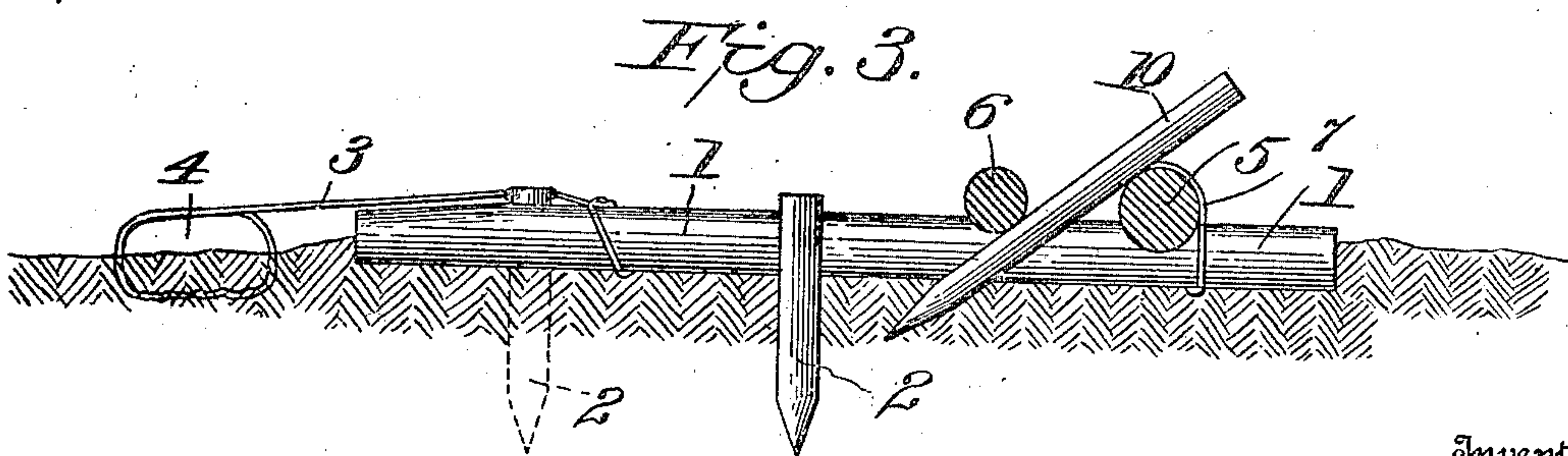
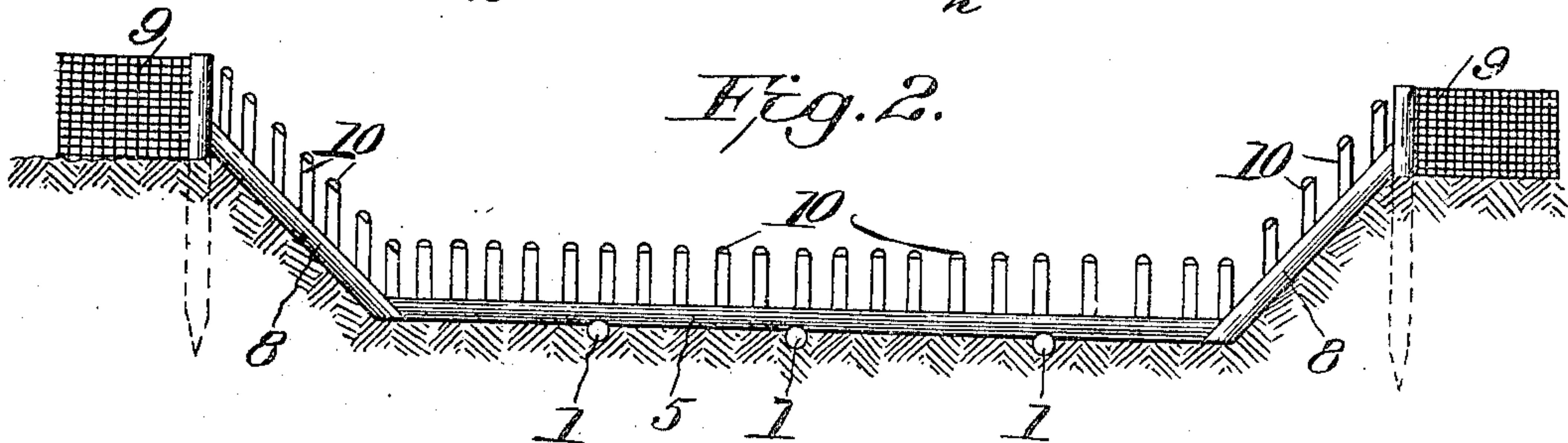
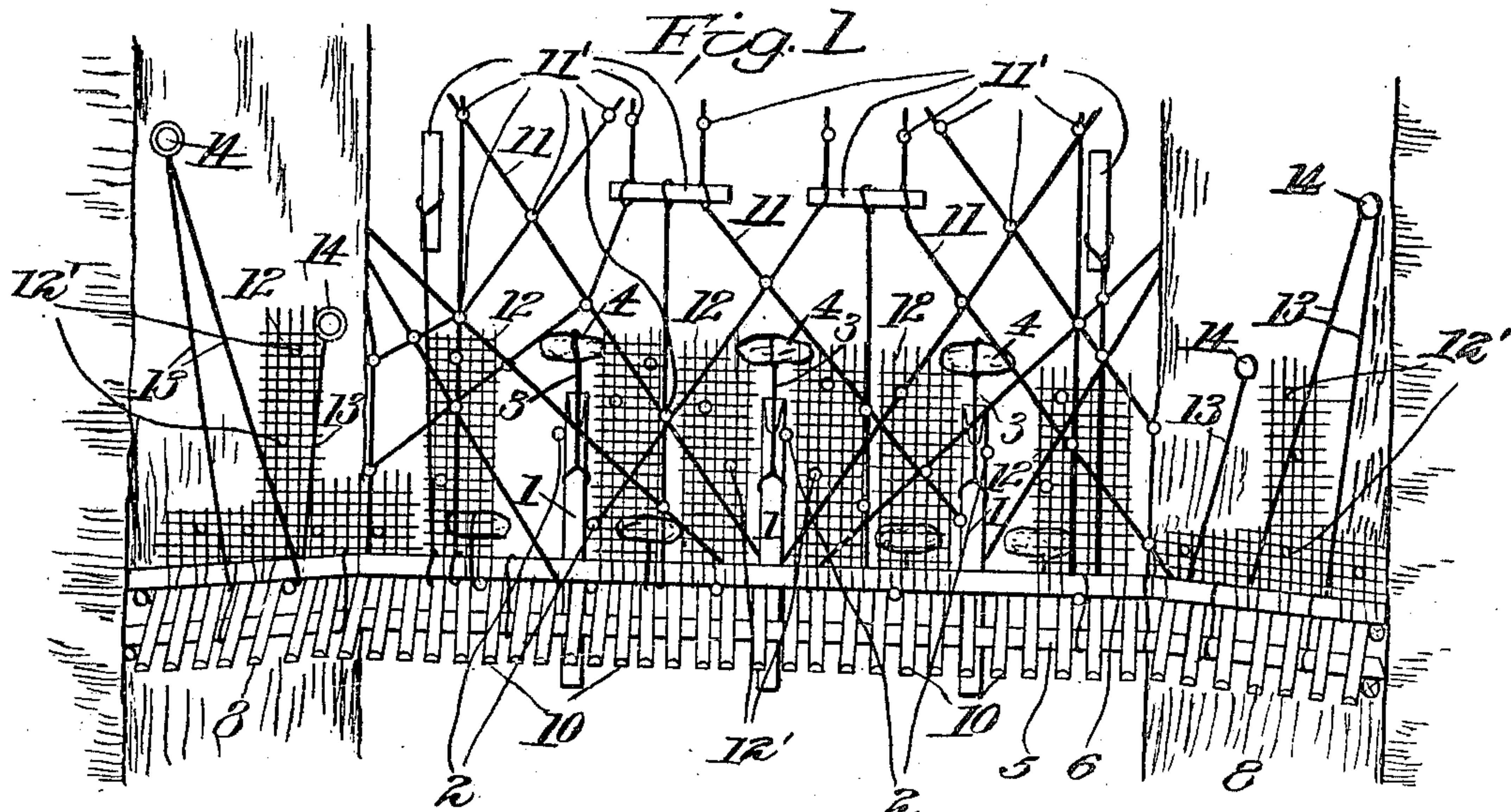


E. E. TYLER.
WATERWAY STOCK FENCE.
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952,023.

Patented Mar. 15, 1910.



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ELZA E. TYLER, OF COLUMBIA, MISSOURI.

WATERWAY STOCK-FENCE.

952,023.

Specification of Letters Patent.

Patented Mar. 15, 1910.

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To all whom it may concern:

Be it known that I, ELZA E. TYLER, a citizen of the United States, residing at Columbia, in the county of Boone and State of Missouri, have invented certain new and useful Improvements in Waterway Stock-Fences, of which the following is a specification.

My invention relates to new and useful improvements in water way fences.

The objects of my invention are to provide a practical and durable water way palisade or stake fence for restraining animals from passing through the fence line of an inclosure by way of a stream or water bed, and to construct the same in such manner that it will not interfere with the flow of water, the passage of drifting substances or of the free movement of fish in the stream. And also further objects are to provide a substantial fence of the class described, adaptable to broad or narrow streams, swamps and the like, to low or high water, or floods, and so constructed as to eliminate the employment of brush or other like obstructing anchorage or riprap now commonly in use, as they easily wash away, are temporary in character, catch sediment filling up the bed of the stream and injuriously impede the free movement of fish.

With these objects in view, and others which will appear from the specifications and claims filed herein, I give the following as a full and exact description of my invention, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, they making a part of these specifications, and in which—

Figure 1, is a plan view of my improved fence applied to a stream. Fig. 2, is a perspective view of the same, looking up stream. Fig. 3, is a sectional elevation of the foundation.

In describing the construction of my fence I have conveniently employed suitable timber, but concrete, or other like material, or iron, may be used, and in many cases either of these is preferable to timber.

In describing my fence in connection with the drawings, 1—1, are mud-sills extending longitudinally to the direction of the stream, and are located in its bed and up the adjacent banks should it be required by reason of their low character. These sills are placed a suitable distance apart, and are held in position by stakes, 2—2, driven into the bed of

the stream, and by guy wires, 3—3, extending up stream, one end attached to the sill and the up stream end secured to embedded rocks, 4—4, or other suitable anchorage.

5 and 6 are stringers extending horizontally across the sills 1—1, parallel to each other, and if the walls of the bank are low, they extend sufficiently up the bank to connect with the land fences, 9—9, on either side of the stream. These stringers 5 and 6, are held in position on the mud-sills 1—1, by wire fastening as at 7, or other convenient means, and are placed a suitable distance from each other in order to engage and support palisades or stakes, 10—10, inserted endwise between them in such manner that the palisades or stakes may be driven into the ground, their upper ends leaning in a down stream direction.

Palisades or stakes, 10—10, are of suitable dimensions, depending somewhat upon the character of the stream to be traversed, and are placed parallel to each other and the desired distance apart, adapted to the free flow of water, the movement of fish and other existing conditions. They may be secured to the stringers 5 and 6, and with upper ends extending to the surface of the water in the stream, at low water mark, thereby permitting the water and debris, at flood, to sweep over their tops without disturbing their permanency or causing injury to the structure.

11—11 are wire cables used as guy wires provided in the bed of the stream and secured at one end to the structure, preferably to the stringers, the other ends extending up stream where they are secured to stakes or stones 11¹ as anchors.

12—12 are suitable strips of woven or mesh wire, one end secured to the stringers 5 and 6, the other extending up stream where they are held in position by stakes 12¹ driven through the mesh, or rock placed thereon. These anchors strengthen and retain the structure in position and their use eliminates the employment of brush or other destructible and injurious stays and riprap which gather drifting objects and sediment, obstructing the stream or filling its bed and in many instances washing entirely away.

The bank fences, 8—8, are held in position by woven wire strips 12—12, and guy wires 13—13, attached to the stringers 5 and 6 and the upper ends secured by stakes, 14—14, or other convenient means. The

wire strips 12—12, in addition to supplying anchorage for the fence, prevent the bank from washing away, thus giving stability to the walls and support to the land connecting fences, 9—9, on either side of the stream.

While in the description of the construction of my fence I have employed wood, I reserve the right to utilize concrete, or other like material, or iron, and when the water bed is sandy or rocky these materials are preferable, as their own weight will add to the stability and permanency. The stakes and palisades may be composed of like material, iron piping of suitable dimensions being especially valuable.

Having described my invention what I claim is;—

1. A water way palisade stock fence, composed of mud-sills longitudinally to the stream and secured in the water bed by stays and guy wires attached to embedded anchorage; parallel cross-stringers overlying said mud-sills and adapted to engage palisades inserted between them, and held in position by guy wires, mesh wires and cables at-

tached to submerged anchorage; palisades adapted to be inserted between said cross stringers, in a down stream inclined position, and held in place by contact with the water bed and the cross stringers; wires, wire mesh, stays and anchors adapted to secure the mud-sills, cross stringers and superstructure in position in the water bed, substantially as and for the purposes described.

2. A water way palisade stock combination fence, consisting of mud-sills longitudinally positioned in the stream; overlying stay-beam cross stringers, and palisades inserted between said stay-beam cross stringers in a down stream inclined position; wires, stays, wire mesh and anchors securing said mud-sills and stay-beam cross stringers in the water bed, substantially as described.

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

ELZA E. TYLER.

Witnesses:

J. M. BATTERDON,
C. C. BOWERSOX.