

(No Model.)

H. D. MERRILL.

FLOOD FENCE.

No. 371,346.

Patented Oct. 11, 1887.

Fig: 1.

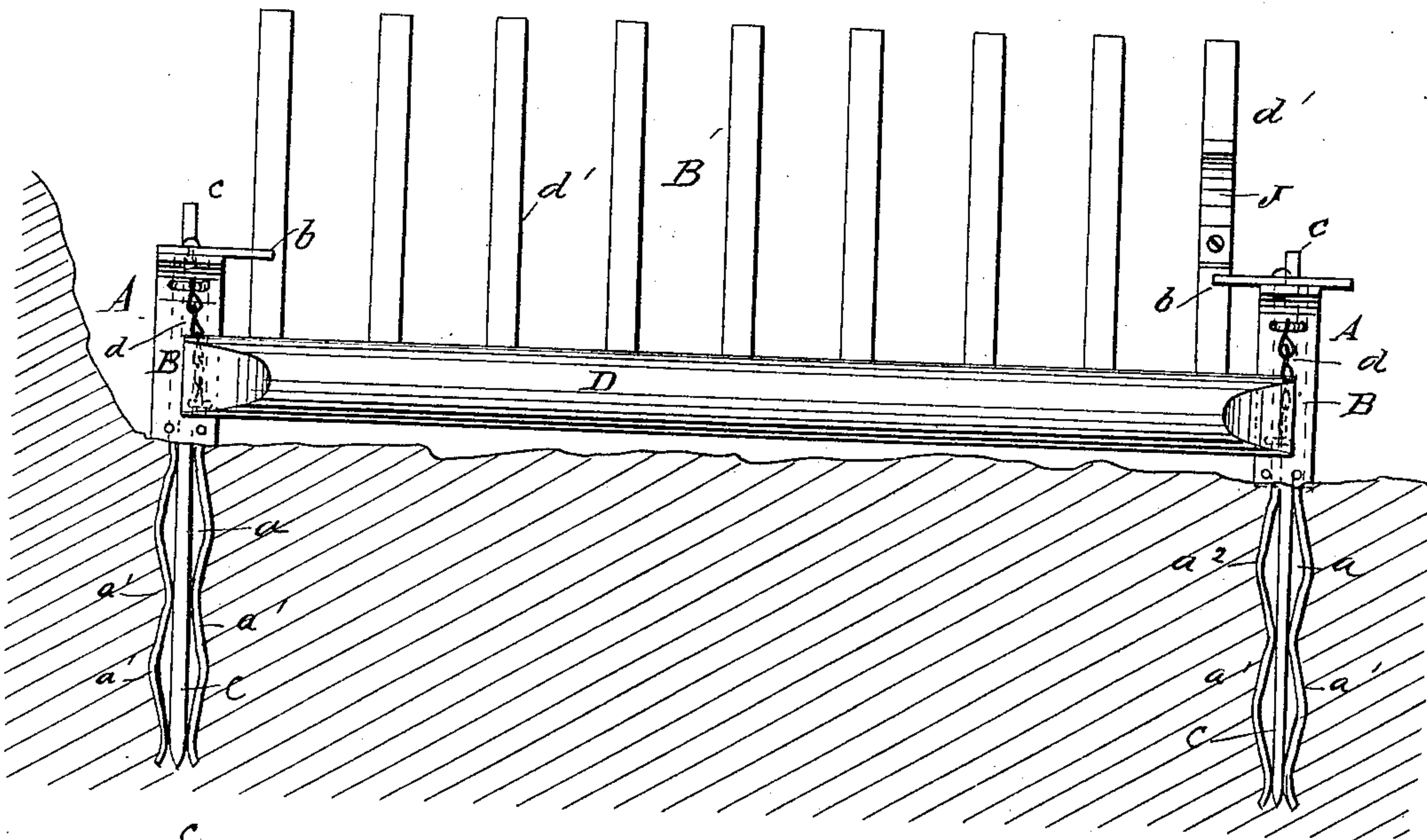


Fig: 2.

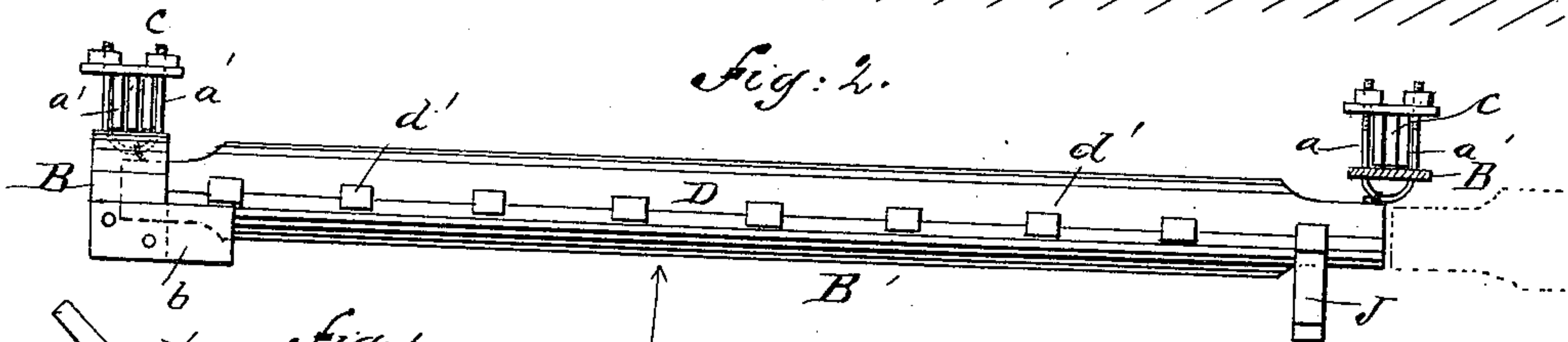


Fig: 4.

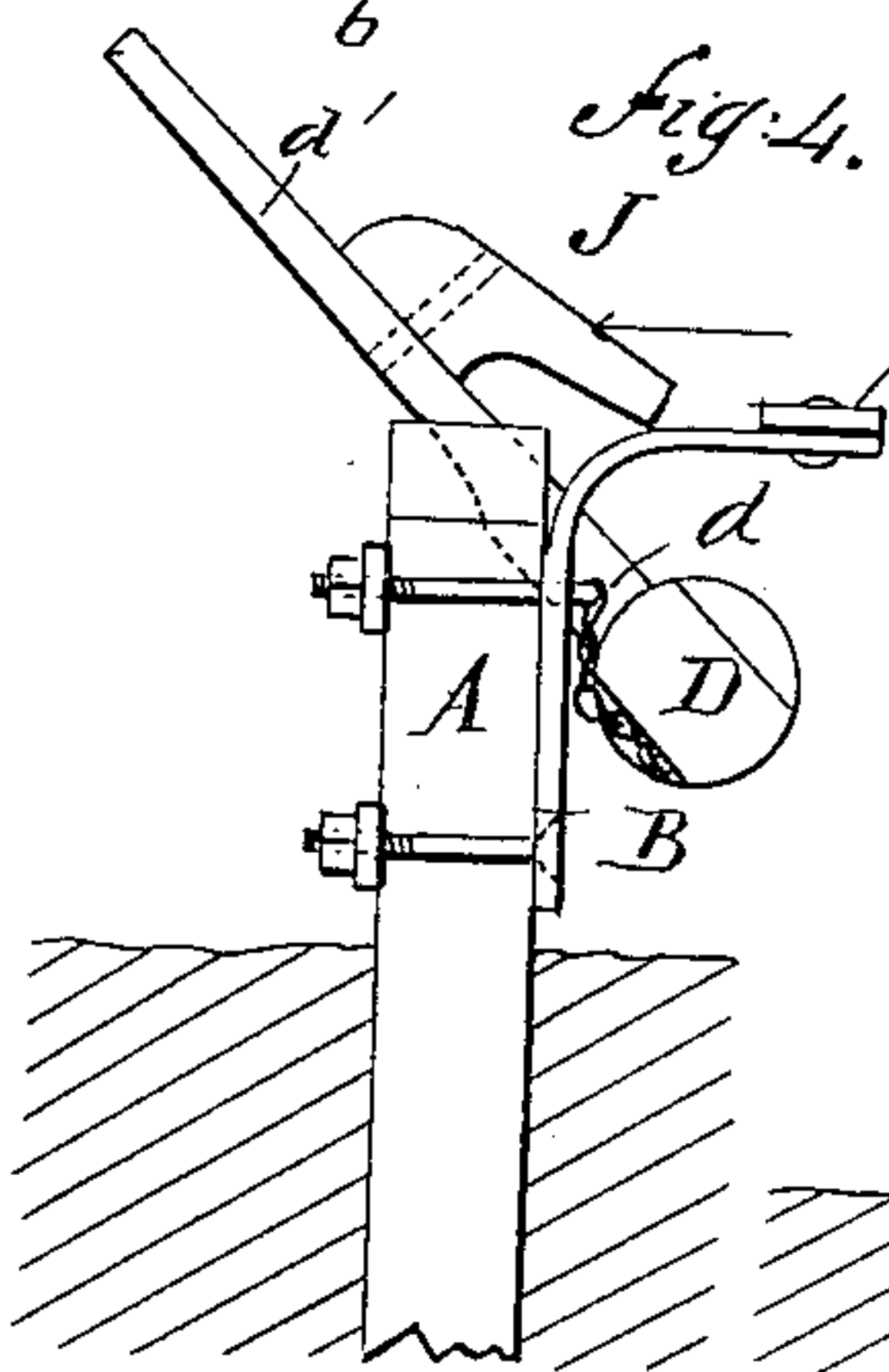


Fig: 3.

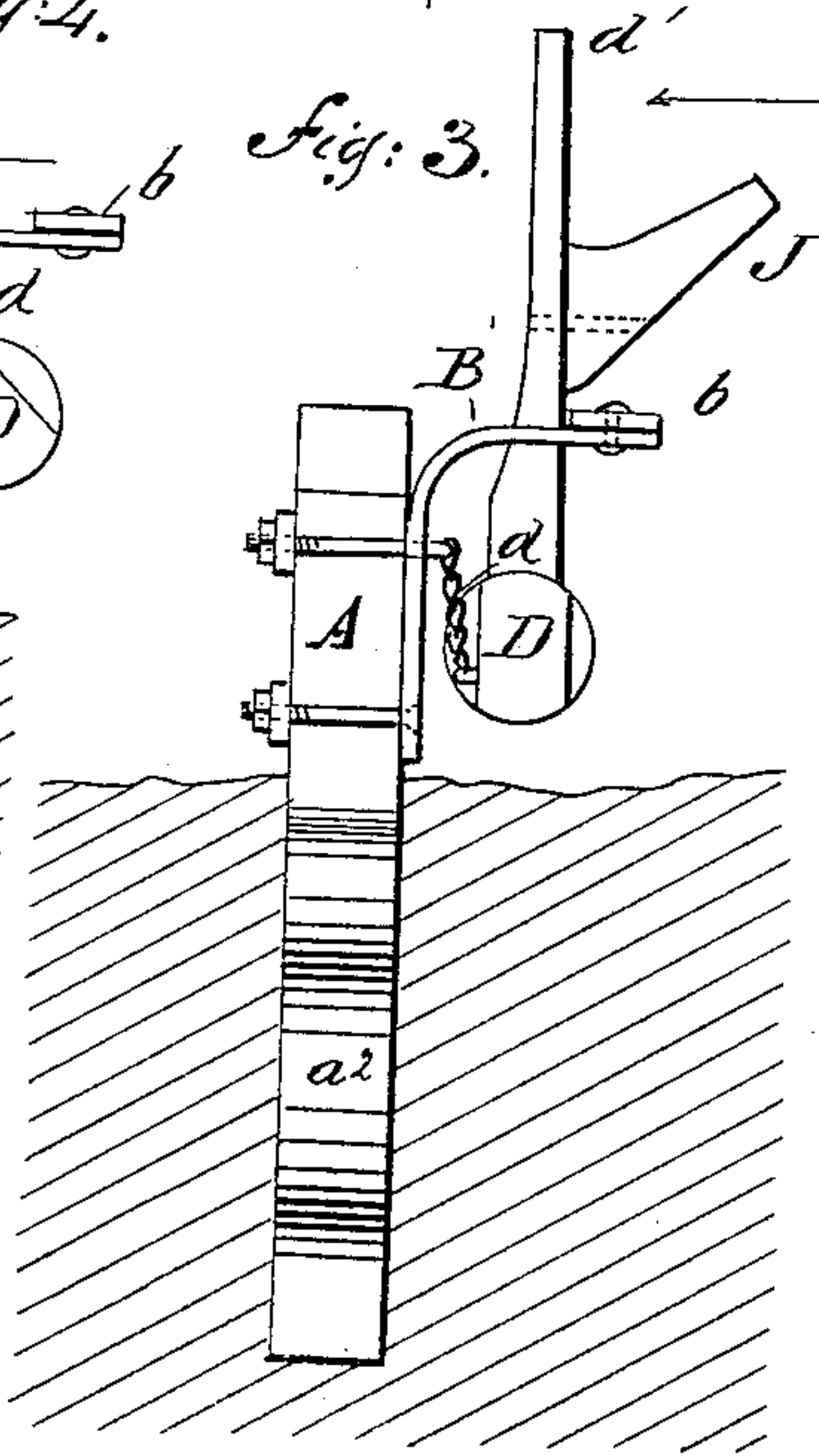
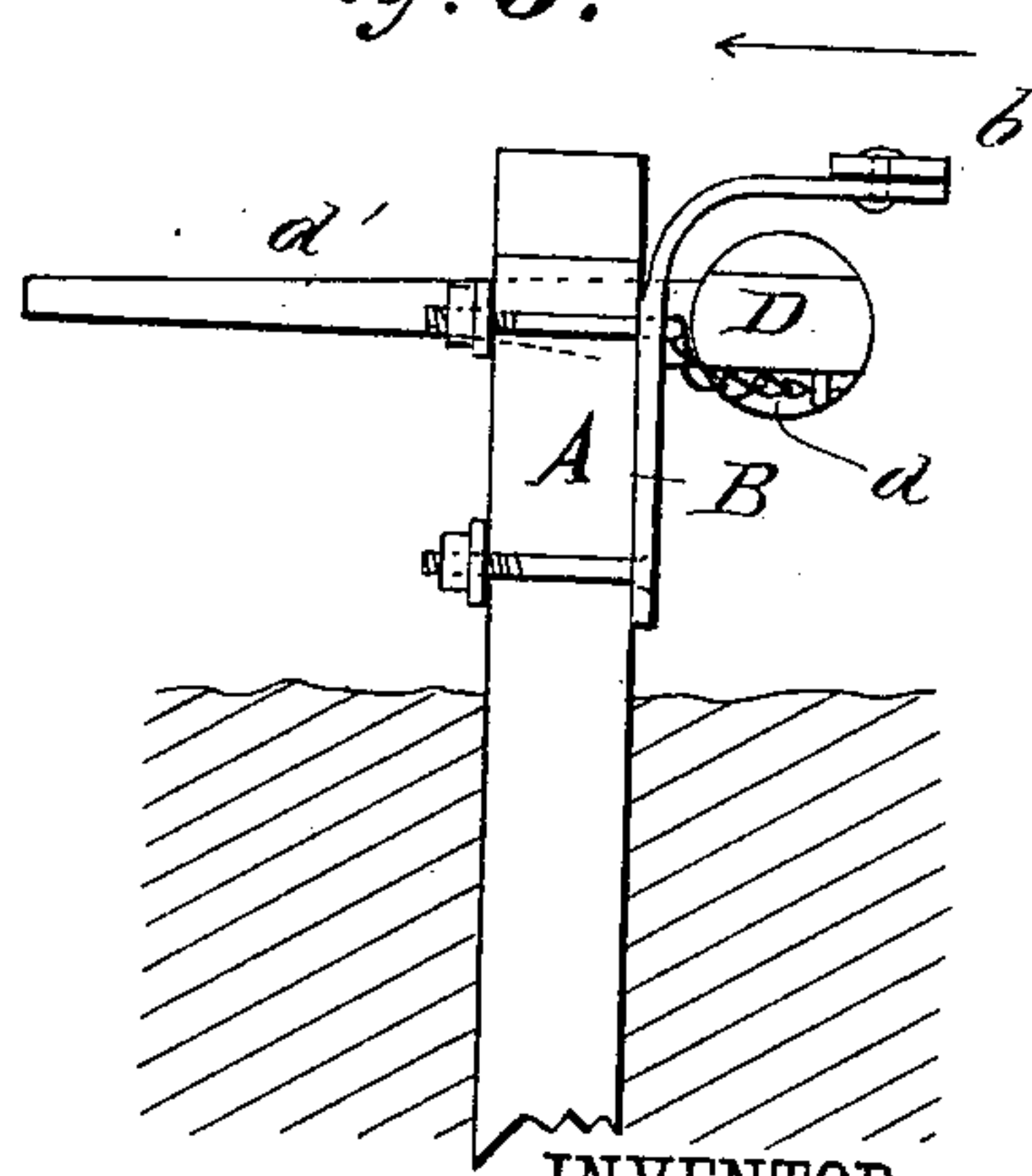


Fig: 5.



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FLOOD-FENCE.

SPECIFICATION forming part of Letters Patent No. 371,346, dated October 11, 1887.

Application filed June 29, 1887. Serial No. 242,877. (No model.)

To all whom it may concern:

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

My invention relates to an improvement in flood-fences, and has for its object to provide a fence for streams and low places liable or subject to an overflow, which fence will bar the passage of stock when the water is at the usual height or below its usual height, and wherein, when a rise in the water or an overflow takes place, the said fence will incline sufficiently to allow the drift carried by the water to pass over it without damage thereto, and wherein the fence will also rise automatically to a vertical position when the water becomes low again.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a front elevation of the fence, and Fig. 2 is a plan view thereof. Fig. 3 is a side elevation illustrating the fence in a vertical or normal position. Fig. 4 is a side elevation, the fence being carried partially forward; and Fig. 5 is a side elevation illustrating the fence in an open or horizontal position.

In carrying out the invention holes *a* are drilled in the bed of the stream which is to be crossed at such points as it is purposed to plant the posts adapted to support the gate or fencing. The holes having been drilled, the posts *A* are secured therein, which posts are built in three sections—namely, two sections, *a' a'*, consist of flat metal bars of suitable length and any desired width and thickness, the said bars being fluted or corrugated transversely, as shown at *a''*, Fig. 1, the said fluting extending from the lower end upward a distance about equal to the depth of the holes *a*. The fluted bars are placed in the said holes *a*, and a straight wedge, *c*, being entered between them at the top, is driven vertically downward to the bottom of the post-hole, thereby causing the fluted

bars to expand and form a solid foundation for that portion of the post above the ground. Upon that side of the posts facing the head of the stream outwardly-curved plates *B* are secured by means of U-shaped bolts or clips, or in any approved manner, the position of the said plates upon the posts being at right angles to the proposed line of fence. To the extended end of the plates, at right angles thereto, an arm, *b*, is secured, adapted to project inward a distance in the direction of the opposing posts and parallel with the line of the gate or fence, as shown in Fig. 1. A heavy log or beam, *D*, is now suspended from the posts inside thereof—that is, in the direction of the head of the stream—by means of two suitable lengths of chain, *d*, each attached at one end to the end of the log upon that side facing the said posts, the other end of each chain being secured to the plate *B* and post *A* by a staple or equivalent fastening, and a number of pickets, *d'*, are fastened to the upper face of the log at such a distance apart as to prevent the passage of stock, the log and pickets forming the gate or fencing *B'*. The fence thus suspended will naturally have a tendency to fall in a horizontal position away from the posts. This tendency is checked and the fence kept in a normal vertical position by the engagement of said fence with the fixed arms *b*.

It is obvious that should the stream crossed by this fence become swollen the drift carried down by said stream and the force of the current will, without injury to the fence, press it down to an inclined or, if necessary, a horizontal position, thus permitting the free passage of any obstructions, and it is also evident that when the floods subside the fence will automatically assume its normal position.

By means of stops *J*, pivoted to the outer pickets of the fence, the same can be kept in an inclined position through the engagement of the said stops with the arms *b*, as shown in Fig. 4. This arrangement is very desirable in winter, permitting the broken ice to more readily pass.

In the event that the stream is too wide for one fence-panel to span it advantageously, two or more panels may be employed with equally effective results.

In large streams, where unusual strength is required, the curved plates *B* may be projected

down to bed-rock and bolted thereto on the upstream side of the picket-log D.

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

5 Patent—

1. A flood-fence consisting of posts A, fixed in the bed of a stream, curved plates attached to said posts, stop-arms *b*, attached to said plates at right angles thereto and parallel with
10 the line of the fence, and a log or beam, D, carrying pickets *d'*, suspended from said posts, the end pickets normally engaging said stop-arms, substantially as herein shown and described.

2. In a flood-fence, the combination, with
15 the posts A, provided with longitudinal wedges *c*, the curved plates B, attached to said posts, and the stop-arms *b*, attached to said plates, extending parallel with the axis of the fence, of the log or beam D, carrying a series of pick-

ets, *d'*, stops J, pivoted to the outer pickets, and 20 the chain *d*, suspending the fence from said posts above the bed of the stream, substantially as herein set forth.

3. In a flood-fence, the combination, with the posts A, consisting of metal bars *a'*, hav- 25 ing fluted lower ends, and a longitudinal wedge, *c*, the curved plates B, attached to said posts, and the arms *b*, secured to said plates parallel with the axis of the fence, of the log or beam D, provided with a series of pickets, *d'*, and 30 chain *d*, suspending the fence from said posts above the bed of the stream, substantially as herein set forth.

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Witnesses:

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C. F. SPURRELL.