June 26, 1934. H. E. LYNCH 1,964,404

METALLIC POST

Filed Oct. 31, 1929

Fig. 1

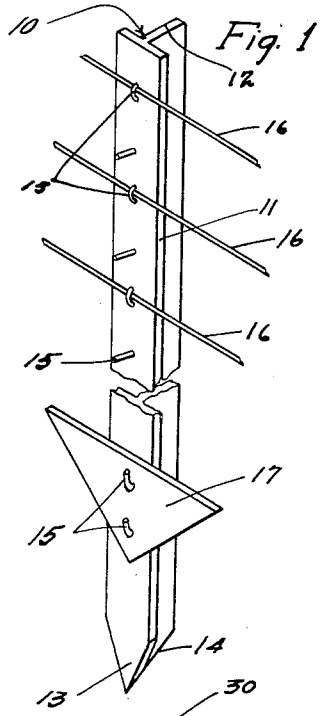


Fig. 2.

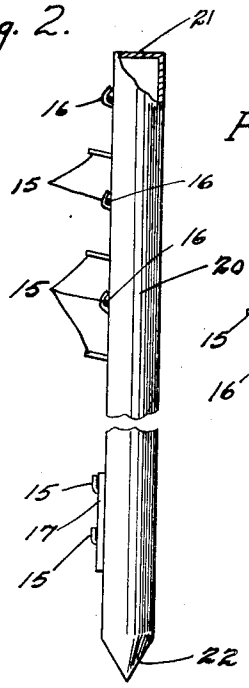


Fig. 4.

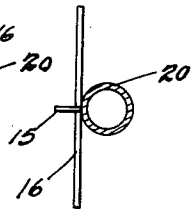


Fig. 3.

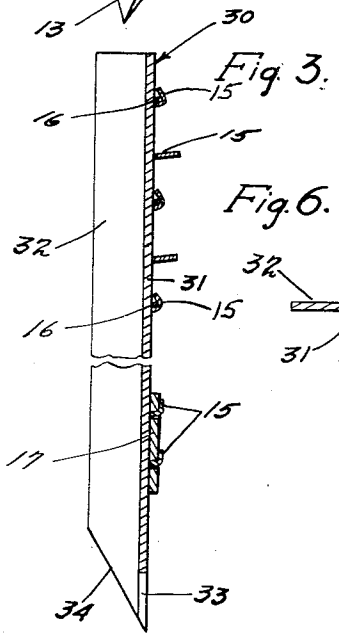


Fig. 6.

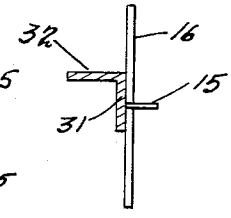
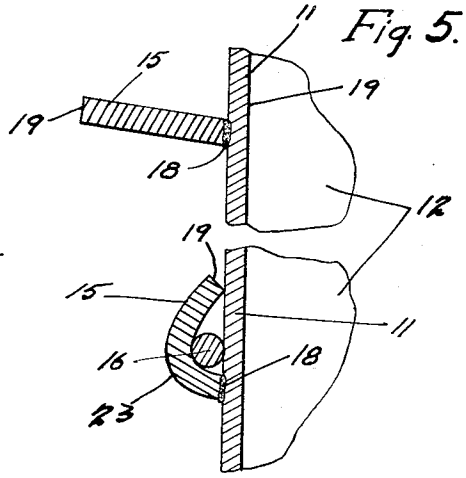


Fig. 5.



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UNITED STATES PATENT OFFICE

1,964,404

METALLIC POST

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Application October 31, 1929, Serial No. 403,781

4 Claims. (Cl. 256—48)

My invention relates to fence posts and more particularly to metallic fence posts.

It is a purpose of my invention to make a strong and durable fence post with wire securing means thereon that are also strong and durable and which can be readily engaged with the wire to hold the same without the use of any special tools.

It has been found that ordinary sheet metal fence posts with sheet metal fingers thereon for holding the wire are not lasting in character and do not hold the wire firmly and reliably in position. Furthermore, most of such posts that are hollow in character, have openings therein due to the fingers being punched therefrom through which water will enter the same and cause the same to rust out and be destroyed in a short time. Such posts are usually not of sufficient strength to maintain live stock within the fenced area, as the running of the live stock into the fence will cause the posts to either bend or collapse or the wires to become disengaged therefrom.

It is accordingly a purpose of my invention to provide a strong solid imperforate metallic post the material of which is of sufficient thickness and rigidity that the same will not be bent out of shape and which is provided with projecting fastening elements thereon that are of sufficient cross section that the same will remain in wire holding position even though the wire is put under an unusual tension or is twisted. The fastening elements are rigidly fixed in position on the post and are preferably electrically welded thereto so as to be substantially integral therewith.

It is a further purpose of my invention to provide such projecting fastening elements that extend from one face of the post at a slightly oblique angle, and which are made of steel of such a character that the same can be bent without heating toward the post into wire clamping position by a hammer blow and will remain in such position after having been bent into wire clamping position. It is also a purpose of my invention to make the post of such thickness and stiffness that the same will serve as an anvil or backing member that will not bend or be distorted in any manner when the wire fastening projections are hammered toward the same to clamp the wire between the fastening projection and the post.

Other objects and advantages of my invention will appear as the description of the drawing proceeds. I desire to have it distinctly understood, however, that I do not intend to limit myself to the particular details shown or described, but that I intend to include as part of my invention, all such obvious changes and modifications as would occur to a person skilled in this art and as would fall within the scope of the claims.

In the drawing:

Fig. 1 is a perspective view of one of my improved fence posts showing wires in engagement therewith, the wires being partly broken away and a portion of the post being broken away.

Fig. 2 is a view partly in side elevation and partly in section of a post of tubular form embodying my invention, partly broken away.

Fig. 3 is a longitudinal section, partly broken away, of another form of post made in accordance with my invention.

Fig. 4 is a transverse section through the post shown in Fig. 2.

Fig. 5 is an enlarged fragmentary section of a post partly broken away showing one of the projections in clamping position, and another in the position thereof prior to being bent into clamping relation with the wire, and

Fig. 6 is a transverse section through the post shown in Fig. 3.

Referring in detail to the drawing, the various forms of posts shown are only different in cross section and the principle of operation of the various forms shown is substantially the same. In Fig. 1 a post 10 is shown that is substantially T-shaped in cross section, and which comprises a transverse portion 11 and a rearwardly extending flange 12 substantially perpendicular thereto. The post 10 is made of heavy steel construction similar to structural shapes and is sufficiently stiff and strong that the same can be driven into the ground without any damage thereto or bending thereof. In order to facilitate the driving of the post 10 into the ground the transverse portion 11 is provided with a tapered lower end 13 and the flange 12 is tapered at its lower end as shown at 14 to correspond to the taper of the portion 13. Extending from the face of the portion 11 of the post 10 are the wire clamping projecting finger-like studs 15 which serve as the wire fastening elements, the same being bent into position toward the post to clamp the wires 16 between the face of the post and said bent over studs. Certain of said studs are also utilized to secure an anchor plate 17 to the post below the ground. The anchor plate may be of various shapes, but is preferably tapered and is shown as being triangular in the drawing.

In Figs. 2 and 4 a tubular substantially cylin-

drical post 20 is shown, which has the closed substantially flat top 21 and the closed tapered substantially conical bottom end 22 to facilitate driving the same into the ground. The ends are so united with the post, by welding or otherwise, as to leave no cracks or openings therein through which water might enter the interior of the post. The fingerlike studs 15 are also provided on the post 20 and these are mounted in the same way as described in connection with Fig. 1 and secure the wires 16 and anchor plate 17 in position in the same manner as above described.

In Figs. 3 and 6 an angle iron post 30 is shown, said post having a transverse portion 31 and a rearwardly extending flange 32 the transverse portion 31 being tapered as shown at 33 and the flange 32 being tapered at 34 to provide a tapered lower end on the post to facilitate driving the same into the ground. The transverse portion 32 of the post 30 is provided with the projecting fingerlike studs 15 previously described and these serve to hold the wires 16 and the anchor plate 17 in position on the post in the manner previously described.

The fingerlike studs 15 are made substantially the same when used with any one of the forms of posts described, and are secured to all the posts in the same manner and have the same relationship to the various posts. The same are accordingly described in detail only in connection with one form of post, as the cross sectional shape of the post is of secondary importance.

In Fig. 5 is shown a fragmentary portion of one of the posts 10, on an enlarged scale, to more clearly show the mounting of the studs and the inclination thereof relative to the face of the post. The post is broken away between two adjacent studs to bring the same into closer proximity in this figure. Each of said studs comprises a fingerlike body portion 15 that is substantially cylindrical in form, being made, preferably, of a length of rod-like metal. The fingerlike stud 15 is made of a different material than the post and is of such a character that the same can be bent into wire clinching position by one or two blows of a sledge hammer or similar hammer, without cracking or breaking and will remain in such wire clinching position and is preferably made of a ductile steel. The stud 15 is secured to the post 10, or to any of the other posts shown by welding the same thereto so as to make the same an integral part of the post, said welding is preferably done by an electric resistance welding process, and the weld is shown at 18 in the drawing, forming a solid bond between the stud and the post, so that the stud is substantially an integral part of the post.

When the wire is to be attached to the post the same is usually brought into a position adjacent the post on the upper side of the stud and the stud being slightly inclined upwardly relative to the perpendicular to the face of the post, the wire will tend to lie in a position near the base of the stud. The stud is then struck a blow with a hammer or similar tool to bend the same upwardly and toward the post, as shown in the lower portion of Fig. 5 to clinch the wire 16 between the stud and the post, the outer end 19 of the stud being brought substantially into engagement with the face of the post and the bend in the stud being rather abrupt, as indicated at 23. The stud can, of course, also be bent sidewise to clamp a vertically extending wire to the post if desired. The post in any case serves as a sort of an anvil or backing member and is preferably made of a relatively harder metal, such as a low carbon steel, so as not to bend or warp when the stud is bent into wire clinching position.

Having thus described my invention, what I claim and desire to secure by United States Letters Patent is:

1. A post of the character described comprising an imperforate, hard, rigid steel body portion, and elongated, substantially straight, finger-like, ductile steel studs welded to the imperforate outer face of said body portion, and projecting upwardly from their point of union with said body portion at an oblique angle to said body portion, to provide tapering wire receiving pockets between said outer face of said body portion and said studs, the outer ends of each of said studs being adapted to be bent against said body portion to clamp a wire between said stud and said post.

2. A post of the character described comprising an imperforate, hard, rigid, steel body portion, and elongated substantially straight, rod-like, ductile steel studs of substantially uniform cross section from end to end thereof, electric resistance welded to the imperforate outer face of said body portion, and projecting upwardly from their point of union with said body portion at an oblique angle to said body portion, to provide tapering wire receiving pockets between said outer face of said body portion and said studs, said studs having blunt outer ends which are adapted to be bent against the outer face of said body portion.

3. A post of the character described comprising an imperforate, hard, rigid steel body portion having a flat uninterrupted, wire attaching face and a bracing portion extending perpendicularly rearwardly from said attaching face, and elongated, substantially straight, finger-like, ductile steel studs welded at one end thereof to said flat face of said body portion, and extending outwardly from said face so as to be slightly inclined upwardly at an oblique angle to a perpendicular to said flat face, said studs being of substantially uniform cross section from end to end thereof and having blunt outer ends adapted to be bent against the flat face of said body portion by hammering without deformation or denting of said flat face.

4. A post of the character described comprising an imperforate, closed, hard, rigid tubular steel body portion of substantially uniform diameter throughout the length thereof except for a tapered bottom end portion, and elongated, substantially straight, finger-like, ductile steel studs welded at one end thereof to said tubular body portion on the outer face thereof and projecting slightly upwardly at an oblique angle to said body portion from their point of union with said body portion to their outer ends, said studs being of substantially uniform cross section from end to end thereof and having blunt outer ends adapted to be bent against the outer face of said body portion by hammering without deformation or denting of said body portion.

HARRY E. LYNCH.