April 28, 1931. G. P. BUTLER 1,802,939

SIGN

Filed June 12, 1928

Fig. 1.

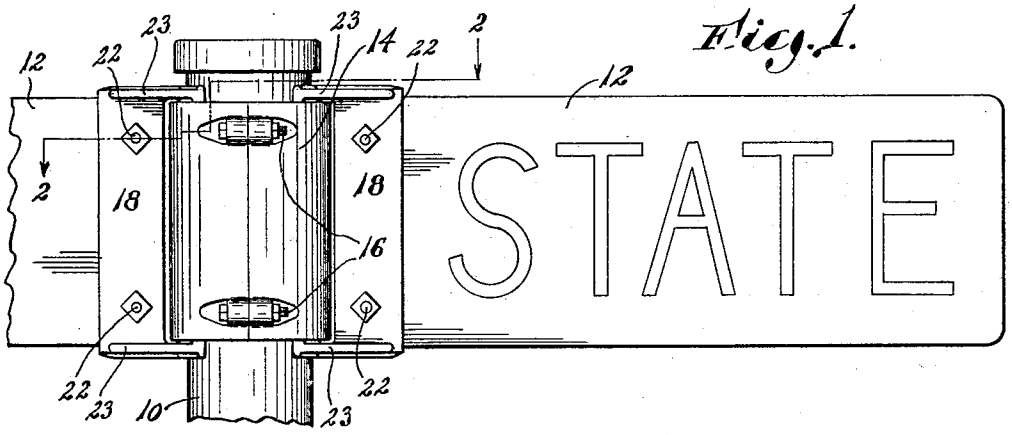


Fig. 2.

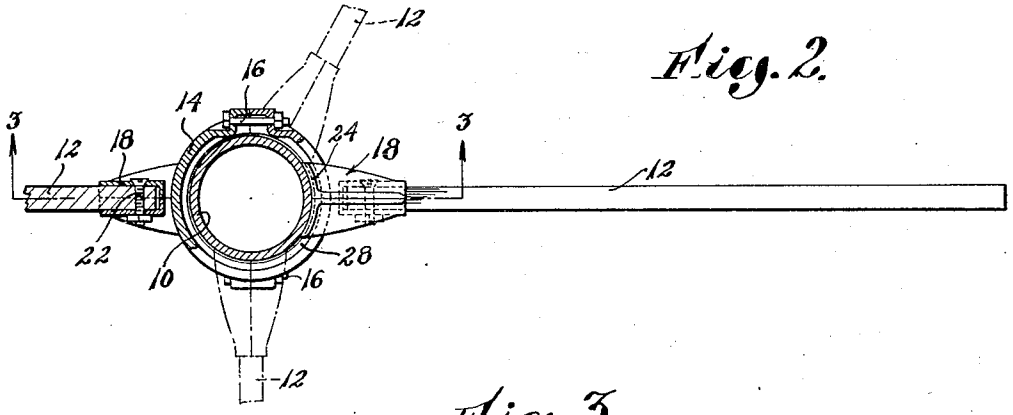


Fig. 3.

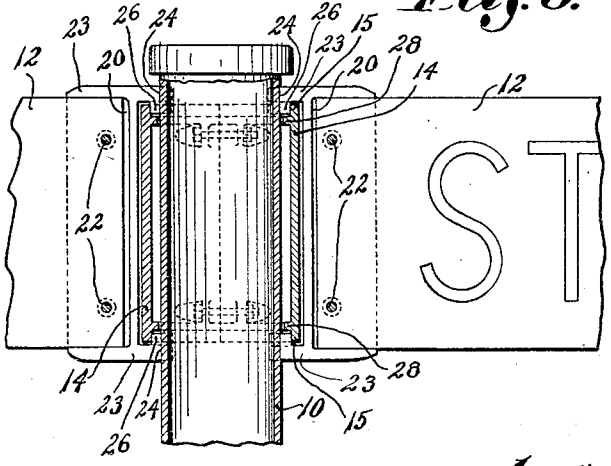
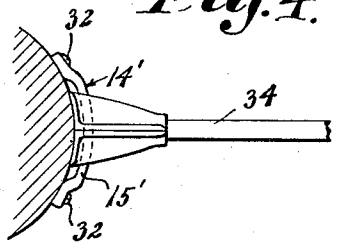


Fig. 4.



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UNITED STATES PATENT OFFICE

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SIGN

Application filed June 12, 1928. Serial No. 284,779.

This invention relates to improvements in signs. More particularly it relates to improvements in the connection between the sign proper and the supporting post in signs, such as street signs, which have one or more sign blades disposed radially around the axis of support. The invention presents structural features of novelty which facilitate selective setting of the blades, and the effective securing of them on the post in the selected positions.

Street signs have to be individualistic in that each must conform to the particular requirements at the place of installation. And yet it is highly desirable that the sign structures, for the most part, be such as to permit of both manufacture and installation on principles of mass production. Otherwise the cost becomes excessive, which cost includes a considerable preliminary expense for survey as to requirements at each proposed location, and a considerable expense in connection with the directional setting of post, for the engineer must oversee it and wait at the spot while the gang is at work, although the time required for his part of the work is very brief, or else many gangs must be at work some of whom must always be awaiting the engineer's arrival.

The invention has for an object to simplify both the sign structure and the operations of setting the blades selectively and securing them on a post in the selected positions. A feature of importance resides in the adaptability, of the relatively very few parts, for assemblage into signs to meet various requirements. A single blade sign may be made, and one, two or three additional blades may be added as required, and each may be set readily at any time and in any radial angular relation to its neighbors and to the axis of support, without regard to the way the post is faced. Another object is to provide simple yet effective means for making secure the sign on its supporting post, so that one-man installation is possible, and so that possibility of dislocation of sign blades is minimized. And it is an important feature that the costs to produce, install and maintain the signs may be reduced to a minimum.

By the invention, in a preferred form, the halves of a split-sleeve, of size to surround a post, can be drawn together so as to clamp, between themselves and the post, the segmental lugs or shoes of blade-holders. One or more blade-holders may be clamped thus to the post accordingly as one or more sign blades are needed at the particular location. Each holder has a hook extending over the top edge and one extending under the bottom edge of the split sleeve, terminating inside the sleeve in flanges constituting the said segmental shoes. The sleeve has two internal annular ribs which project from the sleeve inward toward the post a distance slightly less than the thickness of the segmental shoes. Thus at each place around a post where a blade holder is present, its shoes will be clamped tight between the post and the sleeve; and the annular ribs of the sleeve at that point will not quite reach the post. But where only one blade holder is to be mounted on a post, the sleeve ribs, at points on the opposite side of the post from where the blade holder is positioned, will engage the post. Thus one or more sign blades may be selectively positioned on a supporting post, and may be secured effectively thereon, by the single said clamp, both as to elevation and as to individual selected angular position.

It is intended that the patent shall cover, by suitable expression in the appended claims, whatever features of patentable novelty exist in the invention disclosed.

In the accompanying drawings:

Figure 1 is an elevation of a sign embodying features of the invention;

Figure 2 is a plan thereof, in section on 2—2 of Figure 1;

Figure 3 is an elevation, in section on 3—3 of Figure 2; and

Figure 4 is a plan, with post in section, of a modified form of clamp.

Referring to the drawings the post 10 has, secured at its top, two sign-blades 12 which may have the names of streets on their faces. The blades are illustrated as being

set in alignment, but, prior to their being secured, each may be adjusted to any desired position around the post, as indicated by the dot and dash lines in Figure 2. A sign having but one sign blade may be produced, or two, three and even four-blade signs may be built.

The invention has to do with an improved clamp-mounting for the blades. As represented at 14 the clamp consists of a split sleeve, the halves of which are adapted to be drawn together around the post 10 by means of the bolts 16 through terminal flanges of each semi-sleeve. Each blade holder 18 has a socket 20 within which one end of a blade may be secured, as by bolts 22, and has hooks for its attachment loosely to the sleeve, comprising a pair of arms 23 extending, one to the upper edge rail 15 of the split-sleeve 14 and one to the lower edge rail 15 thereof, where each arm has a segmental shoe 24 at its end, preferably with concave surface adapted to fit the curvature of the post, and where each shoe has a flange 26 extending between the rail 15 of the sleeve and the post, so that the tightening of the clamp bolts 16 causes the two shoes of each blade holder to be pressed tight against the post.

The fit of each hook on the split sleeve, is a loose one; so that before the clamp 14 is drawn tight the blade holders may be moved along the rails of the sleeve to set them in desired positions. But, as the halves of the sleeve are drawn together, the inner surface of the sleeve clamps the flanges 26 on the shoes 24 tightly against the post, so that they cannot be moved thereon vertically or horizontally until the bolts 16 are loosened.

Where two or more sign blades are thus mounted, the split sleeve will not itself come into contact with the post because the shoe-flanges 26 will intervene. But in cases where only one sign blade is mounted on a post, the side of the post opposite the location of the single blade holder will be engaged by the sleeve directly in the making of the desired clamping. Two annular ribs 28 preserve the concentricity of the sleeve with respect to the post in such a case, they being on the inner surface of the sleeve, and projecting inward toward the post a distance slightly less than the thickness of the shoe flanges 26. That is, the annular ribs 28 are located at a radial distance from the axis of the sleeve slightly exceeding that at which the shoe flanges or hooks 26 stand. Thus when two or more blade holders are mounted in the sleeve, these ribs 28 do not contact with the post and do not interfere with the tight clamping of the blade-holder shoes; but when only one blade holder is mounted in the sleeve, the ribs 28, at points on the opposite side of the post from where the holder is positioned, come into contact with the post as the halves of sleeve 14 are drawn together. And the slight difference in dimension between the thickness of the shoe flanges 26 and the degree of inward projection of the ribs 28 does not affect the appearance of the sleeve as being perfectly centered on the post.

As illustrated in Figure 4, the sleeve for securing the sign blades need not extend all the way around a post, but may, for example, be only a segmental sleeve made to cover only an arc of the circumference of a large wooden post, as a telephone pole, toward which it is suitably clamped. Thus a segmental sleeve 14′ may be clamped on the side of the post, as by screws 32, with the sign blade 34 hung on its rails 15′ as in the preferred form and pressed tightly against the post by tightening of the screws 32. Before such tightening the blade 34 may be adjusted around the post, within the range permitted by the segmental distance over which the sleeve extends.

It is a feature of importance in both of the illustrated structures that a system of grips and leverages is involved which holds each blade secure against dislocation downward. For example, in Figure 3, neither the weight of the blade nor a force such as might be caused by a boy hanging on the blade can slip it down; for the blade then becomes a lever tending to rotate the upper shoe 23 about the lower shoe 23 as a fulcrum, and thus to grip the post the more tightly, somewhat on the principle of a Stillson wrench. And in like manner the sign blades are held against being turned around the post. This feature best may be explained by reference to Figure 2, where a force applied laterally to the blade would press one end of the segmental shoe of the blade holder to bind against the post, while the other end of the segment would cooperate in binding against the clamp.

Signs made in this simple construction are exceedingly effective and practical.

All of the parts, except the individual printing of street name, can be made under conditions of mass production; and the installations can be effected on similar principles, for specialized gangs can proceed from one location to another without delay for the work of any other gang or for attention of any separate engineer, one gang or machine digging holes; another setting round posts; another assembling clamps and sign blades thereon, and finally the engineer setting the directions of blades, which become secure by the simple tightening of bolts or screws. Changes can be made at will by loosening or cutting the same. The blades themselves may be inexpensive, and they can be cheaply replaced, so far as labor costs are concerned. In consequence the costs to produce, install and maintain the signs of the invention are

very low, considering their quality and attractiveness.

I claim as my invention:

1. A post-connection for a sign or the like comprising, in combination, a split-sleeve clamp adapted for its sections to be drawn together around a post; and a member mounted on said sleeve and extending radially from the post, having at one end a hook in position to be pressed tight against the post by the said drawing together of the clamp.

2. A post-connection for a sign or the like comprising, in combination, a split-sleeve clamp adapted for its sections to be drawn together around a post; and a member mounted on said sleeve having a hook adapted to be loosely interposed between the clamp and a post; there being adjacent projections extending from the sleeve toward its axis, terminating at a radial distance from the axis of the sleeve slightly greater than that at which the said interposed part of the hook stands; the whole being adapted for the hook to be clamped tight against a post by the said drawing together of the clamp.

3. A post-connection for a sign or the like comprising, in combination, a split-sleeve clamp adapted for its sections to be drawn together around a post; a member mounted on said sleeve and loosely movable around it to selective positions, said member having a hook in the clamp in position to be pressed by the clamp against a post; the said sleeve having internal abutments for engaging opposite said hook on a post, they terminating at a radial distance from the axis of the sleeve slightly exceeding that at which the hook stands.

4. The combination, with a supporting post, of a split-sleeve clamp having internal annular ribs, a sign blade movably mounted on the sleeve, having arms extending around upper and lower edges of the sleeve and terminating in post-engaging feet interposed between clamp and post beside the ribs, said ribs terminating a little short of post-engagement in the vicinity of said feet.

5. A sign comprising, in combination, a post; a split-sleeve clamp adapted for its sections to be drawn together around the post; one or more radial sign blades hung individually movable on the sleeve for selective setting; said blades having retaining supports carried by the sleeve; and means co-acting with the supports to prevent separation of the sleeve and supports; the said supports being in position to be clamped rigidly between sleeve and post when the clamp is tight.

6. The combination, with a radial sign blade and a post, of upper and lower supports, means to clamp these supports toward the post; upper and lower post engaging shoes fast on one end of the sign blade, engaging between both said supports and the post, and having substantial width of bearing in direction around the post and at separated up and down locations.

Signed at Boston, Massachusetts, this 29th day of November, 1927.

GEORGE P. BUTLER.