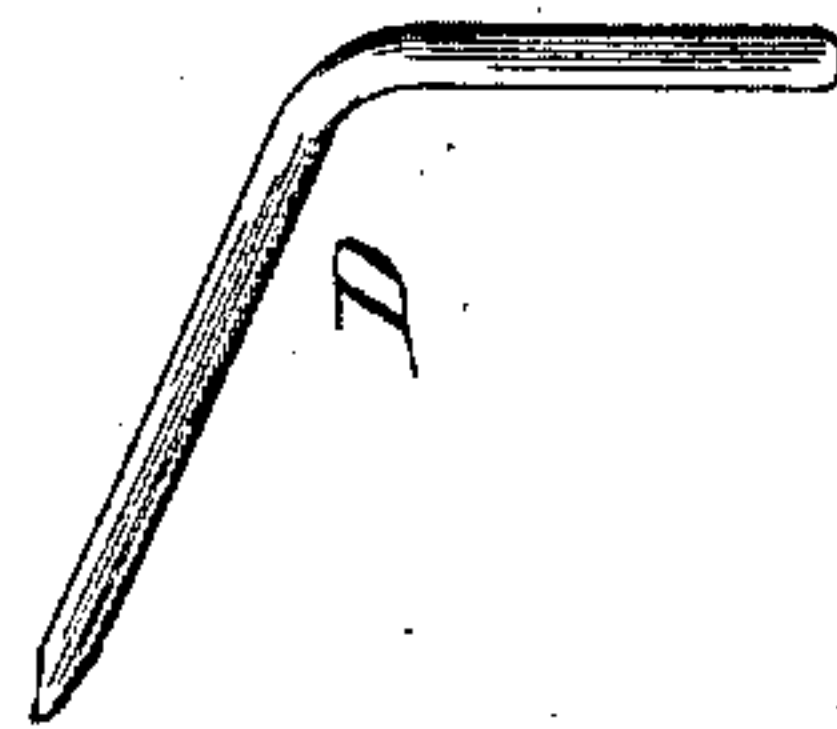
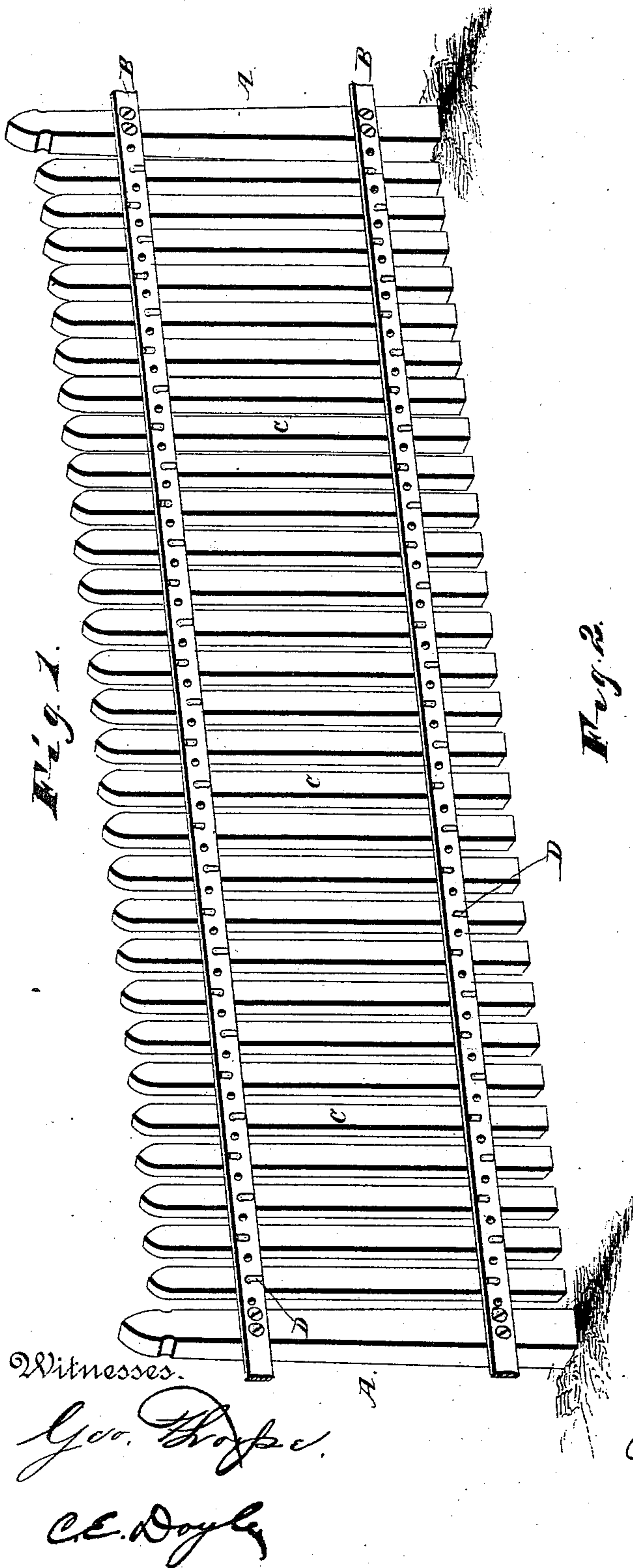


(No Model.)

J. F. LEMEN.
FENCE.

No. 379,279.

Patented Mar. 13, 1888.



Witnesses.

Geo. Thayer

C. E. Doyle

Inventor,
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UNITED STATES PATENT OFFICE.

JACOB F. LEMEN, OF BEDINGTON, WEST VIRGINIA.

FENCE.

SPECIFICATION forming part of Letters Patent No. 379,279, dated March 13, 1898.

Application filed September 15, 1887. Serial No. 249,781. (No model.)

To all whom it may concern:

Be it known that I, JACOB F. LEMEN, a citizen of the United States, residing at Bedington, in the county of Berkeley and State of West Virginia, have invented a new and useful Improvement in Fences, of which the following is a specification.

My invention relates to improvements in fences; and it consists in a certain novel construction and arrangement of parts, fully set forth hereinafter, and specifically pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a fence constructed according to my invention. Fig. 2 is a detail view of one of the pins.

In carrying out my invention I provide the posts A A, of the necessary size and number, and the flexible metallic straps B B. In these straps I form a plurality of transverse perforations arranged in a longitudinal series. These perforations are formed comparatively close together, so that any number or size of pickets may be secured to the straps, and also to overcome the necessity of having the pickets of uniform size. The pickets C may be of any size and material, and they are provided with pins D, which are driven partly into them before being applied in position, so as to be firmly secured.

The construction thus far described may be completed indoors and by a single person, and the fence is now ready to be set up. This is accomplished as follows: The posts A A are first set in the ground at the proper distance apart, and the straps B are then secured thereto. The pickets are then applied to the said straps by inserting the projecting portions of the pins D, secured to the pickets, through the perforations in the straps. After having passed the pins through the perforations in the straps the projecting ends of the pins are turned over and driven tightly against the strap to hold the latter close against the picket and thus render the fence firm.

It will be readily seen that should a picket be broken off a new one can be very readily and quickly put in its place. By providing the straps with perforations and driving the pins into the pickets before applying the same to the straps the construction of the fence is

rendered very simple and may be built by ignorant farm hands.

By constructing the fence as herein described the pickets may be of any shape and size desired. They may be composed of sawed timbers, boards, or planks, or they may be simply rough-hewn logs.

Staples, or even nails, may be used to secure the pickets in place on the straps; but the pins herein described are preferred, as they may be secured in the pickets before conveying the same to the place where the fence is to be built, and when there they may be immediately applied to the fence without further preparation, thus rendering the construction of the fence more rapid.

It will be seen by the drawings that the staples or pins, after being passed through the perforations in the straps, are turned over, the pins at the upper and lower ends of each picket being turned, respectively, in opposite directions; and, further, the pins in the upper ends and also in the lower ends of adjacent pickets are respectively turned in opposite directions, thus making the pressure and strain upon the straps equal at all points of their length. If nails or rivets are used to secure the pickets to the supporting-bands, the strain upon the said bands is confined to a very small area immediately around the aperture in the band. Further, if nails or rivets are used, it is difficult to replace a broken picket, for the reason that the rivets or nails are not easily removed from the said apertures. This is a serious objection to a fence which is to be used for farm purposes, and it is overcome in the fence herein described. The pins which I use in my fence are preferably of pliable metal—as wrought-iron—so that when a picket is broken the pins may be straightened and withdrawn from the supporting-band and used to attach the new picket. It will be seen that these pins are not analogous to the staples which are sometimes used to secure pickets in place, as the latter cannot be used in the manner which is herein described. They cannot be secured in the picket before the latter is applied to the supporting band or wire, as can the bent pins which I use.

Bent pins have been heretofore used to secure pickets to a supporting-wire; but even

this does not correspond with the construction and arrangement herein shown. In the case where wire is used as a support the pins are passed around it, as this is the only way in which they can be used; but I prefer to use bands, as described herein, and in this case the ends or heads of the pins which project through the apertures in the band are bent alternately upward and downward, the strain upon the band being thus distributed evenly over the entire surface thereof. I prefer to use a band arranged with its edges up and down, because it is possessed of more strength vertically than a wire, and therefore is less liable to sag at the centers of the panels and at the same time all the lateral swing that is necessary is allowed the pickets.

It will be seen from the foregoing description that the effect upon the fence by using the steel supporting-straps will be to give it flexibility. A heavy weight thrown against the fence built in this manner, or a gale of wind blowing against the same, will not affect it as it would a rigid fence. It will yield slightly before the pressure, but will return immediately to its former position when the pressure is removed.

Wire supports would serve to hang the pickets upon; but it will be readily seen that the latter could not be as securely fastened to wire, and, further, the latter has not the same vertical strength as the straps. The wire would be liable to bend and allow the pickets at the center of the panel to come closer to the ground than those at the ends and thus render the appearance of the fence unsymmetrical.

In practice, where thick and knotty lumber is employed for pickets, I propose to insert the pins only part way through the pickets. The principal feature of my invention resides in the employment of the flexible strips or bands of metal to which the pickets are hung, said strips or bands having a plurality of perforations to permit of any sized picket to be applied.

Having thus described my invention, I claim—

1. In a fence, the combination, with the posts, of the flexible metallic straps secured thereto and provided with a plurality of perforations and adapted to support the pickets, the plurality of perforations in the straps making provision for any size of pickets, as set forth.

2. In a fence, the combination of the posts, the straps secured thereto having a plurality of perforations, the pickets and the pins secured in the pickets and inserted through any one of the perforations in the straps, the plurality of perforations in the straps providing for any size of pickets, and the ends of the pins, after being inserted through the said perforations, being bent over laterally alternately in opposite directions, as set forth.

3. As an improvement in fences, the combination of the posts A A, the flexible metallic straps or bands B B, secured permanently to the posts and provided with longitudinal series of perforations, the pickets C, arranged all in the same plane and on the same side of the straps or bands as the posts, and the pins D, secured rigidly in the pickets and inserted through the perforations in the straps or bands, the free ends of the pins being bent over on the opposite sides of the straps or bands from the pickets, so that the ends of adjacent pins extend alternately in opposite directions, thereby equalizing the strain upon the straps or bands, substantially as and for the purpose specified.

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

JACOB F. LEMEN.

Witnesses:

J. BAKER KEARFOTT,
JNO. A. BOYER.