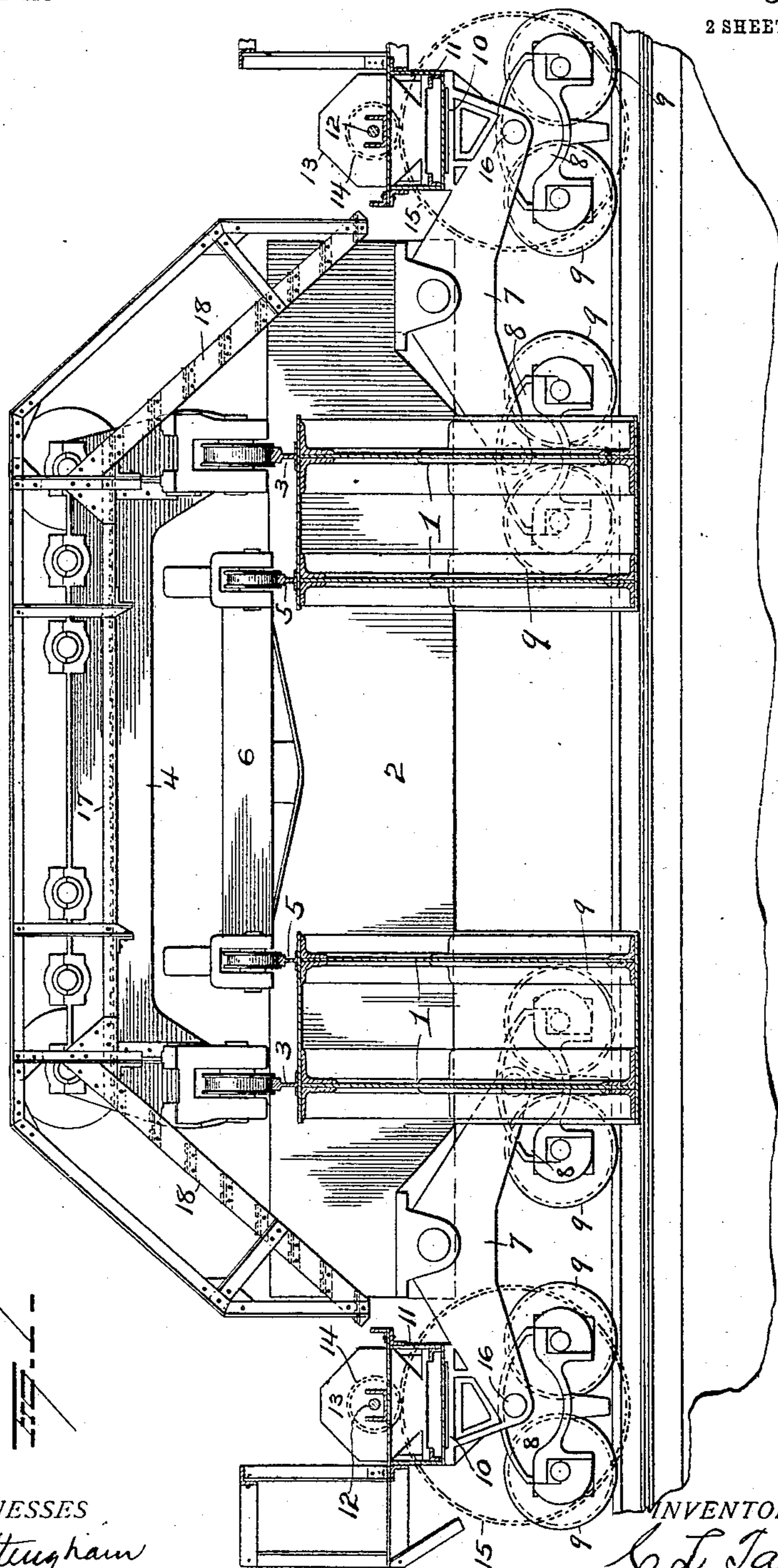


C. L. TAYLOR.
OVERHEAD TRAVELING CRANE.
APPLICATION FILED OCT. 2, 1909

968,814.

Patented Aug. 30, 1910.

2 SHEETS—SHEET 1.



WITNESSES
E. D. Nottingham
G. F. Downing

INVENTOR
C. L. Taylor
By H. A. Seymour
Attorney

C. L. TAYLOR.
OVERHEAD TRAVELING CRANE.
APPLICATION FILED OCT. 2, 1909.

968,814.

Patented Aug. 30, 1910.

2 SHEETS—SHEET 2.

Fig. 2.

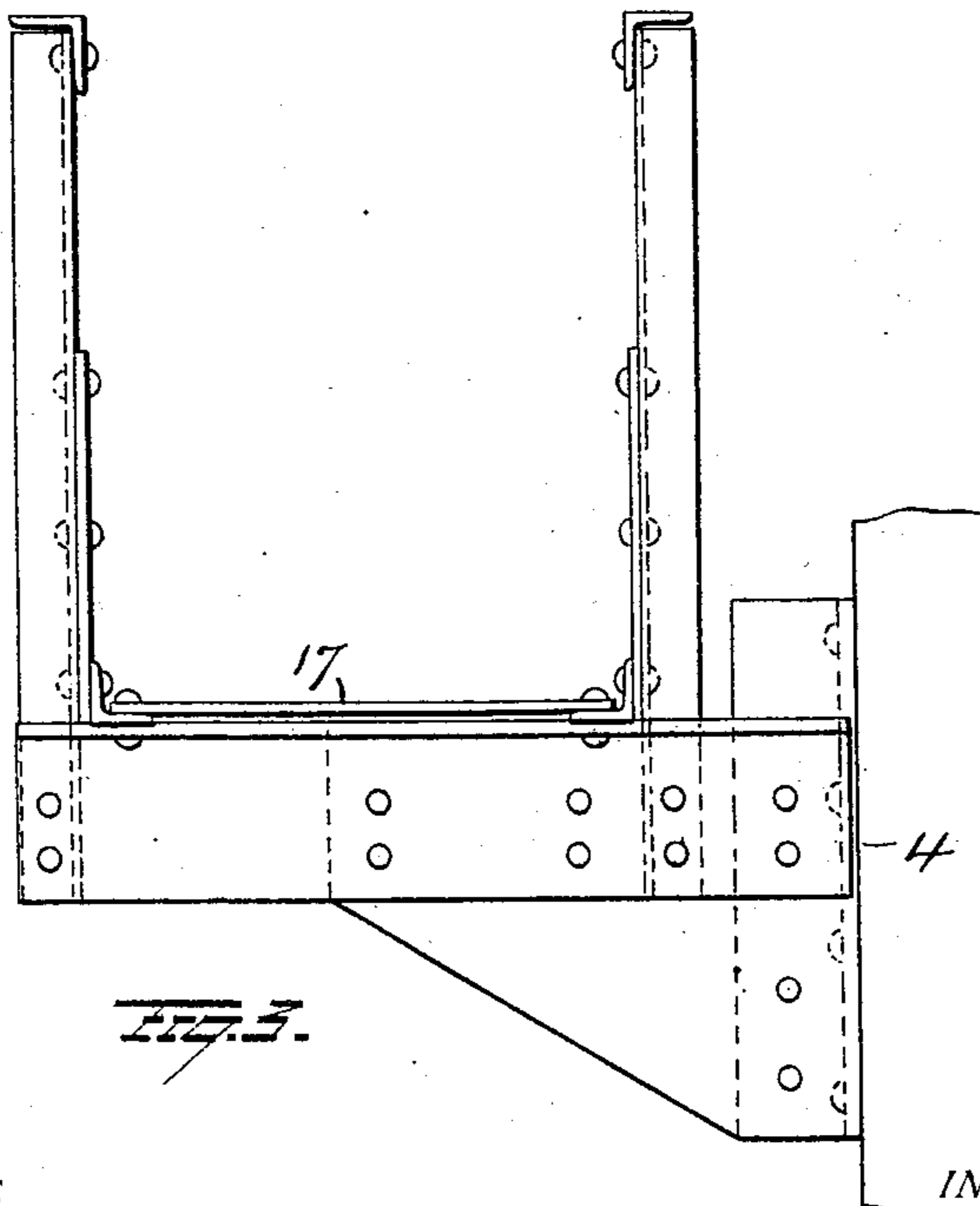
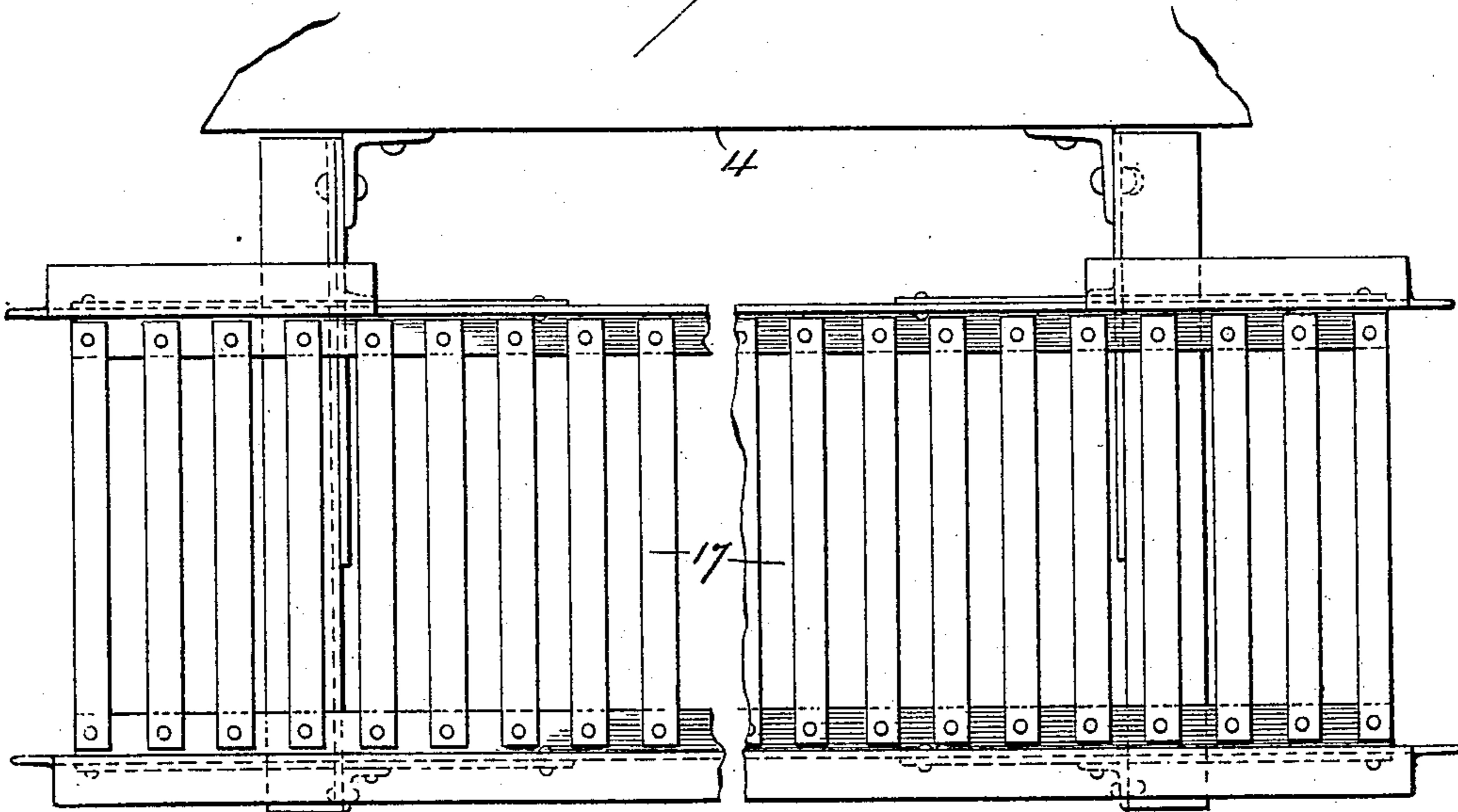


Fig. 3.

WITNESSES
E. J. Nottingham
G. A. Downing

INVENTOR
C. L. Taylor
By St. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

CLARENCE L. TAYLOR, OF ALLIANCE, OHIO, ASSIGNOR TO THE MORGAN ENGINEERING COMPANY, OF ALLIANCE, OHIO.

OVERHEAD TRAVELING CRANE.

968,814.

Specification of Letters Patent.

Patented Aug. 30, 1910.

Application filed October 2, 1909. Serial No. 520,674.

To all whom it may concern:

Be it known that I, CLARENCE L. TAYLOR, of Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Overhead Traveling Cranes; and I do hereby 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.

My invention relates to improvements in overhead traveling cranes and more particularly to ladle cranes, the object being to provide means whereby the operator can have easy access to the trolley or bridge, irrespective of the position of the trolley on the bridge, and it consists in the parts and combination of parts as will be more fully explained and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in transverse section of the crane bridge, the trolley being in elevation. Fig. 2 is a view in plan of the foot walk on the trolley and Fig. 3 is an end view of same.

This improvement is designed particularly as an improvement on the crane shown in my pending application filed January 20th, 1909, Serial Number 473,343. In this pending application, I show two main girders carrying the two trolleys, and two side or auxiliary girders carried by compensating trucks to the outside of and parallel with the main girders. These auxiliary girders carry the centrally located bridge drive motors, shafts and gearing and also form foot walks throughout the length of the bridge.

My present invention consists in providing the main trolley with a foot walk at one side thereof, and steps carried by the foot walk and terminating within easy stepping distance of the side or auxiliary girders thereby enabling the operator to readily pass from either side or auxiliary girder to the other or from either side girder to the main trolley thereby enabling the several parts of the apparatus to be readily inspected and repaired without any dangerous climbing.

1 represents the main girders secured at their ends to the end carriages 2, (only one of which is shown), and carrying the rails 3 for the main trolley 4 and rails 5 for the auxiliary trolley 6.

The end carriages 2 are supported on trucks, which in the present instance are

shown as compensating trucks consisting of a compensating frame 7 to which an end carriage of the bridge is pivoted, and two wheel trucks 8 to which the ends of the compensating frame is pivoted. There is one carrying truck at each of the four corners of the bridge, and each wheel truck 8 is mounted on two flanged wheels 9. These trucks are journaled on the bearings carried by the compensating frames, and each is provided with a fixed or integral seat located over the pivoted bearings of the outer wheel trucks 8 at each corner of the bridge. The two seats 10 at opposite ends of the bridge, constitute supports for the side or auxiliary girder 11, which latter extends lengthwise the bridge parallel with the main girders thereof, and connects the compensating frames at the opposite ends of the bridge. These side or auxiliary girders, at each side of the bridge, are connected to and are supported by the trucks, and not by the end carriage, which as previously stated carry and support the trolley carrying or main girders. They are also separated from the main girders so as to permit the load carrying members to depend between the side or auxiliary girders and the main girders.

The auxiliary girders 11 form supports for the bridge drive shaft 12 and motors 13, the latter being located at or near the center of the girders 11, and as previously stated also form foot walks from one end carriage of the bridge to the other. Each shaft 12 carries a pinion 14 at each end, and each pinion 14 meshes with a larger toothed wheel 15 on shaft 16, which latter carries a pinion (not shown) which meshes with the gearing connected with the drive wheels of each bridge carrying truck. By this arrangement the trucks at the sides of the bridge are positively driven, and as the drive motors are mounted on girders carried by the trucks, and are concentric with the axis of the drive trucks, it follows that the trucks can follow any inequalities of the track, without binding or straining the motors or gearing and without any danger of disengagement of any of the wheels of the drive gearing.

Secured to the trolley at one end of the latter, is the foot walk 17, of any preferred construction extending approximately the width of the trolley. This foot walk is

fixed to the trolley and movable therewith, and is provided at its two ends with the steps 18 which latter terminate adjacent to the tops of the side or auxiliary girders 11 so that the operator can readily pass from either side girder (which as before explained constitute longitudinal foot walks) to the other, or from the trolley to either side girder. By this construction the operator can reach the trolley from either end of the bridge without any dangerous climbing, the foot walks and steps forming safe and convenient supports from which to inspect and repair the parts and oil the bearings. Again by making the main girders with wide top as shown they form foot walks which are readily accessible from the side girders and from which the auxiliary trolley can be inspected and gotten at for repairs. It is evident that many slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention hence I would have it understood that I do not wish to confine myself to the exact construction and arrangement of parts shown and described, but

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

1. In a traveling crane, the combination with a traveling bridge, and a side or auxiliary girder parallel with the bridge and forming a foot walk, of a trolley mounted

on the bridge and provided with a foot walk and steps leading from the latter to a point adjacent the auxiliary girder. 35

2. In a traveling crane, the combination with a traveling bridge and connected side or auxiliary girders parallel with the bridge and forming foot walks, of a trolley mounted to travel on the bridge and provided with a foot walk and steps leading from the ends of the latter to points adjacent the auxiliary girders. 40 45

3. In a traveling crane, the combination with a bridge mounted on trucks, and an auxiliary girder carried by the trucks parallel with the bridge, of a trolley mounted on the bridge and provided with a foot walk and steps leading from the latter to a point adjacent the top of the auxiliary girder. 50

4. In a traveling crane, the combination with a bridge mounted on trucks, an auxiliary girder carried by two of the bridge trucks independently of the bridge, and bridge travel motor and gearing carried by said auxiliary girder, of a trolley on the bridge, a foot walk fixed to the trolley, and steps leading from the foot walk to a point adjacent to the top of the auxiliary girder. 55 60

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

CLARENCE L. TAYLOR.

Witnesses:

N. C. FETTERS,
DELLA RELILLOT.