C. C. ROGERS.
TRACK FOR STORE SERVICE APPARATUS.

Patented Aug. 11, 1891. No. 457,609.

THE NORRIS PETERS CO., PHOTO-LITHOU WASHINGTON, O. C.

## United States Patent Office.

CHARLES C. ROGERS, OF BROCKTON, MASSACHUSETTS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF TWO-THIRDS TO CHARLES E. MCELROY AND CHARLES C. MERRITT, OF SAME PLACE.

## TRACK FOR STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 457,609, dated August 11, 1891.

Application filed November 24, 1890. Serial No. 372,402. (No model.)

To all whom it may concern:

Be it known that I. CHARLES C. ROGERS, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Wire Tracks for Store-Service Systems, of which the following is a specification.

This invention has for its object to provide an improved construction of curves for wire 10 tracks which are used to support and guide cash-carrying cars in retail stores; and it consists in the improvements which I will now

proceed to describe and claim.

Of the accompanying drawings, forming a 15 part of this specification, Figure 1 represents a perspective view of a portion of a wire track, including a curve, embodying my invention. Fig. 2 represents a top view of the same. Fig. 3 represents a section on line 33, 20 Fig. 2, showing the position of the carrier when it is running upon the curved portion of the track. Fig. 4 represents a perspective view of a modification.

The same letters of reference indicate the

25 same parts in all of the figures.

In the drawngs, a a represent two straight lengths or sections of wire, such as are commonly employed for cash-carrier tracks in retail stores. Said sections may be supported, 30 excepting at the point where the curve forming my improvement is located, by any wellknown means, and as means for supporting wire tracks are well known I have not shown the supports for any portion of the track, ex-35 cepting the curved portion. The two sections a a are arranged at different angles, and it is the object of my invention to so connect said sections that a carrier f, having a wheel or wheels f', can run from one section to the other, 40 and thus take a different course, the said sections extending in different directions. To this end I connect the sections a a by means of a curve b, composed of a curved metallic strip or bar, to which the sections a may be 45 attached in any suitable way. For example, the sections may be riveted, brazed, or otherwise connected to the curve at or near the ends thereof, the two sections being made in separate pieces. The curve b is inclined in

transverse section, as shown clearly in Fig. 3, 50 its upper edge having a shorter radius than its lower edge, so that a carrier f when passing along the curve will be free to swing laterally by centrifugal force, as indicated in Fig. 3, without striking the track.

d represents a fixed support, which is preferably a vertical post or pillar, and may be attached to the ceiling and project downwardly therefrom or to the floor or any other suitable part of the room. To the sup- 60 port d is affixed a plate d', arranged horizon-

tally. To said plate d' are attached the tracksections a a and a series of tie-rods c c, extending to the curve b and secured to the latter, as shown in Figs. 1 and 2.

c' c' represent a series of tie-rods secured to the curve b and to the wire track-sections a a.

It will be seen that the track-sections a a and the system of tie-rods c c c' c' constitute 70 a secure connection between the curve b and the fixed support d, so that the curve is held securely in place and enables a carrier to pass freely from one straight track-section to the other.

I prefer to curve the tie-rods c c c' c' at  $c^2$ , near their junction with the curve b, to afford room at the outer side of the curve for the upper portion of the carrier in case the latter is of such form that it would be likely to 80 strike the tie-rods if they were not thus curved. When two parallel tracks are employed, I connect the curve b of the inner track with the straight track-sections a a by brazing, soldering, or otherwise attaching the ends 85 of said sections to the ends of the curve at a'a'. I also connect the curve with the tie-rods c c' by means of curved extensions  $c^3$  of said tie-rods, said extensions passing over the outer curve, as shown, and supporting both the in- 90 ner curve and the inner straight track-sections.

In case it is not practicable to locate the support d at the convex side of the curve, said support may be located at the concave or in- 95 ner side of the curve, as shown in Fig. 4, in which case the curve will be supported by radial arms or braces  $f^3$ , secured to the inner

curve, and extensions f'' from said arms to the outer curve.

I claim—

1. The combination of the straight track-5 sections extending in different directions, the curved bar or strip secured to said sections and inclined in cross-section, so that its upper edge has a shorter radius than its lower edge, a fixed support, and connections between said 10 support and the curved strip or bar, as set forth.

2. The combination of two parallel tracks, each comprising straight sections a a and acurve b, connecting said sections, a fixed support, to which the straight sections of the C. F. Brown.

outer track are secured, tie-rods supporting the curve of the outer track at points between the ends thereof, and extensions of said tie-rods secured to the curve of the inner track and supporting both the curve and the 20 straight sections of the inner track, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 20th day of 25

November, A. D. 1890.

CHARLES C. ROGERS.

## Witnesses:

CHARLES E. MCELROY,