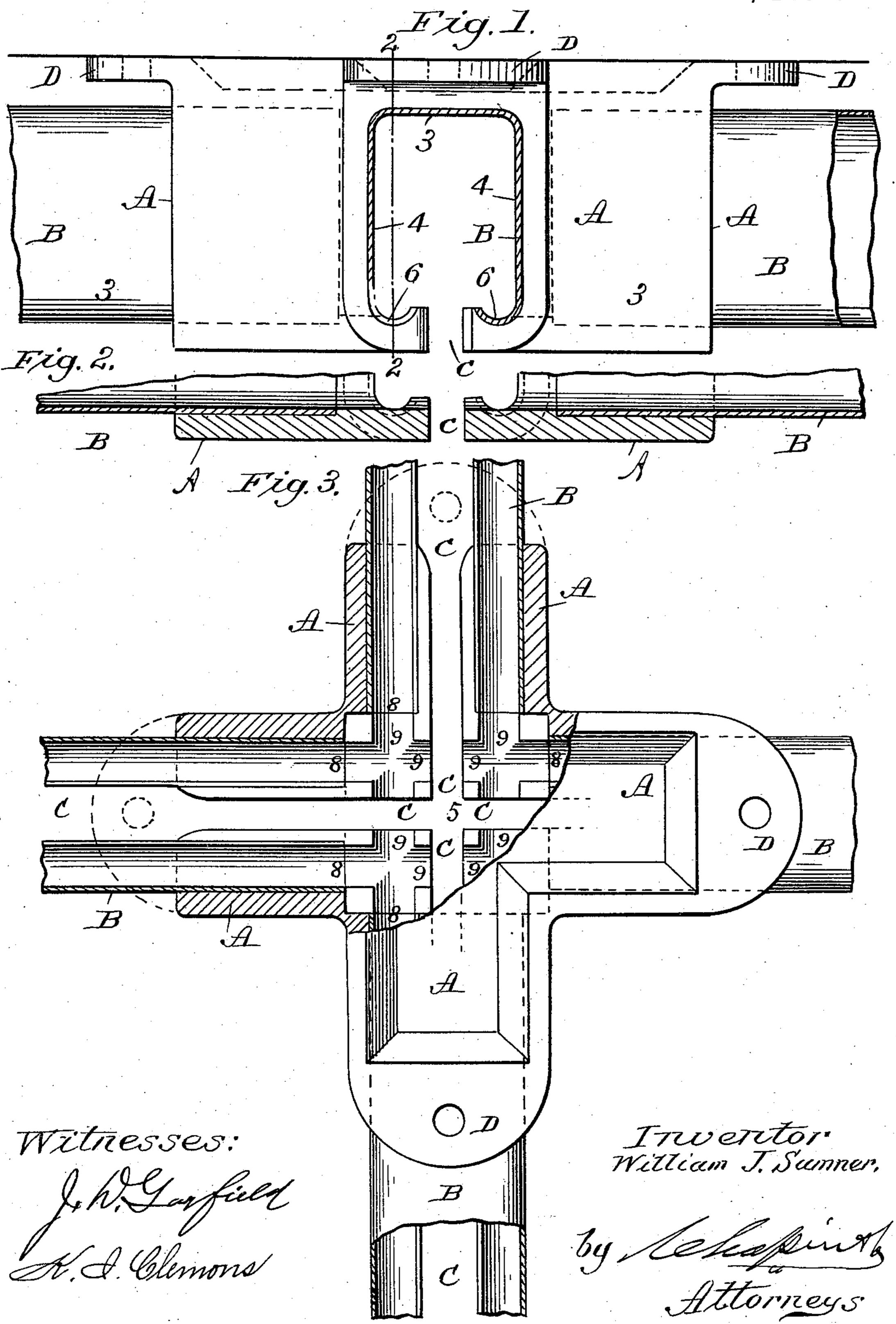
W. J. SUMNER. TROLLEY TRACK FROG.

No. 575,770.

Patented Jan. 26, 1897.



United States Patent Office.

WILLIAM J. SUMNER, OF HOLYOKE, MASSACHUSETTS, ASSIGNOR TO THE COBURN TROLLEY TRACK MANUFACTURING COMPANY, OF SAME PLACE.

TROLLEY-TRACK FROG.

SPECIFICATION forming part of Letters Patent No. 575,770, dated January 26, 1897.

Application filed March 25, 1896. Serial No. 584,782. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. SUMNER, a citizen of the United States of America, residing at Holyoke, in the county of Hampden and 5 State of Massachusetts, have invented new and useful Improvements in Trolley-Track Frogs, of which the following is a specification.

This invention relates to trolley-track frogs,
the object being to provide an improved construction of such frogs for supporting the ends of several lines of converging trolley-tracks and providing for the proper movement of trolleys and their hangers from one track onto another at the intersecting point of different lines of track; and the invention consists in a peculiar construction and arrangement of said frog whereby it provides a support for said several ends of trolley-track and means for supporting said frog in position for use with overhead track-lines, all as hereinafter fully described, and more particularly pointed out in the claims.

In the drawings forming part of this specification, Figures 1 and 3 are respectively side and plan views of trolley-track frogs of box form embodying my improvements, the sectional portion of Fig. 3 being on line 3 3, Fig. 1. Fig. 2 is a sectional view of the lower part of the frog on line 2 2, Fig. 1.

In the drawings, A indicates four boxshaped or hollow arms extending from the central portion of the frog construction, the openings in said arms extending from the ex-35 tremity of one thereof at one side of the frog in a straight line to the extremity of the arm A on the opposite side of the frog. Thus the two lines of track-openings extending at right angles to each other in the frog have a com-40 mon intersecting point at 5, Fig. 3. The form of the track-openings in said arms A may be such as to receive any desired form of trolleytrack. In the present instance, however, trolley-track sections B are shown in connec-45 tion with the several arms of said frog. Said track B represents a well-known form of sheetmetal track having a top 3 and two sides 4 4 at right angles to said top, and two runways 6 6 for the trolley-wheels, consisting of por-50 tions of the said sides at their lower edges bent inwardly in circular form, between

which runways is a longitudinal slot in which the hanger to which trolley-wheels are hung moves in the usual manner. Each of said arms A of the frog is formed to receive the 55 several converging ends, in this instance, of trolley-tracks of the above-described form, and the under side of each of said arms has a slot C therein which is continuous from the end of each arm of the frog to the extremity 60 of the under side of the arm of the frog on the opposite side thereof, as shown in Fig. 3. Consequently when the ends of four trolleytracks B are entered within the four arms A of the frog the inner ends of said tracks oc- 65 cupy the positions relative to the central intersecting point 5 of the frog shown in Fig. 3. C C C C indicate the hanger-slots of each of said four arms and also the said longitudinal slots in said trolley-track B. The 70 runways 6 of the latter extend along the opposite borders of said slots coincidently with the portions of the arms A themselves, on the opposite borders of said slots.

Referring to Fig. 3, the four lines 8 there 75 shown indicate the terminating-points of the inner ends of the four trolley-tracks B, connected to the frog as aforesaid, and the several numerals 9 there shown indicate sections of trolley-wheel runways corresponding in form 80 to the said runways 6 in said trolley-track B, which extend in the base of the frog between the ends of the several tracks B, which are united in the frog, to the end that the wheels of a trolley carrier or hanger, approaching 85 the center 5 of the frog from one direction, will enter and follow the said depressions or runways 9 at or about said lines 8 and immediately reënter the end of the trolley-track in the opposite arm of the frog. In practice 90 the separation of the ends of said track B from each other in the frog is inconsiderable and the passage of the trolley-wheels from the end of one track into the other across the center of the frog, as stated, is not attended 95 by any inconvenient obstacle to the movement of the trolley-carrier.

The above-described trolley-track frog is provided with overhanging flanges D, one on the end of each of said arms A, or with other 100 suitable means for securing the frog in a suspended or overhead position. Each of said

flanges D is provided with a bolt-hole, as shown, through which a sustaining-bolt may be passed in any ordinary way.

Having thus described my invention, what 5 I claim, and desire to secure by Letters Pat-

ent, is—

1. A trolley-track frog made in a single casting, and having hollow supports or extensions extending outwardly from opposite sides to 10 receive the ends of intersecting trolley-tracks, each extension or support having a slot through its base, a trolley-wheel runway upon each side of the slot, and a protecting flange D upon its top, the frog being provided with 15 a central chamber covered over at its top, K. I. Clemons.

and having its bottom formed by the wheelrunways, substantially as described.

2. A trolley-track frog made in a single casting, and having the four box-shaped or hollowed arms extending therefrom, each one 20 having a slot C made through its bottom, and a wheel-runway 6, upon both sides of the slot, a central chamber 8, runways 9 forming the bottom of the chamber, and a protectingflange D, which forms the cover for all the 25 arms or extensions, substantially as set forth.

WILLIAM J. SUMNER.

Witnesses:

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H. A. CHAPIN,