

No. 749,441.

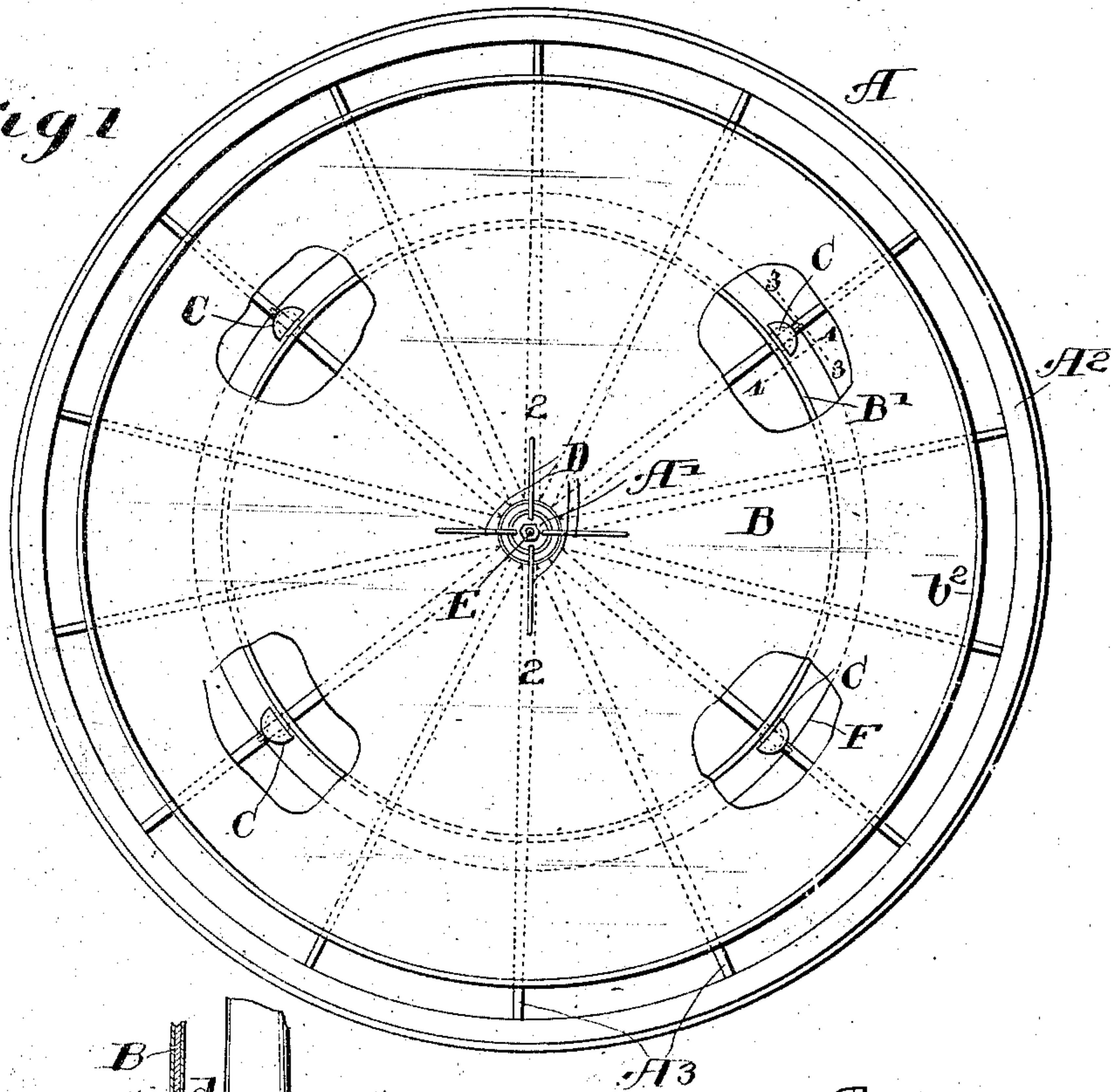
PATENTED JAN. 12, 1904.

D. JONES.  
ADVERTISING DISPLAY DEVICE.

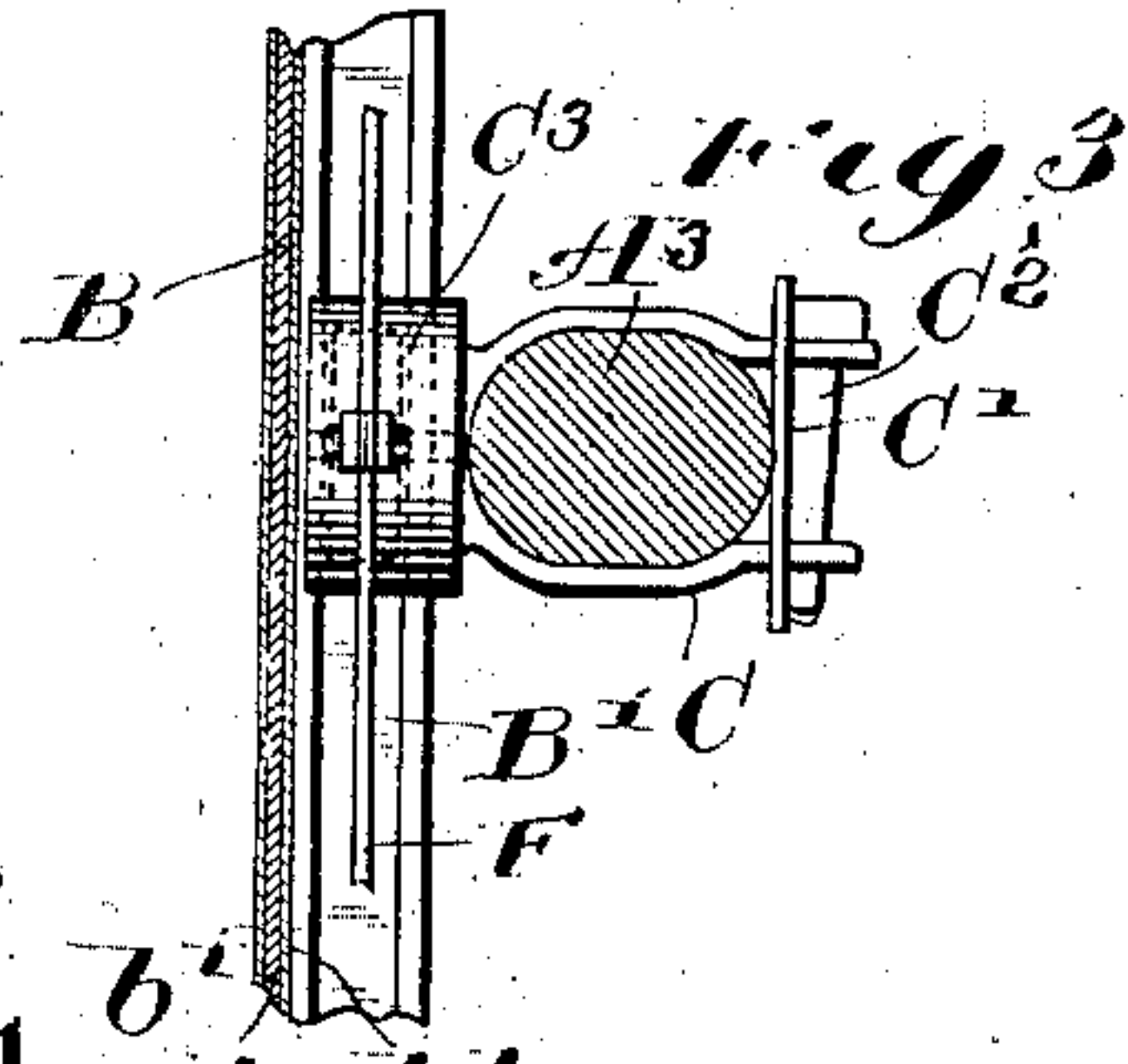
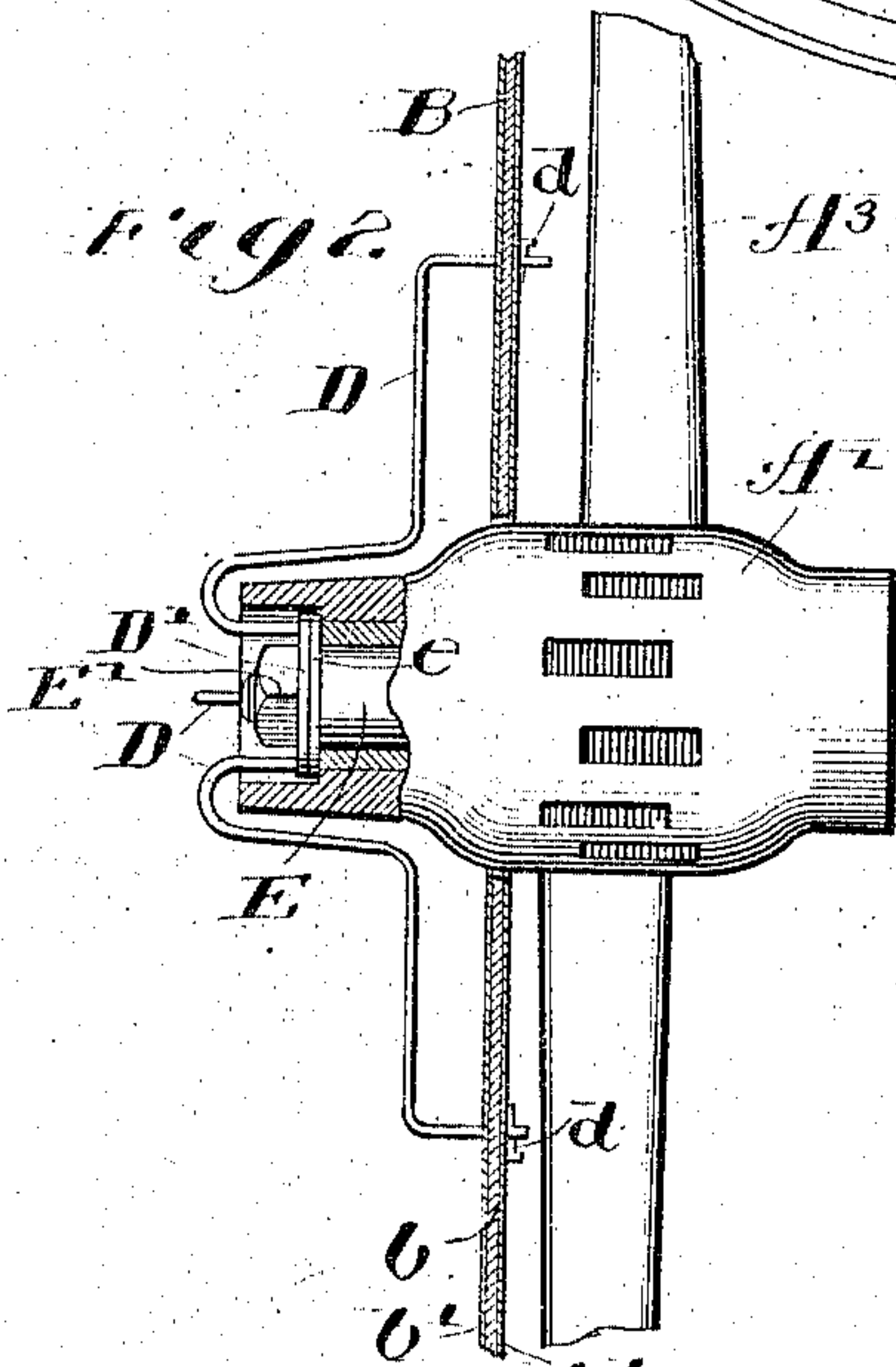
APPLICATION FILED JAN. 30, 1903.

NO MODEL.

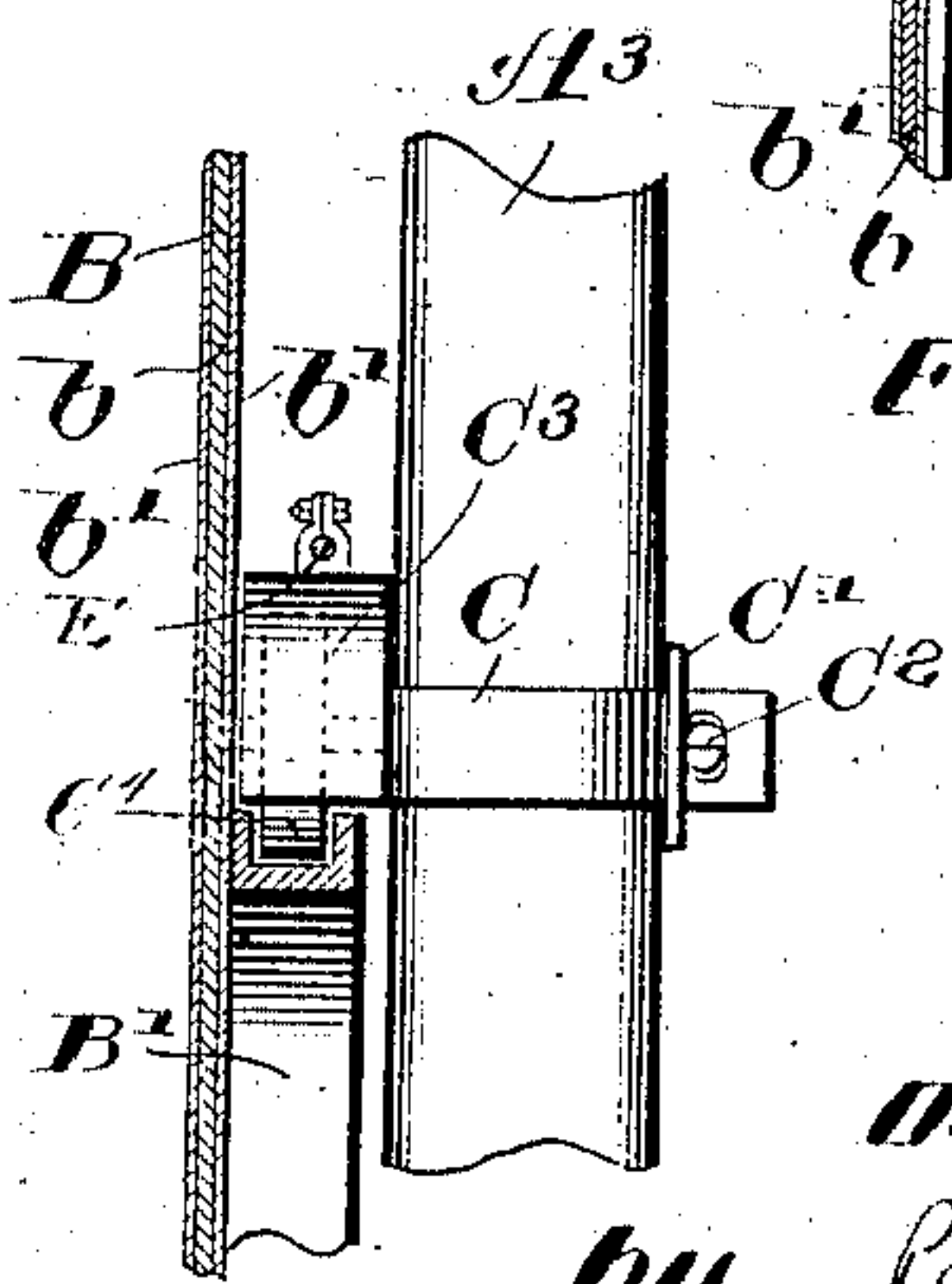
*Fig 1*



*Fig 2*



*Fig 4*



Witnesses: b'  
Carl H. Crawford  
George R. Wilkins

Inventor:  
Dora Jones  
by Poole & Brown  
her Attorneys



# UNITED STATES PATENT OFFICE.

DORA JONES, OF CHICAGO, ILLINOIS.

## ADVERTISING-DISPLAY DEVICE.

SPECIFICATION forming part of Letters Patent No. 749,441, dated January 12, 1904.

Application filed January 30, 1903. Serial No. 141,117. (No model.)

*To all whom it may concern:*

Be it known that I, DORA JONES, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Advertising-Display Devices; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a novel advertising-display device adapted to be supported at the outer side of a vehicle-wheel in such manner as to be stationary or non-rotative notwithstanding the rotation of the wheel whereby the advertising matter displayed on the device is always in proper position for display and inspection.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a side elevation of a wheel, showing my improved advertising-display device attached thereto, said device being broken away to show parts in rear thereof. Fig. 2 is an enlarged sectional view, partially in elevation, taken on line 2 2 of Fig. 1. Figs. 3 and 4 are details illustrating the manner of supporting the device on the wheels, taken on lines 3 3 and 4 4 of Fig. 1.

As shown in said drawings, A designates a vehicle-wheel comprising the usual hub A', a surrounding rim A'', and radial spokes A'', extending between and connecting the hub A' with the rim A'.

A display device made in accordance with my invention embraces a sign-body having the form of a disk B, as herein shown, which is located in front of the wheel and is supported in a manner to remain stationary notwithstanding the rotation of the wheel. Said disk is herein shown as made of a metal plate b, covered on both sides by a fibrous covering or layer b' b'', such as canvas, in the manner shown in my prior application for United States Letters Patent, Serial No. 132,531, filed November 24, 1902, and is provided at its edge with a binding-rim b''. Said disk is supported in place by the following devices:

The disk is provided on its inner face with a circular track B'. (Shown more clearly in Figs. 3 and 4.) Said track is made of channel form with the groove directed outwardly, as herein shown, though, if desired, it may be directed inwardly. An advantage of directing the groove outwardly is that it is not likely to become filled with mud, dirt, or the like.

C C designate a plurality of clips which are attached to the spokes of the wheel, the arms of said clips extending on the opposite sides of the spokes and through apertured plates C', which bear against the inner sides of the spokes. Wedge-shaped cotter-pins C'' extend through apertures in the outer ends of said arms outside of said plates to hold the parts in place. The clips, which are preferably made of cast metal, are provided on their outer ends with heads C'', which are made hollow to receive cylindric rollers C'', which are rotatively mounted on pins c, (shown in dotted lines in Figs. 3 and 4,) which extend transversely through the rollers and the side parts of said hollow heads. Said rollers are located outside of the track B' of the disk and rest and roll in the channels of said track, as clearly shown in Figs. 3 and 4. Preferably four rollers are provided and disposed symmetrically about the track, as shown in Fig. 1, whereby said disk is uniformly supported on the wheel in all angular positions which they may assume in the rotation thereof. If desired, certain of the rollers may be placed to bear on the inside of the track and others upon the outside of the track. The engagement of the rollers C'' with the channeled rail acts to hold the disk from undue lateral vibration. The disk is held from turning with respect to the wheel by means of a frame consisting, as herein shown, of a plurality of angular bars D D. Said bars are attached to the axle E, upon which the hub is mounted, and are attached at their inner ends to the disk. As herein shown, said inner ends of the bars extend through openings in the disk, and the ends of said bars interiorly inside the disk are apertured to receive wedged cotter-pins d, which hold said bars in place on the disk. Said arms



project laterally outwardly from said disk a short distance and are thence turned downwardly in parallel relation to the face of the disk, thence bent outwardly generally parallel with the outer end of the hub, and are turned inwardly at their ends to enter the outer hollow end of the hub. The extreme ends of said bars are attached to a ring D', which fits over the reduced end of the axle between the axle-nut E' and the shoulder of the axle. As herein shown, a washer *e* of ordinary form is interposed between said ring and the shoulder of said axle. The frame just described is held in place on said axle by reason of the clamping engagement of the ring D' between the nut and the shoulder of the axle, said nut being clamped sufficiently tight against the ring D' to prevent rotation of said ring. The frame described not only holds said disk from rotation relatively to the axle, but also supports the central part of the disk. The bars D of said frame may extend radially outwardly a distance greater than that shown to afford a broader support for the disk. Other means may be employed for connecting the central frame with the wheel-axle E.

The rollers C', in conjunction with the track B', constitutes a roller-bearing for the disk on the wheel, and so far as its function as a roller-bearing is concerned the radial location of said bearing may be varied—that is to say, it may be located closer to or farther from the hub than herein shown. In some instances the bearing may be omitted and the disk supported directly from the axle by means of the central frame, comprising, as herein shown, the angular bars D.

In order to counteract any tendency of the clips C in the lower part of the wheel from slipping downwardly on the spokes by reason of the outwardly-tapered form of said spokes in the event of such a tendency existing, said clips may be bound together by means of a stiff-wire ring F, (shown in Fig. 1,) attached thereto in any suitable manner.

The construction described is an extremely simple one, while at the same time the display-disk is held firmly in place and prevented from excessive vibration on the wheel. Moreover, the construction is very light and a highly-desirable feature in constructions of this character.

Another important advantage of the construction is that it may be readily applied to any size or type of wheel and has no parts which mar or disfigure the wheel.

I claim as my invention

1. An advertising-display device for vehicle-wheels comprising a sign-body provided with a central opening through which is designed to extend the wheel-hub, means for connecting the sign-body with the wheel-axle, and roller-bearings for said sign-body located between said central opening and the margin of the sign-body and having parts adapted to

be supported on the wheel, said roller-bearings serving to prevent lateral vibration of the outer part of the sign-body.

2. An advertising-display device for vehicle-wheels comprising a sign-body provided with a central opening through which is designed to extend the wheel-hub, means for connecting the sign-body with the wheel-axle, a circular track on the inner face of said sign-body between said central opening and the outer margin thereof, and roller-bearings adapted to engage said track and to be supported on the wheel.

3. An advertising-display device for a vehicle-wheel comprising a sign-body, a frame for connecting the body with the vehicle-axle comprising bars extending at their inner ends through said sign-body, cotter-pins extending through apertures in the inner ends of said bars inside said sign-body, said bars extending laterally outwardly from said body and means for attaching the outer ends of said bars to the wheel-axle.

4. An advertising-display device for a vehicle-wheel comprising a sign-body, means for connecting the sign with the wheel-axle, a circular grooved track attached to the inner face of said sign-body, and roller-bearings adapted to engage said track and to be supported on the wheel.

5. An advertising-display device for vehicle-wheels comprising a sign-body provided with a central opening through which is designed to extend the wheel-hub, a circular track extending laterally inwardly from the inner face of said sign-body between said central opening and the margin thereof, roller-bearings engaging said track and adapted to be supported on the wheel, and means for preventing rotation of the sign-body.

6. An advertising-display device for vehicle-wheels comprising a sign-body provided with a central opening through which the wheel-hub is designed to extend, a circular grooved track extending laterally inwardly from the inner face of the sign-body between said central opening and the margin thereof, roller-bearings adapted to be supported on the wheel and engaging in said grooved track, and means for holding said sign-body from rotation.

7. An advertising-display device for a vehicle-wheel comprising a sign-body, a circular track on the inner face of said sign-body, a plurality of roller-bearings adapted to be supported on the wheel-spokes and to engage said track, and a circular ring connecting said roller-bearings.

8. An advertising-display device for vehicle-wheels comprising a sign-body, a circular grooved track on the inner face of said sign-body, the groove of which opens radially outwardly, and bearing-rollers adapted to be supported on the wheel-spokes and to engage said grooved track.

9. In combination with a rotatable wheel; a

disk concentrically arranged at one of the faces of said wheel; an annular guide connecting the disk and the wheel about midway the center and periphery of the disk; and  
5 means for preventing rotation of the disk as the wheel revolves.

10. In combination with a rotatable wheel; a disk concentrically arranged at one of the faces of said wheel; an annular flange secured  
10 to the disk about midway its center and periphery; guide-pulleys secured to the wheel

and engaging the annular flange; and means for positively holding the disk from rotating as the wheel revolves.

In testimony that I claim the foregoing as  
my invention I affix my signature, in presence  
of two witnesses, this 28th day of January,  
A. D. 1903.

DORA JONES.

Witnesses:

C. CLARENCE POOLE,  
BERTHA A. PRICE.