(No Model.)

H. D. MERRILL.

FLOOD FENCE.

No. 486,349. Patented Nov. 15, 1892.

Fig. 1

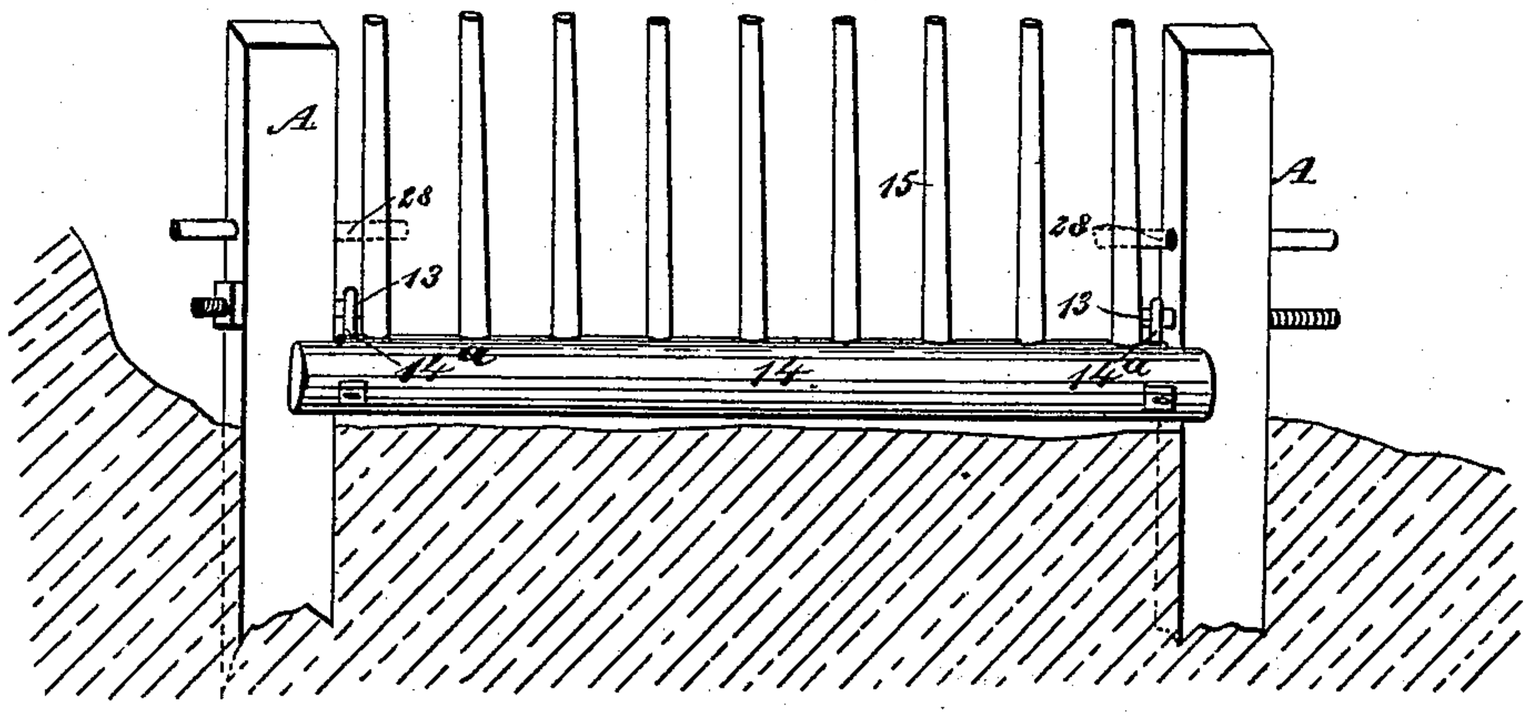


Fig. 2.

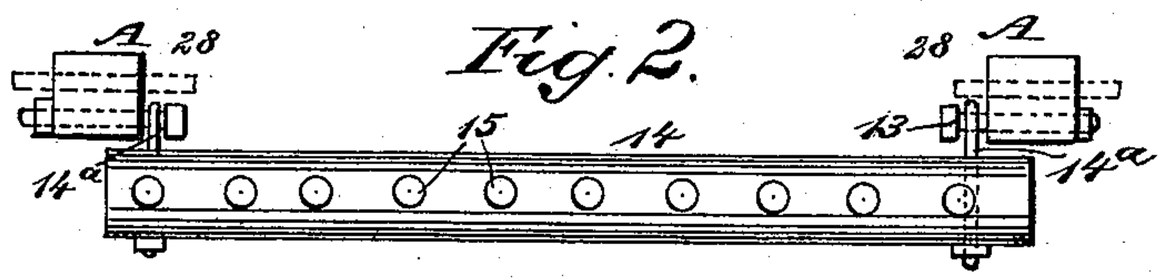


Fig. 3

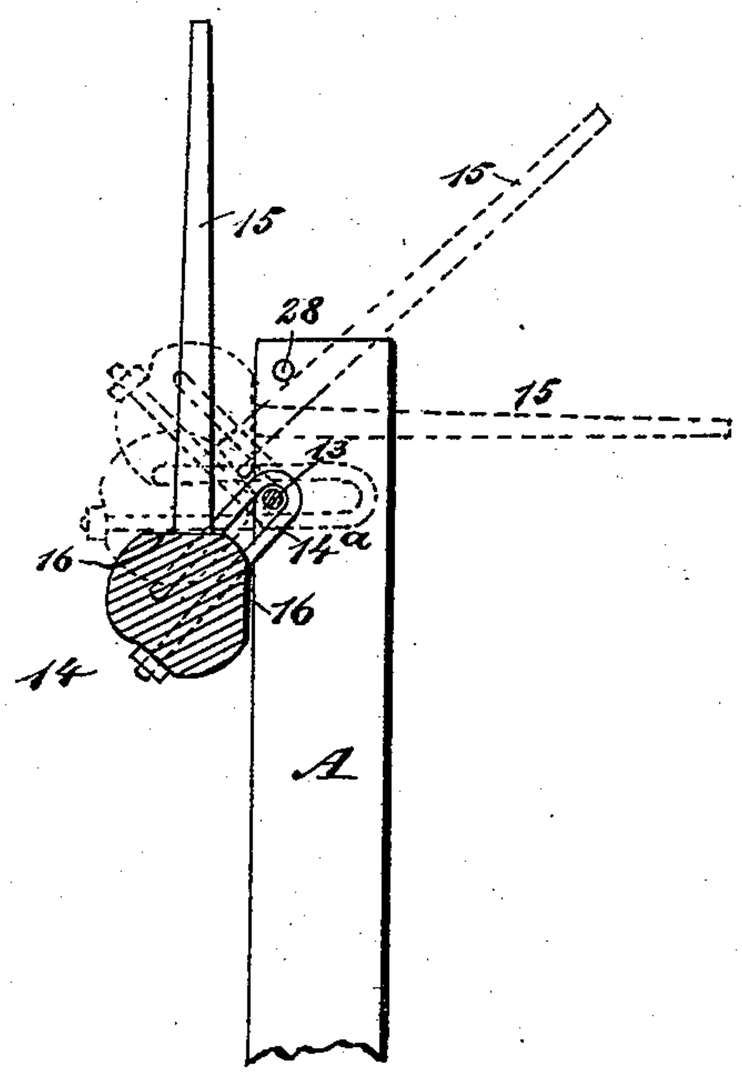


Fig. 4

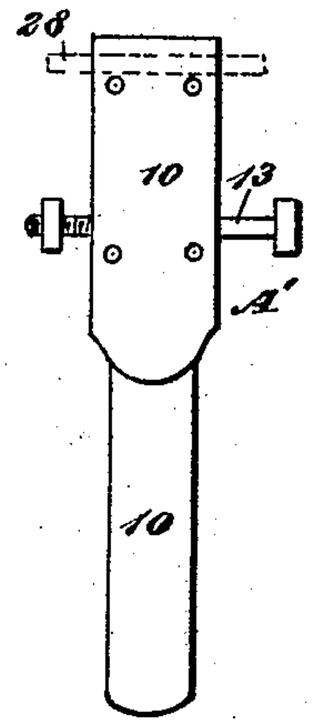
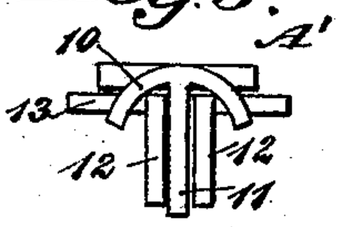


Fig. 5.



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HENRY DEARBORNE MERRILL, OF MIDDLEBURY, INDIANA.

FLOOD-FENCE.

SPECIFICATION forming part of Letters Patent No. 486,349, dated November 15, 1892.

Application filed January 15, 1892. Serial No. 418,172. (No model.)

To all whom it may concern:

Be it known that I, HENRY DEARBORNE MERRILL, of Middlebury, in the county of Elkhart and State of Indiana, have invented a new and useful Improvement in Flood-Fences, of which the following is a full, clear, and exact description.

My invention relates to an improvement in farm flood-fences adapted to cross streams and low places subject or liable to overflow in time of floods, which fence will bar the passage of all stock when the water is at its usual height or below its usual height, and wherein when the rise of water or an overflow takes place the fence will incline sufficiently to permit the drift carried by the water to pass over without damaging the fence, and wherein the fence will also rise automatically to its normal or vertical position as the water recedes.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of a section of a fence constructed in accordance with my invention. Fig. 2 is plan view thereof. Fig. 3 is a side elevation of one of the posts, the panel being in vertical section, the said figure being also adapted to illustrate the fence in three positions—one in positive and two in dotted lines—the first position being a vertical or normal one, the second a position to be occupied in the winter, the fence-panel being carried somewhat at an inclination, and the third position is a horizontal one which carries the fence parallel to the stream and permits objects to pass over unobstructed. Fig. 4 is a front elevation of one form of post adapted for use in connection with certain characters of ground, and Fig. 5 is a bottom plan view of the post shown in Fig. 4.

Referring to the drawings by letters and figures, A represents the posts, which may be of wood or other suitable material.

When streams having bed-rock bottoms are to be crossed by the fence, holes are drilled in the bed of the stream transversely thereof at points where it is proposed to plant the posts, and in this character of ground the form of posts shown in Figs. 4 and 5 is preferred, in which it will be observed that the post, which is designated as A′, is T-shaped in cross-section throughout the major portion of its length, the upper portion being perfectly T-shaped, while at the lower portion of the post the head member 10 of the T is curved to form a segment, and is best shown in Fig. 5, the shank member 11 remaining straight. The portions of the posts having the curved heads 10 are introduced into holes drilled to receive them, and the length of the curved portion of the cross-bars or head members of the posts is preferably equal to the depth of the holes in which the posts are placed, the posts being so located that their cross-bars or head members face the head of the stream. The posts being in position two preferably straight wedges or keys 12 are driven into the holes, one at each side of the shank members of the posts, and said keys are driven vertically downward to the bottom of the holes, their position being edgewise with the current and extending upward to any height desired to assist in the support of the posts, thus providing a solid foundation for that portion of the posts above the ground, as the wedges not only serve to steady the central or shank members of the posts, but also assist in crowding the curved cross-bars or head members to a firm contact with the walls of the hole.

When building a fence across streams having different formations, the wooden posts A (shown in Fig. 1) may be employed, in which event the posts are set permanently at either bank of the stream. Each post is provided with a pivot pin or stud 13, extending at a right angle from its inner face in the direction of the opposite post. These pivot pins or studs may be secured to the posts in any suitable or approved manner and are located parallel with the line of the fence; but their location may be varied as occasion may demand.

Each panel of the fence may be said to consist of a heavy log or beam 14, adapted to be suspended from the posts inside thereof—that is, in the direction of the head of the stream by means of two hinges 14ª, used in

connection with the pivot pins or studs 13. The hinges are secured directly to the log or beam, one at each end, at a point which is preferably at an angle of about forty-five degrees between the posts and the plane of a row of pickets 15. These hinges may consist of bolts having elongated eyes or slots, the bolts being secured to the log or beam and the eyes or slots being adapted to receive the pivot-pins 13, or the hinges may consist of staples, as shown in the drawings, passing through the log or beam and downwardly inclined in the direction of upstream at an angle of about forty-five degrees and secured with nuts or burrs; but any desired form of hinge may be employed which will maintain the fence-panel in the position above described with relation to the stream and to the posts. The pickets are secured to the log or beam at such distances apart as to bar the passage of stock, the log or beam and pickets constituting the body portion of a fence-panel. Wherever it is necessary the side faces of the log or beam at the top are beveled, as illustrated at 16 in Fig. 3, to afford the beam or log a solid bearing against the post when the panel is in either a horizontal or a vertical position.

It is preferable in winter that the normal position of the fence-panel should be that between a vertical and a horizontal position, and to accomplish this end stop-pins 28 are secured to the inner faces of the posts, as shown in Figs. 1 and 3, after the body of the panel has been pressed downward, and the stop-pins are so located that when the panel is released the weight of its beam or log 14 in carrying the end pickets to an engagement with the under faces of the stops will locate the panel in the required position. Thus the stop-pins prevent the fence from rising above a predetermined position; but it is free to move downward as far as may be required. The stop-pins, however, are preferably made removable, so that they need not be brought into action, save when required.

It is obvious that should a stream crossed by a fence constructed as above described become swollen the drift carried down by said stream and the force of the current will without injury to the fence press it down to an inclined, or, if necessary, a horizontal position, thereby permitting the free passage of any obstruction, and it is further evident that when the flood subsides the weighty log or beam 14 will automatically carry the fence to its normal position.

In the event that the stream is too wide for one fence-panel to span it two or more panels may be employed with equally-effective results, the added panels being constructed in substantially the same manner as the one above described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a flood-fence, the combination, with posts provided with pins on their inner faces, of a panel provided with elongated eyes engaging the pins on the posts, substantially as described.

2. In a flood-fence, the combination, with posts provided with pins on their inner faces, of a panel comprising a beam of greater length than the distance the posts are apart, and pickets projecting from the beam, said beam being provided with elongated eyes engaging the pins on the posts, substantially as herein shown and described.

3. In a flood-fence, the combination, with posts adapted to be fixed in the bed of a stream or in low land and pivot-pins projected from the posts parallel with the proposed line of fence or gate, of a panel comprising a weighty beam and pickets projected from the beam, bolts secured to the beam and having elongated eyes engaging the pivot-pins of the posts, and stops carried by the posts, whereby the upward movement of the panel may be limited, as and for the purpose specified.

4. A post adapted for use in connection with flood-fences, the said post being constructed of metal T-shaped in cross-section, the cross-bar or head member at the lower end of the post being curved inward to form a segment, and wedges adapted for use in connection with the post, as and for the purpose set forth.

HENRY DEARBORNE MERRILL.

Witnesses:
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