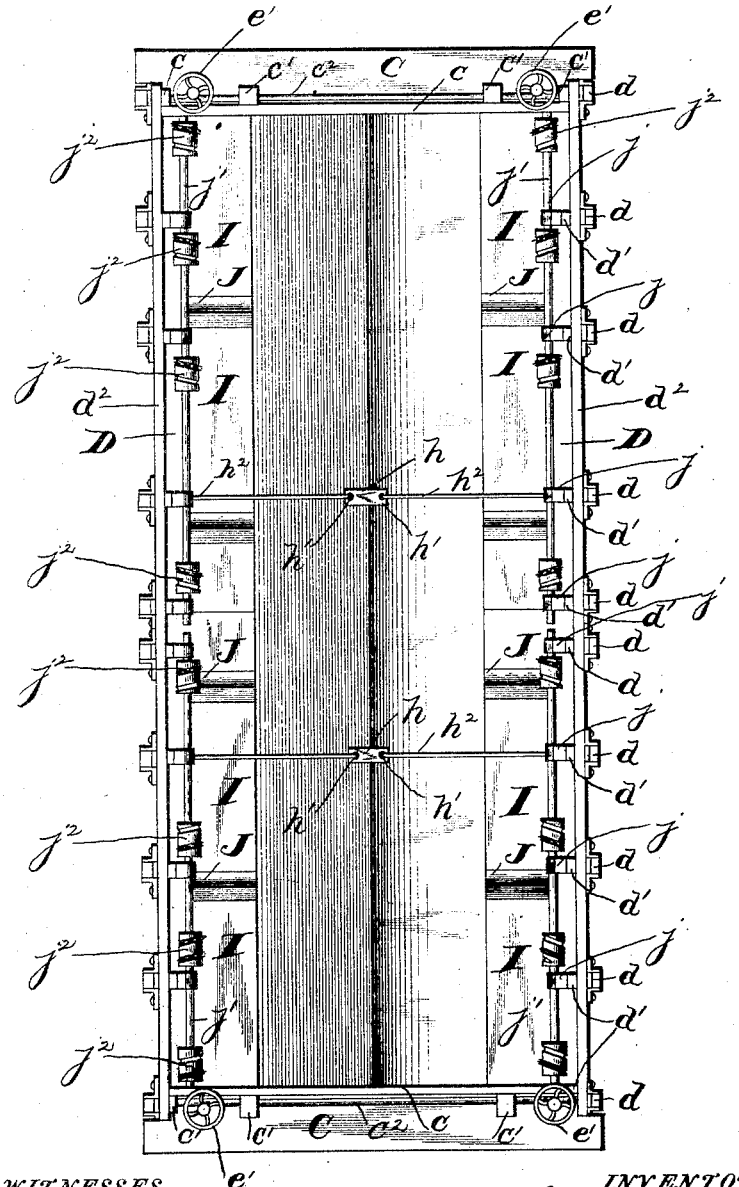
(No Model.) 2 Sheets—Sheet 1.

H. C. WOMELSDORFF.

DUMPING CAR.

No. 489,111. Patented Jan. 3, 1893.



WITNESSES
F. L. Ourand
M. E. Lansdale.

INVENTOR
H. C. Womelsdorff.
By John S. Duffie, Attorney.

(No Model.) 2 Sheets—Sheet 2.

H. C. WOMELSDORFF.

DUMPING CAR.

No. 489,111. Patented Jan. 3, 1893.

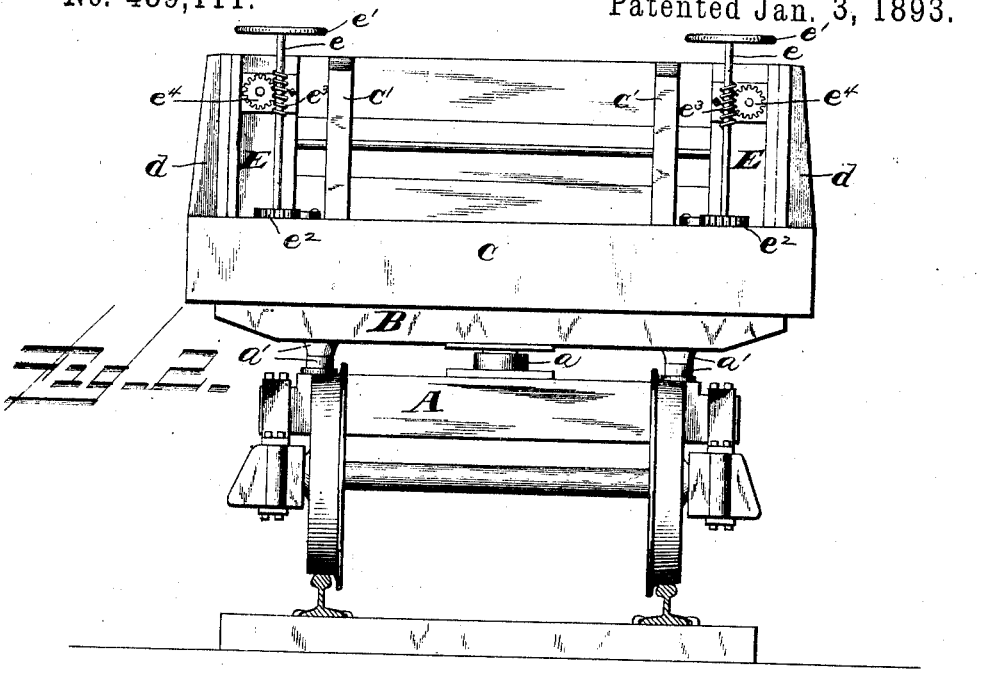


Fig. 2.

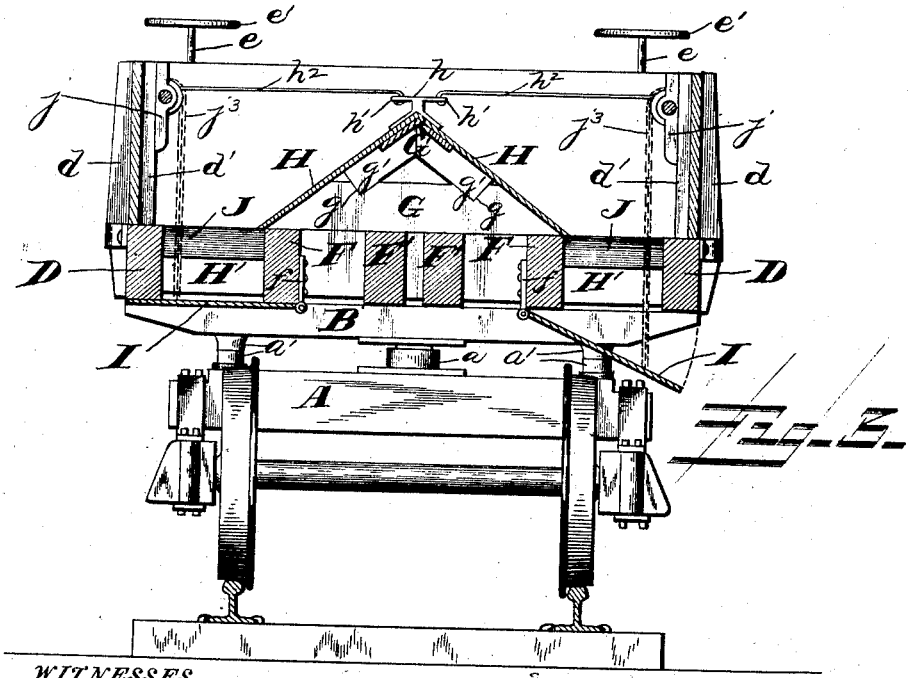


Fig. 3.

WITNESSES

H. L. Ourand

M. E. Lansdale.

INVENTOR

H. C. Womelsdorff

By John S. Duffee, Attorney

UNITED STATES PATENT OFFICE.

HENRY CLAY WOMELSDORFF, OF TYLER, TEXAS.

DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 489,111, dated January 3, 1893.

Application filed September 26, 1892. Serial No. 446,948. (No model.)

To all whom it may concern:

Be it known that I, HENRY CLAY WOMELSDORFF, a citizen of the United States, residing at Tyler, in the county of Smith and State of Texas, have invented certain new and useful Improvements in Railway Dumping-Cars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention is a railway dumping car, and consists in the novel construction and arrangement of its parts.

In the accompanying drawings: Figure 1 is an end view of my car. Fig. 2 is a cross sectional view of my car, and Fig. 3 is a top plan view of the same.

My invention is described as follows:

A, represents the trucks; a, the pivot or king bolt; a', side bearings; B, represents transoms on which the body of the car rests; C, represents the end sills of the body, and D, the side sills of the body; c, the end walls of the body box; c', the outside standards of the end walls; c^2, end brace rods; d, outside standards of the side walls; d', inside standards of the side walls, and d^2, the side walls.

On each end of the car and at each corner are secured heavy upright pieces, E, (see Fig. 1) to which are secured brake shafts, e, and wheels, e'; said brake shafts are secured in proper bearings, and on the lower end of each of said shafts and on top of car deck are secured ratchet wheels and dog, e^2, and near the upper ends of said rods are spiral threads, e^3; these spiral threads mesh with and work in the cogs of wheels, e^4.

On the cross transoms, B, are secured two longitudinal sills, F, the outer edges of which are about on a line with the inner rims of the truck wheels, and in the center of the car are two other longitudinal sills, F', which also rest on the transoms, B; on the top of these longitudinal sills are cross sills, G, having grooves, g, and on top of these cross sills, G, is a longitudinal triangular beam, G', having tongues, g', to fit in said grooves. Thus there is built in the center of the car a longitudinal frame-work coming to an apex in the center on which is secured two incline floors, H, the lower edges of which rest on the outer edges of longitudinal sills, F. Thus there is left on each side of the car an opening, H', its entire length. On the summit of said incline floors are mounted at intervals saddles, h, having perforated ears, h'. In the perforations of said ears are secured the inner ends of bracing rods, h^2, the outer ends of which pass through standards, d', body walls, d^2, and outer standards, d, to prevent the body from spreading. To the inner faces of the longitudinal sills, F, are secured hinges, f. To these hinges are hinged aprons, I, so that they will fit snugly against the bottom faces of longitudinal sills, F; there are eight of these aprons four on each side of the body and entirely close the openings, H'. At intervals across the bottom of the said car are cross braces to keep the side sills from spreading. These cross braces are covered with incline floors, J. Against the inner faces of the standards, d', are secured bearings, j, and in these bearings are journaled four shafts, j', two on each side of the car. On the outer ends of these shafts which pass through the end braces, E, are rigidly secured cog-wheels, e^4, which mesh with spiral threads, e^3. On these shafts, j', are secured at intervals grooved winding spools, j^2; to each of these winding spools is secured one end of the upper chain, j^3, the other ends of which chains are secured to the aprons, I.

The operation of my dumping car is as follows: The aprons are wound up until they are tight against the lower faces of the sills, D, F; the car is then filled with gravel sand, dirt or other material intended to be dumped and is started on its course. When the dumping ground is reached the operator unlocks one or more of the ratchet wheels, e^2, turns one or more of the brake wheels, e', and lets down one or more of the aprons, I. It will be seen that all of the material may be dumped at one place, one-half on one side and the other half on the other side of the car. As there are eight aprons, one-eighth or more may be dumped at any point desired, or the aprons may be let down part of the way and the material allowed to sprinkle down as the car moves gradually along.

The incline floors, H and J, are for the purpose of causing the dirt or gravel to shoot out from the car and leave none therein. The purpose of the spools in the winding grooves, j^2, is to keep the chains, j^3, from winding on themselves so that both ends of the aprons will at the same time be wound up tightly against the bottom faces of D and F. The purpose of the saddles, h, is to ride upon the apex of the incline floors and keep them in place, the rods, h^2, performing the double purpose of keeping said saddles in place and the sides of the body from spreading.

I have shown in the drawings but eight aprons and sixteen winding spools, but I may use more aprons and more winding spools if found desirable.

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

1. In a dumping car, in combination with a railroad car, the combination of the longitudinal sills F, incline floors H and J, aprons I, hinged to sills F, shafts j', working in bearings j, and carrying on their outer ends cog-wheels e^4, and at intervals along their length grooved winding spools j^2; chains j^3, having their upper ends secured to said winding spools and the lower ends to said aprons; brake rod e, provided with brake wheel e', ratchet wheel and dog e^2, and spiral thread e^3, substantially as shown and described and for the purposes set forth.

2. In a dumping car, in combination with a railroad car, the combination of the longitudinal sills F, F', cross, grooved, sills, G, and triangular longitudinal tongued beam G', incline floors H and J, aprons I, hinged to sills F, shafts g' working in bearings j, and carrying on their outer ends cog-wheels e^4, and at intervals along their length grooved winding spools j^2; chains j^3, having their upper ends secured to said winding spools and their lower ends to said aprons; brake rods e, provided with brake wheels e', ratchet wheels and dogs e^2, and spiral threads e^3; saddles h, mounted on apex of incline floors H, and rods h^2, keeping said saddles in place and preventing the sides of the body from spreading, substantially as shown and described and for the purposes set forth.

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

HENRY CLAY WOMELSDORFF.

Witnesses:
JEFF D. BURNS,
SAM BURNS.