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R. S. HILTNER.

FENCE POST.

APPLICATION FILED FEB. 14, 1906.

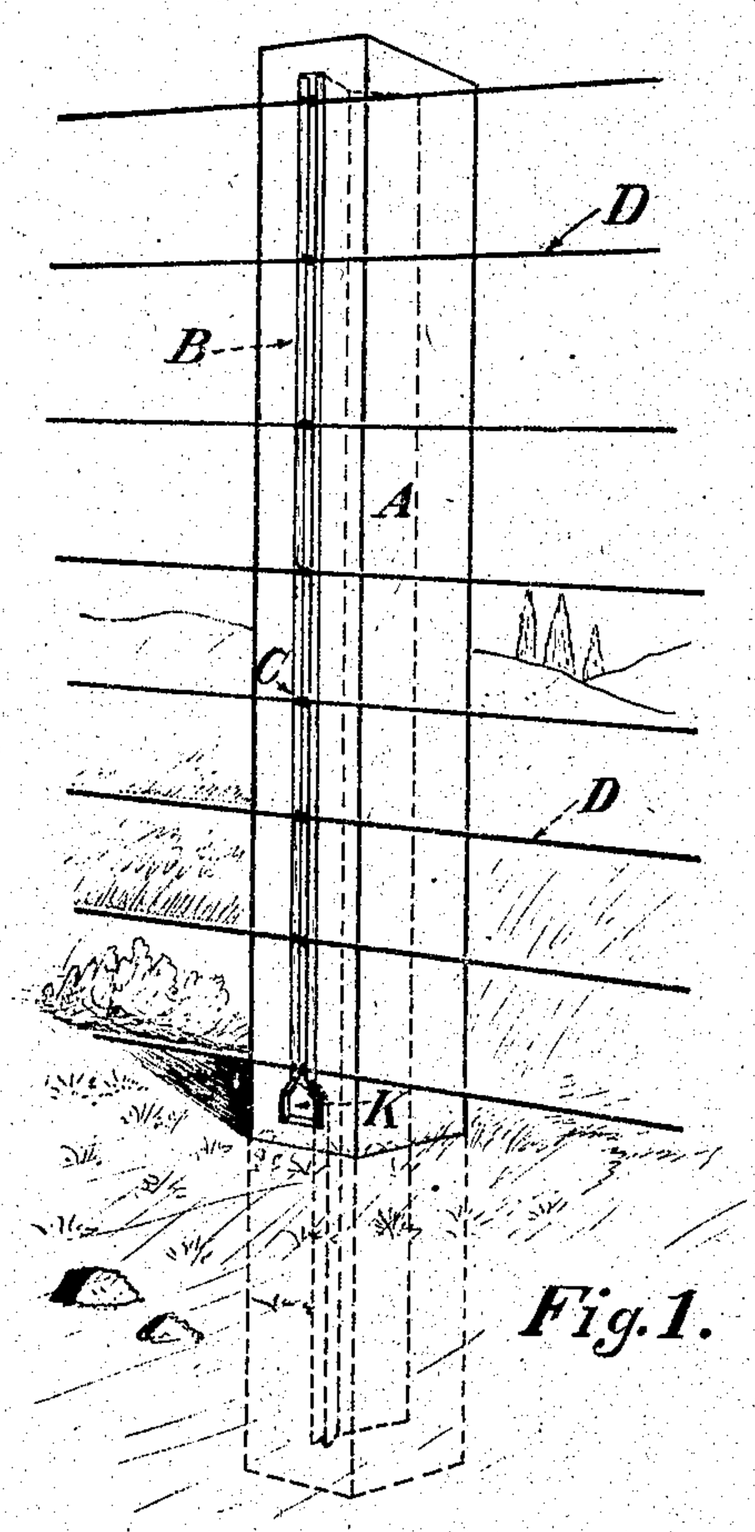

Fig. 1.

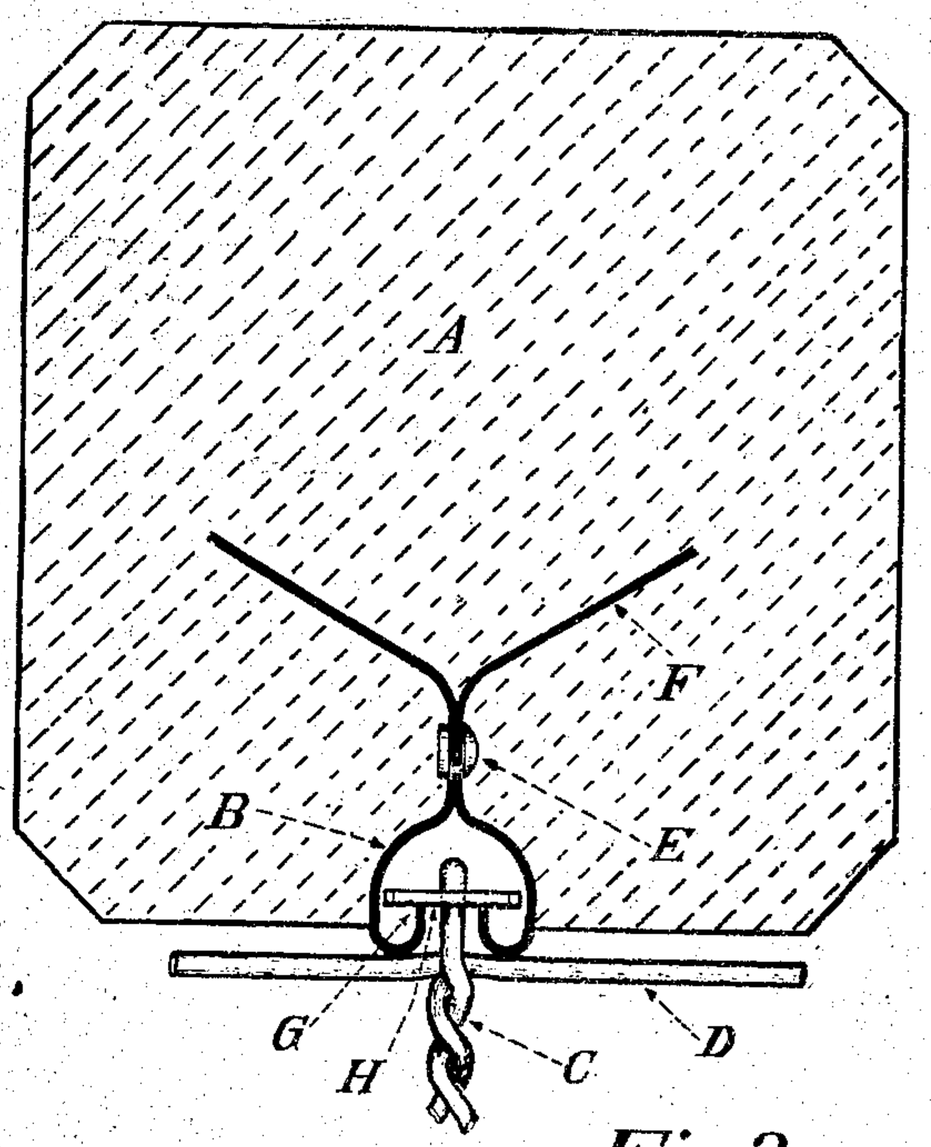

Fig. 2.

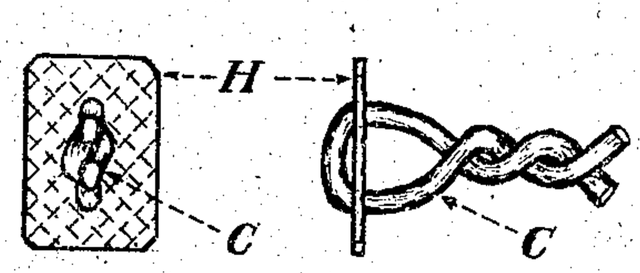

Fig. 3.

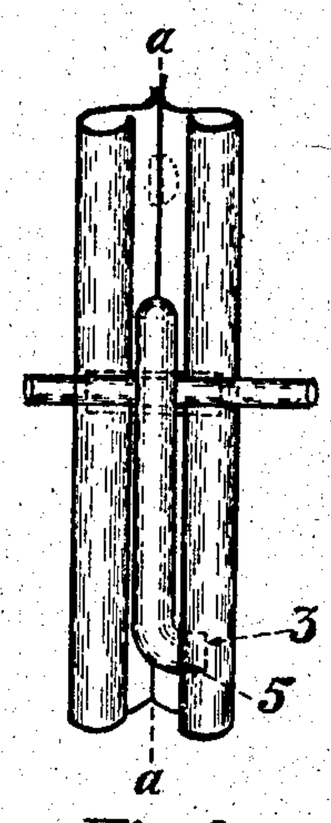

Fig. 4.

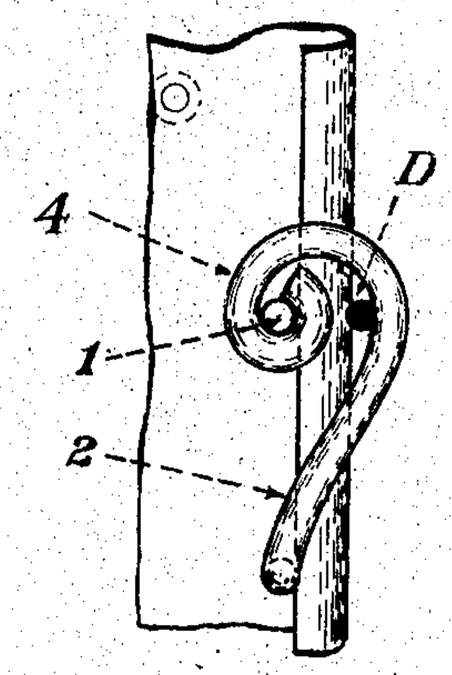

Fig. 5.

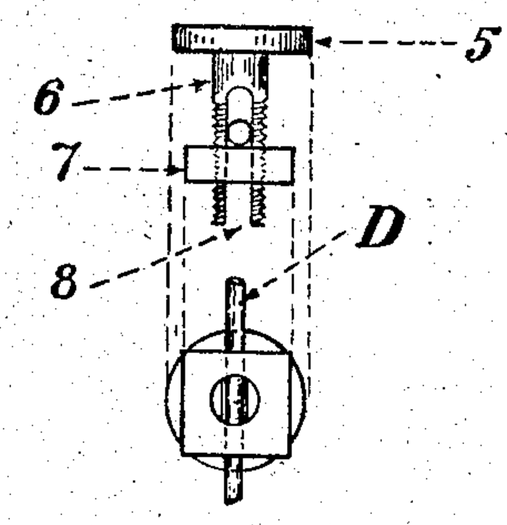

Fig. 6.

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FENCE-POST.

No. 824,117. Specification of Letters Patent. Patented June 26, 1906.

Application filed February 14, 1906. Serial No. 300,987.

To all whom it may concern:

Be it known that I, ROBERT S. HILTNER, a citizen of the United States, and a resident of Lincoln, Lancaster county, Nebraska, have invented certain new and useful Improvements in Fence-Posts, of which the following is a full and clear description, the accompanying drawings forming a part thereof.

It is well known that the use of wood for fence-posts is becoming restricted in many parts of this country because of the scarcity and consequent high cost of timber and that Portland-cement concrete is rapidly replacing the wood in many instances. Obviously concrete properly reinforced is much preferable to wood in the matter of stability and endurance; but there is one objection to its use as material for fence-posts—viz., its impenetrability to staples and other wire-fasteners, nails, &c. With wooden posts the wires of the fence may be attached by staples at any desired point; but not so with concrete posts. When cement is the material used and when the means for attaching the fence-wires are embedded singly and at intervals in the face of the cement post, the position of said fasteners are fixed, and therefore not capable of adjustment. With woven-wire fences, and even in ordinary line-wire fences, a fastener fixed in position is highly objectionable, because it is limited in its usefulness. Either a great deal of care is necessary in laying out the positions of the wire-attaching means on the posts or the wires must be bent out of alinement where attached to the posts, or else a fastener must be improvised to secure the wire at the desired point.

It is the object of this invention to remedy the defect pointed out above by providing a perfectly-adjustable wire-attaching means for use in concrete posts.

Although reference has been made above to cement concrete posts, it is not desired to limit this improvement alone to posts composed of this material. Any suitable substance into which the device can be embedded or to which it can be fastened may be used as the body for posts or supports for line-wires. Thus strips of wood could be utilized, or, in fact, the device may be used alone as a post.

With reference to the accompanying drawings, which illustrate several forms of devices for accomplishing the object sought, Figure 1 is a perspective view of a fence-post having my improvement applied thereto. Fig. 2 is a cross-section of a post, taken through one of the wire-fastening members. Fig. 3 is a detail of a fastener in plan and elevation. Fig. 4 is a modified and preferred form of fastener, showing its position in the channel-bar. Fig. 5 is a sectional view on line *a a* of Fig. 4. Fig. 6 is another modified form of clamp or fastener that may be used with wire or wooden rails.

A is a post of cementitious material. In one face of the post is embedded a channel member B. The shape of this member is well illustrated in Fig. 2. The channel portion is of substantially U shape or other shape adapted to the purpose described, with lips G at the extremities of the sides B, formed by rounding the same and turning them inward. The specific form of this channeled member is a non-essential feature of my invention. Thus, for example, it may be substantially inverted-T shape instead of U shape and have the sides B turned outward upon the face of the post instead of inward without departing in the least from the spirit of the invention. This channel is formed by riveting together, as at E, or by binding by any other suitable means two strips of metal bent as indicated. Extending back from the riveted portion E are diverging wings F, the function of which is to hold firmly in place the channel-bar embedded in the cement. The channel portion proper is continued from a point near the top of the post to a point near the ground-line. The cement is cut away at K just below the terminal of the channel to form a pocket substantially of same cross-sectional dimensions as the channel. This pocket allows the introduction of the adjustable clamps into said channel. The wings F, however, extend substantially the entire length of the post to serve as a reinforcement.

In posts of the character described composed of cementitious material (usually of a substance technically known as "concrete") it is obviously necessary to have the channel portion of the post constructed of some sort of metal which has greater cohesive strength and elasticity and is less friable than concrete to serve as a reinforcement and to prevent breaking and splintering away of the flanges when the pressure of the wire-fastener is applied.

One form of clamp is shown in Fig. 3. It consists of a plate H, of metal, of proper size to

fit into channel B and a wire C bent in the form of a staple. The plate is roughened on one surface to prevent sliding in the channel. Two openings are formed in the plate, through which the wire C is passed. These clamps are placed in proper position in the channel B, and the wire C is twisted around the line-wire D of the fence to clamp the same against the outside of the channel.

Figs. 4 and 5 show the preferred form of clamp, comprising a short wire 1, which bridges the channel and about which is pivoted the other member of the clamp—viz., a scroll-shaped wire 4 having a relatively long arm 2, the end of which is turned laterally at 3. On the front side of this arm 3 is a notch 5 to engage the inner edge of the channel G.

The operation of this device is apparent from the drawings. The wire 1, carrying the clamp, is moved into position in the channel B under the lips G. The clamp is then turned from a position above the fence-wire D until the wire is clamped against the channel B. The notch 5 of the arm 3 is then pushed or sprung into place under the lip G to hold the wire and the clamp firmly.

Fig. 6 illustrates another simple construction for the clamp comprising a split bolt 6 with a head 5 of proper size to fit into the channel B. Upon this bolt is fitted a nut 7, which serves to clamp the fence-wire D, placed in the slot 8 in the bolt, firmly against the face of the channel-bar B.

The devices shown are simply illustrative of the manner in which my invention may be formed and utilized; but I do not desire to be limited by any of these specific forms, as modifications may be easily designed. Neither do I wish to limit my invention to use for wire fences alone, as the mechanism may be used in any structure where wires are to be attached to a member—as, for example, in telegraph-pole construction.

What I claim, and desire to secure by Letters Patent, is—

1. In a device of the character described, a molded member of cementitious material, a channeled member embedded therein, and adjustable clamping devices in the channel, substantially as described.

2. A post of cementitious material, a sheet-metal channel embedded therein, and adjustable clamping devices in the channel, substantially as described.

3. A post of cementitious material, and a sheet-metal channel embedded therein, substantially as described.

4. A post of cementitious material, a sheet-metal channel embedded therein, of substantially U shape, and having lips to form a runway, and adjustable clamping devices in said runway, substantially as described.

5. A post of cementitious material and a channel embedded therein, comprising two strips of metal, attached together near the middle longitudinal line, and having diverging wings at one side, and formed into U shape at the other side, substantially as described.

6. A post of cementitious material, a channel embedded therein, and a clamp in the channel, comprising a bridge plate or bar and a clamping member attached to the bridge, substantially as described.

7. A channel-bar, substantially U shape on one side, having inwardly-turned lips to form a runway, and on the opposite side, having diverging wings; and adjustable wire-clamping devices in said runway, substantially as described.

8. A post having a channeled portion, a wire-clamping device within the channel, comprising a bar engaging the sides of the channel, and a scroll-shaped member pivotally connected to the bar and having means at one extremity for engaging one side of the channel.

9. A post having a channeled portion, a clamping device within the channel, comprising a bar engaging the sides of the channel, a member attached to the bar and adapted to swing about the same as a pivot to engage a line-wire of the fence, and a means on the member for engaging one side of the channel.

10. A post having a channel portion, and a wire-clamping device therein, comprising a bar, a bent wire member connected thereto and adapted to be intertwined at the ends around the line-wire of the fence to clamp same against face of the channel-bar, substantially as described.

11. A means for securing a wire to a channeled member, comprising a pivotal rod and scroll-shaped member attached thereto, the free end of which is laterally turned, substantially as described.

12. A fastener comprising a rod, a scroll-shaped member connected thereto, and a means on the member adapting it to be held in clamping position, substantially as described.

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