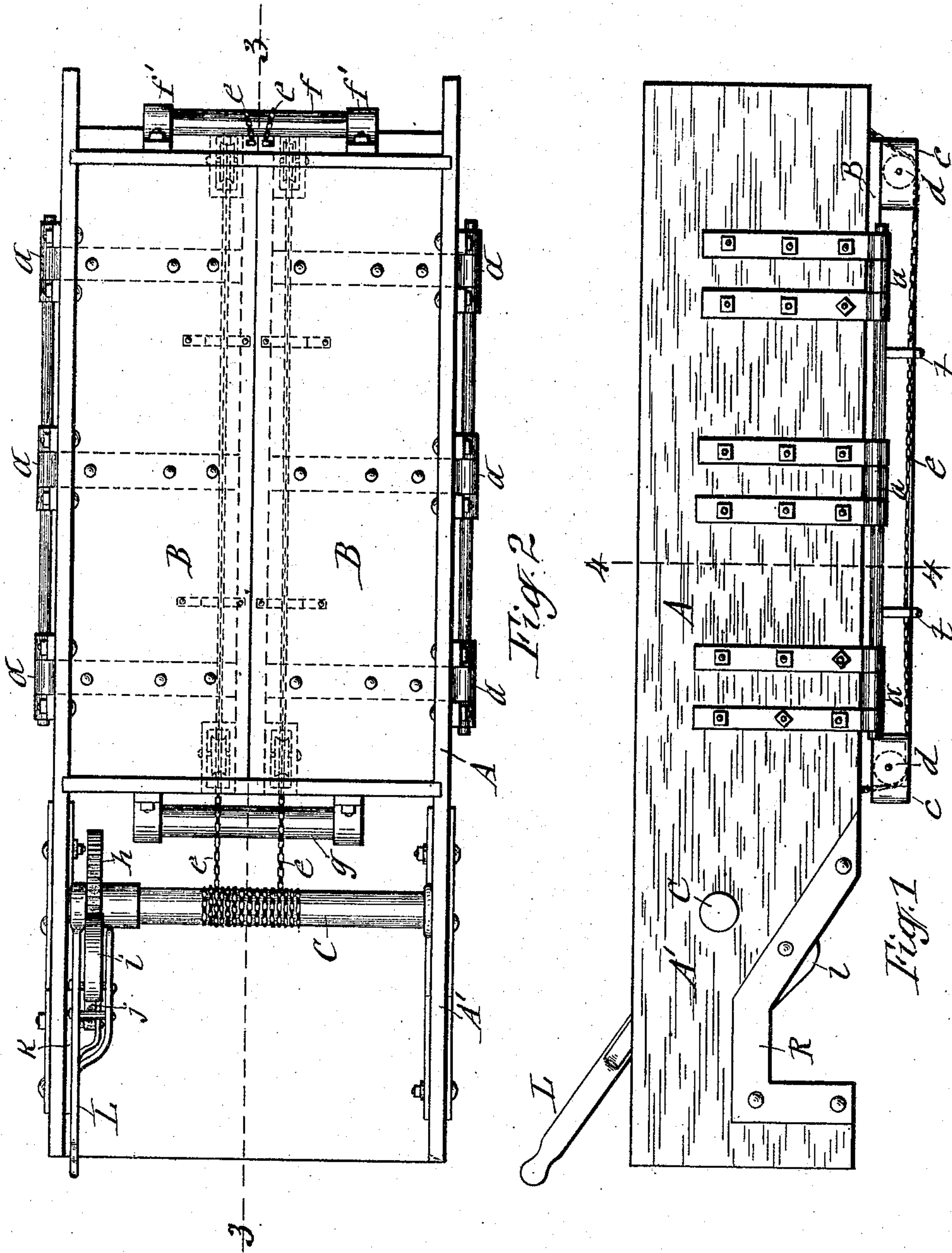


No. 806,387.

PATENTED DEC. 5, 1905.

J. YOUNG.
DUMPING WAGON.
APPLICATION FILED JAN. 3, 1905.

4 SHEETS—SHEET 1.



WITNESSES:

G. H. Palmer
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INVENTOR

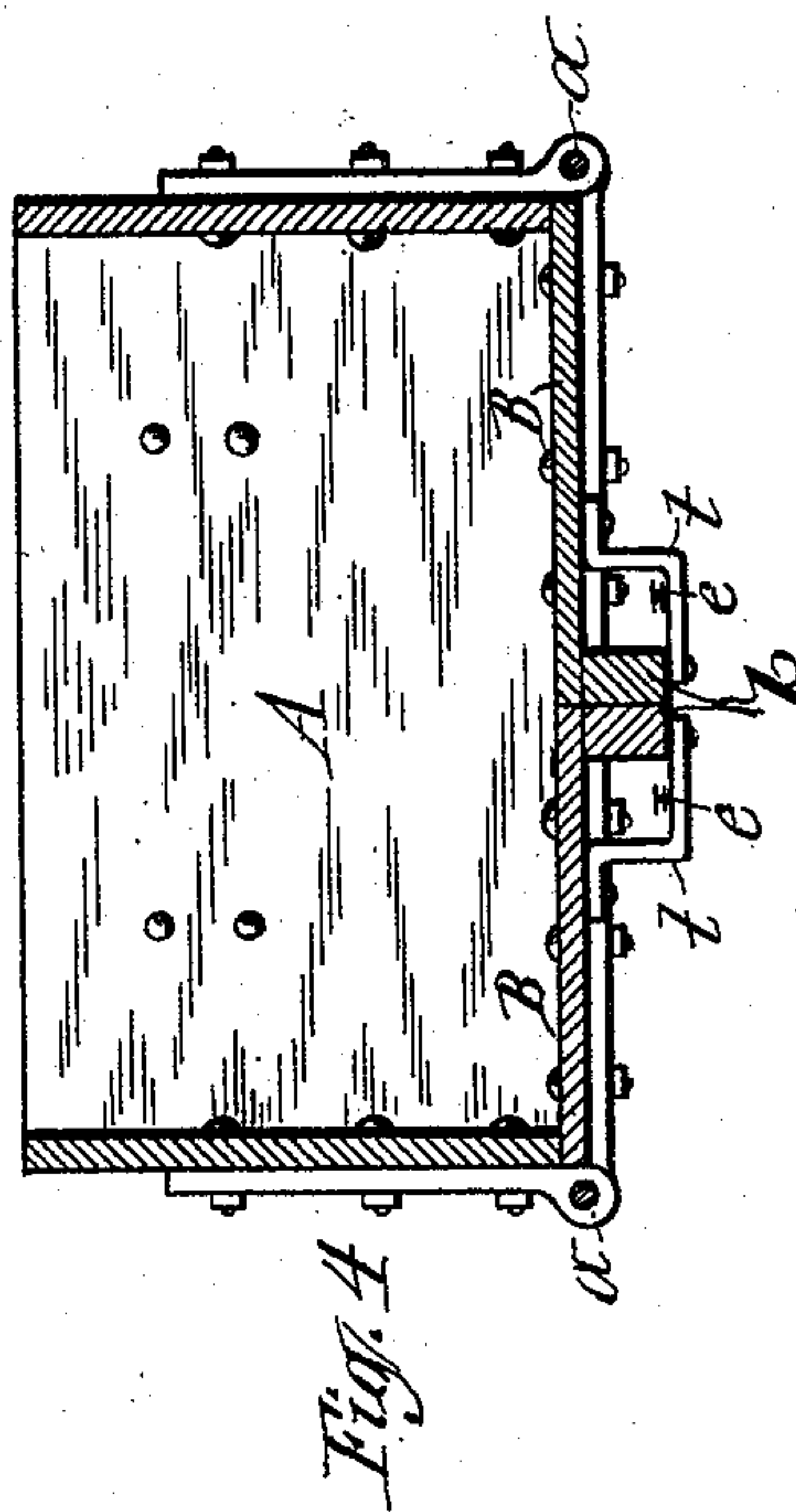
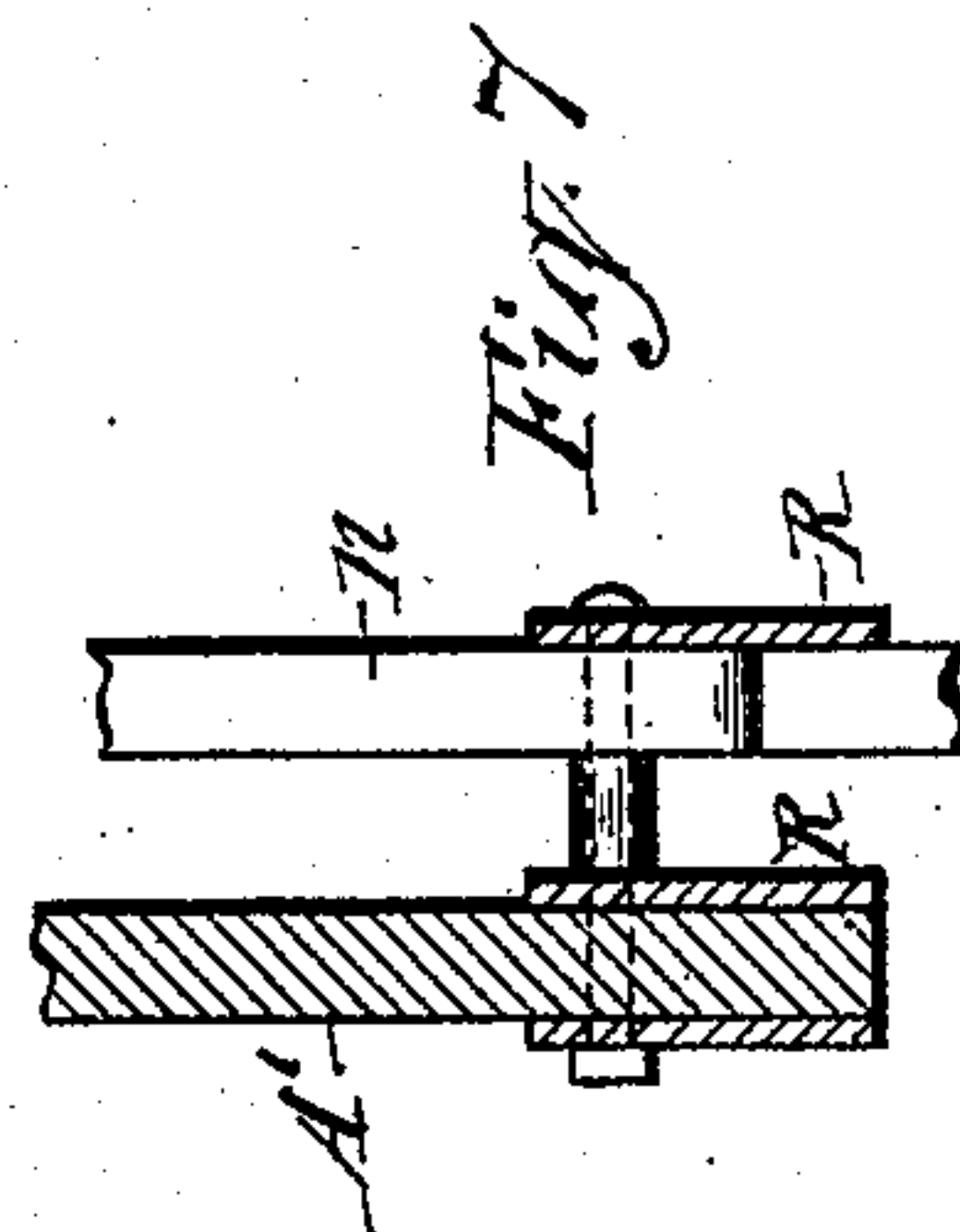
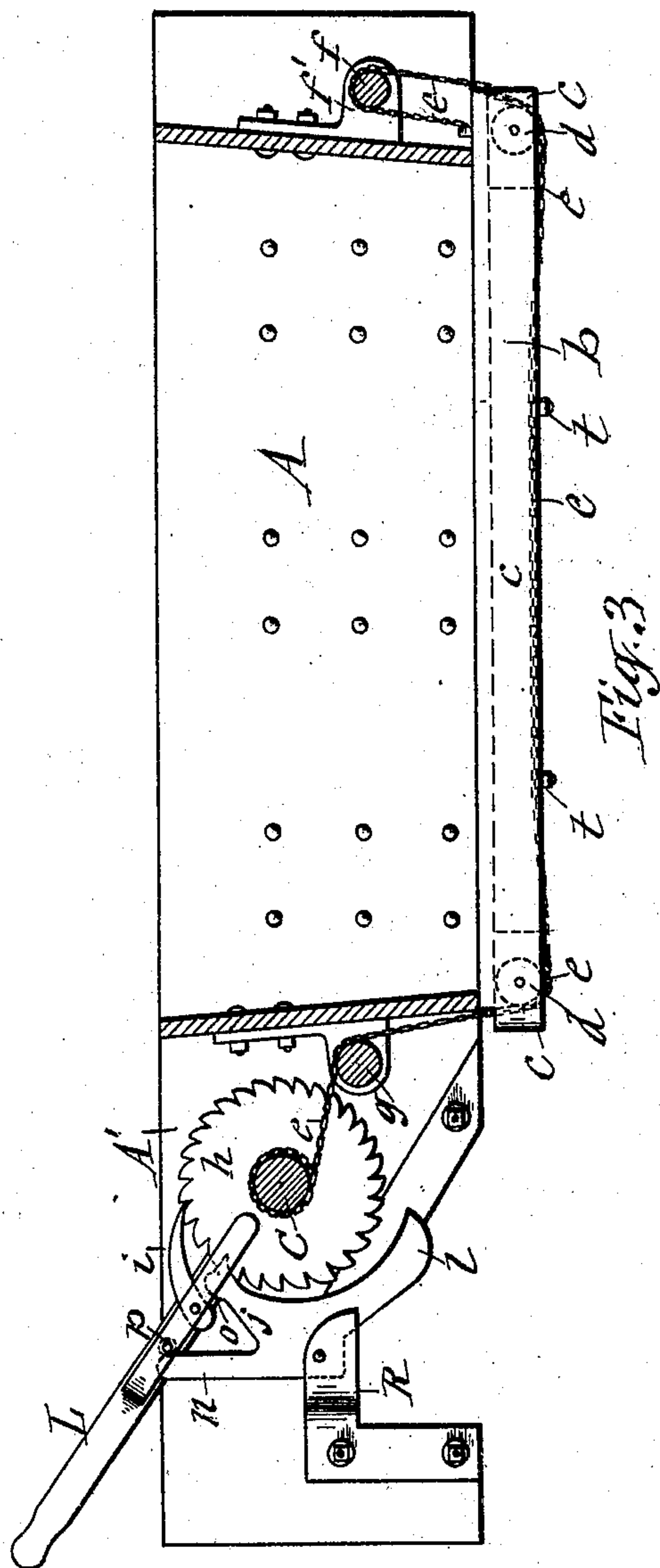
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No. 806,387.

PATENTED DEC. 5, 1905.

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APPLICATION FILED JAN. 3, 1905.

4 SHEETS—SHEET 2.



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4 SHEETS—SHEET 3.

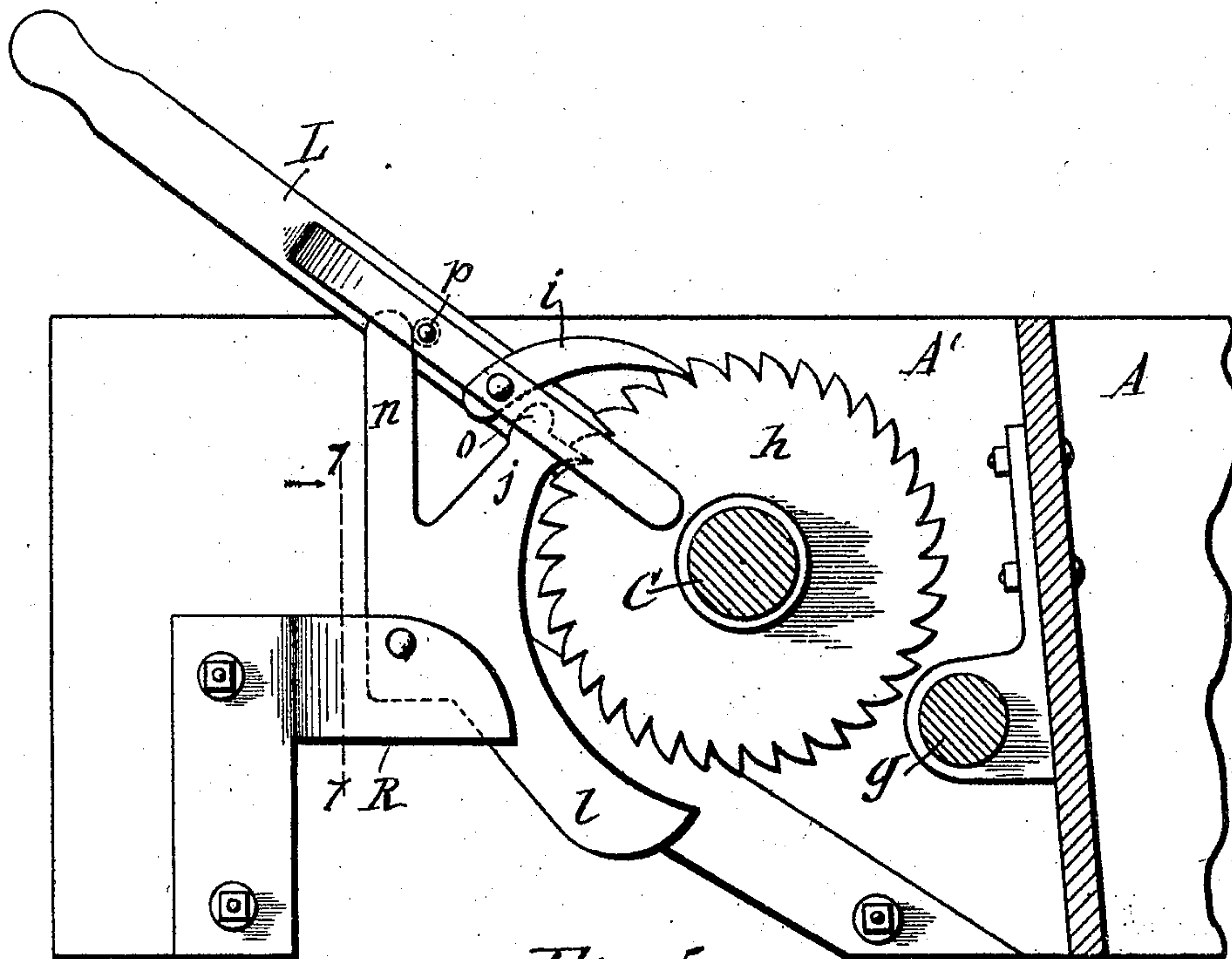


Fig. 5

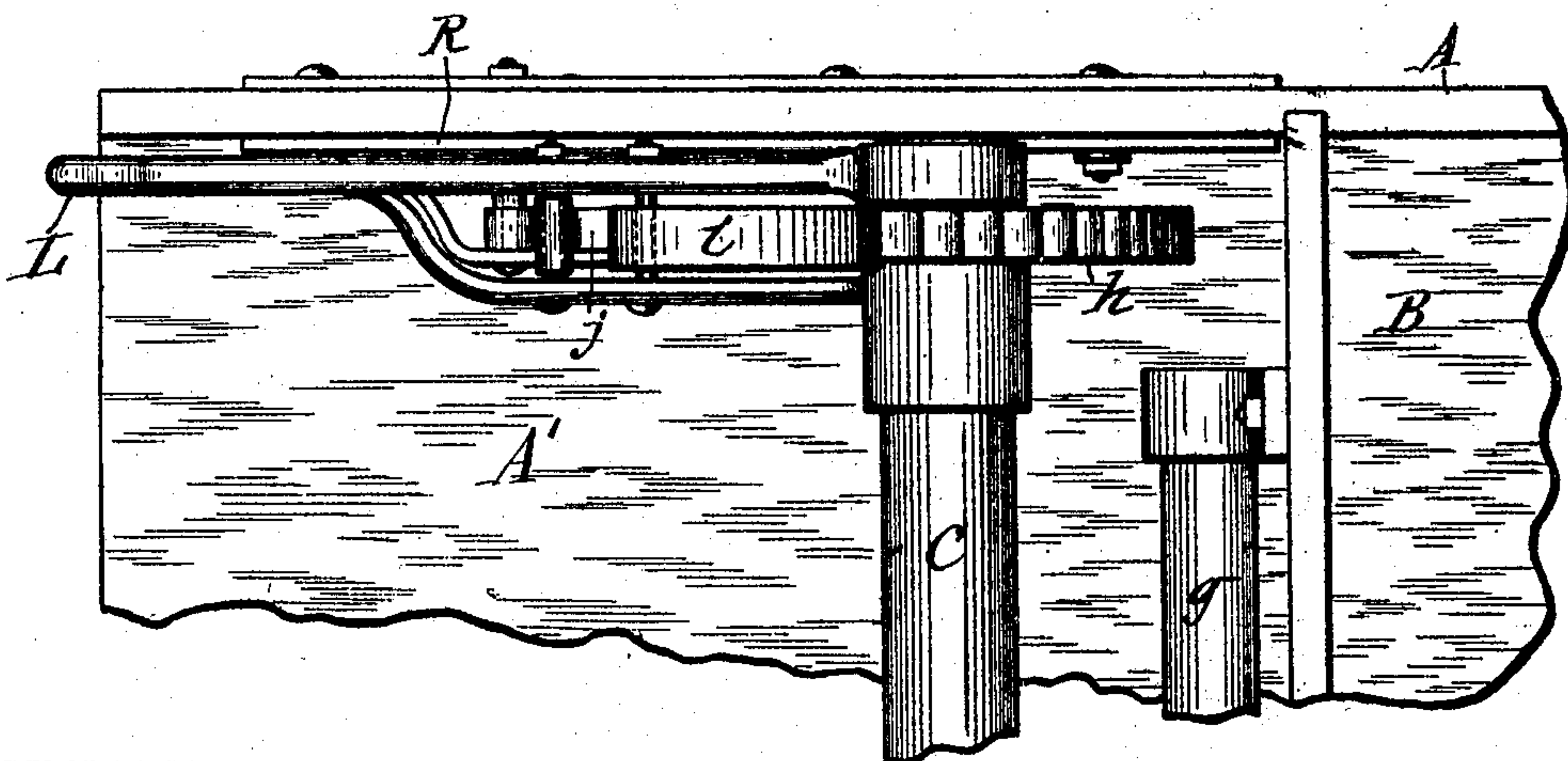


Fig. 6

WITNESSES:

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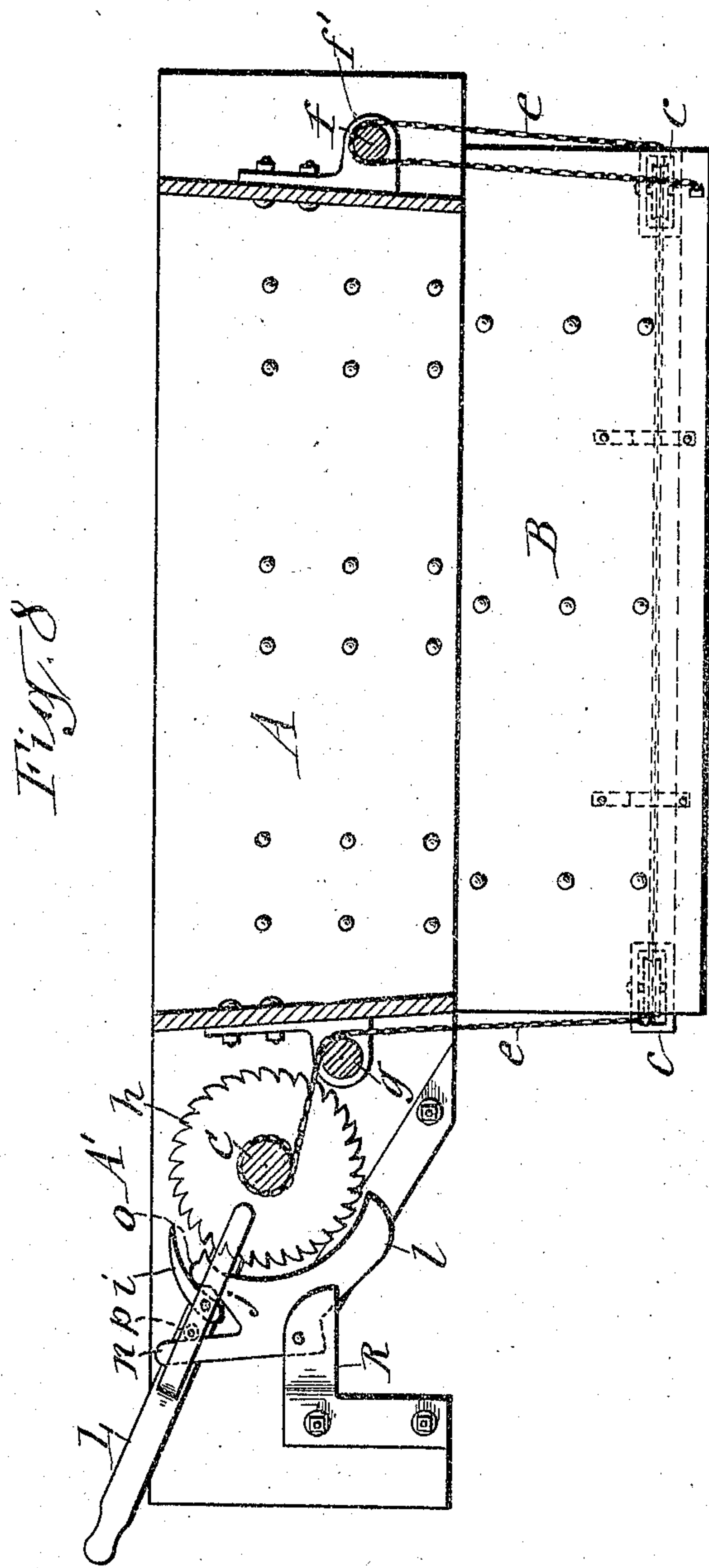
John Young
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APPLICATION FILED JAN. 3, 1905.

4 SHEETS—SHEET 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN YOUNG, OF SYRACUSE, NEW YORK.

DUMPING-WAGON.

No. 806,387.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed January 3, 1905. Serial No. 239,314.

To all whom it may concern:

Be it known that I, JOHN YOUNG, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Dumping-Wagons, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of dumping-wagons which have the floor of the body hinged to allow said floor to drop to its open position and are provided with a winch upon which are wound the chains connected to the floor-sections, said winch having attached to it a ratchet which is operated by means of a lever provided with a pawl engaging the ratchet by the movement of the lever in one direction, while a dog engages the ratchet to prevent reverse movement of the ratchet when released from the pawl.

The object of the invention is to provide simple, durable, and efficient means for throwing the dog and pawl both out of engagement with the ratchet by the same lever which carries the aforesaid pawl, thus requiring only one lever for operating the winch to lift the floor to its closed position and for releasing the winch to allow the said floor to drop to its open position; and to that end the invention consists in the novel construction and combination of the winch operating and controlling devices hereinafter described, and as illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the body of a dumping-wagon embodying my invention in its normal condition. Fig. 2 is a plan view of the same. Fig. 3 is a longitudinal section on the line 3 3 in Fig. 2. Fig. 4 is a transverse section on the line 4 4 in Fig. 1. Fig. 5 is an enlarged vertical transverse section of the winch operating and controlling devices. Fig. 6 is a plan view of the same. Fig. 7 is a transverse section on the line 7 7 in Fig. 5; and Fig. 8 is a vertical longitudinal section of the body of a dumping-wagon, showing my invention in position for dropping the floor of said body.

Similar letters of reference indicate corresponding parts.

A represents the body of the dumping-wagon.

B denotes the drop floor or bottom of said body, which floor is divided into two side sections hinged to the body, as shown at *a a*, to

allow said sections to drop into position to discharge the contents of the body.

To the under side of the floor-sections, adjacent to the meeting edges thereof, are attached longitudinal bars *b b*, which serve to stiffen said sections. To the end portions of these bars are attached brackets *c c*, to which are pivoted sheaves *d d*, on the under sides of which run chains *e e*, each of which passes over a horizontal roller *f*, mounted in bearings *f' f'*, attached to the exterior of the rear end of the body A. The rear end portions of said chains pass from the roller *f* down to the ends of the bars *b b* and are fastened thereto. The front end portions of the chains pass from the front sheaves *d d* up and over a roller *g*, pivotally supported on the exterior of the front end of the body A. The chains pass thence to the winch C, upon which they are wound. Said winch is mounted in suitable bearings attached to extensions A' of the side walls of the body A. *h* represents a ratchet which is fastened to the winch.

A lever L is pivotally connected to the winch and has pivoted to it a pawl *i*, which engages the ratchet when the lever L is operated to wind the chains *e e* on the winch, and thereby lift the floor-sections to close the bottom of the body A.

j represents the dog which engages the ratchet to prevent retrograde movement thereof while the pawl *i* is carried to a position to obtain a new hold on the ratchet. This dog is pivoted to a bracket R, attached to the side of the body extension A'. In order to cause the said dog to normally engage the ratchet, I form the dog with a depending weight *l*, which is disposed to swing the dog *j* into engagement with the ratchet. In order to throw the said dog and pawl out of engagement by the same lever L which carries said pawl, I form the dog with an upwardly-extending arm *n* and with a head *o* on the top of the front of the dog and attach to the lever L a stud or roller *p*, which is caused to press on the back of the free end of the arm *n* by a downward pressure applied to the lever. Said pressure on the arm *n* throws the dog *j* out of engagement with the ratchet. Simultaneously with this movement of the dog the head *o* thereof engages the under side of the pawl *i* and lifts the same from the ratchet. The ratchet being thus released from the dog *j* and pawl *i* allows the winch C to yield to the

strain of the chains *ee*, which are thus unwound on the winch and caused to allow the floor-sections B to drop to their open position on the body A, as shown in Fig. 8 of the drawings.

In lifting the floor-sections to their closed position the lever is swung rearward from the position shown in Figs. 1, 2, and 5 of the drawings, and in this movement the arm *n* and head *o* of the dog *j* are out of engagement with the stud or roller *p* and pawl *i*, and thus the said dog is allowed to assume its normal position for engaging the ratchet and prevent retrograde movement of the ratchet while released from the pawl *i* in swinging the lever L forward to cause the pawl to obtain a new hold on the ratchet.

To carry the chains *ee* laterally from under the center of the body A and shield said chains when the floor-sections are dropped to discharge the contents of the said body, I attach to the under side of said floor-sections suitable brackets *t t*, disposed at intervals in the length of the body A and receiving the chains through them.

What I claim as my invention is—

1. The combination, with the ratchet, lever and pawl pivoted to said lever, of a dog disposed to become interposed between the pawl and ratchet by the movement of the lever and actuated by said lever to throw dog from the ratchet and simultaneously cause the dog to pry the pawl out of engagement as set forth.

2. The combination with the ratchet, lever and pawl pivoted to said lever, of a pivoted

dog disposed to become interposed between the pawl and ratchet and formed with a depending weight forcing the dog into engagement, and means applied to the lever to throw the dog out of engagement and cause the dog to pry the pawl from the ratchet as set forth.

3. The combination, with the wagon-body having drop-floor sections hinged to said body, a floor-lifting winch, a ratchet attached to said winch, and a lever provided with a pawl for engaging the ratchet, of a dog normally engaging the ratchet, an arm and a head fixed to said dog and disposed to engage respectively the lever and the pawl and thereby throw the dog and pawl both out of engagement by the movement of the lever in one direction.

4. The combination, with the wagon-body having drop-floor sections hinged to said body, a floor-lifting winch, a ratchet attached to said winch, and a lever provided with a pawl for engaging the ratchet, of a dog formed with a depending weight to hold the dog normally in engagement with the ratchet, a forwardly-projecting head on the dog and an upwardly-extending arm fixed to the dog and disposed in front thereof, and a roller pivoted to the handle and in position to press the aforesaid arm forward and thereby throw the dog out of engagement and cause the head thereof to hold the pawl from engagement as set forth.

JOHN YOUNG.

Witnesses:

L. H. FULMER,

J. J. LAASS.