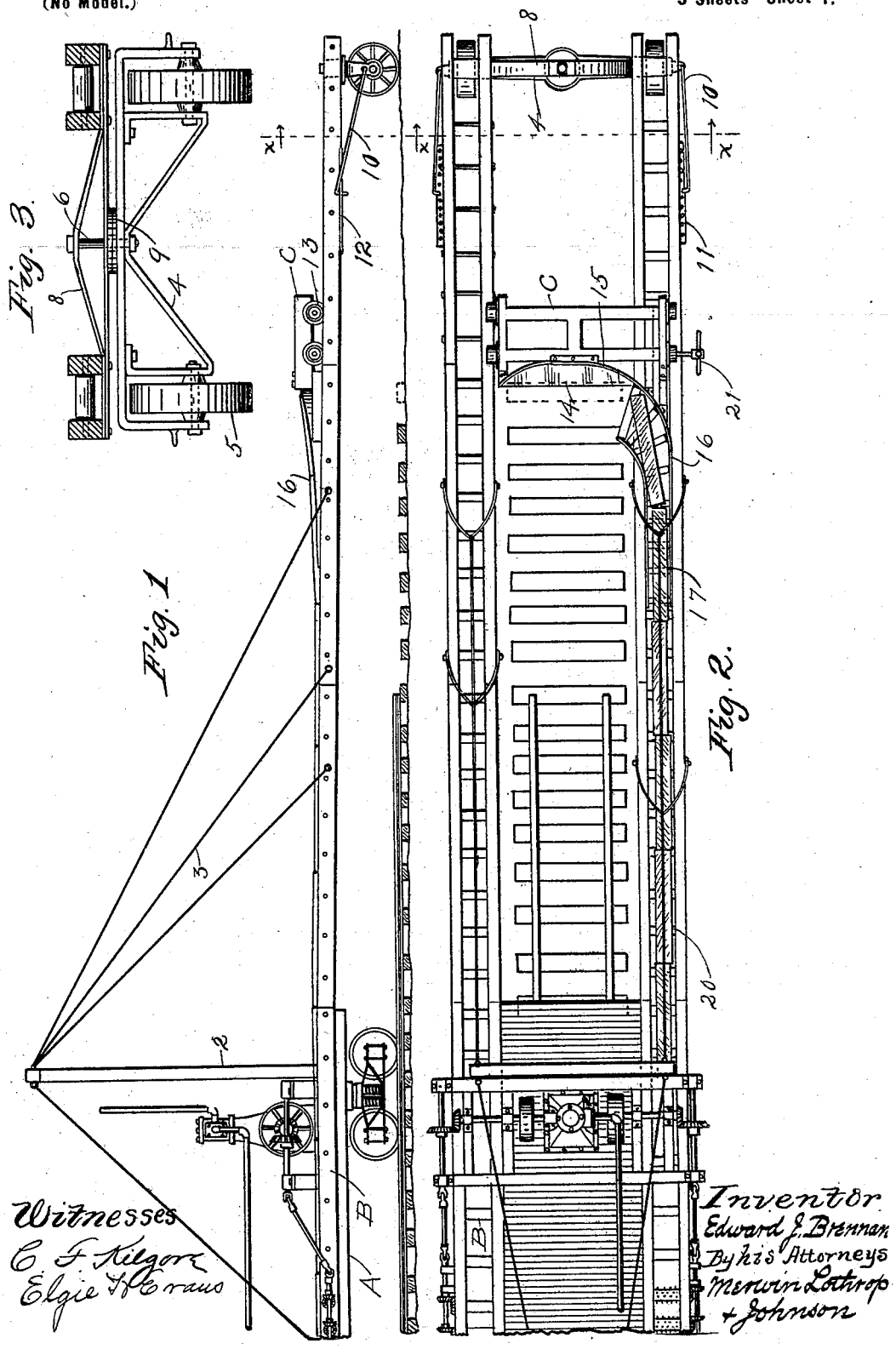
No. 648,482. Patented May 1, 1900.

E. J. BRENNAN.

TRACK LAYING MACHINE.

(Application filed Jan. 3, 1900.)

(No Model.) 3 Sheets—Sheet 1.



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3 Sheets—Sheet 2.

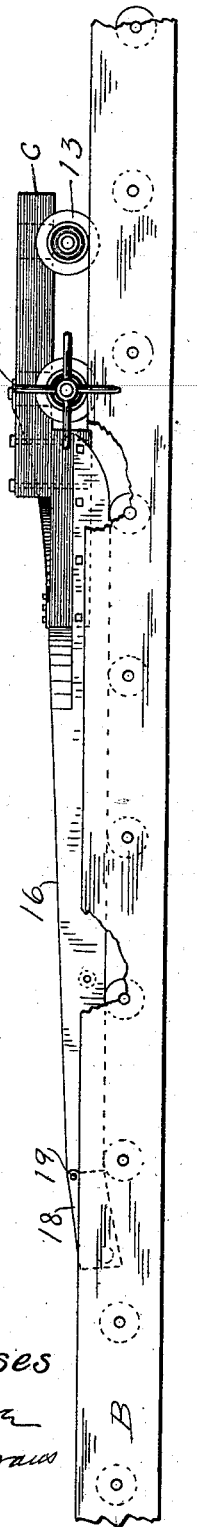

Fig. 4.

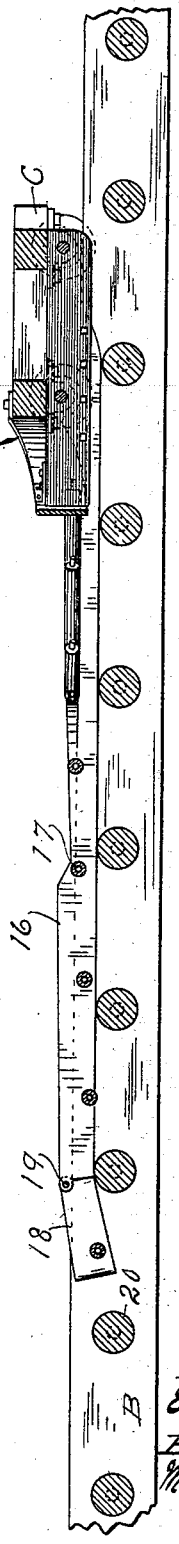

Fig. 5.

Witnesses
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Elgie A. Evans

Inventor
Edward J. Brennan
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(No Model.) 3 Sheets—Sheet 3.

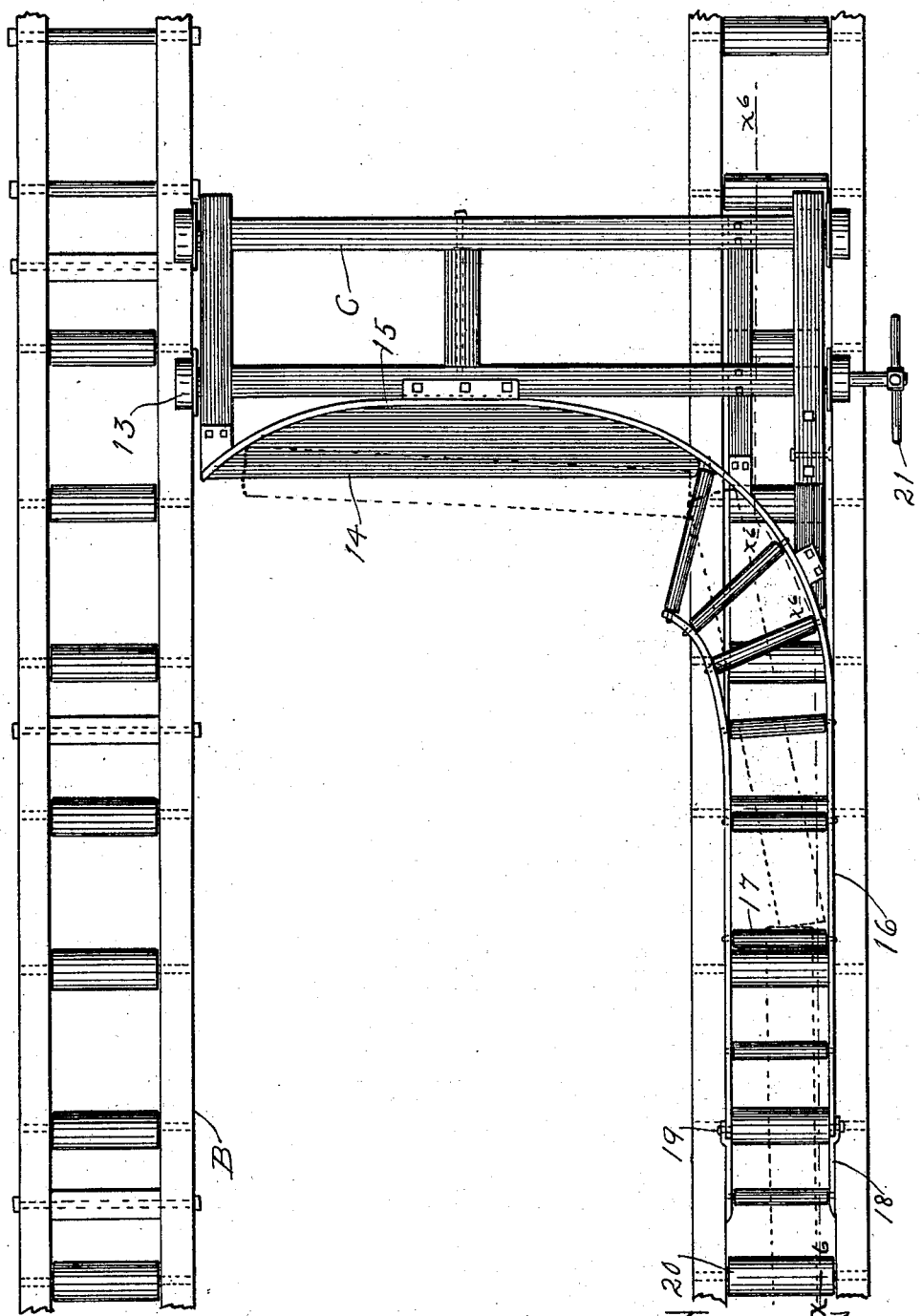

Fig. 6.

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UNITED STATES PATENT OFFICE.

EDWARD J. BRENNAN, OF ST. PAUL, MINNESOTA.

TRACK-LAYING MACHINE.

SPECIFICATION forming part of Letters Patent No. 648,482, dated May 1, 1900.

Application filed January 3, 1900. Serial No. 208. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BRENNAN, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Track-Laying Machines, of which the following is a specification.

My invention relates to improvements in track-laying machines of that class in which the ties and rails are carried on tramways from the supply-car to where the tracks are being laid; and it consists in providing means for unloading the ties from the tramway onto the ground; also, in providing means for supporting and controlling the projecting ends of the tramways, and in other features of construction hereinafter particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of the end of a supply-car and projecting tramways. Fig. 2 is a plan view of Fig. 1. Fig. 3 is a section on line $x\dot{x}$ of Fig. 2. Fig. 4 is a side elevation of a portion of the tramway, showing my tie-unloading means. Fig. 5 is a longitudinal vertical section of Fig. 4, and Fig. 6 is a plan view of the same.

In the drawings, A represents an ordinary flat-car constituting part of the supply-train. Suitably supported along the sides of the car are tramway-sections B. These sections are suitably secured together and a number of them project beyond the end of the car A. The projecting sections are connected with a beam 2 upon the car by means of guy-rods 3. Arranged under the end of the projecting tramway-sections is a carriage 4, provided with carrying-wheels 5. The carriage is connected with the tramway-sections by means of a bolt 6, passing through the framework of the carriage and the truss 8 of the tramway-sections, suitable bearing-plates 9 being interposed between said carriage and tramway-section. In order to turn and hold the carriage at the desired angle with the tramway in turning curves, I provide rods 10, each connected at one end with the carriage and having its other end downwardly turned to fit in openings 11 of the plates 12, secured upon the outer sides of the tramway-sections.

For the purpose of unloading the ties from the trams and depositing them in proper position upon the ground I provide a carriage C, mounted upon the carrying-wheels 13, which travel upon the beams of the tramways. Secured to the inner side of the carriage C is a shelf 14, preferably made of sheet metal and having a curved back wall 15. Connected with one side of said shelf is a runway 16, provided with transverse rollers 17, the end of said runway adjacent to the shelf 14 being widened, as shown. The free end 18 of the runway is connected with a body portion by pivots 19, allowing said end to turn downward between the rolls 20 of the tramway, as shown in Figs. 4 and 5, the better to facilitate the passage of the ties from the tramway-rolls onto the rollers of the runway. The runway may be supported upon the rolls of the tramway-sections, as shown in Figs. 4 and 5, or may, if desired, be supported upon independent wheels. To adjust the carriage C and connected runway along the tramway-sections, I provide a handle 21, connected with one of the wheels 13.

Operation: The ties to be used in constructing the track are carried by the supply-car, to the sides of which are secured the tramways B. The rollers of the tramway-sections along the sides of the car are suitably actuated, as by the gearing 22, so that the ties when placed upon said rollers will be carried forward to the rollers of the tramway-sections, which project beyond the end of the car. The ties are thus forced forward until they strike the runway and then over the rollers of the runway to the shelf 14. As the forward tie is pushed out upon the shelf 14 the curved back wall 15 of the shelf will force the tie over the edge to the ground, as illustrated by dotted lines in Fig. 2. The carriage C, which carries the shelf and runway, is then rolled forward upon the tramway-sections to allow the next tie to be deposited upon the ground at the proper distance from the preceding tie. This operation continues until the carriage reaches the end of the tramway-sections, when the construction-train is run forward upon the rails and the carriage rolled back upon the tramway-sections to begin the laying of another series of ties. While the ties are being laid, rails are being carried forward by the tramways upon the

opposite side of the train and are lifted from said tramways and deposited upon the ties.

In order to enable the carriage to travel back and forth on the tramway-sections, it is necessary to keep the sections which extend beyond the train in substantially a straight line, and I therefore support the end of the tramway-sections by the carriage 4, and when it is desired to lay the tracks upon a curve the carriage is turned and secured at the proper angle with the tramway-sections, thus allowing the carriage to travel around the curve and at the same time allow the tramway-sections to remain substantially rigid.

I claim—

1. In a track-laying machine of the class described, the combination with a supply-car and tramway-sections secured along the sides of said car, of a series of tramway-sections projecting beyond both sides of the car, and a wheeled carriage or truck arranged between and supporting the free ends of said sections.

2. In a track-laying machine of the class described, the combination with a supply-car, and tramway-sections secured along the sides of said car, of a series of tramway-sections projecting beyond both sides of the car, framework connecting the free ends of said projecting sections, a wheeled carriage or truck, and a pivotal connection between said truck and framework.

3. In a track-laying machine of the class described, the combination with a supply-car, tramway-sections secured along the sides of said car, of a series of tramway-sections projecting beyond both sides of the car, a wheeled carriage or truck arranged between and supporting the ends of said sections, and an adjustable connection between said truck and tramways for holding said truck turned at an angle with said sections.

4. In a track-laying machine of the class described, the combination with a supply-car, and a series of tramway-sections secured along the sides of said car and projecting beyond the end thereof, of means adjustable along the tramway-sections for diverting the ties from said sections and depositing them upon the ground.

5. In a track-laying machine of the class described, the combination with a supply-car, and a series of tramway-sections secured along the sides of said car and projecting beyond the end thereof, of a runway arranged in connection with said projecting sections for diverting ties and discharging them from the tramway, said runway being adjustable along said tramway.

6. In a track-laying machine of the class described, the combination with a supply-car, and a series of tramway-sections secured along the sides of said car and projecting beyond the end thereof, of a runway adjustable along said tramway-sections and adapted to receive the ties therefrom, and means arranged in connection with said runway for receiving ties therefrom and depositing them upon the ground.

7. In a track-laying machine of the class described, the combination with a supply-car, and a series of tramway-sections secured along the sides of said car and projecting beyond the end thereof, of means arranged between opposite tramway-sections for receiving ties from one of said sections and depositing them upon the ground.

8. In a track-laying machine of the class described, the combination with a supply-car, and a series of tramway-sections secured along the sides of said car, and projecting beyond the end thereof, of means arranged between opposite tramways for receiving ties from one tramway and discharging them to the ground, said means being adjustable along said tramway.

9. In a track-laying machine of the class described, the combination with a supply-car, and a series of tramway-sections secured along both sides of said car, and projecting beyond the end thereof, of a runway arranged in connection with one of said tramways, a connected shelf arranged between opposite tramways and adapted to receive ties from said runway and deposit them upon the ground.

10. In a track-laying machine of the class described, the combination with a supply-car, and a series of tramway-sections secured along the sides of said car and projecting beyond the end thereof, of a runway arranged in connection with one of said tramways and adapted to receive ties therefrom, a connected shelf arranged between opposite tramways for receiving ties from the runway and discharging them upon the ground, and means for adjusting said runway and shelf along said tramways.

11. In a track-laying machine of the class described, the combination with a supply-car, and tramways arranged along the side of the same and projecting beyond the end thereof, of means arranged in connection with said tramways for receiving ties therefrom and depositing them upon the ground, said means being adjustable along said tramway.

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

EDWARD J. BRENNAN.

Witnesses:
ELGIE H. EVANS,
H. S. JOHNSON.