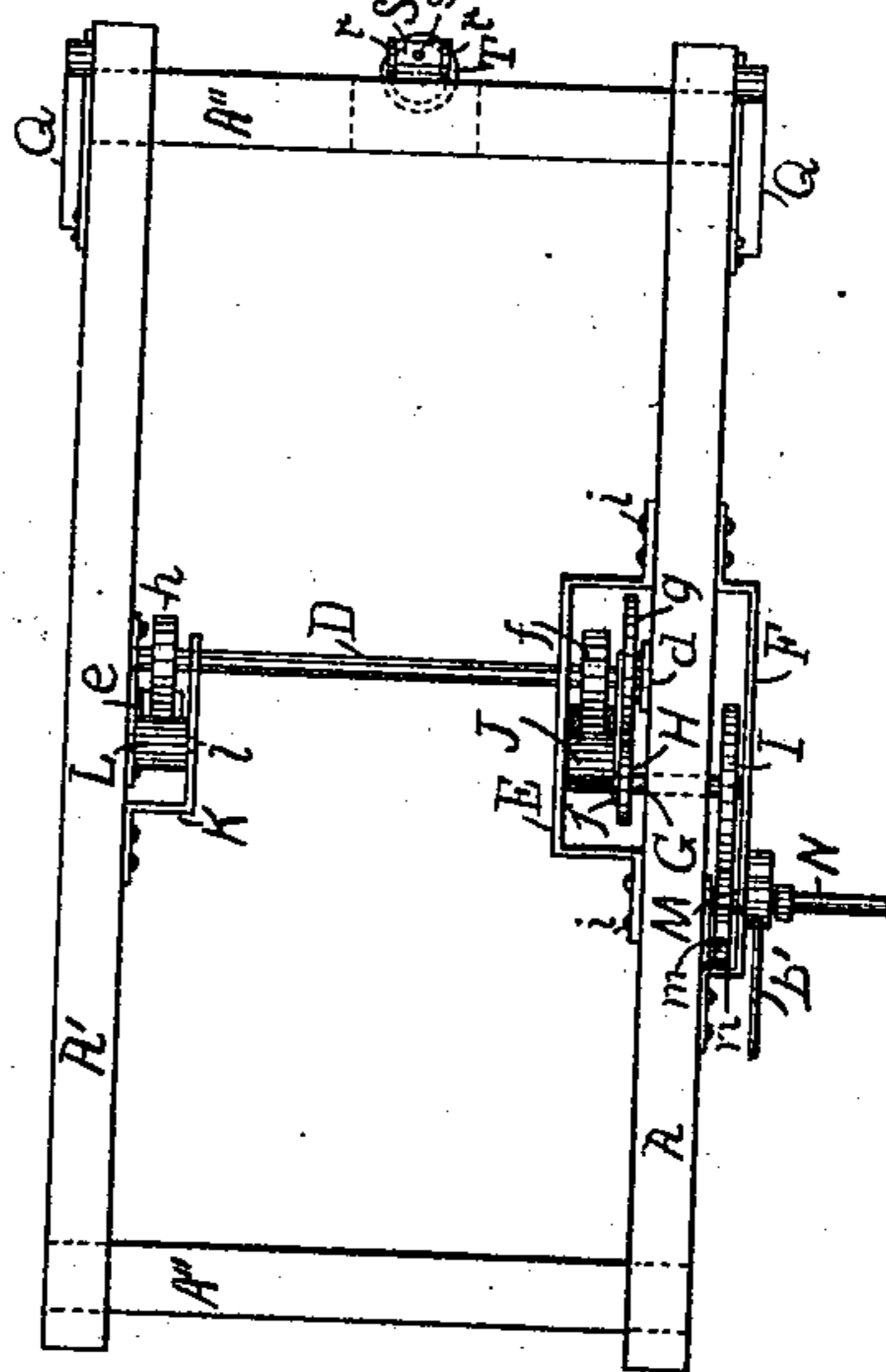
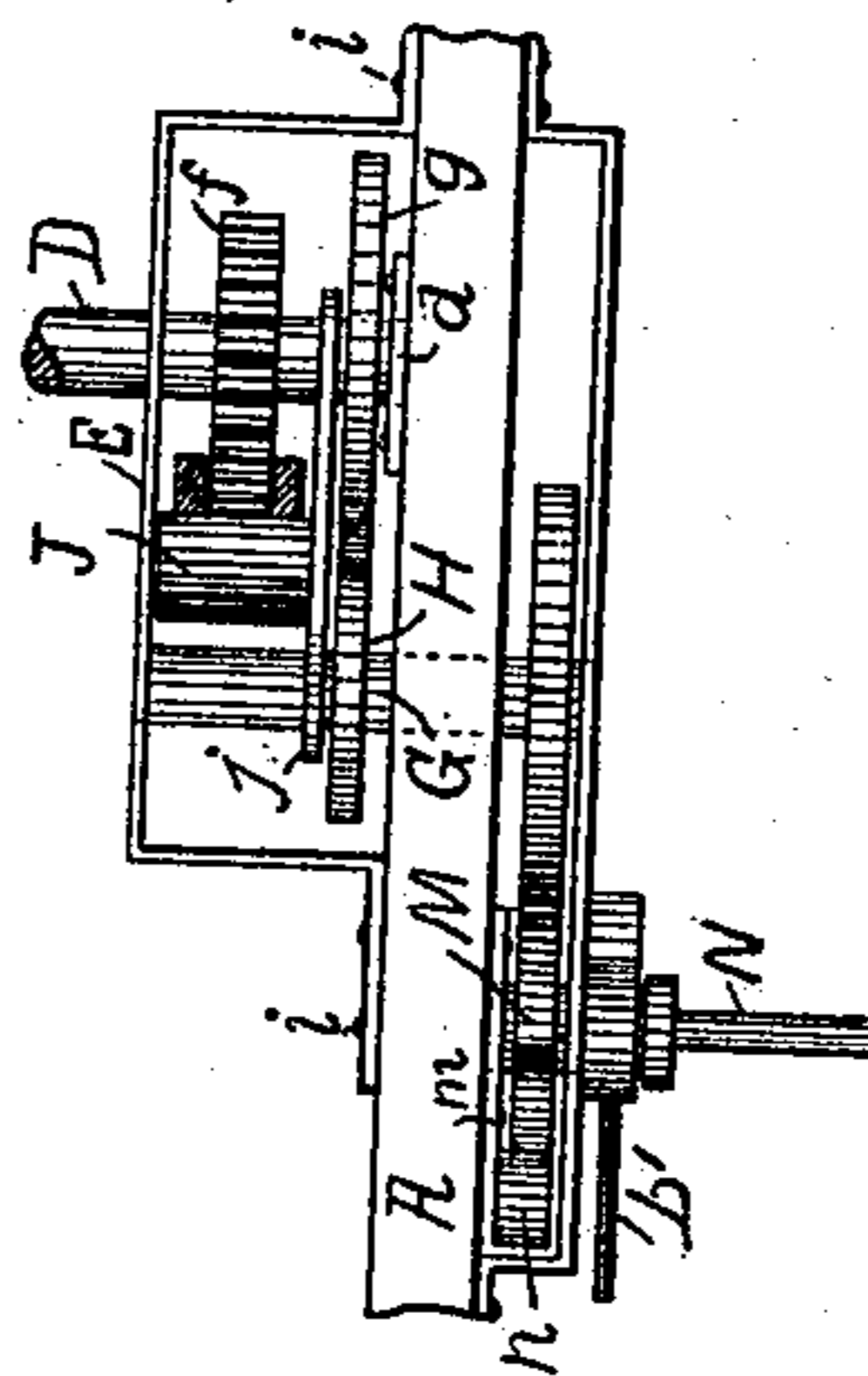


Fig. 6.



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DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 501,938, dated July 25, 1893.

Application filed April 4, 1893. Serial No. 468,974. (No model.)

To all whom it may concern:

Be it known that I, JOHN FIEGER, a citizen of the United States, residing at New York, in the county and State of New York, have
5 invented certain new and useful Improvements in Dumping-Wagons, which improvements are fully set forth in the following specification and accompanying drawings, in which—

10 Figure 1 is a view of the front-end of a wagon embodying my improvements. Fig. 2 is a side elevation of same, showing the body in an elevated position. Fig. 3 is a view of the rear-end of the wagon, showing certain
15 parts employed for tilting the body when elevated. Fig. 4 is a detailed side view, on an enlarged scale, showing certain gearing mechanism employed, part being broken away to show the engagement of the rack therewith.
20 Fig. 5 is a plan view of said wagon, the body thereof being removed to better show the disposition of parts. Fig. 6 is a plan view of Fig. 4.

Similar reference-letters denote like parts
25 in all the views.

This invention relates to that class of wagons in which means are employed by which the body may be elevated, and the rear end thereof may be tilted upward or downward,
30 to the end that the load may be discharged from said body, as by means of a chute. Its object is to provide a dumping wagon embodying simple and efficient means whereby the body of the wagon may be readily elevated
35 and controlled while in its elevated position.

It consists of the novel disposition of certain gearing-mechanism, adapted to act in conjunction with toothed racks carried by the body; of a screw arrangement whereby
40 control of the rear end of the body, when said body is in an elevated position, is secured; means for obviating lateral tilting of the body, when raised from the bed-frame, and of certain details of construction, all of which
45 will be referred to specifically hereinafter.

The bed-frame of my improved wagon consists of the side-pieces A, A', and the respective end-pieces, A''. The respective side-pieces may, of course, be any desired number of cross-pieces.
50

The letter B denotes the body of my improved wagon. To the under surface of the

body B, central of each side thereof, I secure two small plates, preferably by bolting, as shown, each of which plates has a small projection *b*, in the form of an eye; and to either
55 of the said projections I pivotally connect one of the racks C, which extend downward therefrom, and each of which consists of two slightly-curved, parallel arms, connected at
60 regular intervals by the pins *c*.

I secure to the inner face of the side-piece A, a plate *d*, which extends a suitable distance downward from said side-piece; and in the lower end of the plate *d* is journaled one
65 end of the shaft D. To the inner face of the side-piece A', I secure the plate *e*, which extends downward from the side-piece A', and in which is journaled the other end of the shaft D, at a suitable point therein. The
70 shaft D carries, inside and adjacent to the side-piece A', a small sprocket-wheel *h*, and inside and adjacent to the side-piece A, the spur-wheel *g* and the sprocket-wheel *f*, the said spur-wheel and both of said sprocket-wheels being keyed to, or otherwise fixed
75 upon the shaft D. To the inner face of the side-piece A, I secure, as by means of the bolts *i*, the angle-plate E. To the outer face of said side-piece A, I secure the angle-plate
80 F. These angle-plates project respectively away from the side-piece A, as well as downward therefrom.

The shaft G is journaled at either end in the respective angle-plates E, F, said shaft
85 passing transversely beneath the side-piece A. The pinion H is fixed upon the shaft G, adjacent to the inner face of the side-piece A, and the spur-wheel I is fixed upon said shaft adjacent to the outer face of the side-piece A, the said pinion H being adapted to
90 stand at all times in mesh with the spur-wheel *g*. The plate *j* extends from the shaft G to the shaft D, through the respective ends of which plate the shafts last named loosely
95 pass; and the shaft *k*, (Fig. 4,) is rigidly secured at one end to the plate *j*, and at the other end thereof to the angle plate E, at a suitable point therein; and there is loosely
100 mounted upon the shaft *k* a small drum J. The angle-plate K is bolted to the inner face of the side-piece A' forward of the plate *e*, and extends obliquely downward to a point parallel with the shaft D, then rearward to

the shaft D, the latter passing loosely through the end thereof. The shaft *l*, (Fig. 5) is rigidly secured at one end to the angle-plate last named, at a suitable point therein; and at
 5 the other end thereof, to the plate *e*, at a suitable point therein. The drum L is loosely mounted upon the shaft *l*. The pinion M is firmly mounted upon a shaft N, which is journaled at one end in a downwardly-extending plate *m*, secured to the outer face of the
 10 side-piece A, and bears in the angle-plate F, the said shaft extending through and projecting outward from the plate F; a small drum being firmly mounted upon the outward-pro-
 15 jecting portion of the shaft N, and said shaft being provided at its extreme outer end with a crank O. A pawl *n* is pivoted to the side-piece A, and is adapted to engage the teeth of the pinion M, to prevent reverse move-
 20 ment thereof.

The brake-lever *b'* works at one end thereof upon a pivot which projects outward from the angle-plate F, said brake-lever being provided with a semi-circular portion adapted to
 25 take partially around the peripheral face of the drum last named, upon the free end of said lever *b'* being depressed.

The sprocket-wheels *f*, *h*, are adapted to engage the pins *c*, of the racks C, the latter passing downward respectively between the said
 30 sprocket wheels and the drums J, L; and it will be understood that by turning the crank O in the proper direction, the racks C, with the body B, will move upward.

To the sides of the body B, near the rear ends thereof, I secure the plates P, each of
 35 said plates being provided with a stud adapted to project laterally from the sides of said body, upon said plates being secured in posi-
 40 tion.

To each of the side-pieces A, A', I secure oblique guides Q, each of which is provided with a central, longitudinal slot, into which
 45 take the respective studs of the plates P, and each of which guides being held rigidly in position by means of the brace *q*.

To the bottom of the body B, I secure the angular piece R, at the rear end of said body, and to the rear end-piece A'', of the bed frame,
 50 I secure two outwardly-extending, parallel arms *r*. The block S, is journaled at either end in the said arms *r*, at the outer ends thereof, said block being adapted to rock in its bearings, and being provided with an open-
 55 ing, interiorly screw-threaded, through which passes the screw or threaded rod *s*, the point

of said rod being rotatably connected to the horizontal portion of the angular piece R, at a point central therein; and said screw carries at its lower end the wheel T. 60

It will be understood that upon the body of the wagon being elevated, as hereinbefore described, the rear end of said body may be readily tilted upward or downward by simply turning the wheel T, in different directions. 65

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

1. In a dumping wagon, in combination with the bed-frame, the respective plates *d*, *e*, the
 70 shaft D, journaled in said plates, the sprocket-wheels *f*, *h*, and the spur-wheel *g* carried by said shaft D, the angle plates E, F, secured to the side-piece A, the shaft G journaled in said
 75 angle-plates and carrying the spur-wheel I and the pinion H, the latter being adapted to mesh with the spur-wheel *g*, the plate *j*, through the ends of which the respective shafts D, G, loosely pass, a rod connecting
 80 said plate *j* with the angle-plate E and having loosely mounted thereon the drum J, the plate *m* extending downward from the outer face of the side-piece A, a shaft journaled at one end therein and bearing in the angle-plate
 85 F, said shaft carrying a drum, and the pinion M, the latter being adapted to mesh with the spur-wheel I, the crank O carried by said shaft, the pawl *n* adapted to engage the teeth of the pinion M, the angle-plate K secured to the side-piece A', a rod extending from the
 90 horizontal portion of said angle-plate to the plate *e*, and the drum L loosely mounted on said rod, all substantially as described and for the purposes set forth.

2. In a dumping wagon having a body and
 95 a bed-frame, in combination, the angular piece R secured to the rear end of said body, the arms *r* secured to the rear end of said bed-frame and projecting outward therefrom, the block S, journaled in said arms *r* and having an
 100 opening provided with interior screw-threads, and the screw *s*, passing through said opening, said screw being rotatably connected at its point to the horizontal portion of said angular piece R, and carrying at its lower end
 105 the wheel T, all substantially as described and for the purposes set forth.

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Witnesses:

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