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L. C. LEWISON.

WIRE FENCE GATE.

APPLICATION FILED JULY 29, 1902.

NO MODEL.

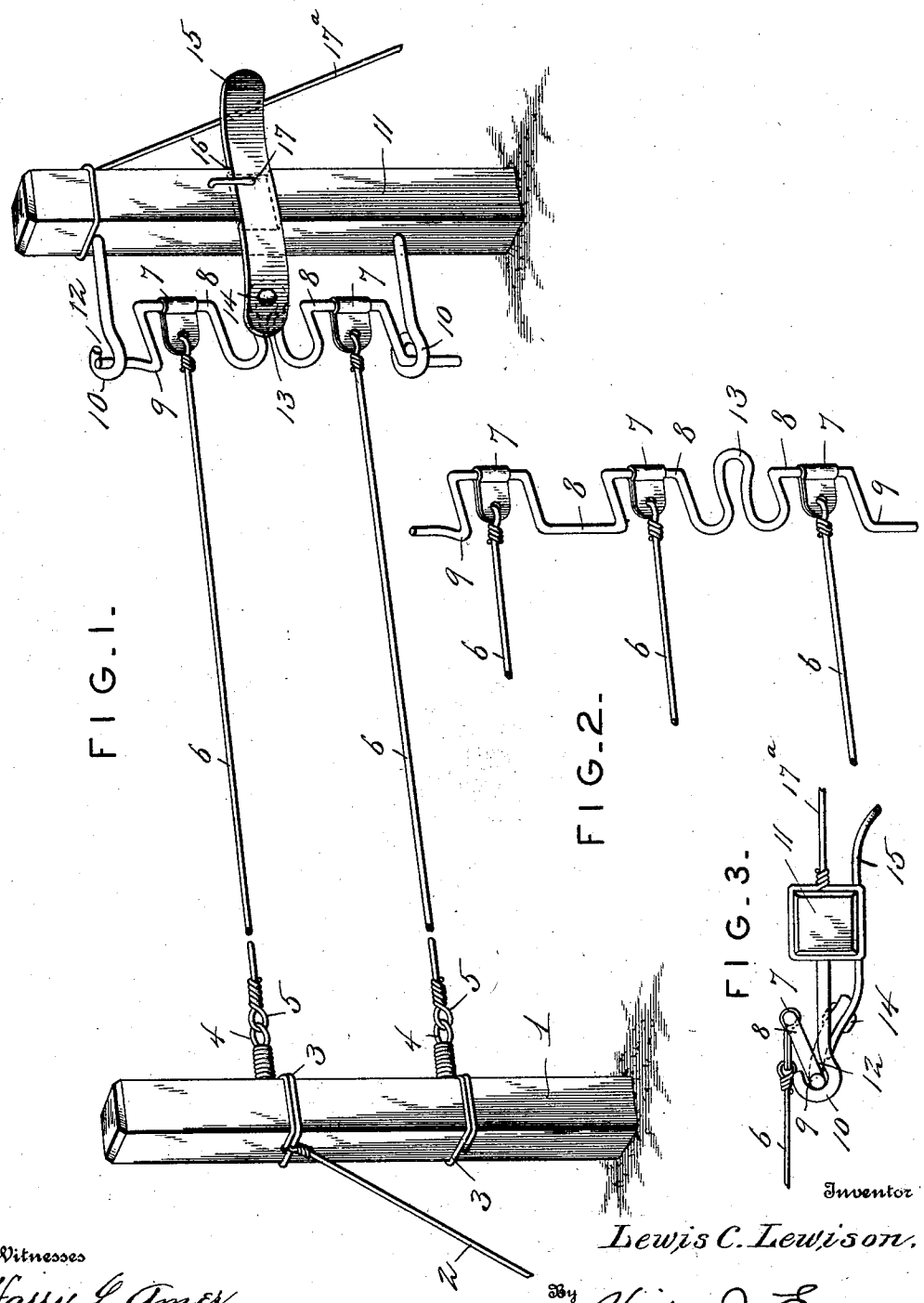


FIG. 1.

FIG. 2.

FIG. 3.

Witnesses

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WIRE FENCE-GATE.

SPECIFICATION forming part of Letters Patent No. 718,777, dated January 20, 1903.

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To all whom it may concern:

Be it known that I, LEWIS C. LEWISON, a citizen of the United States, residing at Adams, in the county of Mower and State of Minnesota, have invented certain new and useful Improvements in Wire Fence-Gates, of which the following is a specification.

My invention has relation to new and useful improvements in wire fence-gates; and the primary object of the invention is to provide a gate of the kind mentioned which will be simple in construction and efficient and durable in use and wherein will be embodied an improved fastening means for securing the free end of the gate to a post or other suitable standard.

A further object of the invention is to arrange and construct the fastening means so that when operated to close the gate it will serve to stretch the strands, and thus place them under tension, which tension will assist the fastening means in its operation and hold the same in its closed position.

I have fully and clearly illustrated my invention in the accompanying drawings, wherein—

Figure 1 is a perspective view of a gate constructed in accordance with my invention, and Fig. 2 is a detail view of a slightly-modified form of fastening means. Fig. 3 is a top plan view of the locking means, showing the angular relations of the parts thereof.

Referring to the drawings, 1 designates a fence-post of any preferred design and of such height and dimensions as may be required by the purposes for which it is employed. This post has a suitable brace 2, by which it is prevented from becoming dislodged from its foundation by any excessive pull upon the fence-strands comprising the gate-panels. Secured about the post 1 and at proper intervals thereon are a plurality of collars 3, corresponding in number to the number of strands composing the gate and which may be of any form which will effectually withstand the strain and wear imposed upon them. Formed integrally with the collars 3 or suitably secured thereto are eyes or rings 4. Within these eyes 4 are held similar eyes 5, which are carried by the ends of the fence-strands 6, comprising the gate-panel, thus forming a flexible connection between the strands and the post 1. The flexible connection just described serves to permit a free movement of the gate from side to side without unduly bending the strands, and thereby impairing their durability, or in case I prefer to substitute rigid bars for the strands the said connections will serve as hinges when the gate is opened and closed. The opposite ends of the strands 6 from those secured to the post 1 are secured to clips 7, which clips are rotatably mounted upon vertically-alining cranks 8 8, formed upon a vertically-arranged crank-shaft 9, the upper and lower ends of which are journaled in suitable eyes or bearings 10, mounted on a post 11, which post is of any suitable design. The lower bearing-eye 10 is so formed as to prevent the lateral displacement of the lower end of the crank-shaft; but the upper eye is formed with a lateral opening 12, in order that the upper end of the crank-shaft may be removed from its bearing and the lower end of the shaft then be lifted out of the lower eye and the gate swung aside to permit an opening to be made in the fence. It will readily be seen that the side arm of the lower crank will rest upon the lower eye 10 and that in case of any vertical longitudinal movement of the crank-shaft the upper arm of the crank nearest the upper end of the crank-shaft will strike against the upper bearing-eye and the endwise displacement of the said crank-shaft be prevented.

Projecting from the crank-shaft 9 is a laterally-disposed arm 13, which lies in a vertical plane which is at an angle to that of the crank 8 and has secured thereto by a rivet 14 or any other suitable fastening means a lever 15, which lever forms an extension of the arm 13 and lies substantially in the same plane therewith and serves as an operating-lever to rotate the crank-shaft to lock or release the gate and as a latch-bar when the gate is in its closed position.

Within one side of the post 11 is formed a transverse seat or recess 16, which is arranged and adapted to receive the free end of the lever 15 when the gate is held closed and whereby the said lever is prevented from displacement longitudinally of the post. The post 11 is also provided at a point adjacent the seat 16 with a pivoted latch 17, which is

adapted to be rotated to engage the lever 15 and hold it within the seat 16 and form an additional means for preventing the dislodgment of the said lever. The post 11 is also provided with a suitable brace 17^a, by which it is held against dislodgment and held rigidly in position.

In Fig. 1 of the drawings I have illustrated a crank-shaft having two cranks, to each of which is secured a single fence-strand; but it is obvious that I may secure more than one strand to each of said cranks or that I may provide the said crank-shaft with any number of cranks, as shown in Fig. 2, whereby the fastening means may be employed in connection with a gate having any number of strands.

The operation of my invention is as follows: When it is desired to close the gate, the upper and lower ends of the crank-shaft are placed in their bearings in the bearing-eyes, and the operating-lever is grasped by the operator and swung toward the post 11. In view of the fact that the said operating-lever is arranged at an angle to the plane of the cranks it will be seen that the plane of the cranks will reach the longitudinal center of the fence before the said operating-lever assumes its locked position on the post 10 and that when the movement of the lever is continued long enough to carry the plane of the cranks beyond the longitudinal center of the fence the tension of the wire strands caused by their being stretched will exert a pull on the cranks, which will continue the rotation of the crank-shaft, and thereby assist to throw the lever into its locked position on the post. The tension of the wires, as above mentioned, so materially assists in the movement of the locking means that the hold of the operator may be released and the operation of the device will continue without further effort on his part, and once having reached its locked position the lever will be held in position by the wires. In order to provide an additional means of securing the lever, the latch 17 may then be turned over the lever, substantially as shown in Fig. 1. When it is desired to open the gate, the latch is removed from engagement with the lever, which lever is swung away from the post by the operator until, as above described, the cranks pass the longitudinal center of the fence, when the pull of the wires will continue the rotation of the crank-shaft. The said shaft may be then lifted from its bearing and carried to one side in order that the desired opening may be made in the fence.

Having thus fully described the invention, what is claimed as new is—

1. A wire fence-gate, comprising strands, a shaft formed with a plurality of cranks to which the strands are connected, and an operating-lever arranged at an angle to the cranks, and adapted to be swung in one direction into engagement with a standard and held there against return in the opposite direction by the tension of the strands comprising the gate.

2. A wire fence-gate comprising strands, a shaft formed with a plurality of cranks to which the strands are connected, an operating-lever arranged at an angle to the cranks and adapted to be swung into engagement with a standard and held there by the tension of the strands, and a latch to engage the operating-lever.

3. The combination with a wire fence-gate comprising strands and a standard having bearings and a recess, of a crank-shaft detachably journaled in the said bearings, and operatively connected to the strands of the gate, an operating-lever connected to the crank-shaft and arranged at an angle to the cranks, and adapted to be swung into engagement with the standard and be seated in the recess therein, and means to hold the lever in position in the recess.

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

LEWIS C. LEWISON.

Witnesses:
R. M. LARSON,
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