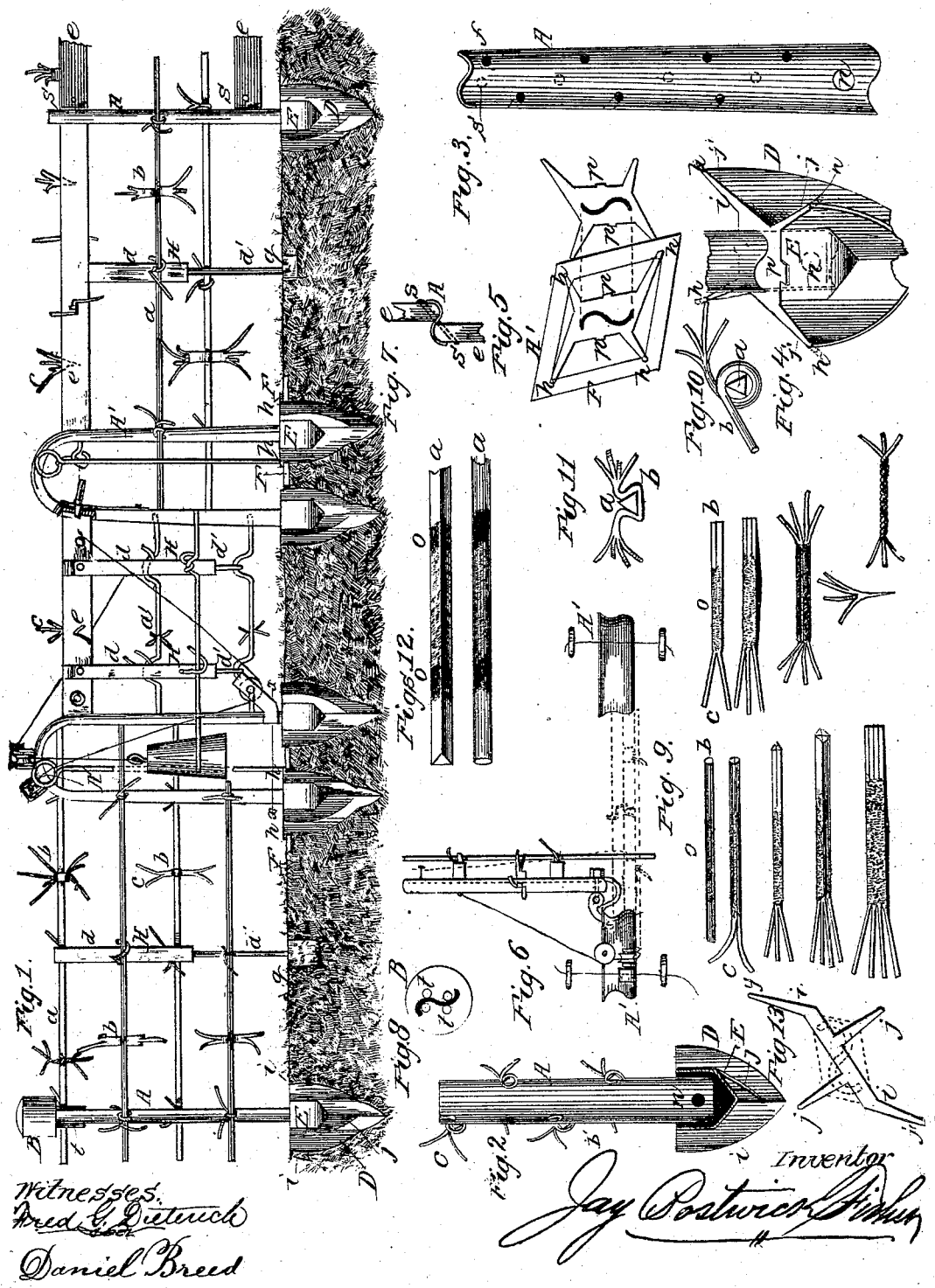
J. B. FISHER.

Fence.

No. 203,536. Patented May 14, 1878.



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JAY BOSTWICK FISHER, OF DAVENPORT, IOWA.

IMPROVEMENT IN FENCES.

Specification forming part of Letters Patent No. **203,536**, dated May 14, 1878; application filed December 5, 1877.

To all whom it may concern:

Be it known that I, JAY BOSTWICK FISHER, of Davenport, in the county of Scott and State of Iowa, have invented a new and useful Improvement in Fences, of which the following is a specification:

My invention relates to fences; and consists in certain improvements in the construction of the parts which go to make up the fence, as hereinafter fully set forth and described.

In the accompanying drawings, Figure 1 is an elevation of a fence embodying my improvements. Fig. 2 is a vertical sectional view of one of the posts with the foot and prongs attached thereto. Fig. 3 is a perspective view of one of the posts detached. Fig. 4 is an enlarged perspective view, showing the manner in which the post is attached to the foot. Fig. 5 is a plan view of the foot-rest for the double post. Fig. 6 is a plan view of the gate or movable panel which forms part of the fence. Fig. 7 is a detail view, showing the method of securing the boards to the posts. Fig. 8 is a plan view of the dowel-cap. Fig. 9 represents several modifications of the shields or prongs which are attached to the wires in the process of formation. Fig. 10 illustrates one method of securing a prong to a triangular wire, and shows a fastening arm or finger on one end to secure the wire to the post. Fig. 11 shows a prong secured to a triangular wire with both ends projecting therefrom. Fig. 12 represents detached views of sections of the wire. Fig. 13 is a plan view of the foot for the posts.

Referring to the parts by letters, A represents a single post, made of metal in the form shown by Fig. 3 of the drawings—that is, tapering and S-shaped in cross-section. A′ represents double posts, united at the top or upper end, but of the same form in cross-section as the posts A. B is a metal cap-piece, having dowel-pins *t*, arranged so as to hold the cap on the top of the post A while driving the foot D into the ground. D is the foot for the post, made of metal in the form shown by Figs. 4 and 13—that is, with a bed-piece, E, having the center base web-plate *i* and branches *j j′*, as clearly shown by the drawings. The points of these branches extend beyond the web, so as to form lugs *h*, by means of which the foot is secured to a flat bed-plate, F, which rests on the surface of the ground outside of the foot proper, and prevents the post from sinking too far into the ground. This plate may be dispensed with, but is very useful for the corner and division posts, and where the posts are set in wet sand.

p represents lugs formed on the foot, by means of which they may be readily raised out of the ground by a crow-bar. *n* is a hole in the lower end of the post. These posts are preferably made of wrought-iron, and the foot is cast onto them. In casting, the molten metal passes through the hole *n*, and thereby unites the parts securely together.

The posts are also formed with perforations *f* and *s′*, the latter being for receiving the bolts which secure the wooden boards, and the former for the fence-wires, as hereinafter set forth.

The boards referred to may constitute the top or bottom rail of the fence, as indicated by letter *e*. Their ends fit into the corrugations of the posts, forming arc-shaped brace-shoulders on all sides of the boards, so that one bolt, nail, or screw, passed diagonally through them and through the hole *s′*, secures all together.

a represents the wires of the fence, which may be round or triangular, as shown by Fig. 12, and I prefer to roughen them with paint and sand, or in any convenient manner, as indicated by letter O, so that the roughened surface will furnish a good holdfast for the prong. The triangular form of wire I prefer for the fence proper; but for the gate or movable panel the round wire should be used.

Between the posts I use a center tie, H, which is made partly of wood *d* and partly of metal *d′*, the latter being the part inserted in the ground, so that it cannot rot or burn. I prefer, however, to embed the tie in a stone, as shown at *q*.

The central portion of the fence, as shown by Fig. 1, is made to operate as a gate or movable panel; but as this must form the subject of another patent I will not here describe it at length.

b represents the prongs, which are constructed differently from the barbs heretofore used—that is, instead of having sharp points,

which lacerate the animals which come in contact with them, the projecting ends are made angular or blunt, so that they will not readily penetrate the skin or flesh of the animals, but will, through contact, sufficiently warn them of their proximity to the fence.

I prefer to make these prongs from metal bars, the ends of which are cut in parallel lines, and the cut portions spread apart, like fingers, as shown by Fig. 9 of the drawings; and, as will be obvious, these prongs may be made of wire-rope, with the ends of the strands of wire spread apart; or a number of twisted or untwisted wires, inclosed within a sheet or sleeve, may be used, as found most convenient or desirable.

The prongs *b* are secured to the fence-wires in any suitable manner, preferably in the manner shown by Figs. 10 and 11, before referred to. I also attach them to the posts, as shown by Figs. 2 and 10, the holes *f* being made diagonally in the posts for that purpose, and attach them to the wooden portions of the fence, and provide them with a pointed end, which is driven into the wood.

The wires *a* are placed alternately on each side of the single and double posts and tie H, as shown by Fig. 1.

I am aware that wire fences protected with barbed points are now in use, and I wish it to be distinctly understood that I do not claim such as my invention.

The use of these sharp-pointed barbs has proved injurious through the wounds they inflict on the animals that come in contact with them. The object of my improvements is to provide a fence which possesses all the advantages of a wire fence without having the objectionable features referred to—one which can be seen by animals, and which, if they come in contact with it, will not injure them, and also made fire-proof.

I therefore claim as my invention certain improvements in the construction of fences, to wit:

1. A post, A, constructed as described, **S**-shaped in cross-section and made tapering, substantially as and for the purpose specified.

2. The foot D, constructed as described, with the center web-plate *i* and the branches *j j'*, bed E, lug *h*, and lug *p*, substantially as and for the purpose specified.

3. The combination of the post A and foot D, having the web-plate *i*, branches *j j'*, and lugs *h* and *p*, substantially as and for the purpose specified.

4. The double post A', constructed of two uprights, united at their upper ends, as described, and having the feet D, substantially as and for the purpose specified.

5. The combination of the **S**-shaped post with the boards *e*, arranged as described, so that a single bolt, nail, or screw passed diagonally through them secures all together, in the manner specified.

6. The cap B, having dowels *t*, substantially as described, and for the purpose specified.

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