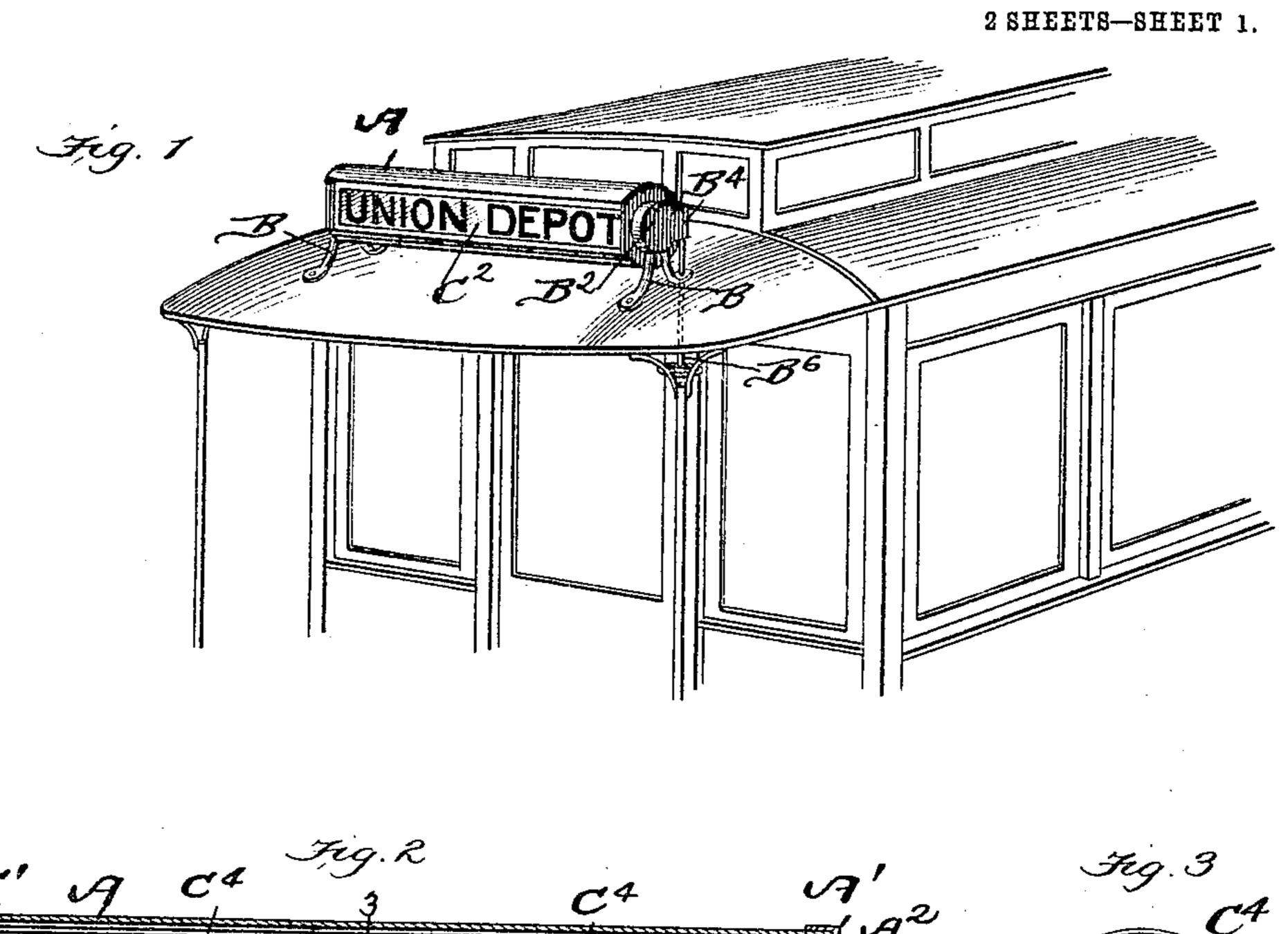
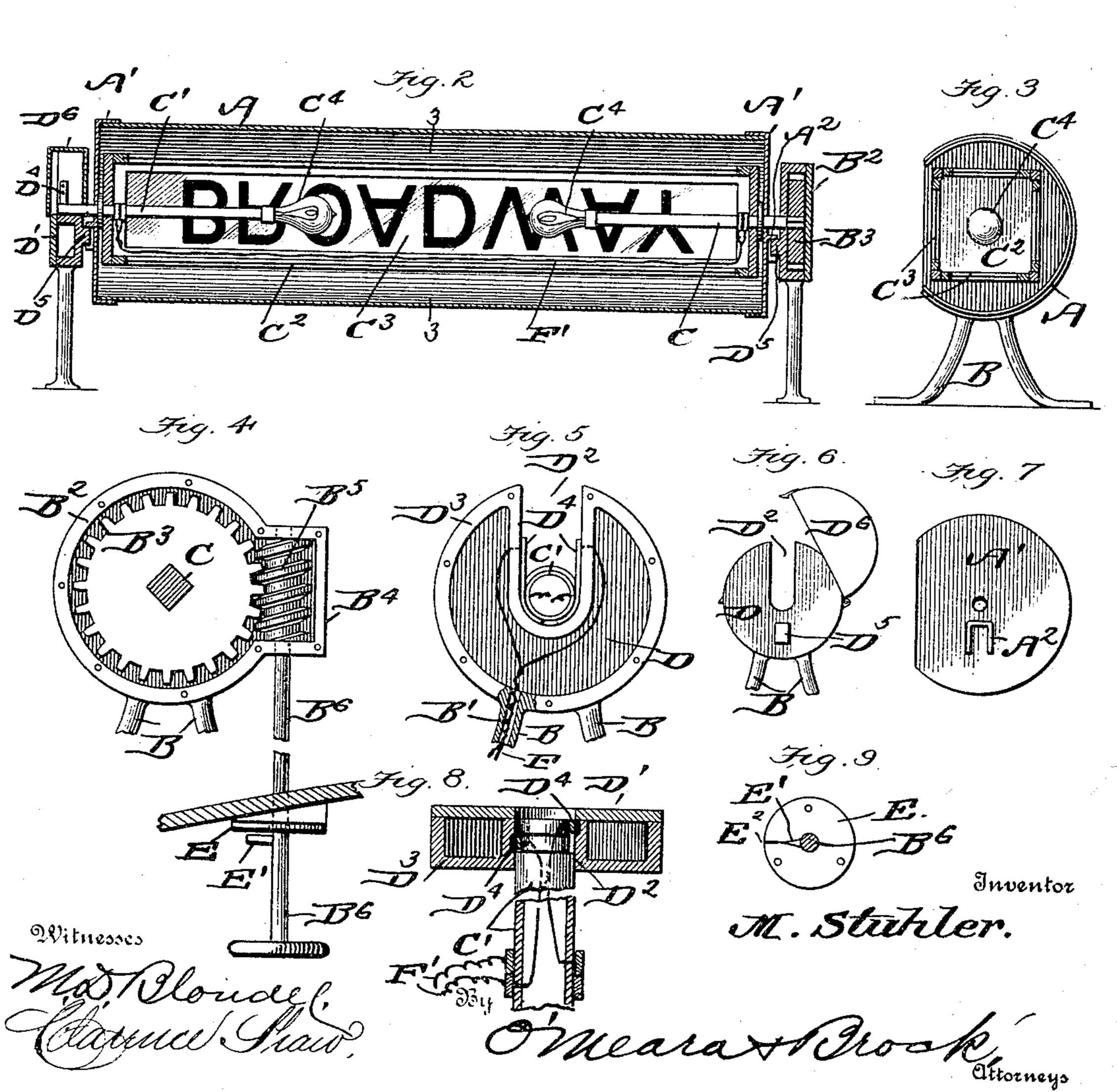
M. STUHLER. CAR INDICATOR.

APPLICATION FILED JUNE 27, 1903.





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2 SHEETS-SHEET 2.

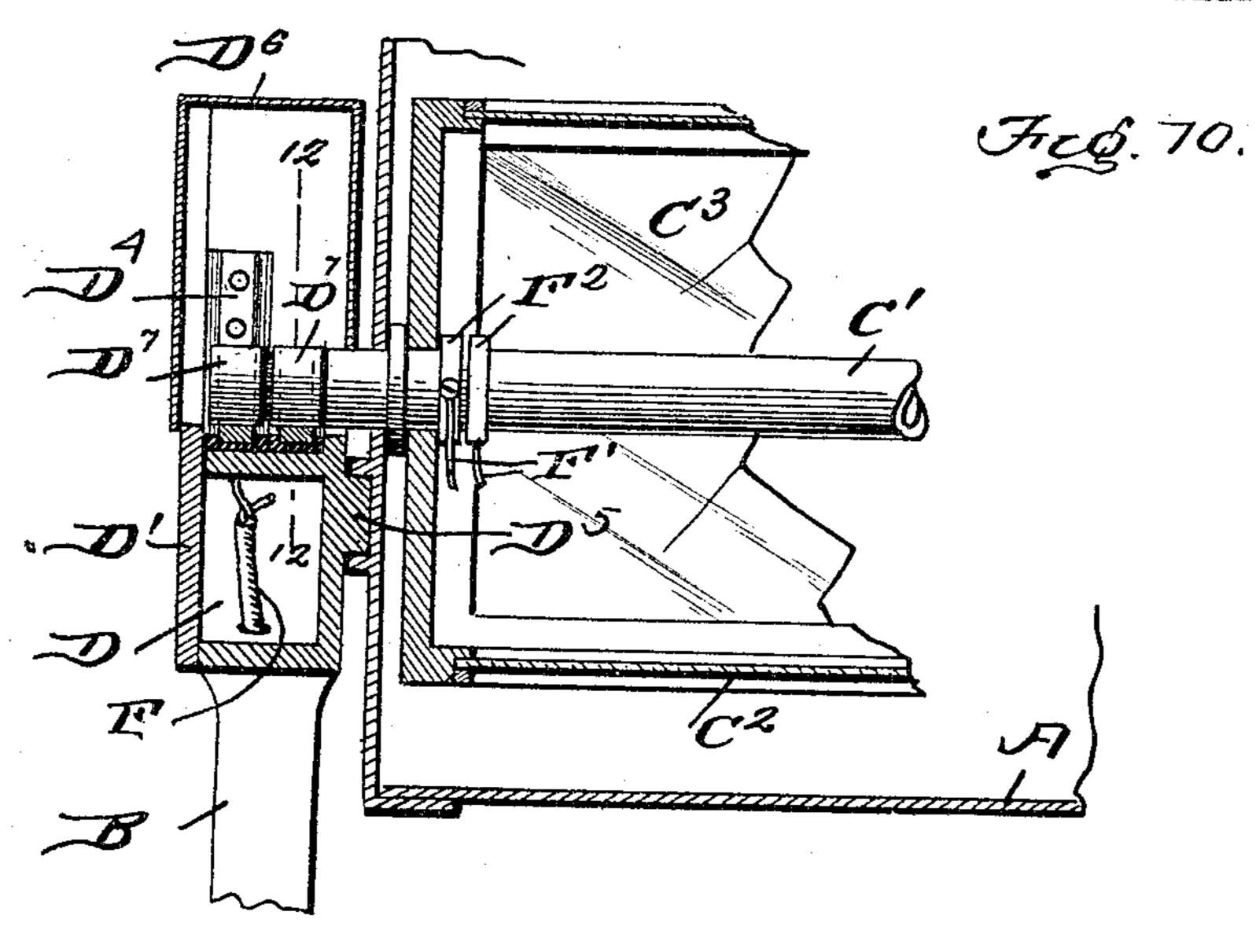
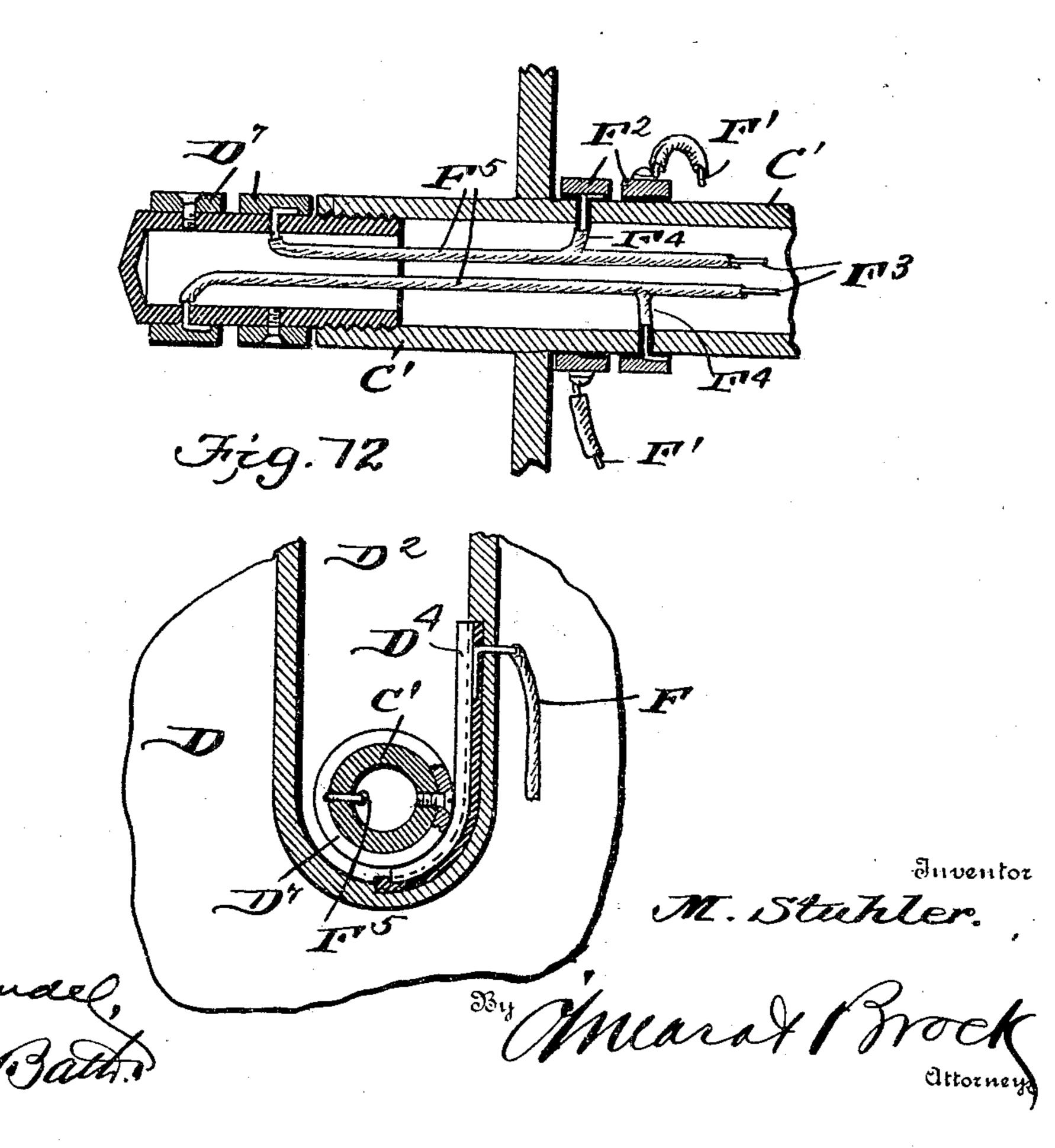


Fig. 77.



United States Patent Office.

MAX STUHLER, OF BROOKLYN, NEW YORK.

CAR-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 784,361, dated March 7, 1905.

Application filed June 27, 1903. Serial No. 163,420.

To all whom it may concern:

Be it known that I, Max Stuhler, a citizen of the United States, residing at Brooklyn, in the State of New York, have invented a new and useful Car-Indicator, of which the following is a specification.

My invention is an improvement in street-car indicators of that class carried by cars and indicating the destination of the car. I am aware of the fact that such signs have been used heretofore having in view the same object, and hence do not claim, broadly, the use of such signs.

My invention consists of the novel features of construction and combination of parts hereinafter described, particularly pointed out in the claim, and shown in the accompanying

drawings, in which—

Figure 1 is a perspective view showing a 20 sign constructed in accordance with my invention in actual use. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section about on the line 3 3 of Fig. 2. Fig. 4 is a detail elevation of one of the end brackets, a 25 side of the bracket being removed. Fig. 5 is a similar view of the opposite end bracket. Fig. 6 is a side elevation showing the hinged cover that fits over the end bracket shown in Fig. 5. Fig. 7 is an end view of the reflector. 3° Fig. 8 is a horizontal section taken centrally through the end bracket shown in Fig. 5. Fig. 9 is a plan view of an indicator dial and hand. Fig. 10 is a detail sectional view of an end of the casing and a portion of a bracket, 35 showing in elevation the shaft and collectingrings. Fig. 11 is a horizontal section through the shaft end. Fig. 12 is a section on the line 12 12 of Fig. 10.

Mounted upon a car is a cylindrical casing
40 A, cut away longitudinally along the forward
side and forming a reflector. This reflector
has removable end pieces A', carrying Ushaped lugs A'. Adjacent each end of the reflector is arranged a bracket having curved
45 feet B resting on the roof of the car, one of
the feet on one side being tubular, as shown
at B', through which the electric wiring is
run. At one end of the casing A this supporting-bracket is in the form of a cylindrical
50 casing B', and a shaft C extends through the

casing B² and into the reflector A. The portion of the shaft within the casing B2 is squared, and mounted thereon is a pinion B³. An extension B* is formed on the rear side of the casing, and in this portion is journaled a ver- 55 tical worm-gear B⁵, having a depending shaft B⁶ extending downwardly through the carroof. The gear B meshes with the pinion B³, rotating the shaft C. The bracket at the opposite end comprises a flanged disk D, hav- 60 ing a disk D' fitting over same and bolted to the flange, and each disk has a U-shaped downwardly-extending slot D², the flange D³ of the disk D being continued along the margins of the slot. Insulated brass contact-plates D^{*} 65 are arranged in the lower portion of the slot, and on these plates rests the outer end of a shaft C', also extending within the reflector and carrying collector-rings D', which bear on the plates D⁴, respectively. A polygonal sign- 70 box C², having its sides formed of glass panels C³, is arranged within the reflector and is supported by the shafts C and C', which extend through its ends into the box, the box rotating with the shaft C, to which it is rigidly secured, 75 and rotating the shaft C'. At their inner ends these shafts carry incandescent-light bulbs C^{*}. To insure stability of the reflector, lugs D are formed on the brackets B² and D and engage the lugs A² on the ends of the reflector and 80 prevent same from rotating when the signbox is rotated to display a new panel. On the under side of the car-roof is arranged a stationary disk E, through which the shaft B⁶ passes. The shaft carries an indicating- 85 hand E', which travels around the face of the disk and indicates by its position with reference to the mark E² which of the various panels is visible through the longitudinal opening in the reflector. The contact-plates D^{*} 90 are offset with reference to each other, one of said plates being nearer the outer end of the shaft C' and the plates being arranged upon opposite sides of the shaft C'. Conducting-wires F, running through the foot 95 B', carry current to and from the plates D⁴. One of said wires being a lead or positive wire and the other the return or negative wire, it is immaterial which plate the positive wire is connected to and to which plate the negative 100

wire is connected, and suitable wires F' extend from one plate to the incandescent-light sockets and back to the other plate and carry the current between the plates and the incan-5 descent-light bulbs. Within the casing the shaft C', which is hollow, rotates in metal rings F², (shown in elevation in Fig. 10 and in section in Figs. 8 and 11,) and the wires F⁵ are branched, the branches F³ leading along 10 the interior of the shaft C' to the lamp C⁴, carried by the said shaft, and the branches \mathbf{F}^* extend through the walls of the shaft \mathbf{C}' , properly insulated, and make sliding contact with the rings F², and from these rings lead 15 the exterior wires F', which supply current to the lamp C⁴, carried by the shaft C.

Any desired arrangement can be adopted for the wiring, as it is immaterial whether the lamps are arranged in series or in parallel, the particular arrangement of the electrical circuit not being a part of this invention, and insulation is of course used wherever required—as, for example, between the shaft C' and the

rings D^7 and F^2 .

The shaft B⁶ extends to within reach of the motorman or conductor, and by rotating same

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the sign-box will be rotated, changing the sign by displaying a new panel. Any reading-matter desired may be imprinted on the panels, and the glass may be plain or colored. 3°

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

The combination with a sign-box, a bracket at one end of said box comprising a flanged 35 disk, a second disk fitting over same and bolted to the flange, each disk having a U-shaped downwardly - extending slot formed therein the flange being continued along the margins of the slot, insulated contact-plates arranged 40 in the lower portion of the slot, a shaft extending into the sign-box and having its outer end journaled in the slot, rings carried by the shaft adapted to rest on the contact-plates, said plates being offset with reference to each 45 other, and means for lighting the sign-box and means for rotating the box.

MAX STUHLER.

Witnesses:
L. H. Wrelfel,
Geo. S. Jervis, Jr.