(No Model.)

M. SALLBERG.

WIRE STRETCHER.

No. 454,988. Patented June 30, 1891.

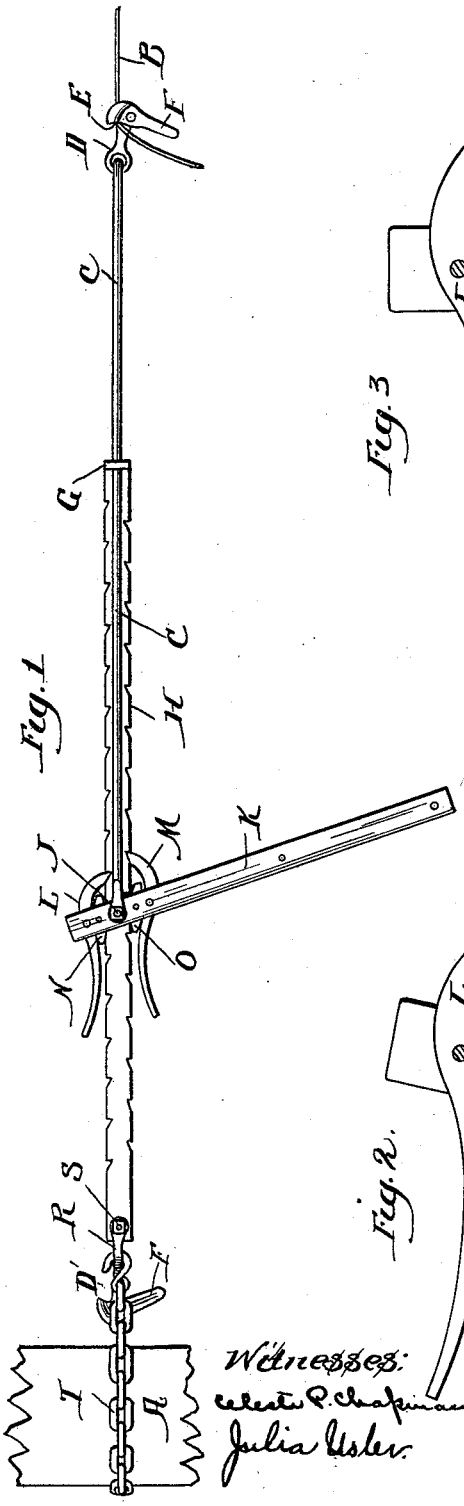

Fig. 1.

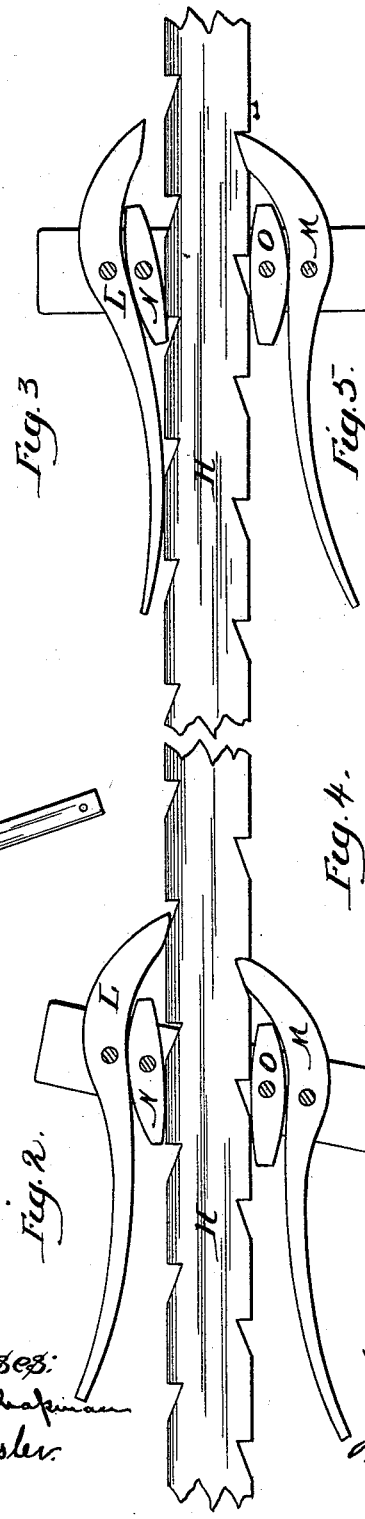

Fig. 3.

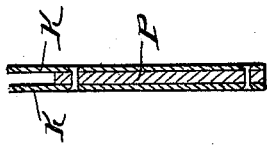

Fig. 5.

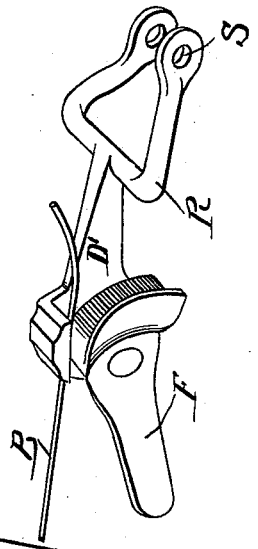

Fig. 4.

Fig. 2.

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UNITED STATES PATENT OFFICE.

MAGNUS SALLBERG, OF CHICAGO, ILLINOIS, ASSIGNOR TO C. F. JACOBS, OF SAME PLACE.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 454,988, dated June 30, 1891.

Application filed October 27, 1890. Serial No. 369,444. (No model.)

To all whom it may concern:

Be it known that I, MAGNUS SALLBERG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Wire-Stretchers, of which the following is a clear, full, and exact specification.

My invention relates to wire-stretchers, and has for its object to provide a cheap, simple, and efficient wire-stretcher.

It is illustrated in the accompanying drawings, wherein—

Figure 1 is a view of the stretcher in operation. Fig. 2 is a detail showing the parts in one position; Fig. 3, a similar detail showing the parts in another position. Fig. 4 is a detail view of the wire-grip and its connections. Fig. 5 is a detail of the lever and handle.

Like parts are indicated by the same letter in all the figures.

A is a post; B, a wire to be stretched and made fast thereto.

C is a rod on one end of which is swiveled the bar D, having the ratchet-surface E and carrying the clamp F, adapted to engage such ratchet-surface and thus grip the wire B. The rod C passes through an eye in the upturned end G of the ratchet-bar H, which is provided with ratchet-teeth or notches on each side. The bar C at its other end is pivoted on the bolt J and the double lever K, between the two sides of which are pivoted the dogs L M, substantially as shown. Between the side pieces of the lever K are also pivoted the wedge-blocks N O and the outer wooden handle P.

D′ is a gripping device provided with a sort of clevis R, which is secured by a bolt S on the end of the bar H, and on which is secured the chain T.

The size, proportions, and arrangement of the parts might be considerably altered without departing from the spirit of my invention.

The use and operation of my invention are as follows: If the wire is to be made fast to the post A, it will be gripped at some point by the gripping device shown, and the lever K, with the rod C, will be moved to the end G of the bar H. The parts will then be in the position indicated in Fig. 2, with the lower dog, for example, in its proper notch and the other parts substantially as shown. If now the handle be moved forward to the position shown in Fig. 3, until such handle or lever K is in a vertical line, the wedge-block N will assume the position indicated and the dog L will travel over and above its opposed notches. It will also be observed that the rear end of the block N is thus brought inside of the next notch in the rear, and if the motion be continued it is manifest that the rear end of the wedge-block will ride up the rear portion of such notch and the pivot of the wedge-block will approach the upper margin of the plate H. Thus the parts will pass into the position indicated in Fig. 1, and will move the dog L on its pivot, so as to force its end down into engagement with the next notch. By swinging the lever-handle K toward the left this operation is repeated with dog M and block O, and in this manner the parts travel toward the left and thus stretch the wire. If the wire is not sufficiently stretched by one operation, it may be caught in the catch or clamp D′ and the handle K moved toward the right, and then the operation repeated until the wire has been sufficiently stretched. The wire may be then made fast to the post in a substantial manner.

If the loose ends of a broken wire are to be brought together, the two clamps or catches may be used simultaneously, the stretcher being opened out the full length, and the two wires may be brought together by operating the stretcher and then spliced.

If it is desired or necessary to take the apparatus to pieces, it may be done by removing the securing-bolts J and S, whereupon the parts may be detached from one another. By bringing the wooden handle between the sides of the lever K they are sufficiently separated to leave a space for the dogs and lever-blocks, and the handle will be large enough to permit of convenient use.

I claim—

1. In a wire-stretcher, the combination of a lever with a ratchet-bar, dogs pivoted on

such lever on opposite sides of the ratchet-bar, and wedge-blocks pivoted to such lever, one between each dog and the ratchet-bar.

2. In a wire-stretcher, the combination of a lever with a ratchet-bar, dogs pivoted on such lever on opposite sides of the ratchet-bar, and wedge-blocks pivoted to such lever, one between each dog and the ratchet-bar, said blocks curved at their rear ends so as to tend to force the dogs into their respective notches at the end of each movement of the lever.

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