

(No Model.)

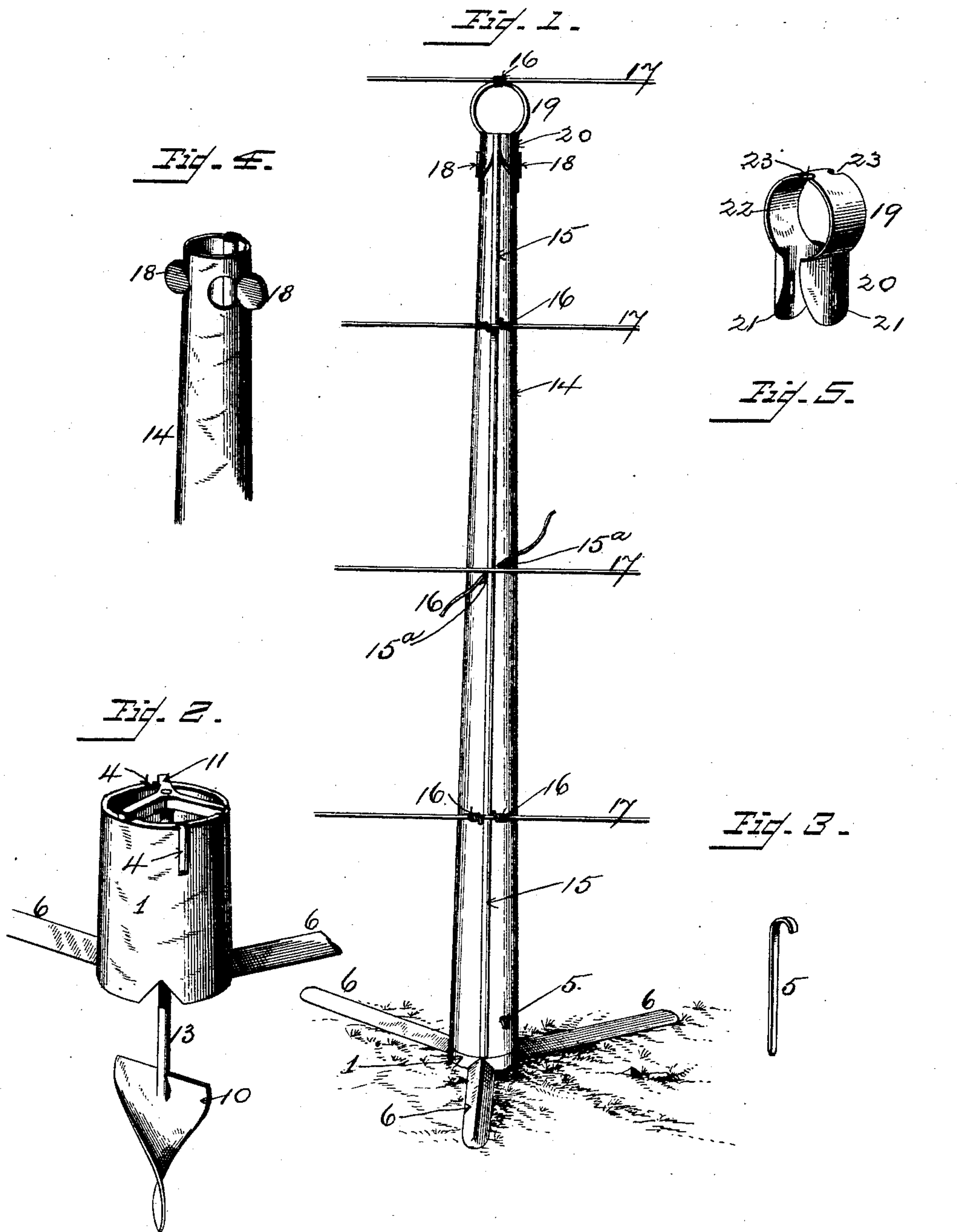
2 Sheets—Sheet 1.

A. W. TOURGÉE.

POST.

No. 377,337.

Patented Jan. 31, 1888.



Witnesses
Wm. L. Goch
C. L. Goch

Inventor
albion W. Tourgée
By his Attorney Chas J. Gooch

(No Model.)

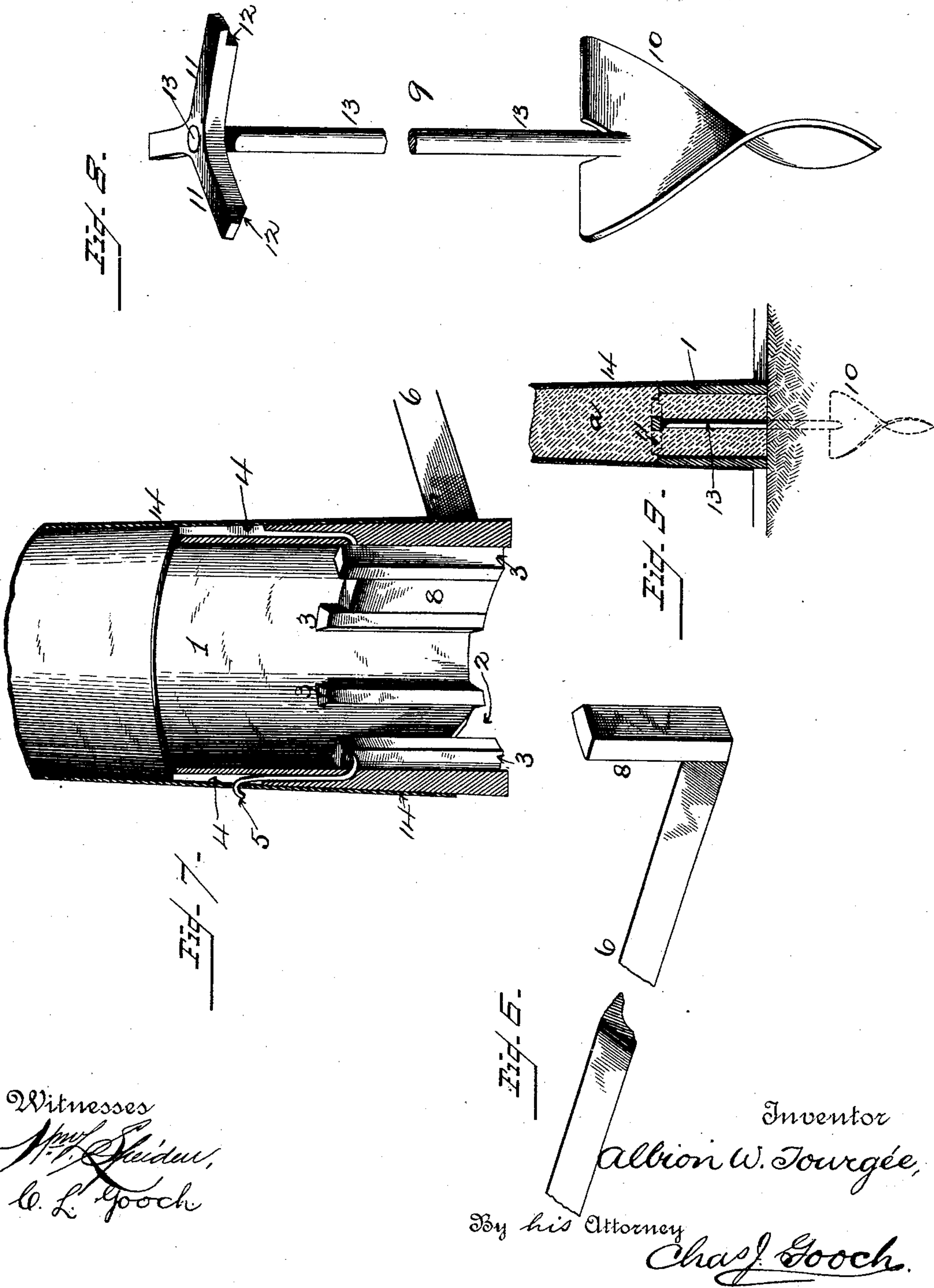
2 Sheets—Sheet 2.

A. W. TOURGÉE.

POST.

No. 377,337.

Patented Jan. 31, 1888.



Witnesses
W. F. Steider,
C. L. Gooch

Inventor
Albion W. Tourgée,
By his Attorney
Chas. J. Gooch.

UNITED STATES PATENT OFFICE.

ALBION W. TOURGÉE, OF MAYVILLE, NEW YORK, ASSIGNOR TO E. K.
TOURGÉE, OF SAME PLACE.

POST.

SPECIFICATION forming part of Letters Patent No. 377,337, dated January 31, 1888.

Application filed May 5, 1887. Serial No. 237,285. (No model.)

To all whom it may concern:

Be it known that I, ALBION W. TOURGÉE, a citizen of the United States, residing at Mayville, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Posts; and I do hereby declare the following to be a full clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention consists of a post and anchoring devices of novel construction, to be used for fences, vineyard-posts, hop-poles, and telegraph and other similar purposes. It is composed of the following essential parts, viz: a hollow metallic cylindrical post, preferably upwardly tapering and fitting snugly at the bottom over a hollow metallic base, to which it is securely fastened with removable keys; a hollow cylindrical metallic base shaped to fit within the lower end of the post and provided with slots for attaching the same by keys, and having inside lugs for the purpose of attaching horizontal braces designed to rest on or near the surface of the ground; a screw-tipped arrow-pointed stake having a head designed to rest solidly upon the upper surface of the hollow base, which, being driven into the ground, presses the base and the attached braces firmly upon the surface or within the ground and holds the same securely in position, and a post-covering cap secured to the post by wings on said post passed through slots in the cap.

In the accompanying drawings, Figure 1 represents in front elevation my improved post in position, this view showing its adaptation for use with a wire fence. Fig. 2 represents a detail perspective view of the base and stake; Fig. 3, a perspective view of one of the keys for connecting the post and base. Fig. 4 represents a detail view of the top portion of the post previous to the application thereto of the cap. Fig. 5 represents a detail perspective view of the post cap. Fig. 6 represents, on an enlarged scale, one of the base-bracing arms. Fig. 7 represents, on an enlarged scale, a vertical section of the base, this view also showing the position the base and post-connecting keys assume when the base and post are connected together. Fig. 8 rep-

resents an enlarged detail view of the stake; and Fig. 9 represents a vertical sectional view of the lower portion of the post, with base and stake connected therewith and with cement filling.

1 represents the hollow base for the post. This base is of corresponding shape circumferentially to the post employed therewith and of slightly less diameter, so that the post may be slipped thereover, as represented in Fig. 1 of the drawings.

In the drawings the base and the post are represented as of cylindrical shape in cross-section; but it is manifest that each of said parts may be square, octagonal, or of other shape in cross-section, as may be desired. The post-supporting base 1 is cast or otherwise formed of some suitable metal, as iron, and preferably of upwardly-tapering form and of greater thickness toward its lower end, as shown in Fig. 7, for the double purpose of permitting the post to be pushed down upon the base with a wedging contact therewith, and also of increasing its bearing and supporting qualities.

2 represents a series of wedge-shaped brace-sockets, each of which is formed by a pair of vertical wedge-shaped lugs, 3, cast or otherwise formed on or attached to the inner face of the base, and 4 4 represent slots in the side walls of the base to receive, as represented in Fig. 7, the post and base connecting keys 5, of malleable or ductile metal or material.

6 represents the base-braces, which are each composed of a tail or arm having a curved or recessed under face, and which tails when in position, as represented in Figs. 1 and 2, fit within notches in the bottom edge of the base and extend outwardly therefrom in divergent directions and rest upon or near the surface of the ground, so as to brace and anchor the base and the thereto connected post and an inner wedge-shaped upturned end, 8, each of which engages and keys within one of the series of brace-sockets 2.

9 represents the base-anchoring stake, which comprises an arrow-pointed and screw-shaped lower end, 10, divergent or spider arms 11, having notched under edges, 12, to permit of their resting snugly upon the top edge of and partly within the upper portion of the base, and a rod or spindle, 13, connecting said

spider-arms and the earth-penetrating point of the stake. The base-braces and the stake may each be formed of individual castings, or the arms or head 11 of the stake may be formed separately from and connected to the rod 13 in any convenient manner, as by screw-threads, riveting, or welding, as desired.

14 represents my improved post, which is formed of sheet metal struck up into proper shape—as, for instance, of upwardly-tapering form, as represented in Fig. 1.

15 represents the seam or bead formed in connecting the two edges of the sheet of metal of which the post is formed, said seam being formed by overturning the two edges and pressing them down upon each other after the manner of forming the ordinary seam in a lapped pipe.

15^a represents the holes through which the binder-wires 16 pass. These holes are punched in that portion of the body of the post on opposite sides of and adjacent to the seam, not through the seam, the respective members of each pair of holes being in different planes—that is, the one a little above the other—so as to give the strongest possible support to the binders. The seam or beading thereby gives to the binders, which are passed in an angular direction under and around said seam and that portion of the body of the post adjacent thereto, a four-ply support instead of merely one thickness of material. The binder-holes 15^a are put the one above the other to more securely hold the fence-wire 17, the upper end of the binder 16 being wound downward over the fence-wire and the lower end upward around it, furnishing a simple, secure, and readily-applied fastening. By forming the two holes of each pair in different planes, as shown, the line of strain and friction will not lie exactly along the axis of the fence-wire. I thereby avoid the play which wear and friction soon cause in the thin casing when each pair of tie-wire or binder-receiving holes is in a single plane, or where a lapped bead is not interposed between the binder-receiving holes. The result of my construction and arrangement is that it will take several times as much force to tear out a tie-wire as if the seam was not embraced by the tie-wire, while the difference in the plane of the tie-wire holes prevents the ready enlargement of the holes and play and wear by the sagging and swaying of the fence-wire. As a consequence a fence-post may be made in this manner out of much lighter iron than if the tie-wires did not embrace the seam, and will stand much longer service than if the tie-wire holes were in the same line.

As represented at Fig. 4 of the drawings, the upper end of the post 14 is provided on the opposite sides with outwardly-extending wings or lugs 18, formed either by stamping or cutting the same out of the sheet-metal post, or formed separately therefrom and attached thereto by any suitable means—as by rivets, welding, or otherwise—as desired.

19 represents a sheet-metal cap, designed, as represented in Fig. 1, to cover or partly cover the top of the post 14 and provide a firm bearing and rest for the top wire of the fence and also protect the interior of the post. This cap is formed with depending wings 20, each having a vertical slot, 21, and a curved or rounded top portion, 22, having notches 23 in its edges. This cap can be very readily, cheaply, and securely placed in and readily removed from its post-covering position (represented in Fig. 1) when desired. All that is necessary to place it in position is to spread the wings 20 slightly outward, slip them over the top of the post and over the lugs or wings 18 on the post, so that said wings shall pass through the slots 21, and then bend said wings 18 down upon the outer faces of said wings 20, whereby the cap will be securely clamped to the post. The curved or arch-shaped top portion of the cap affords, by reason of its shape, the strongest possible support to the topmost wire of the fence.

In placing my improved post and the parts connected therewith, as represented in the drawings, in position when I desire to construct a removable fence I proceed as follows: I first attach the braces 6 to the base 1 by slipping the wedge-shaped inner ends, 8, into the wedge-shaped sockets 2. I then place said connected braces 6 and base 1 in the appropriate position upon the surface of the ground; or, if desired, with a portion of the base and a portion or the whole of the brace-arms embedded in the ground. I then insert the anchoring stake 9 within the base 1 and turn or drive it in the earth until its head 11 rests upon the top edge of the base, as represented in Fig. 2. I then slip the lower end of the post 14 over the base and drive the pliable metal keys 5 through suitable holes or slots in the base of the post and along the key-slots 4 in the base, as represented in Fig. 7. By reversing this process the several parts can be readily detached and removed. The tie or fence wire binder-wires 16 are next passed through the holes 15^a, the wires 17 placed in position, and the ends of the binders 16 wound, respectively, upward and downward around the fence-wires 17, in the manner before explained. The cap 19 is then placed over the top of the post and secured in position thereon by bending the lugs or wings 18 down thereupon, as before explained. It will thus be seen that the several parts of the post-anchoring devices and fence can be expeditiously and easily placed in position and removed whenever desired, even by unskilled workmen.

In case of heaving by frost, the post can be readily adjusted by simply removing the keys 5, lifting the post off the base without detaching the fence-wires therefrom, then driving home the anchoring-stake, and replacing and keying the post.

A post constructed as above described possesses the advantages of great strength, durability, and rigidity, is of comparatively light

weight, can be readily and easily set and removed, may be cheaply and expeditiously constructed, and the several parts, excepting the base, can be tied together in a bundle and slipped within the post for ease of transportation, the base being secured to the bottom of the post, while the stake, braces, and cap are contained within the post.

This post, while shown in the drawings as adapted for use in the construction of fences, is equally well adapted, it being varied only in size and strength, for use as a vineyard-post, hop-pole, or telegraph-post, the binders serving to strongly secure training and other wires to the post most effectively.

Where it is desired to form a permanent fence, the post 14 may be strengthened, and an extra-solid post cheaply and effectively secured by pouring therein, after the parts heretofore mentioned, excepting the cap 19, have been placed in position, a liquid cement, *a*, composed of about three parts of sand to one part of hydraulic lime, which will speedily set within the post and produce in effect a stone post, and a post as strong and substantial as one formed of solid iron or other heavy material requiring manipulation and costly and difficult transportation. After thus filling the post, the cap 19 is placed in position thereon. By thus filling the post, common sand—an abundant article—can be very effectively utilized.

Having thus described my invention, what I claim is—

1. The herein-described post, comprising a hollow base, an anchoring-stake having an arrow-pointed and screw-shaped lower end, and a head composed of diverging arms having notched under edges to adapt them to snugly rest upon the top edge of the base, a tubular beaded post adapted at its lower end to fit over said base and having holes on either side of the bead, wire-binders within said holes, and at its upper portion outwardly-extending wings, and a covering-cap having depending slotted wings to receive the wings on the post, substantially as and for the purpose set forth.

2. The combination of a tubular post having slots or holes in its lower portion, a tubular base adapted at its upper end to rest within the post and having on its inner face a series of brace-sockets and in its sides vertical and angular keyways, keys for connecting said post and base, said keys being formed of pliable metal to permit of their passing through the holes in the post and along the keyways in the base, as explained, and base-braces connecting at the inner end with the brace-sockets in the base and extending outwardly and divergently from said base, substantially as set forth.

3. The combination of a tubular post having at its upper end outwardly-extending

wings or lugs, a cap having depending slotted wings to embrace the post and receive the wings thereon, and a curved upper portion having side openings and notched edges, substantially as and for the purpose set forth.

4. The sheet-metal post herein described, having the vertical lapped bead or seam described, a series of holes in the body of the post adjacent to but outside the respective edges of the lapped bead, the respective holes of each pair being formed in different planes, as shown, and a series of binders or tie-wires each passed through a pair of said holes and extending in an angular direction across the inner face of and embracing the bead and the body of the post adjacent thereto and coiled around the fence-wire, substantially as and for the purpose set forth.

5. The post herein described, comprising a hollow base, braces connected thereto and extending outwardly therefrom, a stake having a head adapted to rest upon the top of the base, a tubular sheet-metal post adapted to fit over the base and having a cement filling composed of sand and hydraulic lime, as described, and having at its upper portion outwardly-extending wings, and a sheet-metal cap having depending slotted wings to receive the wings on the post, substantially as set forth.

6. The combination, with a hollow post-receiving base, of an anchoring-stake comprising an arrow-pointed and screw-shaped lower end, a head composed of diverging arms, and a rod or spindle connecting said point and head, substantially as set forth.

7. The combination of a hollow post-receiving base having lugs on its inner face and base-braces each having at its inner end an upwardly-extending portion to engage said lugs and a rear outwardly-extending arm, substantially as and for the purpose set forth.

8. The combination of a post-receiving base having brace-sockets therein on its inner face, and base-bracing arms adapted at their inner ends to removably fit within said sockets and having horizontally-extending rear portions, substantially as set forth.

9. The combination, with a post for fences and other purposes having suitable slots or holes in its lower portion, of a removable base having vertical and angular keyways and internal brace-sockets, keys adapted to pass through said holes and keyways in the post and base and connect said post and base, and a series of base-braces adapted to engage the sockets in the interior of the base, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ALBION W. TOURGÉE.

Witnesses:

C. R. CIPPERLY,
J. W. BURROWS.