

J. Thomas,

Iron Fence.

N<sup>o</sup> 65,025.

Patented May 21, 1867.

Fig. 3.

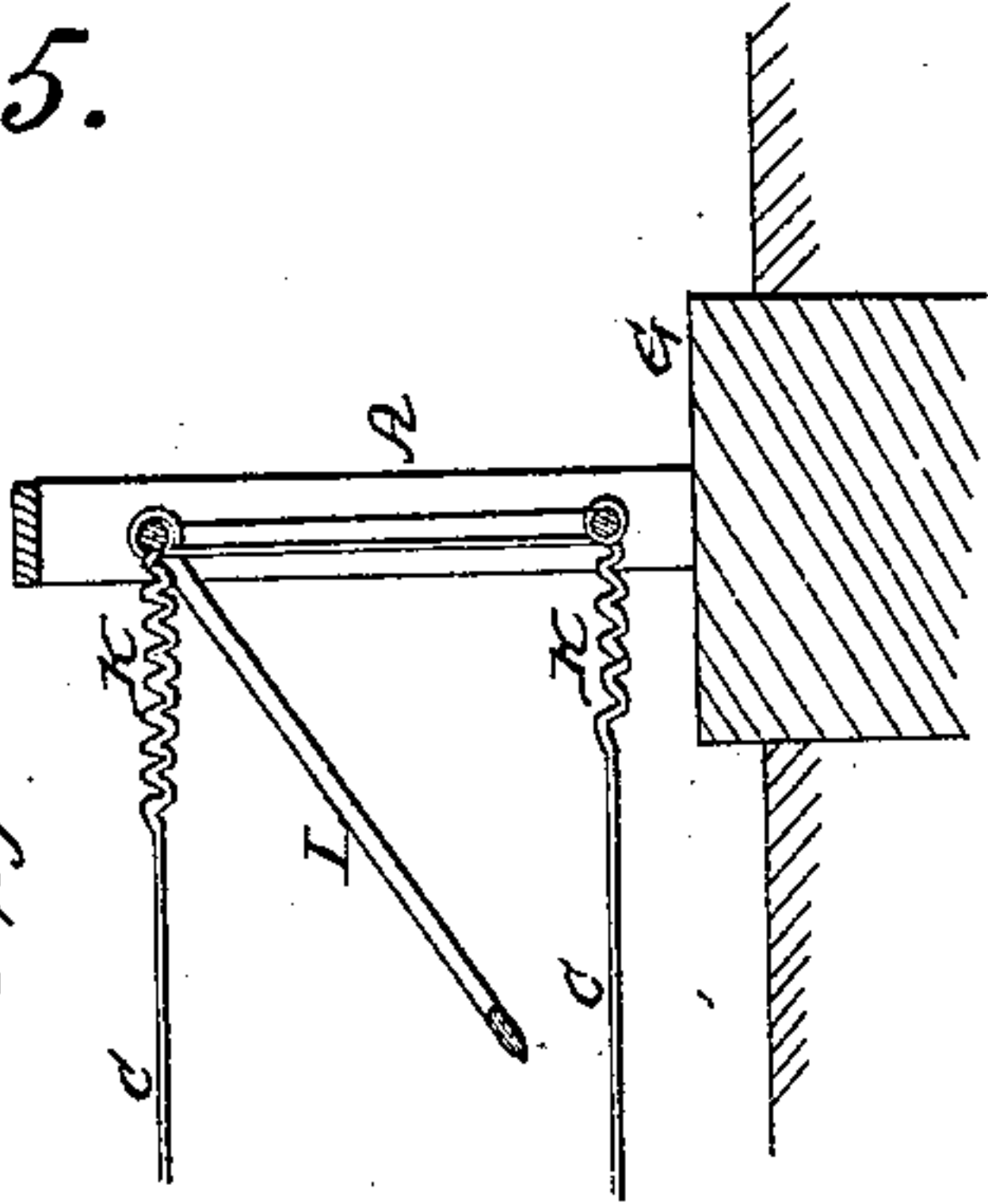


Fig. 4.

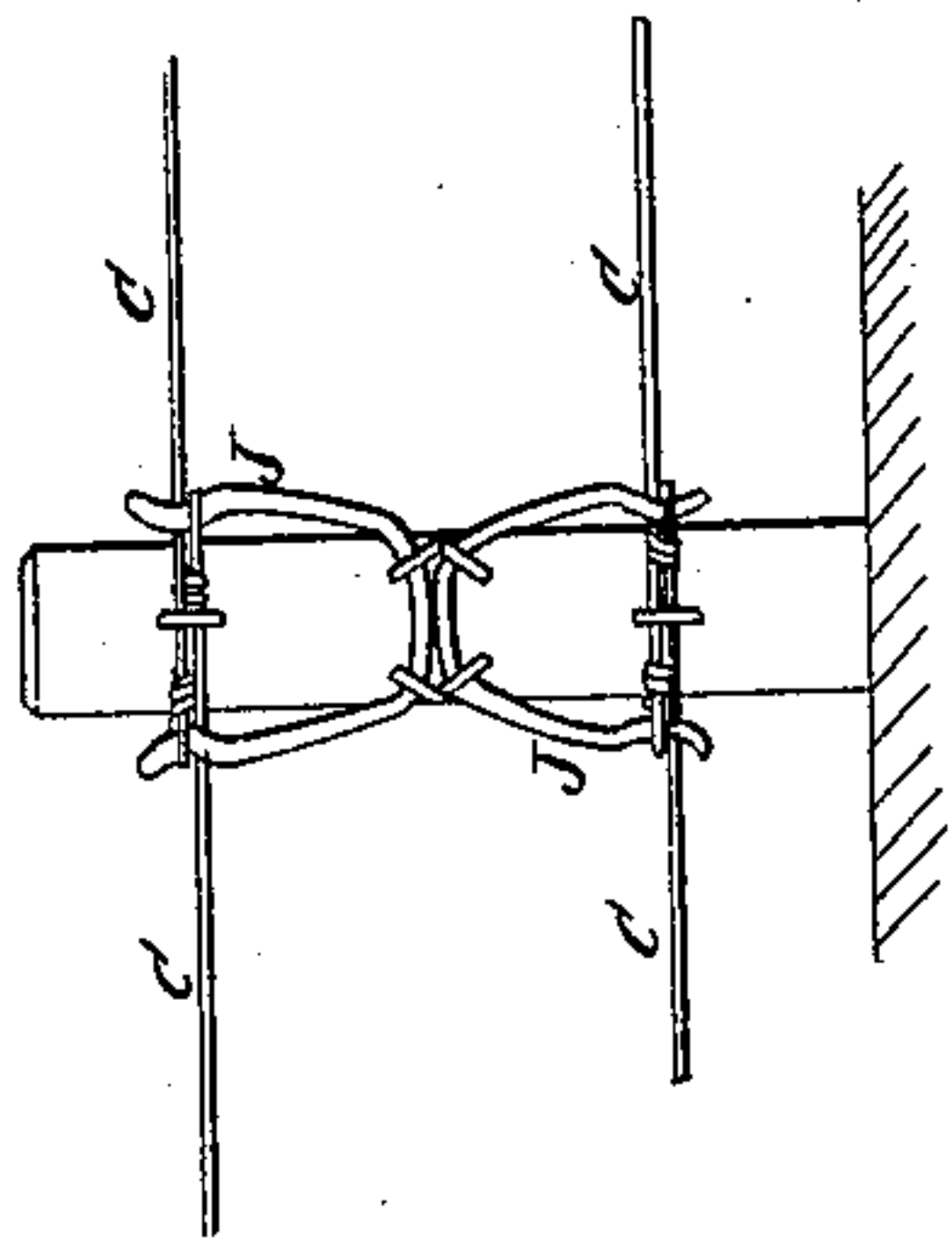


Fig. 1.

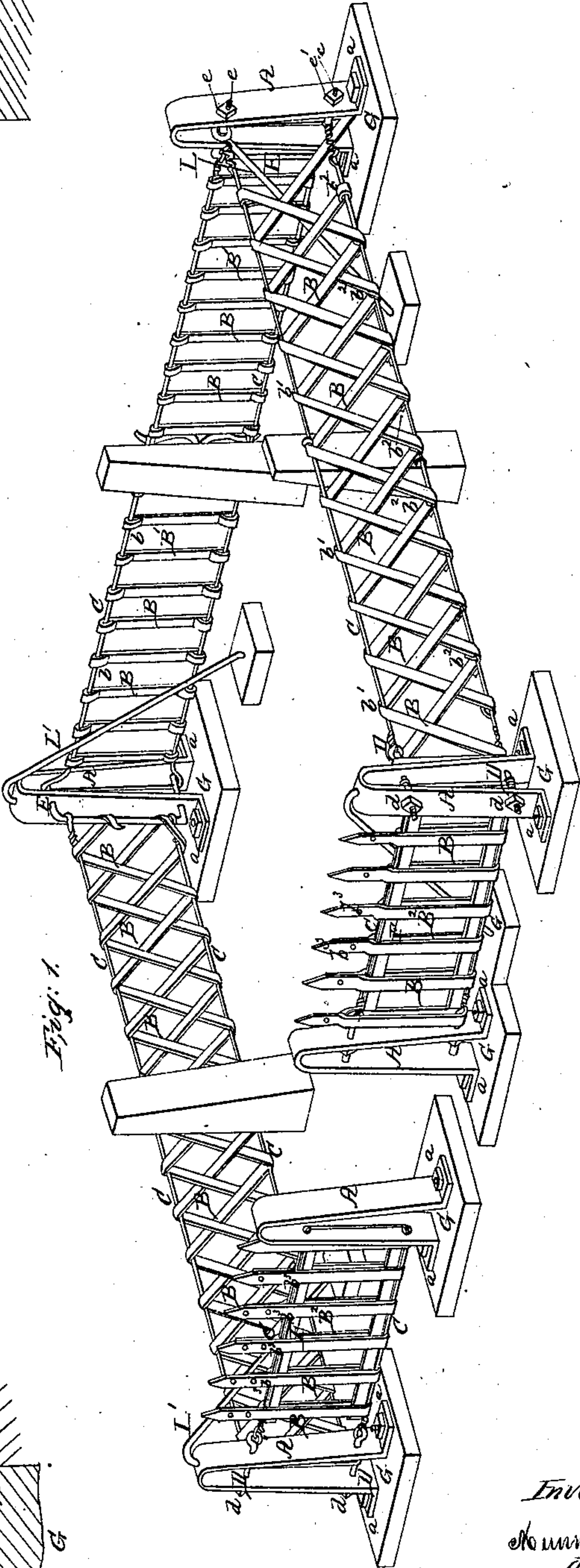
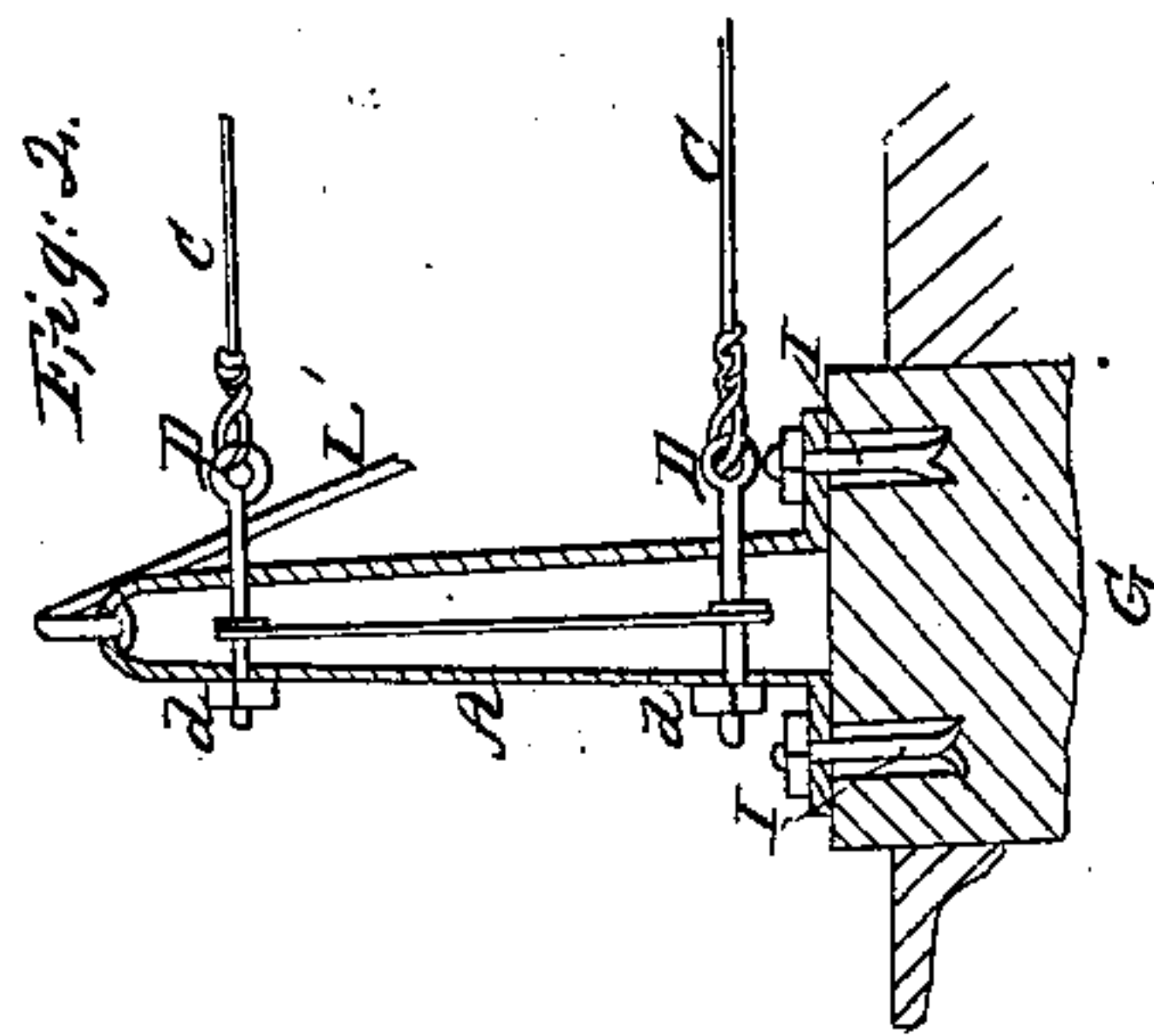


Fig. 2.



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# United States Patent Office.

JONATHAN THOMAS, OF MOUNT UNION, OHIO.

Letters Patent No. 65,025, dated May 21, 1867.

## FENCE.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JONATHAN THOMAS, of Mount Union, in the county of Stark, and State of Ohio, have invented a new and useful improvement in Fences; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

Figure 1 is a perspective view of a field fence made according to my invention.

Figures 2, 3, and 4 are detached views, illustrating the construction of, and mode of connecting, the several parts.

Similar letters of reference indicate corresponding parts in the two figures.

The fence, the subject of this application, is composed of taut horizontal supporting wires and the bar or hoop iron, the latter being applied to the wires by crimping alone, or by crimping and riveting, so as to form a firm and durable structure, which shall remain unimpaired under the action of moisture or the lapse of time. The posts are made of heavier bar iron, bent in the form of an inverted U, the flanges on the bottom of which enable them to be bolted to a stone or other suitable base, to preserve the iron from the injurious action which would result from embedding in the ground.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe it in detail.

In the accompanying drawings, A A A represent the fence-posts, which are made of bar iron in the form of an inverted U, which not only affords great strength with economy of material, but facilitates the attachment of the wires which are used in the formation of the intermediate sections of the fence. B B B represent strips or pieces of bar or hoop iron, and C C the taut horizontal wires which afford the means of attachment and support for said strips B, the wires being fastened to the posts in any suitable manner, as, for example, by means of the threaded eye-bolts D, which pass through the iron posts, and are held therein by nuts *d*, or through the medium of the bent rods E, the threaded horizontal portions *e* of which pass through the posts, and are likewise secured by nuts *e'*. When made in the form of vertical rails or palings, as shown at B<sup>1</sup>, the strips B are attached to the wires C by bending their ends around the wire and crimping, as shown at *b*. When the strips B are bent in the form of a V, their crotch *b'* rests upon or straddles the upper wire, while their lower ends are crimped to the lower wire, as shown at *b''*. If made in the form of a picket fence, as at B<sup>2</sup>, each of the pointed palings, (consisting of a strip of bar or hoop iron, as the other) is bent up with its two sides in close proximity. In the latter case the horizontal iron rails F are embraced between the two vertical portions of the paling B, and the crotch at the lower end of the paling straddles the under side of the lower wire C. The palings thus made, with the two parallel vertical portions, may be crimped to the upper wire, or secured thereto by riveting, as shown at *b'*. The posts A may be supported upon a stone or other suitable base, G, to which the flanges *a* of the posts are fastened by bolts, which may extend entirely through the base, or the bolts extend only partially through the base, as shown at I, fig. 2, in which case the space around the bolt is filled with lead or cement. The iron posts are only needed at corners and junctions, all the others being plain wooden posts, to which the iron fence is secured by nails or staples.

As it may be necessary to make provisions for contraction and expansion, which occur in cold and warm weather, respectively, I have shown two modes of doing it. One mode consists in the application of U-shaped springs J, fig. 4, to one of the wooden posts at the middle of a section, to the extremities of which springs the ends of the wires C C are attached. The other mode consists in forming a helical spring of the wire itself at the end thereof, as shown at K; but, as the wires C may not be sufficiently stout or elastic, I prefer to employ a separate spring of larger wire as the means of connecting the ends of the wires C to the posts A. L I' represent the iron braces, which may be applied in any desired manner; but, of the two modes represented, I prefer the one represented at L, in which the post bolt, to which the supporting wire C is attached, passes through an eye in the end of the brace, the other end of the brace being fixed in a base in the ground, or otherwise made secure. Wire, applied in the same way as the strips B, may be used in lieu of the latter, if preferred.

Having thus described my invention, the following is what I claim as new herein, and desire to secure by Letters Patent:

1. The combination of the horizontal wires C C with the strips B B<sup>1</sup> looped around them, substantially as shown and described.
2. I claim the posts A, constructed of bar iron in U-form, with the flanges at bottom to adapt them to be bolted to a base, substantially as described.
3. The springs J J, adapted and employed to operate substantially as and for the purpose set forth.

JONATHAN THOMAS.

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