No. 803,785. PATENTED NOV. 7, 1905.

J. K. PURINTON.

CEMENT FENCE POST.

APPLICATION FILED MAR. 2, 1905.

Fig. 1.

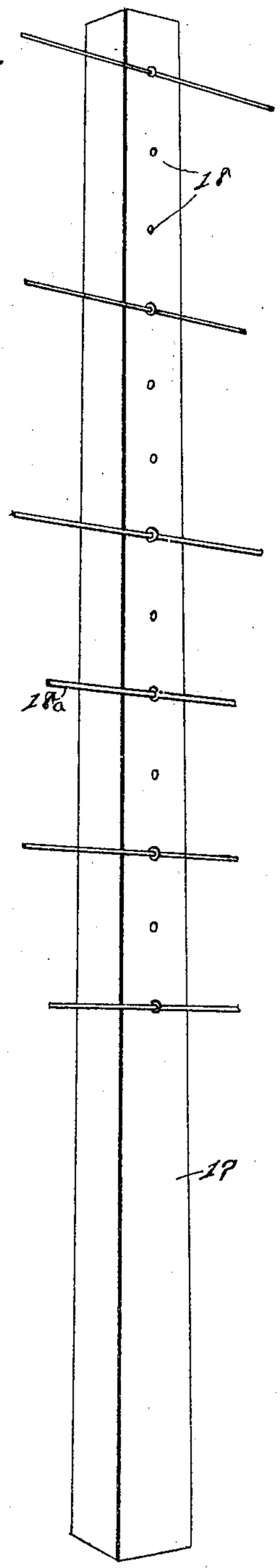


Fig. 2.

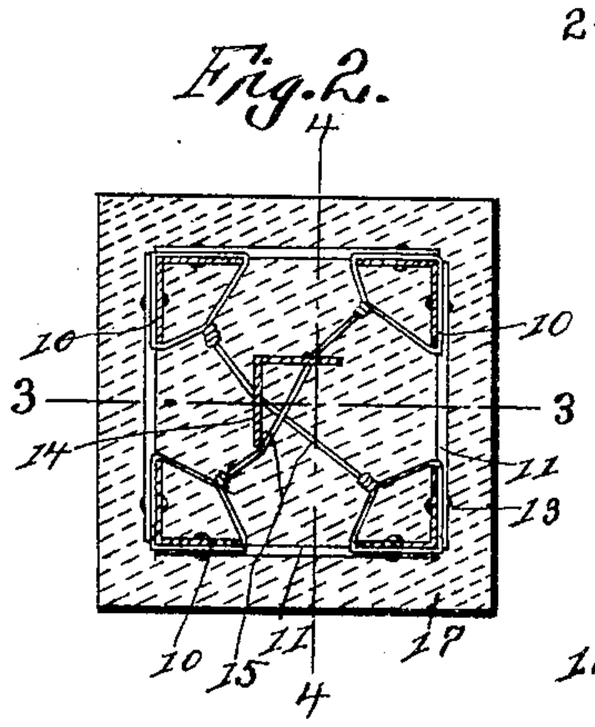


Fig. 3.

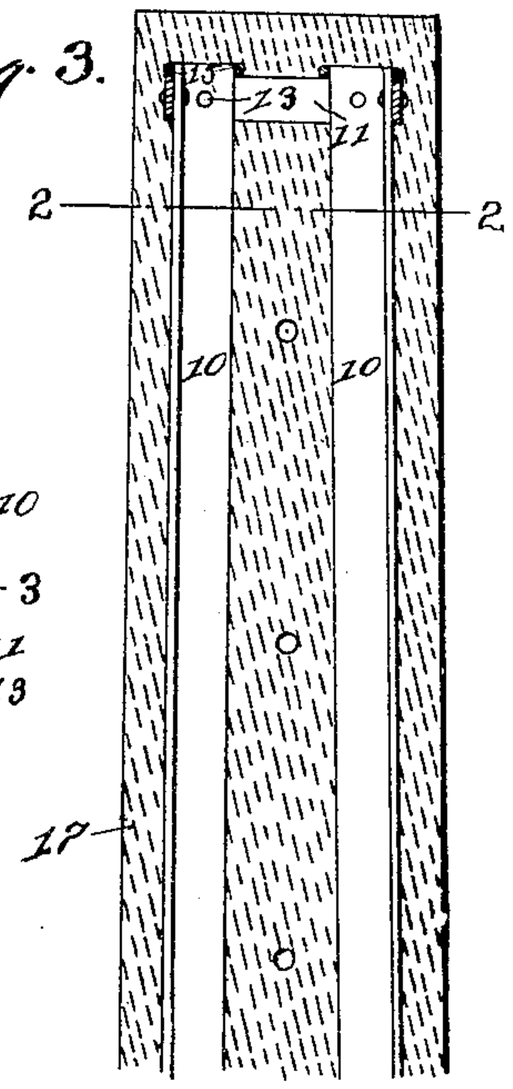
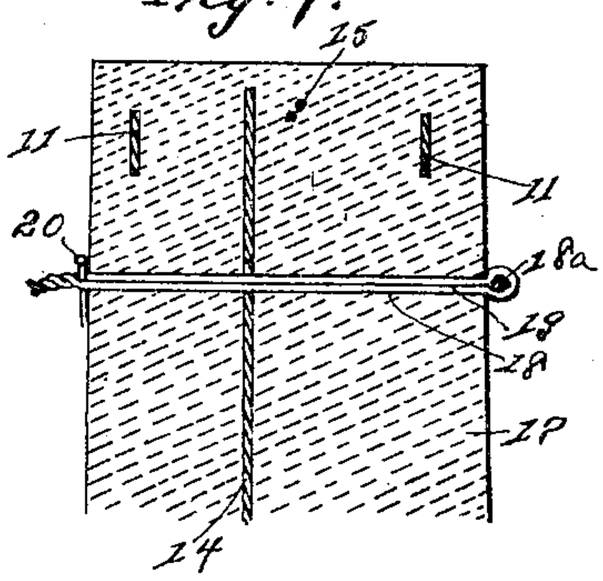


Fig. 4.



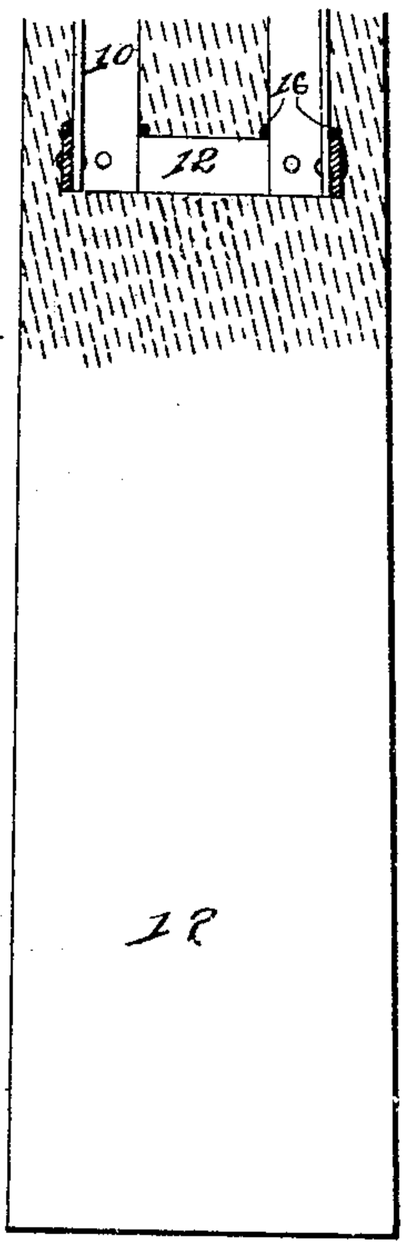
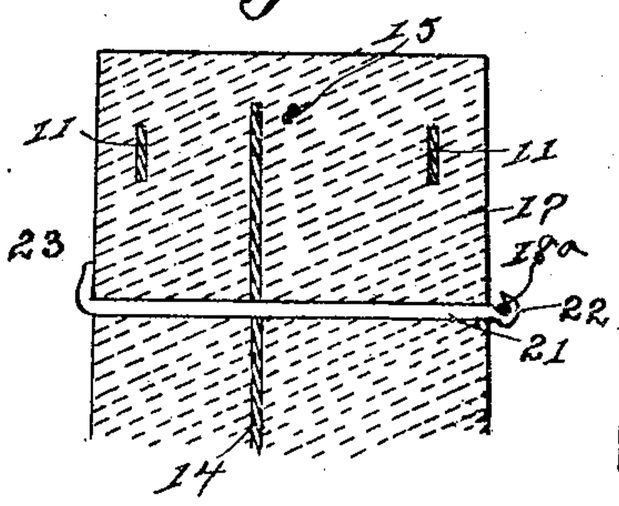


Fig. 5.



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UNITED STATES PATENT OFFICE

JUDSON K. PURINTON, OF DES MOINES, IOWA.

CEMENT FENCE-POST.

No. 803,785. Specification of Letters Patent. Patented Nov. 7, 1905.

Application filed March 2, 1905. Serial No. 248,743.

To all whom it may concern:

Be it known that I, JUDSON K. PURINTON, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Cement Fence-Post, of which the following is a specification.

The objects of my invention are to provide a metallic skeleton frame of simple, durable, and inexpensive construction designed to be placed in the interior of a cement post for the purpose of bracing the post and of preventing the post from becoming easily broken and, further, to provide improved means for connecting fence-wires with a post of this kind.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a perspective view of a complete post having a number of fence-wires attached thereto. Fig. 2 shows a longitudinal sectional view on the line 2 2 of Fig. 3. Fig. 3 shows a vertical sectional view of the upper and lower end portions of the post, taken on the line 3 3 of Fig. 2. Fig. 4 shows a detail sectional view on the line 4 4 of Fig. 2, illustrating the means by which a fence-wire is attached to the post; and Fig. 5 shows a like view of a modified form of wire-attaching device.

Referring to the accompanying drawings, I first construct the metallic frame hereinafter described and then support it in a mold and place cement in the mold to form the complete post. The metal frame comprises four upright angle-bars 10, arranged as shown in Fig. 2, forming the corners of a rectangular figure. These angle-bars are of a length to extend from a point near the top of a post to a point about a foot from the bottom of the post. The said uprights are connected with each other and spaced apart by means of the metal straps 11 at the top of the frame and the metal straps 12 at the bottom thereof, these straps being connected by rivets 13 with the uprights 10. In the center of the rectangle formed by the uprights 10 I have provided a longitudinal angle-bar 14 of substantially the same length as the uprights 10, and I support the central upright 14 temporarily in position in the center of the rectangle by means of the cross-wires 15 at the top of the frame and the cross-wires 16 at the bottom of the frame. These cross-wires have their end portions passed around the uprights 10, that are diagonally opposite each other, and their central portions passed through openings in the central upright 14, and in this way the central upright is firmly supported in position in the metal frame. The said upright 14 is provided throughout its length with one or more openings to receive pins or other wire-fastening devices hereinafter described. The metal frame thus formed is first placed in a mold of the ordinary kind and then a plastic composition, such as cement, is placed in the mold, completely filling the space within the rectangle formed by the uprights 10 and also completely covering the exterior of the metal frame.

The cement post is indicated by the reference-numeral 17, and the cement preferably extends about a foot below the lower end of the metal frame, as shown in Fig. 3.

The reference-numeral 18 indicates openings formed in the cement post, which openings are in line with the ones formed in the central upright 14. These openings may be formed in the cement exactly in line with the openings in the central upright 14 by placing pins in the mold before the cement is placed therein and having said pins passed through the upright 14. In this way the finished post will be provided with openings extending through the cement and also through the central upright 14.

I have provided means for connecting fence-wires 18 with the post, as follows: The reference-numeral 19 indicates a piece of wire doubled at its center, and I employ the wires 19 in connecting fence-wires with my improved post, as follows: First the fence-wire to be connected is passed through between the ends of the wire 19, and then the said wire 19 is passed through one of the openings in the cement post and through the opening in the central upright 14, the ends of the wire 19 projecting beyond the opposite side of the post. I then place a small pin 20—such, for instance, as a nail—between the projecting ends of the wire, and said ends are then twisted upon themselves, thus tightly securing the pin 20 between the ends of the wire 19 and drawing the fence-wire 18 firmly against the post. In this way the fence-wires are connected not only to the cement portion of the post, but also to the central upright

angle-bar 14, thus making a firm support for the fence-wires.

In the modified form shown in Fig. 5 of the drawings I have shown a metal rod 21, having an eye 22 at one end. In connecting fence-wires with a post by means of the rod 21 I first insert the wire in the eye 22, then pass the rod 21 through the opening in the post and through the opening in the upright 14, and I then bend the projecting end 23 of the rod 21 laterally against the opposite side of the post. In this way the wire is permanently secured to the post and may be removed only by straightening the end 23 of the rod and withdrawing it from the post. By having the wire-fastening devices passed not only through the cement portion of the post, but through the angle-bar 14 as well, I provide fastening means of great durability, for, if by some means, the wire-fastening devices should be subjected to such uses as would tend to make them work in and out through the openings provided for them in the fence-post they could of course wear away the adjacent portions of the cement post, but they could not wear out or enlarge the openings provided for them in the central upright 14. Furthermore, by providing a frame for cement posts, said frame comprising a number of rigid angle-bars the body portions of which are disconnected and spaced apart, it is obvious that the cement will fill the interior of the post and the various parts of the cement will be firmly united to each other between the metal frame members, so that the presence of the metal frame members will not tend to weaken the post nor to cause it to crack along the lines of the metal frame members, and, furthermore, by providing a frame composed of rigid uprights connected at their upper and lower ends by rigid straps. A post is provided that cannot readily be bent when subjected to excessive strains and jars, and hence the metal frame will support and brace the cement part of the post and the cement post will inclose and protect the metal frame from deterioration by rusting, and, furthermore, by means of my improved fence-post fastenings wires may be attached to the post and can be readily removed and replaced as often as desired without in any way injuring the post. In a post of this kind where the rigidity is furnished by a metal frame which cannot be bent the cement portion of the post may be made relatively small, and therefore inexpensive, and yet a post is provided of great durability and strength.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. In a post, the combination of four longitudinally-arranged angle-bars, straps secured to the end portions thereof rigidly securing them in position spaced apart, a central angle-bar, means for supporting the central angle-bar in position between the corner-bars and a plastic substance surrounding the frame and filling the spaces between the angle-bars.

2. In a post, the combination of four angle-bars, straps riveted to the end portions thereof forming a rectangular frame, the angle-bars thereof spaced apart, a central angle-bar within the rectangular frame formed by the corner angle-bars, wires connected with the corner angle-bars supporting the central angle-bar in position, said central angle-bar provided with an opening, a plastic substance surrounding the metal frame and filling the spaces between the angle-bars and provided with an opening in line with the opening in the central angle-bar.

3. A post comprising four angle-bars, straps riveted to the end portions thereof forming a rectangular frame, the angle-bars thereof spaced apart, a central angle-bar within the rectanugular frame formed by the corner angle-bars, wires connected with the corner angle-bars supporting the central angle-bar in position, said central angle-bar provided with openings, a plastic substance surrounding the metal frame and filling the spaces between the angle-bars and provided with openings in line with the openings in the central angle-bar and fence-wire fastenings extended through the openings in the central angle-iron and the plastic substance.

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