(No Model.) 2 Sheets—Sheet 1.

D. D. STEWART.

RAILWAY CONSTRUCTION MACHINE.

No. 418,083. Patented Dec. 24, 1889.

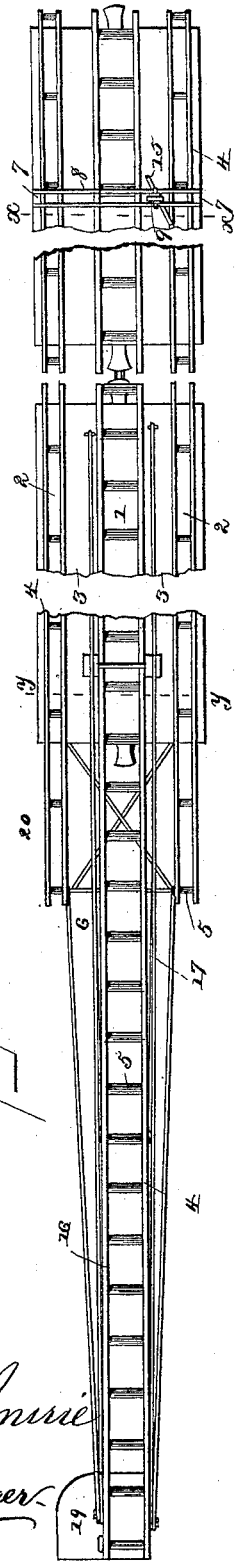

Fig. 1.

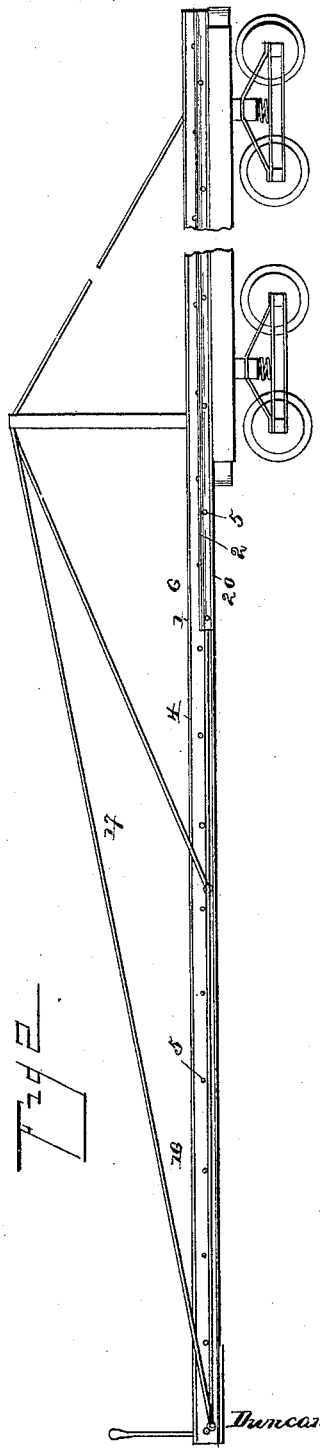

Fig. 2.

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Fig 3

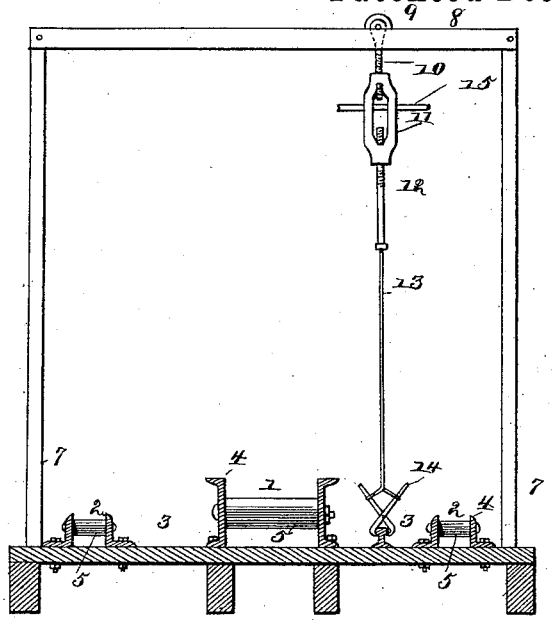
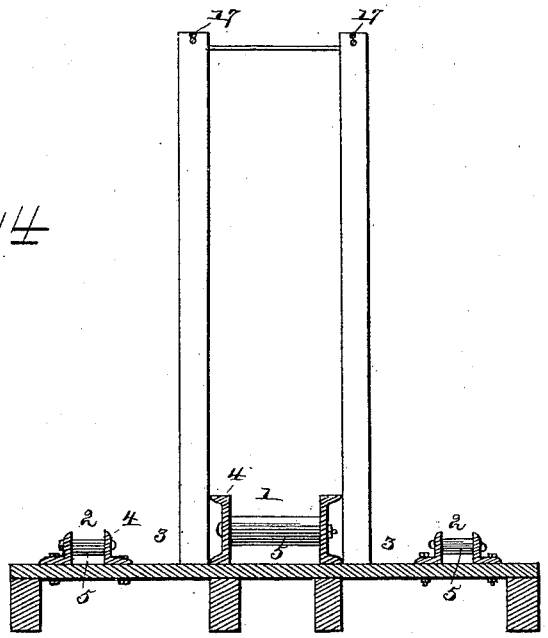


Fig 4



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UNITED STATES PATENT OFFICE.

DUNCAN D. STEWART, OF MANISTIQUE, MICHIGAN.

RAILWAY-CONSTRUCTION MACHINE.

SPECIFICATION forming part of Letters Patent No. 418,083, dated December 24, 1889.

Application filed June 25, 1889. Serial No. 315,525. (No model.)

To all whom it may concern:

Be it known that I, DUNCAN D. STEWART, a citizen of the United States, residing at Manistique, in the county of Schoolcraft and State of Michigan, have invented a new and useful Railway-Construction Machine, of which the following is a specification.

This invention relates to railway-construction machines; and it consists in an improved attachment for railway-construction cars, by means of which cross-ties and rails may be conveniently unloaded in such a manner that the gangs engaged in laying the ties and rails, respectively, may work conveniently without interfering with each other.

My improved device consists in the improved construction and arrangement of details which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a plan view showing the two front cars of a construction-train equipped with my improvements. Fig. 2 is a side elevation of the front part of the train with its attachments. Fig. 3 is a vertical transverse section taken on the line *x x* in Fig. 1. Fig. 4 is a vertical transverse section taken on the line *y y* in Fig. 1.

Like numerals of reference indicate like parts in all the figures.

In carrying out my invention each of the cars of the construction-train to which my invention is applied is provided with three longitudinal roller-ways, (designated, respectively, by 1 and 2 2,) the former of which extends centrally along the car, while one of the latter is constructed on each side and separated from the central roller-way by the compartments 3 3, which are used for the storage of rails. The said roller-ways are constructed simply of longitudinal channel and angle irons 4, which are to be suitably bolted or otherwise secured to the floors of the flat cars and between which the rollers 5, which are to be of any suitable dimensions, are journaled in any convenient manner. The central roller-way 1, which is for the passage of the ties, is wider than the side ways, which are for the passage of the rails, each of said roller-ways being of such width as to prevent the ties or rails from swerving laterally while being passed along the said ways, and the flanges or angle-irons are extended above the faces of the rollers, as will be seen clearly by reference to Figs. 3 and 4 of the drawings. The roller-ways are extended slightly beyond the ends of the flat cars, as will be seen clearly at 6 in Fig. 1 of the drawings.

Located centrally at the sides of each of the flat cars are the uprights 7 7, which are suitably braced to retain them firmly in position. The upper ends of the said uprights are connected by the tracks 8, extending transversely across the cars and having the travelers 9, provided with downwardly-extending screw-threaded shanks 10, upon which are mounted the links 11, which are provided at their upper and lower ends with right and left hand threaded perforations, in the lower ones of which are mounted the bolts 12, having the downwardly-extending rods 13, to which the lifting-tongs 14 are suitably connected. The link 11 may be operated by means of a lever 15, so as to raise or lower the lifting-tongs for the purpose of lifting the rails out of their storage-compartments and placing them upon the roller-ways. The front car of the train is provided with the forwardly-extending roller-way 16, which is a continuation of the central roller-way 1. The way 16 extends forwardly about forty feet, or a distance exceeding the length of the car, and it is stayed by means of suitable guys or braces 17, extending to the tops of uprights erected at the front end of the front car of the train. At the forward end of the roller 16 is a suitably-constructed platform 19, upon which a workman may be stationed to swing the cross-ties into position as they are being passed forward upon the central roller-way. The side roller-ways 2 2 are likewise extended forwardly, as shown at 20, but only for a distance of about eight feet.

In operation the rails are stored in the compartments 3 and the ties are piled crosswise over the rails. The ties are first passed forward upon the central roller-way and dumped at the forward end of the latter, the train meanwhile moving forward at a slow rate of speed, so that each tie shall be dumped nearly in the right position. It will be seen that when the train has moved forward nearly

to the end of the track which has been laid the ties have been dumped for about forty feet in advance. Two of the rails are now passed forward upon the side roller-ways and dumped, and the construction-gang may now speedily secure the rails upon the ties which have already been laid. This being done, the train is at liberty to move forward and to repeat the operation.

It is obvious that the rails and ties are to be so stored and arranged with relation to each other that they shall be readily accessible in the order in which they are required. By my improvement it will be seen that the ties and rails may be conveniently passed forward from the rear to the front car of the train exactly as they are required and without much manual labor.

The construction of the parts comprising my invention is simple, and it may be readily applied to flat cars of ordinary construction.

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

1. A railway-construction car provided with a central roller-way and two longitudinal roller-ways located at the sides and separated from the central roller-way by rail-storage compartments, substantially as and for the purpose set forth.

2. A railway-construction car provided with a central longitudinal roller-way and two longitudinal roller-ways located at the sides and separated from the central roller-way by rail-storage compartments, said roller-ways being constructed of longitudinal flanges or angle-irons and rollers journaled between the same, the said flanges or angle-irons being extended above the faces of the said rollers, substantially as set forth.

3. A railway-construction car provided with a central roller-way and two longitudinal roller-ways located at the sides and separated from the central roller-way by rail-storage compartments, in combination with a pair of uprights, the transverse track connecting the same, the traveler having the downwardly-extended screw-threaded shank, the link having a right and left hand threaded perforation, the bolt having a downwardly-extending rod, the hoisting-tongs connected to said rod, and an operating-lever, substantially as set forth.

4. A railway-construction car having the central roller-way extended forwardly for a distance exceeding the length of the car and suitably braced or stayed, and provided with a platform at its front end, substantially as set forth.

5. A railway-construction car having a central roller-way extended forwardly for a distance exceeding the length of the car, and longitudinal roller-ways separated from the central roller-way by rail-storage compartments and extended forward a suitable distance, substantially as set forth.

6. A railway-construction car having the longitudinal roller-ways separated by rail-storage compartments and extended forward, the central roller-way being suitably braced and provided with a platform at its front end, in combination with a transverse track mounted upon suitable uprights, and the rail-hoisting mechanism traveling upon said track, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DUNCAN D. STEWART.

Witnesses:

JOS. H. CLARK,

WM. A. MCKINNEY.