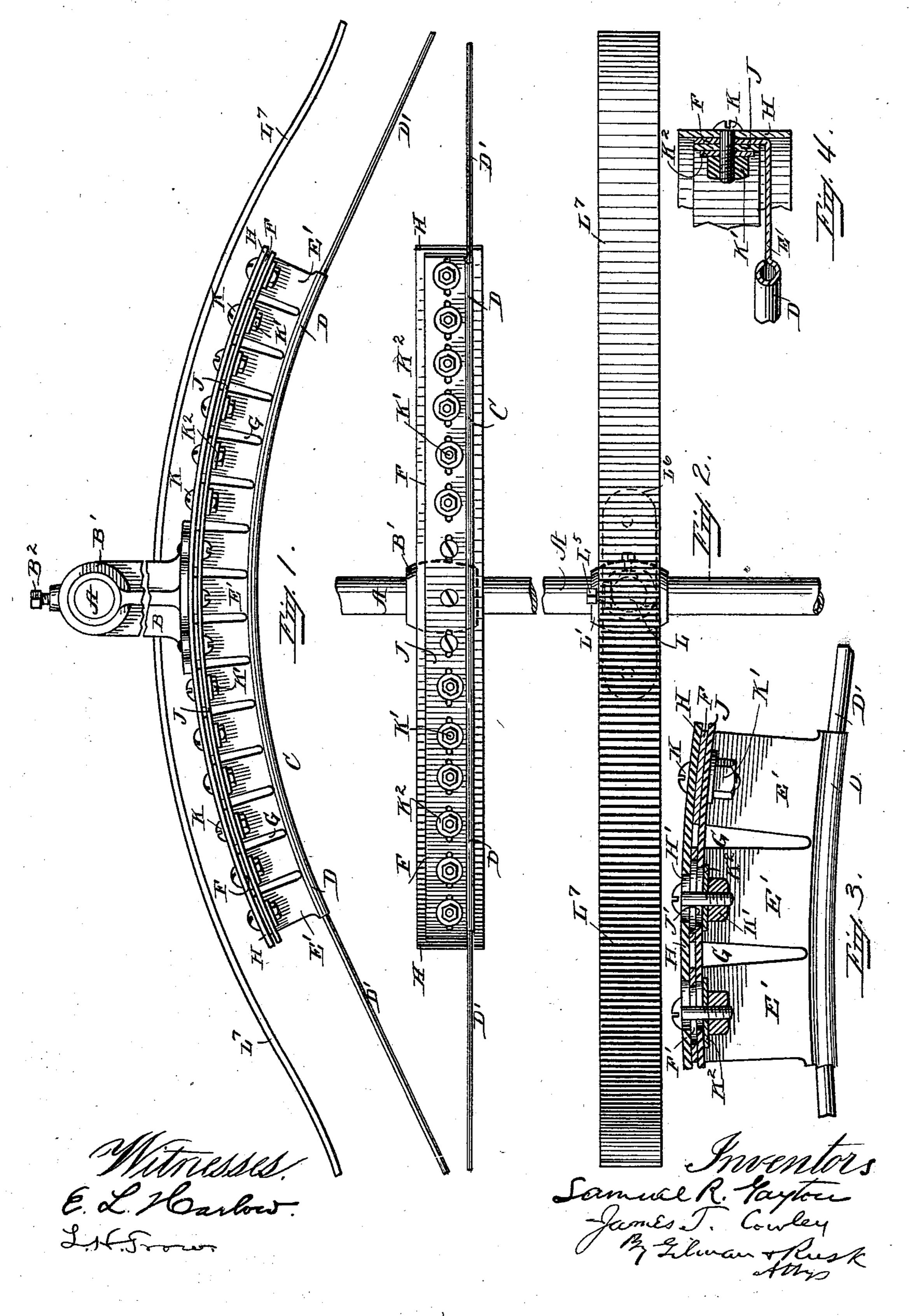
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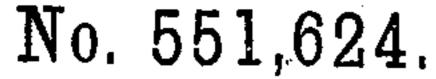
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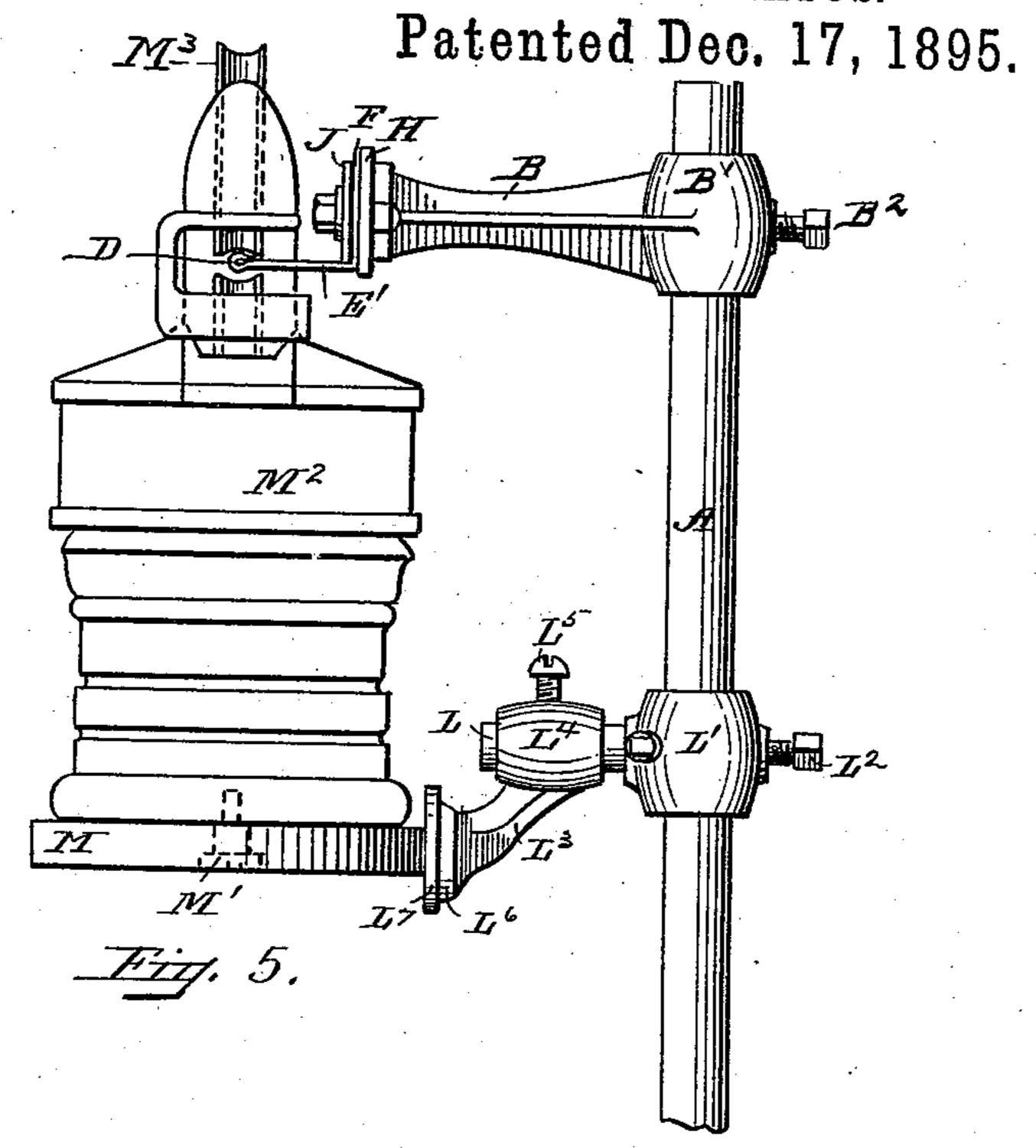
Patented Dec. 17, 1895.

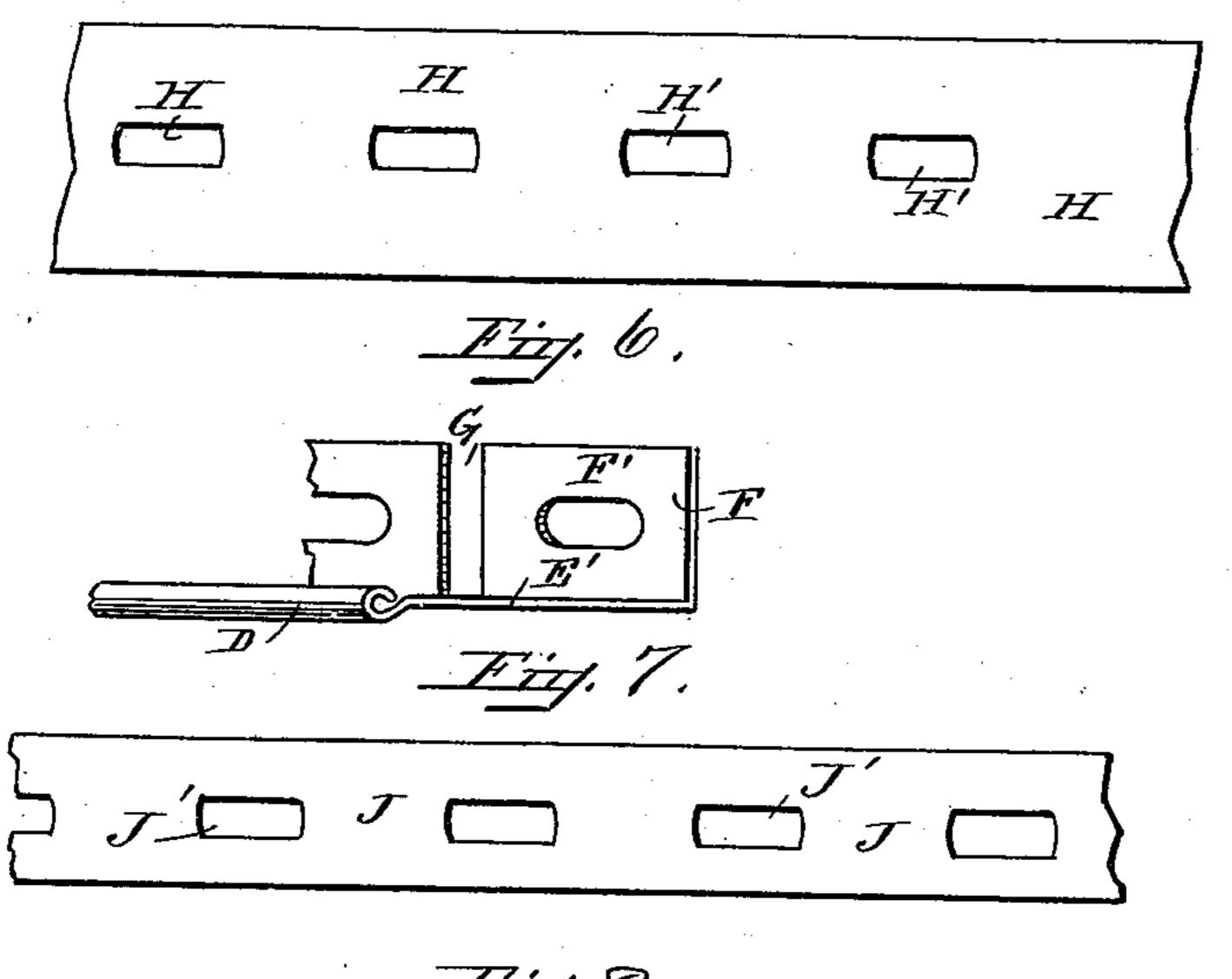


## S. R. GAYTON & J. T. COWLEY.

ADJUSTABLE CURVE FOR STORE SERVICE APPARATUS.







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## United States Patent Office.

SAMUEL R. GAYTON, OF PHILADELPHIA, PENNSYLVANIA, AND JAMES T. COWLEY, OF LOWELL, MASSACHUSETTS, ASSIGNORS TO THE LAMSON CONSOLIDATED STORE SERVICE COMPANY, OF NEWARK, NEW JERSEY.

## ADJUSTABLE CURVE FOR STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 551,624, dated December 17, 1895.

Application filed April 25, 1895. Serial No. 547,066. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL R. GAYTON, of Philadelphia, county of Philadelphia, and State of Pennsylvania, and JAMES T. Cow5 LEY, of Lowell, county of Middlesex, and State of Massachusetts, have invented new and useful Improvements in Adjustable Curves for Store-Service Apparatus; and we hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to new and useful improvements in adjustable curves for storeservice apparatus; and it has for its object to provide a curve that can be readily adjusted to different radii and firmly fixed in

that position.

Often in running lines between two termi-20 nals it is necessary that the lines should pass around some obstruction that would prevent a line from being run direct between the two points, and in that case it would be necessary to construct a curve which would carry the 25 line out of a direct line to pass around the said obstruction. In some cases it would be necessary to only change the line from a direct line slightly, while in others it would be necessary to run it at a right angle or even more; 30 and the object of this invention is to provide a curve that can be adjusted by the workman erecting the line, who can readily change the radii of the curve and fix the same for the particular requirements of the line he may be 35 erecting. These curves can all be manufactured the same and can be changed to suit the particular requirements needed without any additional labor being expended in erecting, and thereby avoiding the necessity for 40 constructing particular curves for particular circumstances, as each curve can be changed by the workman to meet any condition; and a further object is to provide means for guiding and steadying the carrier while passing 45 around said curves.

Our invention consists of certain novel features, arrangements, and combinations hereinafter described, and particularly pointed out in the claims.

In the drawings accompanying this appli-

cation and which illustrate a construction embodying our invention, Figure 1 is a plan view of the curve and carrier together. Fig. 2 is a side elevation of the curve and carrier together. Fig. 3 is an enlarged detail view 55 showing in plan and part section a portion of the curve. Fig. 4 is an enlarged detail end sectional view of a portion of the curve. Fig. 5 is an end view in elevation showing the carrier located on the curve. Figs. 6, 7, and 8 60 are detail views of the parts which compose the curve.

Like letters of reference refer to like parts

throughout the several views.

Upon the standard A there is mounted an 65 arm B, having a hub B' around said standard and secured thereon at any desired position by the set-screw B<sup>2</sup>. To the outer end of said arm there is secured an adjustable curve C, which consists of an eye D, formed on the 70 inner edge of the sheet-metal web E, and through this eye the track-wire D' passes. This sheet-metal web E consists of a series of horizontal sections E', with vertical extensions F, and between each two sections there 75 " is a slot G to permit the eye D to readily bend to any desired radius. On the outer side of the vertical extensions F there is located a flat plate H, and on the inner side of said vertical extensions F there is provided a flat 80 plate J, and the outer flat plate H is provided with a series of slots H', which register with the slots G in the vertical extensions F and the slots J' in the inner flat plate J, and through these slots bolts K pass, with nuts 85 K' on the inner edge, and provided with washers K<sup>2</sup>, which bear against the inner flat plate J.

When the lineman is erecting the line he determines at what angle his curve should 90 be placed, and first loosens the nuts K', which leaves the flat plates H and J loose, and the eye D, through which the wire passes, can then be sprung to any desired curve. After the eye D is set to the desired curve 95 the nuts K' on the bolts K are again tightened, which, by clamping the plates H and J onto the vertical extensions F of the sheetmetal web E, firmly holds the eye D to the radius at which it has been set. Upon the 100

same standard A and below the arm B there is arranged an arm L, having a hub L' around said standard and adjustably secured thereto in any desired position by a set-screw L<sup>2</sup>. On 5 the outer end of said arm L there is arranged a bracket L<sup>3</sup>, having a hub L<sup>4</sup>, provided with a set-screw L<sup>5</sup>, by which said hub can be set on the arm in any desired position. At the extreme end of the bracket L³ there is a foot 10 L<sup>6</sup>, to which is secured the curved guide L<sup>7</sup>, against which the roller M, pivotally secured to the bottom of the carrier M<sup>2</sup> by a stud M', works as the wheels M<sup>3</sup> of the carrier travel along the eye D of the adjustable curve, and 15 in this manner steady and guide the carrier in its movement around the curve.

We do not limit ourselves to the arrangement and construction shown, as the same may be varied without departing from the 20 spirit of our invention, and we further do not limit ourselves to the use of said curves in store-service apparatus, as it is equally well adapted for other apparatuses in which adjustable curves are required.

Having thus ascertained the nature of our invention and set forth a construction embodying the same, what we claim as new, and desire to secure by Letters Patent of the United States, is—

30 1. In a store service apparatus, a way, a carrier adapted to travel on said way, a curve to which said way is connected capable of adjustment to different angles, and means for varying the angle of said curve.

2. In a store service apparatus, a way, a carrier adapted to travel on said way, a curve to which said way is connected capable of adjustment to different angles, means for varying the angle of said curve, an arm for sup-

porting the said curve, and means for vary- 40

ing the adjustment of said arm.

3. In a store service apparatus, a way, a carrier adapted to travel on said way, a curve to which said way is connected capable of adjustment to different angles, a guide located 45 below said curve, and a roller mounted on the bottom of said carrier and adapted to contact with and be guided by said guide as the carrier moves around the said curve.

4. In a store service apparatus, a way, a car- 50 rier adapted to travel on said way, a curve to ' which said way is connected capable of adjustment to different angles, an adjustable guide located below said curve, and a roller mounted on the bottom of said carrier and 55 adapted to contact with and be guided by said guide as the carrier moves around the said curve.

5. In a store service apparatus, a way, a carrier adapted to travel on said way, a curve to 60 which said way is connected capable of adjustment to different angles, and means for varying the angle of said curve, the said curve consisting of a slotted web and one or more plates to which said web is secured.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, on the 12th and

13th days of April, 1895.

SAMUEL R. GAYTON. JAMES T. COWLEY.

Witnesses to S. R. Gayton's signature:

C. FREEMAN SLATER, R. C. MARKLEY.

Witnesses to J. T. Cowley's signature:

E. L. HARLOW,