

(No Model.)

D. R. LITTLEFIELD.
WIRE FENCE LOCK.

No. 579,238.

Patented Mar. 23, 1897.

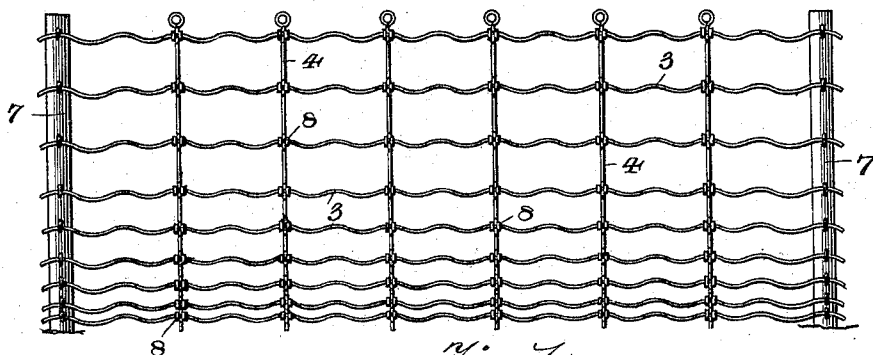


Fig. 1.

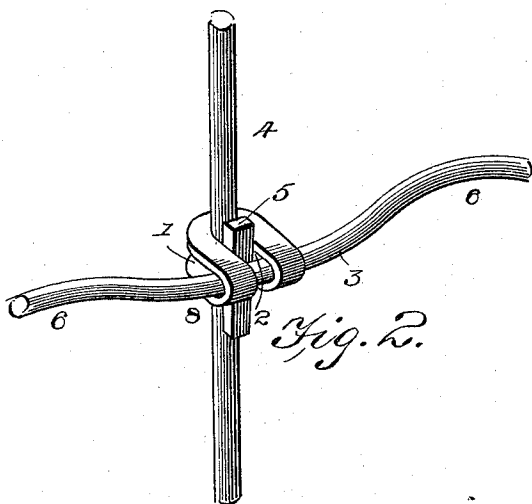


Fig. 2.

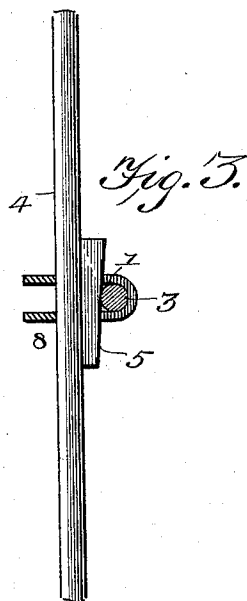


Fig. 3.

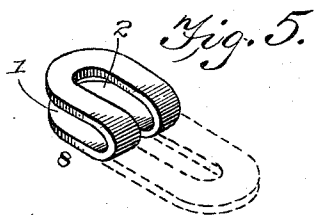


Fig. 4.

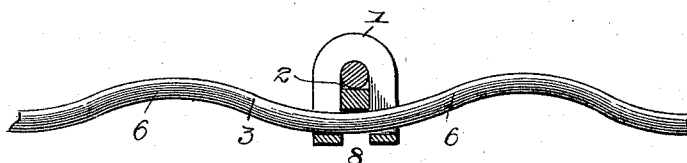


Fig. 5.

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Witnesses

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UNITED STATES PATENT OFFICE.

DANIEL R. LITTLEFIELD, OF WARSAW, INDIANA.

WIRE-FENCE LOCK.

SPECIFICATION forming part of Letters Patent No. 579,238, dated March 23, 1897.

Application filed August 29, 1895. Serial No. 560,911. (No model.)

To all whom it may concern:

Be it known that I, DANIEL R. LITTLEFIELD, a citizen of the United States, residing at Warsaw, in the county of Kosciusko and State of Indiana, have invented a new and useful Wire-Fence Lock, of which the following is a specification.

My invention relates to fences, and particularly to those embodying wire runners and intersecting stays; and the object in view is to provide a fastening device adapted for connecting stays to waved or crimped runners wherein the tension of the runners cannot be depended upon to secure the necessary frictional contact to prevent relative displacement of the several parts.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a view of a fence embodying my invention. Fig. 2 is a detail view in perspective of the fastening device or lock employed for securing the runners and stays at their points of intersection. Fig. 3 is a vertical sectional view of the same. Fig. 4 is a horizontal section of the fastening device or lock. Fig. 5 is a detail view in perspective of the looped member of the lock detached, the dotted lines showing the blank prior to the folding thereof to form the loop.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The waved or crimped runners 3 are secured to the posts or uprights 7 and are intersected at intervals by straight stays 4, secured in place at each intersection by means of fastening devices or locks 8.

The stays are preferably arranged in contact with the concave sides of alined curves in the runners, whereby the contiguous portions of each runner upon opposite sides of the stay project forward, as shown at 6 in Fig. 4, toward the vertical plane of the stay, and each fastening device or lock comprises a looped eye, consisting of a double loop, and a wedge by which the stay and runner are separated and firmly seated in the alined loops provided for their reception. The looped member or eye is provided with ver-

tically-alined loops to receive the stay and horizontally-alined loops to receive the runner, the interval 2 between the horizontally-alined loops communicating with and forming the mouth of the vertically-alined loops and the interval 1 between the vertically-alined loops communicating with and forming the mouth of the horizontally-alined loops, whereby after the runners have been arranged in operative position and have been secured to the posts or fixed uprights of the fence the eyes may be fitted over the runners and extended beyond the plane of the concave sides of the curves in said runners to receive the stays, which are adapted to be vertically introduced or threaded through the eyes. After thus arranging the stays in the vertically-alined loops of the eye a key or wedge 5 is introduced between the contiguous faces of the stay and runner to separate said parts of the fence and force them respectively into the vertically and horizontally alined loops of the eye. The key or wedge is thus arranged parallel with a straight member or stay and lies in a flat position against the same, and by being tapered toward its lower extremity it is not liable to be displaced by jarring the fence; and, furthermore, it will be observed that inasmuch as the key or wedge is inserted between the stay and the runner and between the horizontally-alined loops of the eye a yielding surface is provided by the runner, (or the portion between the points of support formed by the horizontally-alined loops,) whereby a still further guard against displacement of the key is secured. The front surface of the runner bears at a single point, in a horizontal plane, against the outer or front surface of the key, and thus forms an efficient clamp for securing the key against displacement.

A further advantage of the improved lock as used in connection with waved or crimped runners resides in the fact that the horizontally-alined and spaced loops provide a seat for such runner, which is adapted to hold the same without tending to straighten the engaged portion of the runner, and the effect of the wedge, which is arranged in contact with the concave side of the bend, is to force the convex side of the same into the interval between the seats formed by the horizontally-

alined loops, and thus still further secure the parts against relative displacement.

Furthermore, it will be observed that the extremities of the blank forming the looped eye, or those portions in which the vertically-alined loops are formed, are spaced apart an interval corresponding with the thickness of the runner, and hence obtain spaced bearings upon the rear side of the stay-wire, and the wedge, which is held from lateral displacement by the upper and lower sides of the loops, obtains a flat bearing at one side against the stay-wire and a single-point bearing at the opposite or front side against the runner perpendicular to which it is disposed. The result of this relative arrangement of parts resides in the fact that no twisting of the looped eye can be caused by tightening the wedge, for the reason that the wedge, which is of tapered or irregular construction, comes in contact only with the stay and runner between which it is interposed, whereas the vertically and horizontally alined loops of the eye are respectively in engagement with and are seated solely upon the perpendicularly-disposed stay and runner.

Having described my invention, what I claim is—

A fence having intersecting runners and stays, and a fastening device or lock arranged at each intersection of a runner with a stay, and comprising a looped eye having horizontally-alined loops engaging and seated upon the runner and spaced apart a distance equal to the stay, and vertically-alined loops engaging and seated solely upon the stay and spaced apart a distance equal to the thickness of the runner, to facilitate application to and detachment from the stay and runner, and a wedge arranged between the horizontally-alined loops and bearing at opposite sides respectively against the stay and runner whereby the wedge has a flat bearing at one side against the stay and a single-point bearing at the opposite side against the rounded surface of the runner, lateral displacement of the wedge being prevented by the parallel upper and lower sides of the vertically-alined loops, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DANIEL R. LITTLEFIELD.

Witnesses:

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