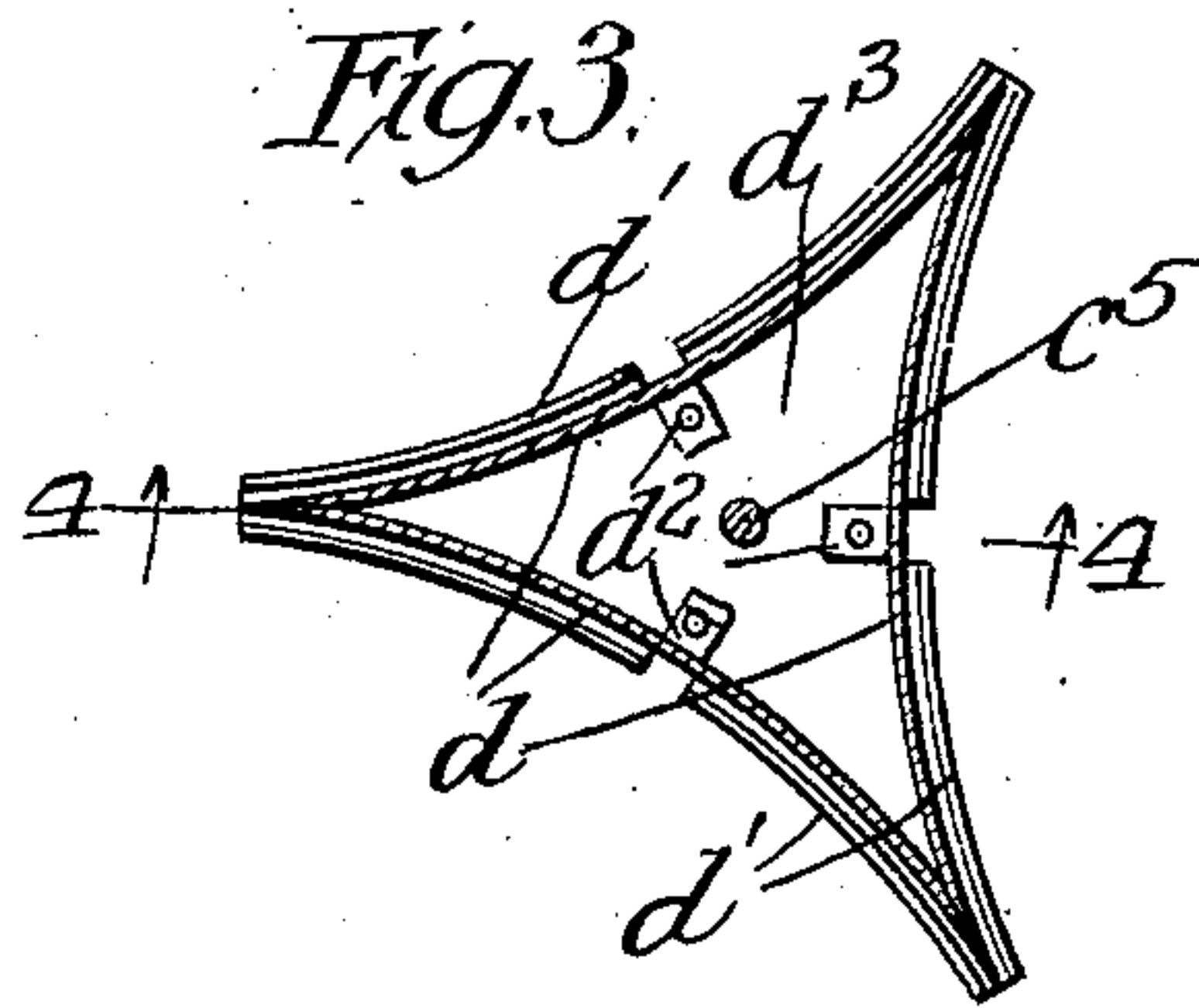
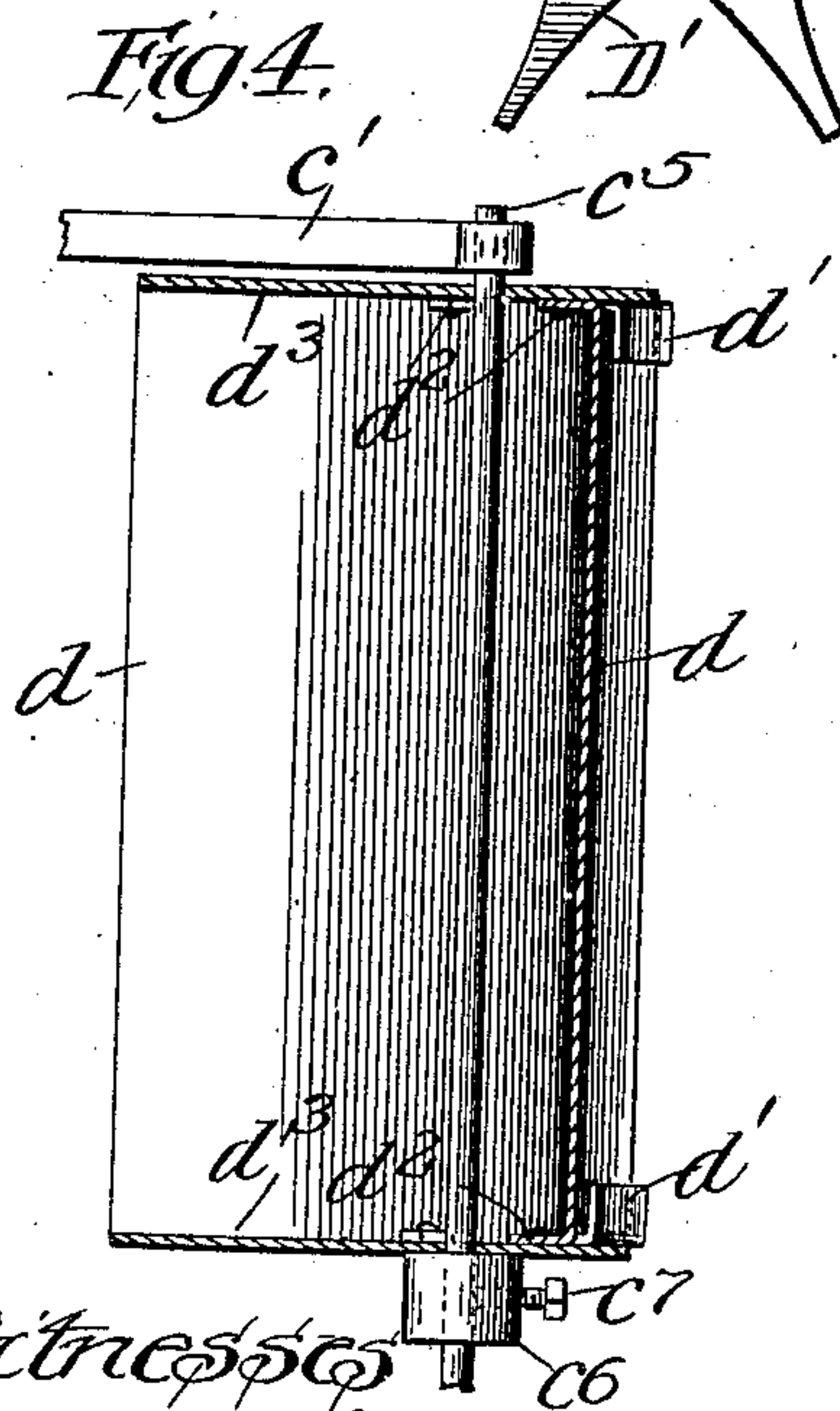
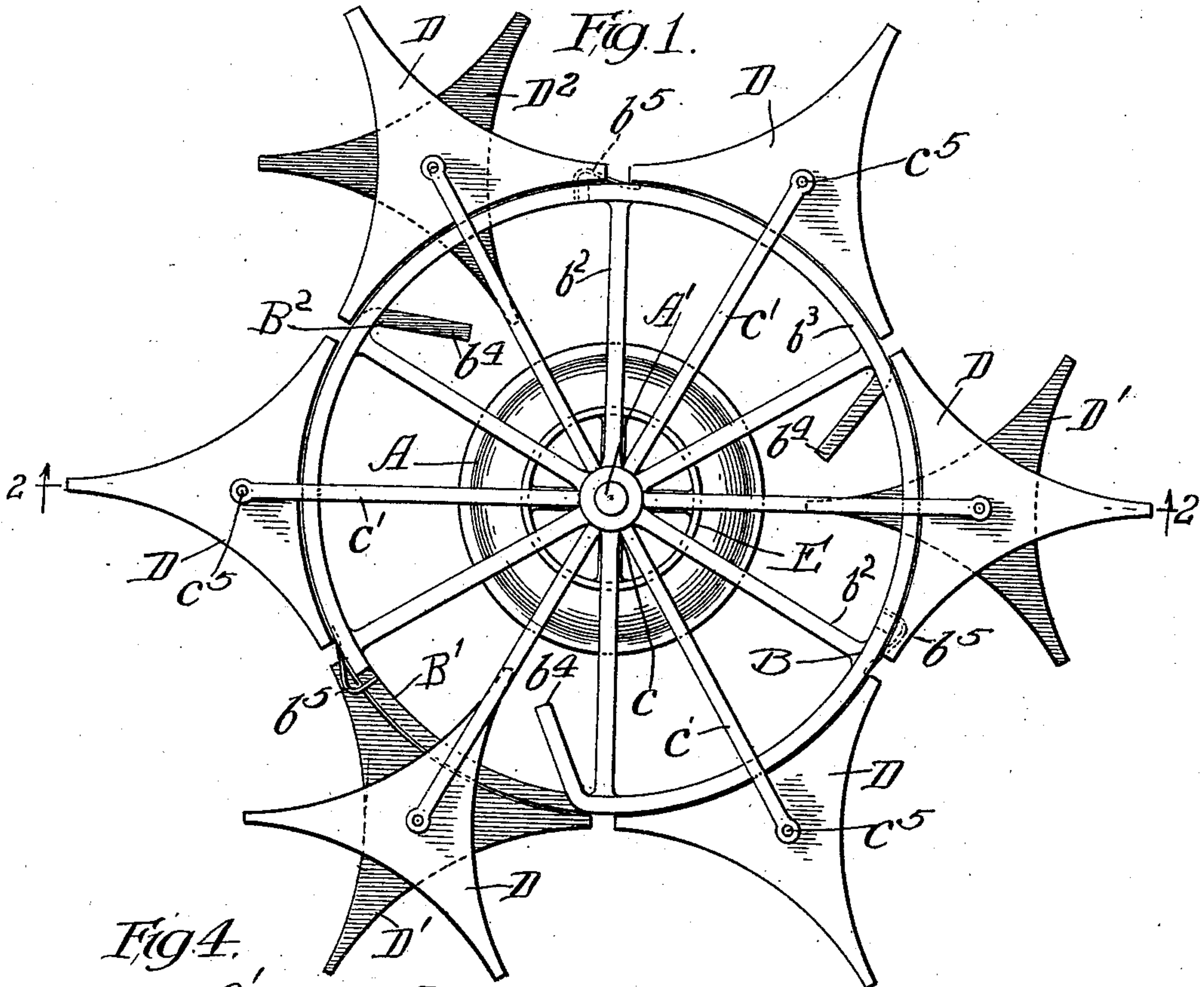


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Patented July 27, 1909.  
 2 SHEETS—SHEET 1.



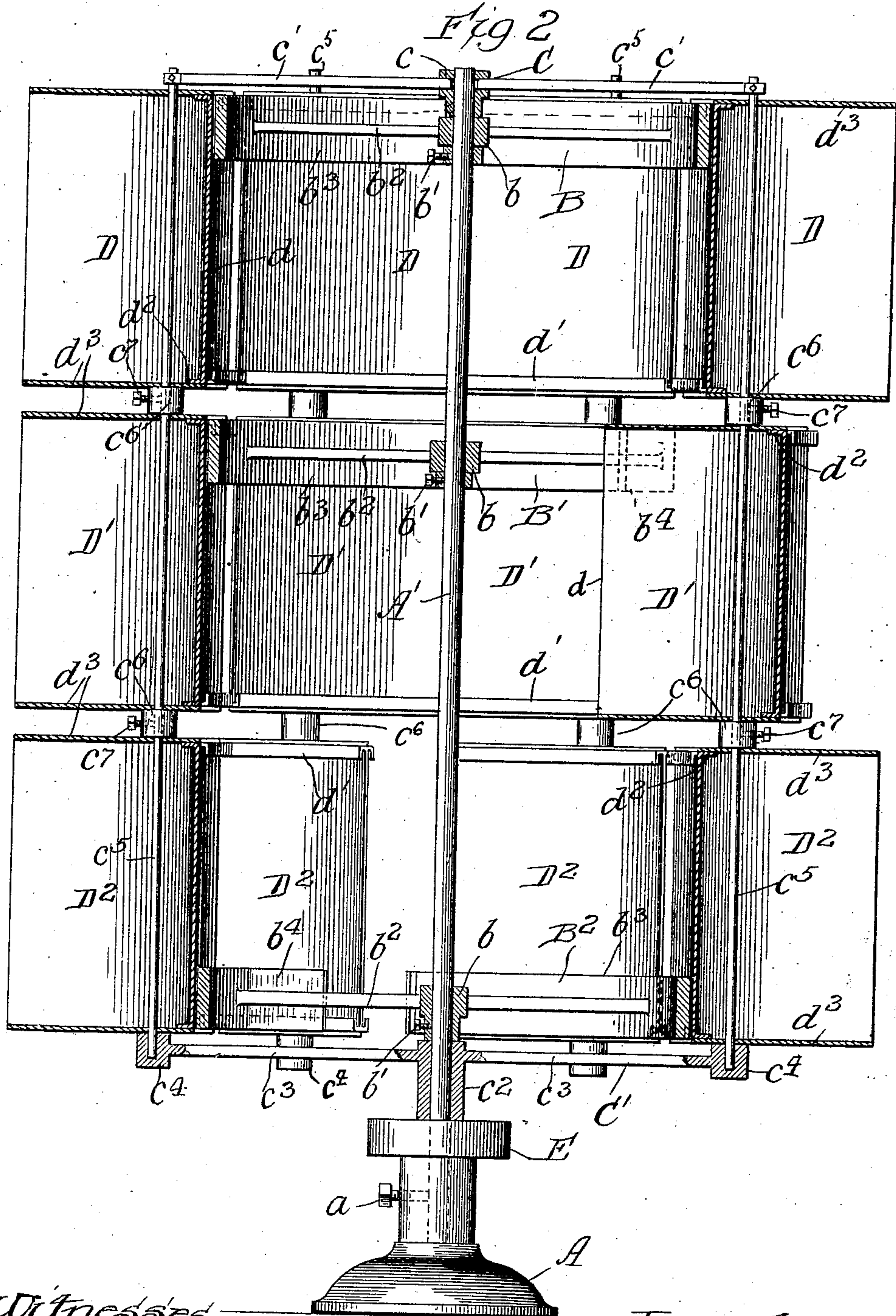
Witnesses  
 R. A. White  
 Harry R. L. White

Inventor  
 John Lawson  
 By W. W. Withenbury, Atty.

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# UNITED STATES PATENT OFFICE.

JOHN LAWSON, OF CHICAGO, ILLINOIS.

## ROTARY SIGN-DISPLAY MEANS.

No. 928,990.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed April 20, 1908. Serial No. 428,239.

*To all whom it may concern:*

Be it known that I, JOHN LAWSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Rotary Sign-Display Means, of which the following is a complete specification.

This invention relates to improvements in rotary sign display means and more particularly to a device adapted to simultaneously display a plurality of signs and to automatically change the positions of the signs to successively bring them into view.

The object of this invention is to provide a sign display means particularly adapted for show or display windows where it is desired to display a large number of signs at one time, and in such a manner as to successfully attract public notice.

It is also an object of the invention to provide a device in which the signs are brought to the vision of the observer in succession, and in which the sign carrier is automatically rotated on its axis without stopping the device so as to successively bring the signs into view.

It is a further object of the invention to provide a very cheap and simple device in which the signs may be easily inserted or removed when desired, and in which the sign carriers or frames are caused to continuously revolve around a common center and to intermittently rotate upon their axes.

The invention consists of the matters hereinafter described in the specification and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a top plan view of a device embodying my invention. Fig. 2 is a section taken on line 2—2 of Fig. 1. Fig. 3 is a horizontal section of one of the sign carriers. Fig. 4 is a section taken on line 4—4 of Fig. 3.

As shown in said drawings: A indicates a base of any preferred construction and material which may be rigidly secured in any preferred manner to the floor or other surface upon which it is to be supported. A vertical standard or center post A' is rigidly secured in said base in any preferred manner, as by means of the set screw *a* carried in the base and adapted to engage the lower end of said post. Rigidly secured to said standard may be any desired number of tracks or guides for the sign carriers but, as shown,

there are three, which are indicated by B, B' and B<sup>2</sup> respectively. Each of said tracks comprises a central hub or collar *b*, which is rigidly but adjustably secured to the standard A' by means of set screws *b'*, or in any other preferred manner, and radiating from said hub are a plurality of arms or spokes *b<sup>2</sup>* which support at their outer ends the track or guide plate *b<sup>3</sup>*. Each of said track or guide plates *b<sup>3</sup>* are broken or interrupted between two adjacent spokes and one end thereof *b<sup>4</sup>* is turned inwardly to provide a deflector, as shown more clearly in Fig. 1. On the other end of said plate is a leaf spring *b<sup>5</sup>*, which is attached to the outer face of the track at a short distance from the end and normally curves outwardly therefrom and then turns inwardly past the end of the plate. Said spring may be countersunk into the surface of the track if preferred so that when it is forced inwardly against the plate its outer surface will be flush with the outer surface of the plate.

Rotatively engaged on the standard A' is the carrier frame, comprising an upper and a lower member C and C' which may be of any preferred construction, but the former of which as shown comprises a central hub *c* journaled on the standard and having a plurality of radially directed arms *c'* extending outwardly beyond the track B. The lower member C', as shown, comprises a central hub *c<sup>2</sup>* journaled on the standard and having radially directed arms *c<sup>3</sup>* thereon, which correspond with and are immediately below the arms *c'*, and are provided on their outer ends with sockets or sleeves *c<sup>4</sup>*. Carrier shafts *c<sup>5</sup>* are seated at their lower ends in the sockets *c<sup>4</sup>* and at their upper ends are rigidly engaged in the outer ends of the arms *c'*. Rotatively engaged on each of said shafts in position to travel against the tracks are a plurality of sign carriers D, D' and D<sup>2</sup>, corresponding with the tracks B, B' and B<sup>2</sup>, and fitting closely thereagainst. Said carriers may be of any preferred construction but, as shown more clearly in Figs. 3 and 4, each comprises three side walls or plates *d* of suitable material, which are concaved on their outer faces to correspond with the curvature of the tracks and are secured together at their meeting edges by means of soldering, riveting or the like. At the top and bottom of each wall, on the outer side thereof, is a retaining flange *d'* between which and the wall a card board sign may



be inserted. Lugs  $d^2$ , formed from portions of said flanges, are turned inwardly at the tops and bottoms of said walls and the top and bottom plates  $d^3$  are riveted or otherwise secured thereto. The shafts  $c^5$  are provided between said carriers with collars  $c^6$ , which are rigidly held in place by set screws  $c^7$  and serve to support the carriers the desired distance apart.

Any preferred means may be provided for rotating the carrier frame but, as shown, a belt pulley E is rigidly engaged on the hub  $c^2$  and is adapted to receive a belt from any desired source of power.

The operation is as follows: The signs are placed in the carriers by inserting them behind the flanges  $d'$ , and owing to the curvature of the walls  $d$  the signs are firmly held in place. As shown, each carrier is adapted to hold three signs, two of which are always exposed and one of which is adjacent the track. Owing to the fact that the side walls are curved complementally with the tracks and are adapted to fit closely thereto, it is obvious that as a carrier passes over the spring  $b^5$  in its track it will force the spring inwardly against the track and when the pivotal point of the carrier, or the shaft  $c^5$ , has passed beyond the spring the latter will resume its normal position and force the rear corner of the carrier outwardly from the track, thereby swinging the front corner thereof into the opening in the track into position to contact with the deflector  $b^4$ , which it engages, and as the carrier travels forwardly the side thereof which was previously in the lead, is now turned toward the track, until the carrier again comes to the opening in the track when the operation is repeated. As shown the tracks are so adjusted on the standard that their openings are approximately 120 degrees apart but they may be arranged thereon in any other preferred order to accomplish the change of the signs at any desired point.

Obviously any preferred number of tracks may be employed, as well as any desired number of carriers for each track and obviously many details of form and construction may be varied without departing from the principles of my invention.

I claim as my invention:

1. In a device of the class described the combination with an annular track of means for supporting the same, a plurality of carriers having sides curved complementally with said track, said sides being adapted to alternately travel against said track, and means on said track adapted to partially rotate each carrier at a given point to bring the next adjacent side into contact with said track.

2. In a device of the class described the combination with an annular track of means adjustably supporting the same, a carrier

having a plurality of concaved sides each adapted to fit closely to and travel against said track, and means adapted to partially revolve said carrier at a predetermined point on the track.

3. In a device of the class described the combination with an annular, broken track having an inturned end adjacent the break, of arms extending beyond said track, a carrier journaled in the outer ends of said arms and provided with concaved sides adapted to fit closely against said track, and a spring adjacent the break in said track adapted to engage the carrier and partially revolve it as it passes said break.

4. In a device of the class described the combination with a standard of an annular track adjustably mounted thereon, arms journaled on said standard and projecting radially beyond said track, carriers journaled on the outer ends of said arms and adapted to travel against the track, means for removably securing signs on the outer sides of said carriers, and means for partially rotating each carrier at a predetermined point in the track.

5. In a device of the class described the combination with a standard of a plurality of upper and lower radially directed arms journaled thereon, shafts connecting the ends of corresponding upper and lower arms, a carrier journaled on each shaft and provided with concaved sides, a track adjustably secured on said standard and adapted to abut against said carriers, and means adapted to partially rotate each carrier at a predetermined point on the track.

6. In a device of the class described the combination with a standard of tracks adjustably supported thereon and each having an opening therein out of register with that in the other, a frame journaled on the standard, rotatable carriers on said frame adapted to travel against the tracks, and means adjacent the opening in each track adapted to partially rotate a carrier as it passes said opening.

7. In a device of the class described the combination with a standard of annular tracks adjustably engaged thereon one above the other, a frame journaled on said standard and extending outwardly beyond the tracks, carriers rotatively supported on said frame and having sides curved complementally with the tracks, and means for partially rotating each carrier as it passes a given point in the track.

8. In a device of the class described the combination with a standard of a circular track thereon, vertical shafts about said track, means journaled on the standard adapted to support said shafts, a sign carrier journaled on each shaft and provided with curved sides adapted to travel against the track, and means on the track adapted



to partially rotate each carrier as it moves therepast.

9. In a device of the class described the combination with a standard of a plurality  
5 of annular, discontinuous tracks thereon, each having an inturned end, a frame journaled on said standard, sign carriers rotatively mounted on said frame and adapted to travel against the outer surfaces of said  
10 tracks and a spring on each track adapted to

rotate the carriers as they approach said inturned ends.

In witness whereof I have hereunto subscribed my name in the presence of two witnesses.

JOHN LAWSON.

Witnesses:

W. W. WITHEBURG,  
W. A. SWAREN.