Aug. 11, 1925.

1,549,625

H. H. SWIFT

OVERHEAD RAILWAY

Filed Aug. 21, 1924

3 Sheets-Sheet 1

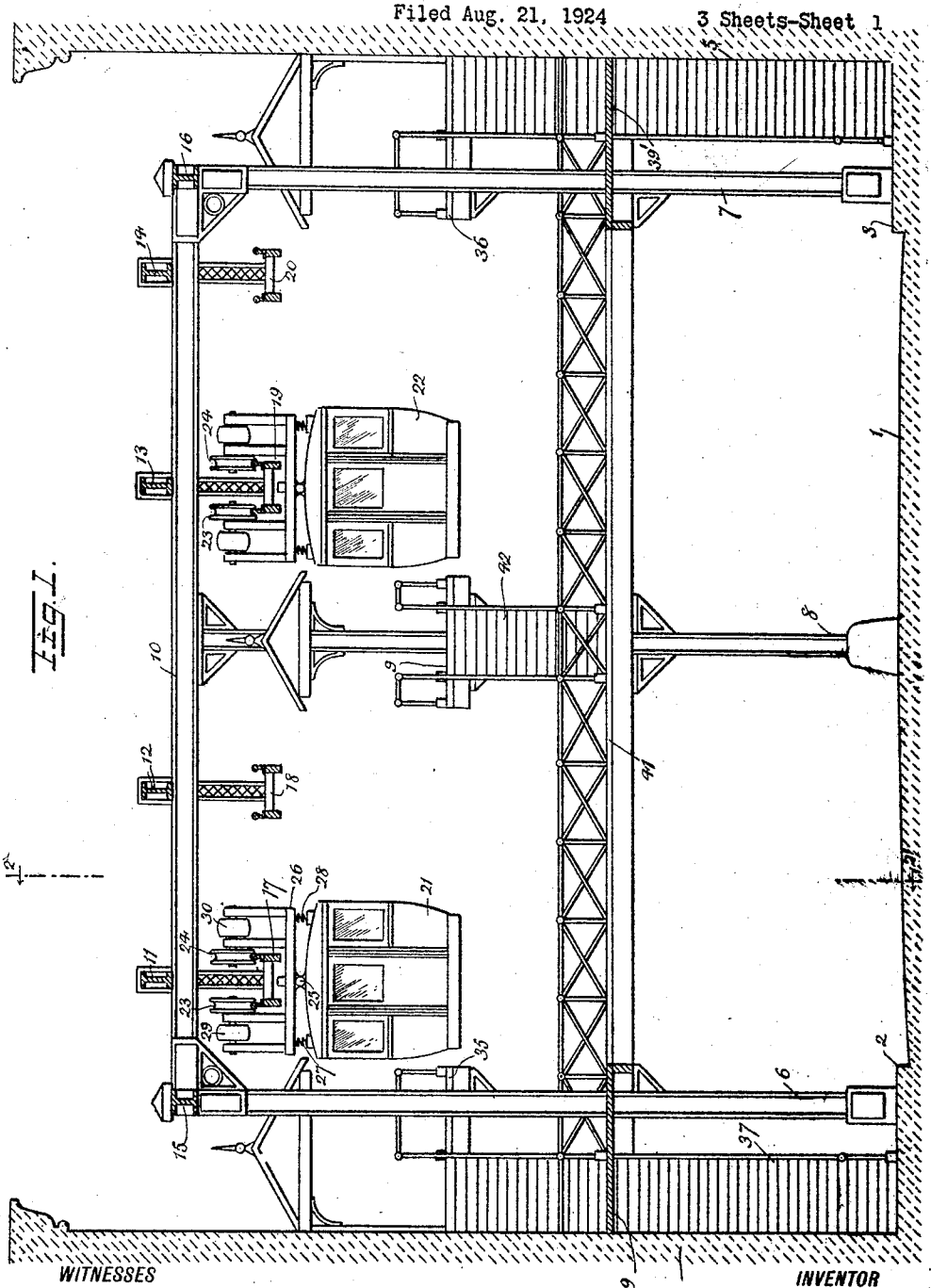


FIG. 1.

WITNESSES

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OVERHEAD RAILWAY

Filed Aug. 21, 1924 3 Sheets-Sheet 2

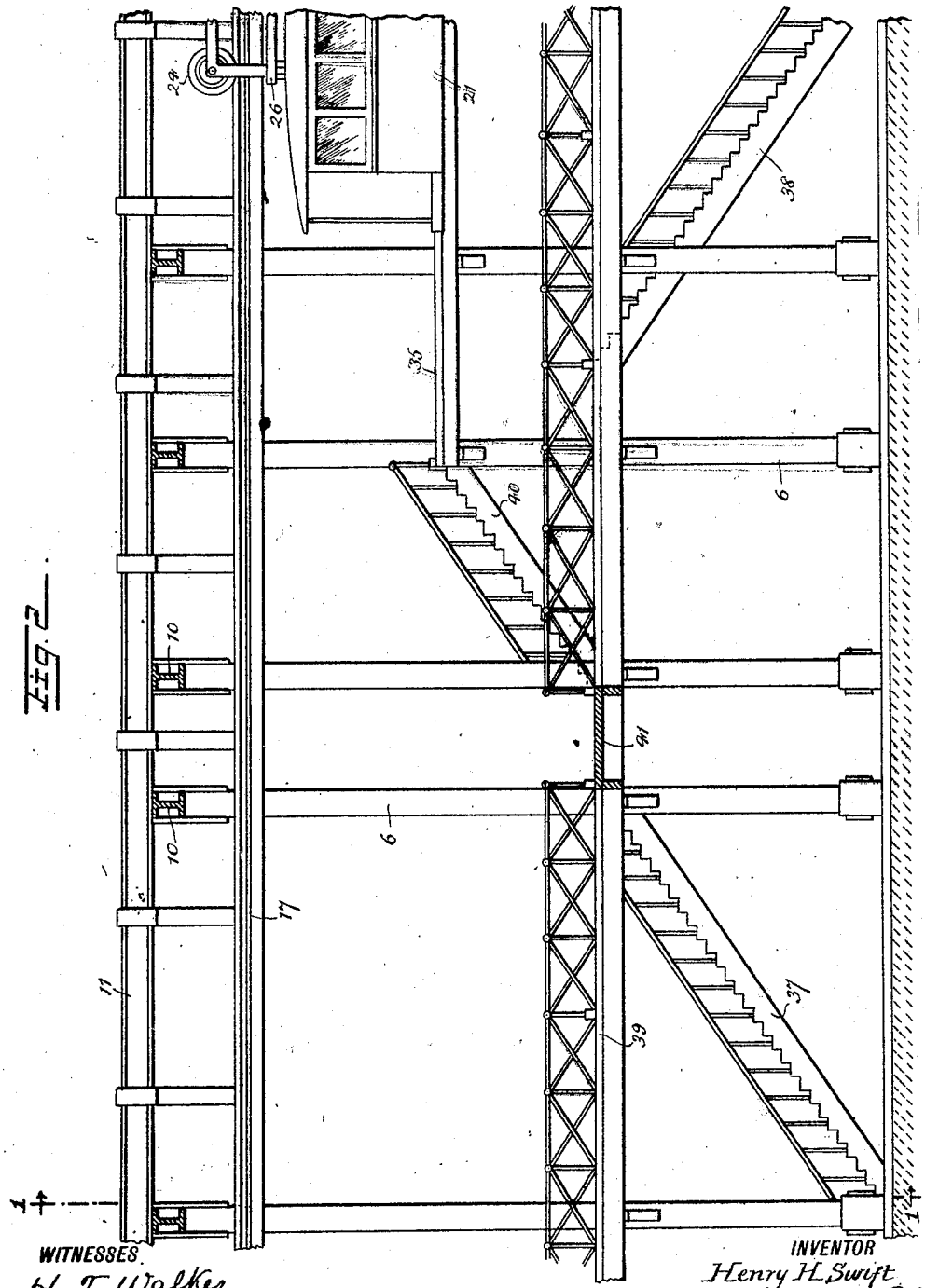


Fig. 2.

WITNESSES.
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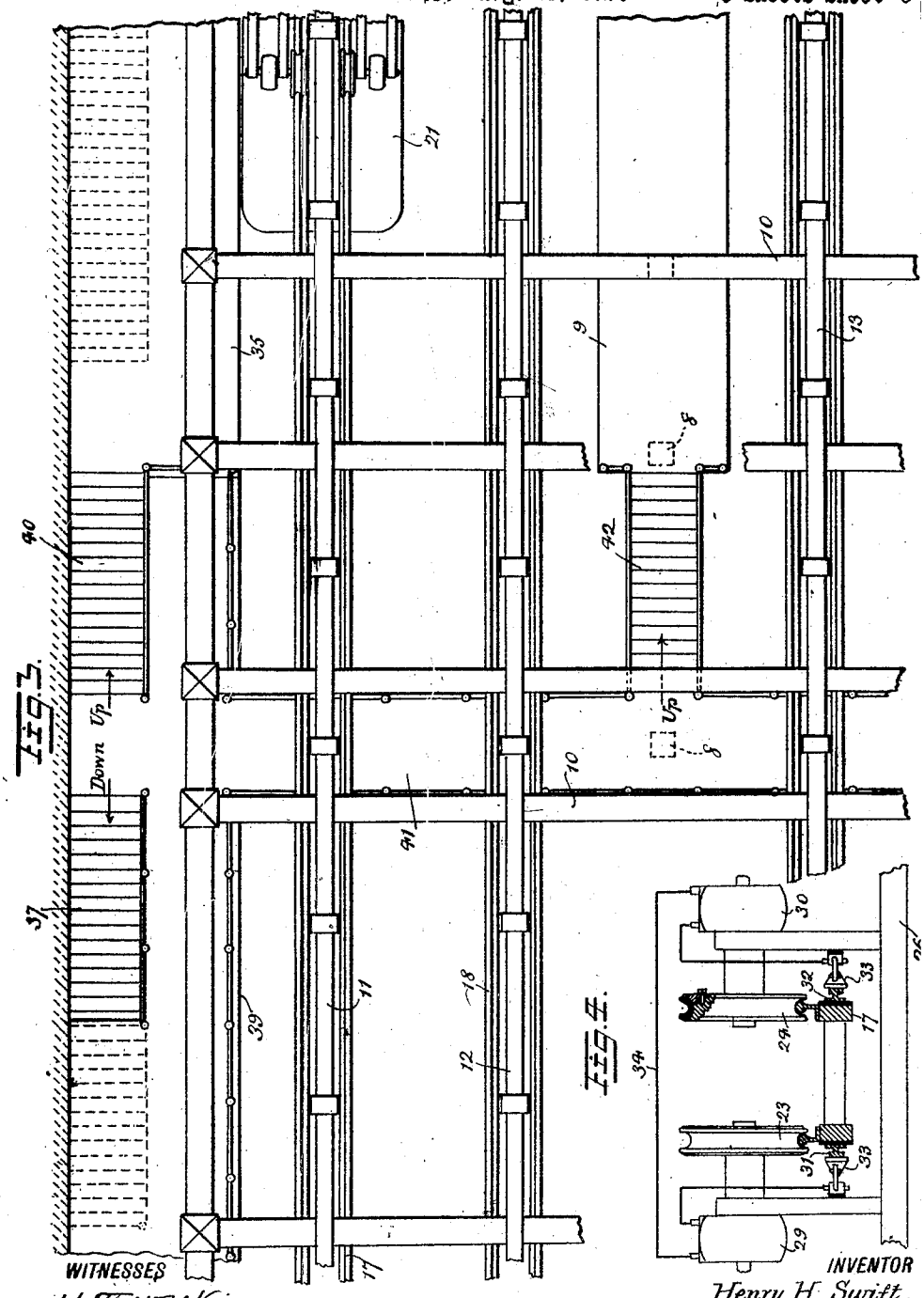
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Filed Aug. 21, 1924 3 Sheets-Sheet 3



WITNESSES

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Patented Aug. 11, 1925. 1,549,625

UNITED STATES PATENT OFFICE.

HENRY H. SWIFT, OF MILLBROOK, NEW YORK.

OVERHEAD RAILWAY.

Application filed August 21, 1924. Serial No. 733,409.

To all whom it may concern:

Be it known that I, HENRY H. SWIFT, a citizen of the United States, and a resident of Millbrook, in the county of Dutchess and State of New York, have invented a new and Improved Overhead Railway, of which the following is a full, clear, and exact description.

This invention relates to an improved overhead railway and has for an object to provide an improved construction which is comparatively inexpensive and which may be readily placed in position without undesirable expense, the same acting to provide transportation facilities without using an appreciable amount of the street.

Another object of the invention is to provide an improved arrangement of swinging or suspended cars with associated parts for completing the railroad system.

A still further object of the invention is to provide an overhead railway wherein not only are there provided cars for transportation purposes but an elevated platform acting as an elevating sidewalk.

In the accompanying drawings—

Figure 1 is a transverse sectional view through an overhead railway embodying the invention.

Figure 2 is a sectional view through Figure 1, approximately on line 2—2.

Figure 3 is a top plan view of about one-half of the structure shown in Figure 1 illustrating how the elevated sidewalks are associated with the landing platforms and other parts.

Figure 4 is an enlarged detail fragmentary sectional view showing the third rail connections.

Referring to the accompanying drawings by numerals, 1 indicates the street which is of the usual construction and which at the sides is provided with sidewalks 2 and 3. Adjacent the sidewalks are buildings 4 and 5 of any desired structure. The intention is to provide a construction which will extend from one building to the other across the street or almost this distance, according to various conditions.

In constructing the overhead railway, suitable supports 6 and 7 are provided on opposite sides of the street and at certain points supports 8 are provided centrally for supporting the central platforms 9. The various supports or posts are connected by brackets or otherwise at the upper ends with strong I-beams 10 which extend entirely across the street and which act to support the various I-beams 11, 12, 13 and 14. Side I-beams 15 and 16 connect the posts 6 and 7 longitudinally of the street while the I-beams 11 to 14 are connected by rivets or otherwise to I-beam 10 and act to support tracks 17, 18, 19 and 20, said tracks in turn supporting suitable cars, as for instance, cars 21 and 22. It will be noted that the tracks 17 and 18 depend from their various I-beams, said tracks being made in pairs so as to accommodate the grooved divided rim wheels 23 and 24 on the respective cars. It will be noted that there may be any desired number of wheels 23 and 24, said wheels being preferably rather deeply grooved and also preferably provided with grooved rubber tires in order that the movement of the cars or coaches 21 and 22 may be substantially noiseless. As each of the cars 21 and 22 are identical, the description of one will apply to both.

As indicated in Figure 1, the car 21 is suspended by a suitable pivotal rod or pin 25 at a point centrally of the top whereby it may swing. The pivotal support is carried by a frame 26 and in order that the car may not swing unduly, springs 27 and 28 are provided between the frame 26 and the car 21. The frame 26 may be of any desired structure and carries any desired number of wheels 23 and 24, as for instance, four. Associated with these wheels are electric motors 29 and 30 of any desired construction, said motors being connected by gearing or otherwise to the wheels 23 and 24 for propelling the same.

In order that current may be properly supplied to the motors, the track 17 is provided with oppositely extending third rails 31 and 32 (Figure 4), said third rails co-acting with the respective shoes 33, which shoes are connected by a suitable conductor to one side of the respective motors 29 and 30. These motors are connected by a suitable wire 34 whereby a complete circuit will be provided. By this arrangement, the motors are in series but it will be evident that current could be readily taken off all the third rails 31 and 32 and the connection changed to a shunt connection.

As shown in Figure 1, the outside tracks 17 and 20 are intended to be used as local tracks while the inside tracks 18 and 19 are intended for express trains. In carrying out

this idea, centrally positioned platforms 9 are provided at convenient points, said points being usually spaced further apart than the platforms 35 and 36, which latter platforms are used for local service. As indicated in Figure 2, steps 37 and 38 are provided which extend from the sidewalk upwardly to the elevated sidewalk 39. Passengers may pass upwardly from the elevated sidewalk over the stair steps 40 to platform 35 or may pass over the connecting bridge 41 to the stair steps 42 and from thence onto the platform 9. The stair steps have been shown as extending upwardly from the sidewalk but it will be evident that these may be arranged inside of the buildings along the street or at some other point as preferred. Preferably, the elevated sidewalks 39 and 39′ are made from glass which is transparent or at least translucent, whereby very little light will be shut out. Also, by arranging the tracks as shown in Figure 1, a super structure is provided which is comparatively small and, consequently, will also shut out very little light. The elevated sidewalks 39 and 39′ may be used and extend for the full length of the railway system or may be eliminated. When used, they provide a safe passage-way for pedestrians and also permit the establishment of stores along the second stories of the various buildings as well as the ground floor. In wholesale districts, as well as elsewhere, the sidewalks 2 and 3 might be eliminated and the entire street given up to vehicular traffic. This construction presents means for the safe use of the streets, both by vehicular traffic and by pedestrians. It will also be noted that the crossing of the street may be done in safety by passing over the various bridges provided which are preferably constructed as shown in the accompanying drawings but if desired, additional crossing bridges might be used without departing from the spirit of the invention.

What I claim is:

1. In an overhead railway, a plurality of suspended cars, each of said cars including a car body for receiving passengers, a supporting frame, wheels carried by said supporting frame carrying said car body, a pivotal pin for pivotally connecting said car body to said frame, said pin extending longitudinally of the car body whereby the car body may swing laterally, resilient means interposed between the car body and the frame for limiting said swinging movement, and means for rotating said wheels whereby said car is propelled.

2. In an overhead railway, a plurality of suspended cars, each of said cars including a car body for receiving passengers, a supporting frame, wheels carried by said frame for supporting the frame and car body, a pivotal pin extending longitudinally of the car body acting to pivotally connect the car body and frame together whereby the car body may swing laterally, springs arranged on the opposite edges of the top of the car body and acting against the car body and against said frame for limiting the swinging movement of the car body, and means for rotating the wheels whereby said car is propelled.

HENRY H. SWIFT.