A. W. SPRAGUE, DEC'D.
C. SPRAGUE, EXECUTRIX.
FENCE POST BRACE CLAMP.
APPLICATION FILED MAY 7, 1917.

1,249,848.

Patented Dec. 11, 1917.

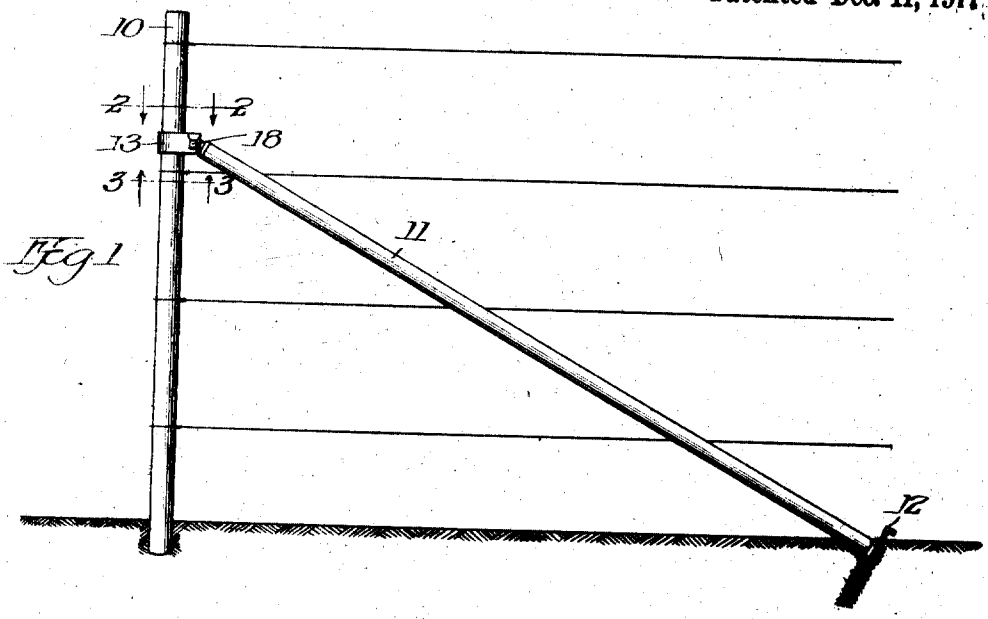


Fig. 1

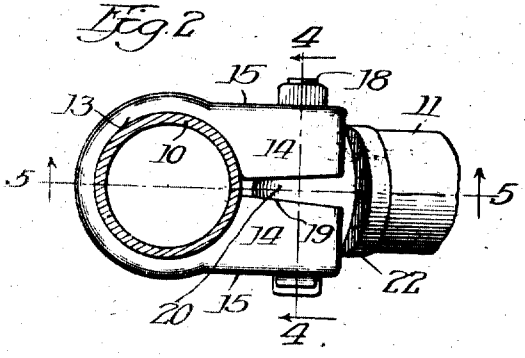


Fig. 2

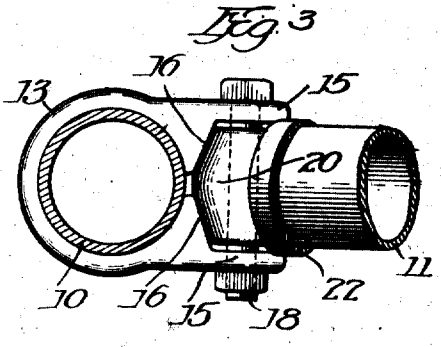


Fig. 3

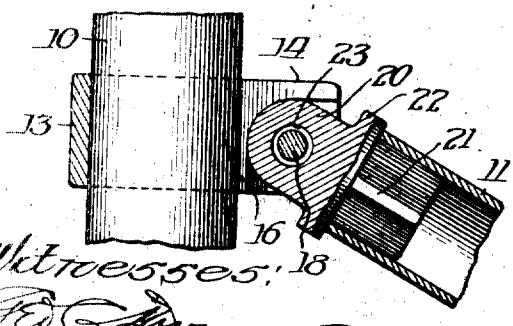


Fig. 5

Witnesses:

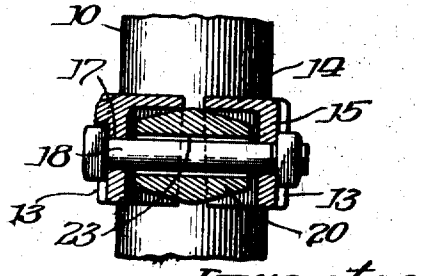


Fig. 4

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UNITED STATES PATENT OFFICE.

ARTHUR W. SPRAGUE, DECEASED, LATE OF LA GRANGE, ILLINOIS, BY CORA SPRAGUE, EXECUTRIX, OF LA GRANGE, ILLINOIS.

FENCE-POST-BRACE CLAMP.

1,249,848. Specification of Letters Patent. **Patented Dec. 11, 1917.**

Application filed May 7, 1917. Serial No. 167,075.

To all whom it may concern:

Be it known that I, CORA SPRAGUE, a citizen of the United States, residing at La Grange, county of Cook, and State of Illinois, executrix of the last will and testament of ARTHUR W. SPRAGUE, deceased, late a resident of La Grange, county of Cook, and State of Illinois, citizen of the United States, do hereby declare the following to be a specification of the invention of ARTHUR W. SPRAGUE, deceased, covering certain new and useful Improvements in Fence-Post-Brace Clamps.

His invention refers to fencing and more particularly to a clamp for securing a brace to a fence post, whereby the bracing rod is held in such a manner in the clamp which embraces the post that all the thrust is transmitted directly to the clamp without any of it being borne by the bolt. This he accomplishes by a novel arrangement of clamp and brace connection which will hereinafter be more fully described.

The great disadvantage of the arrangements now employed is that the thrust of the brace rod is not in the center of the post; consequently it tends to push the post out of vertical position. This disadvantage is brought about by the fact that the brace connection is held rigidly by the collar against sidewise movement, so unless the collar is applied to the post in such a position that the plane of the thrust will be through the vertical axis of the post the undesirable result follows. It is too much trouble and requires too much time to adjust the collar to the exact position. Another disadvantage is that some, if not all of the thrust is transmitted to the collar through the bolt—a condition not at all in harmony with the results demanded.

To overcome these difficulties he has invented a collar and brace connection so shaped and related that the bolt will be relieved of all strain and that the thrust rod will always be centered on account of the peculiar shape of my brace connection and the mode of joining it to the collar.

The features of his invention will be more readily understood by reference to the accompanying drawings wherein—

Figure 1 is an elevation of an end of a fence attached to a post and the post held in vertical position by a thrust rod in conjunction with the collar and brace connection embodying his invention.

Fig. 2 is a section on line 2—2 of Fig. 1.

Fig. 3 is a section on line 3—3 of Fig. 1.

Fig. 4 is a section on line 4—4 of Fig. 2.

Fig. 5 is a section on line 5—5 of Fig. 2.

In the drawings 10 represents a fence post at the end of a piece of fencing. To retain the post 10 in vertical position against the pull of the fence, a thrust rod 11 is provided, having one end fastened to an anchor 12 driven into the ground and the other end secured to the brace connection on the clamp. Referring more particularly to Figs. 2 and 3 it will be observed that the clamping features consist of a strap or collar adapted to embrace the fence post, a brace adapted to fit the recessed ends of the strap, and a bolt to draw the strap about the post and hold it firmly thereon and to hold the brace connection to the collar.

In the form in which he has preferred to illustrate his invention the strap or collar has a split eye portion 13 for embracing the post 10, and two extending jaws, each a continuation of the side of the eye 13. The jaws have tops 14, side walls 15 and back walls 16. The back walls 16 are arranged to converge toward the eye 13, the purpose of which will be explained later. In the side walls 15 are holes 17 for the reception of a bolt 18 which operates to draw the jaws together when the collar is applied to a post. To permit the jaws being brought closely together the edges 19 are made so as to diverge from the center of the eye 13. The brace connection he will refer to as having three portions—the head 20, tongue 21 and shoulder 22. He prefers to make the head 20 of substantially barrel shape so that the intermediate portion will be larger than the ends. Through the head 20 is an aperture 23 greater in diameter than the bolt 18, so as to permit the head being rocked on the

bolt. The tongue 21 is that portion which engages the thrust rod 11 and is, in section, in the form of a conventional Maltese cross—it being understood that the brace rod 11 is hollow and that the brace connection is adapted to project into one end thereof. To afford abutting provision he prefers to employ the shoulder 22 against which the upper end of the brace rod 11 rests. Naturally, therefore, the shoulder 22 must be greater in transverse dimensions than the tongue 21, and he prefers to make the head 20 smaller than the shoulder 22. The aperture 23 in the head 21 is large enough so that the head 21 will abut the back and top walls 16 and 14 without bearing against the bolt 18.

The operation of the device is as follows: The post 10 having been put in position, the collar is then slipped on over the post and slid into position when the bolt 18 is tightened, thus causing the jaws to move together and the collar to tightly embrace the post. It is understood that the collar is thus secured in position so that the brace connection lies in substantially the proper position. The brace or thrust rod 11 is then slipped over the tongue 21 and brought into abutting position with the shoulder 22. The anchor 12 is then driven into the earth to afford a firm footing for the rod 11. The head 20 is thus pushed against the back and top walls 16 and 15 of the collar. If it should happen that the collar has been secured in such a position on the post so that a vertical plane passing through the center of the eye and between the edges 19 of the jaws should not coincide with a vertical plane through the center of the brace 11, instead of the brace 11 acting to displace the post laterally, the head 20 of the brace connection, by virtue of its peculiar shape, cooperating with the convergent back walls 16, centers in such manner that the thrust against the post 10 is in direct line with the vertical axis thereof and that all the bearing of the head 20 is against the walls. This will be apparent from observation of Figs. 3 and 4. The width of the head 20 being less than the distance between the side walls 15 when the edges 19 of the jaws are in contact, permits of lateral movement so that the head 20 may adjust itself with respect to the walls 16 to meet the direction of thrust imposed by the brace rod 11.

It will be apparent that he has provided a novel arrangement of parts that coöperate to furnish a self-centering brace connection wherein all the thrust is transmitted to the collar and none to the bolt.

I claim:

1. In a device of the class described, the combination of a fence post, a brace rod, a split collar adapted for engagement with said post, and a brace connection, the sides of the collar at the split being provided with extending jaws, the outward ends of the jaws provided with recesses, said brace connection provided with a head portion and a tongue portion, said tongue adapted to engage said brace rod, and said head adapted for engagement with said recess, and means for loosely retaining said head in engagement with said recess, substantially as described.

2. In a device of the class described, the combination of a split collar and a brace connection, said collar comprising an eye portion and extending jaws, said jaws being separated by the split, the ends of said jaws provided with recesses having top, side and back walls, and side walls provided with registering apertures, said brace connection having a head portion adapted to engage said recesses and provided with an aperture, and fastening means adapted to extend through said apertures, substantially as described.

3. In a device of the class described, the combination of a split collar and a brace connection, the sides of the collar at the split being extended forming jaws, said jaws provided with recesses, said collar having inwardly-directed wedge-shaped members intermediate said collar and the ends of said jaws and adapted to form the rear walls of said recesses and to complete the curvature of the collar between the extending sides and the split, substantially as described.

4. In a device of the class described the combination of a split collar and a brace connection, the sides of the collar at the split being extended forming jaws, said jaws provided with recesses, said jaws provided with inwardly-directed lugs adapted to form the back walls of said recesses, said walls being convergent toward the split, said brace connection having a head portion adapted to lie within said recess, said head portion tapering from the middle to each end and adapted to abut the convergent rear walls of said recess, and means for securing said head in engagement with said recess, substantially as described.

5. In a device of the class described, the combination of a split collar member and a brace-connecting member, said brace-connecting member provided with a head portion, a brace-engaging portion and a shoulder, said shoulder being between said head and brace-engaging members and of greater transverse dimensions, said head portion being substantially barrel shape and said brace-engaging member being substantially irregular in cross section, said collar provided with laterally-extending jaws, said jaws provided with recesses having top, side

and back walls lying each side of the split, said side walls provided with registering apertures, the back walls lying in planes convergent toward the spilt, the head portion of said brace-connecting member being less in width than the interior of said recess and provided with an aperture therethrough greater in diameter than the apertures in the side walls of the recess, and a bolt adapted to extend through the apertures in the side walls and the head, substantially as described.

CORA SPRAGUE,
Executrix of said Arthur W. Sprague, deceased.

Witnesses:
ARIS L. SPRAGUE,
A. M. HALE.