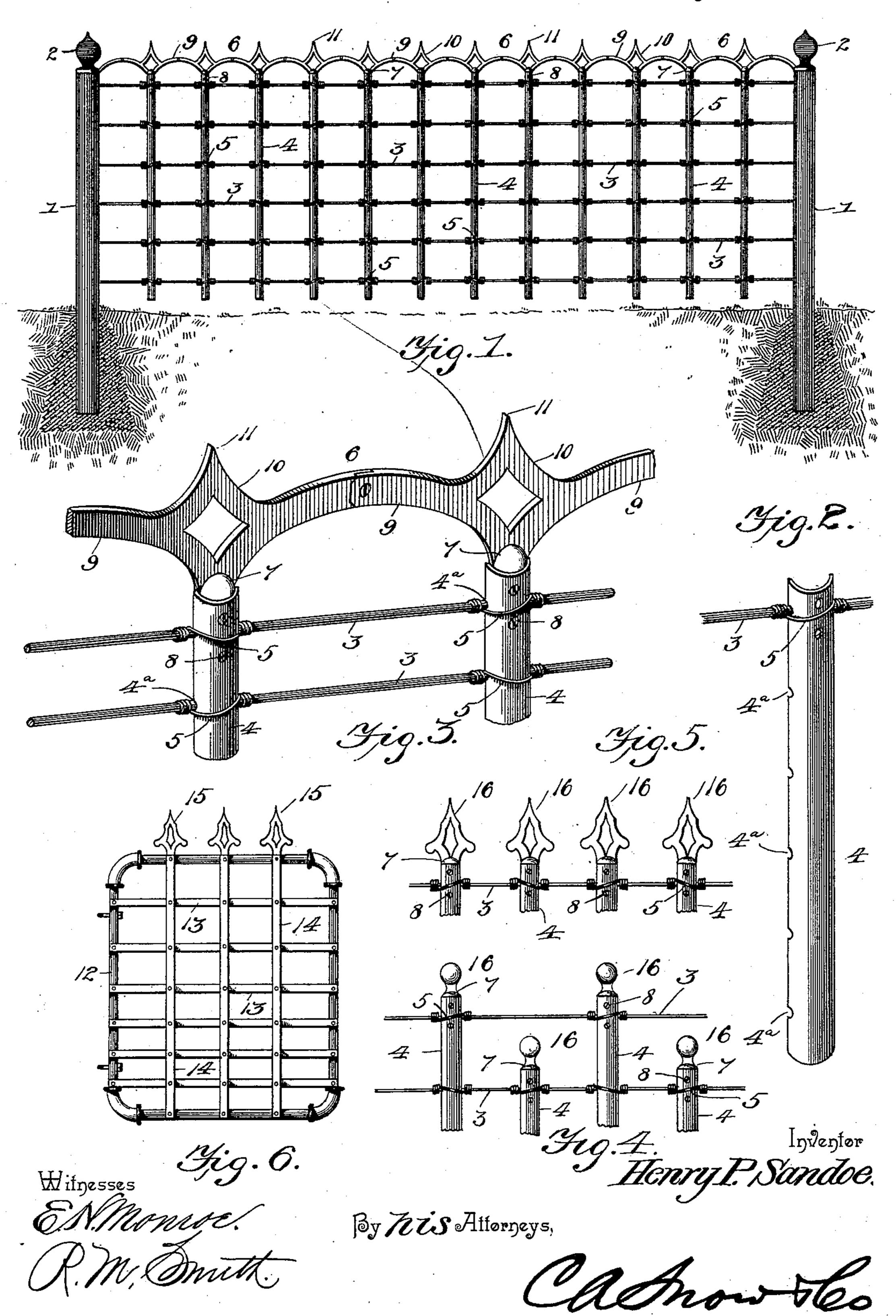
H. P. SANDOE.
WIRE FENCE.

No. 563,509.

Patented July 7, 1896.



United States Patent Office.

HENRY P. SANDOE, OF BIGLERVILLE, PENNSYLVANIA.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 563,509, dated July 7, 1896.

Application filed February 29, 1896. Serial No. 581,316. (No model.)

To all whom it may concern:

Be it known that I, Henry P. Sandoe, a citizen of the United States, residing at Biglerville, in the county of Adams and State of Pennsylvania, have invented a new and useful Wire Fence, of which the following is a specification.

This invention relates to an improvement in wire fences, and has for its object to simplify and improve the construction thereof to the end that the same shall be stronger, easier of construction, and more durable and ornamental.

A further object of the invention is to provide an ornamental top brace made up of similar sections so shaped and arranged as to prevent any one from climbing the fence without subjecting himself to serious danger.

The invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally pointed.out in the claims.

In the accompanying drawings, Figure 1 is a front elevation of one panel of a wire fence constructed in accordance with the present invention. Fig. 2 is an enlarged detail perspective view of one of the fence-stays, showing the manner of attaching the same to the line-wires. Fig. 3 is a similar view showing the top portions of several stays and the relation of the top ornamental brace thereto. Figs. 4 and 5 illustrate in elevation different modes of finishing off the improved fence.

Fig. 6 is a front elevation of a gate to be used with the improved fence.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 designates a pair of tubular fence-posts made of iron pipe of any desired size and having their lower ends sunk in the ground and embedded in and surrounded by a base composed, preferably, of Portland cement mixed with sand and water. This mixture or composition, when dry, becomes as hard as stone and forms a solid and rigid foundation in which the fence-post is rigidly and permanently fastened, and which will also prevent the access of moisture to the metal fence-post, thus obviating the eating away of the

same by rust. The posts 1 may have ornamental knobs or tops 2 of any preferred construction.

The longitudinal or line wires 3 are fastened at their terminals to the posts 1 and are stretched between the same in any approved manner. Secured to the line-wires 3 at any desired intervals and at equal distances apart 60 are a plurality of stays 4. Each of these stays has a concavo-convex or semitubular form in cross-section and is provided in its opposite edges with notches 4^a, located at intervals which correspond to the line-wires 3. Pre- 65 paratory to fastening a stay in place it is applied to the line-wires 3, so that its concaved side is adjacent thereto or so that its edges bear against the said wires, the latter being received in the notches 4a. While in this po- 70 sition a tie-wire 5 is passed around the convex side of the stay in alinement with one of the line-wires, and the terminals of this tiewire are given one or more coils around the said line-wire immediately adjacent to and 75 upon opposite sides of the edges of the stay 4. One of these tie-wires is employed at each intersection of the stay with the line-wires, as clearly shown in Fig. 1, thus imparting to the fence, when completed, great strength and 80 rigidity.

6 designates a number of sections which together comprise an ornamental top brace extending longitudinally the entire length of the panel. Each of said sections comprises, 85 essentially, a depending foot 7, which enters the concavity of the upper end of one of the stays and rests inside of the line-wire to which the stay is secured. The foot 7 may be secured to the top of the stay by means of screws 90 or other fastenings 8, or simply by clamping the same between the stay and one or more of the upper line-wires 3, or it may be held in place by the combination of both means, as may be found most desirable. Each of the 95 sections also comprises upwardly-diverging curved arms 9, and these arms are of such extent and curvature that the arms of one section will overlap and join the arms of adjacent sections and form symmetrical arches, 100 as shown, the meeting ends of such arms being connected by any suitable fastening devices. Immediately above the foot 7 of each section, and therefore above each stay 4, the

arms 9 have upwardly-converging branches 10, which meet and form an upwardly-projecting point or barb 11, which adds to the ornamental appearance of the top brace and 5 prevents persons from attempting to climb over the same. The half-sections at each end of the top brace may be specially made and formed in such manner that they may be secured in any convenient way to the fence10 posts.

The gate employed in connection with the fence is illustrated in Fig. 6. It comprises a rectangular frame made out of gas-pipe or metal tubing, the sections of which are joined at the corners of the gate by tubular elbows,

thus completing the gate-frame 12.

13 indicates a series of cross-horizontal bars preferably of thin strap metal riveted at their extremities to the gate-frame, and 14 represents the vertical stays which are also riveted at their extremities to the gate-frame, and to the horizontal bars 13, where they intersect.

Diamond-shaped tips 15, having open centers, are applied to the top rail of the gate, as shown, and these tips are made to correspond as far as practical in design to the orna-

mental top finish of the fence.

Figs. 4 and 5 show different methods of finishing up or topping out the fence. Instead 30 of employing the top brace shown in Fig. 1, the stays are left disconnected at their tops, except as they are joined by the line-wires, and independent tips 16 are applied, one to each stay. Each of the tips has a depending 35 foot similar to that 7 above described in connection with the top brace-sections, and this foot is introduced into the upper end of the stay and secured in a manner similar to that above described, with reference to the foot 7. 40 These tips may be either in the form of balls or knobs, as in Fig. 4, or diamonds or spearheads, as in Fig. 5, or any other design may be employed. It is also desirable in some instances to make the stays of different 45 lengths, so that the alternate stays, for instance, will project above the others, as shown in Fig. 4.

From the foregoing description it will be seen that a very ornamental and handsome fence is obtained, which at the same time possesses great strength and rigidity, which is materially added to by the application of the top brace, which also serves to prevent the scaling of the fence. The semitubular

stay possesses great strength in itself and 55 adds very much to the finished appearance of the fence. It will be apparent that the particular configuration and design of the ornamental top brace may be changed in a variety of ways, and also that other changes 60 in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what 65

is claimed as new, is—

1. In combination with a wire fence, a top brace formed separately therefrom and consisting of a number of sections each having a foot portion adapted to connect with one 70 of the fence-stays and oppositely-extending arms, the arms of said sections being united, substantially in the manner described.

2. In a wire fence, the combination with the line-wires, of a series of semitubular stays 75 secured thereto, and a top brace having a depending foot portion for each stay, said foot portion being confined between the stay and one of the line-wires, substantially as described.

3. In a wirefence, the combination with the line-wires, of a series of semitubular stays secured thereto with their concaved faces toward the wires, and a top brace comprising a number of sections, each having a foot 85 portion entering between the upper end of one of the stays and one of the line-wires, each section also comprising oppositely-extending arms which connect with corresponding arms of the adjoining sections, substan-90 tially as described.

4. In a wire fence, the combination with the stays, of a series of top braces each having a foot portion for attachment to one of the stays and also having oppositely-extending 95 curved arms which connect with similar arms on adjoining braces, the arms of one brace having converging branches which unite at their upper ends to form a point or barb, substantially as and for the purpose 100 described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY P. SANDOE.

Witnesses:

W. D. MARKLEY, GEO. M. WALTER.