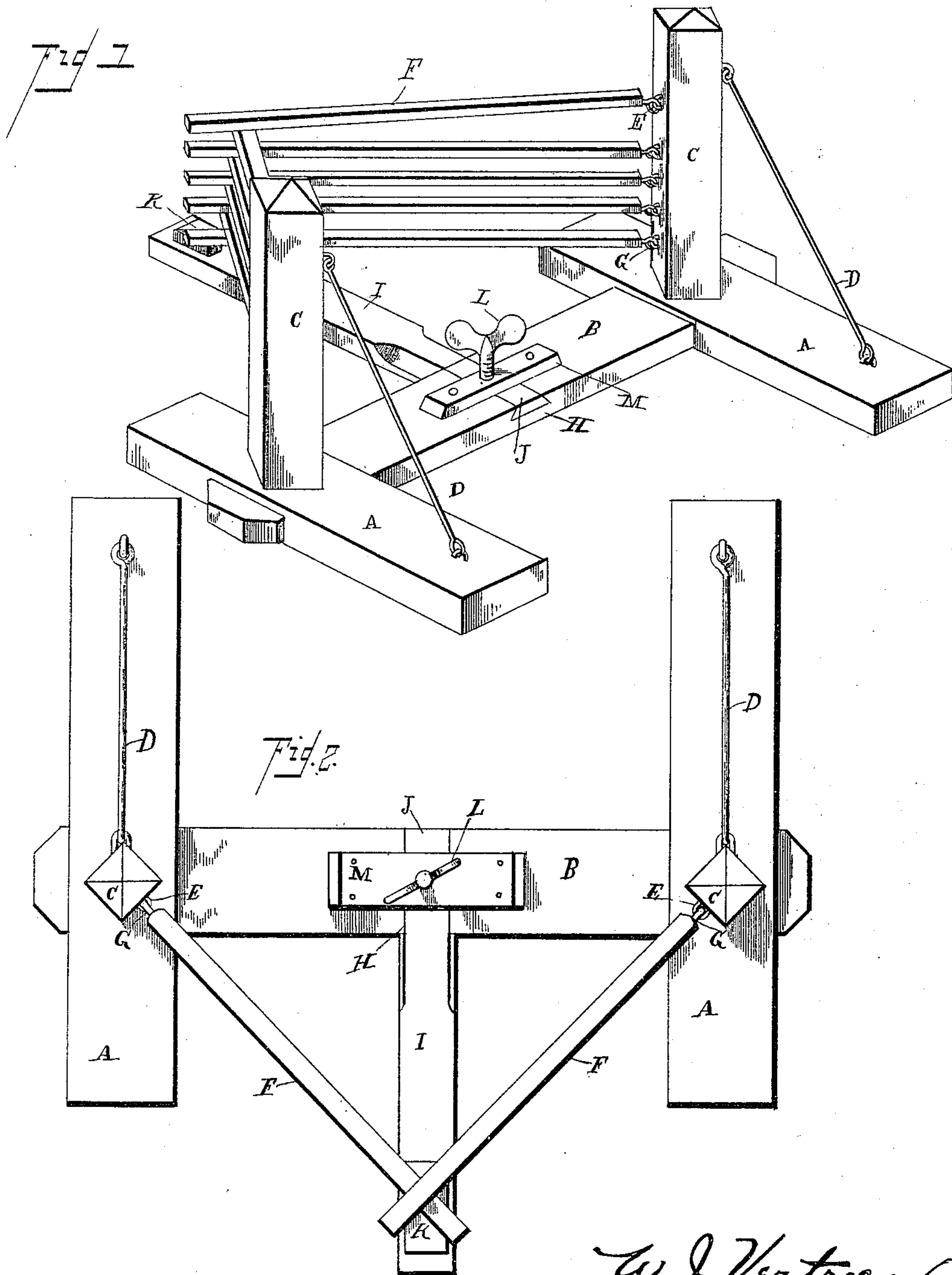


(No Model.)

W. J. VERTREES.
FLOOD FENCE.

No. 438,366.

Patented Oct. 14, 1890.



WITNESSES

F. Willoughby
A. J. Schwarz

INVENTOR

W. J. Vertrees
By *W. F. Fitzgerald*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM J. VERTREES, OF LA PRAIRIE, ILLINOIS.

FLOOD-FENCE.

SPECIFICATION forming part of Letters Patent No. 438,366, dated October 14, 1890.

Application filed March 21, 1890. Serial No. 344,720. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. VERTREES, a citizen of the United States, residing at La Prairie, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Flood-Fences; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists in a new and improved flood-fence, which is designed to be used to fence across streams or low lands which are subject to overflow, being so constructed as to open or move automatically out of the way of the current, and adapted to be readily and easily replaced in position, as will be hereinafter described and claimed.

Referring to the accompanying drawings, Figure 1 is a perspective view of my new and improved flood-fence. Fig. 2 is a top plan view of the same.

The same letters of reference indicate corresponding parts in both the figures.

Referring to the several parts by letter, A indicate the parallel mud-sills, which are connected by the cross-piece B, as shown. In these sills are set the posts C C, which are square in cross-section and are braced by the brace-rods D D. These posts are set in the sills diagonally—that is to say, with their sharp opposite edges at the sides of the sills, as shown.

In the side of the post shown are secured a series of hooks E, placed one above the other. To these hooks are hinged or connected the series of rails F, each rail having secured in one end an eye G, by means of which the rails are readily hooked to the posts.

In the upper side of the central part of the cross-piece B is formed a transverse recess H, the edges of which are dovetailed, and in this recess fits movably the reduced rear part J of an adjustable sliding bar I. The edges of this reduced part J of the bar are dovetailed, and on the forward end of the bar is a block K, on which the end of the lowermost rail rests and is supported.

In placing the fence in position the end of the lowermost rail is placed on the end block

K, and the free ends of the other rails are laid one upon the other, as shown, and it will be seen that by moving the adjustable bar I in or out the rails can be fitted together at a greater or less angle, according to the force of the current and other considerations which arise in practical use.

The sliding bar can be held at the point to which it is adjusted by a clamping or binding screw L, working through a bearing-plate M, which is secured to the cross-piece B and passes over the recess H.

By the above construction it will be seen that I am enabled to fit the free ends of the rails together at any angle desired to suit the force or volume of the current. This is especially valuable in times of high water or moderate floods, when the water is bringing down with it a quantity of small comparatively light débris. The rails, which at low water are set at a comparatively wide angle, are then opened out and fitted together at their free ends at a very small angle, leaving the rails greatly inclined. When the débris carried by the high water reaches my fence, it will, unless it is very large and heavy, slide along the sharply-inclined rails and work or pass through the openings between them without breaking open the fence by forcing the free ends of the rails apart from each other, which would certainly happen if the rails remained at the same wide angle at which they normally stand in time of clear water. The reason why the rails are not left at a long angle is that a fence formed of posts and adjustable rails according to my invention is frequently constructed across a low-lying cultivated field, and in such a field it is always desirable for the fence to take up as little space or width as possible, as all the ground covered by the angles of the fence is of course lost to cultivation. If the sliding support formed by the bar having the end block were not used, the rail ends would necessarily be adjusted on the ground and would be much more liable to be washed apart by the rising water as the ground became wet and soft under them than where they are resting on the firm and solid adjustable block of my sliding bar.

It will be seen that by securing the posts

C with their opposite sharp corners at the sides of the sills A, as shown, the hooks E and eyes G, which form the coupling for the rails and the posts, are completely shielded
5 and protected from injury or breakage from logs and other débris carried along by the flood. This is a valuable feature, saving loss, time, and labor.

The operation of my invention is so apparent that but little explanation is needed. In
10 times of high water or flood the pressure of the water, with the drift which it carries, will swing the free ends of the rails downstream, opening the fence or gate without breaking
15 or carrying off any part of it.

When my invention is used in building a continuous fence, the hooks E will be secured in both the lower faces of the posts, two rows
20 of rails being hung on each post.

By anchoring the posts in the sill, as above referred to, the gap may be used in the stony bed of a stream where a post could not otherwise be secured.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. The combination, in a flood-fence, of the cross-piece B, formed with a transverse recess, the posts, the series of rails hinged to the same, and the sliding bar having the end
30 block and formed with the reduced portion sliding in the recess of the cross-piece, substantially as and for the purpose set forth.

2. The combination of the cross-piece B, formed with the transverse recess, the posts,
35 the series of rails hinged to the same, the movable bar having the end block and formed with the reduced portion sliding in the recessed cross-piece, and a clamping-screw for binding the sliding bar at the point to which
40 it is moved, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM J. VERTREES.

Witnesses:

J. C. HOGSETT,
ED J. DRAKE.