T. W. MAXEY & A. A. ESTEP.

RIVER BANK PROTECTOR.

APPLICATION FILED JUNE 15, 1910.

982,621. Patented Jan. 24, 1911.

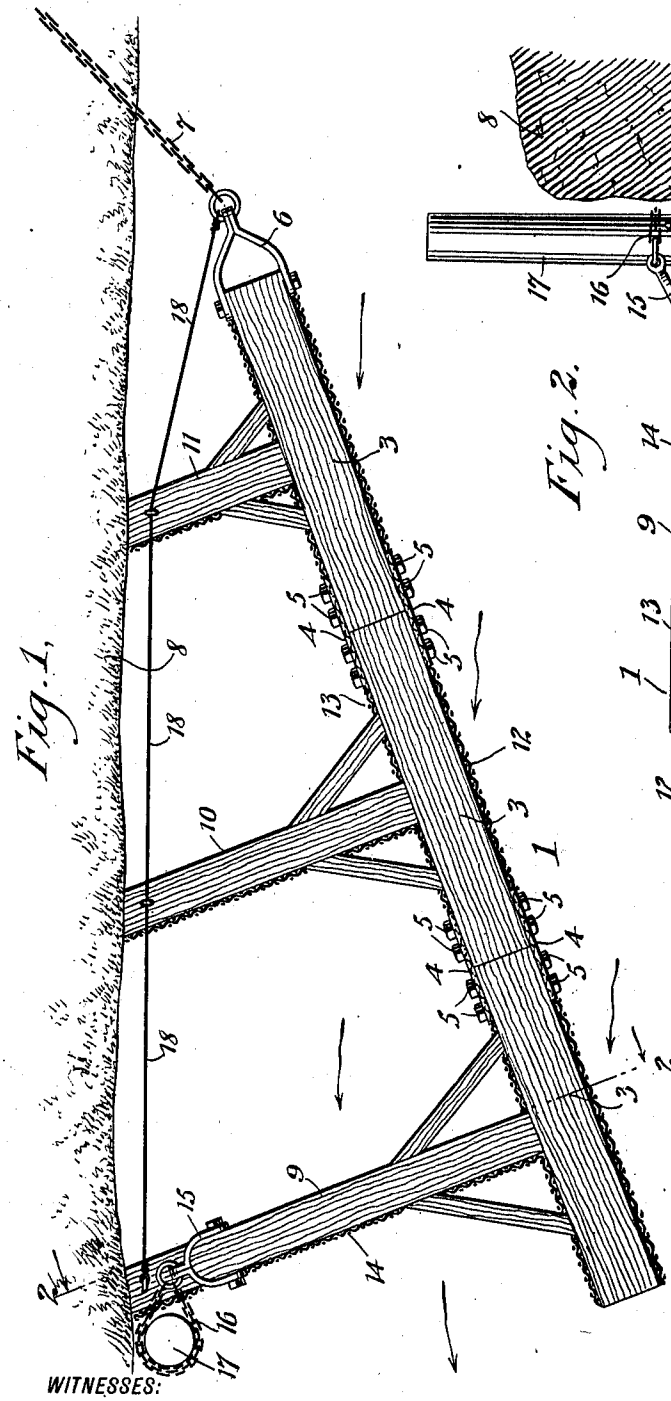

Fig. 1.

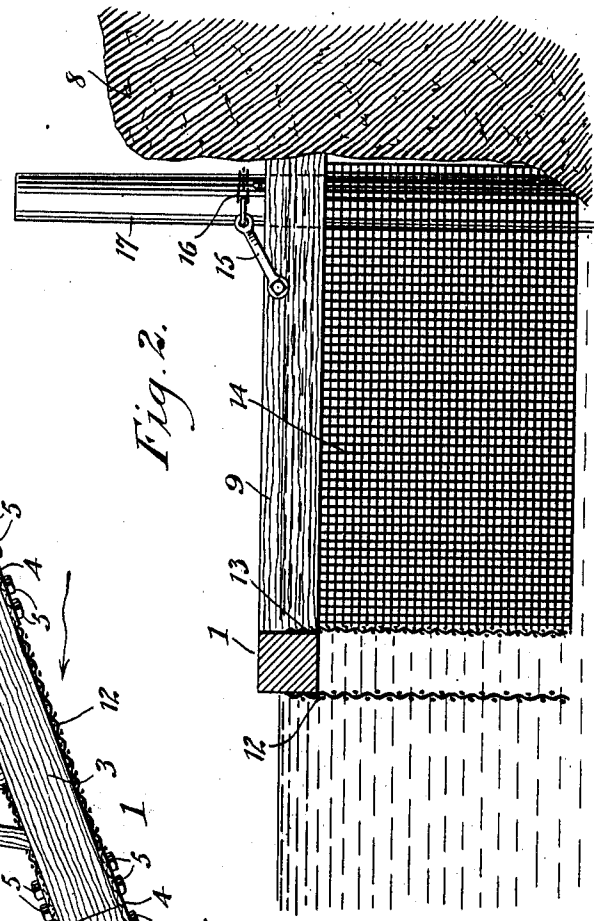

Fig. 2.

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THOMAS W. MAXEY AND ALBERT A. ESTEP, OF FOWLER, COLORADO.

RIVER-BANK PROTECTOR.

982,621. Specification of Letters Patent. Patented Jan. 24, 1911.

Application filed June 15, 1910. Serial No. 566,964.

To all whom it may concern:

Be it known that we, THOMAS W. MAXEY and ALBERT A. ESTEP, both citizens of the United States, and residents of Fowler, in the county of Otero and State of Colorado, have invented a new and Improved River-Bank Protector, of which the following is a full, clear, and exact description.

This invention relates to a new and improved device adapted to be used to protect the bank of a river, stream, or other body of water from being washed away, and which also may be used to change the channel of a river or stream.

An object of this invention is to provide a device which will be simple in construction, inexpensive to manufacture, and exceedingly strong and durable.

A further object of this invention is to provide a boom which will protect the bank, with a coarse-meshed screen on the outer side and a fine-meshed screen on the inner side, whereby the current is retarded in a gradual manner.

These and further objects, together with the construction and combination of parts, will be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views, and in which—

Figure 1 is a top plan view, showing our device attached to the bank of a body of water; and Fig. 2 is a vertical section.

Referring more particularly to the separate parts of the device, 1 indicates a boom, which may be of any suitable form, but preferably consists of a series of angular beams 3, secured end to end by plates 4 secured on opposite sides of the ends of the beams, by means of bolts 5. The boom 1 thus formed is provided at one end with a clevis 6, which is securely tied to the bank by means of a flexible connection, such as a chain 7.

In order to maintain the beams 3 in a position disposed in angular relation with respect to the bank, indicated at 8, there are provided a plurality of braces 9, 10 and 11, which abut against the back side of the boom and are secured thereto in any well known manner.

The boom is provided on both sides with screens 12 and 13, which are adapted to diminish the force of the water and hold the silt and sand on the bank. It will be noted that the outer screen 12 is of considerably coarser mesh than the inner screen 13, so that the former gradually breaks up the force of the current, and the latter finishes the breaking-up action, and further serves to maintain the silt and sand back of it. The braces 9, 10 and 11 are also provided with wire screens 14, which further serve to protect the bank.

For the purpose of preventing the device, as a whole, from being washed up on the bank in case of excessively-high water, there is provided on the lower end thereof, as disclosed, on the brace 9, a clevis 15, which is secured by means of a flexible connection, such as a chain 16, to an anchor or pile 17. The braces 9, 10 and 11 are connected to the forward clevis 6 by means of a cable 18.

It will thus be seen that an exceedingly strong and durable bank protector is formed, which will gradually diminish the eroding force of the water and prevent the sand and silt from washing away.

While we have shown one embodiment of our invention, we do not wish to be limited to the specific details thereof, but desire to be protected in various changes, modifications and alterations which come within the scope of the appended claims.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:—

1. The combination with a boom, of means for maintaining said boom in an inclined position away from the bank of a body of water, and a screen on each side of said boom adapted to afford an inclined double wall of resistance to the force of the water.

2. The combination with a boom, of means for maintaining said boom in an inclined position away from the bank of a body of water, a screen on each side of said boom adapted to afford an inclined double wall of resistance to the force of the water, and a flexible connection for tying said boom to the bank at one end.

3. The combination with a boom, of means for maintaining said boom in an inclined position away from the bank of a body of water, a screen on each side of said boom, adapted to afford an inclined double wall of resistance to the force of the water, a flexible connection for tying said boom to the bank at one end, and an anchor for preventing said boom from riding up on said bank.

4. The combination with a boom, of means for maintaining said boom in an inclined position away from the bank of a body of water, a vertical screen wall of coarse mesh secured to the outer side of said boom, a vertical screen wall of fine mesh secured to the inner side of said boom, and means for securing said boom in position.

5. The combination with a boom, of braces for maintaining said boom in an inclined position in juxtaposition to the bank of a body of water, a coarse-mesh screen wall secured to the outer side of said boom, a fine-mesh screen wall secured to the inner side of said boom, and screen walls secured to said braces.

6. The combination with a boom, of braces for maintaining said boom in an inclined position in juxtaposition to the bank of a body of water, a coarse-mesh screen wall secured to the outer side of said boom, a fine-mesh screen wall secured to the inner side of said boom, screen walls secured to said braces, means for securing said boom to said bank, and an anchor for preventing said boom from riding up on said bank.

7. The combination with a boom, comprising a plurality of beams placed end to end and secured together by means of plates bolted to each side of the beams, of braces for maintaining said boom in inclined juxtaposition to the bank of a body of water, a coarse-mesh screen secured to one side of said boom, a fine-mesh screen secured to the other side of said boom, screens secured to said braces, a flexible connection for securing said boom to said bank, and an anchor-pile for preventing said boom from riding up on said bank.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

THOMAS W. MAXEY.
ALBERT A. ESTEP.

Witnesses:
JAS. W. MAXEY,
MAE L. FISHER.