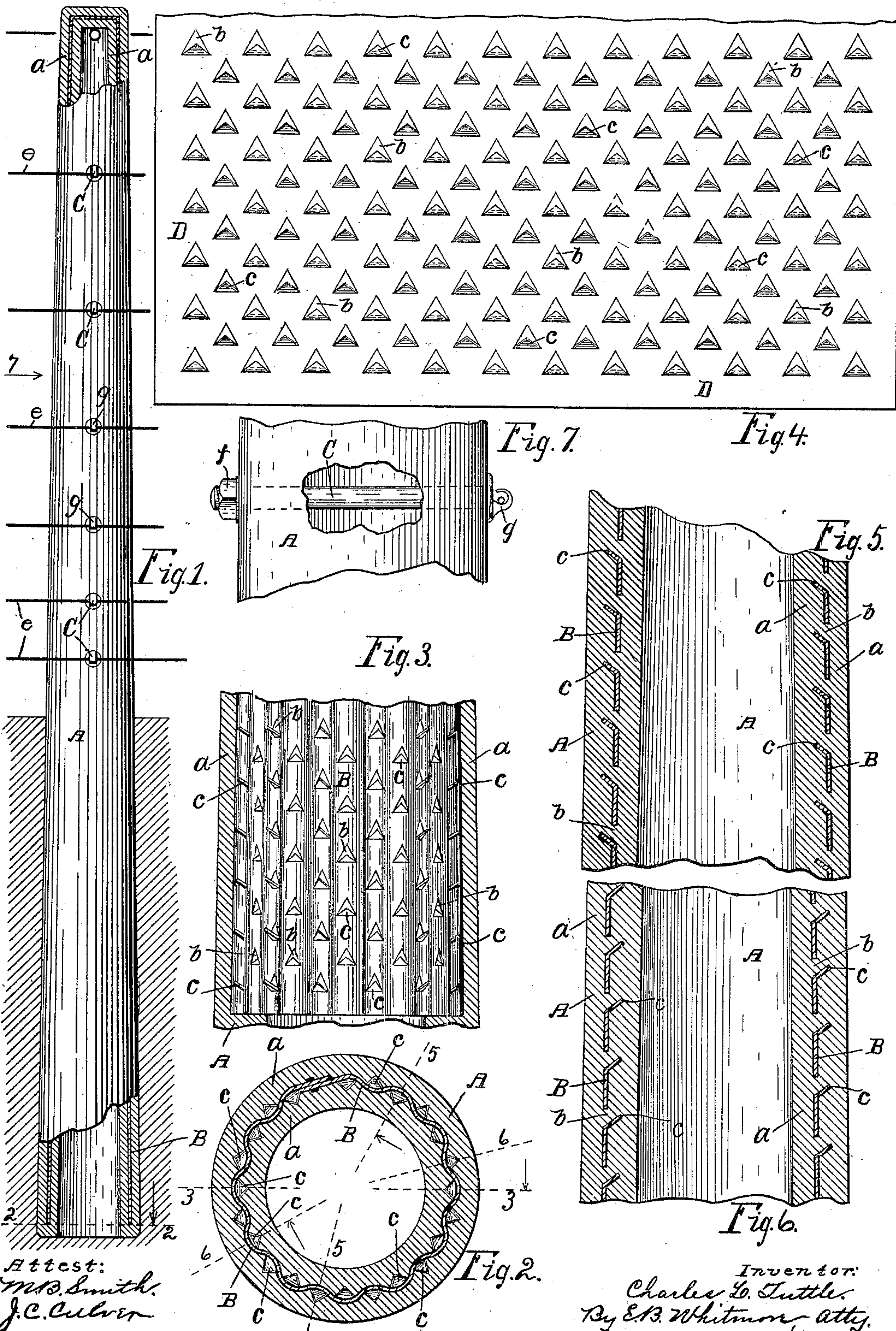


C. L. TUTTLE.

FENCE POST.

(Application filed Feb. 12, 1902.)

(No Model.)



Attest:  
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# UNITED STATES PATENT OFFICE.

CHARLES L. TUTTLE, OF ROCHESTER, NEW YORK, ASSIGNOR OF ONE-HALF  
TO HENRY D. WHIPPLE, OF ROCHESTER, NEW YORK.

## FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 701,426, dated June 3, 1902.

Application filed February 12, 1902. Serial No. 93,748. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES L. TUTTLE, of Rochester, in the county of Monroe and State of New York, have invented a new and useful  
5 Improvement in Fence-Posts, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

My invention is a combined concrete and  
16 metallic fence-post, the same being herein-after fully described, and more particularly pointed out in the claims, reference being had to the accompanying drawings, forming part of this specification.

15 Figure 1 is a side elevation of the post, partly in central longitudinal section. Fig. 2 is a transverse section of the concrete part on the dotted line 2 2 in Fig. 1, the metal part being sectioned a little higher up. Fig.  
20 3 is a central longitudinal section of the concrete part of the post on the dotted line 3 3 in Fig. 2, the metallic part being in elevation. Fig. 4 is a side elevation of a portion of the primary flat metal sheet, showing the punctures  
25 and the barbs. Fig. 5 is a central longitudinal section of a part of the post, taken on the broken dotted line 5 5 in Fig. 2. Fig. 6 is a central longitudinal section on the broken dotted line 6 6 in Fig. 2. Fig. 7 is a side elevation of a part of the post seen as indicated  
30 by arrow 7 in Fig. 1, further showing a wire-holding bolt, parts being broken away.

A in the drawings is the body of the post, consisting of a stony substance, as cement or  
35 concrete, it being hollow and slightly tapered.

B is a sheet-metal tubular skeleton or inner frame wholly embedded in the concrete mass A, as shown, the shells or parts *a a* of the  
40 skeleton being preferably about equal in thickness. The circular wall of the post is about uniformly thick from bottom to top, the skeleton B having the same taper as the concrete part of the post. The skeleton is  
45 open at its lower end and closed at its upper end by inserting therein a circular disk of metal or by other convenient means, as shown in Fig. 1.

In forming the skeleton B the primary flat  
50 metallic sheet D, Fig. 4, is first punctured with openings *b*, preferably triangular in

shape and arranged in rows, as shown. The triangular parts *c*, cut from the sheet to form the openings *b*, are not severed at their lower sides, being merely bent away from the plane  
55 of the sheet to form barb-like projections or spurs *c*, as shown in Figs. 2, 5, and 6. These barbs *c* are turned to project from both sides of the sheet D, those projecting from one side alternating with those projecting from the  
60 other side, as shown. The sheet D, furthermore, is longitudinally corrugated, as appears in Figs. 2 and 3, after being perforated, the corrugations following the vertical or longitudinal rows of perforations *b*. The sheet  
65 is subsequently rolled to a frusto-conical form, as shown in Fig. 1, its meeting edges being joined in some convenient manner, as by lapping and riveting, as shown. The sheet is corrugated in such manner that the barbs  
70 *c*, turning alternately outward and inward, project in each case from the hollow or concave sides of the corrugations, as clearly appears in Fig. 2. The corrugating of the skeleton gives it rigidity and stiffness and adds  
75 materially to the strength of the completed post. It is important that the parts *c*, pressed out to form the openings *b*, remain as rigid parts of the skeleton and not removed therefrom, as they serve materially to give the con-  
80 crete mass a firm hold upon the skeleton and render the body as a whole solid and as if of a single piece.

In constructing the post the skeleton B after being formed as described is stood end-  
85 wise in a tapered vertical mold of the size and form the completed post is to be. A removable tapered core is inserted in the skeleton, the latter, the mold, and the core being  
90 coaxial. The concrete in a semifluid state is then poured into the mold, both outside of and within the skeleton, which concrete flowing through and filling the openings *b* forms a single solid mass when set, the metal part or skeleton being wholly surrounded and covered  
95 by the concrete. When the stony material or concrete has become sufficiently solidified, the core is removed and the large open end of the post filled or closed with the concrete by some simple means. This is  
100 commonly done by standing the post upright, with its base in a shallow circular pan con-



5 taining plastic concrete, the pan having an internal diameter corresponding with the external diameter of the foot of the post. This filling in the end of the post is usually of a thickness or vertical depth about equal to the thickness of the side wall of the post, the same rendering the latter water-tight.

10 With this post are bolts or devices *d*, Figs. 1 and 7, for holding the longitudinal members of the fence, as wires *e*. These bolts are caused to pierce the post diametrically in horizontal positions, as shown, each bolt being threaded at its end and held to place by a screw-nut *f*, the head *g* of the bolt being  
15 formed to receive and hold the wire. The holes through the concrete body for receiving the bolts are usually formed by means of horizontal cylindrical cores placed in the mold, passing either through the openings *b* in the  
20 skeleton or through other openings therein previously formed for the purpose.

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

1. A fence-post comprising a metallic skeleton and a body of concrete or cement covering the walls or sides of the skeleton, the latter being conical or tapering, with its upper end closed and the lower end open, substantially as shown and set forth.

30 2. A fence-post comprising a metallic skele-

ton and a body of concrete or cement covering the walls or sides of the skeleton, the latter being longitudinally fluted, with parts projecting from the hollow or concave sides of the furrows, substantially as shown and  
35 described.

3. A fence-post comprising a metallic tube or skeleton longitudinally fluted with projections extending from the concave sides of said flutes and a body of concrete or cement  
40 covering the walls or sides of the tube or skeleton, and means for holding the horizontal members of a fence, substantially as shown and set forth.

4. A fence-post comprising a metallic tube or skeleton longitudinally fluted with projections extending from the concave sides of said flutes and a body of concrete or cement covering the walls or sides of the tube or skeleton, and holders for parts of the fence  
50 projecting from the post and passing through the metal skeleton or tube, substantially as shown.

In witness whereof I have hereunto set my hand, this 6th day of February, 1902, in the  
55 presence of two subscribing witnesses.

CHARLES L. TUTTLE.

Witnesses:

ENOS B. WHITMORE,  
MINNIE SMITH.