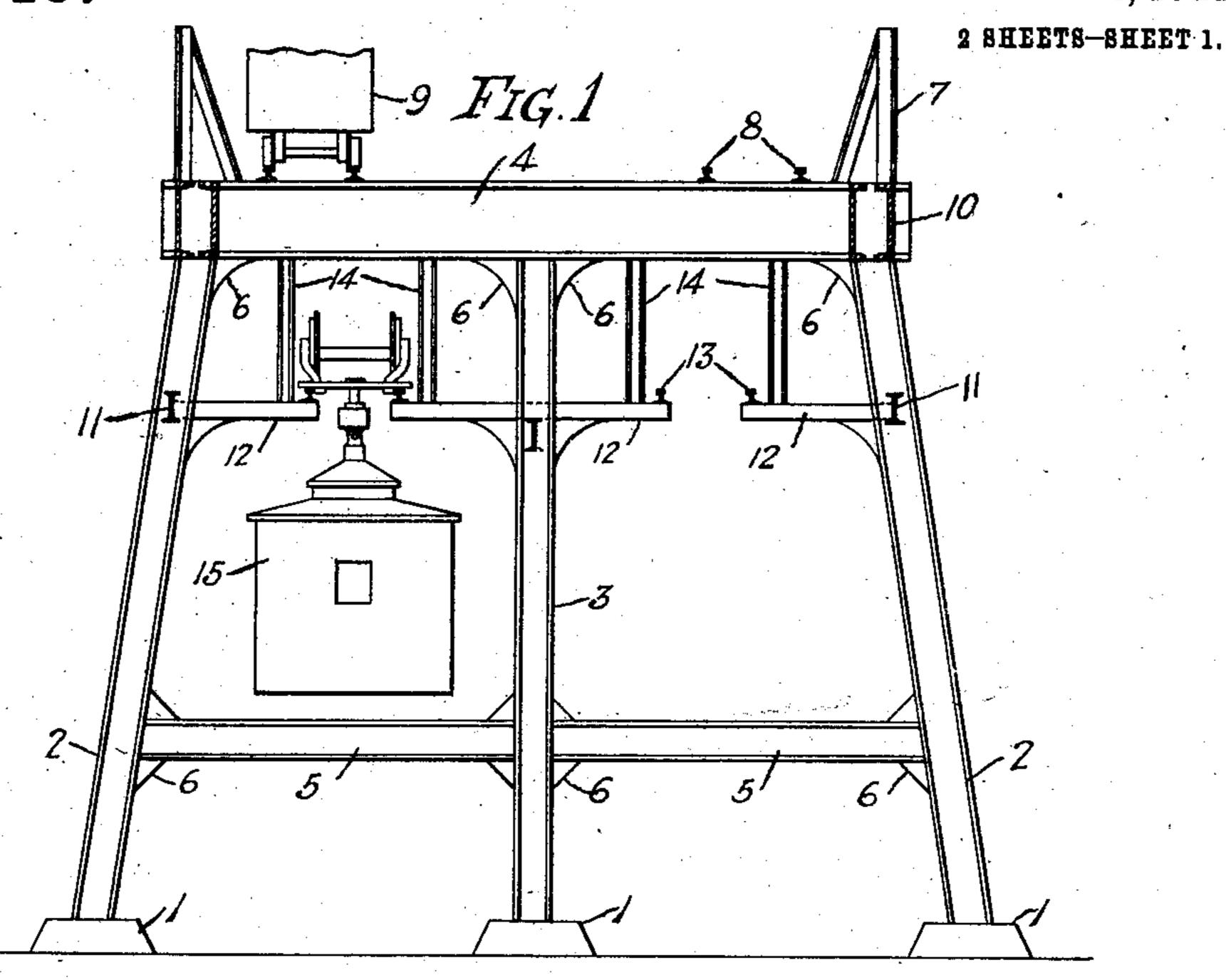
J. IFFT.

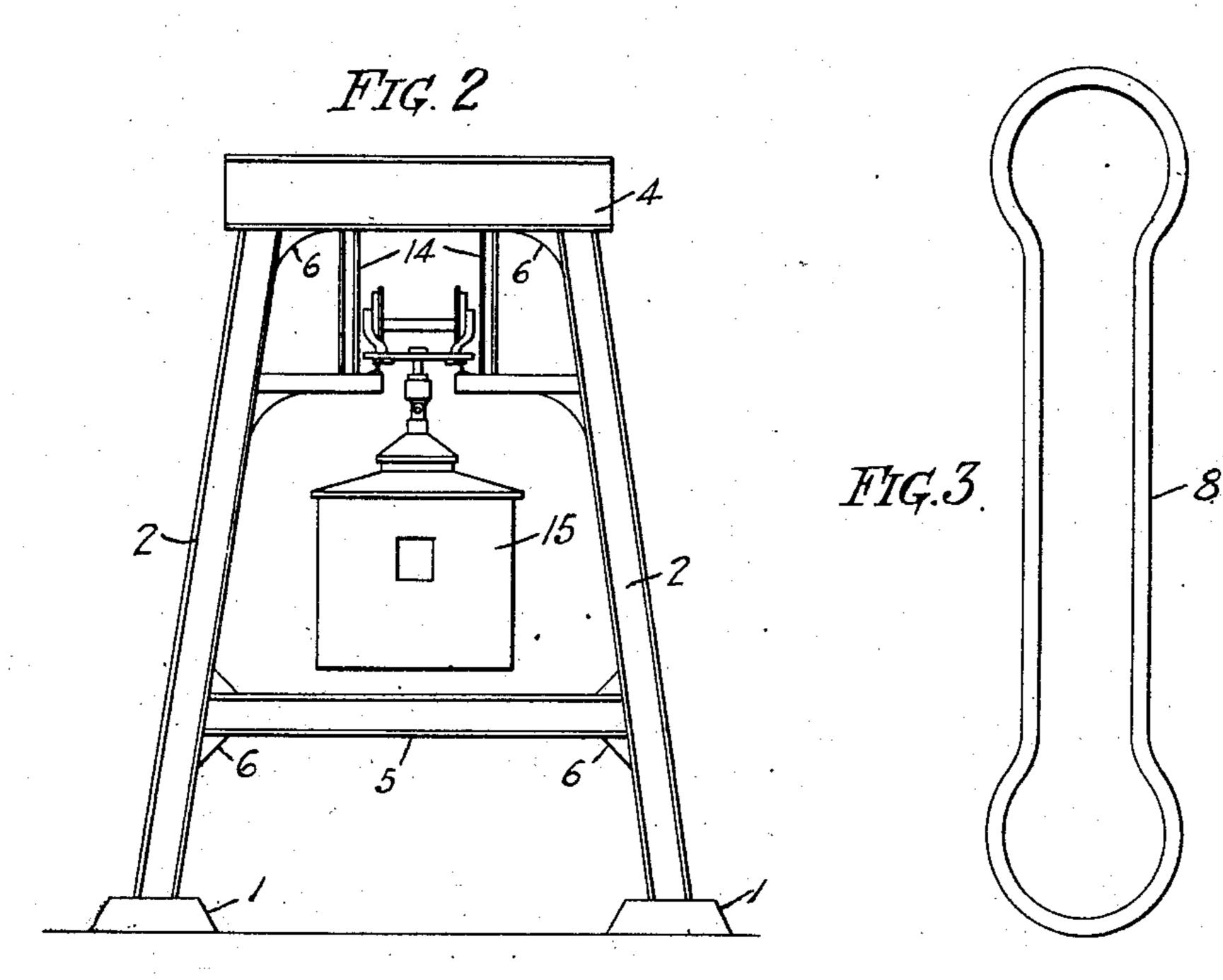
OVERHEAD BAILWAY.

APPLICATION FILED MAR. 3, 1911.

994,519.

Patented June 6, 1911.





WITNESSES

J.R.Mahaney

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INVENTOR

JOHN IFFT.

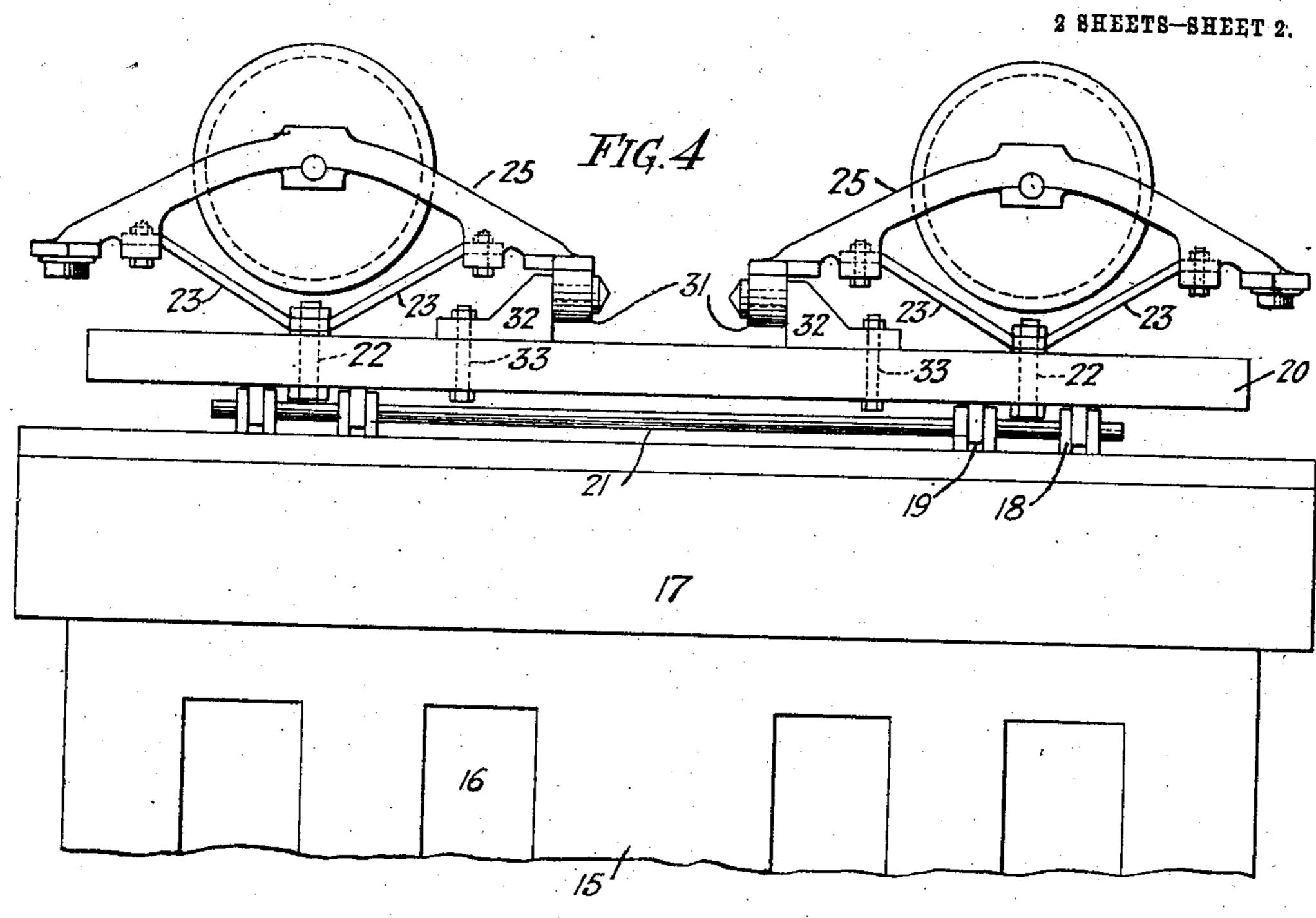
By M. Covert Co.

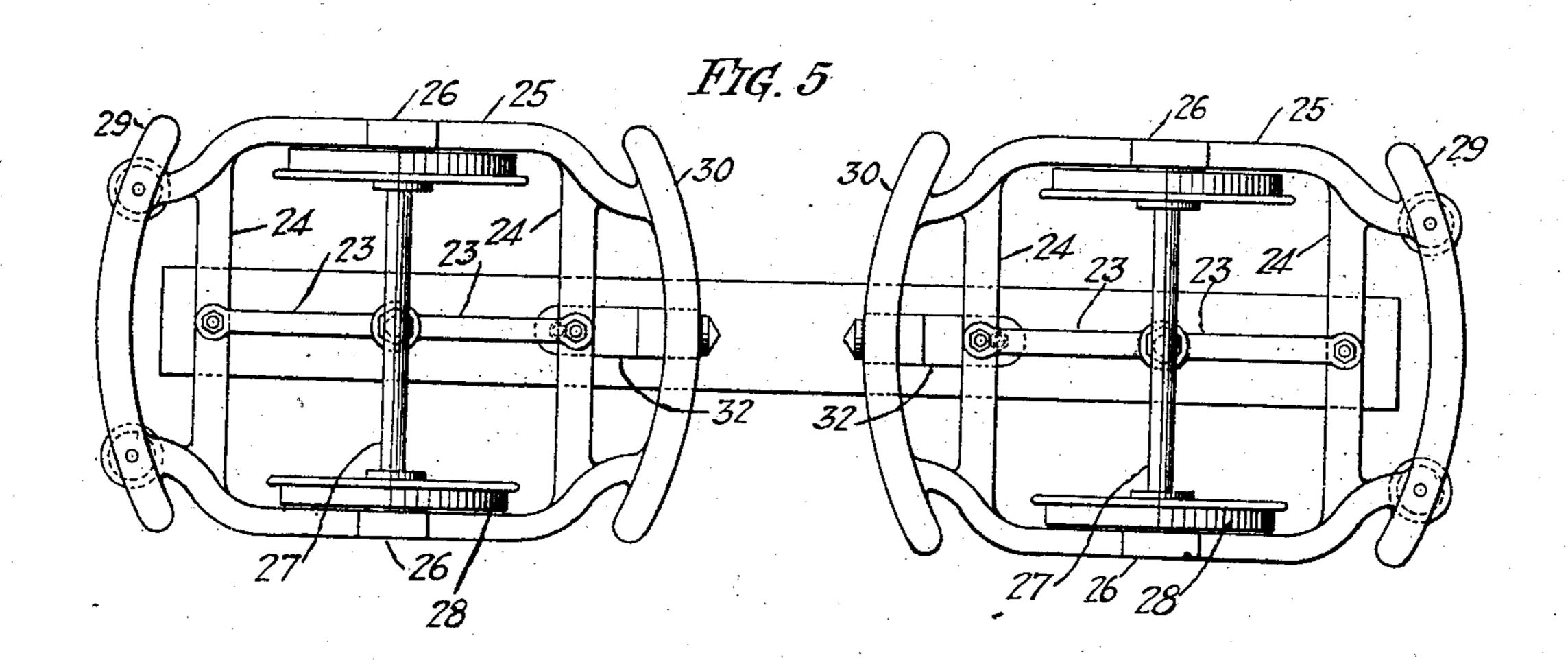
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## J. IFFT. OVERHEAD RAILWAY. APPLICATION FILED MAR. 3, 1911.

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## Patented June 6, 1911.





WITNESSES

INVENTOR JOHN IFFT

## UNITED STATES PATENT OFFICE.

JOHN IFFT, OF ZELIENOPLE, PENNSYLVANIA.

## OVERHEAD RAILWAY.

994,519.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed March 3, 1911. Serial No. 611,970.

To all whom it may concern:

Be it known that I, John Ifft, a citizen of the United States of America, residing at Zelienople, in the county of Butler and 5 State of Pennsylvania, have invented certain new and useful Improvements in Overhead Railways, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an overhead railway, and the objects of my invention are to provide an overhead structure for a plurality of railway systems, and to provide a structure that can be advantageously used in the congested districts of large cities whereby the street traffic will not be interfered with.

Further objects of this invention are to provide an elevated railway structure that is durable, safe and of a simple construction, and to provide a structure that can be built over canals and waterways to utilize the space above the canals and waterways without interfering with the traffic upon the water or without occupying valuable space upon the shores.

With the above and other objects in view, the invention resides in the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawings, wherein like numerals of reference designate corresponding parts throughout the several views, in which:—

Figure 1 is an end view of a railway in accordance with this invention, showing a double system, Fig. 2 is a similar view showing a single system, Fig. 3 is a diagrammatic plan of a loop system, Fig. 4 is an enlarged side elevation of a portion of a car and the trucks thereof, and Fig. 5 is a plan of the trucks.

The reference numerals 1 denote suitable foundations or piers, preferably made of stone or concrete, and erected upon these foundations are inclined side frames 2 and intermediate vertical frames 3, said frames

having the upper ends thereof connected by transverse beams 4 and the lower ends thereof by beams 5, the beams 4 and 5 being suit- 50 ably braced by brackets 6. Arranged upon the beams 4 are side rails 7 and tracks 8. Upon these tracks are adapted to travel ordinary elevated cars 9. The beams 4 are connected by longitudinal girders 10, the 55 frames 2 and 3 by longitudinal girders 11 and these girders are provided with confronting supports 12 adapted to support tracks 13. The confronting ends of the supports 12 are suspended from the beams 60 4 by hangers or cantalivers 14.

The reference numeral 15 denotes a car body having side entrances 16. The roof 17 of the car body is provided with longitudinally alining sets of apertured lugs 18 and 65 pivotally retained between the lugs of each set is a depending lug 19, carried by a longitudinal beam 20. The lugs are pivotally held by a longitudinal rod 21 extending through the lugs 18.

Pivotally connected to the beam 20, at each end thereof, by a king bolt 22 is a strap 23 having the ends thereof connected to the transverse braces 24 of a truck, said truck having arch-shaped side frames 25 75 provided with bearings 26 for the spindles of an axle 27. Mounted upon the axle 27, adjacent to the frames 25 are flanged wheels 28 adapted to travel upon the tracks 13. The ends of the frames 25 are connected by 80 curved shoes 29 and 30, and the shoes 30 are adapted to ride upon antifriction rollers 31 revolubly supported by bearings 32 bolted or otherwise connected, as at 33 to the beam 20. The pivoted trucks safely support the 85 car 15 from the tracks 13 and these trucks will easily take a curve without subjecting the car 15 to any stresses or strains, particularly when the car body is pivotally supported relatively to the beam 20. 90

The invention is not limited to any particular type of car, and while in the drawings there are illustrated the preferred embodiments of the invention, it is to be un-

derstood that the structural elements thereof can be varied or changed without departing from the scope of the appended claim.

What I claim is:—

In an overhead railway, an elevated track, a car, a longitudinal beam pivotally connected to the roof of said car, trucks pivotally connected to ends of said beam, axles supported by said trucks, wheels mounted upon said axles and adapted to travel upon

said track, shoes carried by the ends of said trucks, and anti-friction rollers carried by said beam and adapted to engage said shoes, substantially as described.

In testimony whereof I affix my signature 15 in the presence of two witnesses.

JOHN IFFT.

Witnesses:

FRED ZEHNER, JOHN MIDWYN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."