No. 668,043. Patented Feb. 12, 1901.

C. E. FRY.

WIRE STRETCHER.

(Application filed Mar. 22, 1900.)

(No Model.)

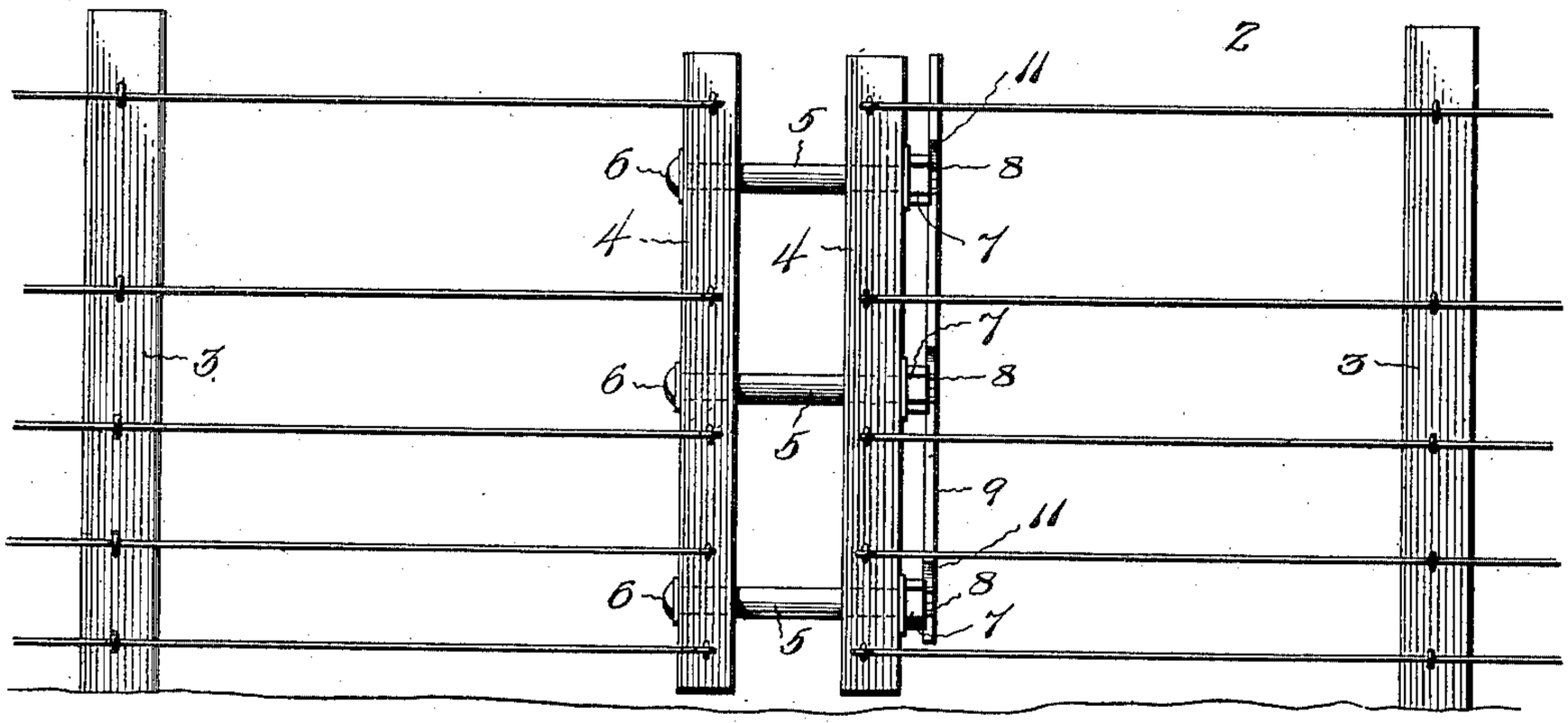


Fig. 1.

Fig. 3.

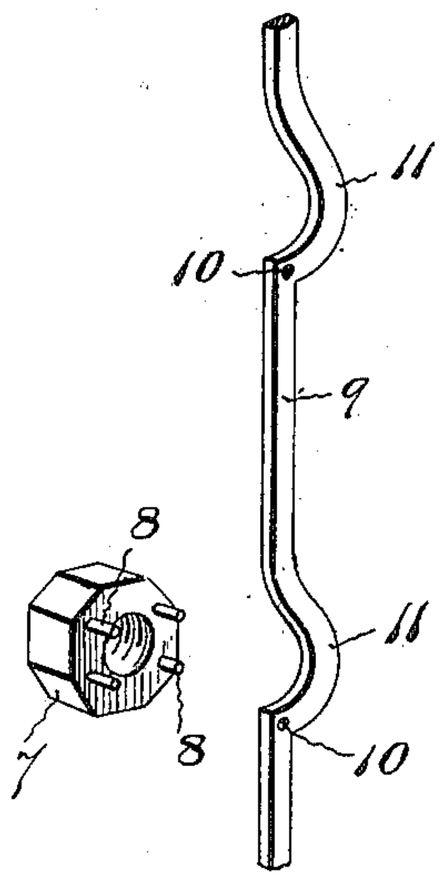
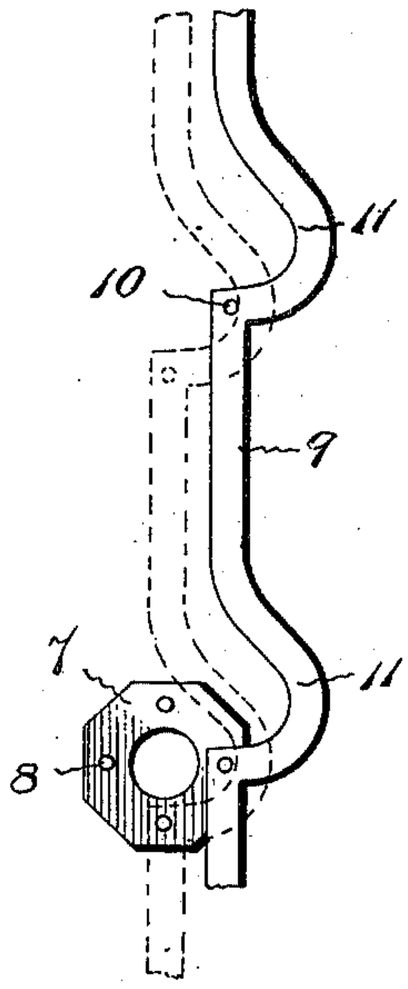


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES E. FRY, OF BLOOMFIELD, IOWA.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 668,043, dated February 12, 1901

Application filed March 22, 1900. Serial No. 9,716. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. FRY, a citizen of the United States, residing at Bloomfield, in the county of Davis and State of Iowa, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in wire fences, and more particularly relates to devices for tensioning the same.

The object of the invention is to provide in the construction of a wire fence simple and efficient means for taking up the slack therein, as may be necessary from time to time.

With this and other objects in view, which will appear as the nature of the improvements is better understood, the invention consists, substantially, in the novel construction, combination, and arrangement of parts, as will be hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the appended claim.

In the drawings, Figure 1 is a side elevation of a wire fence provided with the herein-described tensioning means. Fig. 2 is a perspective view of the nut of one of the tension-bolts and a form of wrench which may be employed for rotating the same. Fig. 3 is an elevation illustrating the wrench applied to the nut, the full lines designating the initial position of the wrench and the dotted lines the position assumed by the latter when the nut has been partially rotated.

Referring to the drawings, the numerals 1 and 2 designate a pair of wire-fence panels, which panels are supported by the usual posts 3, the line-wires of the panels 1 and 2 being suitably connected to said posts, and arranged at the contiguous ends of said panels are vertically-disposed parallel bars 4, the latter being free from the ground and not designed to engage therewith. Connecting the bars 4 and loosely fitting in openings formed therein is a series of tension-bolts 5, said bolts being each provided with a head 6, and said heads 6 engage and bear against one of the bars 4, so that the latter will readily yield to the pressure exerted upon said bolts during the tensioning operation. A nut 7 is also mounted upon each of the bolts 5 and adapted to engage and bear against the other bar 4, the bolts being threaded to engage with said nuts, and each of the latter is provided with a series of outwardly-extending pins or members 8, which pins are arranged in radial relation to the openings of the nuts.

The pins 8 of the nuts 7 are designed to facilitate rotation thereof, and for accomplishing this latter end a wrench or other suitable operating device 9 may be employed. The form of wrench 9 shown in the drawings comprises an elongated shank which is provided at suitable intervals with openings 10, and said openings are adapted to receive the pins 8. It will thus be seen that when the wrench 9 is placed in proximity to the nuts 7 and each of the openings 10 caused to receive one of the pins 8 said wrench is in position to simultaneously rotate all of the nuts 7, and hence a uniform and simultaneous tension is imparted to each of the line-wires; but to prevent the pins 8 not engaged by the wrench contacting with the edge of the latter said wrench is provided with a series of curved offsets 11, which offsets are arranged adjacent to the openings 10 and extend above the same. A portion of the pins not engaged will therefore enter said offsets, and thus when the wrench is moved to the position shown by dotted lines, as when the nuts are being rotated, the proper manipulation of the wrench will be unimpeded.

The manner of tensioning the fence is as follows: The wrench 9 is connected to the nuts 7, as above described, after which downward pressure is exerted upon said wrench, so that the same moves from the position shown by full lines in Fig. 3 to the position shown by dotted lines. A partial rotation of the nuts is thus effected, whereupon the wrench is removed and again placed in the position designated by the full lines, as above described, and by continuing such operation the nuts are gradually screwed upon the bolts 5, thereby drawing the bars 4 nearer together. This movement of said bars obviously tightens the line-wires, and the slack therein may thus be readily taken up from time to time.

From the foregoing it will be understood that the form of wrench shown in the drawings is simply disclosed for illustrative purposes to show an operative means or an operative device for accomplishing the syn-

chronous turning of the nuts. Any equivalent device may be employed, as the wrench shown in the drawings is not specifically claimed in this application.

I claim—

In a wire fence, the combination with two adjacent panels thereof, of tension devices connecting and arranged between contiguous ends of said panels in line therewith and comprising single bolts in vertical alinement passed through the end bars of the panels with heads at one end bearing against the adjacent bars, and nuts upon the other ends bearing against the opposite face of the bar of the other panel, said nuts having members which are adapted to be engaged by a common operating device whereby all of the nuts may be turned simultaneously, as and for the purpose specified.

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

CHARLES E. FRY.

Witnesses:
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S. G. W. STOKES.