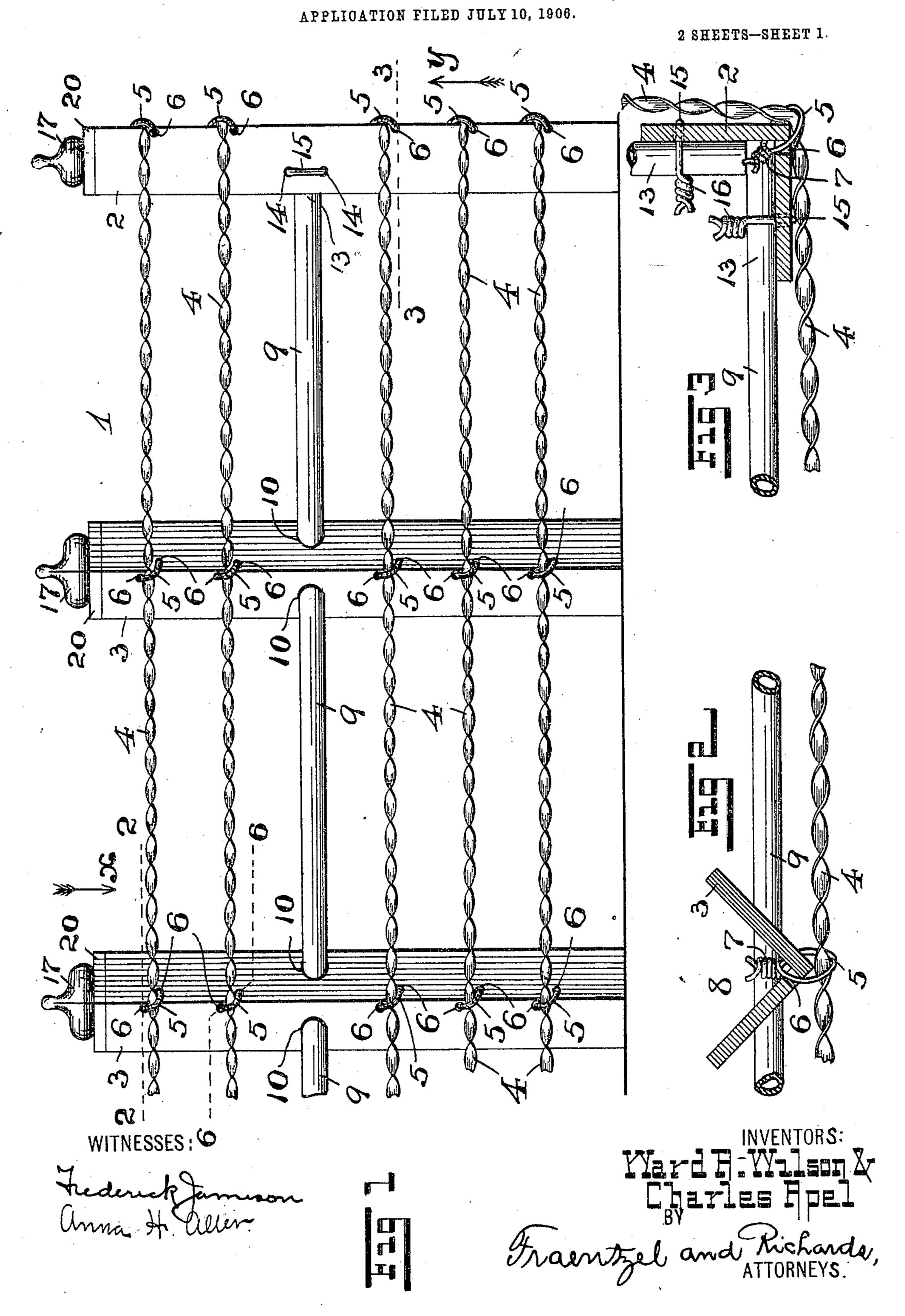
W. A. WILSON & C. APEL. FENCE.



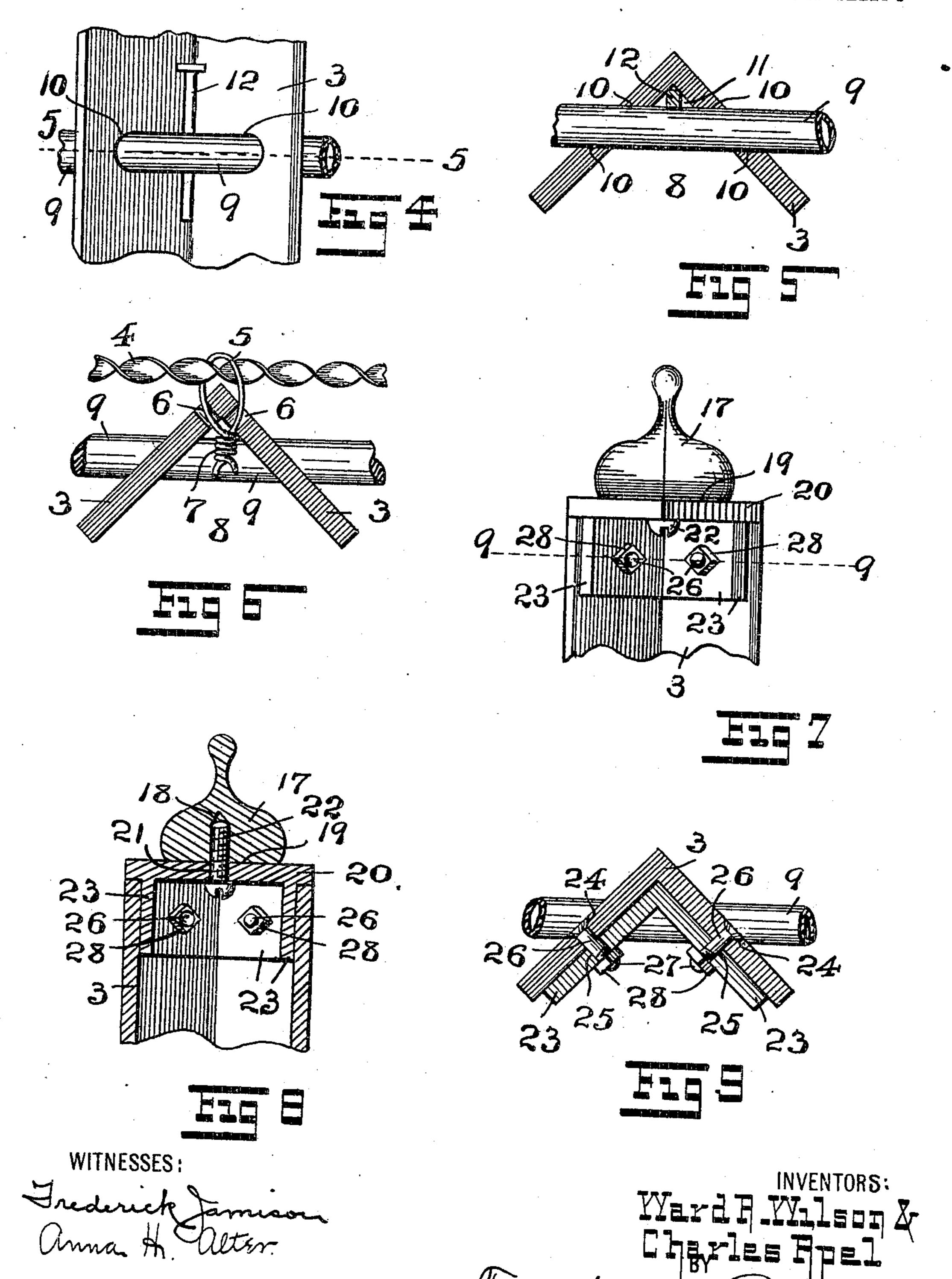
THE NORRIS PETERS CO., WASHINGTON, D. C.

## W. A. WILSON & C. APEL.

FENCE.

APPLICATION FILED JULY 10, 1906.

2 SHEETS-SHEET 2.



## UNITED STATES PATENT OFFICE.

WARD A. WILSON, OF WEST ORANGE, AND CHARLES APEL, OF KEARNY, NEW JERSEY.

## FENCE.

No. 837,365.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed July 10, 1906. Serial No. 325,449.

To all whom it may concern:

Be it known that we, Ward A. Wilson, residing at West Orange, in the county of Essex, and Charles Apel, residing at Kearny, in the county of Hudson, State of New Jersey, citizens of the United States, have invented certain new and useful Improvements in Fences; and we 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, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

This invention has reference generally to improvements in fences; and the invention relates more particularly to that class of fences known in the art as "wire fences," usually comprising a series of posts or rods and strands of wire strung from post to post and provided with some means of fastening to retain the strands of wire in place.

Our present invention has for its principal purpose to provide a novel wire fence of the general character hereinafter more particularly set forth, all with a view of enhancing the general appearance of the fence and simplifying the construction of the same, where by a fence of this character can be set up in very little time and a perfectly efficient and rigid fence is the result.

Other objects of our present invention not at this time more particularly mentioned will be clearly understood from the following detailed description of the same

With the various objects of this invention in view the said invention consists, primarily, in the novel fence hereinafter set forth; and, 40 furthermore, this invention consists in the various arrangement and combinations of devices and parts, as well as in the details of the construction of the same, all of which will be more fully described in the accompanying specification, and then finally embodied in the clauses of the claim which are appended to and which form an essential part of this specification.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a front or face view of a portion of a fence embodying the principles of this invention. Fig. 2 is a detail horizontal section, on an enlarged scale, said section being

taken on line 2 2 in said Fig. 1 looking in the 55 direction of the arrow x; and Fig. 3 is a similar section, on an enlarged scale, taken on line 3 3 in said Fig. 1 looking in the direction of the arrow y. Fig. 4 is an inner face view of a portion of one of the posts and a portion of a 60 piece of tubing or rod used as a stiffening or reinforcing means, showing one means of rigidly securing these parts in their assembled relation by means of a fastening or retaining pin; and Fig. 5 is a horizontal section of the 65 same, said section being taken on line 5 5 in said Fig. 4, a portion of the tubing or rod being shown in top view. Fig. 6 is a sectional representation taken on line 6 6 in said Fig. 1 looking toward the inner face of the post. 70 Fig. 7 is a face view of the inner and upper portion of one of the posts provided with an ornamental cap or end piece and illustrating one means of securing the same upon the end of the post. Fig. 8 is a vertical section of the 75 parts shown in said Fig. 7; and Fig. 9 is a transverse section, on a slightly-enlarged scale, said section being taken on line 9 9 in said Fig. 7 looking in a downward direction and showing in connection with said Fig. 9 80 the relative position of the strengthening or reinforcing tubing or rod.

Similar characters of reference are employed in all of the above-described views to indicate corresponding parts.

Referring now to the several figures of the drawings, the reference character 1 indicates a portion of the complete fence, illustrated more particularly in Fig. 1 of the drawings, and in which the reference character 2 indi- 90 cates a corner-post, 3 the posts which are disposed between two of the corner-posts, and 4 some of the usual forms of wire strands or bands, usually of a twisted configuration.

With our novel construction of fence the 95 various posts 2 and 3 are made from angleiron, so as to be L-shaped in cross-section, as shown, the corner-posts 2, which, as will be evident, may be used also as gate-posts, being suitably set in the ground in any suitable manner that they will have the relative angular relations toward one another, substantially as shown in Figs. 1 and 2 and 3 of the drawings. The wire strands or bands 4, of which there may be any suitable and desired number, according to the height of the fence, are stretched along the outer angular faces of the various posts 2 and 3 in the manner

shown, being fastened or secured in position upon said posts by means of wire fastening loops or bails 5, which are passed around the wire and through each pair of suitably-stag-5 gered holes or perforations 6 in the two flat faces of the posts on opposite sides of the angular edge forming the corner of the post. The free end portions of each wire loop are then made in the form of a twist 7 within the 10 inner faces or the angle 8, formed by the sides of each post, said twisted portions being made sufficiently tight that the adjacent portions of the wire strands or bands 4 are firmly bound upon the outer angular faces of the 15 corner-posts 2, as shown in Fig. 3, or of the posts 3, as indicated in Fig. 2.

Suitable stiffening or reinforcing rods or tubes 9 are also used with the posts or uprights 2 and 3, the angularly-arranged faces of the posts 3 being made with oppositely-located holes or openings 10 of such suitable configuration that when the several posts 3 have been placed in alinement the said rods or tubes 9 can be passed through said holes or openings 10, so as to have portions extending across the angle 8 of each post or up-

right 3, and providing each post 3 with a small angular receiving-space 11, as clearly indicated in Fig. 5 of the drawings.

To rigidly connect the rods or tubes 9 with the posts 3 against any lateral and objectionable motion, a fastening or retaining device 12 is employed, this device being made in the form of a key or wedge, usually an ordinary wedge-shaped nail, which is tightly driven home between the inner faces of the posts 3 and the cylindrical portions of the rods or tubes 9, as clearly illustrated in Figs. 4 and 5 of the drawings. Thus it will be clearly evident that a very simple, efficient, and cheap means has been produced for rigidly connecting the parts, which at the same time

suitably strengthens and reinforces the entire

fence. At the corner or gate posts 2, as will be seen from an inspection of Fig. 3, the posts 2 are differently set from the posts 3, so that the end portions 13 of the angularly-meeting rods or tubes 9 are made to lie directly against 50 the inner faces of the two sides of the posts 2, the end portions 13 abutting substantially in the manner shown, whereby a strong brace is provided. Holes or perforations 14 are provided in the proper places in the sides 55 of said posts 2, through which wire loops 15 are passed, said loops 15 having their free end portions extending, respectively, above and below each end portion 13 of the rod or tube and made into a twist 16 in the manner 60 shown, so as to provide secure and perma-

o shown, so as to provide secure and permanent fastening devices for these end portions of the rods or tubes.

Suitable ornaments 17 of any desired tending through said openings and across the shape may be arranged and secured upon the inner angle between the angular sides of the openings of the posts 2 and 3. To se-post, and a wedge-shaped nail in engagement 130

cure the ornament in place, it is provided in its body preferably with a screw-threaded socket 18, the lower flat surface 19 of the body resting upon a base-plate 20, which is provided with a hole 21, corresponding to the 70 location of the socket 18, so that the parts may be connected by means of a screw 22, screwed into place, substantially in the manner shown in Fig. 8 of the drawings. Extending downwardly from the base-plate 20 75 are angularly-disposed members or flanges 23, corresponding to the inner angular faces of the post, all of which will be clearly understood from an inspection of Figs. 7, 8, and 9 of the drawings.

Any suitable fastening means may be employed for securing the base-plates 20 upon the upper end portions of the posts. The preferred means is that shown in the drawings and consists in providing the posts with 85 countersunk holes 24 and the flanges 23 with correspondingly - located holes 25, screwheaded bolts 26 being arranged in the registering holes 24 and 25 in the manner shown and the projecting and screw-threaded end .o 27 of each bolt 26 being supplied with a tightening-nut 28. In this manner these parts are properly and cheaply connected, and the ornament being removable from the baseplate 20 any other ornament that may be de- 95 sired can be substituted for the one shown.

We claim—

1. In a wire fence, the combination, with a post made from angle-iron of a V-shaped cross-section, said post being provided in its 100 angular sides with oppositely-located openings, of a strengthening-rod extending through said openings and across the inner angle between the angular sides of the post, all arranged to form a triangularly-shaped 105 space between the innerfaces of the sides of the post and the portion of the rod within said inner faces, and means within said triangularly-shaped space of the post and the rod in frictional holding engagement with the 110 parts for securing said rod in place against lateral movement, substantially as and for the purposes set forth.

2. In a wire fence, the combination, with a post made from angle-iron, said post being provided in its angular sides with oppositely-located openings, of a strengthening-rod extending through said openings and across the inner angle between the angular sides of the post, and a key within said angle of the post for keying said rod in position against lateral movement, substantially as and for the pur-

poses set forth.

3. In a wire fence, the combination, with a post made from angle-iron, said post being 125 provided in its angular sides with oppositely-located openings, of a strengthening-rod extending through said openings and across the inner angle between the angular sides of the post, and a wedge-shaped nail in engagement 130

837,365

with the inner faces of the angular sides of ! the post and a portion of said rod, for securing said rod in position against lateral movement, substantially as and for the purposes 5 set forth.

4. A fence, comprising a series of posts made from angle-iron of a V-shaped crosssection, said posts being provided with staggered perforations, located respectively in the 10 angular sides of each post, of a wire strand arranged against the outer angular edge of said post, a wire loop extending around said wire strand, the free end portions of said wire loop extending through said staggered per-15 forations and formed with a twist within the inner angular portion of the angle-iron post, each post being provided also in its angular sides with oppositely-located openings, and a strengthening-rod extending through said 20 openings and across the inner angle between the angular sides of the posts, all arranged to form a triangularly-shaped space between the inner faces of the sides of each post and the portions of the rod within said inner 25 faces, and means within said triangularlyshaped space of the posts and the rod in frictional engagement with the parts for securing said rod in place against lateral movement, substantially as and for the purposes set forth.

5. A wire fence comprising an end post 2 and a series of posts 3, said posts being made from angle-iron, said posts 2 and 3 being provided with staggered perforations arranged upon opposite sides of the angular edge of 35 each post, and said post 2 being provided also in each of its angular sides with a pair of perforations, a series of wire strands arranged against the outer angular edges of said posts, wire loops extending around said wire strands, 40 the free end portions of said loops extending through said staggered perforations and formed with twists within the inner angular portions of the angle-iron posts, said posts 3 being provided also in their angular sides with 45 oppositely-located openings, strengtheningrods extending through the openings in the sides of the posts 3 and across the inner angles of said posts, and said rods having their end portions arranged directly against the inner 50 faces of the angular sides of the posts 2, and a wire extending through each pair of perforations in the sides of said posts 2 and the free end portions of said wires being formed with a twist, substantially as and for the purposes

55 set forth. 6. A wire fence comprising an end post 2 and a series of posts 3, said posts being made from angle-iron, said posts 2 and 3 being provided with staggered perforations arranged 60 upon opposite sides of the angular edge of each post, and said post 2 being provided also in each of its angular sides with a pair of perforations, a series of wire strands arranged against the outer angular edges of said posts, 65 wire loops extending around said wire strands,

the free end portions of said loops extending through said staggered perforations and formed with twists within the inner angular portions of the angle-iron posts, said posts 3 being provided also in their angular sides 70 with oppositely-located openings, strengthening-rods extending through the openings in the sides of the posts 3 and across the inner angles of said posts, and said rods having their end portions arranged directly against the in- 75 ner faces of the angular sides of the posts 2, and a wire extending through each pair of perforations in the sides of said posts 2 and the free end portions of said wires being formed with a twist, and means within the angles of 8c said posts 3 for securing the rods in position against lateral movement, substantially as and for the purposes set forth.

7. A wire fence comprising an end post 2 and a series of posts 3, said posts being made 85 from angle-iron, said posts 2 and 3 being provided with staggered perforations arranged upon opposite sides of the angular edge of each post, and said post 2 being provided also in each of its angular sides with a pair of per- 90 forations, a series of wire strands arranged against the outer angular edges of said posts, wire loops extending around said wire strand, the free end portions of said loops extending through said staggered perforations and 95 formed with twists within the inner angular portions of the angle-iron posts, said posts 3 being provided also in their angular sides with oppositely-located openings, strengthening-rods extending through the openings 100 in the sides of the posts 3 and across the inner angles of said posts, and said rods having their end portions arranged directly against the inner faces of the angular sides of the posts 2, and a wire extending through each 105 pair of perforations in the sides of said posts 2 and the free end portions of said wires being formed with a twist, and a key within the angle of each post 3 for securing the rods in position against lateral movement, substan- 110 tially as and for the purposes set forth.

8. A wire fence comprising an end post 2 and a series of posts 3, said posts being made from angle-iron, said posts 2 and 3 being provided with staggered perforations arranged 115 upon opposite sides of the angular edge of each post, and said post 2 being provided also in each of its angular sides with a pair of perforations, a series of wire strands arranged against the outer angular edges of said posts, 120 wire loops extending around said wire strands, the free end portions of said loops extending through said staggered perforations and formed with twists within the inner angular portions of the angle-iron posts, said posts 3 125 being provided also in their angular sides with oppositely-located openings, strengtheningrods extending through the openings in the sides of the posts 3 and across the inner angles of said posts, and said rods having their 130

end portions arranged directly against the inner faces of the angular sides of the posts 2, and a wire extending through each pair of perforations in the sides of said posts 2 and 5 the free end portions of said wires being formed with a twist, and a wedge-shaped nail in engagement with the inner faces of the angular sides of each post 3 and a portion of the rod which extends across said angle, for securing the rod in position against lateral movement, substantially as and for the purposes set forth.

9. In a wire fence, the combination, with an angle-iron post, of a supporting means upon the upper portion of said post, comprising a base-plate, downwardly-extending angular flanges on said base-plate, said flanges registering with the inner angle formed by the sides of the post, said sides and

flanges being provided with registering per- 20 forations, and fastening screws or bolts in said perforations, an ornament on said base-plate, said ornament being provided with a screw-threaded socket, and said base-plate being formed with a perforation registering 25 with said socket, and a screw extending through said perforation and screwed into said socket, substantially as and for the purposes set forth.

In testimony that we claim the invention 3° set forth above we have hereunto set our

hands this 7th day of July, 1906.

WARD A. WILSON. CHARLES APEL.

 $\mathbf{Witnesses}:$ 

FREDERICK JAMISON.