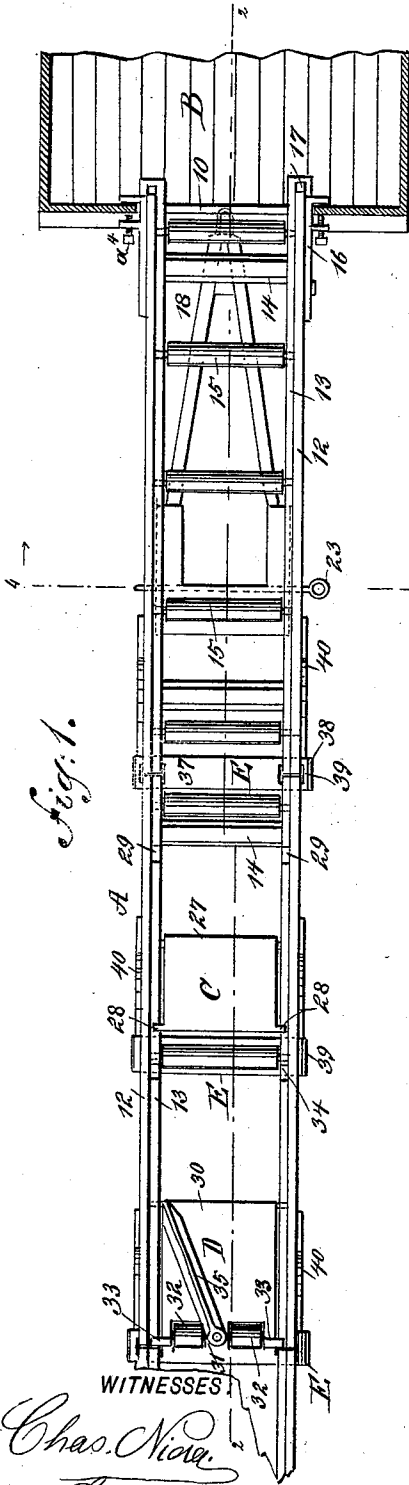


# C. C. GATES. RAILROAD RAIL OR TIE DISTRIBUTER.

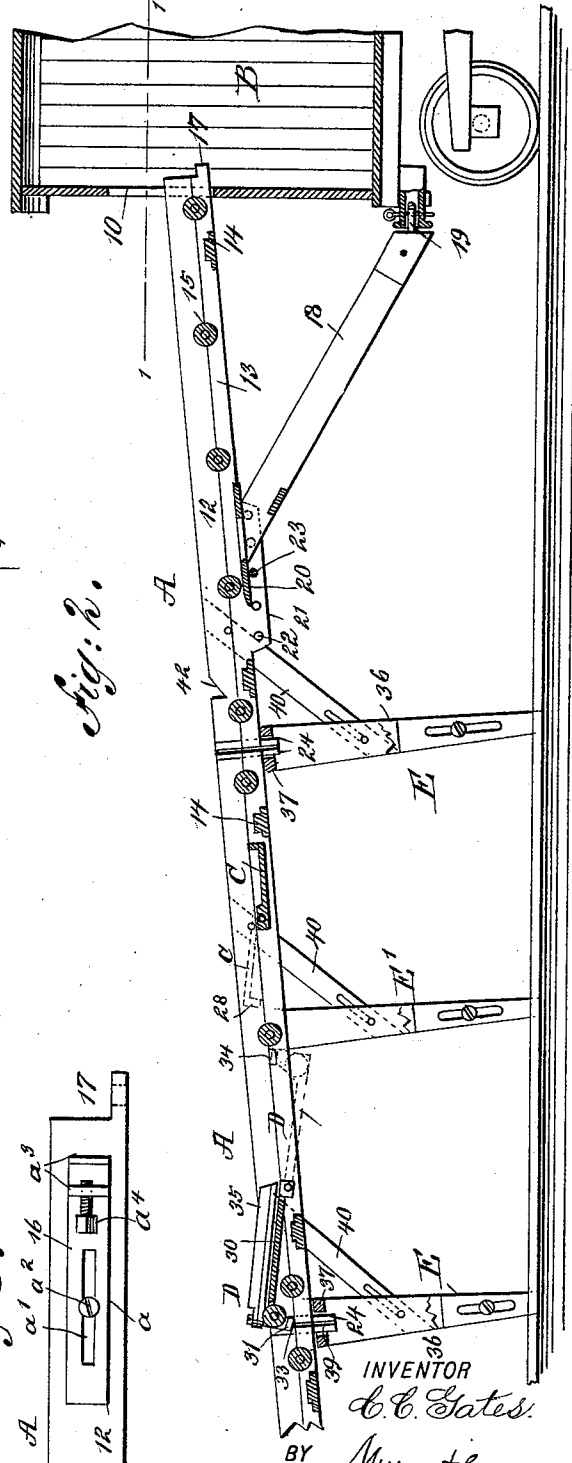
No. 521,023.

Patented June 5, 1894.

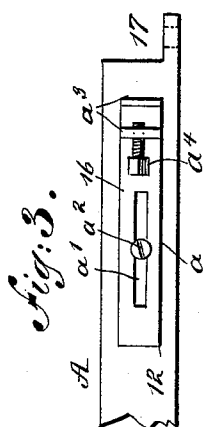


*Fig. 1.*

*Chas. Nove.*  
*A. Lurcott.*



*Fig. 2.*



*Fig. 3.*

INVENTOR  
*C. C. Gates.*

BY *Munn & Co.*

ATTORNEYS.

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RAILROAD RAIL OR TIE DISTRIBUTER.

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Fig: 4.

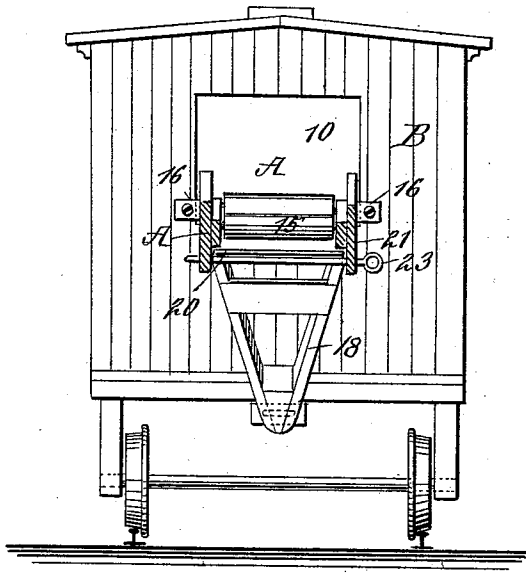


Fig: 5.

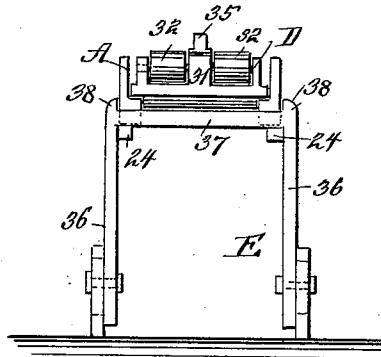


Fig: 6.

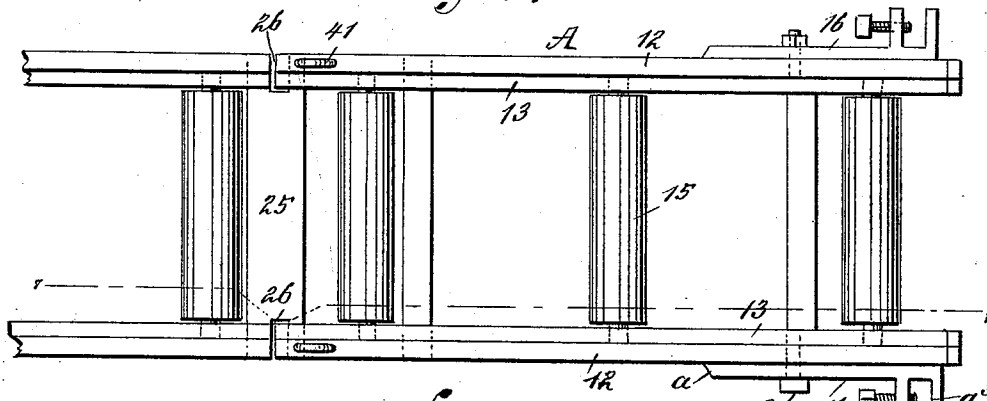
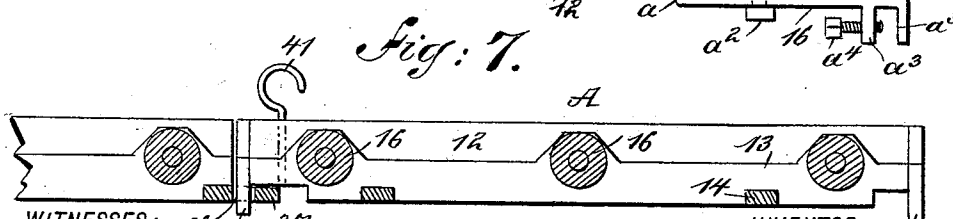


Fig: 7.



WITNESSES: 26 24 25

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INVENTOR: 24  
C. C. Gates.

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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

CALEB CASS GATES, OF FORSYTH, MONTANA, ASSIGNOR TO HIMSELF AND  
JAMES SKINNER HOPKINS, OF SAME PLACE.

## RAILROAD RAIL OR TIE DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 521,023, dated June 5, 1894.

Application filed September 12, 1893. Serial No. 485,329. (No model.)

*To all whom it may concern:*

Be it known that I, CALEB CASS GATES, of Forsyth, in the county of Custer and State of Montana, have invented a new and Improved Railroad Rail or Tie Distributer, of which the following is a full, clear, and exact description.

My invention relates to a railroad rail and tie distributer, and it has for its object to provide a device of exceedingly simple and durable construction, capable of being attached expeditiously and conveniently to any car capable of carrying rails or ties, the attachment being made in such manner that the distributer may be placed at any desired angle.

A further object of the invention is to provide a means whereby the distributer may be made in any desired number of sections, and the sections be readily coupled together and held rigidly in the desired position.

Another feature of the invention consists in a means for regulating the speed of the material to be carried over the distributer, and likewise to provide a device through the medium of which the rails may be directed either to the right or to the left of the distributer for the purpose of discharging them, and to so locate the retarding device and directing mechanism that when not required for use they may be placed in such position as not to interfere with the passage of the ties or other articles over the distributer.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the distributer attached to a box car. Fig. 2 is a longitudinal section taken practically on the line 2—2 of Fig. 1. Fig. 3 is a detail view of one of the clamps through the medium of which the distributer is connected with the car. Fig. 4 is a transverse section taken practically on the line 4—4 of Fig. 1. Fig. 5 is an end view of the distributer. Fig. 6 is a plan view of the sections of the distributer, illustrating a slight

modification in construction; and Fig. 7 is a longitudinal section, taken practically on the line 7—7 of Fig. 6.

The distributer is made in any desired number of sections A, which sections are made of any length and of any width, but they are usually made of a width corresponding practically to the width of an opening 10 in the car B, in which the rails, ties or lumber, for example are to be transported. Each of the sections comprises two sides 12, recessed longitudinally upon their inner faces to provide longitudinal shoulders 13, and cross bars 14 are employed to connect the side pieces. Each section is further provided with a series of rollers 15, located at predetermined distances apart, their trunnions being journaled in boxes 16, as shown in Fig. 7, located upon the inner faces of the sides and formed upon the shoulders 13; or other means may be provided to receive the said trunnions. One section, or that which is to be connected with the car B, is provided upon the outer face of its side pieces at its inner end with clamps 16, one of which is shown in enlarged view in Fig. 3. The clamps preferably comprise a plate or block  $a$ , which is provided with a longitudinal slot  $a'$ , through which a set screw  $a^2$ , is passed into the sides of the section, and through the medium of this set screw and slot the clamp may be adjusted endwise a predetermined distance. At its inner end the clamp is provided with two jaws  $a^3$ , and one of them carries a set screw  $a^4$ . The jaws  $a^3$ , stand at right angles to the body of the clamp and are adapted to receive between them the side framing of the car opening 10, as shown in Fig. 1, the set screw  $a^4$  being made to engage with the said framing.

At the inner extremity of the side rails of the inner section apertured extensions 17, are usually made, in order that the sections may be coupled, as will be hereinafter set forth, when the sections are to be carried through an empty car to a connection with another car to be unloaded. The inner section, after it is attached to the car, may be supported at any desired inclination through the medium of a brace 18, which is preferably of a V-shape, and at its lower or contracted end is provided with a link 19, while at its upper end the brace has secured to it a head plate 20 having

an opening therein, as shown in Fig. 2, through which articles may be passed. Ears 21, are formed upon the sides of the said inner section, as is likewise shown in Fig. 2, and these ears are provided with a series of horizontally arranged apertures 22, and through any two transversely aligning apertures a rod 23, may be passed. The head of the brace is placed in position beneath one of the rollers, and the pin 23, after being passed through one of the apertures in the ears 21, will hold the upper end of the brace in place, and the inclination of the brace will be controlled by the position of the aperture through which the pin is passed. The link 19, at the lower end of the brace is made to enter the drawhead of the car, and the coupling pin is passed through it. In this manner the inner section is firmly held in place at whatever angle or inclination desired. The outer or inner end of the first or inner section is provided with a lug 24, extending downward from each side, and each intermediate section is provided with like lugs at each of its ends; or, as shown in Figs. 6 and 7 each intermediate section may be provided at one end with the said lugs 24, and at the opposite end with a cross bar 25, provided with slots or apertures 26 in each extremity opposite the end of the sides of the section.

Each alternate section is preferably provided with a retarding device C, and with a directing mechanism D, the latter being designed to direct the rails to the right or to the left, and the retarding devices are usually placed about a rail's length apart. The retarding device consists of a table 27, which is pivoted at its ends near one edge in the shouldered side portions of the distributing section, the opposite edge being free; and at the ends of the free edge of the platform lugs 28, are formed. The platform is located between two rollers, and when not in use its lugs 28 are made to enter recesses 29 made in the shoulders 13, as shown in Fig. 1, and when the lugs are in this position the platform will be below the upper face of the shoulders, as shown in Fig. 2, and any object carried by the rollers will readily pass over it. When it is desired to retard the movement of objects located upon the rollers, the platform is drawn upward upon its pivot, and over in direction of the rear end of the distributor, its lugs resting upon the shoulders 13 of the sections upon which it is located. The platform will then be in an inclined position, as shown in dotted lines in Fig. 2, and will retard, or if desired, stop the progress of any article being distributed. The directing mechanism D, is likewise located between the rollers of its distributing section, and the said directing mechanism consists of a platform 30, pivoted at its ends near one side edge to the sides of the section, the opposite edge being free; and at the free edge of the table a flange 31 is formed, recessed at each side of its center to receive friction rollers 32; and lugs 33, are

formed at the free end of the flange, adapted to rest either upon the shoulders of the distributing section, or in recesses produced in said shoulders, as has been described with reference to the retarding device, the recesses being designated as 34. A shifting bar 35, is pivoted upon the flange 31 of the table between the rollers 33, and where the flange connects with the table, the said shifting bar being held to slide upon the table, as shown in Fig. 1, and the free end of the bar is beveled upon opposite sides.

When the table of the directing mechanism is placed in such position that its lugs enter the recesses 34, as shown in dotted lines, Fig. 2, the entire mechanism will be below the upper faces of the rollers; but when rails are to be delivered from a section provided with the directing mechanism, its table is thrown upward until its lugs rest upon the shoulders of the section, thus placing the table at an inclination, as shown in positive lines in Fig. 2, and the shifting bar is placed either to the right or to the left in order that the rails shall be directed to the right or to the left roller 32, and consequently delivered over the right or the left side of the section.

The sections are connected and supported through the medium of supports E. The said supports consist ordinarily of two legs 36, which are made in adjustable sections so that they may be lengthened or shortened, the legs being connected by an upper cross bar 37, said cross bar being provided near its ends with upwardly-extending flanges 38, as shown in Fig. 5, and with apertures 39, as shown in Figs. 1 and 2, and the apertures receive the lugs 24 of abutting sections, while braces 40, are attached to the sides of one of the sections and adjustably connected with the legs as shown in Fig. 2.

Each section is usually provided with three supports, two end supports E and an intermediate support E', the intermediate support being like in construction to the end supports with the exception that the intermediate support is connected with the section to which it belongs only through the medium of its braces 40.

It is obvious from the foregoing description that but few men need be employed in distributing rails or ties, since after the sections are connected one man will be enabled to attend to the ties or rails while passing over the distributor. After one car has been emptied other sections may be added to what was the inner or outer section, in which event the sections are constructed as shown in Figs. 6 and 7, being provided at or near their ends with loops or hooks 41, as the supports E or E', are not used within the car, and chains are substituted, connected with the hooks 41, and clamped or otherwise secured to the rafters of the empty car. The last section added, however, is provided with the clamps 16, for engagement with the door framing of the car to be unloaded.

Any object may be stopped upon any of the sections by passing a bar across the section through slots 42, made in its sides, said slots being shown in Fig. 2.

5 It will be understood that the distributing mechanism above described may be used for distributing lumber, or other unwieldy objects or articles, and that it may be applied to a flat car or to a box car. The sections of  
10 the distributor are left in position after the rails have been passed over them until the ties have been distributed, after which the sections may be disconnected and removed as the ties are delivered along the line of track.  
15 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a distributing device for railway rails, ties, and other articles, a series of roller sections one of which is adapted for attachment to a car, and supports adjustably and removably connected with the ends of the sections and coupling the same, as and for the purpose specified.

2. In a device for distributing railway ties, rails and other articles, a series of roller sections, couplings temporarily uniting the sections, adjustable and removable supports connected with the several sections, clamps carried by one of the sections for attachment to the receptacle to be unloaded, and a brace removably connected with the receptacle and with the clamp carrying section, the brace serving to give inclination to the clamp carrying section, substantially as shown and described.

3. In a distributing device for railway rails, ties, and other articles, a series of roller sections, means for coupling and supporting the same, and a retarding device located upon sundry of the sections, as and for the purpose set forth.

4. In a distributing device for railway rails, ties and other articles, a series of roller sections, couplings uniting the same, adjustable and removable supports connected with the sections, and a retarding device and directing mechanism located upon sundry of the sections, as and for the purpose set forth.

5. In a distributing device for railway rails, ties and other articles, the combination with a series of roller sections, sundry of the sections being provided with clamps adapted for attachment to the receptacle to be unloaded, and supports adjustably and removably connected with the sections and coupling the same, of a retarding table pivoted in sundry of the sections, adapted to be inclined above.

or dropped below the upper surfaces of the rollers of the sections, and a directing mechanism consisting of a pivoted table adapted to be dropped below or raised over the rollers of a section, and a shifting bar having movement over the table, as and for the purpose set forth.

6. In a device for distributing railroad ties, rails, or lumber, a series of roller bearing sections, clamps secured to sundry of the sections, adapted for attachment to the receptacle to be unloaded, and adjustable and removable supports engaging with the sections and coupling the same, as and for the purpose specified.

7. In a device of the character described, the combination, with a series of roller bearing sections, devices for inclining and supporting the same, substantially as shown and described, and a coupling between the sections, of a retarding table pivoted to a section between its rollers, which table is capable of being placed below the level of the rollers or carried above said rollers, substantially as specified.

8. In a distributor for railway rails, ties, lumber or other articles, the combination, with a car and its coupler, of a series of roller carrying sections, couplings and supports therefor, clamps located upon one of the sections, adapted for engagement with the body of the car, and a brace connected with the coupler and the car, and removably connected with the roller section adjacent to the car, whereby the inclination of said section may be regulated, substantially as shown and described.

9. In a distributing mechanism for railroad rails, ties, lumber, &c., the combination, with a roller bearing support or tram way adapted to receive the articles to be distributed, of a retarding device consisting of a table pivoted in the support, adapted to be dropped below the upper surface of the rollers, or carried at an inclination above said surfaces, and a directing mechanism, the same consisting of a table pivoted in the support, adapted to be carried over the rollers or placed below their level, said table being provided with guide rollers, and a bar pivoted at one end to the table and having sliding movement over the face of the table, as and for the purpose set forth.

CALEB CASS GATES.

Witnesses:

E. S. BECKER,  
W. R. CRIMMINS.