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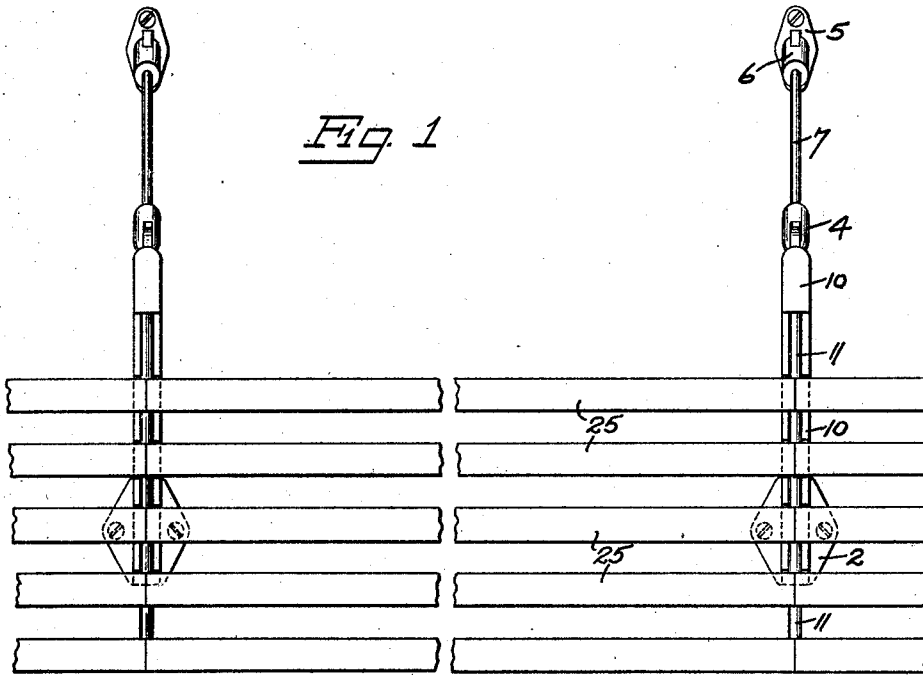
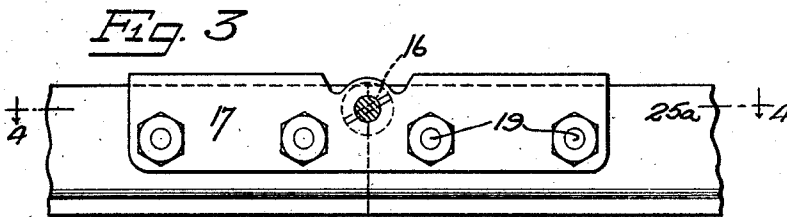
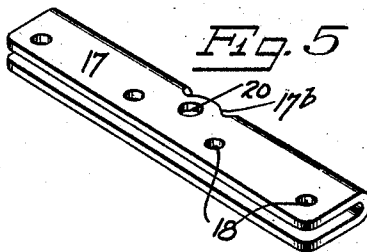
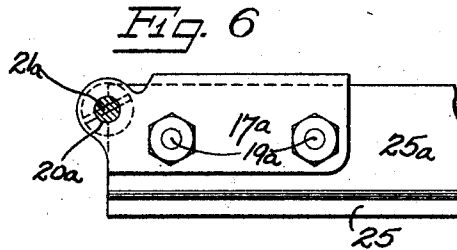
P. J. KOSTER ET AL

1,768,911

MONORAIL SUPPORTING SYSTEM

Filed Feb. 23, 1929

2 Sheets-Sheet 1



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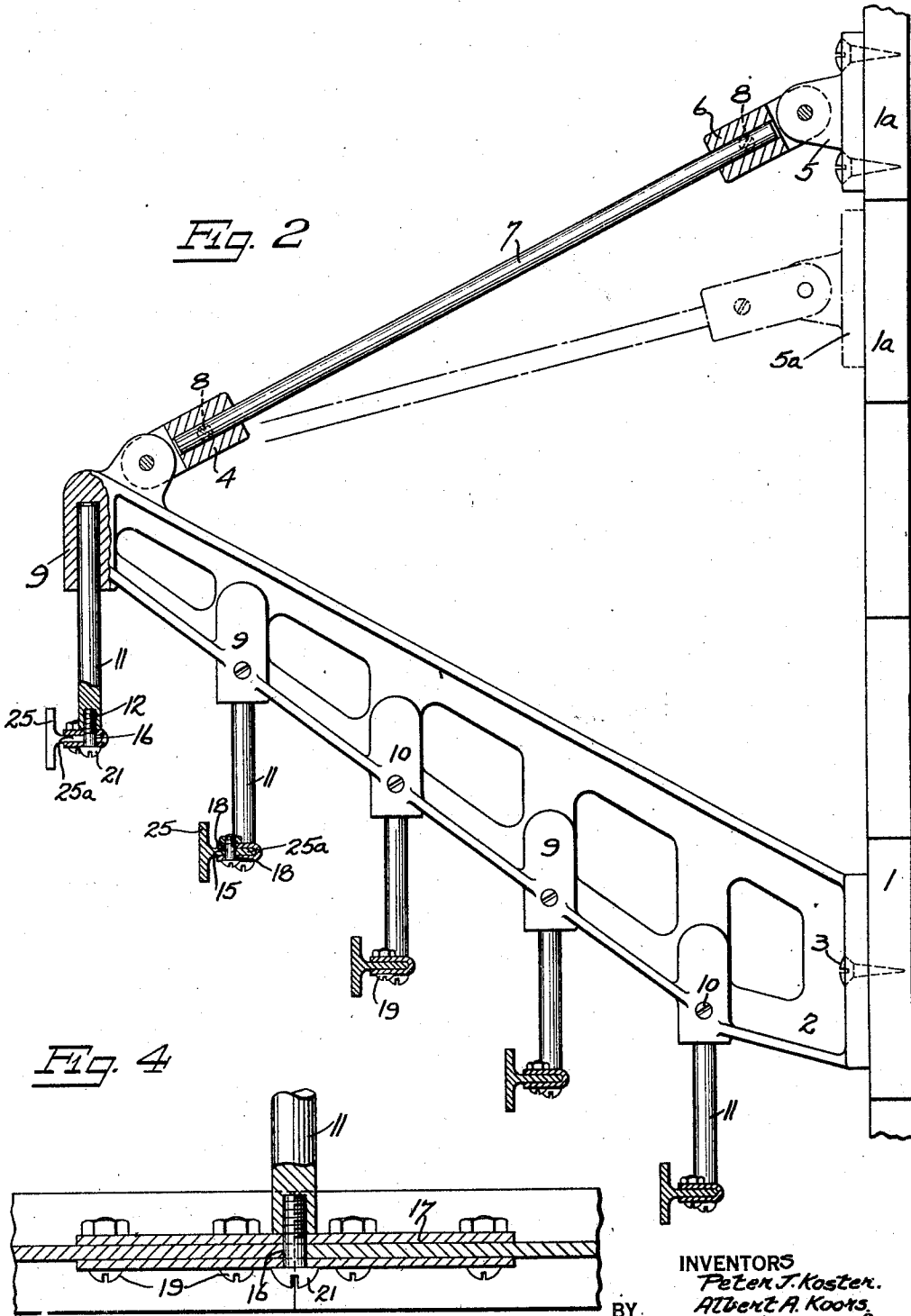
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MONORAIL SUPPORTING SYSTEM

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2 Sheets-Sheet 2



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MONORAIL-SUPPORTING SYSTEM

Application filed February 23, 1929. Serial No. 342,162.

This invention relates to improvements in monorail supporting arrangements, and aims to provide a simple means for supporting a plurality of monorails usually arranged diagonally one above the other.

Some of the objects of the invention are to provide a monorail supporting arrangement: wherein a plurality of monorails are carried by one bracket in which provision is made for varying the relative heights of the diagonally spaced rails with regard to one another; wherein the bracket is reinforced by a pivotally arranged brace rod so that the inclination of the brace may be varied relative to the bracket; wherein a plurality of supports depend from the bracket each of which is adapted to receive a fastening means which also passes through a rail coupling so that two adjacent ends of lengths of monorail may also be held in alignment with each other by each support.

With these and other objects and advantages in view, which will become apparent as the specification proceeds, the invention is hereinafter more fully described with the aid of the accompanying drawings, in which:

Figure 1 illustrates a plurality of monorails supported in diagonal relation to one another by the brackets.

Figure 2 is an enlarged side view of a bracket showing the rails in section.

Figure 3 is an enlarged inverted plan showing the ends of two sections of rail, the coupling member, and the supporting bolt in section.

Figure 4 is a section on the line 4—4 of Figure 3.

Figure 5 is an enlarged perspective view of a coupling, and

Figure 6 shows a split coupling employed at the end of a monorail where no rail joint is to be made.

The primary purpose of this monorail supporting system is to provide an arrangement suitable for use in front of telephone switchboards, which are usually built up of a series of vertical panels 1 and 1^a, where it is sometimes found necessary to utilize additional panel space for the insertion of additional plug connections. The bracket 2, which is

generally upwardly and outwardly inclined, is fastened to one panel 1 as by screws 3 and has a pivotal socket 4 at its outer end. A mounting 5 is attached to the face of another panel 1^a and carries a pivotal socket 6. A brace rod 7 extends between the sockets 4 and 6 and is held at its extremities in the sockets as by set screws 8. The distance between the panels 1 and 1^a, to which the bracket 2 and mounting 5 are secured, may then be varied by merely removing the rod 7 and substituting another of a different length. Provision is thus made for altering the heights of either or both of the parts 2 and 5 by removing the panels 1 and 1^a to which they are attached and replacing them at different elevations, or different relative elevations. The latter being indicated in Figure 2 where the mounting 5^a is shown also in a lower position.

On the underside of each bracket 2 a plurality of pockets 9 occur which open downwards. Held in each pocket 9, as by a set screw 10 so as to be permitted vertical adjustment, and depending therefrom is a support 11 which has a tapped hole 12 in its underside. Towards the extremities of the monorail lengths 25, which are generally made of T-section, and through the lateral web 25^a of the latter, holes 15 are provided; and in the ends of the lateral webs semi-circular openings 16 are formed. The coupling members 17, which are U-shaped, have apertures 18 therethrough which register with the rail holes 15; and 19 denotes bolts which extend through the holes 15 and apertures 18 and hold the rail ends together.

Substantially centrally of the length of the coupling members 17 other apertures 20 are formed therethrough opposite which the flexed portions of the members are cut away as indicated at 17^b, so that the sides of the said couplings surrounding the apertures may be more easily left flat to afford bearing surfaces for parts which rest against them. Screws 21 pass through the apertures 20 and through the two semi-circular openings 16 in the adjacent ends of the lateral rail web 25^a and are in threaded engagement with the holes 12 in the lower ends of the supports 11.

In this way the adjacent ends of the rail lengths are so supported that the coupling members are reinforced, and again less space along the lateral webs 25^a is occupied than would be utilized if separately spaced supports and coupling were employed, so that a greater amount of space along the lateral webs may be devoted to other purposes.

The modified construction of the coupling member 17^a, shown in Figure 6, is employed at the ends of monorails. In that case the bolts 19^a merely hold the short form of coupling to the end of a web 25^a so that the rail end may be supported through the coupling, and the screw 21^a which passes through the apertures 20^a in the member 17^a and also through the semi-circular opening 16 in the end of the rail web extends into one of the tapped holes 12 in the manner already described.

While in the foregoing the preferred embodiment of the invention has been described and shown it is understood that the construction is susceptible to such modifications as fall within the scope of the claims.

What we claim and desire to secure by Letters Patent is:

1. A monorail supporting system comprising a bracket, supports held by said brackets, a plurality of monorails each held by one of said supports, and means for varying the relative heights of said monorails.

2. A monorail supporting system comprising a bracket, a plurality of pockets in said bracket, a support held by each pocket so that the amount each support projects from its pocket may be varied, and a monorail supported at the extremity of each support.

3. A monorail supporting system comprising a bracket adapted to be mounted on a wall, a plurality of pockets opening downwardly on said bracket, each pocket being located at a different height, supports dependently mounted in said pockets, each pocket having a tapped hole through its side, a set screw extending into each tapped hole which grips the side of the support in the pocket, and a monorail held by each support.

4. A monorail supporting system comprising a bracket one end of which is adapted to be secured to a wall, a pivotal socket at the outer end of said bracket, a mounting adapted to be secured to said wall, a pivotal socket on said mounting, a brace rod having its extremities supported in said sockets, and a plurality of monorails supported by said bracket.

5. A monorail supporting system comprising a bracket, supports held by said bracket, a coupling member held by each support, and monorails the adjacent ends of two lengths of which are held in relation to one another by each coupling.

6. A monorail supporting system comprising a bracket, supports held by said bracket having tapped holes in their extremities, cou-

pling members having openings therethrough a screw extending through each coupling member and extending into one of said tapped holes, and monorails, the adjacent ends of two lengths of which are held in correct relation to one another by each of said couplings.

7. A monorail supporting system comprising a bracket, supports, held by said bracket having tapped holes in their extremities, U-shaped coupling members each having openings therethrough towards their ends and a central hole therethrough, T-shaped monorails the adjacent ends of lengths of which butt against one another, said rail lengths, having apertures through their lateral webs towards their ends, each coupling being placed around the ends of two adjacent lengths of the lateral web of said monorail so that their openings register with the web apertures, said lateral web extremities each having a substantially semi-circular opening therethrough, each two adjacent semi-circular openings registering with the central hole through one of said couplings, and a screw in threaded engagement with the tapped hole in the extremity of each support which passes through the central hole in one of the coupling members and through the two semi-circular web openings which registers with it, and other fastening means extending through the coupling openings and the web apertures.

8. A monorail supporting system comprising a bracket adapted to be secured to a wall, said bracket being upwardly and outwardly inclined, a pivotal socket at the outer end of said bracket, a mounting adapted to be secured to said wall, a pivotal socket on said mounting, a brace rod having its extremities supported by said sockets, a plurality of pockets on said bracket, each pocket being a different distance from and at a different relative height to the inner end of said bracket, supports mounted in said pockets and projecting therefrom, means for varying the distance each support projects from its pocket, and monorails carried by said supports.

9. A monorail supporting system comprising a supporting member, a plurality of monorails, and means supporting said monorails below said supporting member in a relatively stepped relationship.

10. A monorail supporting system comprising a supporting member, a plurality of monorails, and means supporting said monorails below said supporting member in a relatively stepped relationship, said monorails being separately vertically adjustable with respect to the supporting member.

11. A monorail supporting system comprising a bracket, a plurality of monorails, coupling members each of which joins to adjacent lengths of monorail, and means supporting said coupling members below said bracket in a relatively stepped relationship.

12. A monorail supporting system comprising a bracket, a plurality of monorails, coupling members each of which joins to adjacent lengths of monorail, and means supporting
5 said coupling members below said bracket in a relatively stepped relationship, said coupling members being separately vertically adjustable relative to said bracket.

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