J. F. GLIDDEN.

Wire-Fences.

No. 157,124. Patented Nov. 24, 1874.

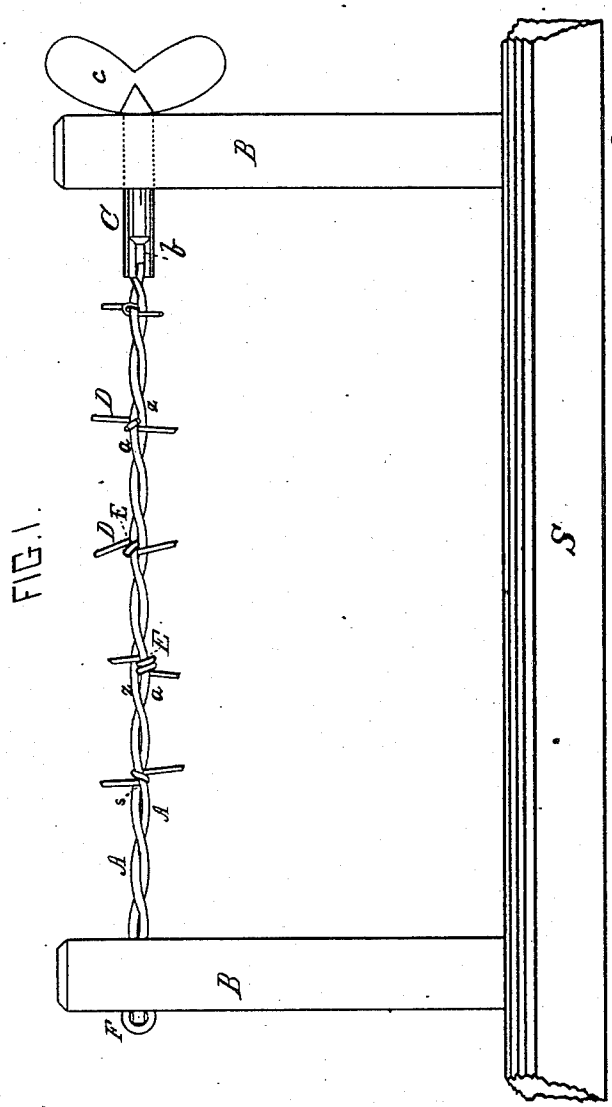

FIG. I.

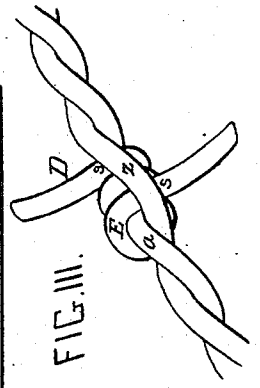

FIG. III.

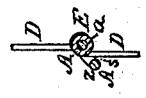

FIG. II.

Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH F. GLIDDEN, OF DE KALB, ILLINOIS.

IMPROVEMENT IN WIRE-FENCES.

Specification forming part of Letters Patent No. **157,124**, dated November 24, 1874; application filed October 27, 1873.

To all whom it may concern:

Be it known that I, JOSEPH F. GLIDDEN, of De Kalb, in the county of De Kalb and State of Illinois, have invented a new and valuable Improvement in Wire-Fences; and that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a side view of a section of fence exhibiting my invention. Fig. 2 is a sectional view, and Fig. 3 is a perspective view, of the same.

This invention has relation to means for preventing cattle from breaking through wire-fences; and it consists in combining, with the twisted fence-wires, a short transverse wire, coiled or bent at its central portion about one of the wire strands of the twist, with its free ends projecting in opposite directions, the other wire strand serving to bind the spur-wire firmly to its place, and in position, with its spur ends perpendicular to the direction of the fence-wire, lateral movement, as well as vibration, being prevented. It also consists in the construction and novel arrangement, in connection with such a twisted fence-wire, and its spur-wires, connected and arranged as above described, of a twisting-key or head-piece passing through the fence-post, carrying the ends of the fence-wires, and serving, when the spurs become loose, to tighten the twist of the wires, and thus render them rigid and firm in position.

In the accompanying drawings, the letter B designates the fence-posts, the twisted fence-wire connecting the same being indicated by the letter A. C represents the twisting-key, the shank of which passes through the fence-post, and is provided at its end with an eye, *b*, to which the fence-wire is attached. The outer end of said key is provided with a transverse thumb-piece, *c*, which serves for its manipulation, and at the same time, abutting against the post, forms a shoulder or stop, which prevents the contraction of the wire from drawing the key through its perforation in said post.

The fence-wire is composed at least of two strands, *a* and *z*, which are designed to be twisted together after the spur-wires have been arranged in place.

The letter D indicates the spur-wires. Each of these is formed of a short piece of wire, which is bent at its middle portion, as at E, around one only of the wire strands, this strand being designated by the letter *a*. In forming this middle bend or coil several turns are taken in the wire, so that it will extend along the strand-wire for a distance several times the breadth of its diameter, and thereby form a solid and substantial bearing-head for the spurs, which will effectually prevent them from vibrating laterally or being pushed down by cattle against the fence-wire. Although these spur-wires may be turned at once around the wire strand, it is preferred to form the central bend first, and to then slip them on the wire strand, arranging them at suitable distances apart. The spurs having thus been arranged on one of the wire strands are fixed in position and place by approaching the other wire strands *z* on the side of the bend from which the spurs extend, and then twisting the two strands *a z* together by means of the wire key above mentioned or otherwise. This operation locks each spur wire at its allotted place, and prevents it from moving therefrom in either direction. It clamps the bend of the spur-wire upon the wire *a*, thereby holding it against rotary vibration. Finally, the spur ends extending out between the strands on each side, and where the wires are more closely approximated in the twist, form shoulders or stops, *s*, which effectually prevent such rotation in either direction.

Should the spurs, from the untwisting of the strands, become loose and easily movable on their bearings, a few turns of the twisting-key will make them firm, besides straightening up the fence-wire.

What I claim as my invention, and desire to secure by Letters Patent, is—

A twisted fence-wire having the transverse spur-wire D bent at its middle portion about one of the wire strands *a* of said fence-wire, and clamped in position and place by the other wire strand *z*, twisted upon its fellow, substantially as specified.

JOSEPH F. GLIDDEN.

Witnesses:

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