

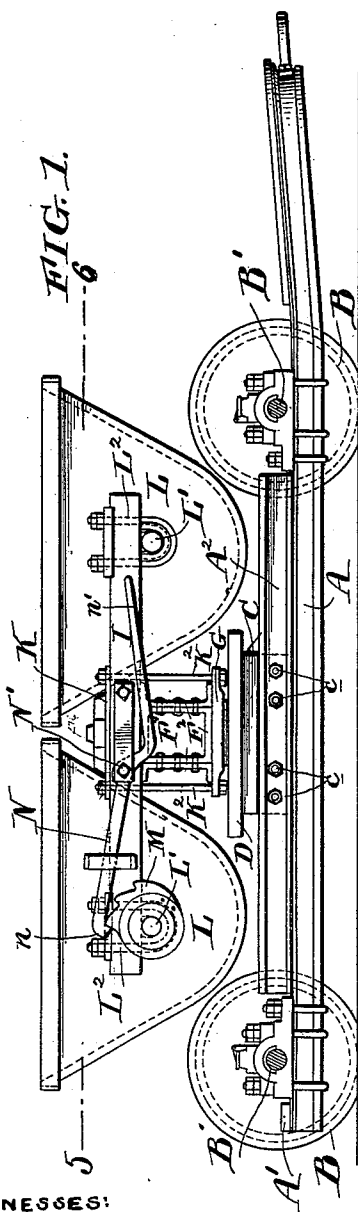
(No Model.)

2 Sheets—Sheet 1.

M. W. ILES.
DUMPING CAR.

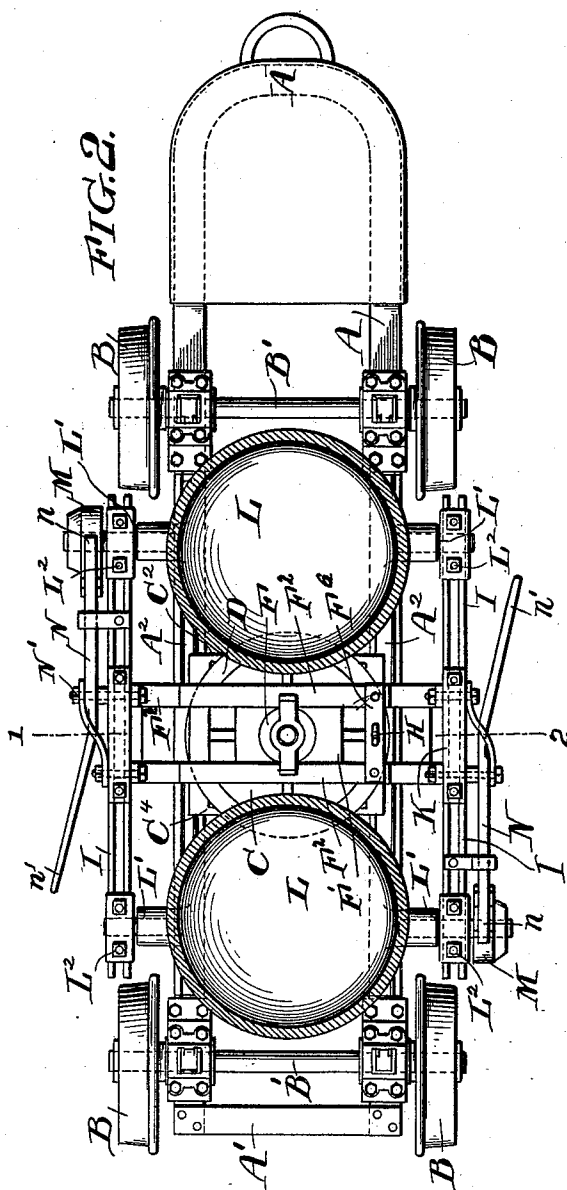
No. 484,019.

Patented Oct. 11, 1892.



WITNESSES:

Henry Denny
J. H. Russell.



INVENTOR:

Malvern W. Hes
by his atty
Francis T. Chambers

(No Model.)

2 Sheets—Sheet 2.

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FIG. 3.

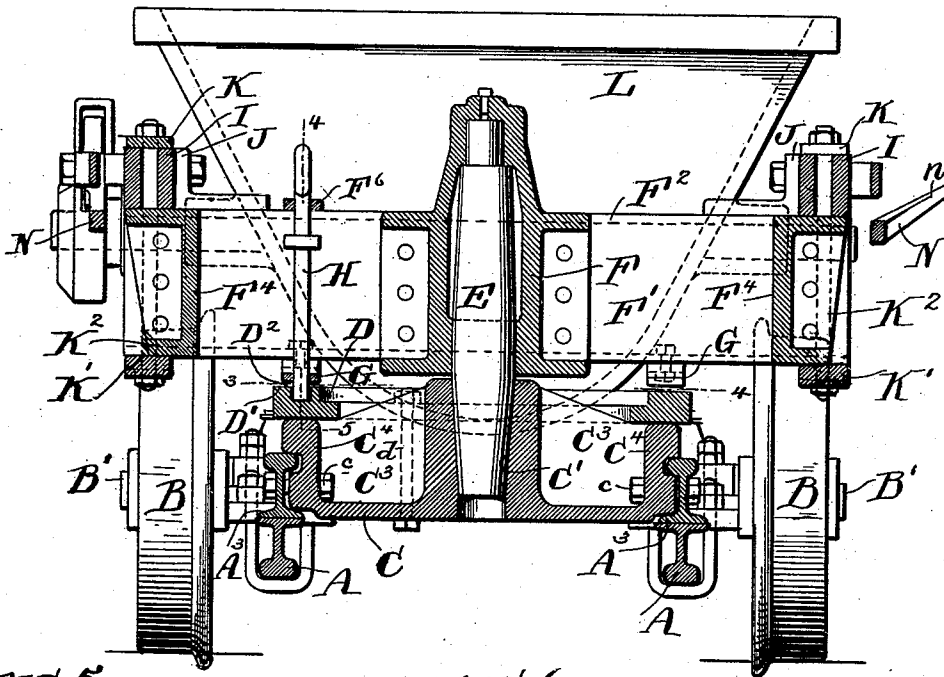


FIG. 5.

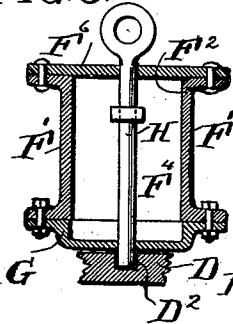
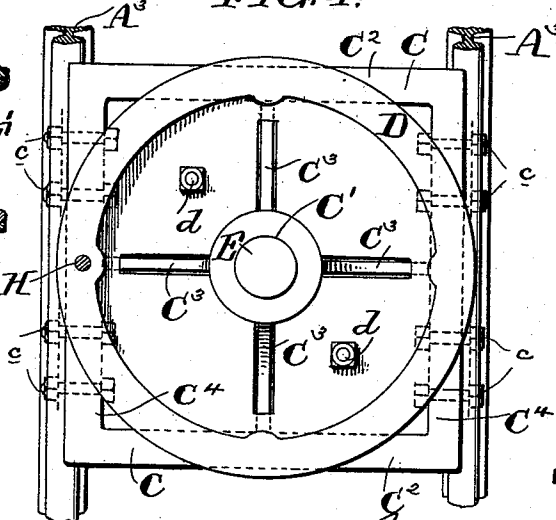


FIG. 4.



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UNITED STATES PATENT OFFICE.

MALVERN W. ILES, OF DENVER, COLORADO.

DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 484,019, dated October 11, 1892.

Application filed June 7, 1892. Serial No. 435,832. (No model.)

To all whom it may concern:

Be it known that I, MALVERN W. ILES, of Denver, county of Arapahoe, State of Colorado, have invented a certain new and useful
5 Improved Dumping-Car, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to dumping-cars of the
10 general character of that described in the patent to Nesmith, granted August 28, 1888, and numbered 388,708, the object of my invention being, chiefly, to strengthen such cars, making them more durable and also somewhat easier
15 in operation.

The nature of my invention will be best understood as described in connection with the drawings in which it is illustrated, and in which—

20 Figure 1 is a side elevation of my improved car; Fig. 2, a plan view thereof; Fig. 3, a cross-section on the line 1 2 of Fig. 2; Fig. 4, a horizontal section on the line 3 4 of Fig. 3, and Fig. 5 a cross-section on the line 5 6 of Fig. 3.

25 A indicates the truck-frame, which is preferably made of a bent rail and strengthened in that part exposed to the greatest pressure by means of a second rail A², resting on the bottom flange of the first rail.

30 A¹ is an iron brace securing together the two ends of the bent rail at the back of the car.

35 B B, &c., indicate the wheels of the car, which are secured to axles B', which axles in turn are secured in boxes firmly secured to the frame, as indicated in Figs. 1 and 2.

C is a rectangular casting adapted to fit between and be secured to the sides of the truck-frame. It is formed with a central hub C',
40 upwardly-extending end and side flanges C² and C⁴, and bracing-webs C³, also extending upward and uniting the hub and outer flanges. Preferably the side flanges C⁴ are made to conform to the shape of the rail A², forming part
45 of the truck-frame, as shown in Fig. 3.

D is a circular ring or plate supported on the top of the casting C, the function of which is to serve as an additional bearing for the cross-beam hereinafter described.

50 E is a pivot-pin supported on the hub C' of the casting C in a conical hole formed therein.

F is a flanged casting adapted to embrace

and rest upon the upwardly-projecting end of the pivot-pin and forming a part of the cross-beam F⁶, which beam is made up of said
55 casting, angle-irons F' F', and plates F² F⁴, &c., firmly riveted together and to the central casting F. Upon the bottom of the cross-beam are secured shoes G, which extend down over the ring D, and one of which will bear
60 upon said ring whenever the cross-beam is tipped to one side or the other, thus preventing any considerable variation from the horizontal line.

H is a latch-pin passing through holes in
65 the cross-beam F⁶ and its shoe G, the end of which is adapted to enter the hole D² in the ring D, thus locking the cross-beam in position and preventing its rotation until the pin is raised free of the hole D². The action of
70 the pin, it is obvious, is automatic. Its end will rest upon the ring D while the cross-bar is rotating until it reaches the hole D², its weight then carrying it down into the hole, and the beam is locked.

75 I I are beams constituting the frame which supports the receptacles or pots. These beams are firmly secured to the ends of the cross-beam F in the plan shown both by being bolted to lugs J, secured on top of the beam, and by
80 being clamped to it by a plate K, through the ends of which pass bolts K², secured at the bottom to a cross-plate K' on the under side of the beam I.

The pots or receptacles are indicated at L
85 and are provided with trunnion-pins L', held in bearings L², secured to the ends of the beams I. On one trunnion-pin of each pot is secured a ratchet-like detent M, which is engaged by a catch-lever N, pivoted near the
90 center of the frame I, as indicated at N'. One end *n* of this lever is formed to engage with the detent M, while the other *n'* forms the handle. It will be observed that this construction enables the operator to release the
95 catch while standing some distance away from the pot to be dumped, and also that the levers N offer a convenient means for turning the beam F⁶ so that the frame I will extend crosswise instead of longitudinally.

100 Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a dumping-car, a frame A, supported

on wheels, in combination with a rectangular pivot-casting C, secured to the frame, said casting being of rectangular shape and formed with upwardly-extending flanges C² C⁴, hubs C', and bracing-webs C³, a pivot-pin E, resting in a cavity of the hub, a casting F, supported on pin E, a cross-beam F⁶, made up of angle and plate iron bars bolted together and to casting F, as specified, beams I I, secured on the ends of beam F⁶, and receptacles I, supported on trunnions at each end of beams I I, all substantially as shown and described.

2. In a dumping-car, a frame A, supported on wheels, in combination with a pivot-casting C, secured to the frame, said casting being of rectangular shape and formed with upwardly-extending flanges C² C⁴, hub C', and bracing-webs C³, a pivot-pin E, resting in a cavity of the hub, a casting F, supported on pin E, a circular bearing-ring D, supported on casting C, a cross-beam F⁶, made up of an-

gle and plate iron bars bolted together and to casting F, as specified, shoes G, secured to frame F so as to bear on ring D, a latch-pin H, carried in frame F⁶ and adapted to enter a hole D² in ring D, beams I I, secured on the ends of beam F⁶, and receptacles L, supported on trunnions at each end of beams I I, all substantially as shown and described.

3. In a dumping-car having a truck-frame and pivotally-supported frame II, arranged substantially as described, receptacles L L, supported on trunnions L' on said frame, a detent M, secured to one trunnion, and a catch-lever N, pivoted at a point N' near the center of frame II, said lever having a catch *n* at one end adapted to engage detent M and a handle *n'* at its other end.

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Witnesses:

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