

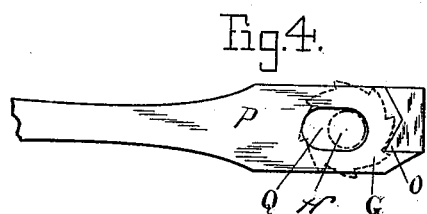
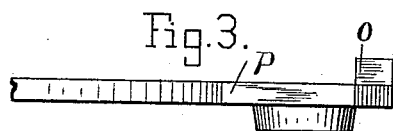
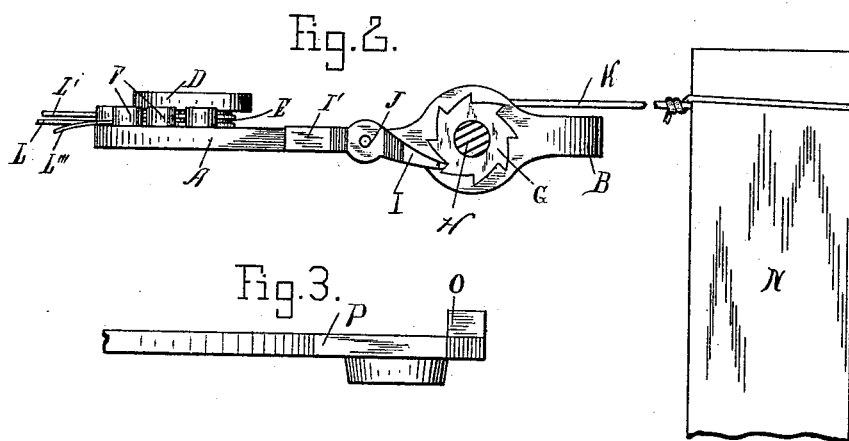
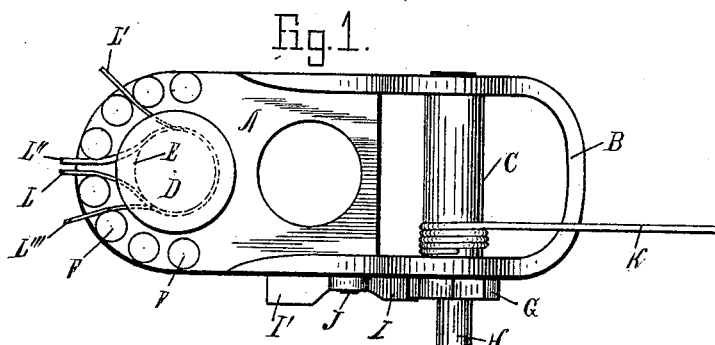
(No Model.)

M. F. CONNETT, Jr.

COMBINED WIRE STRETCHER AND TENSION.

No. 381,462.

Patented Apr. 17, 1888.



Witnesses.
C. W. Graham.
Geo. H. Patterson.

Inventor.
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UNITED STATES PATENT OFFICE.

MATTHEW F. CONNETT, JR., OF PEORIA, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE STAR FENCE MACHINE COMPANY, OF SAME PLACE.

COMBINED WIRE STRETCHER AND TENSION.

SPECIFICATION forming part of Letters Patent No. 381,462, dated April 17, 1888.

Application filed September 1, 1887. Serial No. 248,516. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW F. CONNETT, Jr., a resident of Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Combined Wire-Stretchers and Wire-Tensions; 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 pertains to make and use the same.

The drawings accompanying and forming a part of this specification fully illustrate the invention.

Figure 1 shows my device seen from above. Fig. 2 is a view looking in the direction of the arrow of Fig. 1. Figs. 3 and 4 are side and edge views of a lever by which the device is actuated.

The device consists of a peculiar rotary mechanism for stretching wire and a device for holding the wire to be stretched with any desired degree of force, and at the same time permitting it to slip when this force is exceeded.

In the drawings, A is a metallic plate, provided with an integrally-formed stud, E, and a series of smaller studs, F, disposed in the arc of a circle about the axis of the stud E.

At the opposite end of the plate is a drum, C, revolvably mounted in suitable projections upon the plate and serving to wind a wire or cord, K, by which the device is attached to a post, N. Motion is imparted to the drum by means of a lever, P, which passes over the end H of the drum's axis and engages a ratchet, G, fixed thereon. Reverse rotation of the drum is prevented by a gravity-pawl, I, which at all times, when the device is in working position, is in engagement with the ratchet-teeth.

The manner of engagement of the ratchet by the lever is shown in Fig. 4, wherein the ratchet's position is indicated in dotted lines. The lever is provided with a central oblong slot, Q, adapting it to pass over the axis H, and when the axis is at one end of the slot a tooth, O, upon the lever engages the ratchet and imparts motion thereto when the lever is carried in the proper direction. By sliding

the lever so that the axis H is in the opposite end of the slot Q the tooth O is thrown out of engagement with the ratchet, and the lever may be rotated about the axis H to its original position. The lever, when not in use, may be removed entirely from the axis end H, and may evidently serve for use with any number of stretchers, and always at that part of its path of revolution where power can best be applied—that is, where the lever is nearly at right angles to the wire K.

In forming fence by inserting pickets one at a time between two adjacent fence-wires and twisting the wires together between the pickets the wires are continually drawn lengthwise by an amount dependent upon their deflection from a straight line in passing around the pickets and in intertwisting.

To compensate for any shortening that may thus occur while keeping a practically uniform tension upon the wires is the object of the several studs upon the plate A. The fence-wires L L' are passed between the middle studs, F, carried thence about the stud E, and have their free ends L' L'' placed, respectively, between any two studs F. Now, the wires can evidently slip or pay out to any extent, provided the tension upon them is sufficient to bend them about the stud E, to again straighten them, and to overcome their friction against the stud E and the studs F, and the amount of tensile force requisite depends upon the amount of winding about the stud E—that is, upon the point at which the free ends pass between the studs F, which may be between the first and second, the second and third, and so on. The ends may even be changed in position, varying the tension required, at any time without interfering at all with the operation of weaving in the pickets. To guard against accidental slipping of the wires from the stud E, the latter is provided with a head, D, whose margin is about a wire's diameter within the inner margin of the studs F.

Having fully described the construction and operation of my devices, what I claim as new, and desire to secure by Letters Patent, is—

1. As a wire-tension, the plate A, provided with the stud E, rigidly fixed thereto, and with

studs F, arranged about the stud E at suitable distances therefrom and from each other, whereby the fence-wires passed around the stud E may be held in contact with any desired number of degrees of its circumference and at the same time be permitted to slip longitudinally when drawn with sufficient force.

2. In apparatus of the class described, a plate provided with an integrally-formed stud flanged at its free end, and with means adapted to prevent the unwinding and to allow the longitudinal slipping of wires wound about said stud, substantially as and for the purpose set forth.

3. As a combined wire-stretcher and wire-

tension, the combination of the plate or frame A, stud E, rigidly fixed thereto, studs F, arranged about a stud, E, at a suitable distance from it and from each other, the drum C, mounted in said frame, cord K, ratchet-wheel G, pawl I, and lever P, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

MATTHEW F. CONNETT, JR.

Witnesses:

C. C. LOGAN,
WM. J. HILL.