

(No Model.)

U. A. GREGG.
WIRE FASTENER AND STRETCHER.

No. 541,273.

Patented June 18, 1895.

Fig. 1.

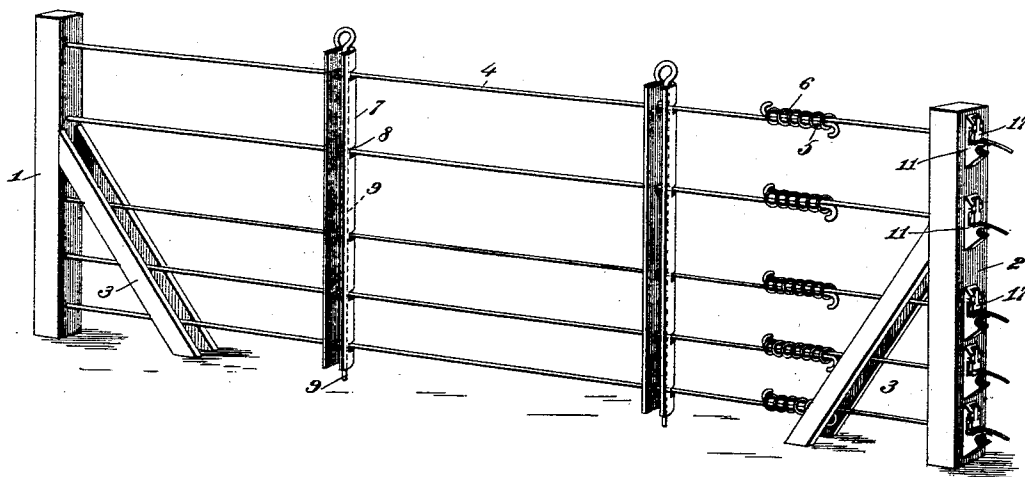


Fig. 2.

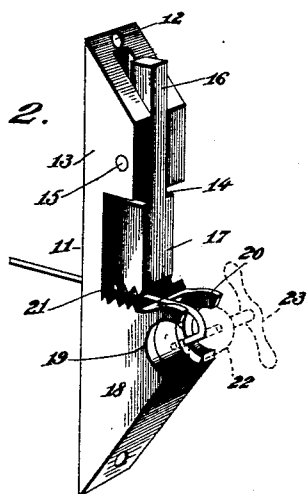
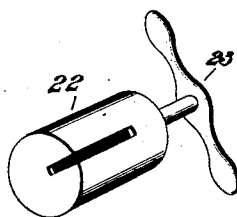


Fig. 3.



Attest.
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WIRE FASTENER AND STRETCHER.

SPECIFICATION forming part of Letters Patent No. 541,273, dated June 18, 1895.

Application filed February 13, 1895. Serial No. 538,185. (No model.)

To all whom it may concern:

Be it known that I, UNION A. GREGG, a citizen of the United States, residing at Tuscola, in the county of Douglas and State of Illinois, have invented certain new and useful Improvements in Fences; 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.

My invention relates to improvements in wire-fences; the objects being to produce a cheap and simple fence, whose construction is such as will permit of it being readily taken down and set up; whose wires will yield or contract as they are influenced by the heat or cold, each of said wires operating independently of the remaining wires; to produce a simply constructed and readily applied stay for holding the wires at proper distances apart, and, finally, to produce a simple means for placing and retaining the wires under proper tension.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of a fence embodying my invention. Fig. 2 is a detail in perspective of one of the wire-retainers. Fig. 3 is a similar view of the removable winding device.

Like numerals of reference indicate like parts in all the figures of the drawings.

The numerals 1 and 2 indicate two ordinary posts, the same having their lower ends let into the ground, or supported thereupon, in the usual manner, and preferably suitably braced, as indicated at 3.

The posts 1 and 2 are perforated transversely, in the usual manner, and through said perforations are passed the fence-wires 4, the distance between the wires being gradually diminished toward the bottom of the fence, as is usual, for the purpose of preventing the passage therethrough of small animals.

Each of the wires 4 is formed in two sections, the adjacent ends of said sections overlapping each other and bent to form hooks 5, and encircling said overlapped ends of each wire and located between the hooks 5 thereof, is a coiled-spring 6, that has an expansive

tendency, and which therefore retains the said wire under a yielding strain. By this means it will be seen that each wire is free to expand and contract as it is influenced by the heat or cold, and yet the wires are always maintained apparently taut.

Arranged at intervals between the posts 1 and 2 and upon the wires 4, are the metallic stays 7, the same being cast or formed of sheet-metal blanks of suitable form and proportions and bent longitudinally into V-form or angular. The angles of these stays are provided with notches or openings 8, which agree in number and location with the number and location of the wires 4, and hence when mounted in position, as shown, receive said wires and serve to stay or space them apart. For the purpose of securing the wires 4 in position within the notches or openings in the stays, key-rods 9, are employed, one of the same being passed down within the angle of each stay and between the said angle and the wires 4, whereby the notches or openings become closed and escape of the wires 9 is impossible. These key-wires or rods are preferably provided at their upper ends with eyes, 10, thereby forming a loop which may be readily grasped for the purpose of withdrawing said rods when it is desired to remove the wires 4 from the stays.

The outer face of the post 2 is provided at intervals with wire retaining or securing-devices 11, the same being preferably formed of cast metal, and they agree in number and location with the number and location of the wires, so that as will be apparent, there is a retaining or securing-device for each of said wires 4.

The securing-device 11 is of oblong shape, and has its opposite ends chamfered or reduced and provided with holes 12, for the passage therethrough of a pair of screws, which pass into the face of the post and form the means of securing the device thereto.

Near its upper end the device is provided with a pair of outwardly projecting parallel lugs or ears 13, between which a space is produced for the accommodation of a locking-pawl or dog 14, which is loosely pivoted in position between the lugs or ears by means of a transverse pin 15, that passes through the pawl or dog and said lugs or ears. The pawl or

dog at its upper end, which is slightly above the lugs or ears forms a tail 16, and that portion of the pawl or dog that is below the lugs or ears is wider, forming a head 17, whose under face is serrated or toothed. Below this point the device is provided with a projection 18, whose front is provided with a half-round bearing recess 19 the wall of which is recessed to form a passage 20, which aligns with a perforation 21, formed in the back of the device. The upper side of the projection 18 is toothed, and designed to bind there-against as it approaches the vertical is the pawl or dog 14.

The perforations 21 of the securing-devices align with the perforations in the post to which the devices are secured, and the ends of the wires 4 pass through the two sets of perforations and under the serrated surfaces of the pawls or dogs 14, whereby said wires are held between the same and the toothed or serrated surfaces of the devices.

A cylindrical winding-drum or windlass 22, is removably and successively seated in the half-round bearing recesses 19 of the devices 11, and is employed to tighten the several wires 4.

The winding-drum or windlass is provided with a key-handle 23, at one end, by which it may be manipulated, or it may be squared to receive a wrench, if preferred. The windlass or drum itself is cylindrical, and its periphery for a portion of its length is provided with a slot 24, which radiates from the center and at one end of the same.

In operation, the wire 4 is first drawn by hand and caught by the pawl or dog, which latter will readily yield to any strain upon the wire but will resist any backward movement thereof, after which the winding-drum or windlass is placed in the bearing recess 19, and the end of the wire 4 inserted into the end of the slot 22 and moved up toward the end of the same, after which it is only necessary to rotate the drum or windlass and wind the surplus wire thereupon. The edge of the slot forms a bight and kink in the wire to prevent slipping during the straining of the wire. When the wire is under sufficient tension, the drum or windlass is removed and the backward movement of the wire causes the pawl or dog to instantly clamp the wire and secure

it in its stretched condition. This operation being repeated upon all the wires, it will be seen that the series of wires can be placed under the desired tension.

From the foregoing description in connection with the accompanying drawings it will be seen that I have produced a wire fence that is cheaply, simply, and substantially built; wherein the parts may be readily separated and the fence taken down and quickly set up without the use of hand-tools other than those usually found on any farm; that the several fence-wires can be independently adjusted to any degree, and that when so adjusted they are independently and yieldingly supported and free to expand or contract to the influences of heat and cold without destroying their tension.

Having described my invention, what I claim is—

1. The combination with the opposite posts and wires, of the series of independent fastening-devices, one for each wire, each of said devices consisting of a cast-metal-block 11, provided at its upper end with a pair of spaced apart perforated ears and below the same with a projection toothed upon its upper side and at its front provided with a bearing, a loosely pivoted pawl arranged between the ears and adapted to bind at its lower end upon the projection, and a removable windlass arranged in the bearing, substantially as specified.
2. The combination with the opposite posts and the connecting wires, of the independent securing-devices, each consisting of the plate 11, having the ears 13, the projection 18, having the half-round bearing 19, the passage 20 within the same, and the serrated portion in rear of the passage, and also the perforation 21, the pawl 14 pivotally mounted between the ears by the pin 15, and having at its upper end the tail 16, and at its lower end the serrated head 17, the removable windlass 22, having the side and end slot 24 and key 23, substantially as specified.

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

UNION A. GREGG.

Witnesses:

W. H. LAMB,
F. W. HAMMETT.