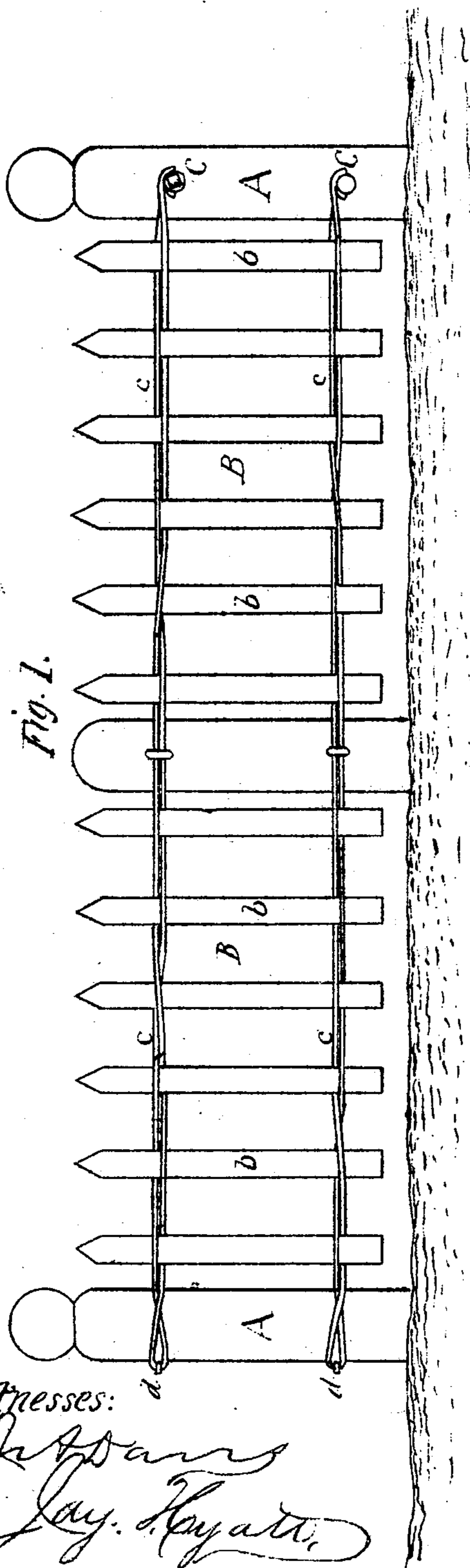


F. H. Crandall.

Straining Wire Fences.

N^o 73302

Patented Jan. 14, 1868.



Witnesses:

J. H. Davis
Jas. Hyatt.

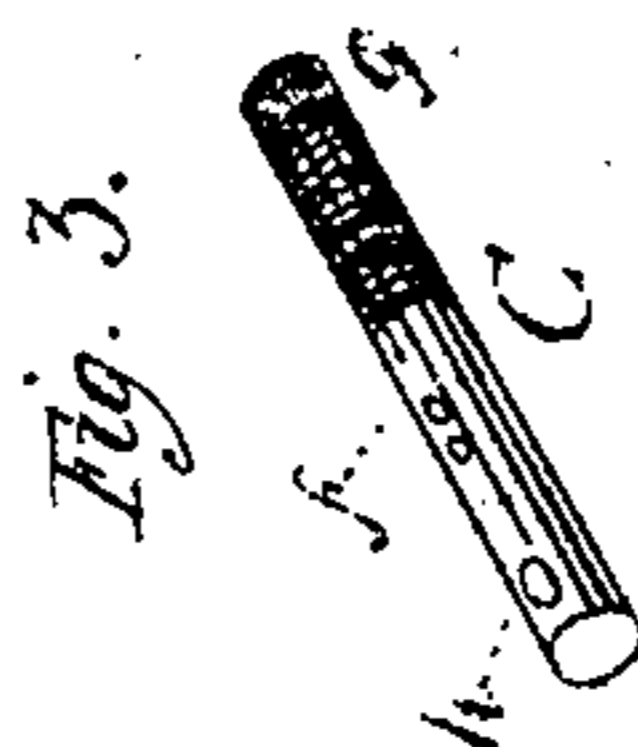
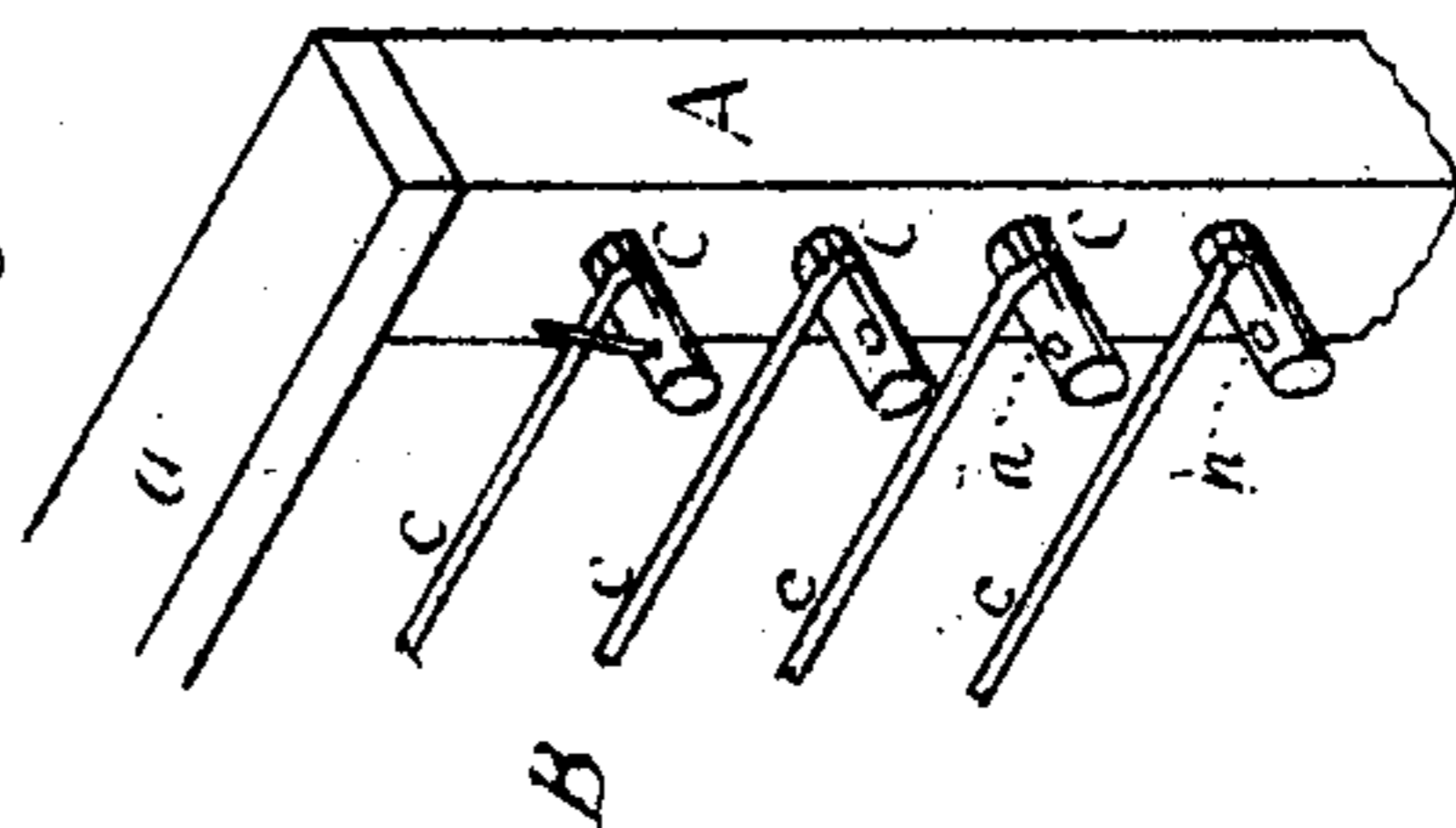


Fig. 2.



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F. H. CRANDALL, OF ONTARIO, NEW YORK.

Letters Patent No. 73,302, dated January 14, 1868.

DEVICES FOR STRAINING WIRE FENCES.

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, F. H. CRANDALL, of Ontario, in the county of Wayne, and State of New York, have invented a certain new and useful Improvement in Devices for Straining Wire Fence; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a front elevation of my improved fence.

Figure 2 a perspective view of a modification of the same.

Figure 3 a perspective view of one of the straining-devices detached.

Like letters of reference indicate corresponding parts in all the figures.

My invention consists in a device for straining wire fence, consisting of a bolt having a screw-thread cut upon one end for screwing into the post, and eyes formed in the body for the connection of the ends of the wire, and a socket, or a square head, or some equivalent arrangement, for fitting the instrument that turns the bolt, all as hereinafter described.

As represented in the drawings, A A are posts connected by suitable braces or stiffeners *a a*, and B B are the panels or sections of fence connected with the posts. Fig. 1 represents a fence that is made by weaving the pickets *b b* in strands of wire *c c*, that are crossed alternately to bind the pickets. Fig. 2 represents simply wire lengths, which form the panels or sections, without pickets, being stretched lengthwise. My improved device is capable of attaching to either form. The wires are rigidly attached at one end, as shown at *d*. The opposite ends are passed through eyes *f f* of bolts C C. Each bolt is made straight, of suitable length, and has a screw-thread, *g*, cut upon its end, which screws into the post. It also has a socket, *h*, for the insertion of a lever to turn the bolt, or the end is made square, as shown at the top in fig. 1, for the application of a wrench, or some equivalent arrangement is employed whereby the bolt may be easily turned.

The operation will be readily understood. The threaded portion of the bolts is screwed into the side of the post, leaving the ends projecting, with the wires fastened in the eyes. Whenever it is desired to strain or tighten the wires, the bolts are turned inward, and when it is desired to unstrain or loosen them, the bolts are turned in the reverse direction. By this means, I am enabled to compensate for contraction and expansion, caused by the difference in the temperature in winter and summer, which obviates one of the greatest difficulties in the wire fence. It will be seen that the adhesion of the threaded part of the bolt to the fibres of the wood is sufficient to prevent its turning under the ordinary tension of the wires, and thus they are kept taut, but when great contraction is produced by severe cold, the force acts to unscrew the bolt sufficiently to prevent the breaking of the wires. Thus, by means of the screw-thread, a connection is formed with the side of the post, that can be relied on to maintain proper tension, and yet be self-adjusting under great variations of temperature, and this device secures the great advantage of having the connection entirely outside of the post, where the wire can be applied with greater rapidity, and much less cost, than when entering or passing through holes in the posts for the same purpose. They also take up the slack from sagging or the stretching of the wires. This effect is of much value, especially in connection with the woven pickets, as in fig. 1, for it enables the pickets to be tightened up when they become loose.

By the employment of the bolts C, I am enabled to connect with any ordinary post, which is far better than would be if the post had to be especially formed for the attachment of the straining-device, and this device itself of a complicated nature. My bolts are of the simplest, cheapest, and most effective form, and have simply to be screwed into the post.

What I claim as my invention, and desire to secure by Letters Patent, is—

The threaded bolt C, constructed, arranged, and applied substantially in the manner and for the purposes herein set forth.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

F. H. CRANDALL.

Witnesses:

J. A. DAVIS,

R. F. OSGOOD.