(No Model.)

D. SCHWEICKHARD.

FENCE POST.

No. 322,072. Patented July 14, 1885.

Fig. 1.

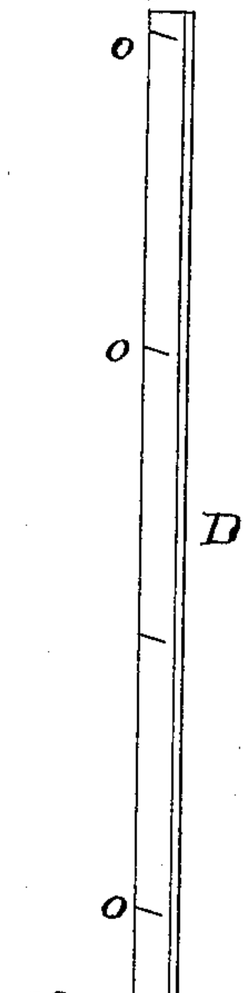


Fig. 2.

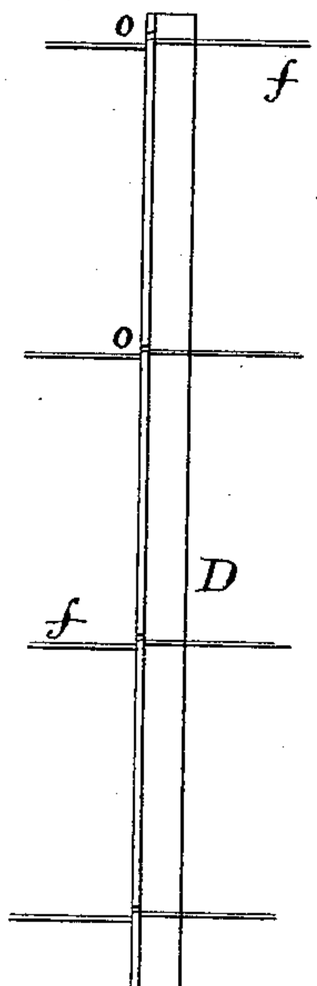


Fig. 4.

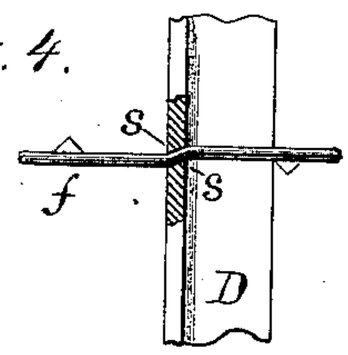


Fig. 3.

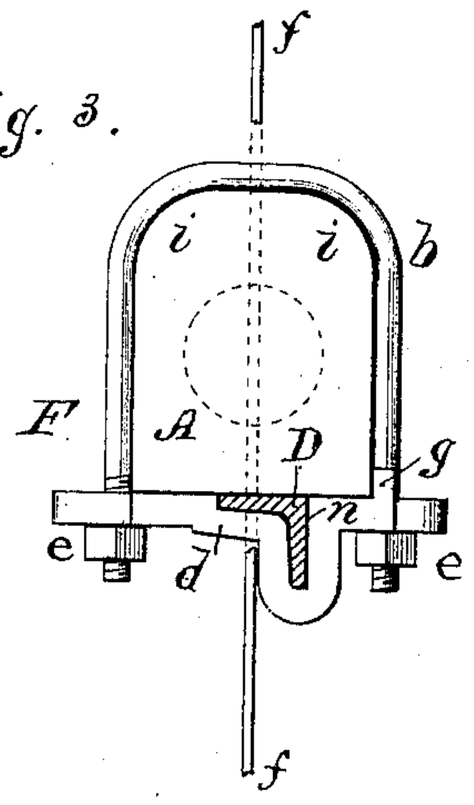
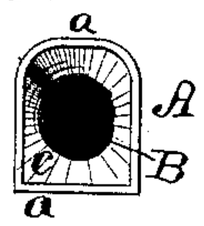


Fig. 5.



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UNITED STATES PATENT OFFICE.

DANIEL SCHWEICKHARD, OF BATAVIA, NEW YORK.

FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 322,072, dated July 14, 1885.

Application filed May 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, DANIEL SCHWEICKHARD, of Batavia, in the county of Genesee and State of New York, have invented a new and useful Improvement in Fence-Posts, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to an improvement in fence-posts; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of the post viewed in a direction lengthwise of the fence, the part of the post inserted in the ground being vertically sectional to uncover its internal form. Fig. 2 is a side elevation of the same viewed, as indicated by arrow *y*, in Fig. 1, having the stub or stone part vertically sectioned at right angles to the plane of section of Fig. 1, and showing more clearly the relation of the wire or ribbon to the post. Fig. 3 is a view of the parts seen, as indicated by the arrow *z*, in Fig. 1, the iron post being sectioned as on the dotted line *x* in Fig. 1, showing more clearly the manner of clamping the iron part of the post to the stone part. Fig. 4 is a detail, sectioned in part, showing more clearly the manner in which the wire is held in the kerfs or slits of the post; and Fig. 5, a view looking in at the bottom or open end of the stub, showing the cavity in the same. Figs. 3 and 4 are drawn to a larger scale than that to which the other figures are drawn.

This invention is designed to be an improvement on the fence-post shown in my patent of January 16, 1883, numbered 270,609, the improvement consisting, in part, in the form of the stone base or stub, in the manner of fastening the iron and stone together, and in the form of the iron part of the post, all of which parts are fully described hereinbelow, and more particularly pointed out in the claims.

Referring to the parts, A is a prism of artificial stone or burnt clay, forming a post or stub to be set in the ground, as shown, the full size of the same being about three feet ten inches in length and four by five inches on cross-measurements. This stub I prefer to make with parallel sides, though it may be made tapering downward like the root of a tree, or of a tap-rooted plant. I prefer to make it hollow, as shown, the cavity B being circular or oval in cross-section, and increasing in diameter from the top toward the bottom. Near the bottom, at *c*, the cavity is made more rapidly flaring, for the purpose of reducing the walls or shell of the stub to mere edges *a*, so that the upheaving of the earth at the foot of the stub by the frost, should such action take place, will have comparatively little end area of the stub to press against. Posts set in the ground are raised by the frost mainly by the upheaving of the earth under their lower ends, which ends of the posts, as commonly formed, present comparatively broad surfaces for the earth beneath to act against. By making the stub or base hollow and bringing its walls to an edge at the lower end thereof, as shown, earth raised by the frost at the foot of the post will move freely up in the empty space at *c* without lifting or disturbing the stub or post.

The cavity B may be made of uniform cross-section, like that shown in said Patent No. 270,609, instead of tapering; but I prefer the form here shown, as it makes the stub much lighter, saves material in construction, and is more in accordance with correct mechanical principles, for the greater strength and mass of material is located at the point at which the stub is subjected to the greatest strain in practice—that is to say, at or near the top.

A fence-post is more apt to break off near the surface of the ground than at any point farther down from accident or from cattle and horses or the wind pressing against the same. When cored, as shown, the light part of the post is at the bottom, where the strain is least, and the strong part at or near the surface of the ground, where the strain is greatest.

A solid head, C, about six inches in vertical measurement, is provided for the stub, to which to secure the iron part D of the post, a suitable clamp, F, being employed for the purpose. The part D of the post, as shown, I prefer to make of angle-iron of about one and one-half inch exterior measurement, and in length about equal to the height of a fence as determined by law, being usually about four feet above the ground.

The clamp F is composed of a bent threaded

rod or bolt, *b*, to go around three sides of the post, and a plate, *d*, at the fourth side, the ends of the bolt passing through holes in the plate and secured by screw-nuts *e e*. The two adjacent corners *i i* of the post opposite the plate *d*, I prefer to make rounding, as shown in my patent above mentioned, mainly to make easier bends at those points for the rod *b*. The plate *d* is formed with a vertical angular cavity, *n*, in form to receive the angle-iron D snugly, so that when the screw-nuts *e e* are tightly set the iron part D will be firmly held to the stub A in a vertical position. The cavity *n*, I prefer to make slightly at one side of the center of the plate on a horizontal measurement, as shown in Figs. 1 and 3, for the purpose of bringing the wires *f*, when secured in place to the post, over the center of the stub, so that the strain of the wires will not tend to twist the stub in the ground. A vertical rib, *g*, projecting from the inner face of the plate, is made to lie along the side of the stub, as shown in Fig. 3, so as to prevent the plate from twisting or turning thereon, which twisting or turning of the plate on the stub away from a vertical position would allow the iron part D to lean one way or the other away from the line of the fence.

Inclined slits or kerfs *o* are formed in the iron post D, in which to receive at the lower ends thereof the wires or longitudinal members of the fence. These kerfs are made to incline downward in a direction at right angles with the line of the wires or linear parts of the fence, as appears in Fig. 1, and also in the direction of the linear parts, as shown in Fig. 4. The inclination appearing in Fig. 1 is given the kerfs so that the wires or similar parts shall by their own weight tend to keep at the bottom or lower ends of the kerfs, and the inclination shown in Fig. 4 is given the kerfs for the purpose of necessitating a short bend or kink in the wires where they join the posts, so that they may be gripped by the sharp edges *s s* of the kerfs and firmly held to the post. These bends or kinks prevent the wires from being drawn longitudinally through the posts and hold the wires without extra fastening for the same.

It may be desirable to give to some of the stubs different forms or dimensions than those described when such are to be used—for instance, in different climates or in soils of different natures—and to use iron of other form of cross-section for the upper part of the post than that referred to by D; but the parts shown represent substantially the post as I prefer to construct it.

What I claim as my invention is—

1. The combination of the stub A, having head C, post D, plate *d*, having angular cavity *n*, for the reception of the post D, and rod *b*, having nuts *e*, substantially as described.

2. The combination of the stub A, having head C, post D, plate *d*, having angular cavity *n* for the reception of the post D, and rib *g*, for bearing against the stub, and rod *b*, having nuts *e*, substantially as described.

DANIEL SCHWEICKHARD.

Witnesses:

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C. J. TOWNER.