

(No Model.)

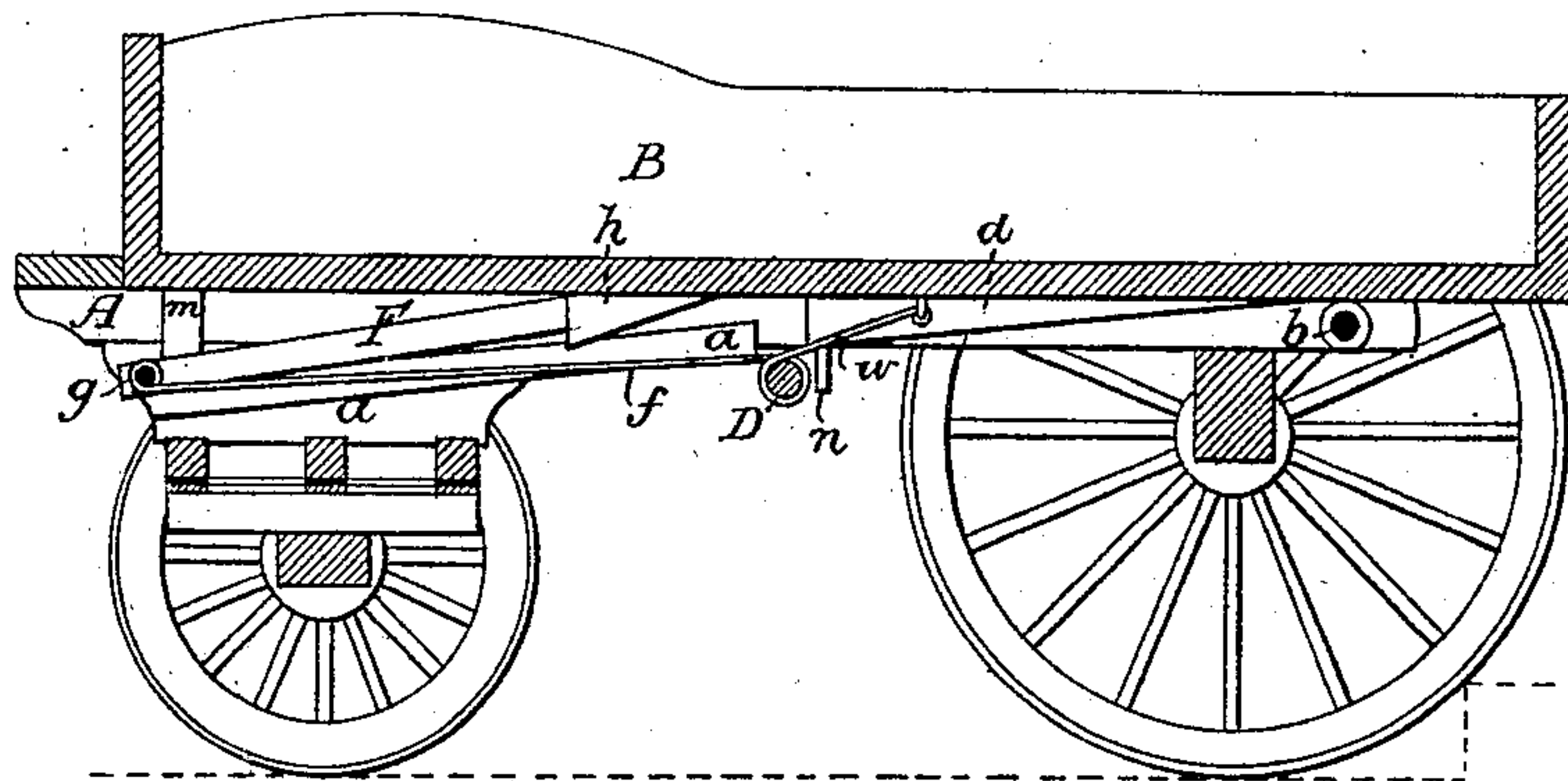
2 Sheets—Sheet 1.

J. MILLS.  
DUMPING WAGON.

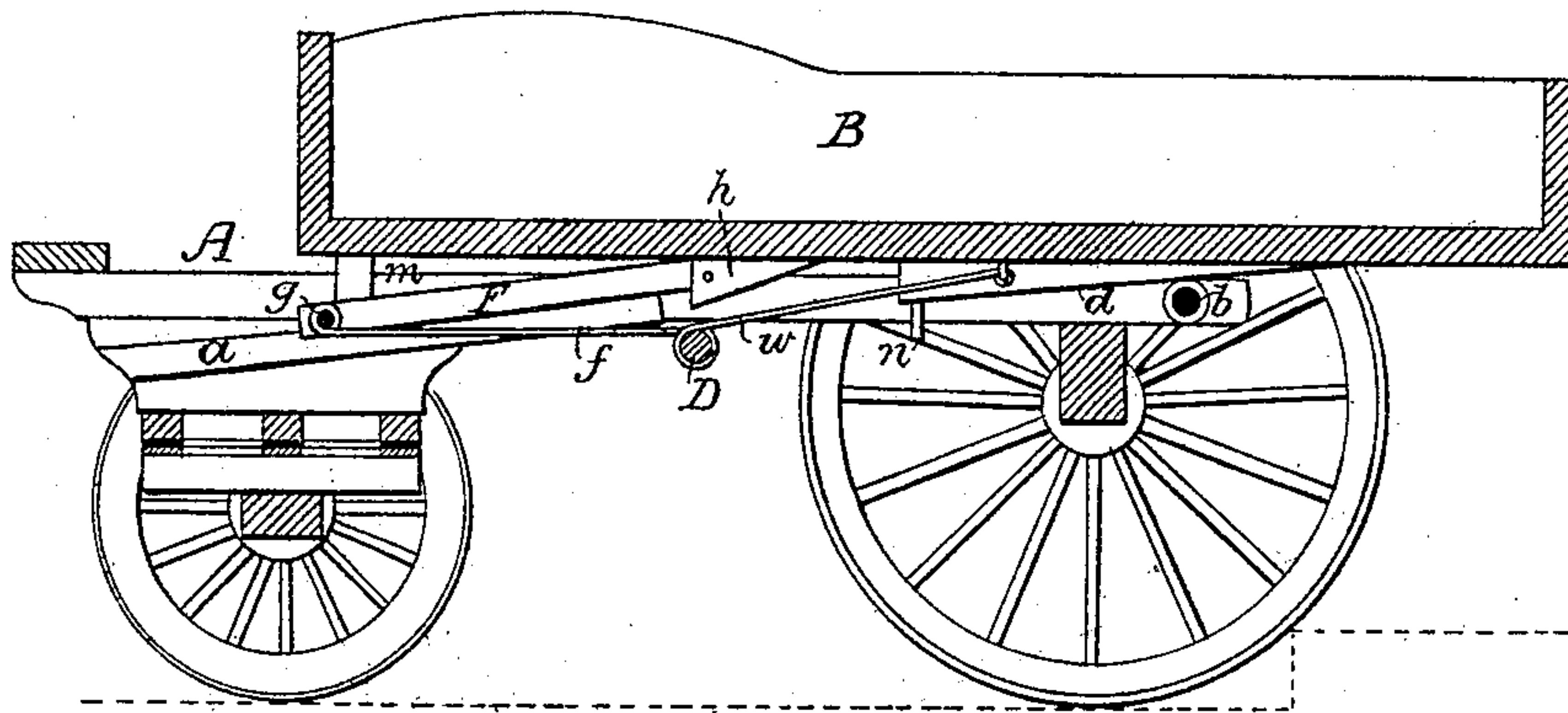
No. 258,790.

Patented May 30, 1882.

*Fig. 1.*



*Fig. 2.*



Witnesses

Harry Drury  
Harry Smith

Inventor  
James Mills  
by his Attorneys  
Howson & Sons

(No Model.)

2 Sheets—Sheet 2.

J. MILLS.

DUMPING WAGON.

No. 258,790.

*FIG. 3.* Patented May 30, 1882

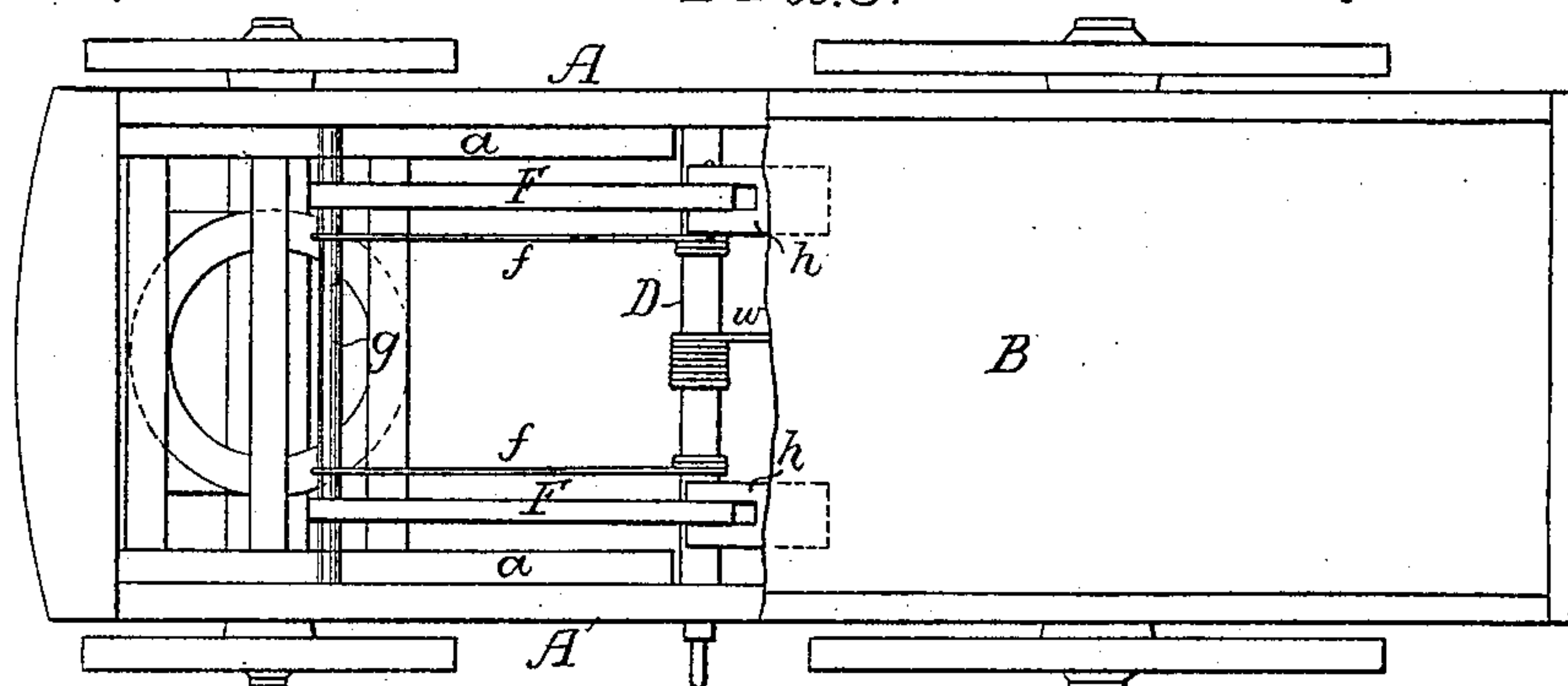
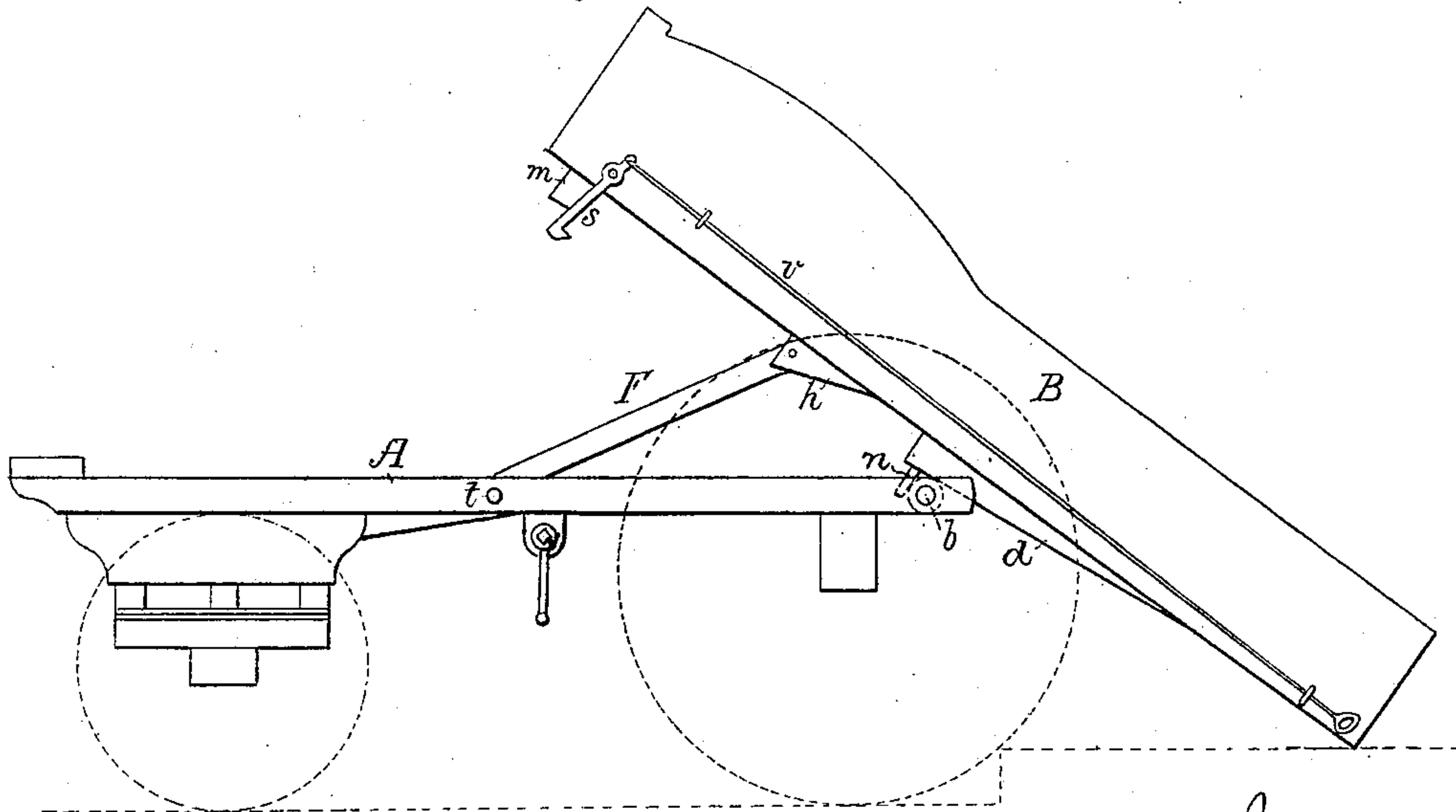
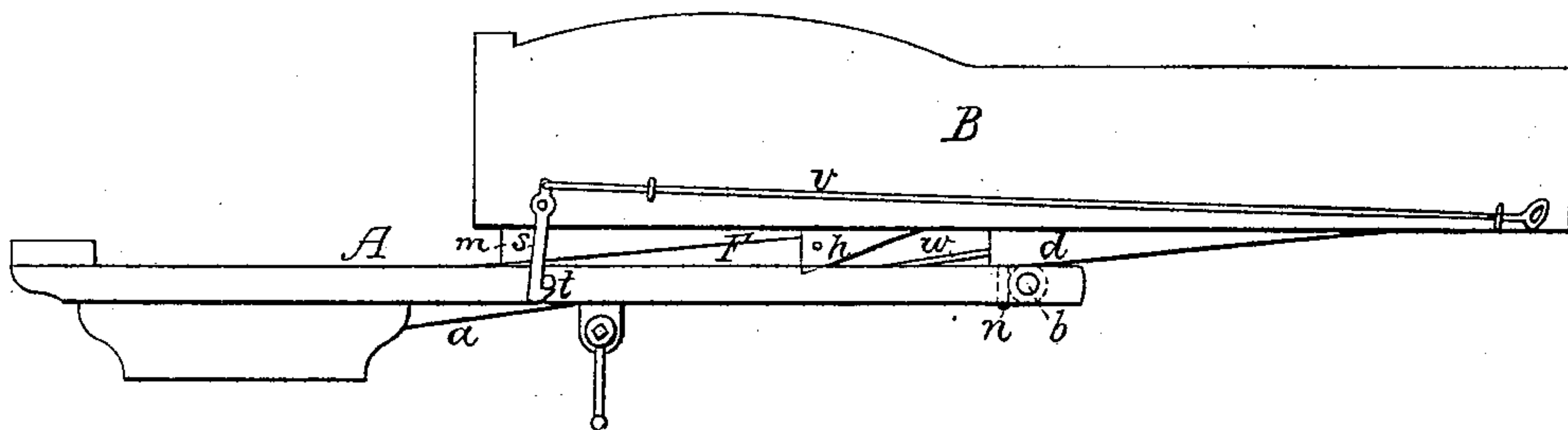


FIG. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

JAMES MILLS, OF WILMINGTON, DELAWARE.

## DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 258,790, dated May 30, 1882.

Application filed March 20, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES MILLS, a citizen of the United States, and a resident of Wilmington, Delaware, have invented certain Improvements in Dumping-Wagons, of which the following is a specification.

The object of my invention is to so construct a dumping-wagon that the coal, wood, or other contents of the wagon can be deposited wholly upon a sidewalk at some distance from the curb; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1, Sheet 1, is a longitudinal section of a dumping-wagon constructed in accordance with my invention, the body being lowered so as to rest upon the sills; Fig. 2, the same with the body partly elevated and moved rearward; Fig. 3, Sheet 2, a plan view of Fig. 2 with part of the body removed; Fig. 4, a side view, showing the position of the body prior to dumping, and Fig. 5 a view showing the body dumped.

A A represent the opposite sills of the wagon, which are mounted upon axles and wheels in the usual manner. To each sill, near the front end of the same, is secured an inclined rail, *a*, and near the rear ends of the sills is a transverse shaft, *b*, having rollers forming bearings for inclined strips *d* on the under side of the wagon-body B. About midway of the sills is a transverse shaft or drum, D, upon which are wound ropes or chains *f*, attached at their front ends to a transverse rod, *g*, said rod having at the ends rollers adapted to the inclined tracks *a* on the sills. To the rod *g* are secured the front ends of a pair of bars, F, the rear ends of which are pivoted to lugs *h*, attached to the under side of the wagon-body, in advance of the strips *d*. Posts *m* on the under side of the wagon-body, near the front end of the same, bear upon the bars F when the said wagon-body is in the horizontal position; but these posts may, if desired, be furnished with rollers adapted to bear upon the inclined rails *a*.

When a load is being transported the wagon-body occupies a position upon the sills as shown in Fig. 1; but when the wagon reaches its destination, and it is desired to dump the load, the drum D is turned, so as to wind up the cords or chains *f*. The first result of this operation

is a combined elevation and rearward projection of the wagon-body, as shown in Fig. 2, this movement continuing until stops *n* on the strips *d* come into contact with the rollers of the shaft *b*, when further rearward movement will be arrested. These stops bear such relation to the wagon-body that when they strike the rollers of the shaft *b* the weight will be about equally distributed on opposite sides of the said shaft, and the body will be balanced, or there will be a slight preponderance of weight in the rear. The body is prevented from tilting so as to discharge the load, however, owing to a hook, *s*, which is hung to one side of the body, and which, as said body is moved rearward, engages with a pin, *t*, on one of the sills A, as shown in Fig. 4. This hook is furnished with an operating-rod, *v*, terminating at a point close to the rear end of the body B, so that after the attendant has released the tail-gate of the wagon he can, by means of the rod, detach the hook *s* from the pin *t* and permit the body B to tilt, so as to dump its contents, as shown in Fig. 5.

The tilting operation may be assisted, if necessary, by a slight downward pressure applied to the projecting rear end of the body, and when it is desired to limit the extent of tilting of the body the hook *s* may be furnished with a series of notches, whereby, in connection with the pin *t*, the body B can be maintained at any desired inclination, and can thus be caused to discharge into a wheelbarrow or other receptacle on the sidewalk.

The bars F, being unconfined at the front ends, do not offer any obstacle to the free tilting of the body of the wagon, and, owing to the connection of said bars to the body close to the pivotal point of the latter, the movement of the bars due to the tilting of the body is very slight. The bars, in short, exercise none of that retarding influence which exists when the body is moved rearward by means of a chain, the tilting of the body in such a case necessitating the unwinding of the chain from the drum. For this reason I prefer to use the bars in place of a chain for effecting the rearward movement of the body prior to dumping.

The retaining-hook *s* may be hung to one of the sills and adapted to engage with a pin on the wagon-body in place of the reverse arrange-



ment shown in the drawings, and in some cases the tracks or ways *a* and strips *d* may be inclined at the ends only, the inclination being sufficient to raise the body free from the sills during the first portion of its rearward movement, and the remainder of the tracks and strips being straight, so as to permit the continued rearward projection of the body without further elevation of the same.

10 In order to restore the wagon-body to its original position after dumping, I provide the drum *D* with a retracting rope or chain, *w*, which is wound upon the drum simultaneously with the unwinding of the chains *f*.

15 In carrying out the invention other means than those shown in the drawings may be relied upon to effect the elevation of the wagon-body as it is thrust rearward. For instance, two sets of inclined strips, *d*—one set at the front 20 and the other at the rear of the wagon-body—may be combined with two transverse shafts, *b*, on the sills; or two sets of inclined rails on the sills may be combined with two sets of rollers on the body. One actuating-bar, *F*, instead of two, may also be used, if desired.

25 I claim as my invention—

1. The combination, in a dumping-wagon, of the sills *A*, the wagon-body *B*, the actuating bar or bars *F*, pivoted to the body, hauling 30 mechanism for said bar or bars, and inclined-plane devices, substantially as described, for

elevating the body as it is moved rearward, as set forth.

2. The combination of the sills *A*, the wagon-body *B*, inclined-plane devices, substantially 35 as described, the pivoted bar or bars *F*, and hauling mechanism having a retracting-chain, *w*, as set forth.

3. The combination of the wagon-body *B*, the sills *A*, having a support on which said body 40 can tilt, hauling mechanism for imparting a rearward movement to the wagon-body, and a retaining device adapted to be brought into action as the body is moved rearward and before said body reaches the tilting position, as 45 set forth.

4. The combination of the wagon-body *B*, the sills *A*, having a support on which said body 50 can tilt, hauling mechanism for imparting a rearward movement to the wagon-body, a retaining device adapted to prevent premature tilting of said body, and a rod whereby the retaining device can be operated from the rear end of the body, as set forth.

In testimony whereof I have signed my name 55 to this specification in the presence of two subscribing witnesses.

JAMES MILLS.

Witnesses:

HARRY DRURY,  
HARRY SMITH.