

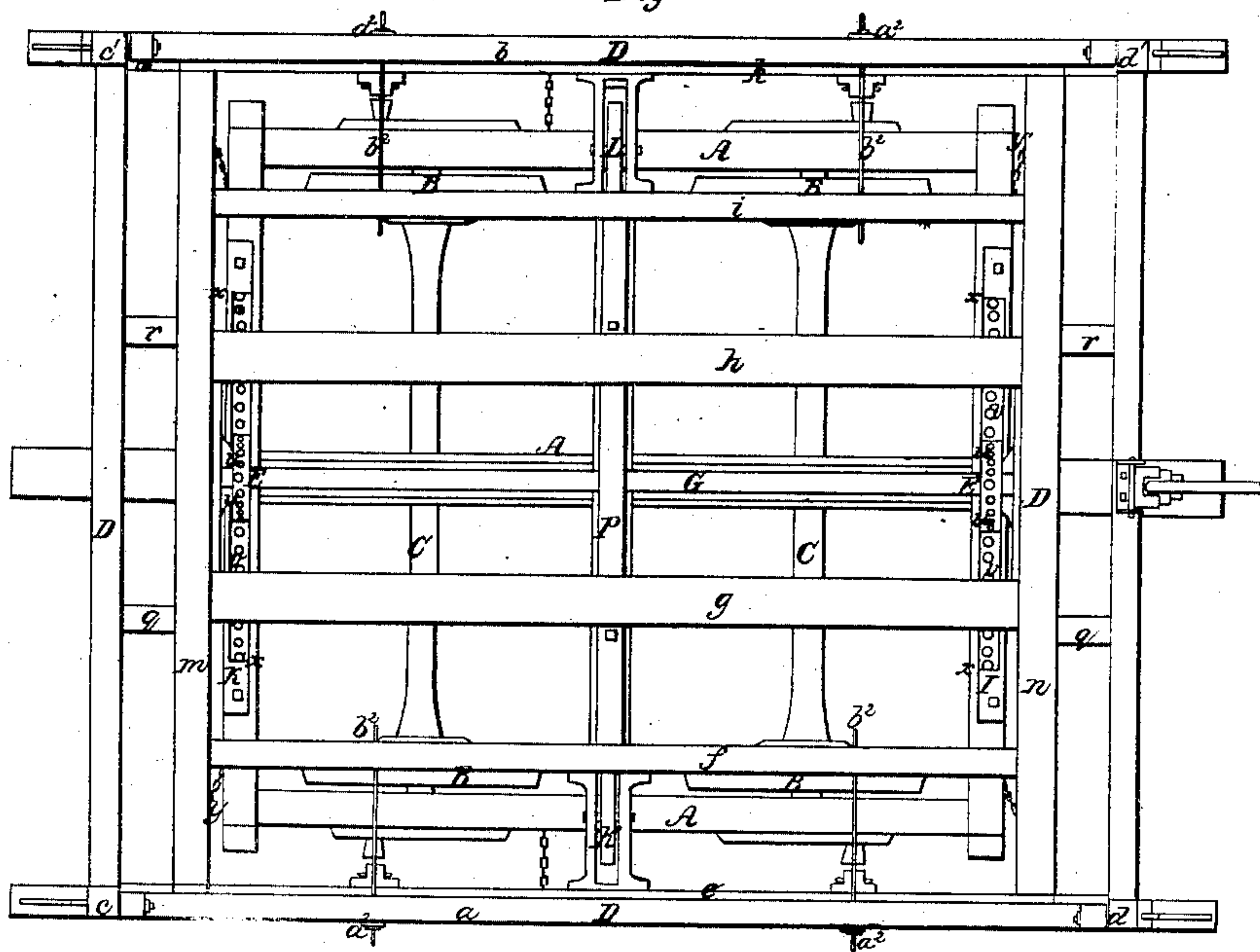
*A. Nettleton.*  
*Dumping Car.*

*Sheet 1-2 Sheets.*

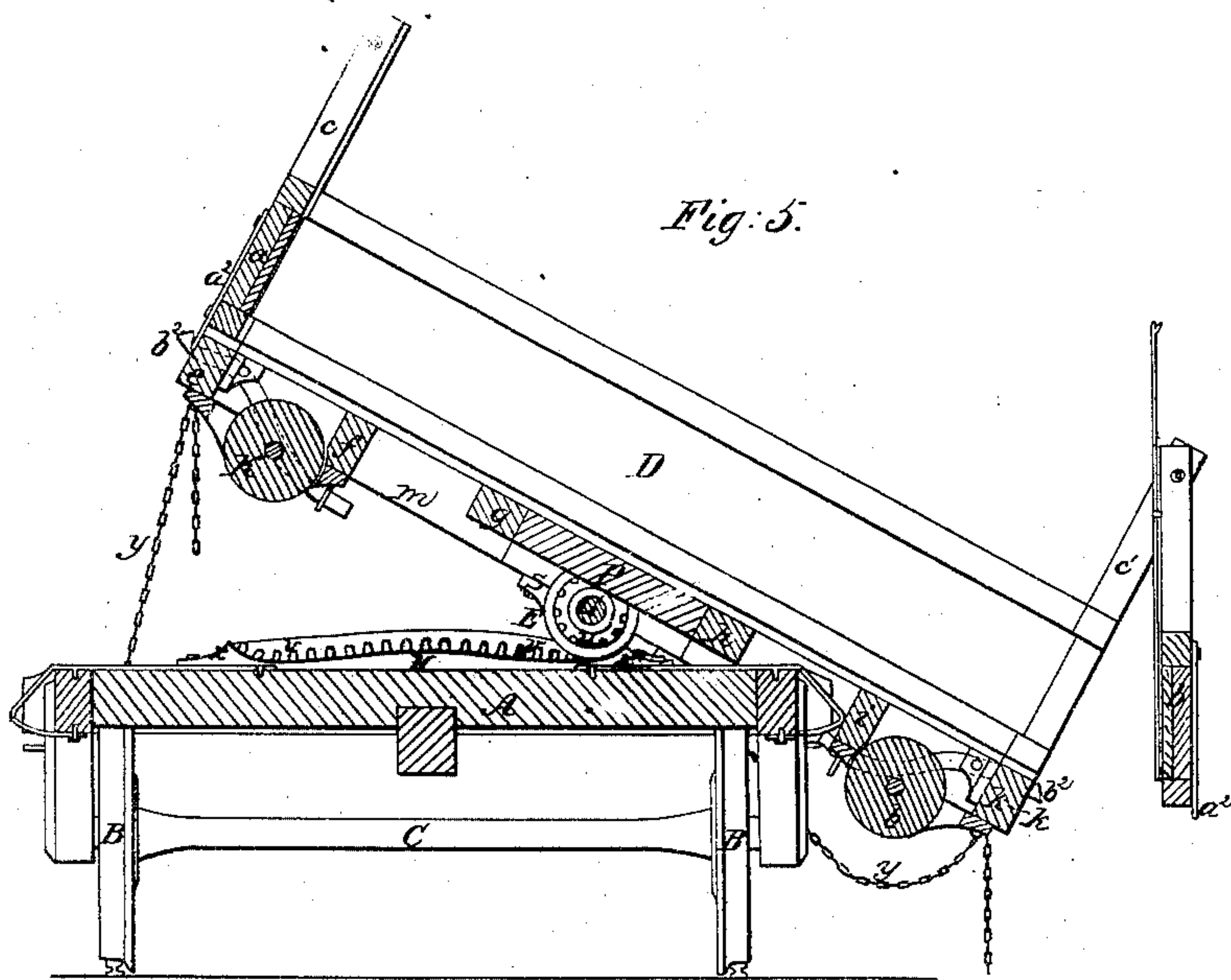
*N<sup>o</sup> 6,065.*

*Patented Jan. 30, 1849.*

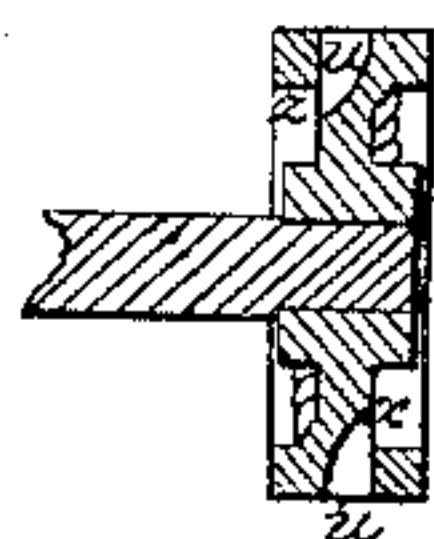
*Fig: 1.*



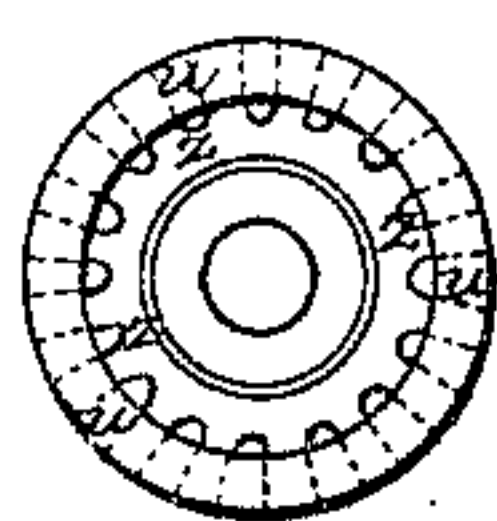
*Fig: 5.*



*Fig: 6.*



*Fig: 7.*



*A. Nettleton.*  
*Dumping Car.*

N<sup>o</sup> 6,065.

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Fig: 2.

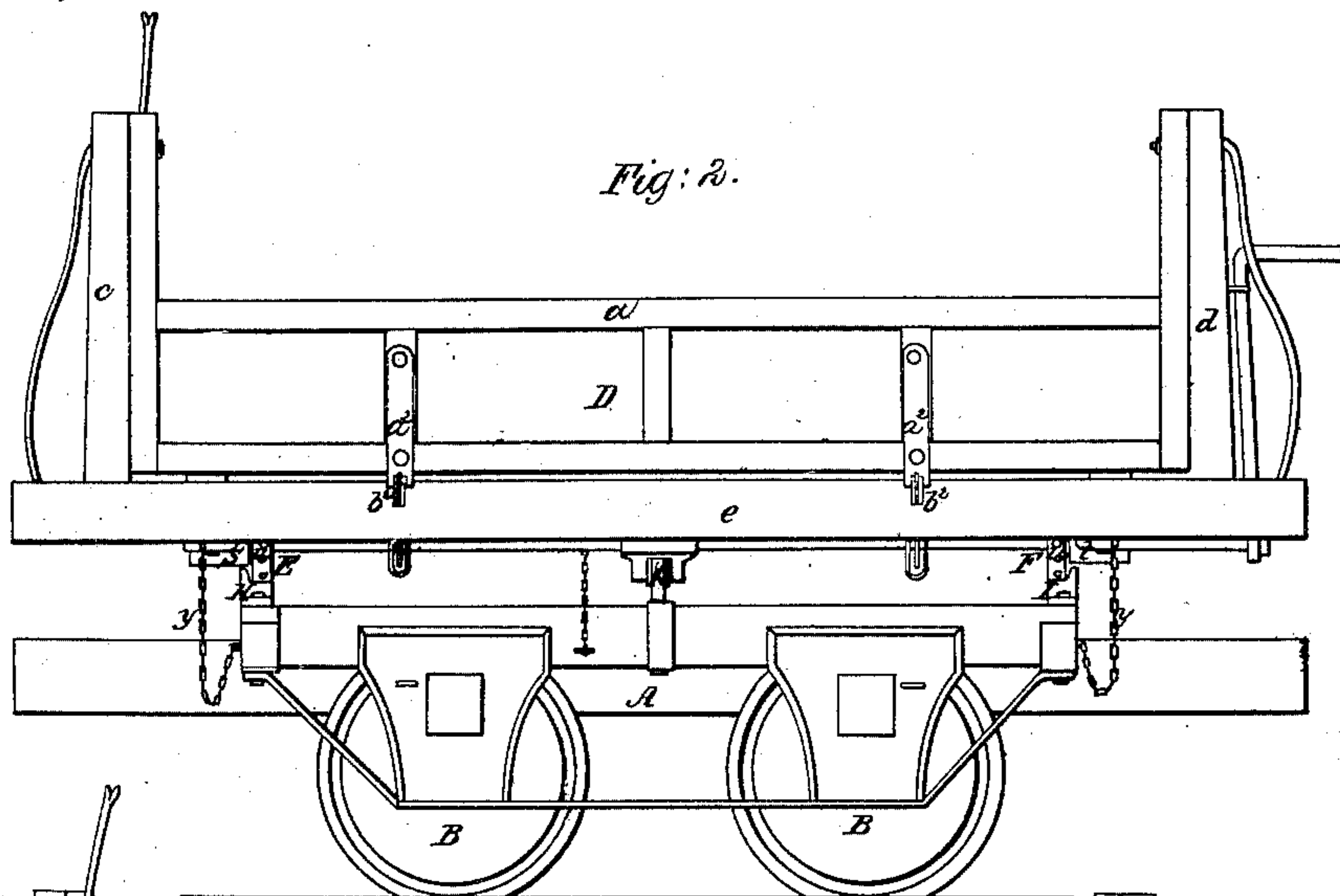


Fig: 3.

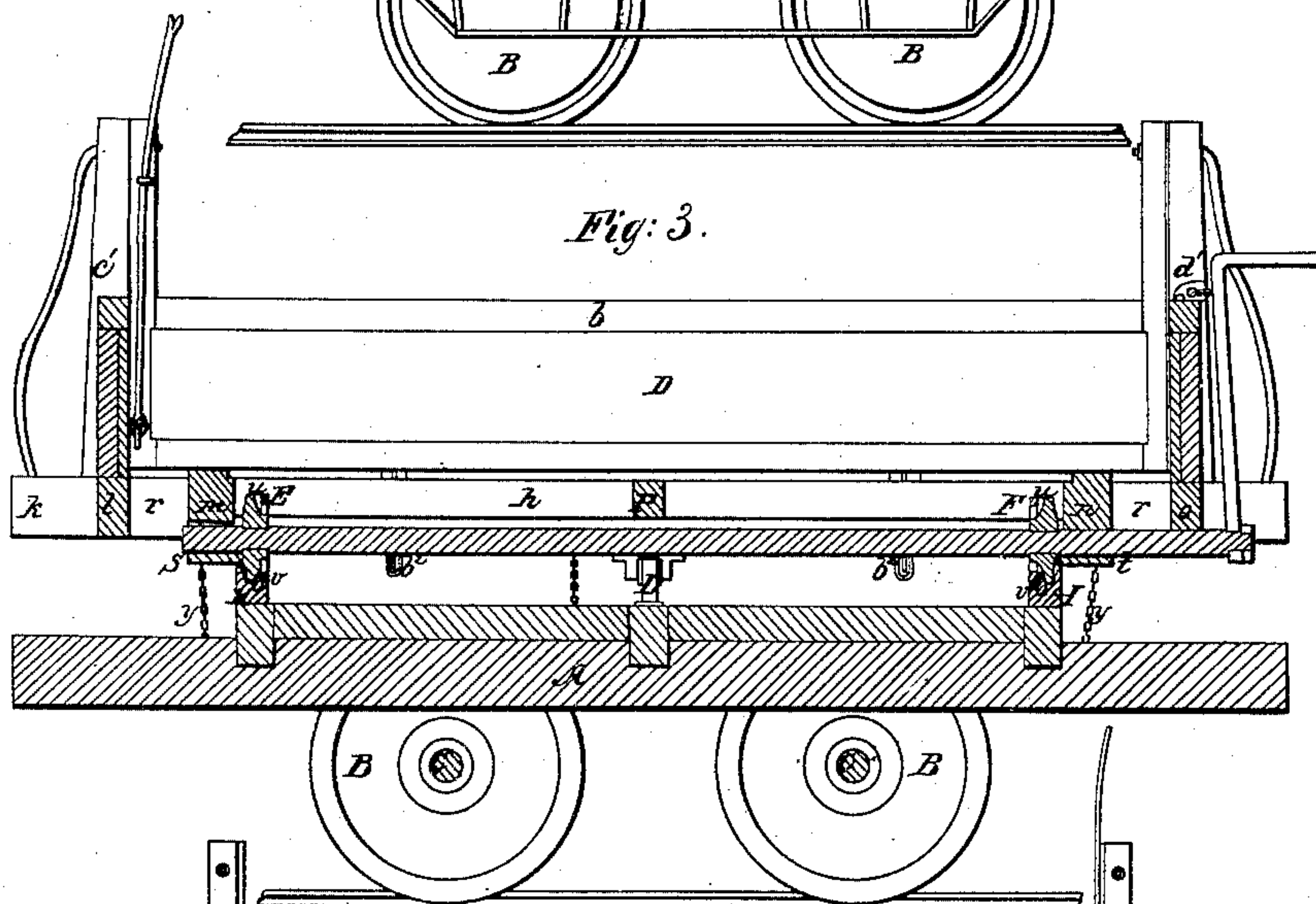
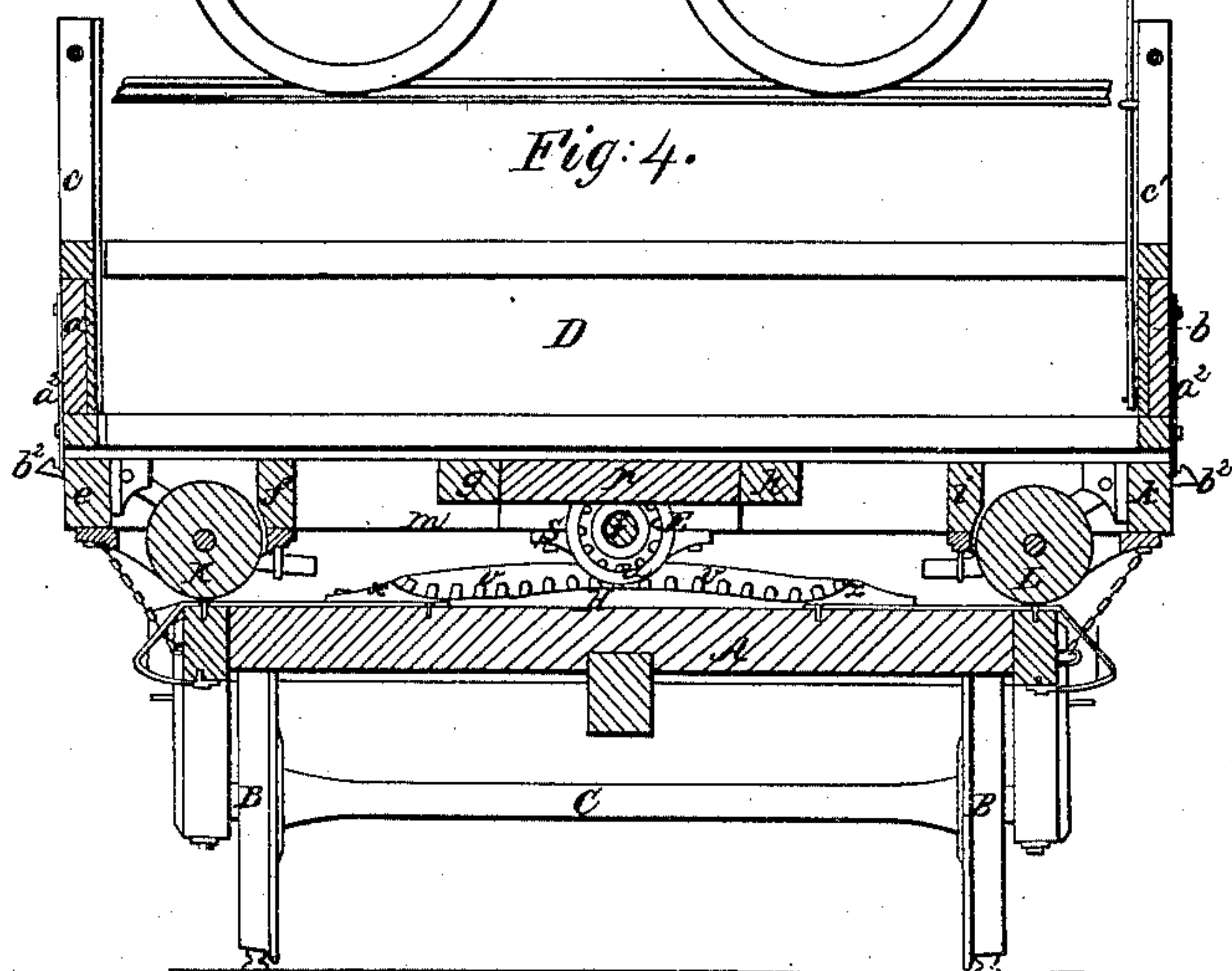


Fig: 4.





# UNITED STATES PATENT OFFICE.

ALPHEUS NETTLETON, OF SPRINGFIELD, MASSACHUSETTS.

## DUMPING-CAR.

Specification of Letters Patent No. 6,065, dated January 30, 1849.

*To all whom it may concern:*

Be it known that I, ALPHEUS NETTLETON, of Springfield, in the county of Hampden and State of Massachusetts, have invented  
5 a new or Improved Railway Dumping-Car; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

10 Of the said drawings Figure 1, denotes a top view of my improved dumping car, the flooring boards of which are represented as removed, in order to exhibit the mechanism beneath them. Fig. 2, is a side elevation of  
15 the said car. Fig. 3, is a central vertical and longitudinal section of it. Fig. 4, is a transverse section, and Fig. 5, is another transverse section, in which the body of the car is shown, when in an inclined position for  
20 the purpose of discharging its contents.

The common excavating or dumping car, on which my car is an improvement, has its body supported on large semicircular arcs, which rest and roll laterally on the truck  
25 frame. In order to bring the body into a proper inclination, so that the dirt, or whatever it may contain, may be properly discharged, it becomes necessary to make the sweeps or semicircular arcs of so large radius  
30 as of necessity will elevate the body of the car to a very inconvenient height above the road track, the same rendering it very difficult if not impossible to use such cars in a train with the common merchandise cars, as  
35 their bumpers cannot generally speaking be arranged on a level with those of the merchandise cars. My improvement in the manner of constructing a dumping car, not only admits of the body of the car being arranged  
40 at the same height above the track as those of the merchandise cars, but presents all the advantages of dumping or discharging earth, coal or other matters which are to be found in the common dumping car to which I have  
45 hereinbefore alluded.

In the drawings A, represents the truck frame, which is a rectangular frame made to rest on the axles of the wheels, the housings  
50 of the boxes of the axles or other contrivances for supporting the said boxes being affixed to said frame, B, B, etc., are the wheels, and C, C, the axles.

55 D, is the car or wagon body, whose width and length is somewhat greater respectively than those of the truck frame as seen in the drawings. Each one of the two opposite

sides *a, b*, of the body, is suspended or hinged to the tops of two posts, *c, d, c', d'*, in such manner as to admit of its being  
60 turned up, or maintaining its vertical position, when the car body is inclined in order to discharge a load, the same being shown in Fig. 5.

The longitudinal floor timbers of the said car body, are seen at *e, f, g, h, i, k*, and the  
65 transverse ones at *l, m, n, o*. A middle brace or tie *p*, is made to extend between the two central longitudinal timbers. There are also two short ties or braces, *q, r*, inserted and fixed between each two transverse timbers  
70 *l, m*, and *n, o*.

The car body is provided with two small wheels E, F, fixed upon a longitudinal shaft or axle G, which extends from the timber  
75 *m*, to the timber *n*, and is supported by and so as to be capable of turning or revolving on its axis, in two boxes *s, t*, fixed respectively to the undersides of the two timbers  
80 *m, n*. The two wheels rest and roll upon two transverse parallel rails or bearing plates H, I, bolted or otherwise properly secured down upon the top of the truck frame.  
85 In order that the car body may always maintain its correct position on the rails or bearing plates H, I, each of the wheels E, F, has its periphery perforated with a series of  
90 holes or openings *u, u*, etc., disposed at equal distances apart, which holes operate in connection with a set of teeth or projections  
95 *v, v, v*, etc., raised above the surface of each of the said rails or bearing plates, that is to say, as the wheels roll over or on the plates, the pins or teeth *v, v*, etc., respectively enter  
100 the holes of their wheels, and thus keep the axle of the said wheels under all circumstances parallel to its position when directly over the middle of the truck frame. Each  
105 bearing plate is made to incline a little each way from its middle as seen in Figs. 4, 5, and to turn upward at its end, as seen at  
110 *x, x*, in order to form a stop for the wheels to bear against when the body of the car is tilted or inclined. In order to effectually prevent the car body from running off the truck frame; one or two chains *y*, may be attached to the axle frame and the truck frame as seen in the drawings. The holes made through the rim of each of the wheels E, F, may each be made to open through it, as seen at *z*, in Figs. 6, and 7, (the former being a section of a wheel and the latter a side view of it) or in any other convenient manner, so



as to enable the pins or projections  $v, v$ , etc. to crowd or force through the rim any dirt or extraneous matter which may accidentally get into any one or more of the said holes.

5 The body of the car is provided with two or more projecting bearing blocks of timber or rollers  $K, L$ , which when it is brought into a central position with respect to the truck frame, rest on the side timbers of the truck frame, and prevent the body from tilting  
10 until the same is moved far enough laterally to move one of the blocks or rollers entirely off the truck frame.

Each side  $a, b$ , of the car body has one or  
15 more stops  $a^2$ , applied to it, which strike or abut against the timber,  $e$  or  $k$ , and prevent the flap or side from moving farther inward. A latch lever  $b^2$ , is also to be affixed to the bottom of the car, and made so as to  
20 latch the side or flap when in a vertical position, and so hold it until it is unlatched.

I do not claim the mode of supporting a car body by means of semicircular arcs or

rockers affixed thereto, and made to rest and rock on the top of the truck frame, as the same has heretofore been effected, but that  
25 which I do claim is—

My improvement or mechanism for sustaining and operating the car body, the same consisting in the rollers or small wheels  $E, F$ ,  
30 and their rail or bearing plates, as constructed combined together, and with the body and truck frame, and made to operate the car body substantially as above specified. my said invention enabling me not only to  
35 construct a dumping car much lower than others in general use, but so low as to be used in trains with common merchandise cars.

In testimony whereof I have hereto set my  
40 signature this first day of June, A D. 1848.

ALPHEUS NETTLETON.

Witnesses:

ELIPHAZ JONES,

JAMES EASTMAN.