July 6, 1937. A. A. NEWTON 2,086,088

REINFORCEMENT FOR CONCRETE POSTS

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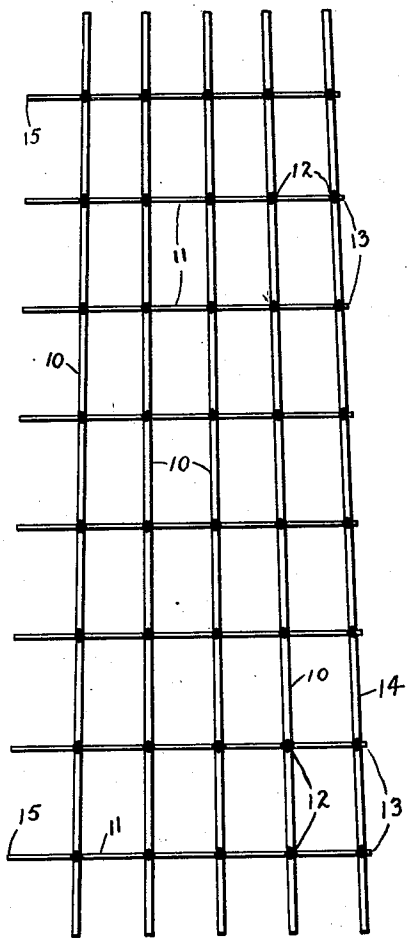
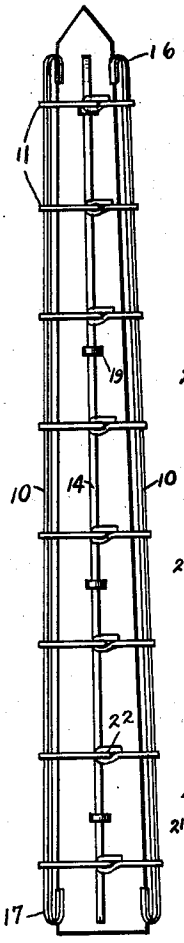


Fig. 1



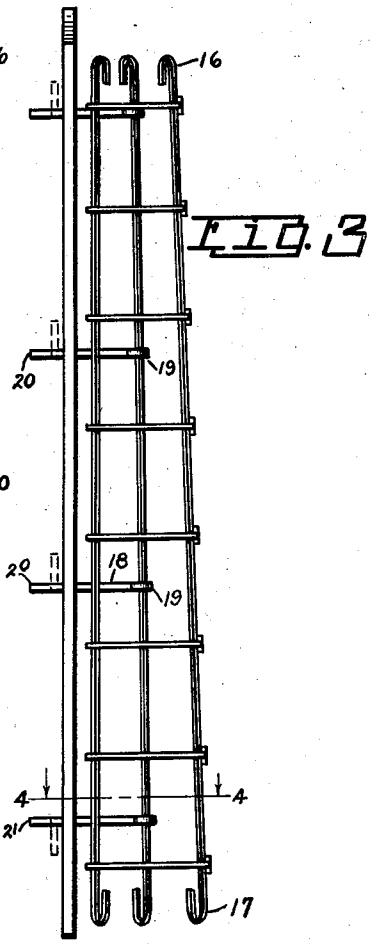


Fig. 3

Fig. 2

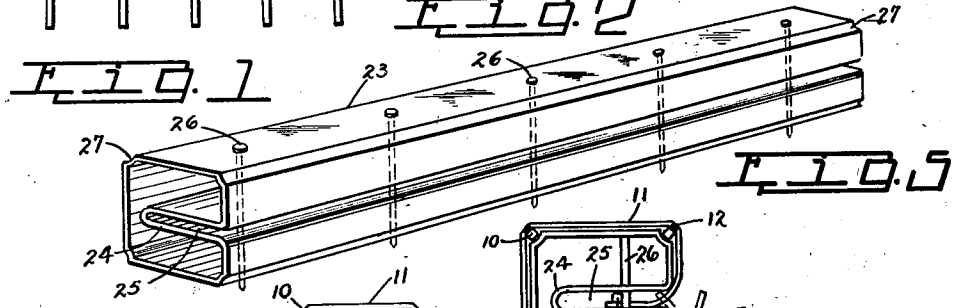


Fig. 5

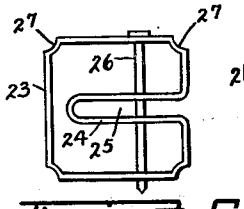


Fig. 6

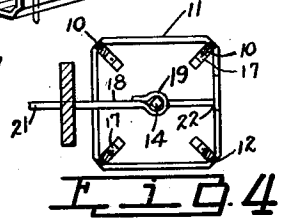


Fig. 4

Fig. 7

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REINFORCEMENT FOR CONCRETE POSTS

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Application February 26, 1936, Serial No. 65,886

4 Claims. (Cl. 72—85)

The present invention relates to improvements in reinforcements for concrete posts and the method of forming same.

It is an object of the present invention to provide an improved reinforcement for fence posts and the like, in which the ends of the longitudinal members are so formed at the top and base that increased tensile strength is added to the reinforcement.

Another object of the present invention is the novel arrangement of the longitudinal rods in spread out position, so designed that one of the rods forms a center reinforcing means.

A further object of the present invention is the utilization of a portion of the transverse wires serving as a central reinforcing means in the post.

A still further object of the present invention is the provision of a post reinforcement in which some of the transverse wires are tied to said wires.

A still further object of the present invention is the novel means for forming the post reinforcement.

A still further object of the present invention is the novel detachable holding means in the reinforcement forming means.

A still further object of the present invention is the provision of a recessed means in the forming means.

With these and other objects in view the invention consists of certain novel features of construction, combination and arrangements of parts as will be more fully described hereinafter and particularly pointed out in the appended claims.

In the accompanying drawing:—

Figure 1 is an elevational view of my novel reticulated reinforcement per se spread out.

Figure 2 is a front elevational view of my novel concrete post reinforcement with a pallet holding the fence securing means in spaced relation to illustrate how these members are held in the mold.

Figure 3 is a side elevational view of Figure 2, illustrating how the fence securing means extend beyond the face of the post, the face of the post being represented in this view by the pallet, the dotted lines illustrating how some of the fence securing means are bent upwardly and the bottom means bent downwardly, the ends of the longitudinal irons being bent inwardly and upwardly forming a U-shaped portion at the top and bottom of the irons.

Figure 4 is a horizontal sectional view taken on line 4—4 of Figure 3 looking in the direction of the arrows.

Figure 5 is a perspective view of my novel form for forming the concrete post reinforcement and illustrating the detachable holding means in the form, the concavo-convex longitudinal corners and the central U-shaped portion within the confines of the form.

Figure 6 is an enlarged end elevational view of my novel form.

Figure 7 is a view similar to Figure 6 illustrating the reticulated material formed around the form.

Referring to the drawing, the numeral 10 represents longitudinal rods of rigid material connected by transverse wires 11 in spaced relation and of smaller diameter than the rods 10. At each point 12 where the transverse wires 11 cross the longitudinal rods 10, the wires 11 are spot welded. In Figure 1 of the drawing I have illustrated a unit for a concrete post, and it is to be noted that the unit is of greater width at the bottom and gradually tapers towards the upper end, providing a tapering reinforcement. The transverse wires 11 are cut at 13 adjacent the longitudinal rod 14, while at the other end 15 these wires are long, the length being equal to the spacing between the longitudinal rods 10 for a purpose to be later described. The transverse wires 11 are of a soft material and consequently sufficiently pliable, permitting the reinforcing unit to be formed into the desired configuration over my novel form to be later described. By spot welding the transverse wires 11 at the point 12 where they cross the longitudinal rods 10, I provide a structure in which the longitudinal rods are held securely and accurately in their proper position while being formed into the reinforcing unit. By providing the short ends 13 of the transverse wires 11, the longitudinal rod 14 becomes the center reinforcing rod in the reinforcing unit, this rod being held in position by the transverse wires which are bent at right angles, at a point mid-way the rod 14 and the adjacent rod 10. Each of the longitudinal rods have their ends 16 and 17 bent inwardly and into a U-shape configuration. To the longitudinal rod 14 in spaced relation are secured a plurality of fence securing members 18 having one end 19 formed into an eye that encircles the rod 14, the other ends 20 of the members 18 project an appreciable distance from one face of the reinforcing unit and as illustrated in Figure 3 of the drawing, they are bent upwardly with the exception of the lower member 21 which

is bent downwardly. By bending the member 21 downwardly a means is provided that prevents animals of the rooting type from pushing the wire up and damaging the fence. The ends 15 of the transverse wires 11 are looped and tied at 22 which is the approximate mid-way point between the longitudinal rod 14 and the adjacent rod 10.

As previously stated, the reinforcement unit is shaped over a form, and in Figure 5 of the drawing I have illustrated said form which comprises a body 23 of tapering configuration. The body has formed within the inner confines of the walls a U-shaped portion 24, the inner portion of the U forming an open groove 25. The walls of the body 23 and the U-shaped portion 24 are provided with a plurality of apertures in register, the apertures receiving detachable pins 26. In the method of forming the reinforcement, the pins 26 are removed from the form, the rod 14 of the reticulated unit is then placed in the groove 25. The pins 26 are then inserted in the apertures and as illustrated in Figure 7 of the drawing, the rod 14 impinges against the detachable pins 26 anchoring the rod 14 in the groove 25. The reticulated unit is then shaped around the form, the rods 10 engaging the concavo-convex grooves 27. The ends 15 are then bent around the wires 11 at 22 as illustrated in Figure 2 and by the dotted line 27 in Figure 7 of the drawing, which completes the shaping of the reinforcement, and due to the tapering of the form the reinforcement as a unit is removed and ready to be placed in the concrete mold.

While the principles of the invention will always be adhered to, the invention is susceptible to certain changes and modifications and I do not wish to limit myself to the exact structure, and changes may be made without departing from the spirit or scope of the invention.

What I claim is:—

1. A concrete post reinforcement unit comprising longitudinal members, transverse members secured to the longitudinal members in spaced relation, one end of each of the transverse members extending beyond the adjacent longitudinal member, one of said longitudinal members being centrally disposed in the reinforcement and supported in said central position by the transverse members, a plurality of horizontal members having one end secured to said central longitudinal member, the other end of said horizontal members extending beyond the reinforcement the end of one of said horizontal members bent downwardly, the ends of the other of said horizontal members bent upwardly, the ends of the transverse extending members looped around the portion of the supporting transverse members adjacent the central longitudinal member, the ends of the longitudinal members formed into a U.

2. A concrete post reinforcement unit comprising longitudinal members, transverse members secured to the longitudinal members in spaced relation, one end of each of the transverse members extending beyond the adjacent longitudinal member, one of said longitudinal members being centrally disposed in the reinforcement and supported in said central position by the transverse members, a plurality of horizontal members having one end secured to said central longitudinal member, the other end of said horizontal members extending beyond the reinforcement, the ends of the transverse extending members looped around the portion of the supporting transverse members adjacent the central longitudinal member.

3. A concrete post reinforcement unit comprising longitudinal members, transverse members secured to the longitudinal members in spaced relation, one end of each of the transverse members extending beyond the adjacent longitudinal member, one of said longitudinal members being centrally disposed in the reinforcement and supported in said central position by the transverse members, a plurality of horizontal members having one end secured to said central longitudinal member, the other end of said horizontal members extending beyond the reinforcement, the end of one of said horizontal members bent downwardly, the ends of the other of said horizontal members bent upwardly, the ends of the transverse extending members looped around the portion of the supporting transverse members adjacent the central longitudinal member.

4. A concrete post reinforcement unit comprising longitudinal members, transverse members secured to the longitudinal members in spaced relation, one end of each of the transverse members extending beyond the adjacent longitudinal member, one of said longitudinal members being centrally disposed in the reinforcement and supported in said central position by the transverse members, a plurality of horizontal members having one end secured to said central longitudinal member, the other end of said horizontal members extending beyond the reinforcement, the ends of the transverse extending members looped around the portion of the supporting transverse members adjacent the central longitudinal member, the ends of the longitudinal members formed into a U.

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