June 9, 1942. P. B. McBRIDE 2,285,735

STREET SIGN

Filed Aug. 17, 1940 2 Sheets-Sheet 1

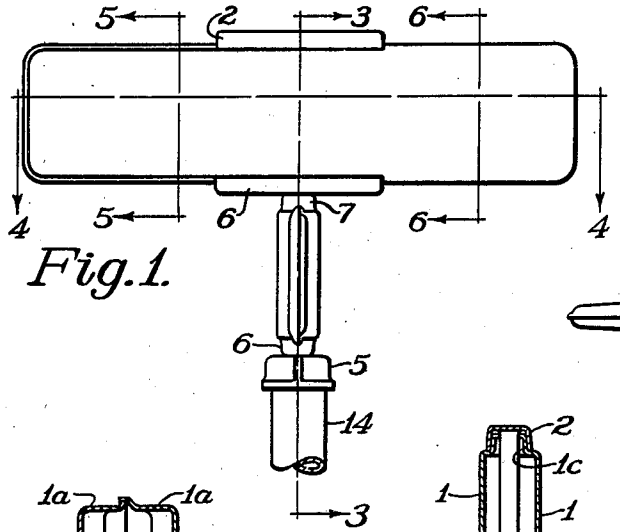

Fig.1.

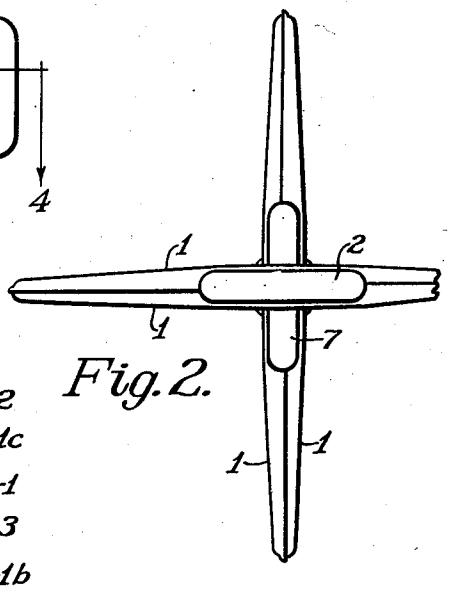

Fig.2.

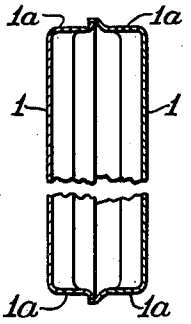

Fig.5.

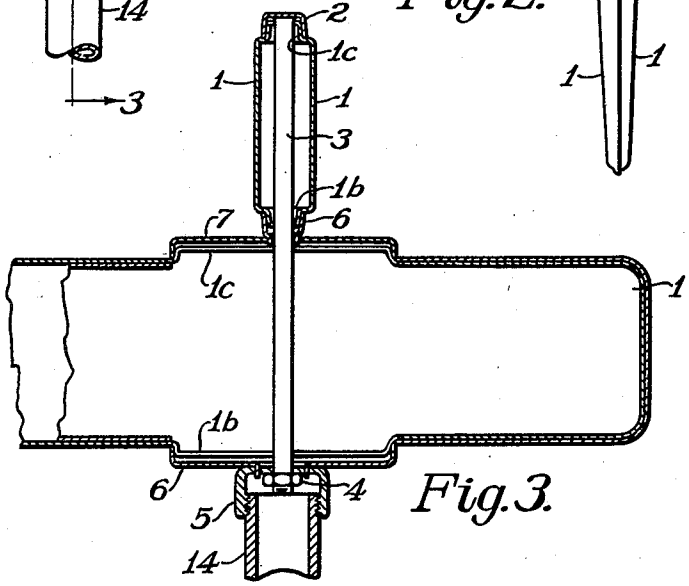

Fig.3.

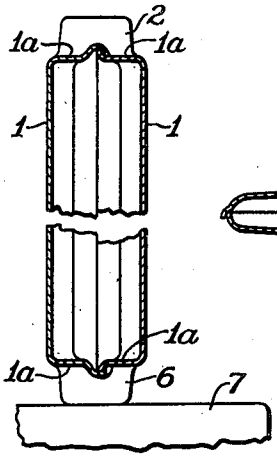

Fig.6.

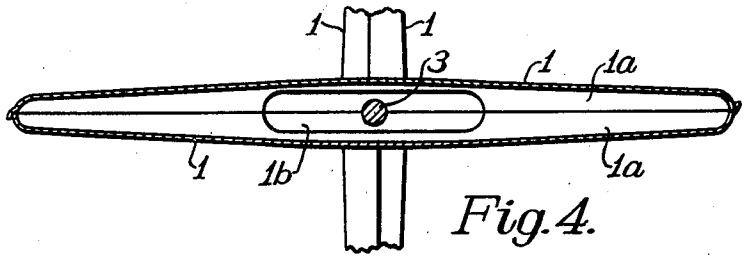

Fig.4.

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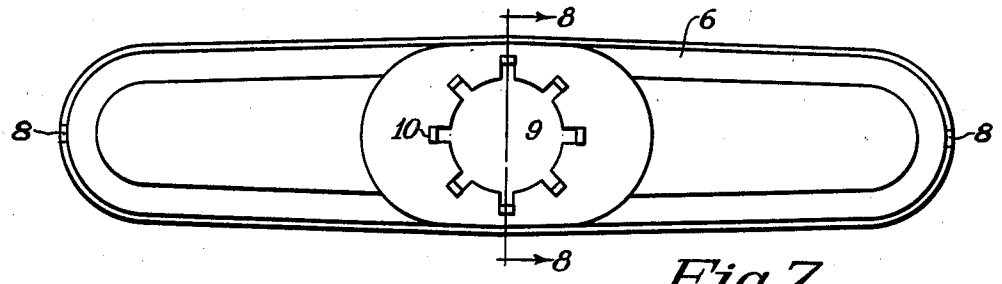

Fig. 7.

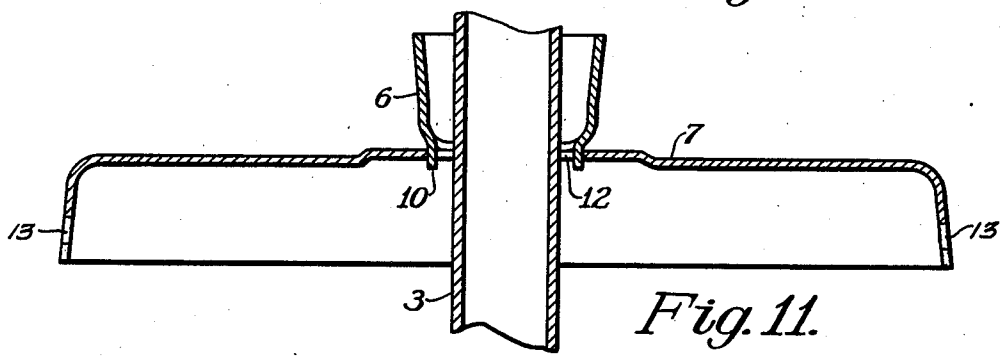

Fig. 11.

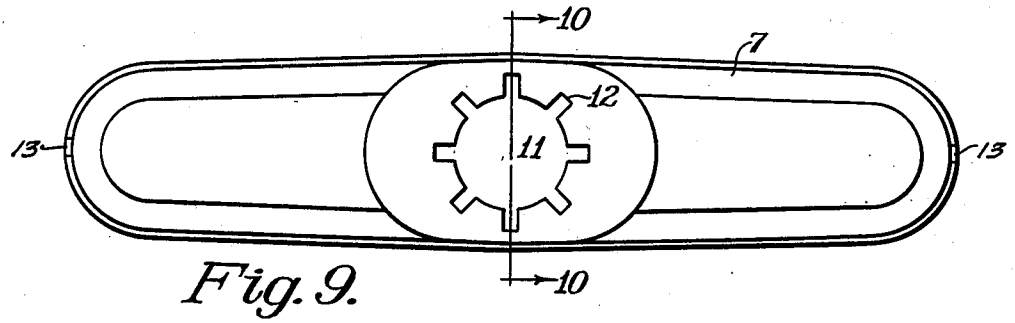

Fig. 9.

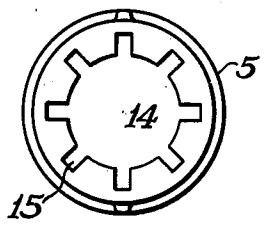

Fig. 12.

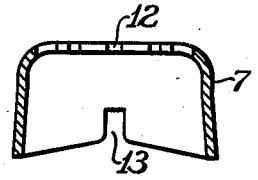

Fig. 10.

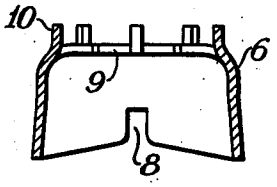

Fig. 8.

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UNITED STATES PATENT OFFICE

2,285,735

STREET SIGN

Pierre B. McBride, Louisville, Ky., assignor to Porcelain Metals Corporation, Louisville, Ky., a corporation of Kentucky

Application August 17, 1940, Serial No. 353,043

11 Claims. (Cl. 40—145)

This invention relates to signs adapted for general outdoor use, particularly to those signs adapted for use at the intersection of streets, public places and the like.

The principal object of this invention is to provide a sign that is substantially indestructible, and relatively free from wear and corrosive action of the elements.

A further object of this invention is to provide a sign having a plurality of replaceable parts, which parts are joined together by telescoping members retained in operative relation by a single draw-bolt extending vertically through the body of the sign.

Another object of this invention is to provide a sign having a simple and positive arrangement for securing the sign plates in various horizontal angular positions, such as is necessary at intersections where the streets do not cross at right angles to each other.

A further object of this invention is to provide a sign structure having a plurality of similar concave sign-plates that are assembled back to back to form a substantially hollow body.

The advantages of these and other objects will become apparent as the following description is read in connection with the accompanying drawings, in which:

Figure 1 is an elevational view of the assembled sign;

Figure 2 is a plan view of the assembled sign, but with one end of the upper sign-plate assembly broken away;

Figure 3 is a vertical section taken along line 3—3 of Figure 1;

Figure 4 is a sectional view taken along line 4—4 of Figure 1, but with the ends of the lower sign-plate assembly broken away;

Figure 5 is a sectional view taken along line 5—5 of Figure 1;

Figure 6 is a sectional view taken along line 6—6 of Figure 1;

Figure 7 is a plan view of ferrule 6;

Figure 8 is sectional view along line 8—8 of Figure 7;

Figure 9 is a plan view of ferrule 7;

Figure 10 is a sectional view taken along line 10—10 of Figure 9;

Figure 11 is a partial elevational view in section, for illustrating radial teeth 10 of the lower ferrule 6 of the upper sign-plate assembly engaging corresponding radial notches 12 of the upper ferrule 7 of the lower sign-plate assembly; and

Figure 12 is a plan view of a pipe cap 12, which cap secures the sign assembly to a pipe standard.

From the accompanying drawings it will be apparent that this invention has particular application to the construction of sheet metal signs having a vitreous-enamel coating, although other coatings and materials may be employed without departing from the spirit thereof.

In the illustrated embodiment of the invention, the supporting post or column comprises a tubular member 14, which column may be set firmly into the ground, or secured to any vertical structure by means of a suitable bracket, and the sign assembly is secured thereto by means of an internally threaded cap 5.

As illustrated in Figure 12, the cap 5 has a central aperture 14 for receiving a draw-bolt 3. Cap 5 also has a plurality of radial notches 15 adapted to receive corresponding radial teeth 10 of the lower ferrule or cap 6 of the lower sign-plate assembly.

The lower sign-plate assembly has an upper ferrule 7, which ferrule, as illustrated in Figures 9 and 10, has a central aperture 11 for receiving the draw-bolt 13, and a plurality of radial notches 12 for receiving corresponding radial teeth 10 of the lower ferrule 6 of the upper sign-plate assembly.

The upper sign-plate assembly has an upper ferrule 2, which ferrule, as illustrated in Figure 3, has the upper end of bolt 3 fixedly secured to the inner face thereof, as, for instance, by welding.

The upper and lower sign-plate assemblies each consist of two concave sign-plates assembled back to back, and with their marginal edges inter-engaging as illustrated in Figures 5 and 6. In this respect it is to be understood that the sign-plates of each assembly have exactly the same mechanical construction, except for the necessary wording on the faces of the sign-plates.

As illustrated in Figures 3 and 4, each sign-plate 1 has a perimetrical flange 1*a* having the opposing horizontal edges notched along the central vertical axis thereof, to form suitable apertures for receiving the draw-bolt 3, when two such sign-plates are assembled back to back.

As illustrated particularly in Figures 5 and 6, the edges of the flange 1*a*, to either side of the central axis, are constructed and arranged so that the edges inter-engage, when the two sign-plates are assembled back to back.

As further illustrated in Figures 3 and 4, each opposing horizontal edge is offset outwardly, so as to form obrotund bosses 1*b* and 1*c* when the two sign plates are assembled back to back.

Therefore, to assemble the sign, two sign-plates 1 having the required wording or the upper sign-plate assembly are placed back to back with the edges of the perimetrical flange inter-engaging. A ferrule 6 is then pressed over the boss 1b formed by the aligned offset portions of the lower horizontal edges of the upper sign-plate assembly. Draw-bolt 3 is then passed through the apertures formed by the aligned notches in the horizontal edges of the upper sign-plates, and through an aperture 9 in the ferrule 6.

The ferrule 2, which ferrule is fixedly secured to the draw-bolt 3, is then pressed over the boss 1c formed by the aligned offset portions of the upper horizontal edges of the sign-plate assembly, and the upper sign-plate assembly is completed.

The lower sign-plate assembly is similarly produced by placing two sign-plates 1 having the required wording for the lower sign-plate assembly back to back, and with the edges of the perimetrical flange inter-engaging. A ferrule 6 is then pressed over the boss 1b formed by the aligned offset portions of the lower horizontal edges of the lower sign-plate assembly. The ferrule 7 is then pressed over the boss 1c formed by the aligned offset portions of the upper horizontal edges of the lower sign-plate assembly, and the lower sign-plate assembly is completed.

To assemble the upper and lower sign-plate assemblies, the draw-bolt 3 is passed through the apertures formed by the aligned notches in the horizontal edges of the lower sign-plates, and the radial teeth 10 of the ferrule 6 on the upper sign-plate assembly are pressed into engagement with the required radial notches 12 of the ferrule 7 on the lower sign-plate assembly. In this respect it is to be understood that the teeth 10 engage the required notches 12 to provide the necessary angular relation between the sign-plate assemblies.

Draw-bolt 3 is then passed through aperture 14 of cap 5, and the radial teeth 10 of the ferrule 6 on the lower sign-plate assembly are pressed into engagement with the corresponding radial notches 15 of cap 5, and the upper and lower sign-plate assemblies are secured one to the other and to the cap 5 by means of a nut 4.

As illustrated in Figures 8 and 10, the end walls of ferrules 6 and 7 respectively are notched at 8 and 13 to slip over the inter-engaged edges of the respective sign plates 1, and it is to be understood that the end walls of the ferrule 2 are similarly notched.

From the foregoing it will be apparent that each individual sign plate is readily replaceable, and that the sign-plates are secured together by a single draw-bolt 3, and co-operating ferrules 2, 6 and 7, which ferrules telescope corresponding portions of the sign-plates 1, and retain the plates assembled without the aid of a plurality of small bolts.

Having thus described the invention, I claim:

1. A sign comprising, two flanged sign plates arranged back to back with corresponding edges of the flanges inter-engaging to form a substantially enclosed sign body, the horizontal portion of each flange having its central portion offset vertically and in alignment with the corresponding offset portion of the adjacent sign plate to form a split boss projecting vertically from each horizontal edge of the sign body; and a retaining ferrule pressed over each boss for securing the sign plates together.

2. A sign comprising, two flanged sign plates arranged back to back with corresponding edges of the flanges inter-engaging to form a substantially enclosed sign body, the portions of the flanges enclosing the horizontal edges of the sign body each having their corresponding central portions offset vertically to form a split boss projecting outwardly from the respective horizontal edges of the sign body; a retaining ferrule pressed over each boss for securing the sign plates togther; a draw bolt fixedly secured to one of said ferrules, and extending between the sign plates and outwardly through the other of said ferrules; and a locking element on the outer end of the draw bolt adapted ot compress and lock the ferrules and plates in secured relation.

3. A sign comprising, two flanged sign plates arranged back to back with corresponding edges of the flanges inter-engaging to form a substantially enclosed sign body, the portions of the flanges enclosing the horizontal edges of the sign body each having their corresponding central portions offset vertically to form a split boss projecting outwardly from each respective horizontal edge of the sign body; a cap pressed over each boss for securing the sign plates together; the horizontal faces of the offset portions and the said cap having aligned apertures therein; and a draw bolt extending through the said apertures for compressing and locking the sign plates and caps in secured relation.

4. A sign comprising, a draw bolt; two sign plates arranged back to back and upon opposite sides of the said draw bolt, the horizontal edges of each sign plate having rearwardly projecting flanges operatively engaging the corresponding flanges of the adjacent plate for retaining the plates in spaced relation one to the other; aligned members extending vertically outwardly from each of the said flanges; retaining members arranged upon the said draw bolt and pressed over the aligned members of corresponding flanges for securing the sign plates together; and a locking element operatively associated with the retaining members and the draw bolt for retaining the sign plates and retaining members in secured relation.

5. A sign comprising, two sign plates arranged back to back and in spaced relation one to the other; means retaining the said plates in spaced relation; aligned members fixedly secured to the said plates and extending vertically outwardly from the horizontal edges of each corresponding sign plate; a retaining member pressed over the aligned members extending outwardly from the corresponding horizontal edges for securing the sign plates together; a draw bolt fixedly secured to the inner portion of one of said retaining members, and extending between the sign plates and outwardly through the other retaining member; and a locking element on the outer end of the draw bolt adapted to compress and lock the retaining members and the sign plates in secured relation.

6. A sign comprising, two sign plates arranged back to back and in spaced relation one to the other, the horizontal edges of each sign plate having rearwardly projecting flanges operatively engaging the corresponding flanges of the adjacent plate for retaining the plates in the aforesaid spaced relation; aligned members extending vertically outwardly from each of the said flanges; and a retaining member pressed over the aligned members of the corresponding flanges for securing the sign plates together.

7. A sign comprising, two sign plates curved

longitudinally and arranged back to back, the horizontal edges of each sign plate having rearwardly projecting flanges operatively engaging corresponding flanges of the adjacent plate for retaining the plates in spaced relation one to the other, each flange having a portion thereof offset vertically and in alignment with the corresponding offset portion of the adjacent sign plate; and a retaining ferrule pressed over the corresponding offset portions, for securing the sign plates together.

8. A sign comprising two sets of sign plates arranged transversely of each other, each set consisting of two flanged sign plates arranged back to back with corresponding edges of the flanges inter-engaging to form a substantially enclosed body, the portions of the flanges enclosing the horizontal edges of the sign body each having their corresponding central portions offset vertically to form a split boss projecting outwardly from the respective horizontal edges of the sign body; retaining caps pressed over the bosses of each sign body for securing the sign plates of each sign body together; the horizontal faces of the offset portions of each sign body, and all but the upper cap of the top sign body, having aligned apertures therein; a draw bolt fixedly secured to the inner portion of the upper cap of the top sign body and extending downwardly through said apertures and sign bodies; and a locking element on the free end of the said draw bolt adapted to compress and lock the caps and plates of each sign body in secured relation.

9. A sign comprising two sets of signs arranged transversely of each other, each set consisting of two sign plates having aligned members projecting vertically outwardly from the horizontal edges thereof; retaining caps pressed over the corresponding aligned members for securing the sign plates one to the other, one of the caps between the two sets of plates having a plurality of radial notches and the other of the caps between the two sets of plates having a like plurality of radial teeth meshing with said notches for maintaining the two sets of signs in a predetermined angular relation; and means adapted to compress and lock the two sets of sign plates in their angular adjusted relation.

10. A sign comprising, a post; a cap fitted over the upper end of the post having a circular aperture in the top wall thereof, the cylindrical wall of the said aperture having a plurality of splines formed longitudinally therein; a pair of sign plates having aligned members projecting vertically downwardly from the lower horizontal edge thereof; a retaining cap pressed over the corresponding aligned members for securing the sign plates one to the other, and having an aperture therein; a like plurality of teeth projecting downwardly from the bottom wall of the said retaining cap and axially from the aperture therein, said teeth adapted to mesh with the said splines for retaining the said sign plates in various positions of angular adjustments; and a draw bolt extending through the apertures and having a nut threaded thereon within said cap, for coupling the sign plates to the said retaining cap.

11. A street sign comprising, two flanged sign plates arranged back to back and having corresponding edges of the flanges in abutting relationship; aligned members projecting vertically from the horizontal portions of each flange; retaining ferrules pressed over the aligned members for securing the sign plates one to the other; and a draw bolt extending between the sign plates and through the retaining ferrules for compressing and locking the ferrules and sign plates together.

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