

I. H. CONGDON & J. E. HOUSE.

Wire-Stretchers.

No. 146,046.

Patented Dec 30, 1873.

Fig: 1

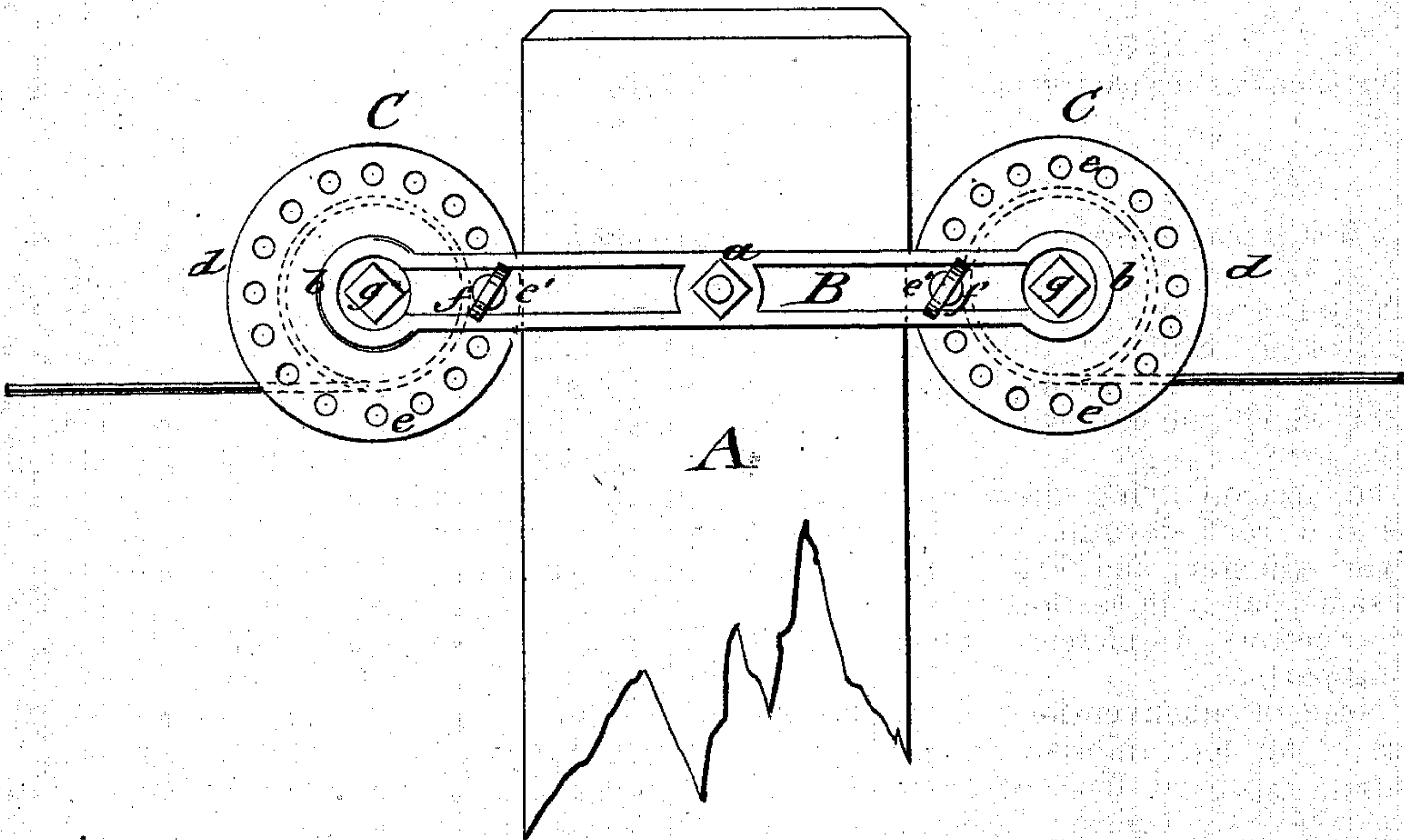
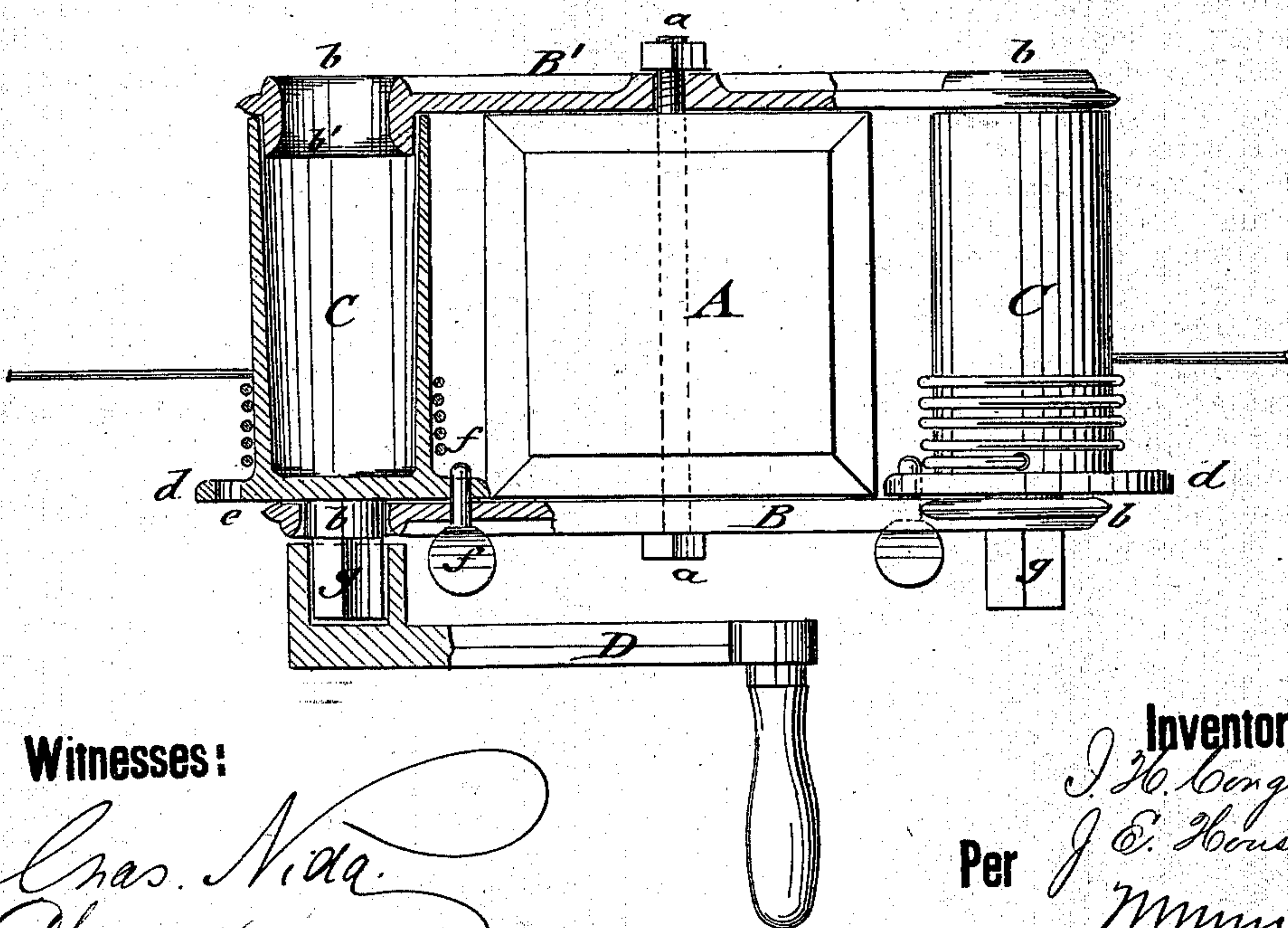


Fig: 2



Witnesses:

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UNITED STATES PATENT OFFICE.

ISAAC H. CONGDON AND JACOB E. HOUSE, OF OMAHA, NEBRASKA.

IMPROVEMENT IN WIRE-STRETCHERS.

Specification forming part of Letters Patent No. **146,046**, dated December 30, 1873; application filed November 1, 1873.

To all whom it may concern:

Be it known that we, ISAAC H. CONGDON and JACOB E. HOUSE, of Omaha, in the county of Douglas and State of Nebraska, have invented a new and Improved Fence-Wire Adjuster, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of our improved fence-wire adjuster; and Fig. 2 is a top view of the same, partly in section.

Similar letters of reference indicate corresponding parts.

The object of our invention is to provide for the use of farmers, railroad companies, and others, an improved fence-wire adjuster, by which the inconvenience and loss arising from breaking of the wire or pulling over of the fence-posts, which is occasioned by the contraction in cold weather, together with the widening by expansion during warmer weather, may be obviated. By a simple, strong, and durable device a source of trouble and expense may be prevented, and the injurious effects of the changes of temperature on the fiber of the wire mitigated. Our invention consists in the mechanical application of an iron frame and rollers for the purpose of adjusting or giving a uniform and constant tightness to the iron wire used in the construction of wire fences.

In the drawing, A represents the fence-post, of round, square, or other form, to which are applied, and at opposite sides and parallel to each other, the supporting frames or pieces B B' of cast iron or other suitable material. Bolt *a* passes through post A and pieces B and B', and connects them rigidly. The supports B B' are cast with ribs for greater

strength and tightness, and provided at both ends with circular perforated bearings *b* for rollers C. The bearings *b* of support B' are also cast with inside projecting flanges *b'* of the inner diameter of the rollers C, which flanges form the bearings of the open ends of the same. The rollers C are of hollow cylindrical shape, as shown in Fig. 2, and provided at the sides opposite to the open ends with flanges *d*, which are cast with the rollers and provided at equal intervals with holes *e*. Corresponding holes *e'* of the adjoining support B serve to insert in holes or slots *e* lock pins or bolts *f*, which prevent the rollers C from turning back after the wire has been tightened. A central pin or arbor, *g*, of roller C projects at the flanged end of the same, being of cylindrical shape, as far as turning in the bearings of support B, and of square shape beyond it, to be taken hold of by crank-handle D. The wire is attached by its end to the roller C, and is adjusted thereon by crank-handle D, which is carried by the attendant from post to post, so that very extensive fences can be easily set as desired.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

A wire-tightening attachment for fences, comprising the frame B B', rollers C C, perforated end disks *d*, arbors *g*, lock-pins *f*, and detachable hand-crank D, when the various parts are constructed and relatively arranged to operate in the manner set forth.

ISAAC H. CONGDON.
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Witnesses:

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