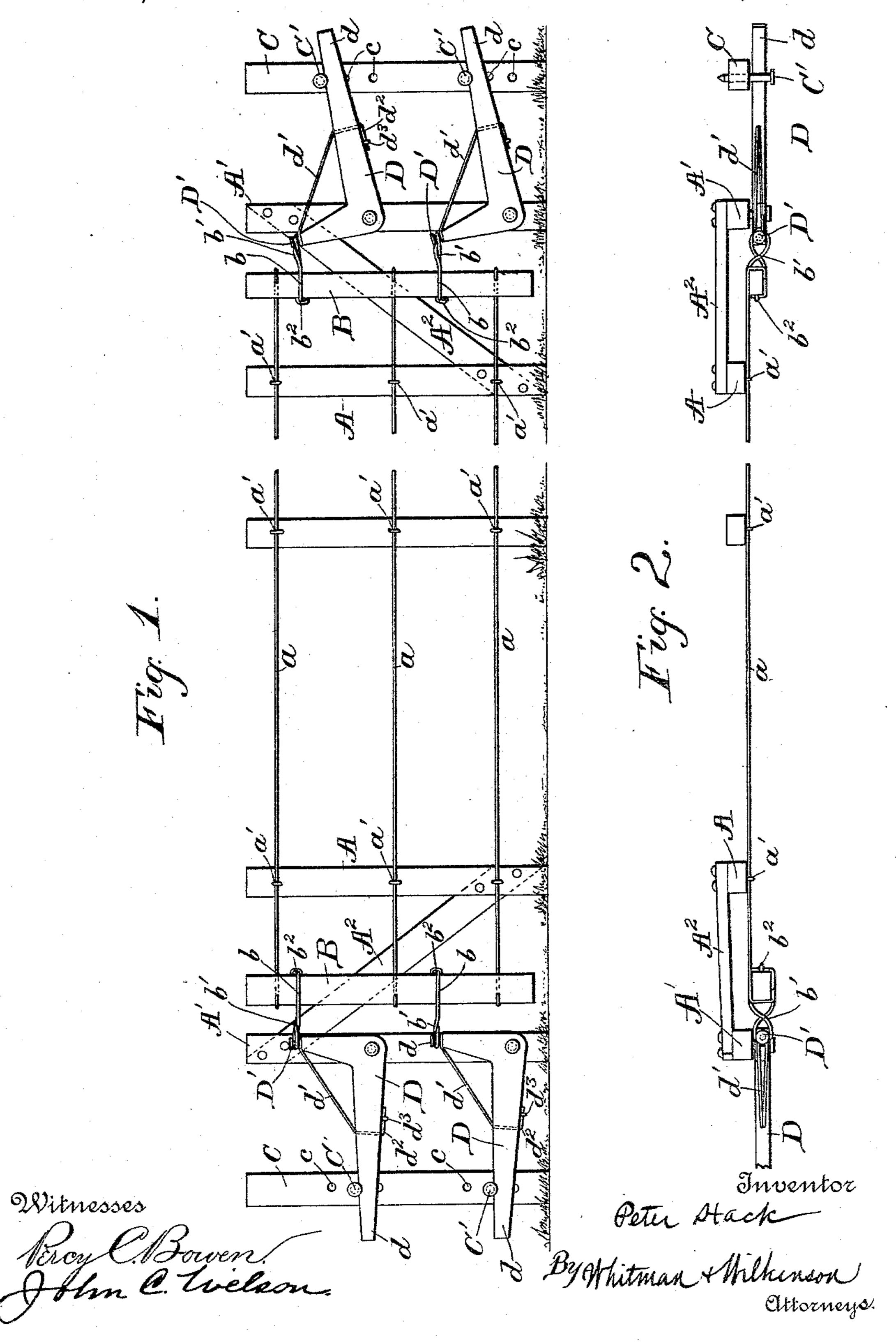
P. HACK.
TENSION DEVICE FOR WIRE FENCES.

No. 490,073.

Patented Jan. 17, 1893.



## United States Patent Office.

PETER HACK, OF MICHIGAN CITY, INDIANA.

## TENSION DEVICE FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 490,073, dated January 17, 1893.

Application filed November 1, 1892. Serial No. 450,658. (No model.)

To all whom it may concern:

Be it known that I, Peter Hack, a citizen of the United States, residing at Michigan City, in the county of La Porte and State of Indiana, have invented certain new and useful Improvements in Tension Devices for Wire Fences; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in devices for compensating for the expansion and contraction of wires in wire fences due

15 to variations in temperature.

It consists of certain novel features hereinafter described and claimed, reference being had to the accompanying drawings, in which the same parts are indicated by the same letters in both the figures.

Figure 1 represents a side elevation of a line of fence, parts being broken away, provided with the improved compensating device. Fig. 2 represents a plan view of the fence and at-

25 tachments shown in Fig. 1.

The posts A next the end of the fence are connected by a brace A<sup>2</sup> to the end posts A', on which the compensating levers D are pivoted. Between the posts A and A' the ends 30 of the wires a are secured to a cross piece B which is connected by loops b to the spikes D' on the ends of the levers D, which levers are preferably bent at a right angle as shown. Loops b are preferably crossed as at b' and 35 secured to the cross piece B with staples  $b^2$ . The bent levers D, and spikes D' are strengthened by the wire loops d' which pass over the spikes D', having their ends  $d^2$  passed through the opposite arm of the bent lever, bent over 40 and secured as at  $d^3$ . The handles d of the bent levers D, are adapted to engage beneath the pin C' fitted in one of a number of holes c made in the post C which is firmly embedded in the earth.

The operation of the device is as follows:--

In warm weather, when the wires become slack through expansion, the handles d are brought down low on the posts C, and the pin C' is placed in one of the lower holes c. In cold weather the levers are eased up and held 50 beneath the pin C' placed in one of the upper holes c, as shown to the right in Fig. 1. The small play of the wires a beneath the staples a' on the posts, will be sufficient to allow for the expansion and contraction of the said 55 wires, and for the proper adjustment of the same by means of the bent levers D.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent of the United States, is:—

1. In a device for compensating for the expansion and contraction of the wires in wire fences, the combination with the post A' and brace  $A^2$ , of the bent levers D pivoted on said post, the said levers having the spikes D' at 65 one end thereof, and the handle d at the other, the cross piece B and loops b secured thereto; the wires a also secured to said cross piece; the post C having a plurality of holes c, and the pins C' for holding said levers down, substantially as and for the purposes described.

2. In a device for compensating for the expansion and contraction of the wires in wire fences, the combination with the post A' and brace  $A^2$ , of the bent levers D pivoted on said 75 post, the said levers having spikes D' at one end thereof, and the handle d at the other, the braces d', connected to the arms of said bent levers, the cross piece B and loops b secured thereto, the wires a also secured to said 80 cross piece, the post C having a plurality of holes c, and the pins C' for holding said levers down, substantially as and for the purposes described.

In testimony whereof I affix my signature in 85 presence of two witnesses.

PETER HACK.

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Witnesses:

LEROY D. HAMRICK, JARED H. ORR.