(No Model.)

M. C. GOUCHER.

WIRE STRETCHER.

No. 263,509. Patented Aug. 29, 1882.

Fig. 1

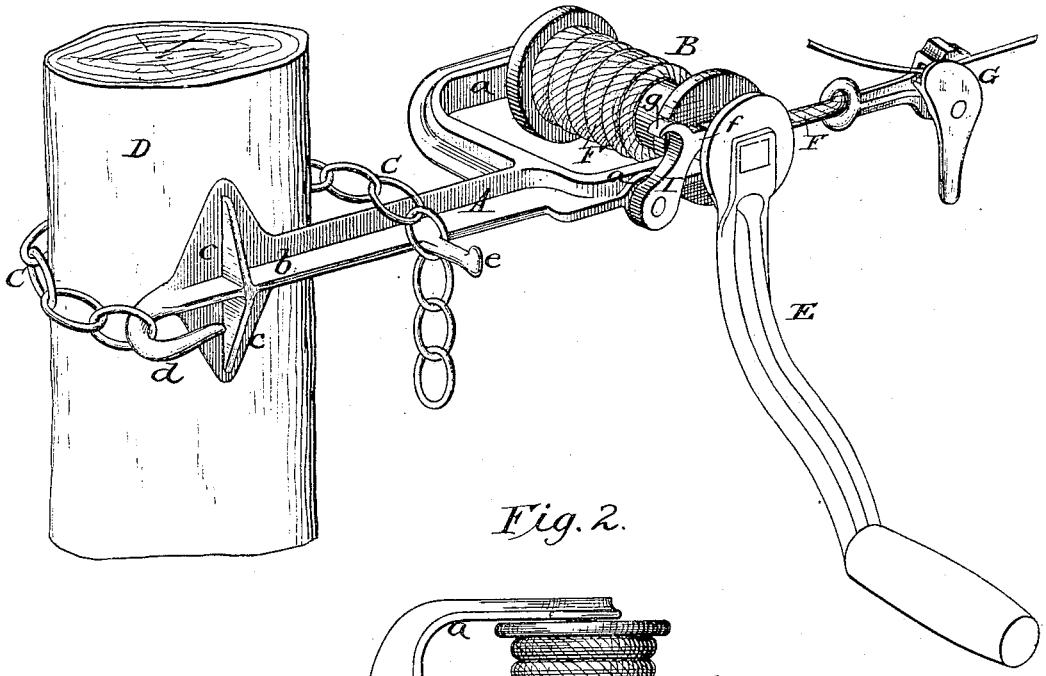


Fig. 2.

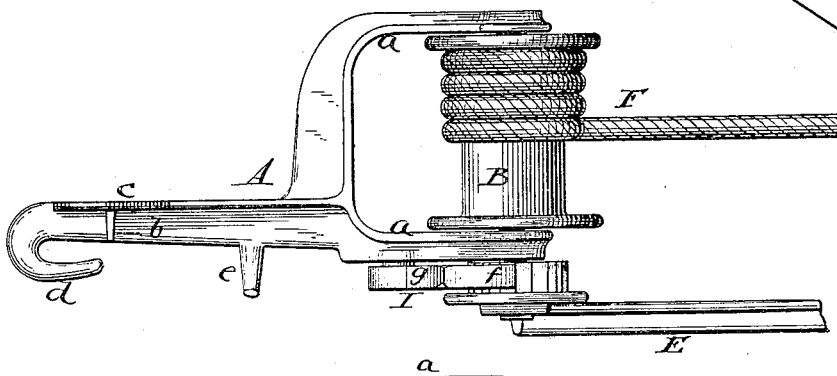
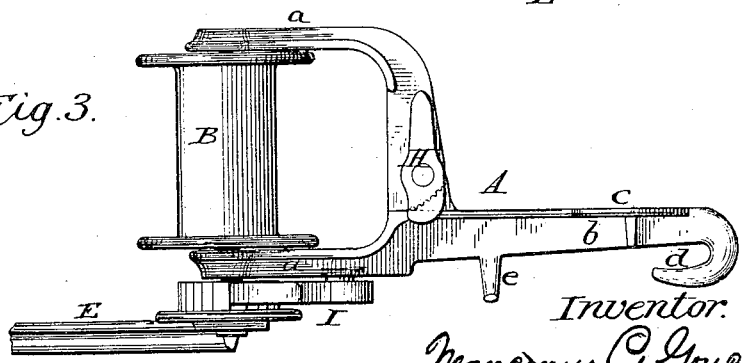


Fig. 3.



Attest.

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UNITED STATES PATENT OFFICE.

MANCINUS C. GOUCHER, OF MILWAUKEE, WISCONSIN.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 263,509, dated August 29, 1882.

Application filed June 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, MANCINUS C. GOUCHER, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain Improvements in Wire-Stretchers, of which the following is a specification.

My invention relates to wire-stretchers; and it consists in a novel construction of the frame, whereby it is prevented from tipping or turning over while the device is in use.

In the drawings, Figure 1 represents a perspective view of the device applied to a post and in position for stretching a wire; Fig. 2, a plan view of the same, and Fig. 3 a plan view of the device in position for use in splicing wires.

The construction and arrangement of the stretching or straining mechanism proper is not essential, though I prefer to adopt substantially that shown in patent to W. Z. Dafoe, reissued July 19, 1881, No. 9,817, the essential feature of the invention consisting in providing the rearwardly-extending arms of the frame with a vertical plate, face, or enlargement, adapted to lie flat against the post, and thereby to prevent the rocking or tipping of the frame.

In the practical use of wire-stretchers it has been found that the frame swings or tips over, frequently causing the pawl to disengage the ratchet, and throwing the free end of the wire in rear of the clamp violently about, to the great danger of persons operating the device, the barbed wire tearing the flesh and being very liable to injure the eyes. To prevent this tipping of the frame I construct the same as shown in the drawings, in which A represents the frame, having at its front two arms, *a a*, to support and carry a winding drum or roller, B, and a rearwardly-extending arm, *b*, which, with a chain or flexible band, C, serves to attach the frame to a post or other support. The arm *b* is furnished near its rear end with a flat plate or web, *c*, extending above and below the arm, as shown in Fig. 1, and is further furnished with a hook or eye, *d*, at its rear end, to which is attached one end of a chain, C, which is carried about the post and hooked upon a stud or pin, *e*, also formed upon the frame, and preferably on that side of arm *b* which is farthest from the post, because this location causes the plate or web *c* to be drawn or pressed against the post with greater force than would otherwise be the case, and without regard to the size of the post, though I do not confine myself to this location of the stud or projection.

The manner of applying the frame to a post will be readily understood by referring to Fig. 1, one end of a chain or band, C, being permanently attached to the frame, and the other end being free, so that it may be passed about a post, D, and hooked upon the stud or projection *e*, as shown.

B represents the winding drum or roller, journaled in the arms *a*, and provided with a handle or crank, E, as in the Dafoe stretcher above mentioned, and upon this drum or roller is wound a rope or other flexible band, F, the free or outer end of which is furnished with a wire clamp, G, by which the wire is engaged and drawn toward the post as the rope is wound upon the drum.

In order to adapt the device for use in splicing wires, a second clamp, H, is secured upon the frame, as usual, and a pawl, I, is pivoted to the frame and formed with a nose or dog, *f*, and with a hook, *g*, so that it may be made to engage automatically with the teeth *h* of ratchet J, after being turned upward over its pivot, whichever side up the device may be used.

In simply stretching wires where the frame is made fast to a post the clamp H is not used, and the device stands in the position shown in Figs. 1 and 2, with the clamp H at the lower side; but in splicing the frame is turned over and the clamp H brought to the upper side, as shown in Fig. 3, to bring the ends of the wire in convenient position for operation.

While I prefer the stretching mechanism shown and described, it will be seen that other forms may be used with the peculiar form of frame shown and described.

I am aware that a wire-stretcher has been proposed in which the forward end of the frame is forked or formed with two separated arms, the frame being furnished with hooks or spurs to engage into a wooden post, and with a clamping device to secure it to a metal post, the windlass being carried by an arm in rear of

the post, and that a frame of the same general shape as mine, but without the web or plate, has been furnished with a hook on the opposite side of the frame from the arm *b*. My frame differs from the first of these in that instead of the spurs or the clamp I employ a flexible band or chain which passes from the rearwardly-projecting arm around the post and back to said arm, thereby causing the strain or tension placed upon the stretcher to draw the arm firmly against the face or side of the post. The plate or web *c*, under this construction, serves to prevent the tipping of the frame, and all necessity of spurs or clamps for this purpose is done away with. It also differs from the second in that the two ends of the chain or band which pass about the post are attached to the same arm *b*, and it therefore draws the plate or web *c* firmly against the post, however small the latter may be, and the web or plate prevents tipping or turning over of the frame, whereas under the construction referred to, and as stated by the inventor, "the instrument frequently turns over by accident."

While I do not claim the frame having the bifurcated arm and the clamp or spurs, nor the frame having a rearwardly-extending arm and a chain extending from said arm to a hook at the opposite side of the frame, I believe myself to be the first to construct a stretcher-frame with a rearwardly-extending arm having a web or lateral projections to lie against the face of the post, and to attach both ends of the chain or band which holds the frame upon the post to the same arm of the frame, whereby the tension or strain to which the device is subjected is caused to press and hold the web or plate firmly against the post and prevent the tipping of the same.

Having thus described my invention, what I claim is—

1. In a wire-stretcher, the combination of a frame having a rearwardly-extending arm, said arm provided with a web or plate on its face, and with a projecting stud, and a chain or band attached at one end to said arm, adapted to pass around a post and to be engaged with the stud, as explained.

2. In combination with the wire-stretcher frame consisting of arms *a a* and *b*, the latter provided with a plate or web, *c*, hook *d*, and stud or projection *e*, a chain or band, C, attached to the hook *d*, and adapted to be engaged with or disengaged from the projection *e*, as desired.

3. The wire-stretcher frame A, having a rearwardly-extending arm, *b*, formed with plate or web *c*, hook *d*, and pin *e* on the outer side of arm *b*, whereby it is adapted to receive chain C, and to be drawn thereby against the face of the post or support to which it is applied when the device is in use.

MANCINUS C. GOUCHER.

Witnesses:
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