

1,056,481.

FIG. 1

FIG. 2

FIG. 3

FIG. 4

Inventor
E. Young.

Witnesses
J. M. Carter
Frank A. Batchiff

Attorney

UNITED STATES PATENT OFFICE.

ELI YOUNG, OF EAST AUBURN, CALIFORNIA, ASSIGNOR OF ONE-HALF TO JOSEPH JOHNSON, OF AUBURN, CALIFORNIA.

WIRE-STRETCHER.

1,056,481.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ELI YOUNG, a citizen of the United States, residing at East Auburn, in the county of Placer, State of California, 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 new and useful improvements in wire stretchers particularly that class in which the wire is stretched by the alternate gripping and sliding of a pair of friction grips upon a respective pair of rods.

The object of this invention is to provide a device of the class described which combines strength, durability and ease and rapidity of operation with a design that admits of economical manufacture.

A further object of this invention is to provide a wire stretcher of such structure as to occupy a minimum of space.

With these and other objects and advantages in view the invention resides in the novel combination and arrangement of parts hereinafter described and more particularly pointed out in the appended claims.

Reference is had to the accompanying drawings, wherein similar characters of reference designate corresponding parts throughout the several views, and in which,

Figure 1 is a side elevation of the device applied, Fig. 2 is a top plan view of the sliding mechanism, Fig. 3 is a section on the line 3—3 of Fig. 1, Fig. 4 is a section on the line 4—4 of Fig. 1, Fig. 5 is a perspective view of one of the sliding boxes, and Fig. 6 is a perspective view of the post attaching member.

Referring to the drawings, there is shown the U-shaped attaching member 10, which has an eye 11 formed on the ends thereof for connection with a chain 12 which is secured to a post or other support not shown. The extremities of the members 10 are bifurcated as at 13, and have pivoted between the bifurcations thereof a pair of rods 14.

To stretch the wire, there is provided a pair of spring pressed clutch members 15, each of which is mounted on a rod 14 and has pivotal connections with a handle 16

and which are adapted to alternately advance toward the member 10. Each clutch member 15 has a frame with sides 16' and 17 and end members 18 and 19. The rod 14 passes freely through alining openings in the end members. The side member 16' is extended adjacent the end 19 and provided with an inwardly directed flange 21, while the side member 17 has a lug 22 formed thereon. A gripping plate 23 is provided with an opening 24 through which is passed the rod 14. One end of the plate bears against the flange 21, while the other end extends past the end member 19 as at 25. A coil spring 26 is positioned between the lug 22 and end 25 and serves to bind the plate 23 against the rod 14 in such a manner that the clutch member 14 is capable of movement toward the attaching member 10, but will bind further on force being applied tending to move it rearwardly, as will be clearly understood. The handle 16 extends through the frames of the clutch members 15 and is provided with bifurcations 27 and 28 which straddle the rods 14. The bifurcation 27 is pivotally secured as at 29 to the pair of sides 16' and the bifurcation 28 is pivotally secured as at 30 to the pair of sides 17, each pair of pivots 29 and 30 having the same axis.

For securing the wire 31 to the device, a bar 32 is pivoted between the bifurcations 27 and 28, midway of the axis of the pairs of pivots 29 and 30, and is provided with an opening 33 for receiving the wire 31.

It will be seen that upon rocking the handle 16 the clutch members 15 will be alternately advanced, each clutch member, when locked forming a fulcrum for the handle, by means of which the other clutch member is advanced, and the wire stretched. The wire is under slight tension when the operation is commenced. This prevents the whole device from rocking with the handle, as would otherwise be the case.

What is claimed is:

1. In a wire-stretcher, the combination with a pair of clutch members, each comprising a rectangular frame having openings in each end and a spring pressed clutch provided at one end thereof, of an attaching member, a pair of rods pivotally secured to said attaching member, one of said clutch members being mounted on each rod, a handle having a lower bifurcated end dis-

posed within the frames of the clutch members and straddling the rods, said handle having pivotal connection with each of said clutch members, and a wire holding member pivotally secured to the handle midway of its pivotal connection with said clutch members.

2. In a wire stretcher, the combination with a pair of clutch members, each comprising a rectangular frame having one of its sides extended and provided with an inwardly directed flange, a lug formed on the other side, a gripping plate having one end in engagement with the flange and a spring bearing against the lug and the other end of the gripping plate, of a U-shaped attaching member, and an eye formed on the bight

thereof, a pair of rods, each pivoted to an extremity of said U-shaped member, one of said clutch members being mounted on each rod, a handle having a lower bifurcated end disposed within the frames of the clutch members and straddling the rods, said handle having pivotal connection with each of said clutch members and a wire-holding bar pivoted between the bifurcations of the handle midway of their pivotal connection with the clutch members.

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

ELI YOUNG.

Witnesses:

JOHN B. LANDIS,
A. E. FALSH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
