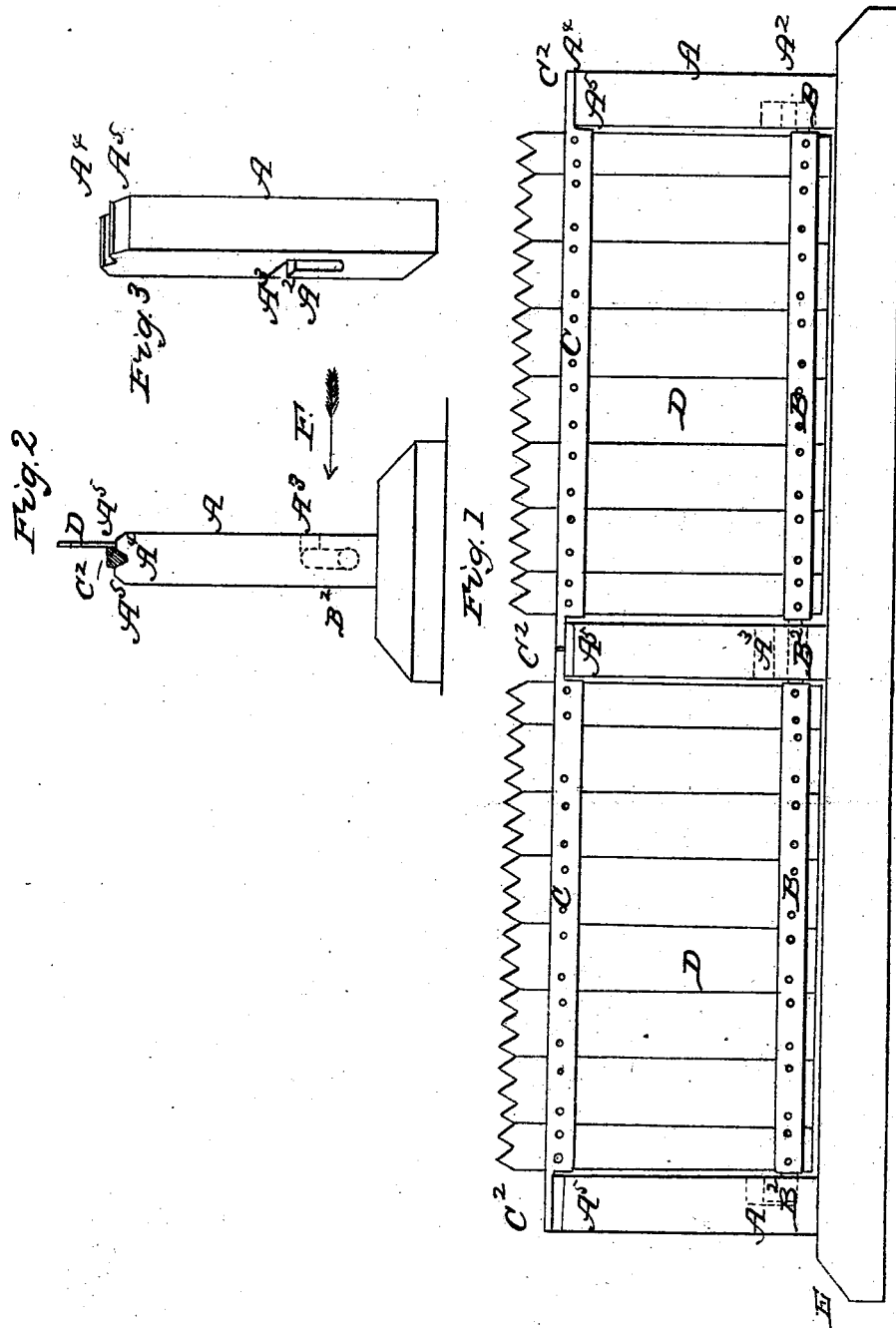


W. MILLER.

Flood Fence.

No. 5,313.

Patented Oct. 2, 1847.



UNITED STATES PATENT OFFICE.

WILLIAM MILLER, OF ORRSTOWN, PENNSYLVANIA.

FENCE TO PREVENT INJURY BY FLOODS.

Specification of Letters Patent No. 5,313, dated October 2, 1847.

To all whom it may concern:

Be it known that I, WILLIAM MILLER, of Orrstown, in the county of Franklin and State of Pennsylvania, have invented a new and useful Improvement in the Construction of Fences that Cannot be Carried Off by Floods, called "Miller's Flood-Fence," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

The nature of my invention and improvement consists in a new and useful mode of constructing panels of fencing so that they shall rise by the force or power of a flood or running stream of water acting against them and sliding over inclined planes and turning on the lower rail in the manner of a hinge a quarter of a circle and lying upon the surface, or in the water, and allowing the flood to pass over it between the posts, and when the flood has subsided allowing the farmer, or other person, to raise the panel on its center, with very little trouble, to restore it to its proper position, the upper rail being made V shaped on the under side and resting in corresponding notches or grooves also made of a V shape in the tops of the posts, the whole being made of clay burned in a kiln, of artificial stone, common pine or other boards and chestnut posts and rails, or other more suitable, cheap, and durable material.

Figure 1 is an elevation of two panels of the improved fencing, showing the down stream side thereof, the dotted lines showing the mortises and tenons. Fig. 2 is a vertical cross section of same showing the horizontal groove in the post communicating with the vertical groove by which the round gudgeon of the lower rail is introduced to the vertical groove from the up stream side of the post, and also showing the end of the V shaped part of the upper rail and the corresponding groove in the head of the post. Fig. 3 is a perspective view of one of the posts.

A are the posts.

A² are the vertical grooves in which the round gudgeons of the lower rails turn.

A³ are the horizontal grooves made in the up stream sides of the posts and leading into the vertical grooves (shown by dotted lines) through which the gudgeons of the lower rail are passed in introducing them to the vertical grooves.

A⁴ are the V shaped grooves made in the

tops of the posts, over the sloped sides of which the sloped surfaces of the upper rail are forced to rise obliquely by the pressure of the water against the vertical plates or boards of the panel as the upper rail becomes disengaged from the posts. The upper corners of the posts are removed forming inclined planes A⁵ on either side of the V shaped grooves for the more easy separation of the upper rail from the posts.

B are the lower rails.

B² are the round gudgeons on their ends made to turn in the aforesaid vertical mortises in the posts as centers.

C are the upper rails.

C² are the V shaped ends thereof made to fit the V shaped grooves in the tops of the posts.

D are the vertical panel boards secured to the horizontal rails made of wood and nailed or otherwise secured to the rails. When made of clay they are cast or molded with the rails, and should be strong enough to resist the pressure of the flood and accumulated drift wood lodged against the same.

E is the line of the surface of the ground.

The arrow F shows the direction of the running stream.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of the falling safety flood panel with the V grooved posts constructed, arranged and operating in the manner and for the purpose above described—that is to say I claim the combination of a rising and turning close panel composed of two horizontal parallel rails placed at a suitable distance apart and united by vertical plates or boards—the upper rail being made of a V shape on the under side at the ends fitted into correspondingly shaped grooves made in the tops of the posts, so that when a pressure of water comes against the vertical boards the said rail with the boards is caused to rise or slide up over the inclined sides of the notches to the top thereof, and back over the same in the direction of the running water and fall down into the same suffering the water to pass between the posts without doing any injury to the fence, the lower rail being made with round tenons that enter oblong mortises in the posts a little wider than the diameter of the tenons and considerably longer so that the panel will be permitted to

rise vertically and turn therein in falling back, but will be prevented from leaving the mortises by the said tenons until the flood subsides, when the panel is lifted to a vertical position and restored to its former place, the parts composing the combination being made of wood, clay molded and baked

or of any suitable material for the purpose intended.

WILLIAM MILLER.

Witnesses:

WM. P. ELLIOT,

A. E. H. JOHNSAN.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

Plant

PATENT NO. : 5, 313

DATED : October 30, 1984

INVENTOR(S) : Guenter Hofmann

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1 Line 15 After "has" insert --also--.

Column 1 Line 30

Delete --FIG. 1 is a graph of the flavonols fingerprinting.--.

Signed and Sealed this

Ninth **Day of** *April* 1985

[SEAL]

Attest:

DONALD J. QUIGG

Attesting Officer

Acting Commissioner of Patents and Trademarks