(No Model.

G. H. SHELLABERGER.

WIRE STRETCHER.

No. 562,928. Patented June 30, 1896.

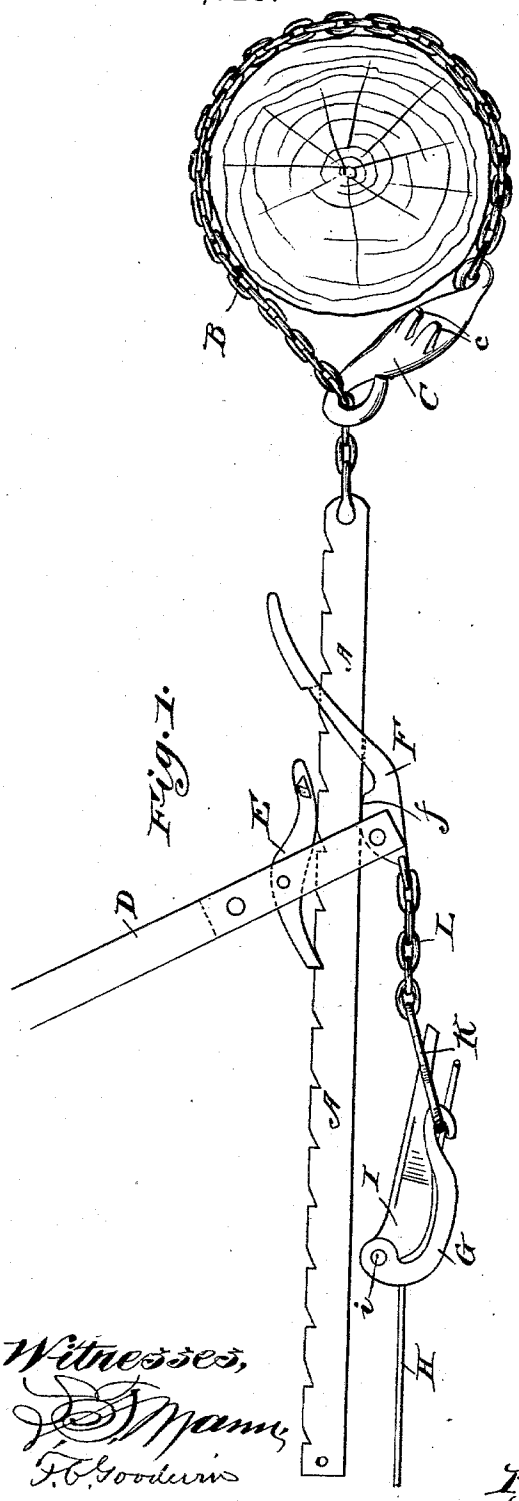

Fig. 1.

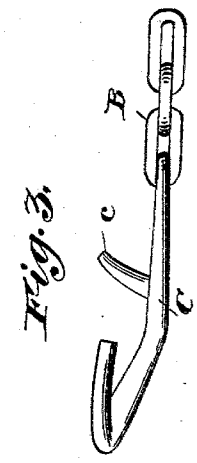

Fig. 3.

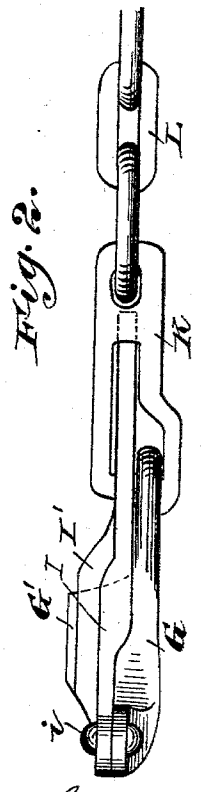

Fig. 2.

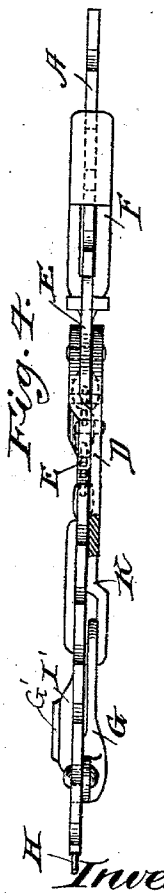

Fig. 4.

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UNITED STATES PATENT OFFICE.

GEORGE H. SHELLABERGER, OF DE KALB, ILLINOIS, ASSIGNOR TO EDWARD F. SHELLABERGER, OF SAME PLACE.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 562,928, dated June 30, 1896.

Application filed March 9, 1895. Serial No. 541,130. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. SHELLABERGER, of De Kalb, Illinois, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification.

This invention relates to an implement for stretching wire, such as the longitudinal strands of wire fences.

In the drawings, Figure 1 is a plan view showing the implement anchored to a post and engaged with a wire. Fig. 2 is an enlarged view, in side elevation, of the wire-grip. Fig. 3 is a similar view of the chain-hook; and Fig. 4 is an edge view of the operating-lever, its dogs, and a ratchet-bar.

The implement consists of a ratchet-bar A, adapted to be secured to the post by means of a chain B, or other flexible connecting device, having a hook member C. The hook C is provided with two upstanding lugs *c*, between which a barb of a barb-wire may be engaged when it is desired to splice such wire between the posts.

D represents the stretching-lever, having its lower end bifurcated to embrace the rack-bar A and carrying a pivoted dog E, which rides on the racked edge of the bar A. The extremity of the bar D carries a dog or pawl F, having a rounded shoe or cam edge *f*, which rides upon the edge of the bar A. The pawl F is bifurcated to embrace the rack-bar, as shown in Fig. 4, and it is thereby adapted to engage the rack-teeth and thus coöperate with the dog E in the working of the device.

The wire-grip consists of two members, one of which is a curved plate G, having a lateral offset portion or outstanding lug G′, over which the end of the wire H is passed.

I represents a clamp hinged at *i* to the plate G and having a lateral offstanding portion I′ with its lower edge curved to correspond substantially to the curvature of the outstanding portion G′ of the plate G.

K represents a slotted plate connected to the plate G, and also, by means of the links L, to the end of the pawl F.

The extremity of the clamp I projects through the slot in the plate K, and the latter is pivotally connected to the plate G, so that by swinging the slotted plate K the clamp I may be raised to introduce the wire below its curved acting edge.

The operation of the device will be apparent from an inspection of Fig. 1 of the drawings. As there shown, the dog E is engaged with the rack-bar, and its pivotal connection with the bar D forms the fulcrum over which said bar may be rocked until the pawl F engages a tooth of the rack-bar. Thereupon the lever D may be moved upon its pivotal connection with the pawl F until the dog E engages another tooth of the rack-bar, during which movement the pawl F will be stationary. Thus, by a step-by-step movement, the wire may be drawn tight, and when sufficiently taut fastened to the posts, or if the wire is to be spliced it may be engaged with the hooks *c* by wrapping around them if it be a plain wire, or by catching a barb therein if it be a barbed wire.

I am aware that it is not broadly new to employ coacting dogs or pawls in combination with a ratchet-bar and operating-lever, but my device is peculiar in the construction of its parts and in the arrangement of its fulcra. Thus the pawl F has the cam or shoe *f*, which is so constructed as to permit said pawl to slide freely on the rack-bar when the lever is moved upon the pivot of the dog E as its fulcrum, and the shape of said cam or shoe is such also as to hold the pawl F in engagement with the rack-bar, while the fulcrum of the lever is the pivotal connection thereof with said pawl. The particular construction of the wire-clamp is also novel. By making the body of the plate G curved, as shown, and forming the wire-clamp I with a corresponding curve bearing upon the wire over a considerable distance, the wire is tightly gripped, but without pinching it over any sharp or abrupt surface or projection which would tend to break or weaken it.

I claim—

1. A wire-stretcher, comprising in combination a bar having rack-teeth on one of its edges and its opposite edge plain, means for flexibly connecting said rack-bar to a post or other stationary object, an operating-lever having a bifurcated end embracing the rack-bar, a pawl or dog pivoted between its ends between the bifurcations of said lever and

having a point adapted to engage the rack-teeth and the heel adapted to bear through but not to engage therewith, a second pawl or dog pivoted to the extremity of the furcations of said lever and having a curved shoe or cam bearing on the plain edge of the rack-bar and bifurcated to embrace the bar and adapted also to engage the rack-teeth, substantially as described.

2. A wire-stretcher, comprising in combination a bar having rack-teeth on one of its edges and its opposite edge plain, means for flexibly connecting said rack-bar to a post or other stationary object, an operating-lever having a bifurcated end embracing the rack-bar, a pawl or dog pivoted between its ends between the bifurcations of said lever and having a point adapted to engage the rack-teeth and the heel adapted to bear through but not to engage therewith, a second pawl or dog pivoted to the extremity of the furcations of said lever and having a curved shoe or cam bearing on the plain edge of the rack-bar and bifurcated to embrace the bar and adapted also to engage the rack-teeth, and a wire-clamp comprising a curved plate over which the wire is passed and a curved shoe pivotally connected to said plate and having its acting edge arranged in line with the wire to be clamped and means for flexibly connecting said clamp with the operating-lever, substantially as described.

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