

(No Model.)

F. H. HOPLER.
WIRE FENCE.

No. 598,226.

Patented Feb. 1, 1898.

Fig. 1.

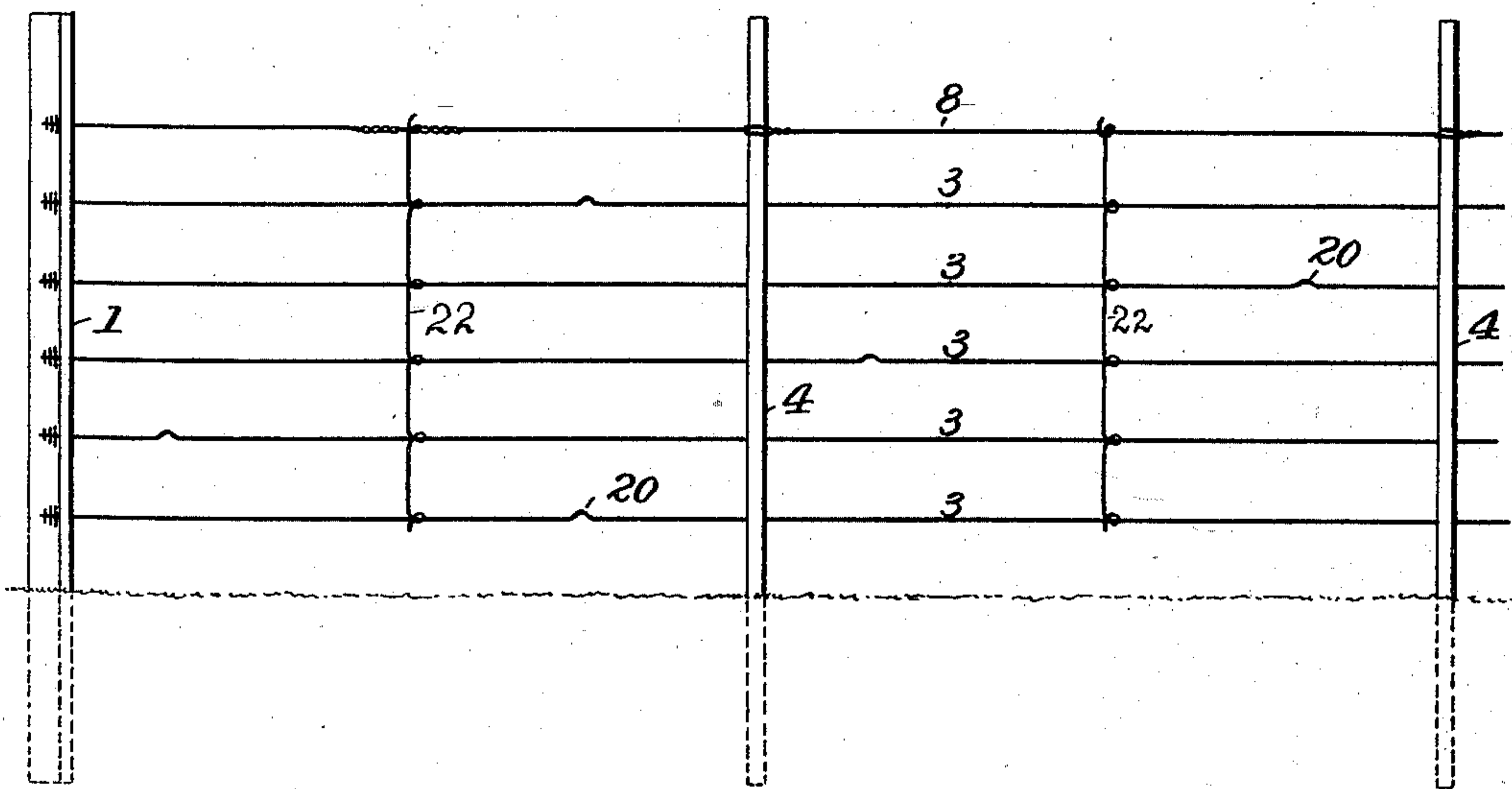


Fig. 2.

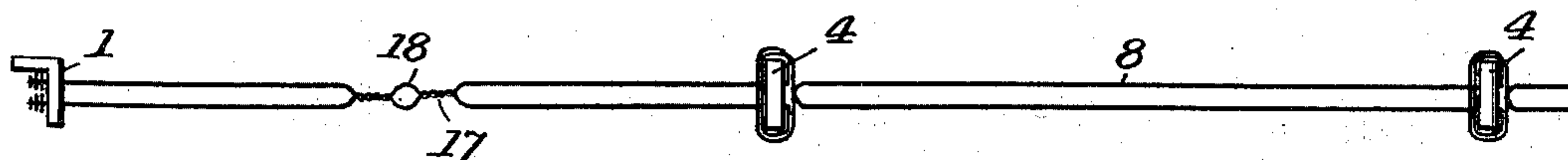


Fig. 3.

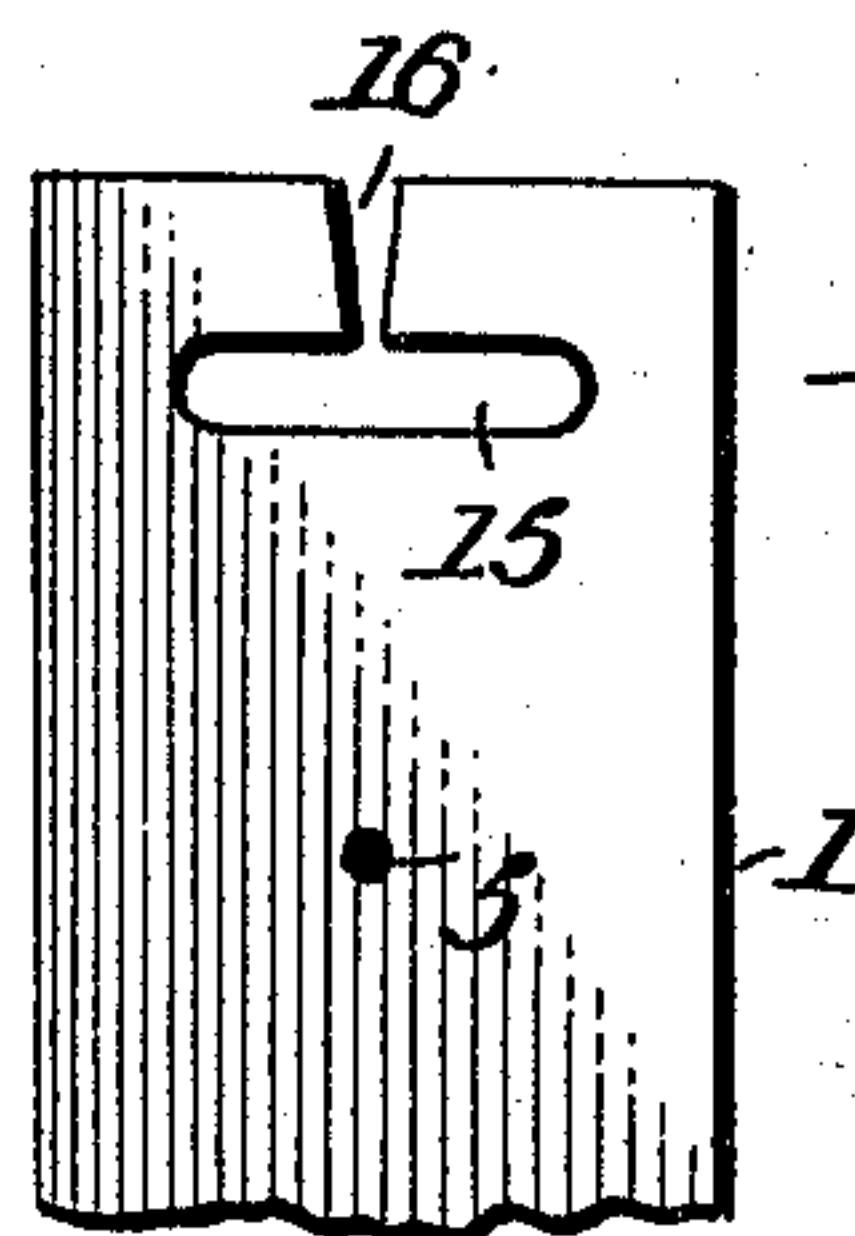
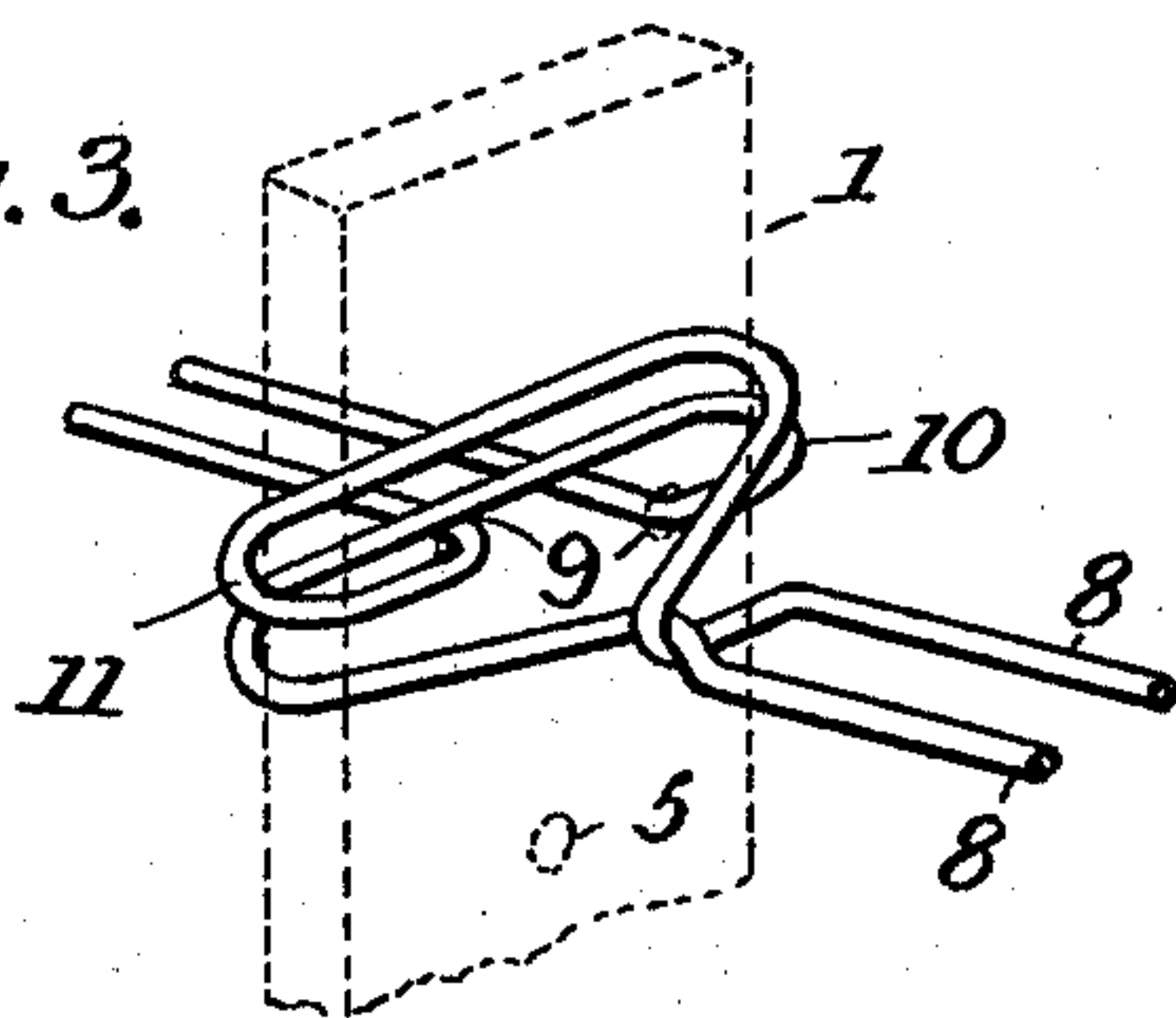


Fig. 4.

Witnesses

James W. Stearns
J. H. Finkel

Inventor
Frank H. Hopler
by Foster & Loomis
Attorneys

UNITED STATES PATENT OFFICE.

FRANK H. HOPLER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
LEWIS BARNES, OF SAME PLACE.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 598,226, dated February 1, 1898.

Application filed May 15, 1897. Serial No. 636,792. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. HOPLER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Wire Fences, of which the following is a specification.

This invention relates to certain new and useful improvements in wire fences; and it consists, substantially, in such features of construction, arrangement, and combinations of parts as will hereinafter be more particularly described.

In the construction of a great many forms of wire fences as heretofore devised considerable difficulty is experienced in maintaining the posts in a secure upright position, and in a large number of instances it is absolutely essential to employ some form of brace for the posts in order that the fence may stand. Sometimes, even though braces are employed for the posts, the latter very soon become loosened from strain and topple over to one side with the effect to either break the wires or cause the same to sag. Obviously the employment of braces for the intermediate posts of a wire fence not only adds very largely to the cost of the fence, but also consumes more time in erecting the same and, perhaps, may require the assistance of experienced help.

The object of the present invention is to provide a wire fence in which the posts are held or maintained in an upright position without the use of braces therefor, substantially as will hereinafter more fully appear when taken in connection with the accompanying drawings, in which—

Figure 1 is a side view of a wire fence when constructed and arranged in accordance with my invention. Fig. 2 is a top or plan view. Fig. 3 is a view in perspective of a section of fence and representing more clearly the manner in which the posts are locked or held in position by the top wires. Fig. 4 is a side view of a modified form of post.

In carrying my invention into effect I provide at the end of the fence any suitable form of post 1, which may or may not be provided with braces, but which, however, is firmly held in position, and to such post the ends of the wires 3 are fastened or secured in any

preferred way. At suitable intervals apart in the line of fence are arranged the intermediate posts 4, which, as will be observed, are each formed with openings 5, spaced apart, and through these openings the wires 3 of the fence are passed. The said posts 4 may either be constructed round, square, or other suitable shape in cross-section, but preferably I make them as thin as practicable and flat, by which great numbers of the same can be manufactured in a short space of time either from wood or metal. Likewise I may employ either flat or round wires for the fence, in which event the openings 5 would be shaped to correspond. I prefer the use of round wires, however, and therefore the said openings are shown to be round in form. In order to dispense with braces for the said posts 4, I connect them and interlock them together in such manner as to be securely held in an upright position and at the same time be capable of withstanding a great amount of strain. While I may resort to a great many constructions for this purpose, I preferably form the upper ends of the posts so as to receive through them duplicate top wires 8, which extend throughout the line of fencing, and which are wrapped or passed around the posts in opposite directions. Thus, as will be seen in Fig. 3, in addition to the openings 5 for the passage of the wires 3 I form in the posts at or near their upper ends two openings 9, and through these openings the top wires 8 are passed. One of the said wires is then turned to the right at 10 and drawn up tightly and passed all the way around the post, while the other one of said wires is turned to the left at 11 and also drawn up very tightly and passed all the way around the post in the opposite direction, the two wires being then together drawn taut and passed through the openings 9 of the next succeeding post and passed around such post in like manner, and so on throughout the entire length of the fence. In this way it will be seen that the posts 4 are substantially interlocked with each other and that a very strong fence is obtained. It is obvious that instead of employing two openings 9 in each post I may only use a single opening and pass both top wires through and wrap them around the posts in opposite di-

rections, as already explained. As a convenient construction I sometimes resort to such as is shown in Fig. 4, wherein I form the post with a short transverse opening 15, communicating with a slit 16, leading downwardly from the upper edge of the post. With this construction I am enabled to slip the top wires in place more conveniently, while still holding the same taut, and then effect the wrapping of said wires around the posts.

Various other means could be employed with equal results, and it is of course understood that I do not limit myself to the particular details herein selected for the purposes of illustration.

In order to lend strength to the structure throughout, as well as to allow for expansion and contraction of the top wires due to thermal changes, I prefer in some instances to impart to said top wires one or more twists between posts—such, for instance, as indicated at 17. By so twisting these wires loops 18 are formed which are sufficient to allow for the lengthening or shortening of the wires. These twists and loops may be formed by the use of any suitable tools or implements for the purpose. Instead of so twisting the wires the same provision for expansion and contraction is had by simply forming bends or kinks therein, such as is shown at 20 in connection with the wires 3.

To prevent spreading or sagging of both the top wires 8 as well as the wires 3, I join them together at one or more points between posts by means of stay-wires 22, which are formed into several spirals or loops 23 to permit of a sufficient yielding action between the wires when strain is encountered. These stay-wires are slipped on over the wires as the fence is being erected, and they are fastened to the said wires 3 and 8 in any suitable manner, such as by clenching with a suitable instrument. In some instances by clenching these parts together as suggested the short bend necessarily then imparted to the wires

3 and 8 will be amply sufficient to allow for expansion and contraction; but preferably I resort to the constructions already described for the purpose.

From the foregoing it will be seen that the top wires firmly maintain the posts in place and that each intermediate post lends its full support to strengthening the fence without depending upon the corner or end posts. The said posts are substantially interlocked with each other, and they assist each other and mutually contribute in maintaining the integrity of the entire fence.

Without limiting myself to the precise details shown and described, I claim—

1. A wire fence comprising the posts and fence-wires, and two top wires passing through the posts and interlocked therewith by being wrapped around the same in opposite directions, substantially as described.

2. A wire fence comprising the posts and fence-wires, and two top wires passing through parallel openings in the posts and interlocked with the latter by being wrapped around the posts in opposite directions, substantially as described.

3. A wire fence comprising the posts provided at or near the top with two parallel openings 9 occupying substantially the same horizontal plane, and body-openings 5 arranged one above the other, the wires 3 passing through said latter openings, and two top wires 8 passing through said openings 9 and wrapped around the posts in opposite directions and interlocked therewith, and the stay-wires, the whole being constructed and arranged, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK H. HOPLER.

Witnesses:

BERTHA E. BENTLEY,
EMILY H. BEATTY.