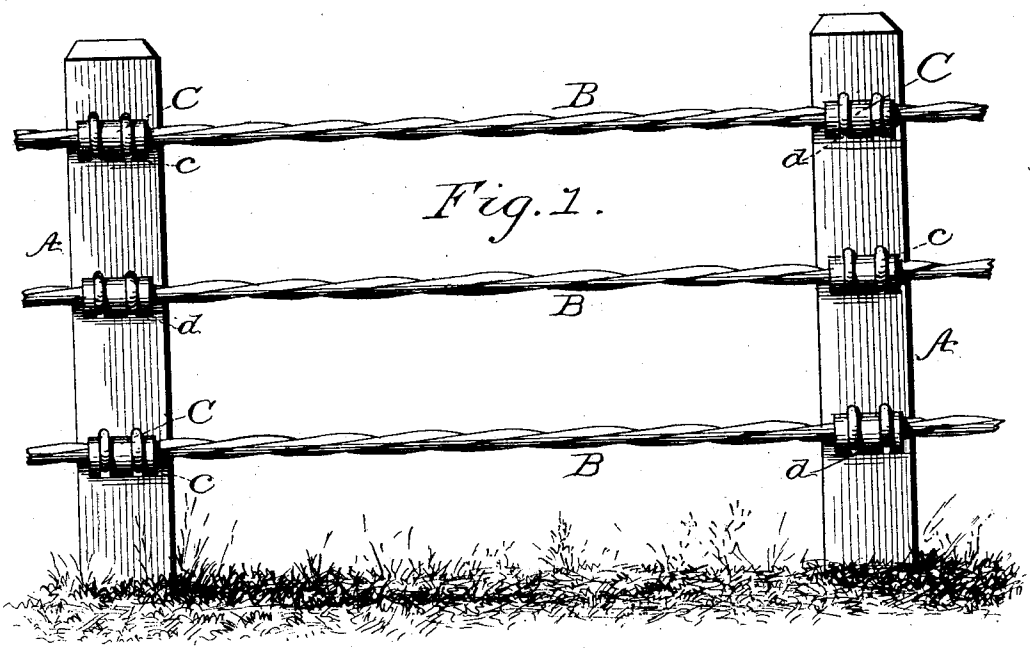
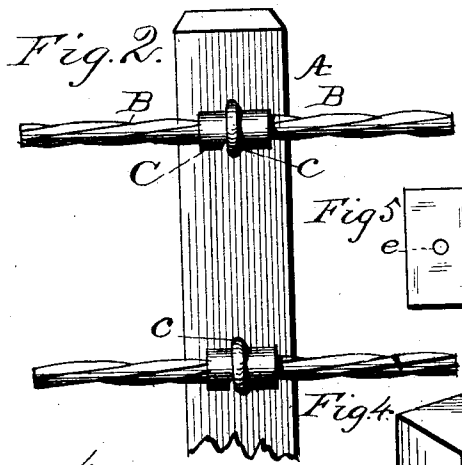
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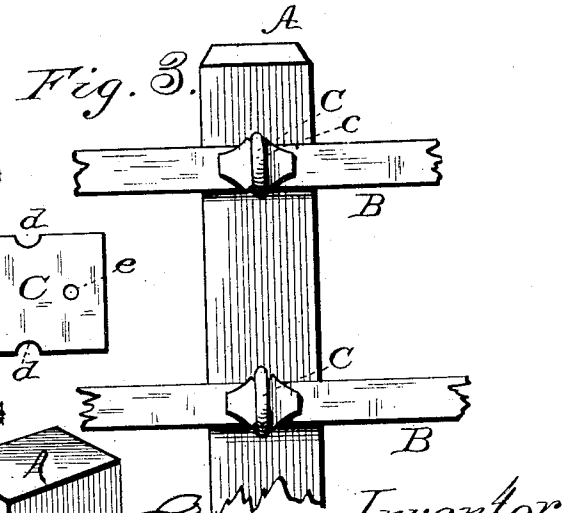
E. S. LENOX, F. H. DANIELS & J. D. CURTIS.

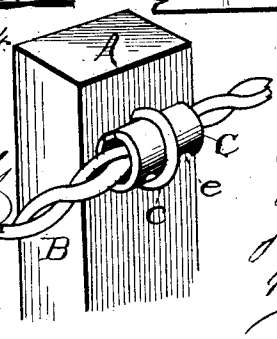
FENCE WIRE FASTENER.

No. 310,833. Patented Jan. 13, 1885.









Witnesses:

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UNITED STATES PATENT OFFICE.

EDWIN SEWALL LENOX, FRED HARRIS DANIELS, AND JOHN DRENNAN CURTIS, OF WORCESTER, MASSACHUSETTS.

FENCE-WIRE FASTENER.

SPECIFICATION forming part of Letters Patent No. 310,833, dated January 13, 1885.

Application filed September 19, 1883. (No model.)

To all whom it may concern:

Be it known that we, EDWIN S. LENOX, FRED H. DANIELS, and JOHN D. CURTIS, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Means for Fastening Fence-Wires to Posts; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to novel and improved means for fastening fence-wires to posts, having for its object to secure and protect the wire from oxidation, caused by escaping acid from the wood, shielding it at these points from action of the elements, and guarding or preventing the rupture of its particles when secured to the post; and to this end it consists in the combination of the wire and post with the improved fastening device herein shown, all of which will be more particularly described hereinafter, and pointed out in the claim, reference being had to the drawings hereunto annexed.

Figure 1 represents a front elevation of a section of fence wherein our improved fastening means are embodied. Figs. 2, 3, and 4 are similar views of posts, illustrating the different forms of the device as employed with the various forms of wire used for fencing. Fig. 5 is a plan view of the device itself before it has been bent to envelop the wire.

In the erection of wire fences of all kinds many and varied means have been employed for fastening the wire to the posts; and among the most simple is the common staple, which, as is well known, has to be driven in very tightly in order to keep the wire from sagging, and to hold it strongly and firmly enough to resist being torn off. In practice it has been found that with this mode of fastening the wires very often break, for reasons hereinafter explained, which gives rise to a great loss of time and labor consequent upon their repair, and especially in long lines of fencing this fault has been found extremely great.

Referring to the parts herein shown, it will be seen that this difficulty is obviated by our device, which is very simple and effective.

A represents a fence-post, and B the wires. C illustrates the fastening means proper, and *c* the staples by which they are held to the posts. This device consists of a single piece of metal stamped out or otherwise formed in the manner illustrated in Fig. 5.

The present method of securing fence-wire to the post by applying the staple directly to the wire very seriously injures the wire, if the staple is driven against it with any considerable force, by rupturing its particles, and in a very short while causing it to break and fall. In the use of galvanized wires the acid from the post eats into and finally weakens them, with the above result. Our invention prevents injury to the wire by the final blow on the staple, and by the attack of the acid of the post, and in great part shields the wire from the action of the elements substantially in the following manner: The piece of metal is bent, leaving its two ends sufficiently wide apart to enable it to be easily slipped over the wire. The staple is driven into the post over the metal shield, as illustrated, and it will be seen that a portion of the metal is between the bight of the staple and the wire.

d d are recesses made in the shield, for preventing endwise movement thereof when the staple is driven into the post, so as to be held within them, as shown. These recesses need not be made in the shield, as indentures can be formed therein by driving in the staple very tight, which will answer almost as well; but for the purpose of thorough effectiveness we prefer to form them as above explained.

e e are holes, which, when the device is placed on the wire with the space between the two ends uppermost, as shown in Fig. 4, allow the escape of any water which may enter therein, and thus preserve the wires from decay and rust.

In Fig. 3, where the flat wire is used, only a single piece of metal is shown; but it of course may be double.

It has been found by actual observation and experience that when the wire breaks, which is very often, it is almost invariably at some one of the points at which it is secured to the post. This, it is thought, is caused by acid—

such as tannic or ligneous acid—escaping from the wood and attacking the steel or other material of which the wire may be made, with the effect of separating or crumbling its particles, and thus causing the wire to deteriorate rapidly. To overcome these difficulties and supply an extremely practicable fastening means are the objects of our invention.

With this description of the invention its novelty and advantages will be readily apparent.

We are aware that in this class of inventions it is not new, broadly, to interpose a washer between the fence wire and post, and also aware that heretofore fastenings have been provided to envelop the wire; further, that a staple for securing the fastening has been heretofore employed; but we are not aware of the particular combination claimed herein.

What we claim, and desire to secure by Letters Patent, is—

In fastening devices for fence-wires, the combination, with the wire, of the metal guard C, formed with one or more recesses, *d*, and provided with openings *e*, and a staple for securing the same to a post, substantially as set forth and described.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

EDWIN SEWALL LENOX.
FRED HARRIS DANIELS.
JOHN DRENNAN CURTIS.

Witnesses:
HENRY C. RICE,
HENRY E. HILL.