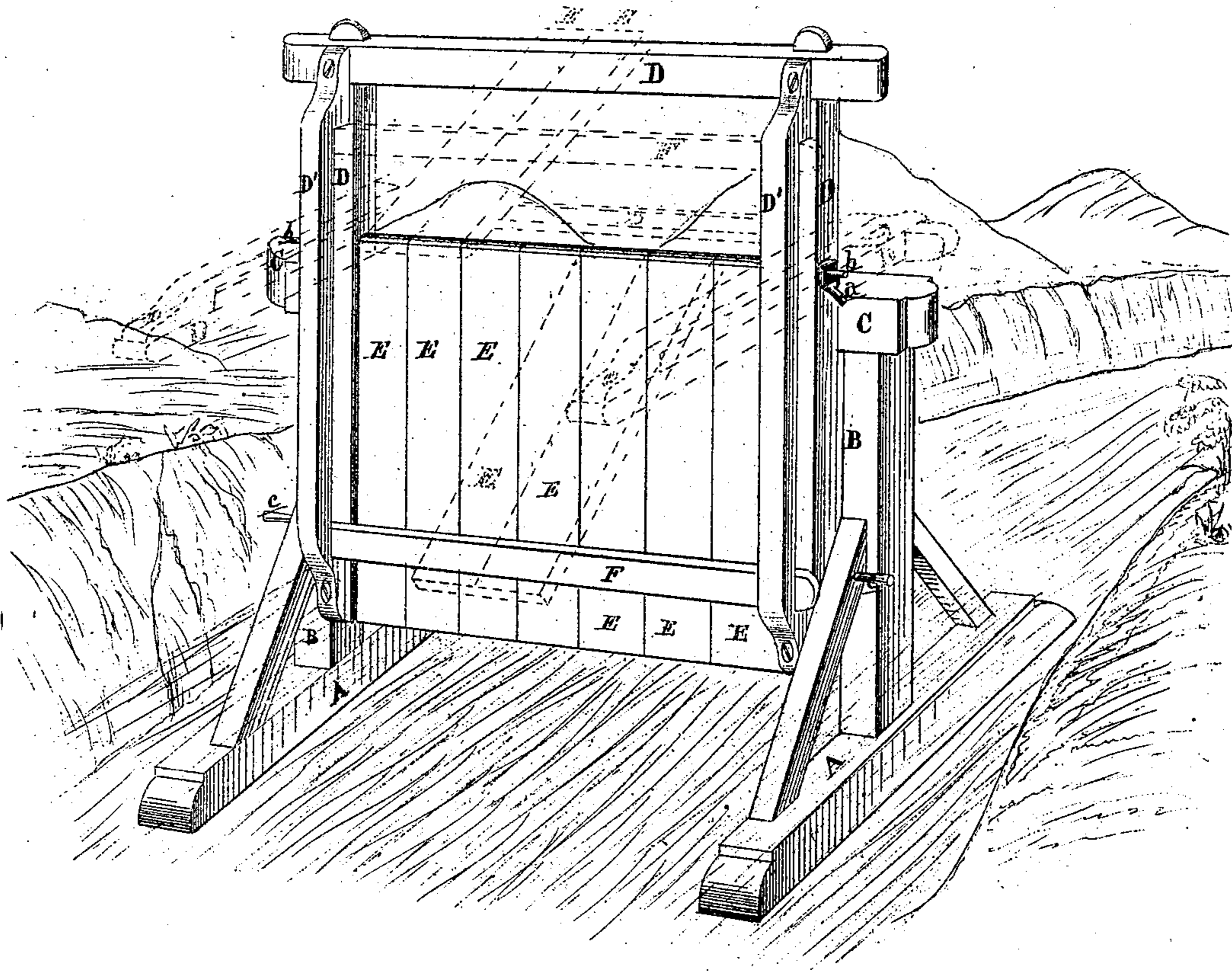


T. H. Breed,

Flood Gate.

No. 107,159.

Patented Sept. 6. 1870.



ATTEST

Frederick Everts
Sam J. Sprague

INVENTOR

Thos. H. Breed
Per Attorney
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United States Patent Office.

THOMAS H. BREED, OF DUNDEE, MICHIGAN.

Letters Patent-No. 107,159, dated September 6, 1870.

IMPROVEMENT IN FLOOD-GATES.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, THOMAS H. BREED, of Dundee, in the county of Monroe and State of Michigan, have invented a new and useful Improvement in a Flood-Gate; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification.

The nature of this invention relates to an improved construction of flood-gates, and consists in the peculiar construction of the gate and its frame, the former being sectional, and the latter hinged to the cross-beam, and the whole so arranged that, in high water a single section, or as many more as may be necessary, will lift to permit the passage of floating sticks and other obstructions; in low water the sections are secured to the frame, and, on approach of winter, the whole may be swung up clear of the water, so as not to be frozen in, which would render it liable to be carried away when the ice broke up.

In the drawing, which is a perspective view of the down-stream side of my flood-gate—

A represents mud-sills, secured in the bottom of brook, near its sides, on which are erected the posts B, connected at the top by a cross-beam, C.

D is the gate-frame, composed of two vertical pieces of timber connected at the top by a cross-beam; from the upper corner of the down-stream side of the beam C project the pintles *d*, to which the gate-frame is pivoted by an iron rod, *b*, passing through all.

E are the sections of the gate, in the shape of planks, either hinged to the bar *b* or bored transversely through their upper ends, so that the bar may pass through them in the manner shown.

D' are side bars, one of which is secured on the down-stream face of each of the vertical bars of the gate-frame.

F is a transverse bar moving up and down in the slide-bars.

c are pins passing through the braces of the posts B, and, engaging with the gate-frame, secure the latter in its vertical position; in the latter position, and in low water, the bar F is moved down to the bottom of the slides, when the gate sections and frame form essentially a solid structure; during high water or flood, the bar F is raised up in the slides above the tops of the sections, which give readily to a floating obstruction and permit it to pass. On the approach of frosty weather, the bar F is moved up above the sections and the pins *c* withdrawn from the gate-frame, which is swung up on its pivot to a horizontal position, resting on the cross-beam C, as shown by the dotted lines, while the sections are thrown up to rest on the cross-bar at the top of the frame, as shown in like manner; by this means, the gate will not be frozen in during the winter, to be carried away when the ice breaks up in the spring.

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

The construction and arrangement of the sills A, posts B, cross-beam C, and gate-frame D, pivoted thereto by the bar *b*, said bar having also pivoted on it the sections E, the slides D', and bar F, as and for the purpose set forth.

THOMAS H. BREED.

Witnesses:

FREDERICK EBERTS,
H. WATLING,
SAM. J. SPRAY.