A. RUSSELL.

ADVERTISING SIGN.

APPLICATION FILED MAR. 10, 1908.

938,710.

Patented Nov. 2, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

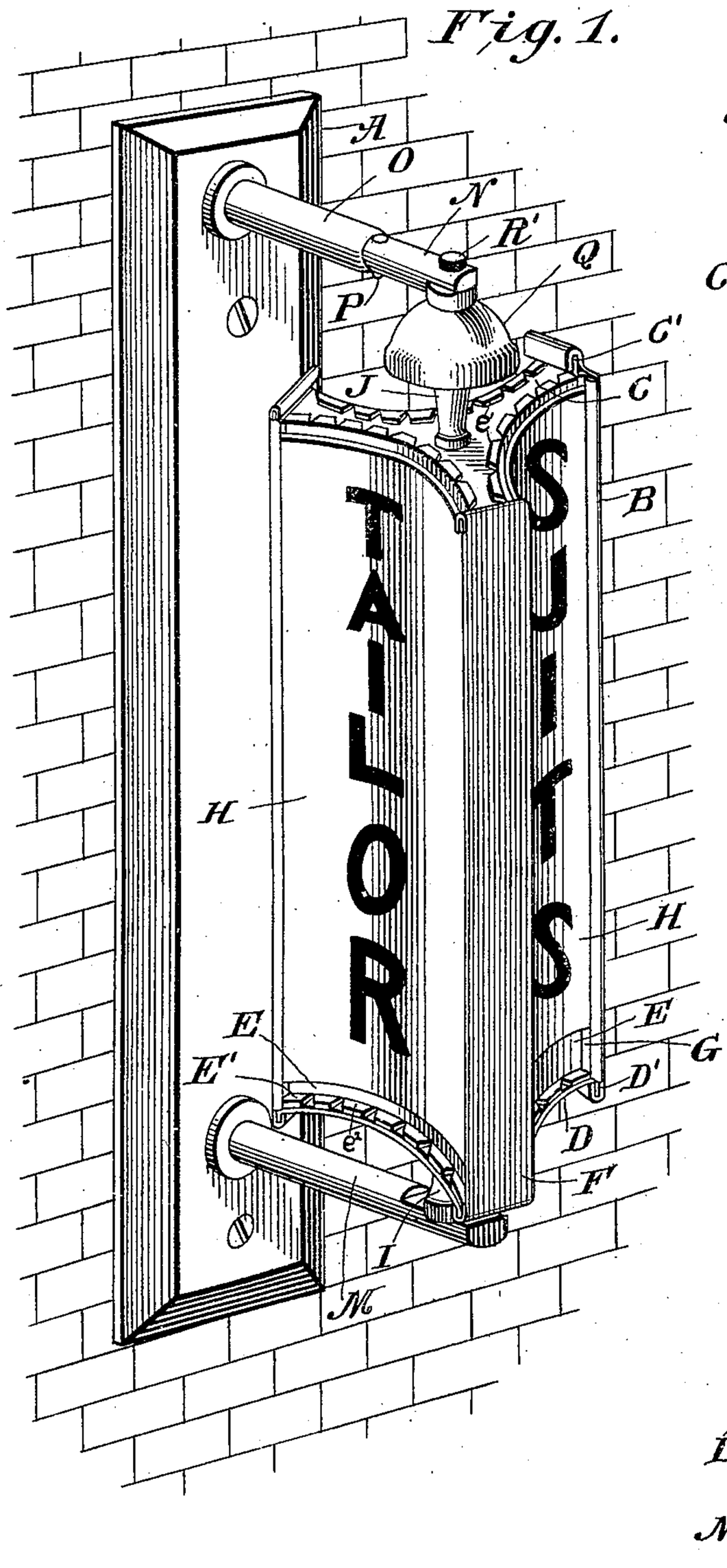
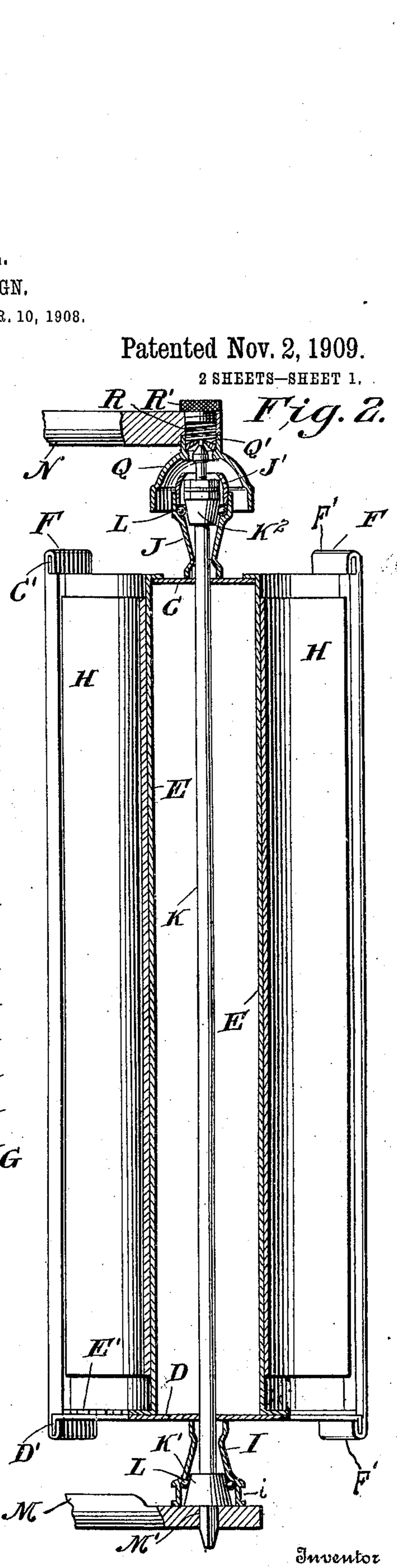


Fig. 2.



Witnesses

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Fig. 3.

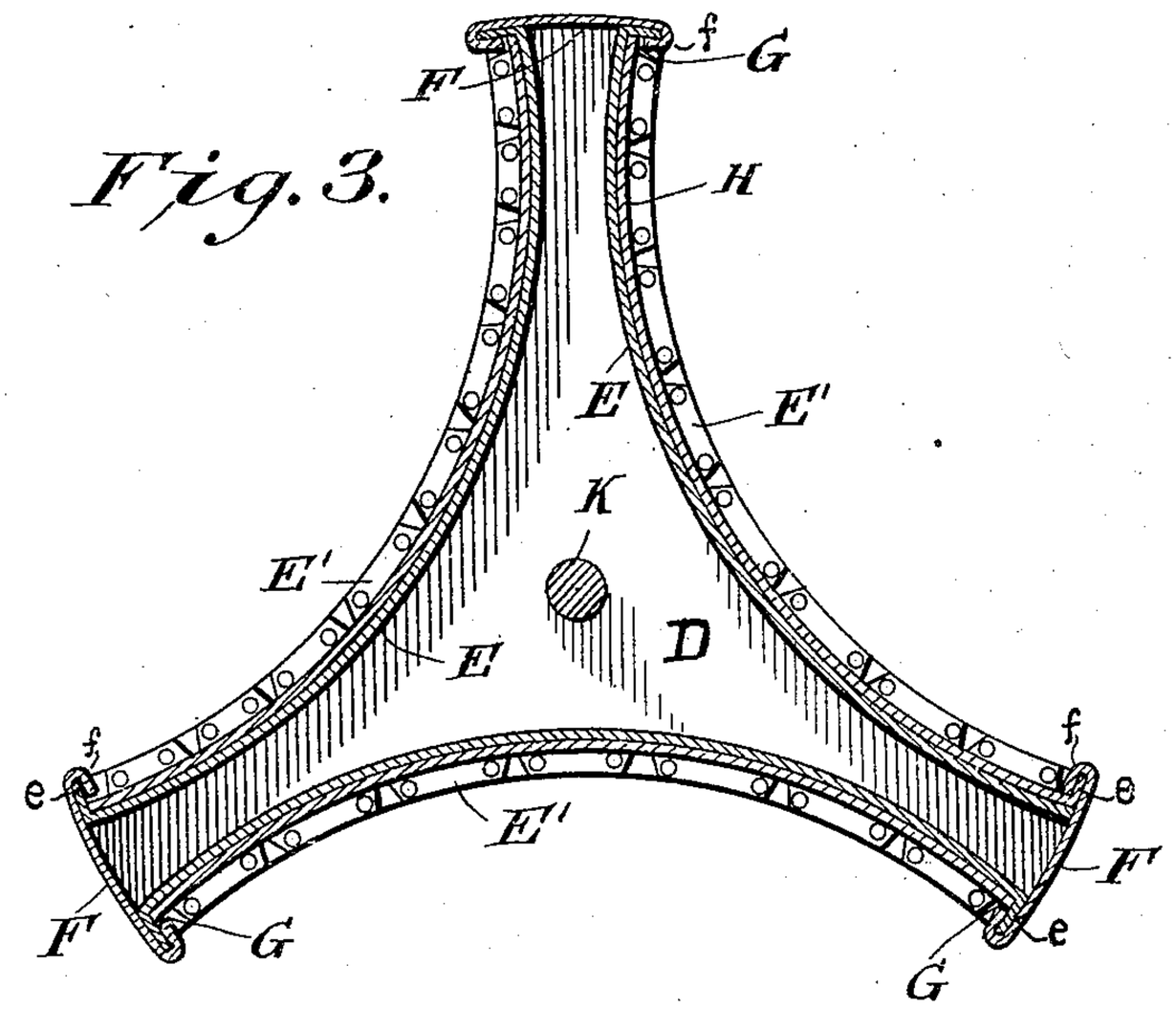


Fig. 4.

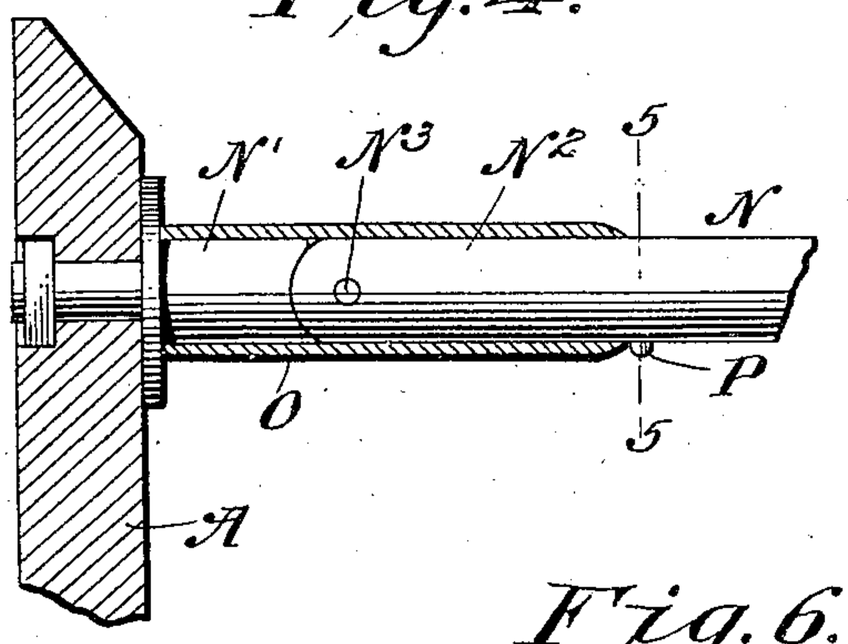


Fig. 5.

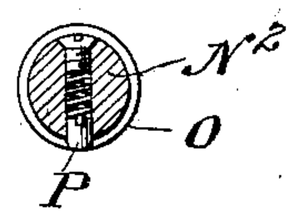
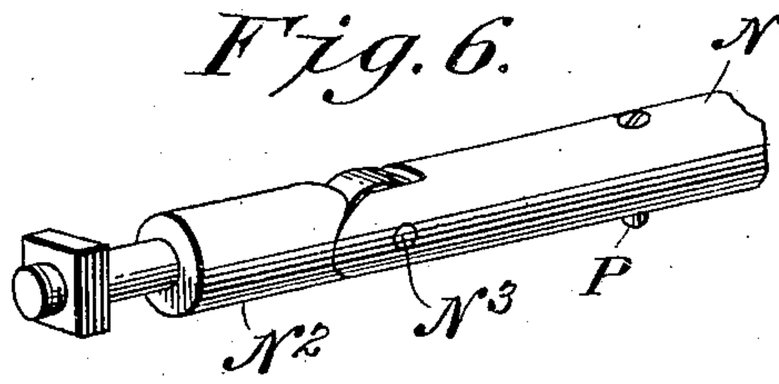


Fig. 6.



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UNITED STATES PATENT OFFICE.

ARTHUR RUSSELL, OF MERCHANTVILLE, NEW JERSEY.

ADVERTISING-SIGN.

938,710. Specification of Letters Patent. **Patented Nov. 2, 1909.**

Application filed March 10, 1908. Serial No. 420,129.

To all whom it may concern:

Be it known that I, ARTHUR RUSSELL, a citizen of the United States, residing at Merchantville, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Advertising-Signs, of which the following is a specification.

This invention relates to advertising signs, and particularly to signs which are rotated by the wind, the object of the invention being to provide a sign which is so constructed that it shall revolve very easily under the impulse of the wind.

Another object of my invention is to provide a sign adapted to carry on its sides a series of removable advertising cards, these cards being carried in guide-ways but adapted to be very easily slid from the guide-ways for the insertion of new cards.

Another object of my invention is to improve the detail construction of signs of this character whereby the sign may be very much strengthened, and yet at the same time constructed at less cost than other signs of like character known to me.

A still further object of the invention is to provide a rotatable sign with ball bearings, and to so shield these bearings that rain or snow cannot lodge thereon and thus impede the rotation of the sign.

These objects are attained by the novel arrangement and construction of parts hereinafter fully described and shown in the accompanying drawings in which,

Figure 1, is a perspective view of my improved sign secured to the wall of a building. Fig. 2, is a vertical section through the same, the supporting arms being broken off. Fig. 3, is a horizontal section through the body of the sign. Fig. 4, is a detail fragmentary section of the support and supporting arm. Fig. 5, is a section on line 5—5 of Fig. 4, and Fig. 6, is an enlarged perspective view of the supporting arm.

In the drawings A designates a base adapted to be attached to a wall, or supported in any other desired manner. This base is provided with supporting arms O, M, which will be later described in detail. The sign which is carried upon these arms is indicated in general by the letter B. This sign is preferably of aluminium or other relatively thin and light sheet metal, and is composed broadly speaking entirely of interlocked plates.

The top and bottom plates C, D, of the sign are approximately triangular in plan, but with the corners of the triangle cut off as shown clearly in Fig. 3, the sides of the triangle being inwardly curved or concaved. The cut off corners of the top and bottom plates are upwardly bent as shown at C′, D′. The top and bottom plates are connected together by plates E forming the sides of the sign. These plates, which are preferably concaved laterally, are provided with outwardly turned marginal flanges *e*. The upper end of each plate E is inwardly turned as at *e′* and the lower end of the plate is outwardly turned as at e^2. Inasmuch as the plate is concaved, it is of course necessary that these inwardly and outwardly turned margins *e′*, e^2, should be slit at intervals so as to permit this slitted flange to accommodate itself to the curve of the plate. The slitted flange *e′* may be attached to the upper plate C in any manner, as by soldering the flange to the plate, but I prefer to use rivets for this purpose. The lower plate D is somewhat larger than the plate C by the width of the flange e^2, and this flange is attached to the plate in the same manner as the flange *e′* to the plate C by rivets or solder. It will thus be seen that the lower plate D will project out beyond the outer face of the plates E, and that this will form a support E′ for the lower end of the display cards H as will be later referred to.

In order to connect the side plates E to each other, to close the gap between the side plates, and to furnish a projecting edge at the margins of the side plates against which the wind may contact to assist in turning the sign, I provide the longitudinal corner plates F. These plates are provided with inwardly turned side flanges *f* plainly shown in Fig. 3, which are bent over and interlocked with the side flanges, or outwardly projecting margins *e* of the plates E.

It will be noted from Fig. 3 that the inwardly turned margins *f* of the plate F do not extend so far inward on the flange *e* as to contact with the body of the plate E, but a space is left the thickness of an ordinary advertising card such as is used in this device. This inwardly turned flange *f* therefore forms in connection with the plate E

a recess G into which the margin of the card H fits and slides. At its upper and lower ends the plate F is inwardly and downwardly bent as at F′ to engage over the projecting flanges C′, D′.

The card or sign plate H is made of any suitable material such as paper, metal or pasteboard, and is designed to be slid into place from the top, the margins of the sign engaging behind the inwardly turned flanges *e* and the lower end of the card resting against the stop ledge E′ formed by the bottom plate projecting out beyond the plates E. This prevents the card from sliding down through the sign.

K designates a fixed shaft which passes entirely through the sign and around which the sign rotates. At its lower end the shaft is provided with a square tapering head adapted to project through the opening M′ in the lower support M, while at its upper end the shaft is supported in the end of the arm N as will be later described. Both at its upper and lower ends the shaft is formed with the cones K′, K², while surrounding the cones are the conical casings I, J. These are attached at the upper and lower ends respectively to the top and bottom plates of the sign and project beyond the cones K′, K² and are formed with raceways in which balls L are carried, these balls contacting with the cones K′, K².

The lowermost casing I extends down nearly to the upper face of the arm M, but the upper casing is open at its upper or wider end and is closed by a cap J′ which surrounds the upper end of the cone K², and fits down within the upper end of the casing J closing the same and preventing the possibility of the balls working out. By removing the cap J′ the balls L can be readily inserted.

In order that the sign may be turned by a motor if desired, the lower casing I is provided with an annular groove *i* in which a belt can be placed leading to any desired motor. My improved support which forms the subject of another application for patent comprises a base A and extending upwardly therefrom adjacent to its lower end is an arm M which is provided with a reduced outer end having a square opening M′ into which the end of the shaft K fits.

Extending outwardly from the base A adjacent to its upper end is a secondary arm N shown in detail in Fig. 4, formed of sections N′, N² hinged together as shown at N³ for movement in a vertical plane. Over these two sections at the joint thereof is slipped a sleeve O which when in place locks the sections in a horizontal position, the sleeve being in turn locked by a spring actuated pin P mounted in the section N². The spring forces this pin outwardly and thus prevents the removal of the sleeve O under ordinary circumstances.

The outer end of the section N² is provided with a circular, outwardly flaring hood Q concentric to, but somewhat larger than the bearing cup or casing J. This hood is provided with a central opening through which the upper cone shaped end of the shaft K extends. On an annular shoulder formed in said opening is mounted a plug Q′ having a conical seat adapted to be forced down over the conical head by a coiled spring R arranged in a bore formed in the end of section N² and secured therein by a screw cap R′. It will be seen that by this arrangement the sign can be easily detached by simply sliding the sleeve O outwardly, which will allow the section N² to be swung upward, thus permitting the lower end of the shaft to be readily removed from the square opening M′ in the lower arm, and to be withdrawn from engagement with the plug Q′ at its upper end. The pin P has a rounded head whereby as the sleeve is forced against it in either direction the pin will be depressed until the sleeve has passed the pin.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. A sign comprising substantially triangular top and bottom plates, concave plates forming sides secured to said top and bottom plates and having outwardly projecting flanges at their lateral margins, longitudinal corner strips secured to said top and bottom plates and having inwardly turned flanges on their side edges adapted to engage with the outwardly turned flanges of the side plates and a shaft passing through said top and bottom plates.

2. A sign comprising triangular top and bottom plates, the corners of said triangular plates being cut off and vertically bent to form corner flanges, concave plates forming sides, each having an inwardly bent flange at the upper end, an outwardly bent flange at the lower edge, and outwardly projecting flanges, longitudinal corner strips having inwardly and downwardly bent flanges interlocking with the corner flanges of the top and bottom plates, said strips having lateral inwardly folded margins adapted to engage with the side flanges of the side plates, and a shaft passing through the top and bottom plates.

3. A sign comprising substantially triangular top and bottom plates, the corners of said plates being cut off and turned vertically to form corner flanges, the lower plate being larger than the upper plate, concave side plates each having an inwardly turned upper flange adapted to engage with the top plate, an outwardly turned lower

flange adapted to engage with the bottom plate, and lateral outwardly turned flanges, longitudinal corner strips having flanges at their upper and lower ends engaging with the corner flanges of the top and bottom plates, said corner strips being provided on their edges with inwardly folded margins of less width than the lateral flanges of the side plates and adapted to be bent over and interlocked with said side flanges thereby to form lateral guide recesses on each side plate for the insertion of display cards, and a shaft passing through said top and bottom plates.

4. An advertising sign comprising a base, arms projecting from said base, a sign revolubly mounted between said arms, said sign comprising substantially triangular top and bottom plates having the corners thereof cut off, concave side plates connecting said top and bottom plates, corner plates connecting said top, bottom and side plates and forming guide-ways therewith, advertising cards adapted to be arranged in said guide-ways, bearings carried by the top and bottom plates and a fixed shaft extending through said bearings and secured at its ends in said supporting arms.

5. In a rotatable sign, a central fixed shaft on which the sign is mounted, supports in which the upper and lower ends of said shaft are carried, bearing cones on said shaft, casings mounted on the upper and lower ends of said sign and surrounding the shaft and its cones, anti-friction balls located between the casing and said cones, a removable cover closing the upper open end of the upper casing having its upper portion extended inward toward the shaft, and a circular outwardly flared shield carried by the uppermost support and extending down around said uppermost bearing casing.

6. In a revolving sign, a central shaft, a fixed support in which the lower end of said shaft is mounted, a hinged support in which the upper end of said shaft is mounted, a bearing on the upper end of the sign through which said shaft passes, and an outwardly and downwardly cup shaped shield carried by said support and extending downward below the bearing of said sign on said shaft.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARTHUR RUSSELL.

Witnesses:
M. C. LYDDANE,
R. H. KRENKEL.