

No. 869,613.

PATENTED OCT. 29, 1907.

J. BENNETT,
DUMPING CAR.
APPLICATION FILED FEB. 20, 1907.

2 SHEETS—SHEET 1.

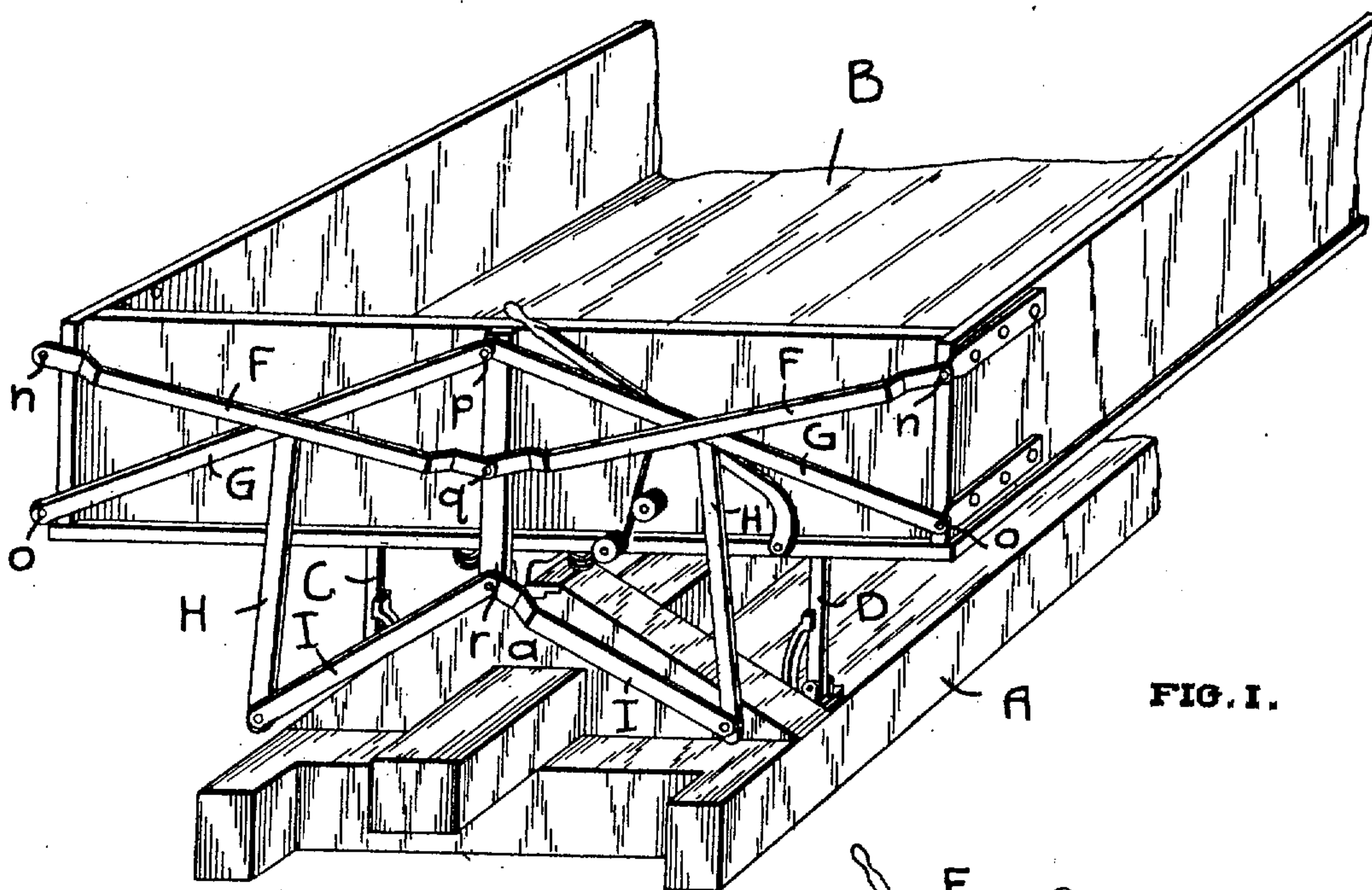


FIG. 1.

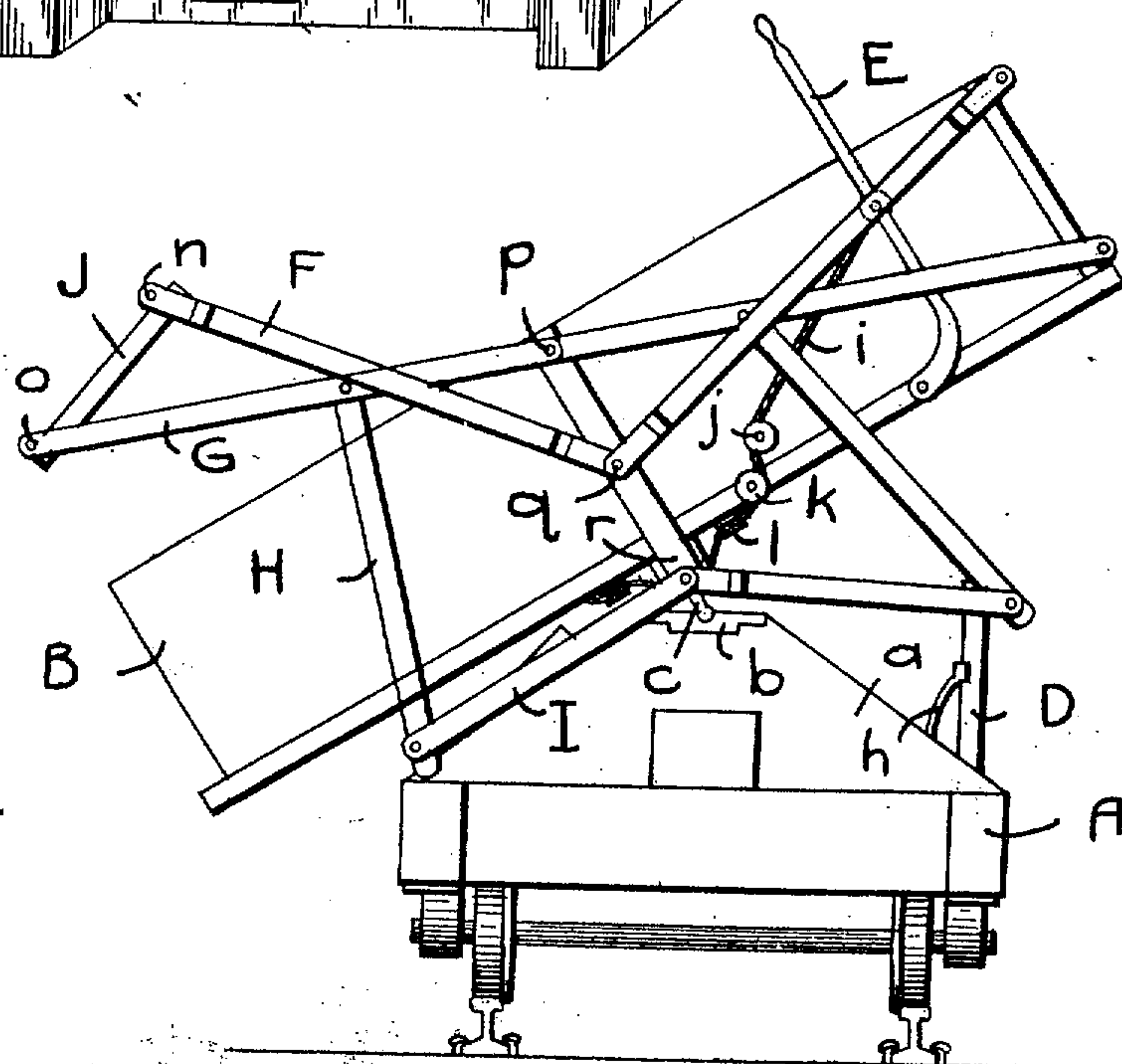


FIG. 2.

WITNESSES

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2 SHEETS—SHEET 2.

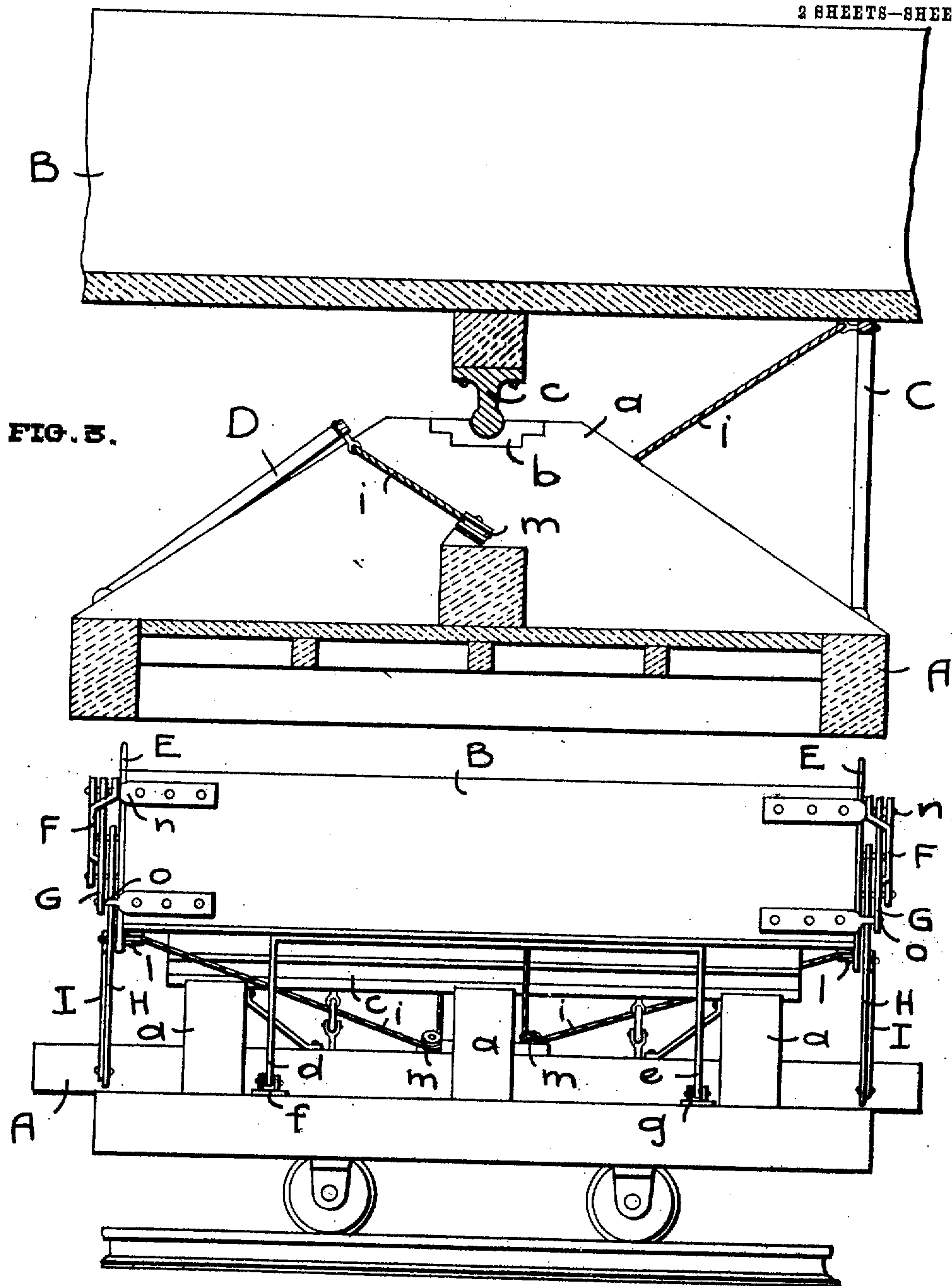


FIG. 3.

FIG. 4.

WITNESSES

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DUMPING-CAR.

No. 869,613.

Specification of Letters Patent.

Patented Oct. 29, 1907.

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To all whom it may concern:

Be it known that I, JOHN BENNETT, of Parry Sound, in the county of Parry Sound, Province of Ontario, Canada, have invented certain new and useful Improvements in Dumping-Cars, of which the following is a specification.

My invention relates to improvements in dumping cars of the type which tilt from side to side and the objects of my invention are to provide simple means for effecting the tilting by the weight of the material in the car, to return it automatically to its normal position when emptied, and also to provide means whereby when the car tilts, the lowest side of the car will be automatically removed to allow the material to dump; and it consists essentially of the improved construction hereinafter more fully described in the accompanying specifications and drawings, and specifically set forth in the claims.

In the drawings, Figure 1 is a perspective view of the end of the car. Fig. 2 is an end view in tilted position. Fig. 3 is an enlarged transverse sectional detail through the center of the car. Fig. 4 is a side view of the car.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the fixed truck on which the tilting car body B is supported. The connection between the truck and car body may be of any desired character, that shown being formed by a plurality of transverse beams *a*, *a*, *a*, on the truck, which support, at their tops, castings *b*, having grooved recesses, into which the semi-spherical head of a rail *c*, secured to the underside of the car body, extends. The car body may thus tilt from side to side about the fulcrum, provided by the contact of the rail with the castings.

The car is normally prevented from tilting by U-shaped struts C and D which have their extremities *d* and *e* pivoted to castings *f* and *g* on the side of the car, their horizontally extending upper ends being adapted to abut the underside of the car body, and so prevent the same from tilting. These struts are normally retained in upright position by means of springs *h*, and suitable means are provided for removing the strut on either side, as desired, which will permit the car body, under the action of the weight of the material in it, to tilt to that side. The means I show to accomplish this comprise a lever E which is pivoted to one end of the car body and has a rope or chain *i* connected thereto, which extends around a plurality of pulleys *j*, *k*, *l* and *m* and is connected centrally to the U-shaped strut C. By this means when it is desired to dump the car on one side, the lever corresponding to that side is swung about its pivoting point until the struts on the given side have been tilted sufficiently far to enable the car

to dump. On the release of the lever the springs will force the struts to their upright position and bring the car body back to its original position.

To provide for the automatic removal of the lowest side as the car tilts, I provide, at each end of each side of the car, two levers F and G which are pivoted at *n* and *o* to the side J of the car and are then crossed, and have their opposite ends pivoted at *p* and *q* to the center of the car body. Pivoted intermediate of the length of the lever G is a strut H, which hangs outwardly and is adapted, when the car body is in its horizontal position, to have its lower extremity a few inches above the floor of the truck A. This lower extremity is connected by a link bar I to an extension *r* on the car body. By this means when the car is tilted, the end of the switch H will abut the floor and force the lever G upwardly, causing the side of the car to assume the position shown in Fig. 2, which gives opportunity for the material to dump out of the car body.

When the car is returned to its horizontal position under the actions of the springs *h*, the weight at the side of the car will cause it to assume its original position, it being guided into proper position by the cross levers F and G.

It will thus be seen that I have devised an exceedingly simple form of dumping car which will dump under the weight of the material in it, and when emptied, will return, under a spring action, to its original position. There is further provided automatic means for removing and returning the side of the car body to enable the material to empty out. It will thus be seen that, owing to the use made of the weight of the material in the car, to effect the tilting, it will be possible for a single man to dump the entire car, all that it is necessary to do to effect this, being to operate the lever E.

While I have described with great particularity of detail one specific form of the invention, yet it will be readily understood that changes within the scope of the appended claims, may be made therein without departing from the spirit of the invention.

What I claim as my invention is:—

1. The combination with the tiltable car body and means for restraining the same from tilting, of means for removing said restraining means and allowing the car to tilt by its own weight, and spring-operated means for returning the car to its normal position after dumping as and for the purpose specified.

2. The combination with the tiltable car body of struts on each side thereof, spring means for holding the same in position and means for withdrawing the struts as and for the purpose specified.

JOHN BENNETT.

Witnesses:

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