(No Model.)

# J. O. BIGHAM.

## WIRE STRETCHER.

No. 455,383. Patented July 7, 1891.

Fig. 1.

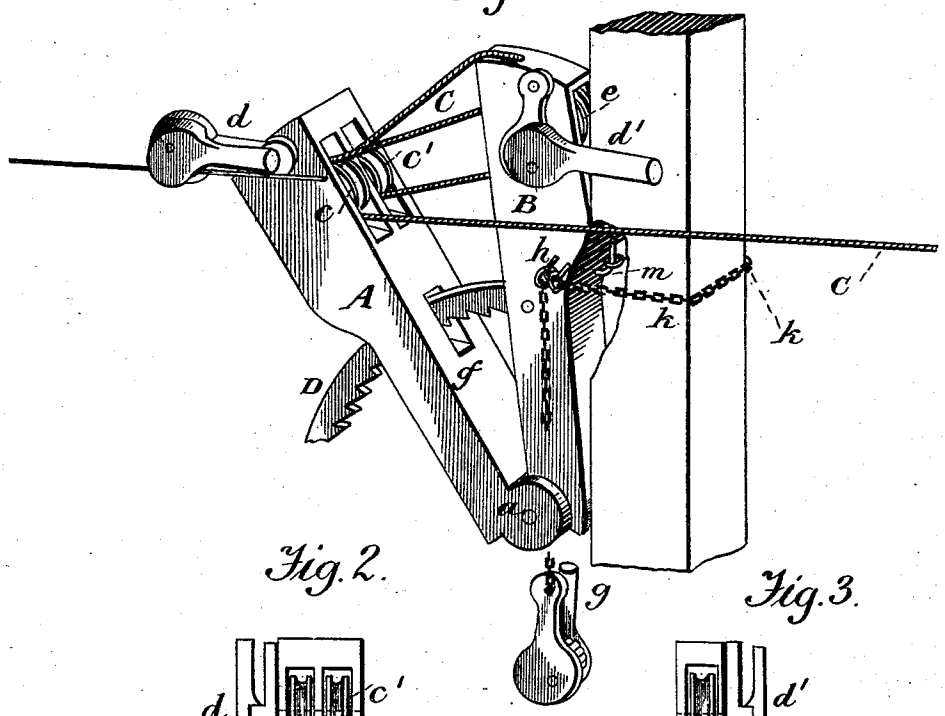



Fig. 2.

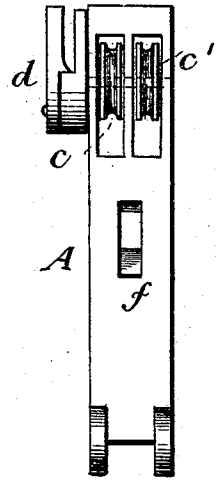



Fig. 3.

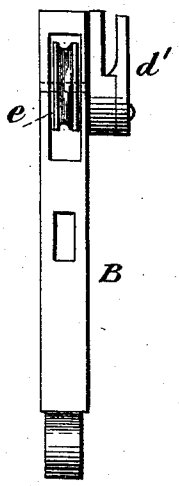
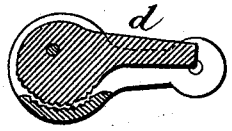



Fig. 4.




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# UNITED STATES PATENT OFFICE.

JAMES OLIVER BIGHAM, OF FLEMING, TEXAS.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 455,383, dated July 7, 1891.

Application filed October 25, 1890. Serial No. 369,331. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES OLIVER BIGHAM, a citizen of the United States, residing at Fleming, in the county of Comanche and State of Texas, have invented certain new and useful Improvements in Wire-Stretchers; 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.

This invention relates to removable wire-stretchers; and it consists in certain improvements in the construction of the same, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a wire-stretcher constructed according to my invention. Figs. 2 and 3 represent face views of the two main parts detached. Fig. 4 illustrates the grips used for grasping the wire.

The main parts of the device are two jaws A and B, the lower ends of which are pivoted together at *a*. The jaw A, near its upper extremity, is recessed to receive two pulleys *c* and *c'*, which are mounted therein on a pin or bolt. The opposite jaw B is also recessed to receive a pulley *e*, which is mounted therein in position to be opposite the pulleys in the jaw A. Two grips *d d'* are pivotally secured one to the jaw A and the other to jaw B, near the upper extremities of the jaws. Each of said grips is made in two parts, which are pivoted together, one of said parts being provided with a rounded corrugated surface and the other having a corresponding corrugated surface, and when a wire is placed in the grip the latter may be closed, so that the wire is tightly grasped between the corrugated surfaces, the two parts of the grip having an eccentric connection, as shown.

C indicates a cord, one end of which is fastened to the top of the jaw B, from which the said cord is passed about pulley *c* in the opposite jaw A, from thence to and about the pulley *e* in jaw B, and from thence to and about the pulley *c'* in jaw A, so that by drawing the cord the jaw A is steadily brought toward the jaw B, which is usually secured to a fixed upright. An additional grip *g* is hung to the device by a short chain or cord, to be used in case the jaws must be operated a second time to tighten the wire sufficiently.

The jaw B is provided with a loop *h*, to which is attached a chain *k* and a hook *m*, these being adapted for securing removably the jaw B to a fixed post.

In operation the jaw B is secured to a post by means of the chain *k* and hook *m*, and the jaws are opened. If a single wire is to be stretched, the wire is placed in the grip *d*, connected with the jaw A, and the grip closed. The cord C is then drawn, bringing jaw A steadily to the jaw B and stretching the wire, which may then be secured. When two wires are to be stretched for connection, the jaws being open, the two wires are secured in the grips *d* and *d'*, respectively, and the cord is drawn, closing the jaws, and thus bringing the ends of the wires together. In case the wire should not be sufficiently taut when the jaws are closed, the additional grip *g* is applied to the wire outside of the grip connected with jaw A, and the jaws may then be opened and the wire again stretched as before. A pivoted rack D, with ratchet-teeth, serves to retain the jaws in their closed position.

I claim—

1. In a wire-stretcher, the combination of the two jaws coupled together and provided with pulleys mounted therein, with a cord connected to one of said jaws and passing around said pulleys, and a gripping device connected with said jaws, as and for the purpose set forth.

2. In combination with the recessed jaws A B, carrying the pulleys *c c' e*, a cord to draw the jaws together passing around said pulleys, and the grips *d d' g*, the grips *d d'* being connected with the jaws, as and for the purpose described.

In testimony whereof I have affixed my signature in presence of two witnesses.

JAMES OLIVER BIGHAM.

Witnesses:
T. H. NORTHCUTT,
R. W. TATE.