C. MITCHELL.

REINFORCED CONCRETE FENCE.

APPLICATION FILED MAY 26, 1909.

955,528.

Patented Apr. 19, 1910.

Fig. 1.

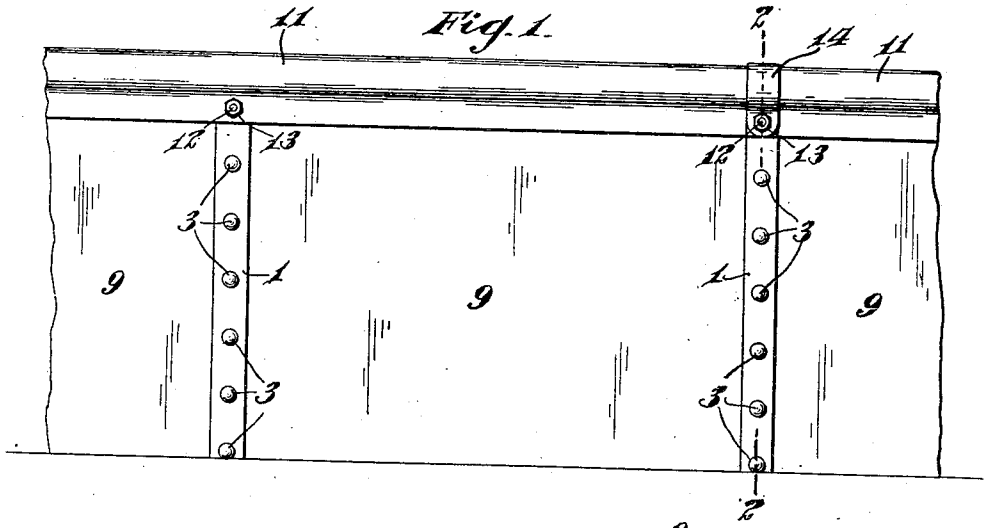


Fig. 2.

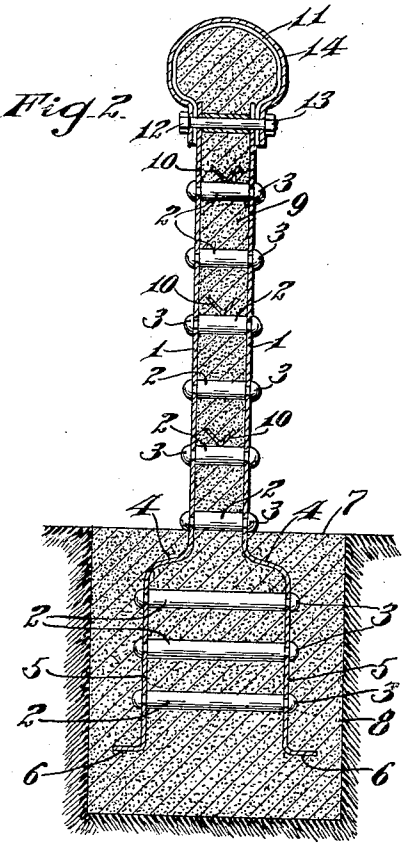


Fig. 3.

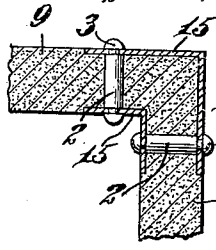


Fig. 4.

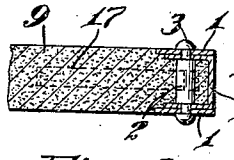


Fig. 5.

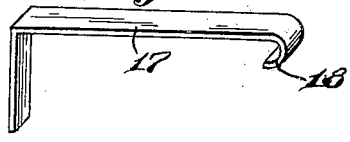
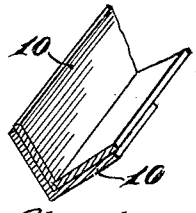


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

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REINFORCED-CONCRETE FENCE.

955,528. Specification of Letters Patent. Patented Apr. 19, 1910.

Application filed May 26, 1909. Serial No. 498,492.

To all whom it may concern:

Be it known that I, CHARLES MITCHELL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Reinforced-Concrete Fences, of which the following is a specification.

My invention relates to an improved reinforced concrete fence, the object of the invention being to provide a fence of this character, which may be made of any desired length, having improved post constructions, which are extremely simple and inexpensive to manufacture, yet strong and durable in use.

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

In the accompanying drawings, Figure 1, is a view in side elevation of my improved fence. Fig. 2, is a view in section on the line 2—2 of Fig. 1. Fig. 3, is a fragmentary view in horizontal section illustrating a corner of the fence. Fig. 4, is a fragmentary view in horizontal section illustrating the end of a fence. Fig. 5, is a detail view of one of the hangers employed in the fence construction, and Fig. 6, is a view showing the overlapping ends of the longitudinal angles.

As shown most clearly in Fig. 2, each fence post in a straight fence, comprises two flat bars 1, 1, spaced apart by means of tubes 2, and secured together by rivets 3, which latter are positioned in the tubes 2, and have their ends outside of bars 1 upset as shown.

The lower portions of the bars are bent away from each other as shown at 4, and then extend downwardly and parallel as shown at 5, the tubes 2 between these portions 5 being of course longer, and the lower ends of the bars are bent outward forming feet 6. This lower enlarged portion of each post is embedded in a concrete post 7, the latter being rammed in a post hole 8, the operation being to ram the concrete into the post hole, then place the feet portion of the post upon this concrete, and then fill the post hole up to the level of the ground, and pack it in between the bars of the post and around the tubes 2, thus firmly securing the post in the concrete base.

When the posts are in position, and in a line, any suitable forms are employed, and the fence *per se*, as indicated by the numeral 9, is formed by tamping concrete between the forms and in the posts between the bars 1 to form a complete integral structure. As the fence progresses, angle tie bars 10 are supported upon the tubes 2, and serve to tie the fence structure together. Where these angle bars meet, they are overlapped as shown in Fig. 6, but no securing means other than the concrete is employed for these angle bars.

The top of the fence is preferably enlarged and shaped as shown most clearly in Fig. 2, and is inclosed in a metal covering 11, preferably of galvanized iron, conforming in shape to the shape of the top of the fence, and the edges of said metal covering are provided with openings, which register with openings in the bars 1 and the upper tubes 2, and bolts 12 are employed at the upper ends of the fence, and extend through said metal covering 11, bars 1 and tubes 2, and are secured in place by nuts 13. Where two sections of this metal covering abut as shown at the right hand post of Fig. 1, a metal strap 14 is employed, which overlaps the meeting ends of the metal covering, and is secured by the bolt 12.

In constructing a post at the corner of the fence, angle irons 15 would be employed as shown in Fig. 3, and would be connected by tubes 2, and rivets 3 as clearly shown. In all other respects the posts would be similar to that shown in Fig. 2.

Where it is desired to form an end wall fence, channel bars 16 would be secured between the bars 1, so as to provide a metal surface at the end of the fence to protect the concrete from chipping and the like.

At any suitable points in the fence, anchors 17 as shown in Fig. 5 are employed. These anchors have hooked ends 18 to be positioned over any of the tubes 2 as illustrated in dotted lines in Fig. 4. When completely embedded in the concrete, they will securely tie the post in the wall and prevent possibility of its separation.

Various slight changes might be made in the general form and arrangements of parts described without departing from my invention, and hence I do not restrict myself to

the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the claims.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. The combination with a series of posts comprising bars spaced apart, concrete forming a fence and packed between the bars of said posts, the upper end of said concrete being enlarged, and a metal covering inclosing said enlarged upper portion of the fence and secured to said posts.

2. In a concrete fence, the combination with posts, comprising bars spaced apart, tubes between the bars, and rivets connecting said bars and passing through said tubes, of angle irons supported on said tubes and connecting the posts, and concrete surrounding said angle irons and tubes.

3. In a concrete fence, the combination with posts, comprising bars spaced apart, tubes between said bars, and rivets passing through said tubes and bars, and securing the bars together, of angle irons connecting said posts and supported on said tubes, an anchor having a hooked end engaging one of said tubes, and concrete embedding said angle irons, tubes and anchor.

4. In a concrete fence, the combination with posts, comprising bars spaced apart, tubes between said bars, and rivets passing through said tubes and bars, and securing the bars together, of angle irons connecting said posts and supported on said tubes, an anchor having a hooked end engaging one of said tubes, concrete embedding said angle irons, tubes and anchor, said concrete made flush with the bars of said posts, and enlarged at its upper edge, a metal covering over said enlarged edge, and bolts in the upper ends of said posts securing said metal covering on the fence.

5. In a concrete fence, the combination with posts, comprising bars spaced apart, tubes between said bars, and rivets passing through said tubes and bars, and securing the bars together, of angle irons connecting said posts and supported on said tubes, concrete embedding said angle irons, tubes and anchor, and enlarged at its upper edge, a metal covering over said enlarged edge, and bolts in the upper ends of said posts securing said metal covering on the fence, and a metal strap overlapping adjacent ends of said metal covering, and secured to one of said posts.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES MITCHELL.

Witnesses:
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