

(No Model.)

F. L. FAIRCHILD.
FENCE POST AND BASE.

No. 362,435.

Patented May 3, 1887.

Fig. 1.

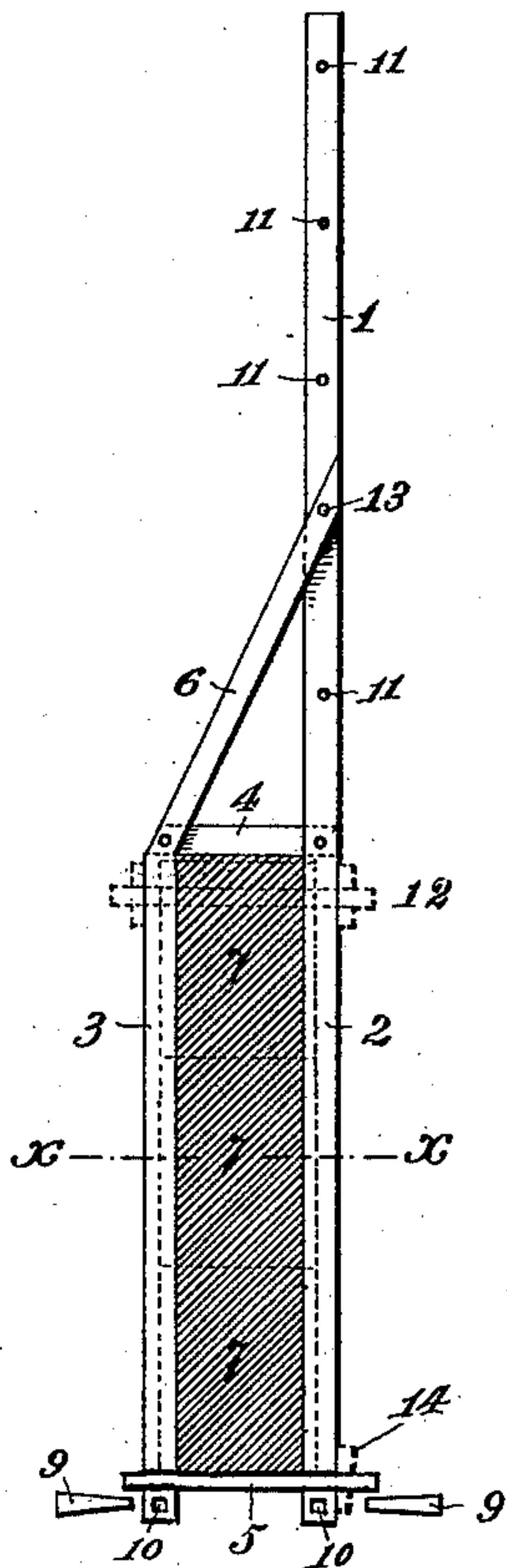


Fig. 3.

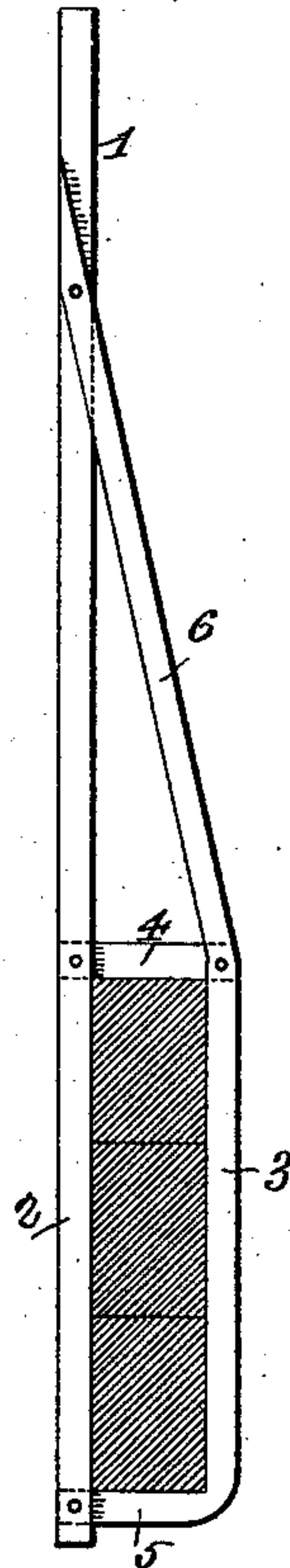


Fig. 4.

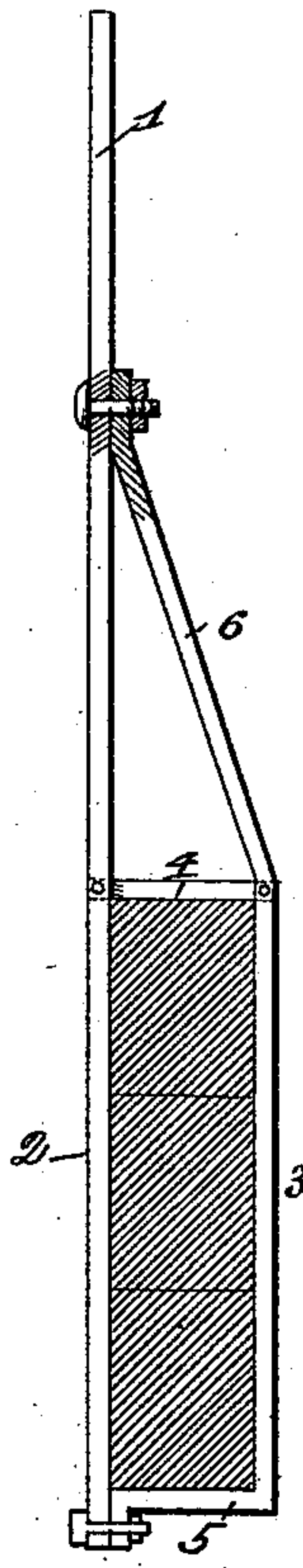


Fig. 5.

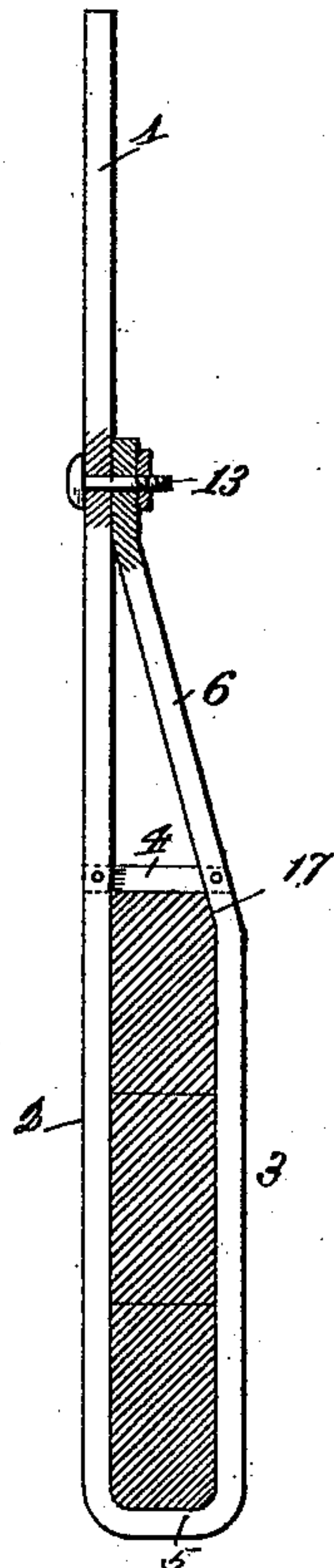
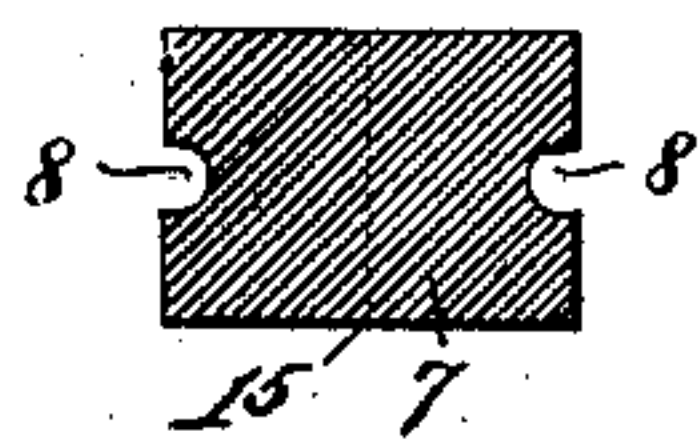


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRANK L. FAIRCHILD, OF MOUNT VERNON, OHIO.

FENCE-POST AND BASE.

SPECIFICATION forming part of Letters Patent No. 362,435, dated May 3, 1887.

Application filed December 28, 1885. Serial No. 186,842. (No model.)

To all whom it may concern:

Be it known that I, FRANK L. FAIRCHILD, of Mount Vernon, Knox county, in the State of Ohio, have invented certain new and useful Improvements in Fence-Posts and Bases therefor, of which the following is a specification.

In an application for a patent filed by me on the 27th day of November, 1885, and bearing Serial No. 184,042, on which Letters Patent No. 356,995 issued to me February 1, 1887, I have set out some of the objections or difficulties attendant hitherto upon the combination of uprights for posts and a base therefor of sufficient size and strength to prevent lateral displacement of the post and retain it in proper or vertical position. To obviate such objections or difficulties I showed in such application, as part of the invention therein, a burnt-clay base having a central aperture to fit tightly upon the shank of the post, so that the two were united without the use of any cementing composition. While the objects of this invention are the same in part as in that case, it differs therefrom in that in this instance the shank, or that portion of the post which is to be set in the ground, is formed as a frame, preferably a parallelogram, adapted to take upon the base on two opposite sides thereof and clamp and retain such base within the frame, so that the post and base are firmly united together. The preferable base in this case, as in that, having in view economy, facility of construction, and durability, is one formed of burnt clay and made in sections, the sections being grooved on one or both sides along the proposed line of contact between the base and the sides of the shank-frame, so that the latter may take therein, the firm union of the post and base being aided thereby. This will be better understood by reference to the drawings, in which—

Figures 1, 3, 4, and 5 are longitudinal sections of posts and bases embodying my invention. Fig. 2 is a transverse section of a base-section on the line $x x$, Fig. 1.

The completed post is formed of three parts—the stem, the word “stem” being used herein to designate the part of the post above the ground, or that portion to which the material forming the fence is to be secured; the shank,

in the form of a frame-work, the term “shank” designating the part to be embedded in the ground; and the base, which is secured within the shank-frame and gives bearing-surface thereto sufficient to prevent displacement or upheaval of the parts, to which may be added, when additional strength or the use of light stems is desired, one or more brace-rods extending diagonally from the shank-frame to the stem.

In the drawings, the reference-numeral 1 indicates the stem, 2 3 4 5 the shank-frame, and 7 the base.

In Figs. 1, 3, 4, and 5 the stem 1 is a bar of iron, whose continuation 2 forms one side of the shank-frame. In Fig. 1 the opposite side of the shank-frame is formed by a bar, 3, arranged parallel thereto, the other sides being cross-braces 4 and 5, uniting 2 and 3. As shown, the cross-brace 4 is permanently affixed to 2 and 3 by rivets or bolts, while the cross-bar 5 is removably connected thereto, it being mortised or slotted at either end, through which mortises or slots pass the ends of 2 and 3, wedge-keys 9 being then driven into apertures 10 in 2 and 3 to secure 2, 3, and 5 together.

In order to give greater rigidity to the stem 1 with a minimum of material, the side bar 3 is carried up above the stop 4 of the shank and bent over and fastened to 1 at any desired point—say 13—thus forming a diagonal stiffening-brace, 6, for the stem 1. This brace 6 may be, as stated, a continuation of the bar 3, or it may be a separate piece riveted or bolted to 3 and the cross-bar 4, or to either of them. This construction of shank is adapted to clamp and retain any desired kind of base of sufficient size to fill the parallelogram formed by the sides 2 3 4 5 of the shank. The bottom cross-bar, 5, being removed from 2 and 3, the base is placed between them, 5 replaced, and the wedge-keys 9 driven home in the apertures 10. The action of the keys forces the base firmly up against 4, the base being gripped between 4 and 5, so that the base and post are firmly united together, yet in a manner admitting of easy separation for convenience of transportation or removal. The preferable base, however, is one made of burnt clay, and

in sections, the making in comparatively short sections almost, if not entirely, obviating the danger of warping or distortion during the process of firing or burning the clay. Such a base is here shown as composed of the three sections 7 7 7, though the number of sections may be greater or less, according to the length desired for the base, the characteristics of the particular clay used, &c. These sections may be provided with the grooves 8 8 upon opposite sides, in which grooves take, when the base is in position, the bars 2 3, lateral displacement of the base or any of its sections with reference to the frame of the shank being prevented thereby, for which end, however, the grooving of only one side would suffice, either the bar 3 or the post 2 taking in such single groove. If desired, the cross-bars 4 5, or either of them, could extend beyond the side bars 2 3 and be provided with slots into which wedge-keys could be driven, so as to force 2 and 3 toward each other and firmly against the side of the base, an example of which is given in dotted lines at 14, Fig. 1, in which case both grooves 8 8 could be dispensed with, the pressure of 2 3 upon the sides of the base preventing lateral displacement thereof or of any of its sections; and while the sections are shown as single blocks whose width is the distance between 2 and 3, it is evident that each one of these transverse sections might be composed of two or more longitudinal sections, as indicated by the dotted line 15 in Fig. 2. The shank-frame, possessing this function of contractibility to firmly grip and hence retain the base, may be made in other ways—as, for instance, in Fig. 3, the side 3 and cross-bar 5 being in one piece bent to form the two sides 3 5, the diagonal brace 6 being attached upon one edge of the stem 1, while in Fig. 4 it is so bent as to be attached to a flat side of the stem. In Fig. 5 the stem 1, sides 2 3 5 of the shank-frame, and diagonal brace 6 are formed of one bar of metal properly bent, as shown. In this latter instance the top section of the base 7 should be inclined, as at 17, so that as the brace 6 is brought home against the stem 1 by the bolt 13 after the sections of the base have been placed between 2 and 3, the action of 6 upon the incline may force the sections closely together and bind them between 2 and 3.

As so far shown, the post and all its component parts are formed of simple flat bar-iron, the use of such iron enabling the post to be made without the use of special machinery and by ordinary iron-workers. The stem of the post should be provided with perforations 11 at suitable distances apart, through which strands of wire may be passed for forming a wire fence; or pins or bolts may be driven therein, extending a short distance upon both or either side of the post, for the securement thereto of devices for retaining either wires or lumber in position to form fence-panels. The post, however, may be made of T or any other

angle-iron, in which case the leg of the T or a wing of the angle-iron may fit into a groove, 8, while, if desired, the face of the T or a face of the angle-iron may be furnished with fastening devices for wire or arranged to receive and retain the lumber or boards forming a panel, as shown and set out in the prior application hereinbefore referred to.

It is of course to be understood that the wedge-keys 9 are typical of fastening devices, which exert, in addition, a binding strain—as, for instance, the ends of 2 3 might be finished off as bolts and have applied thereto nuts. Instead of the bar cross-braces 4 5, as shown, nutted bolts could be used for uniting the sides 2 3 of the frame, the bolts passing through transverse apertures in the upper sections of the base, an example of which is shown in dotted lines at 12, Fig. 1. While it has been suggested that the stem 1, bar 3, diagonal brace 6, and cross-brace 4 be riveted together, they may be arranged to be fastened together by bolts, so as to be readily segregable for transportation, yet quickly and easily assembled and fastened together at the place of using. This construction furnishes a post which combines great rigidity and strength with economy in the amount of metal required, and a base therefor of simple and cheap construction, yet of durable material and affording such extent of bearing-surface that it may be firmly planted in the ground and danger of lateral displacement of the post from ordinary causes avoided. All the parts may be readily separated, forming a “knockdown” post and base for shipment or removal from one to another point, and be as readily put together for use when needed, no cement or other extraneous fastening materials or devices being required for their securement together, this result being attained by the construction and arrangement of the parts composing the post and its base.

I do not here claim the combination, with a metallic fence-post and a leg opposite the lower end or shank of said post, of an upper cross-bar having an elongated opening, a bottom cross-bar having a corresponding elongated opening, and wedges to enter said openings, as this specific combination has been made by me the subject of the fifth claim of my application, Serial No. 230,981, filed March 15, 1887.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A wrought-metal fence-post having its stem 1 integral with its shank 2, and provided with the brace 6 and with the additional side bar, 3, and cross bars or bolts which, with the shank 2, form a frame, in combination with burnt clay or pottery sections held in said frame, as and for the purposes hereinbefore set forth.

2. The wrought-metal fence-post stem 1 and shank 2, formed integral, in combination with

the shank - frame, (of which said shank 2
forms one side,) contractible from the bot-
tom, a base contained in said frame, and
means, substantially as described, for con-
5 tracting and tightening the frame upon said
base, as and for the purposes hereinbefore set
forth.

In testimony whereof I have hereunto set
my hand this 4th day of December, 1885.

FRANK L. FAIRCHILD.

Witnesses:

P. B. CHASE,
GEO. B. BURNS.