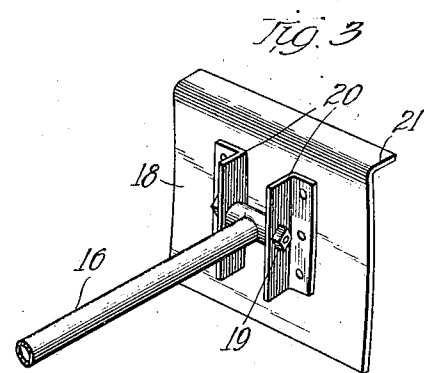
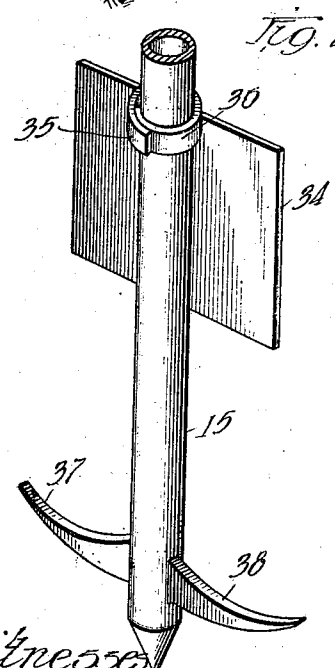
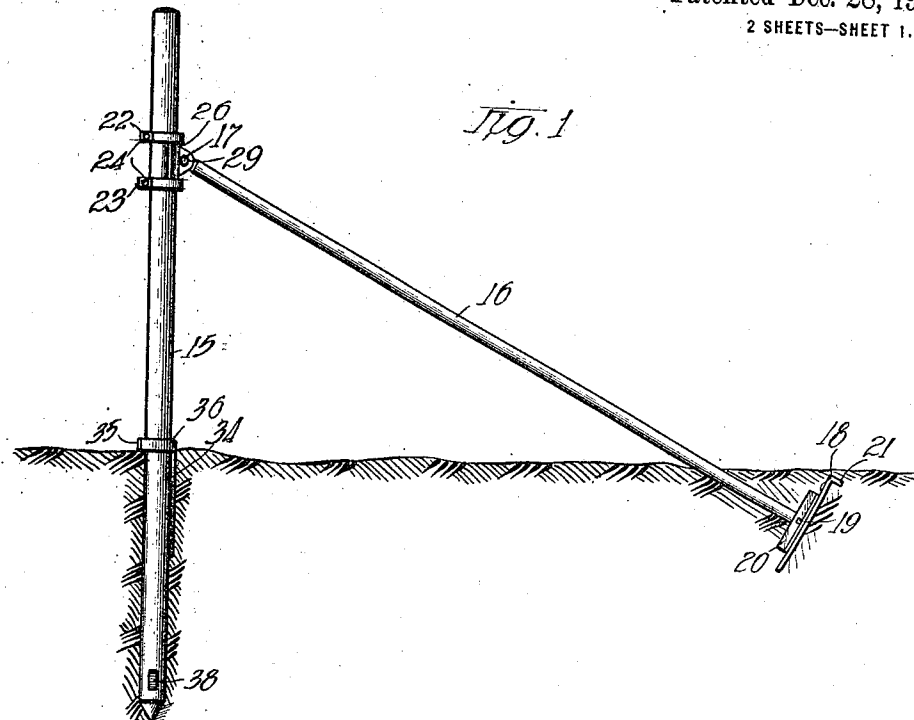


A. W. SPRAGUE.
 POST BRACE.
 APPLICATION FILED JULY 14, 1915.

1,165,459.

Patented Dec. 28, 1915.
 2 SHEETS—SHEET 1.



Witnesses
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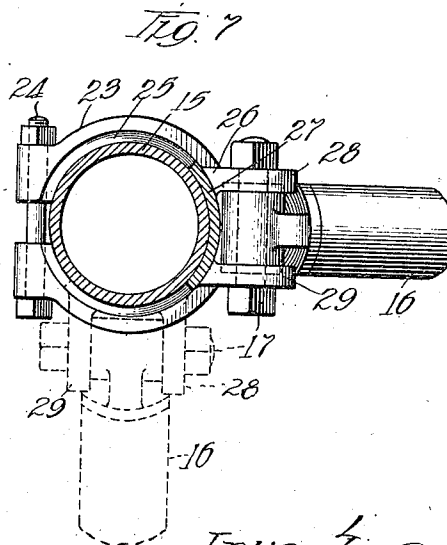
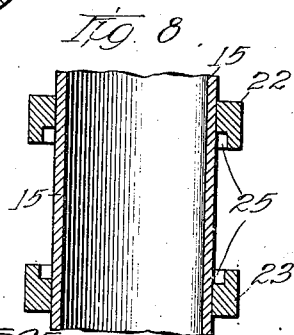
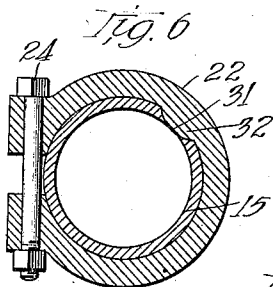
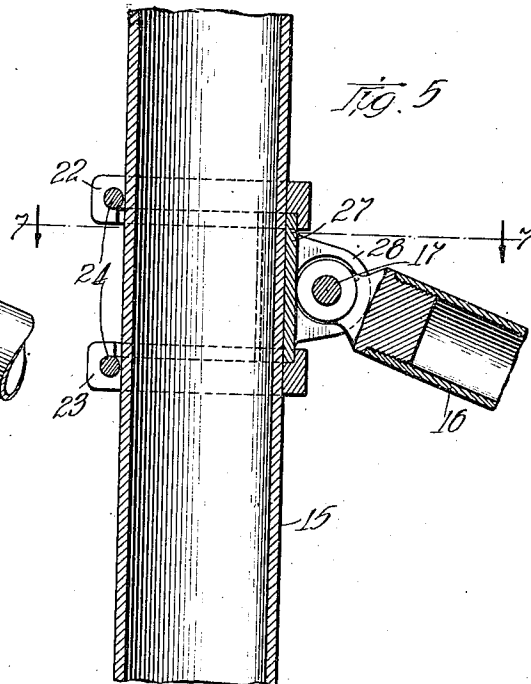
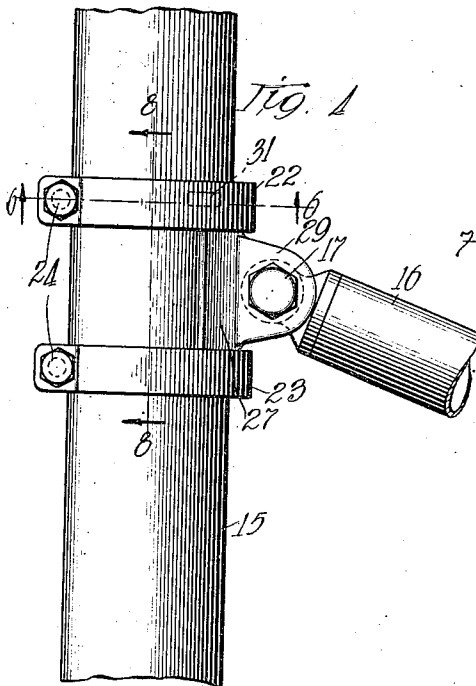
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Witnesses
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UNITED STATES PATENT OFFICE.

ARTHUR W. SPRAGUE, OF LA GRANGE, ILLINOIS.

POST-BRACE.

1,165,459.

Specification of Letters Patent.

Patented Dec. 28, 1915.

Application filed July 14, 1915. Serial No. 39,739.

To all whom it may concern:

Be it known that I, ARTHUR W. SPRAGUE, a citizen of the United States, residing at La Grange, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Post-Braces, of which the following is a specification.

My invention relates to apparatus, or means for bracing posts, poles, masts or the like, when set in the ground, to hold them in vertical position against lateral stress.

It is especially well adapted for use with fence posts and particularly with such posts that are located at corners of angularly disposed panels, or such as are known as corner posts.

One of the objects of my invention is to provide an obliquely positioned brace, in association with suitable plates adapted to hold or sustain a post in vertical position and which will not disturb the position of the post when the footing plate of the brace is driven into the ground. And still another object of my invention is to generally improve, simplify and cheapen devices of this character.

Other and further objects of my invention will become readily apparent, to persons skilled in the art, from a consideration of the following description when taken in conjunction with the drawings, wherein:—

Figure 1 shows a side elevation of a post or pole with my bracing and supporting apparatus applied thereto. Fig. 2 is an enlarged perspective view of the lowered, or buried part of the post, showing the attached stress resisting means. Fig. 3 is a similar view showing a part of the brace bar or pipe, with attached footing plate. Fig. 4 is an enlarged fragment of a post showing the brace bar or pipe secured thereto. Fig. 5 is a central longitudinal section thereof. Fig. 6 is a transverse section taken on line 6—6 of Fig. 4. Fig. 7 is a section taken on line 7—7 of Fig. 5. Fig. 8 is a section taken on line 8—8 of Fig. 4.

In all the views the same reference characters are employed to indicate similar parts.

15 is a tubular, preferably round, fence post supported by an obliquely positioned brace 16, which may also be a tube, rod, or bar, pivoted to the post, as at 17, and bearing a curved foot plate 18. The tube or bar 16 is secured to the foot plate 18 by means of a bolt 19 passing through sections of angle plates 20. Any other means, however,

for fixing the brace 16 to the plate 18 may be employed. The foot plate 18 is curved upon a radius represented by the length of the bar, from the pivotal point or bolt 17 by which the tube or brace 16 is pivotally connected to the post, so that when the foot brace 18 is driven into the ground it will pursue the circumferential path concentric with its curve and consistent with the radial length of the brace 16, and therefore the post 15 will be strongly braced and will not be disturbed in its vertical position when the plate is driven into the ground. To stiffen the plate 18 I prefer to turn over the upper edge, as at 21, which also affords a better driving surface.

One means for attaching the upper end of the brace 16 to the post 15, consists of substantially duplicate, split rings 22 and 23 clamped to the post, as by means of bolts 24. Each ring is concentrically counter-bored and thereby provided with an inner groove 25 to receive the pivotal brace supporting segment member 26. The member 26 consists of a segmental portion 27 having projecting perforate ears 28 and 29, between which is received an ear 30 secured to the brace 16, the ears 28, 29 and 30, being held together by the bolt 17. This pivotal engagement permits free relative movement of the post 15 and the brace 16 around the bolt 17. The rings 22 and 23 are spaced apart sufficiently to receive the segmental portion 27 within the groove 25. At least four such segmental parts 27, may be placed within the circumferentially extending grooves 25—25 and therefore four braces, such as brace 16, may thus be secured to a single post. Of course, by making the segmental parts 27 circumferentially narrower than shown, a greater number of such devices may be secured between a given pair of rings.

Fig. 7 shows, in dotted lines, how two braces 16 may be secured by the segmental means to a single post, and it is evident, from a consideration thereof, that two more braces may be secured on opposite sides to said post. A notch or depression 31 may be made into the post, at the proper height, in which a projection 32, from the upper ring may enter. When putting the ring over the post it may be opened somewhat more than is necessary in order to permit the projections 32 to pass over the post and when the projection 32 has been received in the de-

pression 31, made in the body of the post, the ring will contract, and when the bolt 24 is placed through the perforations in the terminals of the ring and tightened so as to frictionally engage the inner surface of the ring with the outer surface of the post, it will be impossible to lift up the ring 22 vertically with reference to its normal position. In most cases the frictional engagement of the ring with the outer surface of the post will be sufficient to hold it in place. In that event, the depression 31 and the projection 32 will be unnecessary. Supplemental to and operating in conjunction with the brace 16 I prepare a plate 34, having its upper edge cut, from which to form attached strips 35 and 36 projecting oppositely and outwardly from an unsevered mid-portion, which strips are subsequently rolled into cylindrical form around the post, to provide a guide, as shown in Fig. 2. Prior to driving the plate it is placed by the side of the post and the strips 35 and 36 are bent around the post to form a guide. The plate 34 is then driven into the ground between the post and the direction from which the strain comes, substantially in contact with the post, thereby giving the post a wider bearing surface at its top or near the point where it emerges from the ground. The lower end of the post is provided with outwardly extending arms or horns, 37 and 38, which are preferably in the same vertical plane as the plate 34. These horns present additional surface resistance against lateral stress, at the bottom of the post, and at the same time, they prevent it from being drawn vertically from the ground. This horn structure was originally contained within the post and after the post was driven in the ground it was automatically extended

by impact of a hammer or other suitable tool inserted into the interior of the post. This feature of my invention is disclosed in a copending application and is not claimed herein.

Having described my invention, what I claim is:

1. In combination with a post, mast or the like, a brace bar having a pivoting member on its upper end; two spaced-apart grooved adjustable rings substantially encompassing the post; a segment shaped piece having its ends extending into the respective grooves and provided with a pivoting member to engage said similar member on said bar.

2. A brace bar attaching means for a post comprising two open, spaced-apart rings, having counter-bored open grooves 25—25; bolts 24—24 for holding said rings in frictional contact with the post; a segment piece 27 curved to fit the post and having its ends positioned in the respective grooves, and a pivotal attaching member projecting from said segment for pivotal engagement with the end of a brace bar.

3. In combination with a cylindrical post of two split rings for surrounding the post and having confronting open channels; a segment, carrying an eye, adapted to fit the outer surface of the post, the ends of which enter the respective channels provided in the spaced apart rings and bolts for tightening the rings to the post.

In testimony whereof I hereunto set my hand in the presence of two subscribing witnesses.

ARTHUR W. SPRAGUE.

In the presence of—
STANLEY W. COOK,
MARY F. ALLEN.