(Model.)

H. D. MERRILL.

FLOOD FENCE.

No. 265,847. Patented Oct. 10, 1882.

Fig. 1.

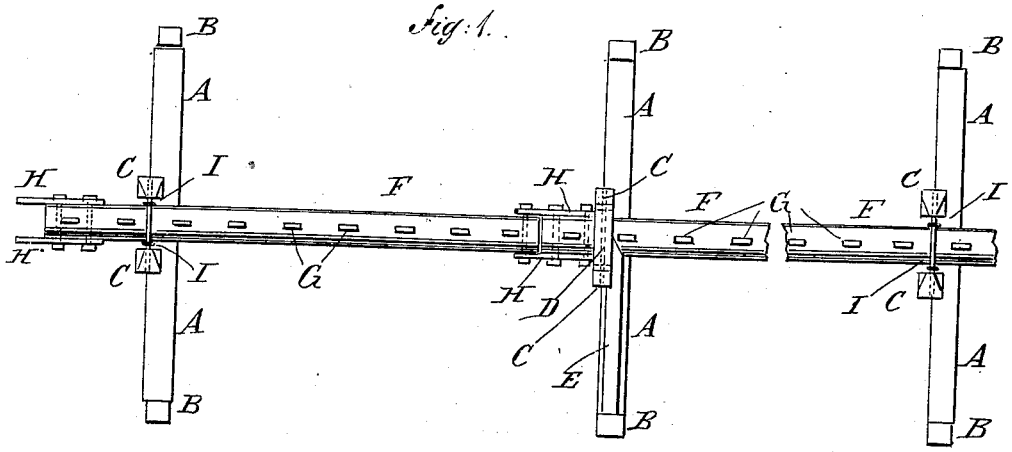


Fig. 2.

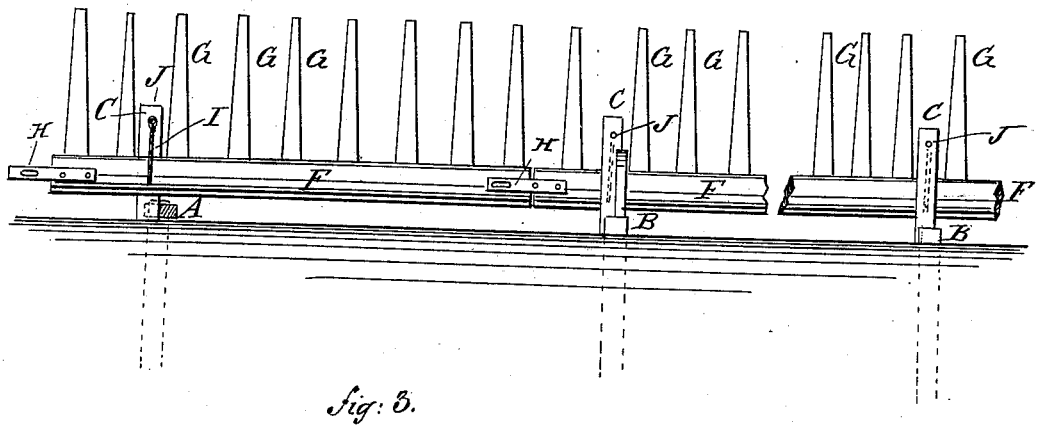
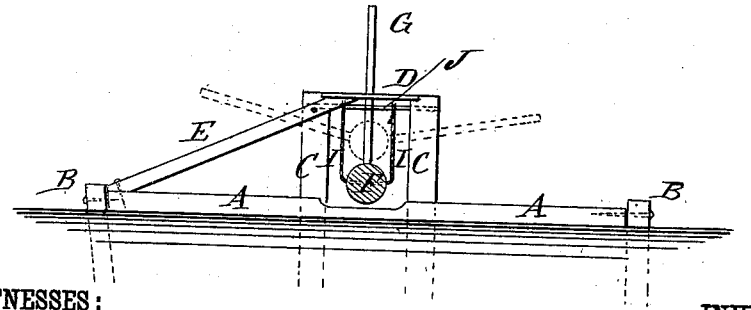


Fig. 3.



WITNESSES:

Chas. Nichols

A. Sedgwick

INVENTOR:

H. D. Merrill

BY Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY D. MERRILL, OF SPRINGFIELD, ILLINOIS.

FLOOD-FENCE.

SPECIFICATION forming part of Letters Patent No. 265,847, dated October 10, 1882.

Application filed June 20, 1882. (Model.)

To all whom it may concern:

Be it known that I, HENRY D. MERRILL, of Springfield, Sangamon county, Illinois, have invented a new and useful Improvement in Flood-Fences, of which the following is a full, clear, and exact description.

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

Figure 1 is a plan view of my improvement. Fig. 2 is a front elevation of the same, partly in section, and Fig. 3 is a sectional end elevation of the same.

The object of this invention is to provide a fence for low lands liable to be submerged by high water, so constructed that it will swing down in either direction when struck by rubbish floating upon the water, and will again rise into an upright position when the rubbish has passed.

The invention consists in a flood-fence constructed with mud-sills secured in place by stakes driven into the ground at their ends. Pairs of parallel posts are driven into the ground at the sides of the mud-sills, connected at their upper ends by cap-bars, and strengthened in place by inclined braces. Between the posts is placed a shaft provided with pickets and having attached to its opposite sides the lower ends of chains, the upper ends of which are attached to the said posts, or to cap-bars or stay-bolts connecting the said posts, whereby the fence-shaft will be firmly supported, and the pickets can be turned down toward either side, as will be hereinafter fully described.

A are mud-sills, which are laid upon the ground at right angles with the line of the fence, and are secured in place by stakes B, driven into the ground at the ends of said sills. One or both ends of the sills A are cut upon a gain or bevel, so that the stakes B will draw the said sills firmly into place and will hold them securely. The mud-sills A are further secured in place by posts C, placed upon the opposite sides of the centers of the said sills, and driven into the ground at the sides of the said sills, or through notches or mortises formed in them. The posts C are connected at their upper ends by cap-bars D, attached to the said upper ends. The pairs of posts C project above the mud-sills A and are strengthened in place by inclined braces E, attached to the end parts of the said posts and to the sills A, or to the ground. The braces E also serve as guards, stops, or fenders to prevent the posts C from being injured by rubbish floating upon the water. Both the posts C of each pair can be provided with braces E, or only the post upon the side toward the direction from which the water will generally flow.

F is the fence-shaft, to the upper side of which are attached pickets G. The shaft F is made in sections, the adjacent ends of which are connected by slotted metal straps H, bolted to their opposite sides; or the adjacent ends of the shaft-sections can be connected by universal joints, or can be left unconnected. In the latter case each shaft-section should be provided with at least two pairs of posts C.

To the opposite sides of the shaft F are attached the lower ends of two chains, I, the upper ends of which are attached to the posts C, to the cap-bars D, or to a stay-bolt, J, attached to the upper parts of the said posts C.

With this construction all of the parts of the fence are firmly connected and strengthen each other to resist any pressure that may be applied to them. With this construction, also, the fence will be turned down in either direction when struck by ice or rubbish floating in the water with the current or driven by the wind, so that the ice or rubbish will pass over the fence without injuring it, and the fence will be raised into a vertical position as soon as the rubbish has passed by the weight of the shaft F, which unwinds the chains I that were wound upon and raised the shaft F by the pressure of the rubbish against the pickets G.

When the fence is placed across running water only one chain I will be required at each bearing. In this case the fence should be prevented from swinging back beyond an exact position by stops, which may be the widened ends of the braces E, or pins or shoulders attached to or formed upon the cap-bar D.

In some cases the mud-sills A and stakes B may be omitted; but I prefer to use them, as making the fence firmer and stronger.

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

1. A flood-fence constructed substantially

as herein shown and described, and consisting of the mud-sills A, the stakes B, the posts C, connected at their upper ends by a cap-bar or stay-bolt, the braces E, the fence-shaft F, carrying the pickets G, and the pairs of chains I, as set forth.

2. In a flood-fence, the combination, with the shaft F, having pickets G, of the pairs of posts C, the chains I, the cap-bar D, and the inclined braces E, substantially as herein shown and described, whereby the said shaft will be firmly held against the pressure of the water, as set forth.

3. In a flood-fence, the combination, with the shaft F, having pickets G, and the pairs of posts C, of the two chains I, substantially as herein shown and described, whereby the said pickets can turn down at either side, as set forth.

HENRY D. MERRILL.

Witnesses:
W. H. WHITNEY,
FRANK HILLERMAN.