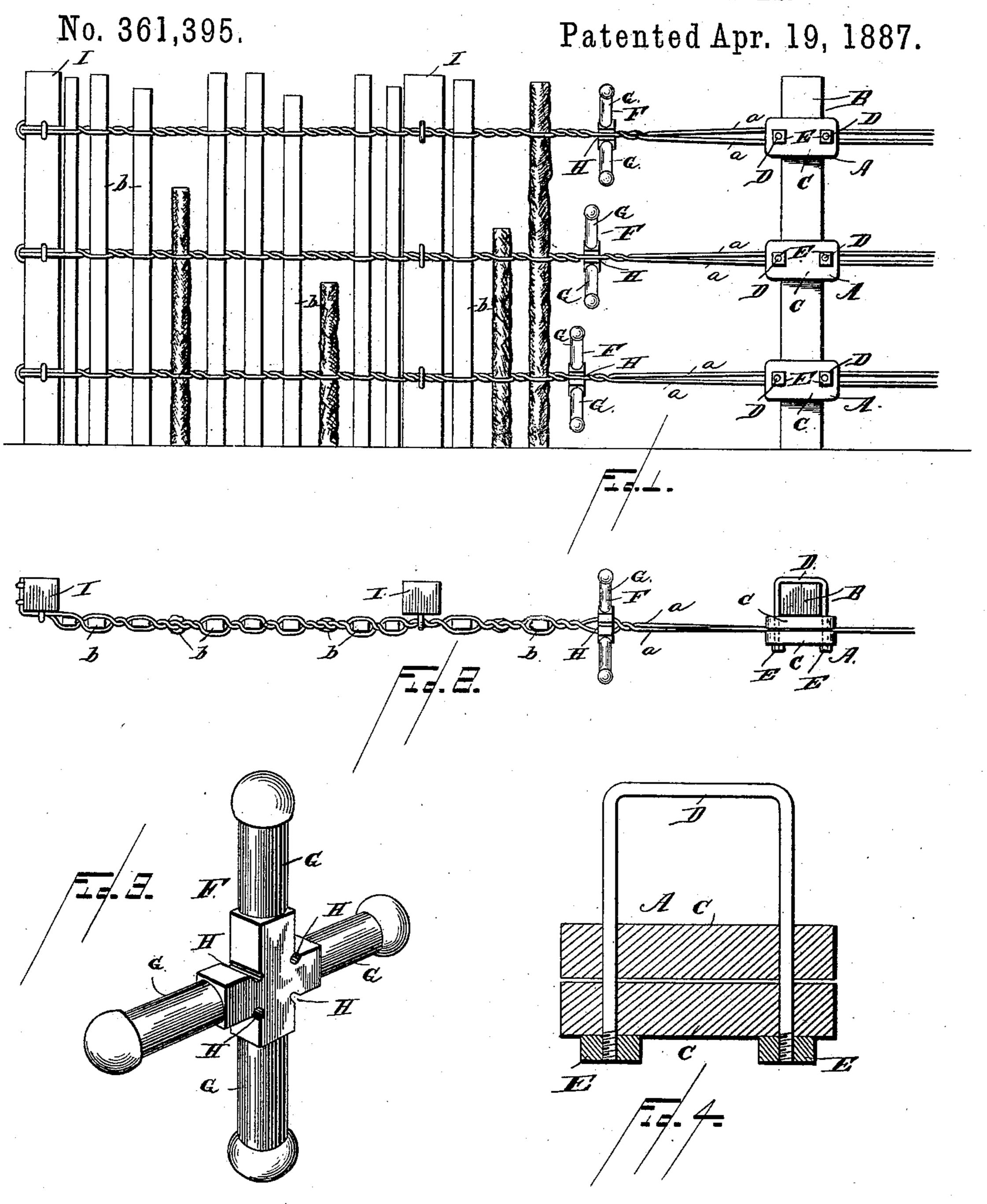
A. N. CALDWELL.

TENSION DEVICE FOR USE IN MAKING FENCES.



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United States Patent Office.

ALBERT N. CALDWELL, OF LEBANON, INDIANA.

TENSION DEVICE FOR USE IN MAKING FENCES.

SPECIFICATION forming part of Letters Patent No. 361,395, dated April 19, 1887.

Application filed February 17, 1887. Serial No. 227,929. (No model.)

To all whom it may concern:

Be it known that I, Albert N. Caldwell, a citizen of the United States, residing at Lebanon, in the county of Boone and State of Indiana, have invented a new and useful Improvement in Tension Devices for Use in Making Fences, of which the following is a specification.

My invention relates to an improvement in tension devices and wrenches for making fences; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the drawings, Figure 1 is a side elevation of a fence in course of construction, and illustrating my improved devices. Fig. 2 is a top plan view of the same. Fig. 3 is a detailed view of one of the wrenches. Fig. 4 is a similar view of one of the tension devices.

A represents a series of tension devices that are attached to a post, B, erected at a suitable distance beyond one end of the proposed line of fence. The said tension devices con-25 sist each of a pair of plates, C, which are clamped together by means of a U-shaped yoke or clip-bolt, B. The said yoke or clipbolt embraces three sides of the post B, and the plates C are provided near their extremi-30 ties with transverse openings, in which the ends of the clip-bolts are inserted. Clampingnuts E are screwed onto the threaded ends of the clip-bolts and serve to compress the plates together and secure them at any desired ver-35 tical adjustment upon the post. The wires a, between which the pickets b of the fence are inserted, are passed through the tension devices and bear between the opposing sides of the plates C, the said wires being arranged in 40 pairs, one wire of each pair being above the clip-bolt and the other wire being below the same, as shown in Fig. 1.

F represents my improved wrench for twisting the wires, and thereby securing the pickets between them. The said wrench comprises four radial arms, G, which project from a common center and have their outer ends rounded, as shown. Between the inner ends of the said radial arms are a series of four ratio dial notches or recesses, H.

The operation of my invention is as follows:

In order to construct a fence, the post B is erected beyond one end of the proposed line of fence, as before stated, and in line with the usual fence-posts, I, which are arranged at 55 suitable regular distances apart. The wires aare attached in pairs to the first post I of the series, and are drawn through the tension devices and secured thereby at the requsite tension. I employ as many of the wrenches as 60 there are pairs of wires, and insert the said wrenches between the wires, so as to cause the latter to enter notches or recesses in the wrenches that are opposed to each other. The said wrenches are then moved forward between 65 the wires toward the starting-post. A picket is then inserted between the wires in a vertical position, and the wrenches are turned, one after another, so as to cause the wires to be twisted in front of the pickets. The wrenches are then 70 moved forward on the wires a suitable distance, and a second picket is inserted between the wires in front of the portions thereof which are twisted together. The wrenches are then turned, as before, to twist the wires against 75 the second picket, and so on until a sufficient number of pickets have been used to form one panel of a fence. The wires are then attached to the next post I by means of the usual Ushaped keepers or staples, and the operation 80 before described is repeated until the fence is complete.

It will be observed that each pair of wires is twisted independently of the other wires, and this enables me to use irregularly-shaped 85 pickets and to use pickets of varying lengths, some of which may be too short to extend entirely across all of the wires. By this means the farmer is enabled to utilize all of the old fence rails, bars, and short or broken pickets 90 that may be on the place when building his fence, thus effecting a great economy in the construction of the latter.

Devices thus constructed are extremely cheap and simple, may be conveniently transported 95 from one place to another without loading them upon a wagon, and are adapted for building strong and durable fences very rapidly and at slight cost.

Having thus described my invention, I 100 claim—

The combination of the tension post or bar

B, the clamping-plates C, and the clip bolts or yokes embracing the post and having their arms passed through the clamping-plates and provided with the clamping-nuts, whereby the 5 plates may be compressed together on opposite sides of the wires, for the purpose set forth, RILEY HAUSER, Substantially as described.

Substantially as described.

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

Witnesses: ALBERT N. CALDWELL. Witnesses: