Feb. 4, 1930. H. G. ELLIS 1,745,987

POST FOR SIGNBOARDS OR THE LIKE

Filed June 21, 1928

Fig. 1.

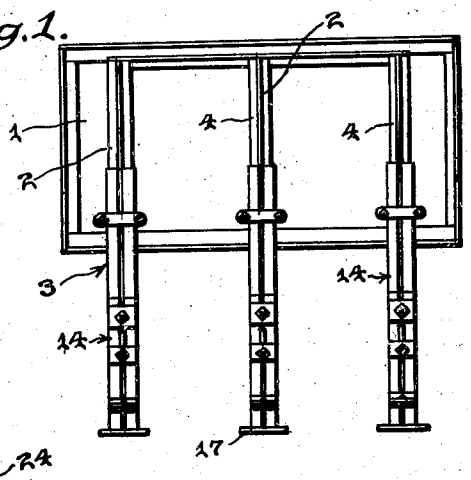


Fig. 6.

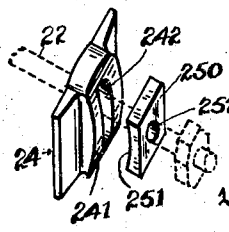


Fig. 2.

Fig. 5.

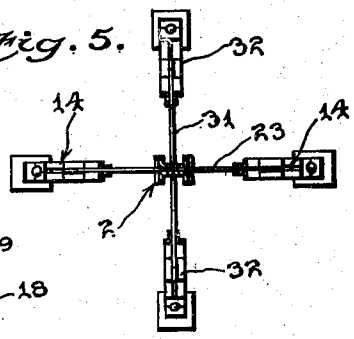


Fig. 3.

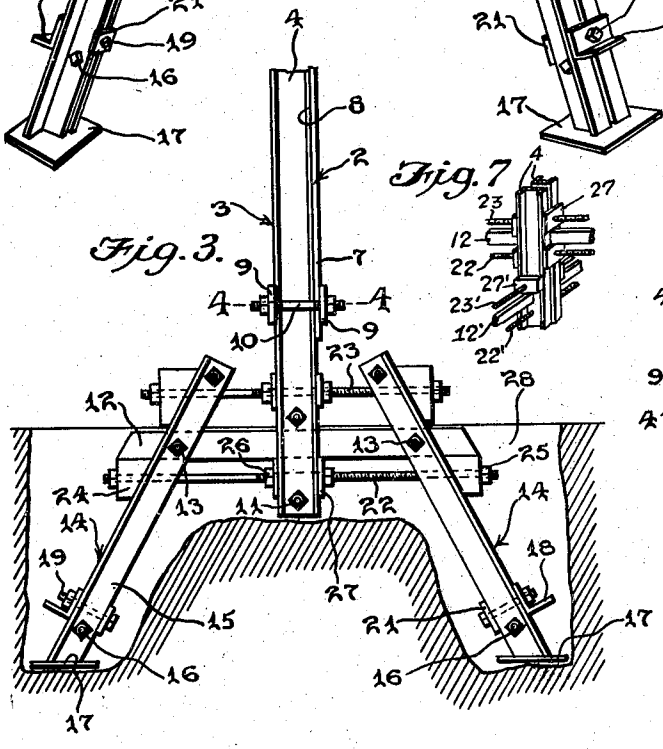
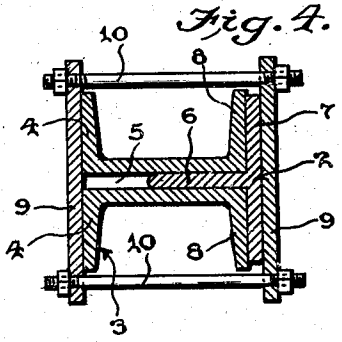


Fig. 7

Fig. 4.



Inventor

Harry G. Ellis

W. G. & D. Stewart

Attorneys

Patented Feb. 4, 1930 1,745,987

UNITED STATES PATENT OFFICE

HARRY G. ELLIS, OF READING, PENNSYLVANIA

POST FOR SIGNBOARDS OR THE LIKE

Application filed June 21, 1928. Serial No. 287,230.

This invention relates to improvements in bill boards or sign boards, and particularly to the supporting posts of the same.

The primary object of the invention is to furnish a post supporting device of simple and inexpensive construction, and one which will permit the adjustment of the post with a view of straightening the sign after one or more of the legs have sagged.

Another important object is to furnish a bill board or sign post supporting device, the portion of which to be imbedded in the earth may be forcibly expanded to firmly anchor it in the solid wall of the post hole preliminary to filling the latter, and the expanding means being readily reached when necessary for the purpose of adjustment.

A still further object is to provide a novel bill board or sign post having special means to facilitate the attachment of the bill board or sign to the post.

A further object is to furnish bill board posts, and post supporting devices formed of structural metal, such as channel irons or angle irons, and so assembled as to permit forcible anchoring spread of the supporting devices and convenient post readjustment, whereby the sign may be rigidly embedded in the earth and the post portion readily straightened or alined when required.

With the foregoing objects outlined and with other objects in view which will appear as the description proceeds, my invention consists in the novel features hereinafter described in detail, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims.

Referring to the drawing,

Fig. 1 is a rear view of a bill board or sign provided with my improvements, and showing the post supporting devices before they have been partially embedded in the earth.

Fig. 2 is a perspective view of the lower portion of one post, and the supporting device of the same.

Fig. 3 is an elevation of the structure shown in Fig. 2, but illustrating the manner in which the supporting device is anchored in the earth.

Fig. 4 is an enlarged horizontal sectional view taken on line 4—4 of Fig. 3.

Fig. 5 is a horizontal sectional view of a modification in which the supporting device has four legs instead of two.

Fig. 6 is a detail perspective view of the special blank and washer preferably employed.

Fig. 7 is a partial elevation of the modified construction indicated in Fig. 5.

In the drawing, 1 indicates a sign or bill board which may be of any desired construction. In the present instance, it is provided with a plurality of metal bars 2, T-shaped in horizontal cross section, and connected to the sign by any suitable means, (not shown).

These bars 2 cooperate with posts 3, and each post consists of a pair of channel shaped irons 4, spaced apart as shown at 5 to receive the vertical web 6 of one of the bars 2. From Fig. 4, it may be seen that the channels are oppositely directed, and that the main plate 7 of the bar rests against the front wings 8 of the channels.

The bars 2 are connected to the posts by means of clamping plates 9 that are drawn toward one another by bolts 10.

The channels of each post are connected together at suitable points by bolts or the like 11.

A cross bar 12 extends through the slot 5 and is clamped in the position illustrated, by bolts 11, and each end of the cross bar is pivotally connected by a bolt 13 or the like, to a leg 14. Each leg preferably consists of a pair of angle irons 15, spaced apart by the cross bar and clamped together by any suitable fastening means such as bolts 16.

An anti-sag foot 17 is secured to the bottom of each leg by any suitable means, not shown, and an anchoring fin 18 is adjustably mounted on each leg. The fin may consist of a short piece of angle iron, through which a bolt 19 passes. This bolt also extends through the slot of the leg, and through a clamping plate 21. This construction permits the fin to be adjusted along the leg and secured in any desired anchoring position thereon.

In order to adjust the post 3 relatively to its supporting legs 14, any suitable adjusting means may be used, but as a preferred embodiment of such means, I employ a pair of threaded rods 22 and 23, which pass through the slot 5 of the post, and the slots 20 of its legs, and each rod is provided with an adjustable block 24, that is forced against one of the legs by a nut 25.

Nuts 26 on the intermediate portions of the rods, function to force spaced clamping plates 27 against opposite sides of the posts to position and support the latter. And it will be noted that by proper adjustment of said spaced clamps, the post may be shifted lengthwise of the cross-bar 12, or angularly moved in the plane of the latter, thus providing for readjustment in case of sag of any leg 14, and true alinement with other posts even if the post holes are not accurately placed.

It will be understood that each post of the sign has a supporting structure of the kind described, and in using the invention, a hole 28, of the type shown in Fig. 3, will be dug in the ground to receive the leg portion 14, 14 of the supporting device of each post. In placing the legs 14, 14 in said post hole, they are positioned by adjustment of nuts 25, 25 so as to be in a slightly retracted closed together position, so that when lowered into the post hole 28, they may be forcibly spread by reverse adjustment of said nuts 25, 25, to force the lower end of said legs apart against the unloosened earth wall of said hole, fins 18, 18 also biting into the latter, such spreading movement firmly anchoring said legs preliminary to refilling said holes 28. After such forcible anchoring adjustments of the legs 14, 14 have been made by means of the nuts 25 and 25, the holes will be filled to further anchor the supporting devices in position, and such filling if desired may cover the entire supporting structure.

It will be obvious that such a supporting structure will hold the bill board steady and straight, in spite of strong wind pressures, but should either post sag, then, by adjusting the nuts 25, the sign may be straightened or posts alined as above set forth. In addition, adjustment of the nuts 25 will enable further anchoring spread of the legs should their first anchoring become loosened by accident or after settlement of the earth filled hole.

In order that the nuts 25 may always exert an axial strain on bolts 22 and 23, I preferably employ a washer plate 250, as clearly seen in Fig. 6, which plate has a concave inner face 251 and a bolt aperture 252. I also preferably form the adjustable blocks 24 as indicated in said Fig. 6, said blocks having a convex face 241 against which the concave face 251 of washer 250 adjustably seats. I also provide said blocks 24 with an elongated bolt aperture 242 so as to permit considerable adjustment movement of the washers 250 on their adjustable seating.

The structure above described though usable for any post structure, has been designed especially for bill boards and the like, where wind pressures will be exerted from directly opposite sides, but in case the supporting structure is used with a sign post subjected to pressures from various angles, it may be advisable to employ an additional pair of legs. Such a construction is shown in Figs. 5 and 7. In this form of the invention, the webs of the channel irons of the post may be slotted at their lower ends to receive a pair of threaded rods and a cross bar, positioned at right angles to and similar to the rods 22, 23, and the cross bar 12. Clamping plates, similar to the plates 27, and nuts, functioning similar to the nuts 25 may be mounted on the rods 31 to engage the opposite faces of the post, and each rod 31 may also be provided with clamping blocks and nuts which function on the auxiliary legs 32, in a manner similar to the blocks 24 and nuts 25.

Due to this arrangement, the post may be adjusted in various directions to accommodate any leaning of the same, or sagging of one or more of the legs.

From the foregoing disclosure, it is believed that the construction, operation and advantages of the invention may be readily understood, and I am aware that various changes may be made in the details disclosed, without departing from the spirit of the invention, as expressed in the claims.

What I claim and desire to secure by Letters Patent is:

1. In a structure of the character described, a post, a supporting member secured to the post, legs pivotally mounted on the supporting member, threaded rods connecting the post and legs, and adjustable elements on said rods for fixing the legs in various positions relatively to said post.

2. In a structure of the character described, a slotted post, a supporting member connected to the post, slotted legs pivotally mounted on the supporting member, threaded members passing through the slots of the post and legs, and threaded elements mounted on the rods for adjustably securing the legs in various positions relatively to the post.

3. In a structure of the character described, a post, a supporting member secured to the post, legs pivotally connected to the supporting member and provided with slots, threaded rods connecting the post and legs and extending through the slots of the latter, and adjustable members on the rods for holding the legs in various positions relatively to said post.

4. In a structure of the character described, a post, a supporting member secured to the

post, legs connected to said supporting member, threaded rods connecting the legs and post and extending through the latter, and adjustable members on the rods engaging opposite sides of the post.

5. In a structure of the character described, a structural metal post having a vertically disposed slot, a cross bar extending through said slot and secured to the post, slotted legs pivotally connected to the cross bar, threaded rods passing through the slots in the post and legs, clamping members on the rods engaging opposite sides of the post, and clamping blocks on the rods engaging said legs.

6. In a structure of the character described, a post, a cross bar secured to the post, legs pivotally connected to the cross bar, each leg having an elongated vertical slot, threaded rods passing through the post and through the slots in the legs, adjustable members on the rods engaging opposite sides of the post, and adjustable blocks on the rods engaging said legs.

7. In a structure of the character described, a post, a cross bar secured to the post, legs pivotally connected to the cross bar, a threaded rod adjustably connecting said legs, a block on one of said legs having a convex outer face and an elongated rod passageway, a washer plate having a rod aperture and a concave inner face adjustably seatable on block convex face, and a nut on said rod seatable on said washer plate and adapted to adjustably seat said plate on said block when drawn up so as to exert an axial strain only on said rod.

In testimony whereof I affix my signature.

HARRY G. ELLIS.