

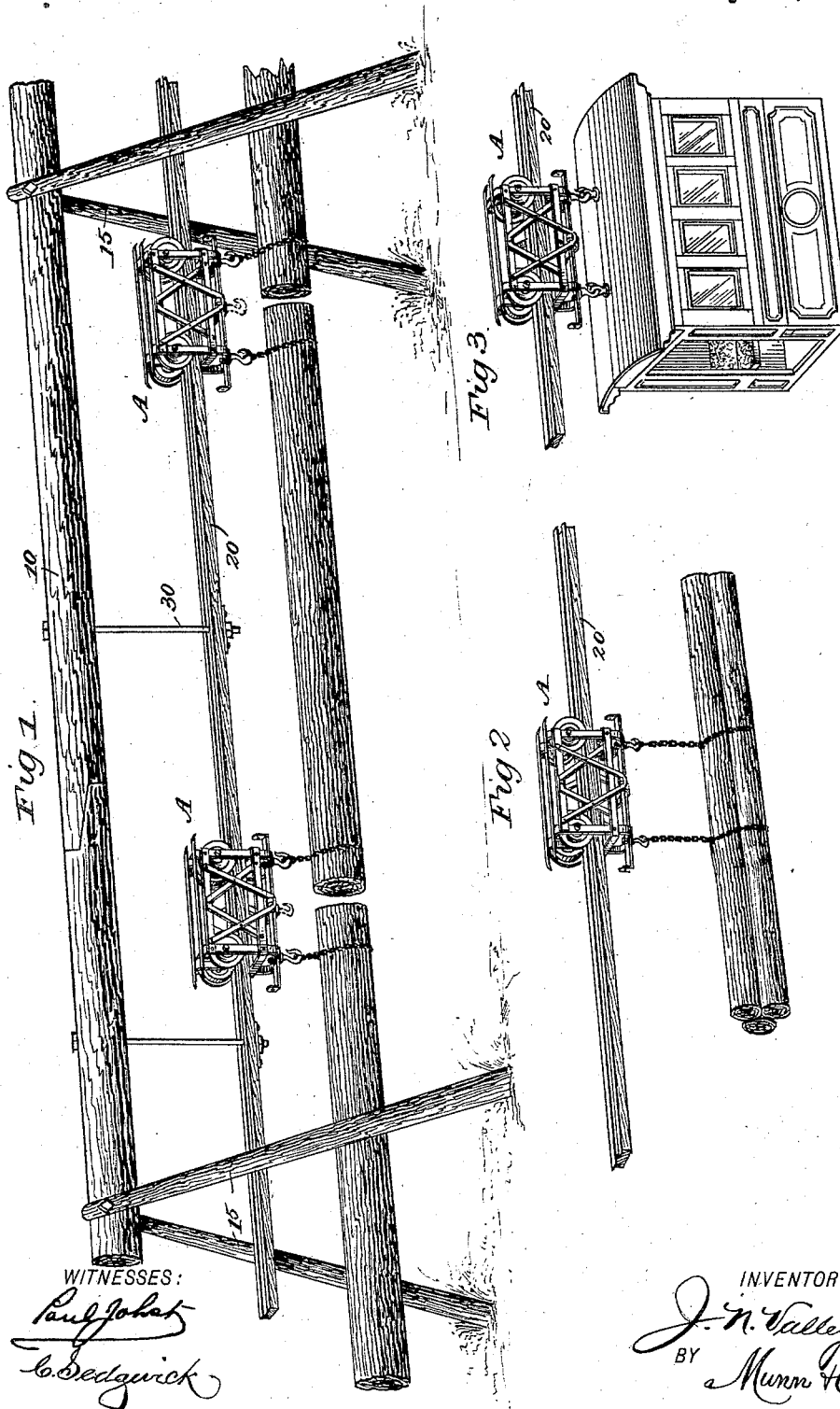
(No Model.)

2 Sheets—Sheet 1.

J. N. VALLEY.
ELEVATED RAILWAY CARRIAGE.

No. 456,867.

Patented July 28, 1891.



WITNESSES:

Paul J. Galt
C. Sedgwick

INVENTOR:

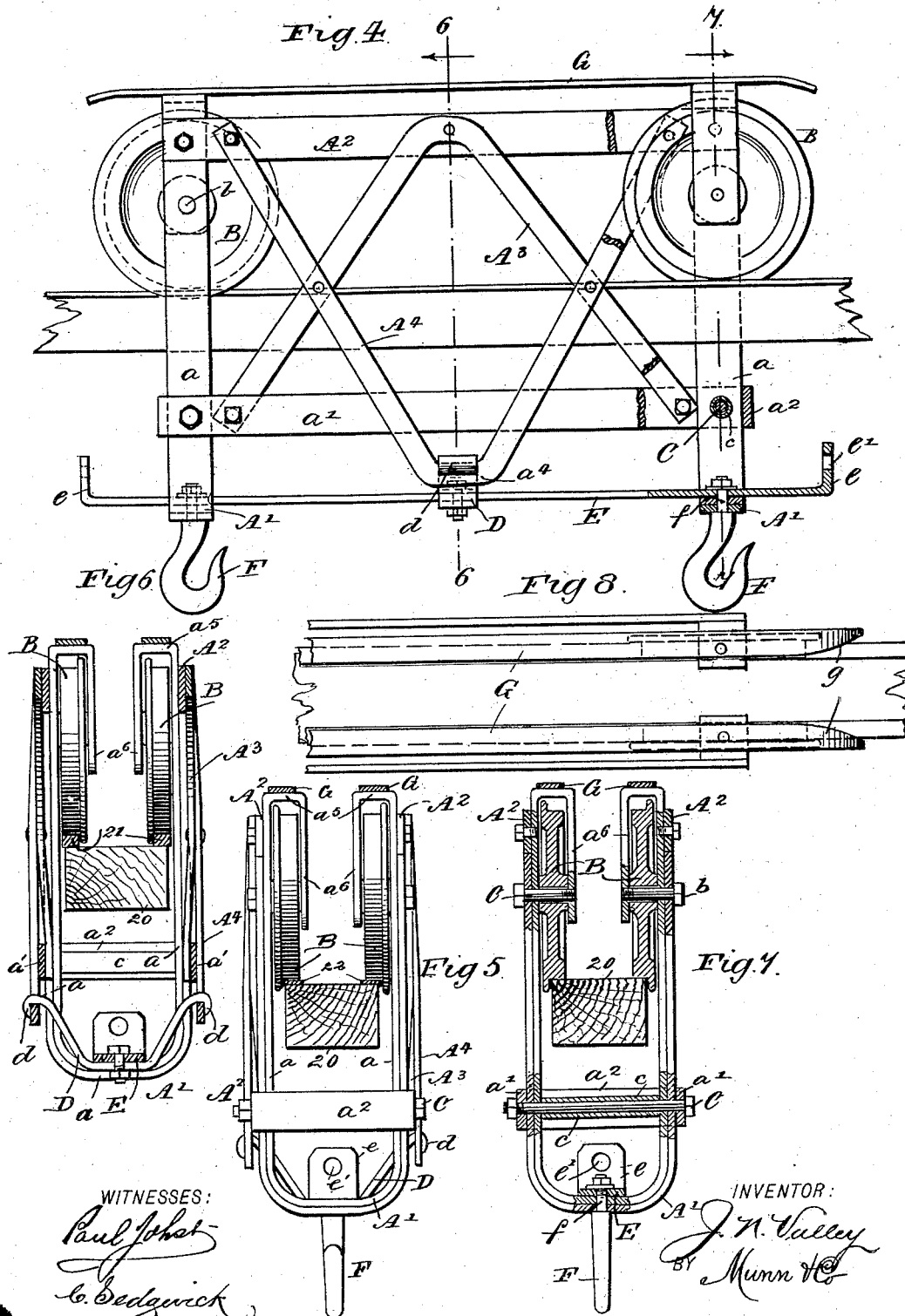
J. N. Valley
BY *Munn & Co.*

ATTORNEYS

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UNITED STATES PATENT OFFICE.

JOHN N. VALLEY, OF JERSEY CITY, NEW JERSEY.

ELEVATED-RAILWAY CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 456,867, dated July 28, 1891.

Application filed February 20, 1891. Serial No. 382,160. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. VALLEY, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Elevated-Railway Carriage, of which the following is a full, clear, and exact description.

The present invention, although capable of use for conveying passenger-cars and loads of various kinds, is especially adapted for logging in the lumber regions.

The object of the invention is to provide a carriage for elevated railways for operation on a suspended track and of simple and durable construction.

The invention comprises a U-shaped carriage having upwardly-extending spaced sides formed integrally or continued from side to side, reversible wheels supported at the upper end of the carriage, suspension-hooks for the logs or other articles to be conveyed, and various details, all as hereinafter particularly described, and defined in the claims.

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

Figure 1 is a perspective view of a section of an elevated railway having my improved carriages mounted thereon and showing one manner of suspending logs therefrom. Fig. 2 is a perspective view illustrating another manner of suspending the logs. Fig. 3 is a similar view illustrating how a passenger-car may be suspended from the carriage. Fig. 4 is an enlarged partly sectional side elevation of one of the carriages. Fig. 5 is an end view thereof. Fig. 6 is a cross-section on line 6 6 of Fig. 4. Fig. 7 is a section on line 7 7, Fig. 4; and Fig. 8 is a broken plan view to be further referred to.

The railway structure is preferably of the form shown, which, briefly, comprises a longitudinal stringer 10, supported by laterally-diverging posts 15, connected directly to said stringer, and a track 20, suspended from the stringer 10 by suspension-rods 30, which pass about centrally through said track. This structure does not, however, form part of the

present invention, which relates solely to the carriage.

The frame of the carriage A is of U shape in cross-section, its opposite upwardly-rang- ing sides or legs *a a* being continued from side to side—that is, formed integrally—and support at their upper ends the carriage-wheels B. In the form shown the frame comprises two yokes A' A', of U shape, braced and connected together. At or near the top the yokes are connected together by the side bars A², which are bolted or riveted to the legs *a*. Near the bottom the yokes are connected by a tie-band extending horizontally entirely around the carriage, said tie-band consisting of the side bars *a'* and end bars *a*². Bolts C pass through opposite sides or legs *a* and through opposite side bars *a'* of the tie-band, and on said bolts, between opposite sides *a*, tubes *c* are fitted, their ends bearing against the inner faces of said sides, the bolts serving to clamp the whole firmly together. At each side the yokes are further braced by two oppositely-disposed V-shaped braces A³ A⁴. Each of the braces A³ is secured at its bend or the point of divergence of its arms to the brace-bars A², and the ends of its downwardly-diverging arms are secured to the side bars *a'* of the tie-band. Each of the braces A⁴ is secured at the ends of its upwardly-diverging arms to the side brace-bars A², and its bend or the point of divergence of its arms, as *a*⁴, is engaged by the hooked ends of the cross-brace D. The cross-brace D extends downwardly and inwardly from its hooked outer ends *d* toward the center and is formed with a horizontal central part *d'*, on which is seated and securely bolted the longitudinal draw-bar E. The said draw-bar is bolted to the yokes A' and extends beyond the ends of the carriage, and its extreme ends are upturned, as at *e*, and apertured, as indicated by the letter *e'*. The upturned ends act as buffers in the event of two carriages colliding, and the eyes *e'* enable coupling-bolts to be passed therethrough for connecting several cars together—as, for instance, in returning the cars for a new load.

To the bottom of the carriage one, two, or more depending hooks F, or equivalent suspension devices, are secured for suspending

the load from the carriage. These hooks are formed with reduced threaded upper ends *f* for receiving nuts that secure them in place. The hooks may be secured one at each end of the carriage for supporting each one end of a large log, as in Fig. 1, or to jointly support a passenger-car, logs, or other load, as in Figs. 2 and 3, or a single hook may be secured at the center to the draw-bar *E* and cross-brace *D* for suspending one end of a log, two carriages being then employed on a single log. Thus by making provision for changing the hooks the carriage is made more efficient in meeting the various contingencies incident to logging.

At the top of the carriage two longitudinally-ranging spaced bars *G* are secured, the projecting ends of which are curved outwardly at the inner edges, as at *g*, Fig. 8, and also preferably curved downwardly. When thus formed, should the carriage tend to become displaced laterally the curved ends *g* will strike the suspension-rods 30 of the track and be moved laterally, righting the carriage. The upper ends of the legs or sides *a* of the U-shaped carriage are bent horizontally, as at *a*⁵, and downwardly, as at *a*⁶, whereby they form bearings for the axles or bolts *b* of the wheels *B*, and as the legs at both sides are integral a cheap and simple construction and increased strength are obtained. The axles *b* of the wheels are in the form of bolts in order to be readily removable for reversing the wheels.

In practice, in logging, only the main line will be provided with rails 21 on the track 20, the temporary branch lines being quickly thrown up and provided only with the timber-track 20 for the wheels or a cheap rail 22 of band-iron. On the main line the wheels travel with the flanges *b'* on the inside of the rails 21, as in Fig. 6; but when traveling on a branch track the wheels are reversed, so that their flanges bear against the outside of the track-timbers 20. When the cars are to be transferred from the main line to a branch, or vice versa, the wheels are reversed accordingly, and the mounting of the wheels, as above described, is specially designed to facilitate such reversal.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. A wheeled carriage for railways of the character described, having upwardly-extending spaced sides or legs adapted to embrace a suspended track and formed integrally or continued from side to side and forming bearings for the wheels at the upper end, substantially as described.

2. The combination, in a carriage of the character described, of a body having upwardly-extending spaced sides adapted to embrace a suspended track and formed integrally, and reversible flanged wheels removably supported at the upper ends thereof, substantially as described.

3. The combination, in a carriage of the character described, of a body having upwardly-extending spaced sides, reversible flanged wheels removably held thereto at the top, and suspension-hooks removably held thereto at the bottom, substantially as described.

4. The combination, in a carriage of the character described, of a body having upwardly-extending spaced sides adapted to embrace a suspended track, wheels carried thereby, and a buffer-bar projecting beyond the carriage and having bent ends, substantially as described.

5. The combination, in a carriage of the character described, with a body having upwardly-ranging spaced sides or legs adapted to embrace a suspended track, of wheels carried thereby and bars projecting therefrom and having curved ends adapted to contact with the suspension-rods of the track should the carriage tend to lateral displacement, substantially as described.

6. The combination, in a carriage of the character described, of U-shaped yokes carrying wheels at their upper ends, longitudinal and transverse braces secured thereto, oppositely-disposed V-shaped braces, and suspension devices for suspending a load, substantially as described.

JOHN N. VALLEY.

Witnesses:

EDWARD M. CLARK,
C. SEDGWICK.