June 19, 1923. 1,459,386

T. H. WRIGHT

MONORAIL CAR

Filed Feb. 15, 1923

Fig. 1.

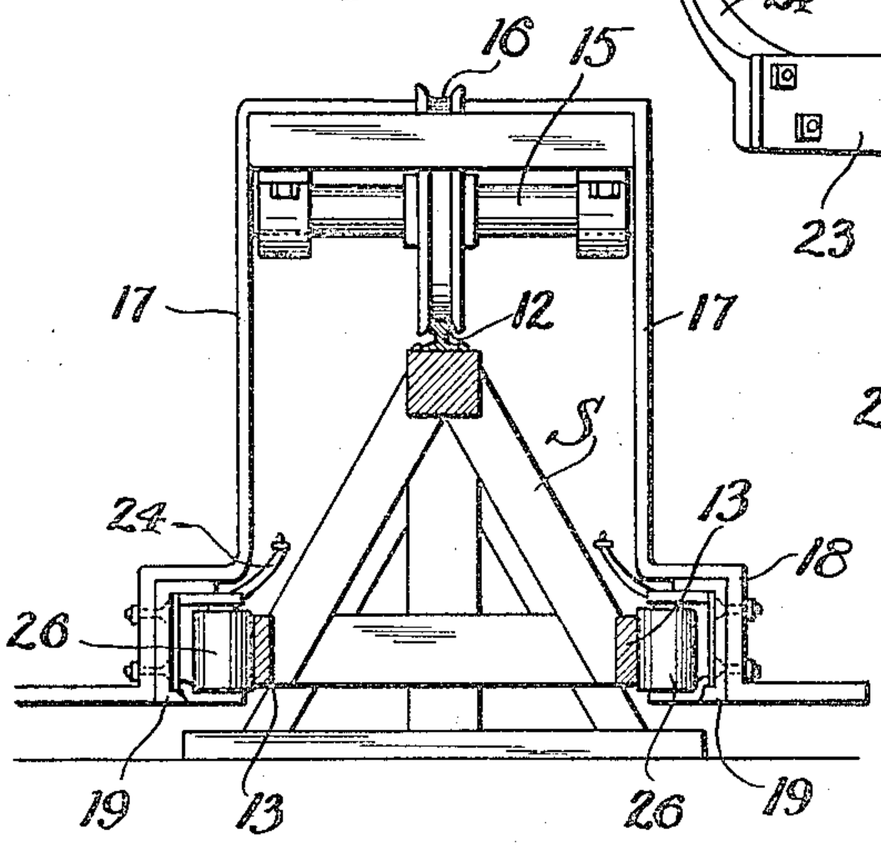



Fig. 4.

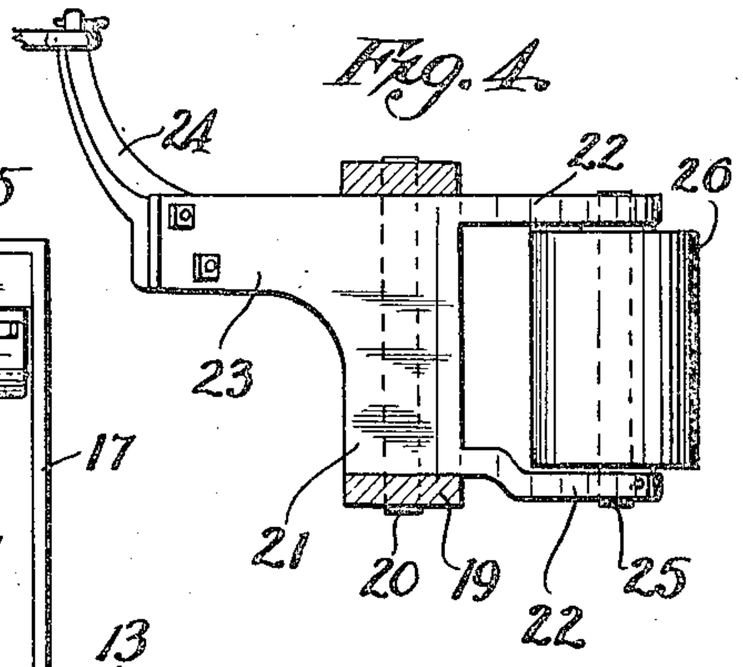



Fig. 2.

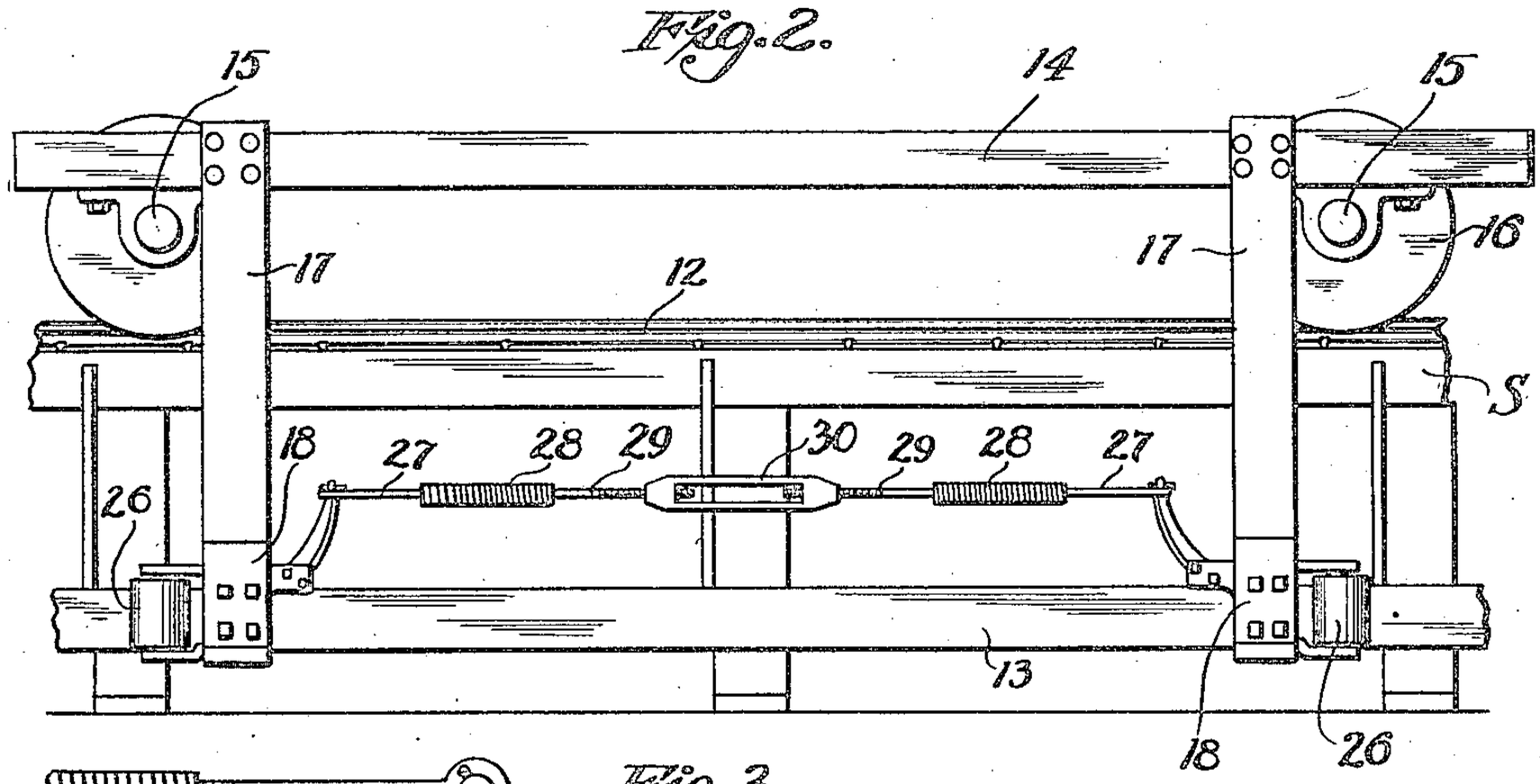
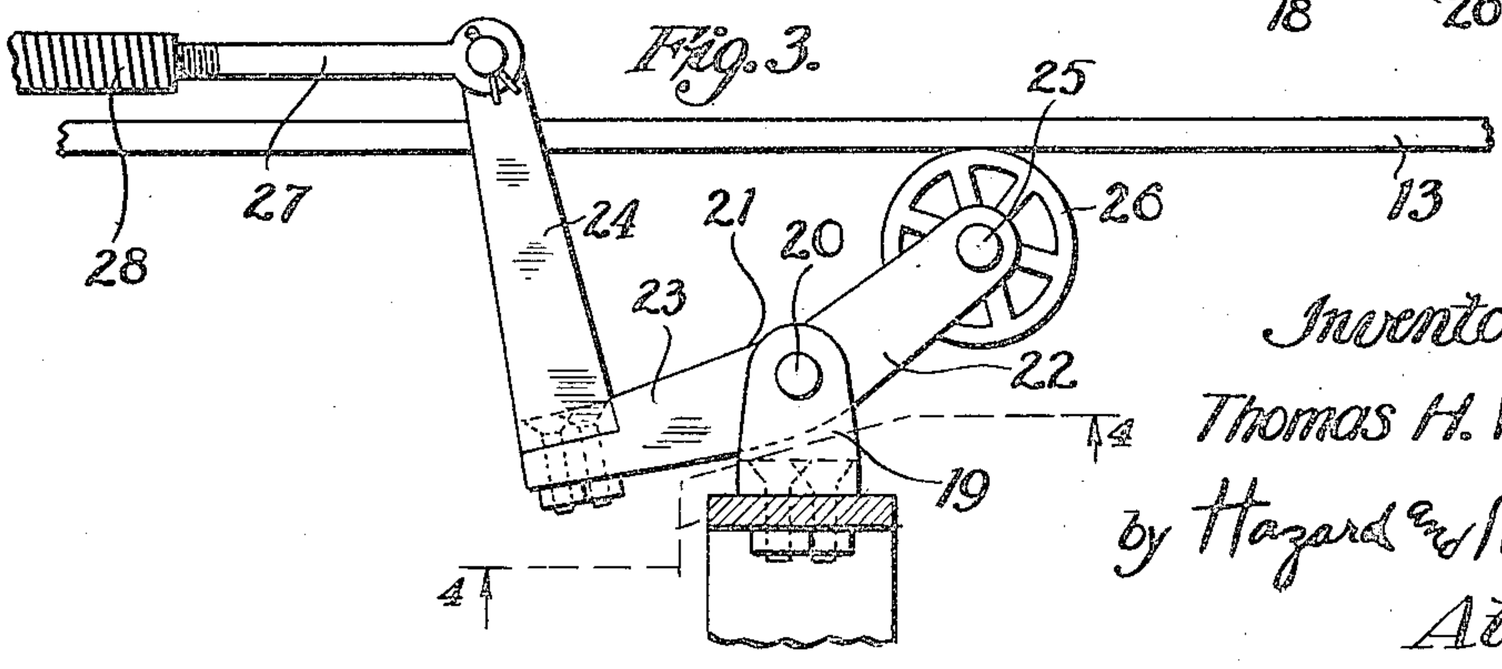



Fig. 3.

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# UNITED STATES PATENT OFFICE.

THOMAS H. WRIGHT, OF LOS ANGELES, CALIFORNIA.

## MONORAIL CAR.

Application filed February 15, 1923. Serial No. 619,114.

*To all whom it may concern:*

Be it known that I, THOMAS H. WRIGHT, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Monorail Cars, of which the following is a specification.

My invention relates to monorail cars of the character embodied in my co-pending application Serial No. 588,430, filed September 15, 1922.

The purpose of my present invention is the provision of a monorail car having means for effectively bracing the car against lateral movement and without subjecting the car and track structure to excessive friction and strains.

Although I have herein shown and described only one form of monorail structure embodying my invention, it is to be understood that various changes and modifications may be made herein without departing from the spirit of the invention and the spirit and scope of the appended claims.

In the accompanying drawings,

Figure 1 is a view showing in vertical sections a monorail track structure having applied thereto one form of monorail car embodying my invention.

Fig. 2 is a view showing the track structure and car in side elevation.

Fig. 3 is an enlarged detailed view of one of the guide rollers and its mounting embodied in the car as shown in the preceding views.

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 3.

Referring specifically to the drawings in which similar reference characters refer to similar parts, my invention in its present embodiment is shown as adapted for use in conjunction with a monorail structure designated generally at S and supporting a main rail 12 and guide rails 13, the latter being disposed in a plane below the main rail 12 and at opposite sides of the latter as clearly shown in Fig. 1.

The monorail car forming the subject matter of my present invention includes a chassis 14 carrying shafts 15 upon which are fixed flange wheels 16 for movement over the rail 12. The chassis 14 includes vertical hangers 17 having inverted L-shaped portions 18 to which are bolted or otherwise secured U-shaped frames 19 on the parallel portions of which are mounted stub axles 20. Yokes are pivotally mounted upon the stub axles, and each yoke includes a hub portion 21, spaced ears 22, and an offset extension 23, the latter having a curved arm 24, secured thereto and disposed substantially at right angles to the extension. The ears 22 receive a stub axle 25 upon which is journaled a guide roller or wheel 26 arranged to have contact with one of the guide rails 13.

As clearly shown in Fig. 2, the L-shaped portions 17 of the chassis 14 are disposed adjacent opposite ends of the monorail car and at opposite sides of the latter, there being four rollers 26 mounted upon the chassis and arranged for engagement with the guide rails 13. The mountings for the rollers at each side of the car are operatively connected to each other by means of rods 27 and pivotally connected at their outer ends to the free ends of the arms 24, the inner ends threadedly engaging coiled contractile springs 28. The confronting ends of the springs are connected to the rods 29 in a similar manner, and these rods are connected by a turnbuckle 30, the latter providing a longitudinal adjustment of the rods 29 which in turn permits of an adjustment of the roller supporting yokes so that the rollers will occupy predetermined positions with respect to the rail 13.

From the foregoing arrangement, it will be clear that the roller supporting yokes can be adjusted so that the rollers normally engage the guide rails 13, the springs 28 serving to yieldably retain the rollers in any set position. Lateral movement of the monorail car is resisted by the yieldably mounted rollers so that the car as well as the track structure is relieved of any undue strains or stresses.

What I claim is:

1. A monorail car comprising a chassis, yokes mounted for rocking movement on and at opposite sides of the chassis, wheels carried by the yokes, and means for urging the yokes so that the wheels are pressed inwardly, the means at either side of the chassis being common to all of the yokes at the respective side of the chassis.

2. A monorail car comprising a chassis, yokes mounted for rocking movement on and at opposite sides of the chassis, wheels carried by the yokes and adjustable and yieldable means for urging the yokes so that the wheels are pressed inwardly, the

means at either side of the chassis being common to all of the yokes at the respective side of the chassis.

3. A monorail car comprising a chassis, yokes mounted for rocking movement on the chassis, wheels on the yokes, resilient members connected to the yokes, and an extensible connection between the resilient members for placing the latter under tension so as to yieldingly urge the yokes and consequently the wheels to definite positions.

4. A monorail car comprising a chassis, yokes mounted for rocking movement on the chassis, wheels journaled on the yokes, contractile springs connected to the yokes, and a turnbuckle between the springs for the purpose described.

5. A monorail car having yokes mounted for rocking movement thereon and arranged in pairs at opposite sides of the car, wheels journaled on the yokes, springs connected to the yokes, and turnbuckles connecting the springs for each pair of yokes for the purpose described.

6. A monorail car including hangers disposed at opposite sides of the car, frames secured to the hangers, yokes pivoted on the frames, rollers journaled in the yokes, arms fixed to the yokes, springs connected to the arms, and turnbuckles connecting the springs for the yokes at the respective sides of the car for the purpose described.

In testimony whereof I have signed my name to this specification.

THOMAS H. WRIGHT.