

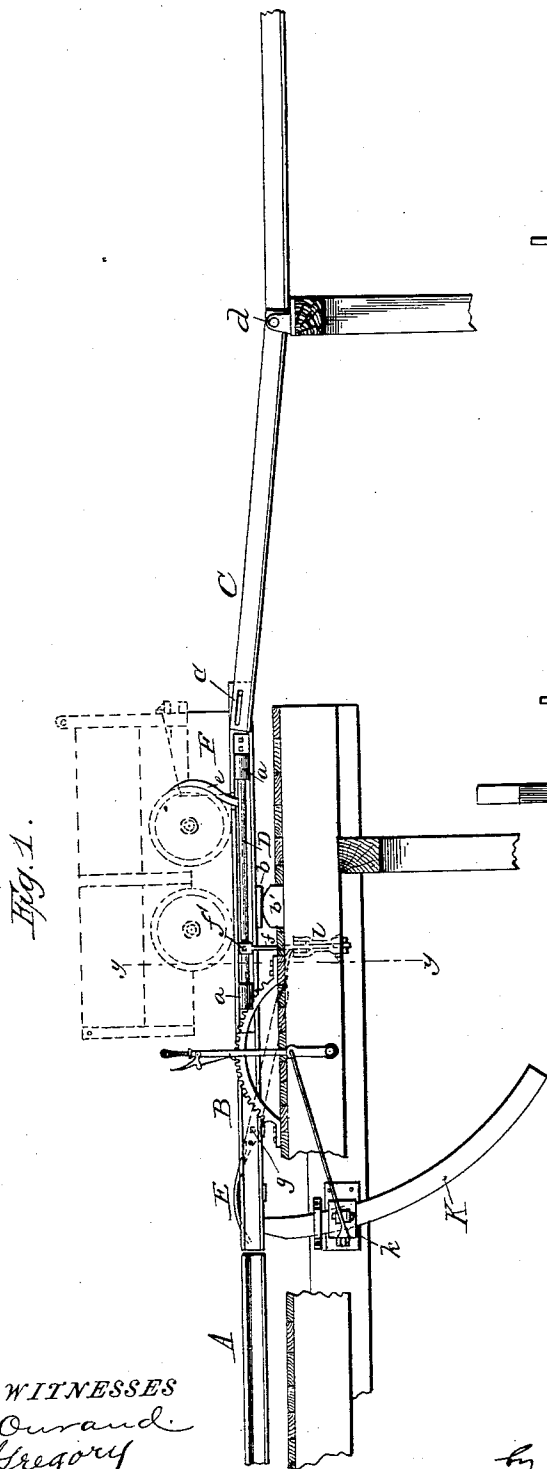
(No Model.)

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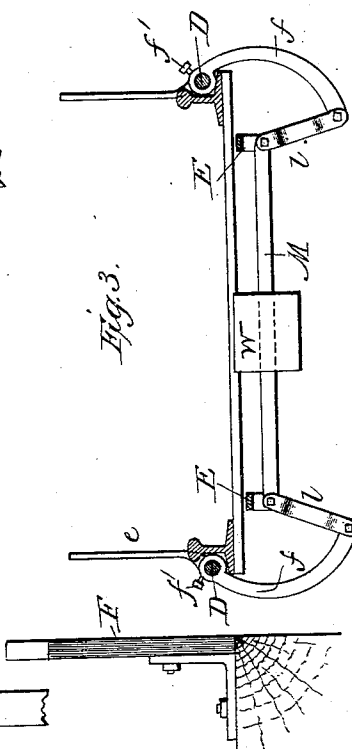
F. MILLER.  
CAR DUMPING APPARATUS.

No. 580,192.

Patented Apr. 6, 1897.



WITNESSES  
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Fig. 2.

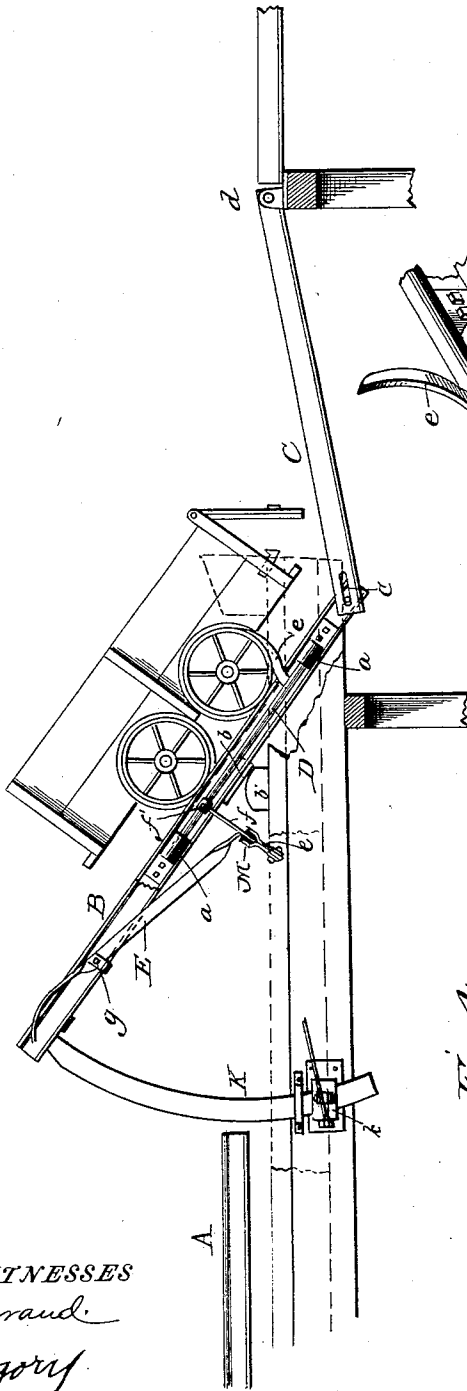


Fig. 4.

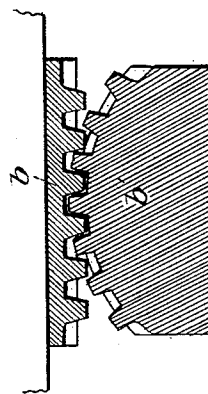
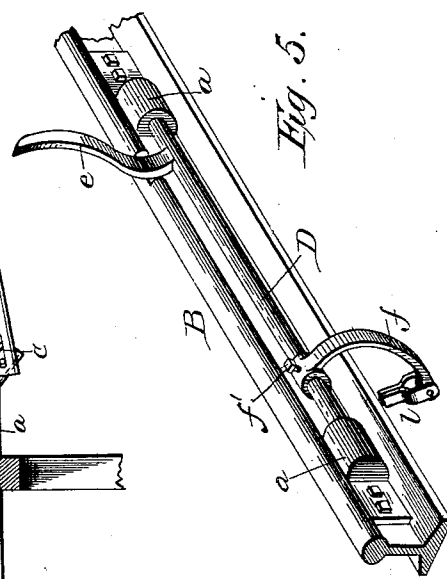


Fig. 5.



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# UNITED STATES PATENT OFFICE.

FRED MILLER, OF CORNING, OHIO.

## CAR-DUMPING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 580,192, dated April 6, 1897.

Application filed August 5, 1893. Renewed August 10, 1894. Serial No. 519,972. (No model.)

*To all whom it may concern:*

Be it known that I, FRED MILLER, a citizen of the United States, residing at Corning, in the county of Perry and State of Ohio, have  
5 invented certain new and useful Improvements in Car-Dumping Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to  
10 which it appertains to make and use the same.

My invention relates more particularly to that class of car-dumping apparatus in which a portion of the track is supported so as to tilt or rock when a loaded car is run onto it,  
15 there being stops on said tilting portion adapted to detain the car on the rails when the tilting portion is in the inclined position and devices whereby said stops may after the tilting or rocking portion of the track has returned  
20 to the horizontal position be automatically operated by the next advancing car to release the discharged car and allow the latter to pass on, and although my invention, as shown in the accompanying drawings, is intended  
25 chiefly for use in handling coal and ore at mines it will be serviceable at other places and for other purposes.

It is the object of my invention to simplify and reduce the cost of such stops and releasing devices, as well as to render them less  
30 liable to derangement.

In the drawings referred to, Figure 1 is a view in side elevation of the upper part of a trestle or frame provided with my dumping  
35 apparatus. Fig. 2 is a similar view, partly in section and partly in elevation. Fig. 3 is a transverse sectional view, and Figs. 4 and 5 are detail views.

A designates the main stationary track; B,  
40 the car tilting or rocking portion thereof.

C are movable portions of the rails, hinged by a slotted-hinge connection to the forward part of the tilting section, as shown at *c*, and to the main stationary track or to the trestle,  
45 as may be desired, as shown at *d*.

At the under side of the dumping or tilting rails are provided rack-bars *b*, the teeth of which mesh with segments of cog-wheels *b'*,  
50 this construction when the forward end of the dumping-track B descends the pivotal

point advances, and that part of said dumping-track in the rear of the pivotal point increases in length and weight, automatically restoring the rails to a horizontal position  
55 when the car has discharged its load.

Secured longitudinally in suitable bearings *a* in the outer sides of the tilting rails B are rock-shafts D, having at their forward ends upwardly-projecting horns or stops *e*, which  
60 in their vertical position receive the rims of the front car-wheels and prevent the forward movement of the car. The rock-shafts D have downwardly and inwardly projecting arms *f*. Extending between the rails and  
65 connected to the arms *ff* by links *ll* is a bar M to support a weight W, that normally holds the horns in their vertical position.

The arms *ff* are laterally and longitudinally adjustable on the rock-shafts and are  
70 secured in their adjusted positions by set-screws *f'*. This enables the parts to be readily adapted to secure the proper positions of stops *e* and levers E E when the proportion  
75 of any of the parts may vary or have been inaccurately fixed in place.

The arms *ff* are operated by the forward ends of the levers E E, which are pivoted at  
80 *g* longitudinally to the inner sides of the rails, and when the flange of an advancing car-wheel depresses the rear arm of one or both of said levers the forward ends thereof elevate the arms *ff*, rock the shafts D, and turn  
85 the stops or horns outward. This allows the front or discharged car to pass on, and before the advancing car arrives at the stops the latter will have been automatically restored by the weight W to their vertical position, detaining the loaded car on the dumping-rail  
90 until it has been duly discharged.

In order automatically to release the latch of the end gate or door of the car to be discharged, I provide at the proper point at the side of the track, as shown at F, an inclined surface which stands in the path of the latch,  
95 so that as the car advances to the dumping-point the latch is lifted, permitting the contents of the car to flow out.

The sections of the rails immediately in front of the dumping-rails are hinged to said  
100 dumping-rails, so that they will be depressed along therewith, and thus not interfere with

the descent of the front end of the car, and when the dumping-rails return to their horizontal position they bring the hinged sections back and form a continuous track over which  
5 the empty car may pass on.

K is a curved bar pivoted to the rear end of the dumping track-section and passing down through a lock *k*, secured on the frame, which serves as a brake to control the move-  
10 ment of the dumping-car.

The weight W on the bar M is removable and may be replaced by a heavier or lighter one, as circumstances may require.

Various modifications of the form and construction of parts claimed herein may be made  
15 without departing from the scope of my invention.

What I claim, and desire to secure by Letters Patent, is—

In a car-dumping apparatus of the kind  
herein described, the combination of the rock-  
shafts D D each having car-stop *e* and arm *f*,  
links *l l* each connected at one end with one  
of the arms *f* and at the other end with bar  
M, the said bar M, and the levers E E con-  
25 nected with links *l* and pivoted in position to be engaged by the car, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

FRED MILLER.

Witnesses:

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J. A. URMSTON.