

(No Model.)

D. A. HOYT.

DAM.

No. 361,290.

Patented Apr. 19, 1887.

Fig. 1.

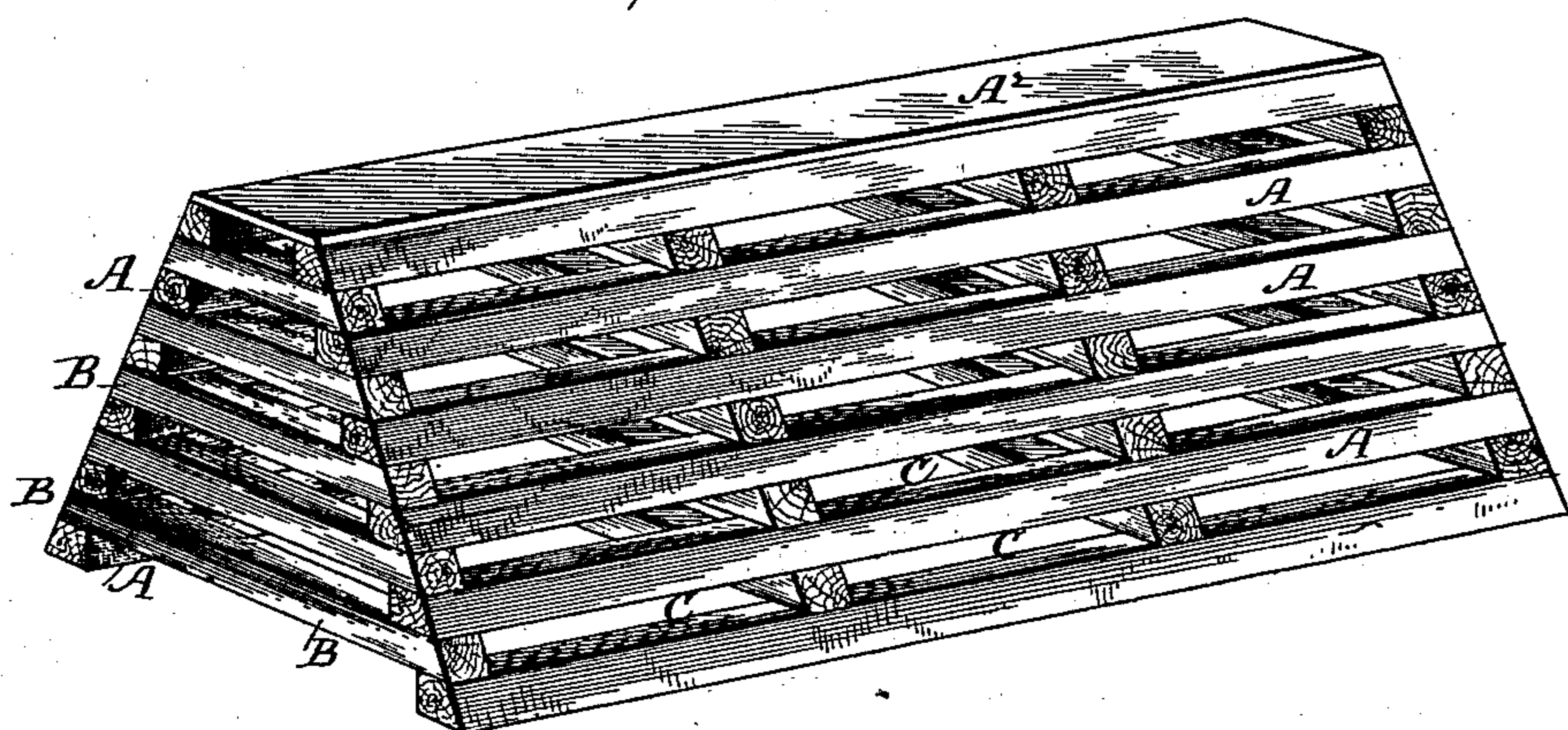


Fig. 2.

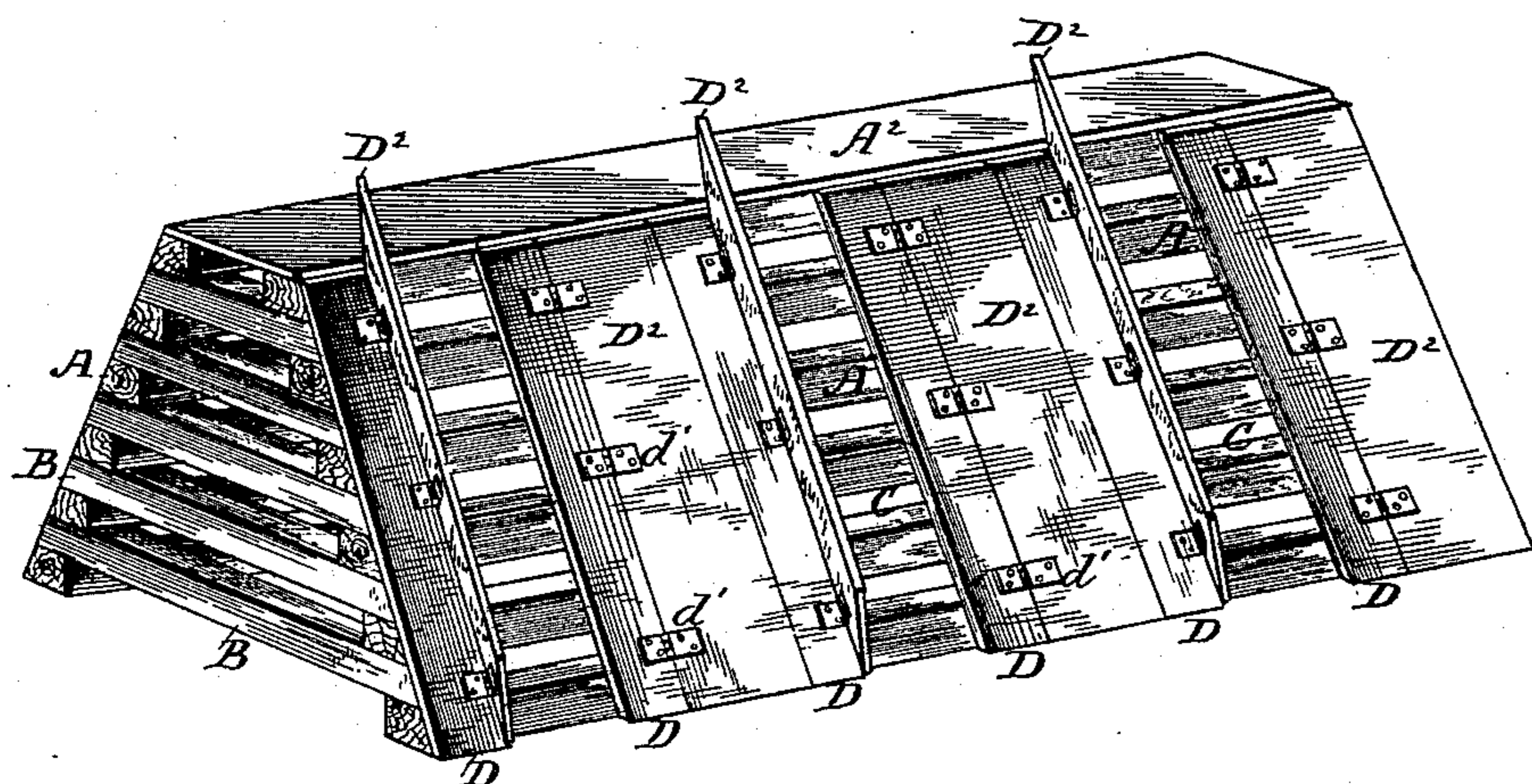
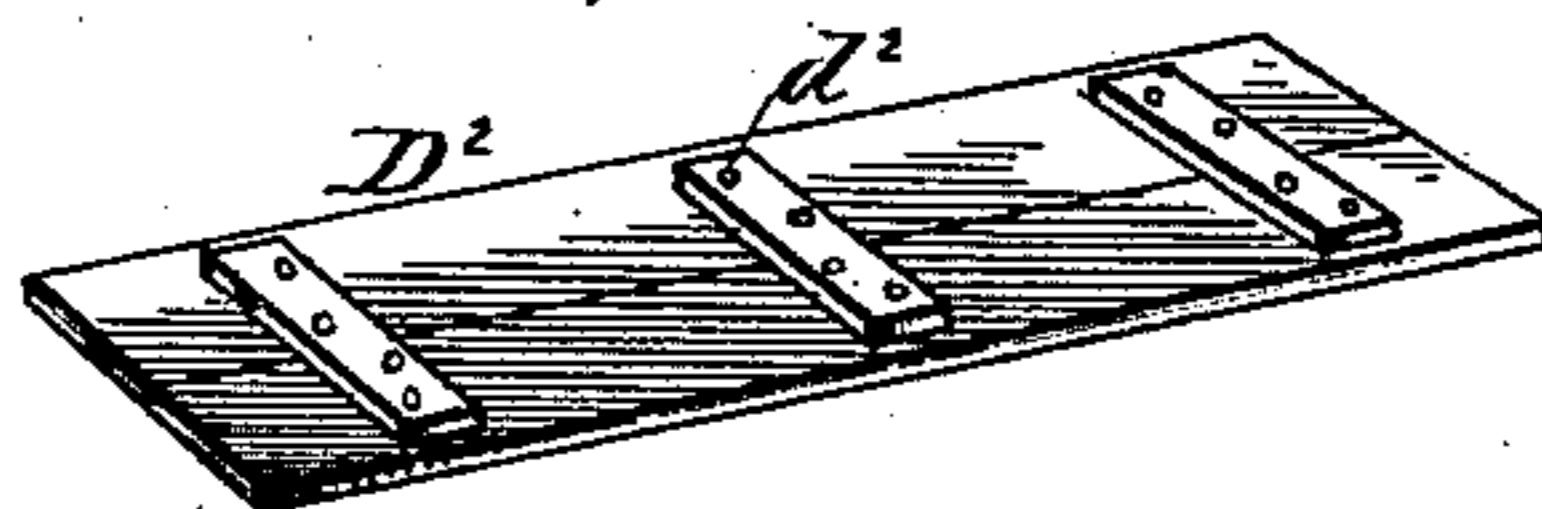


Fig. 3.



Witnesses
E. J. Mordeman
J. E. Masson

Inventor:
Dennis A. Hoyt
by E. E. Masson
atty.

UNITED STATES PATENT OFFICE.

DENNIS A. HOYT, OF ST. CLOUD, MINNESOTA.

DAM.

SPECIFICATION forming part of Letters Patent No. 361,290, dated April 19, 1887.

Application filed August 7, 1886. Serial No. 210,284. (No model.)

To all whom it may concern:

Be it known that I, DENNIS A. HOYT, a citizen of the United States, residing at St. Cloud, in the county of Stearns, State of Minnesota, have invented certain new and useful Improvements in Dams, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in river-dams formed of timber; and the object of my improvement is to provide simple and inexpensive means for placing the last timbers in position and damming the water flowing against them, as shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of an incompleted dam made of timber. Fig. 2 is a similar view of the dam having a portion of the plank covering in position and the other portion or shutters hinged to the first and ready to be dropped upon its foundation-frame and the dam be completed. Fig. 3 is a perspective view of one of the shutters.

The frame consists of heavy timbers A, arranged in rows and united by connecting-timbers B, arranged in series that are longer at the bottom than at the top, forming a pyramidal frame, having large interstices C between them, through which a large body of water may still flow. The bottom rows of timbers are secured to the bed of the river by piles driven into said bed and by bolts passing through the sides of the timbers and piles. The timbers may be notched or dovetailed, as usual, at the points where they meet or cross each other, and a strong foundation be thus completed, through which the river may still flow.

The top timbers of the dam are united and covered by a wide stringer, A², upon which persons may walk while the dam is under construction. To dam the water and complete

the work, planks D, about a foot wide, are first laid up and down against the inclined frame timbers A and spiked to said timbers. The planks D are thus secured at predetermined distances—say two feet apart—across the whole face of the dam, and the river still flows through the interstices C and only covers the lower end of said planks. At this stage a series of shutters, D², are used. They are made of two or more planks united by cleats d², and these shutters are equal in width to the spaces between the already-spiked planks D, and are secured to the latter by hinges d', and retained temporarily in a raised position, with their edge facing the current, by a pin or spike inserted against it in the top stringer. When all is thus ready, either a number of men are stationed on said stringer, or a chain may be connected with all the raised shutters or gates D², and they are closed at once, and the water, being thus arrested, rises over the planked face of the dam until it flows over its top.

If the dam is to be of a great height, the shutters can be made in two or more lengths, to facilitate their closing and the completion of the dam.

Having now fully described my invention, I claim—

In combination with a timber foundation having interstices therein, a series of planks, D, spiked to said timbers, and shutters hinged to the planks D, and having one of their long edges adapted to present little obstruction while facing a current of water, and also be closed against the foundation of a dam, substantially as and for the purpose described.

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

DENNIS A. HOYT.

Witnesses:

ANDREW C. ROBERTSON,
A. F. ROBERTSON.