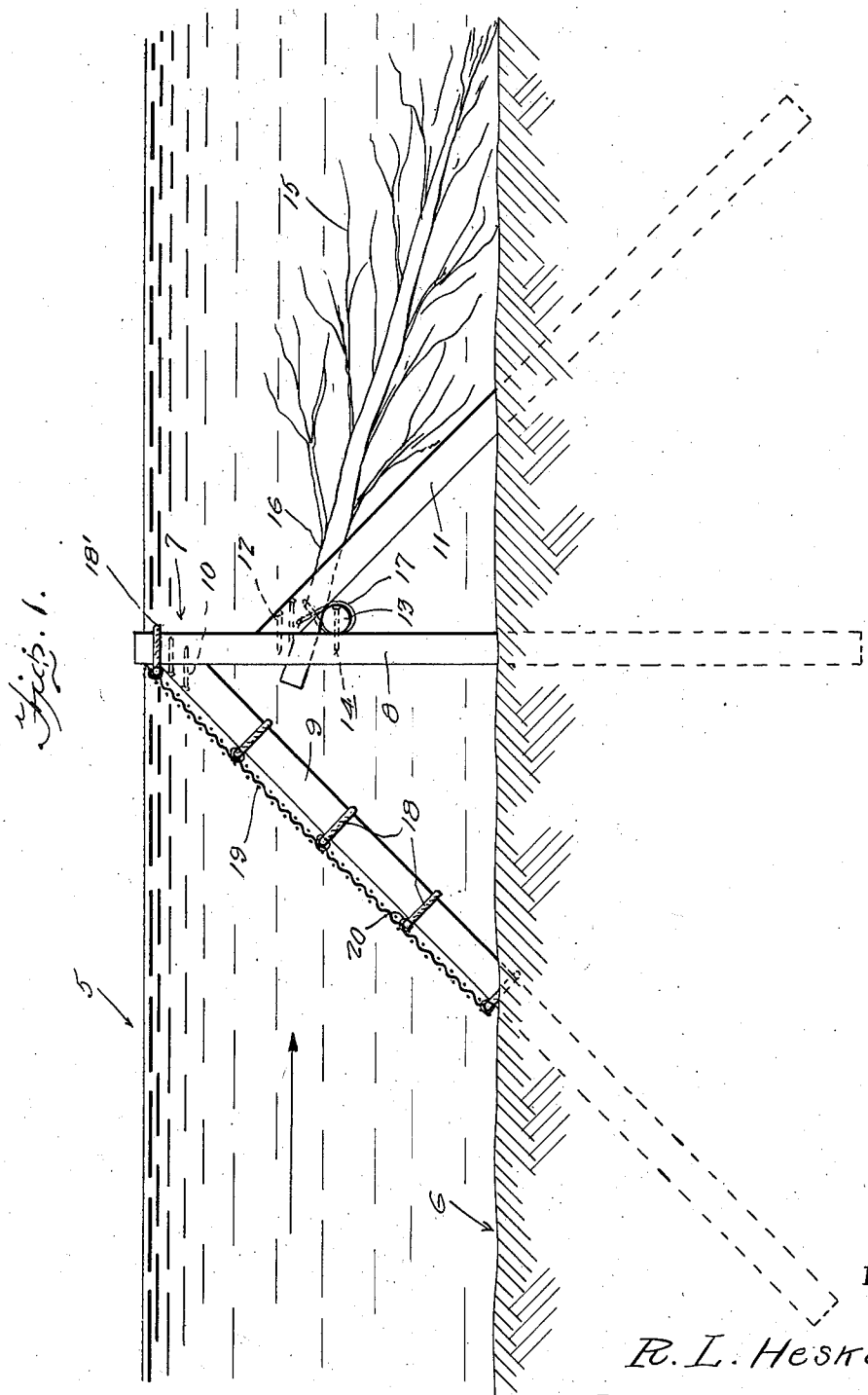
Sept. 22, 1936. R. L. HESKETT 2,055,150

WATER DEFLECTOR

Filed April 11, 1936 3 Sheets-Sheet 1



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WATER DEFLECTOR

Filed April 11, 1936 3 Sheets-Sheet 2

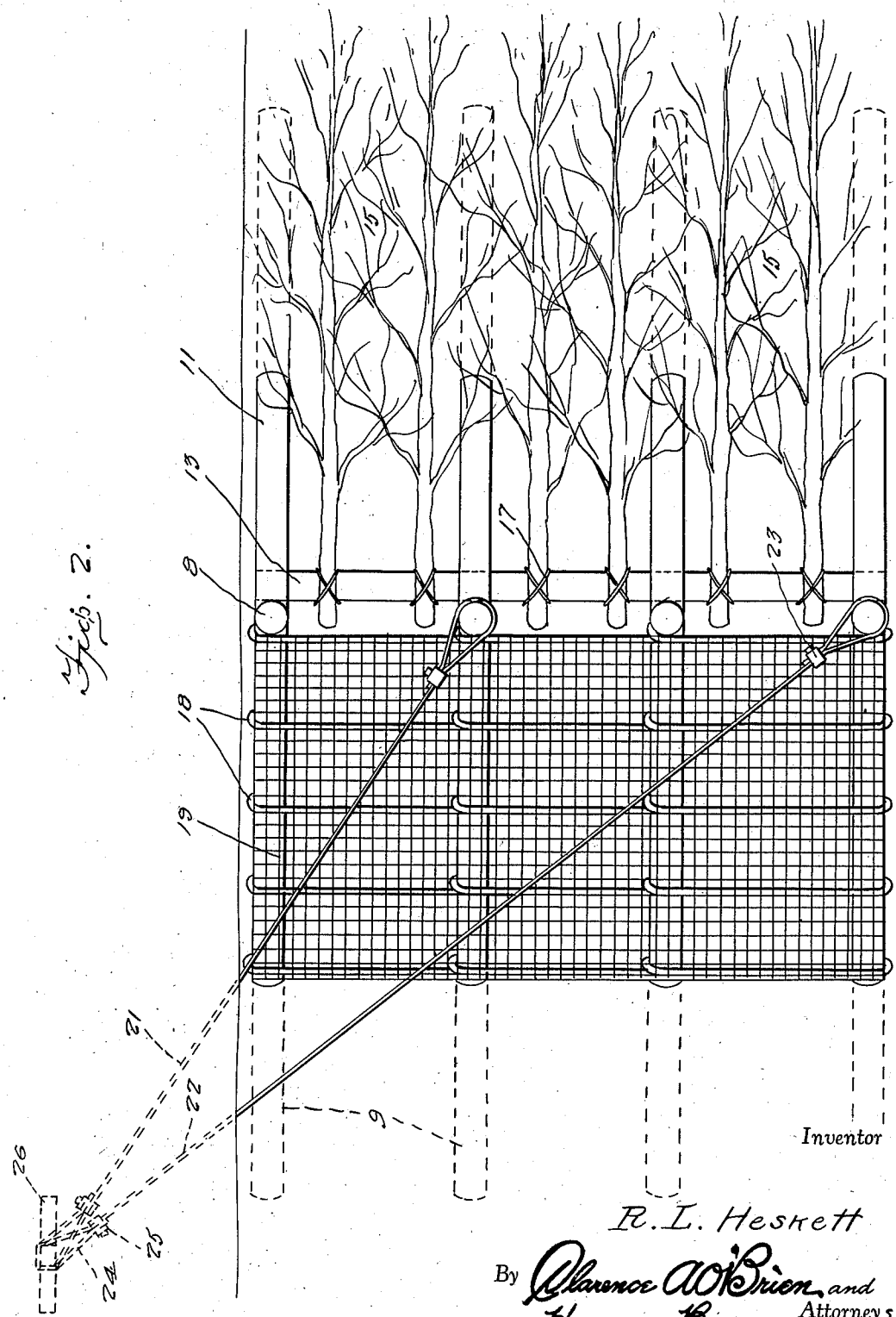


Fig. 2.

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WATER DEFLECTOR

Filed April 11, 1936 3 Sheets-Sheet 3

Fig. 3.

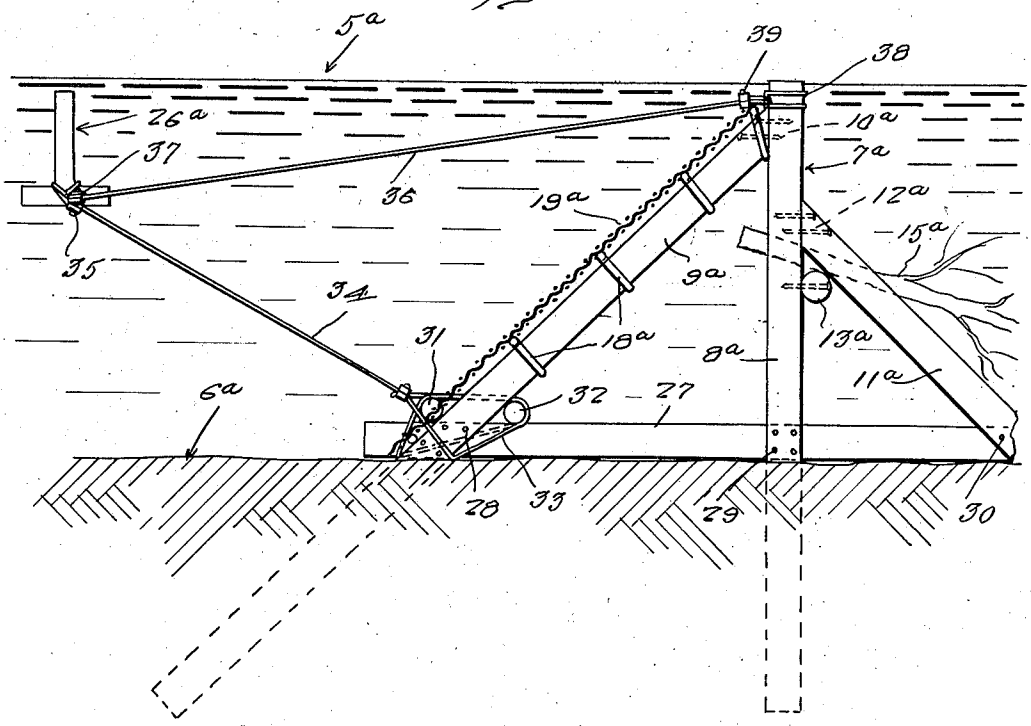
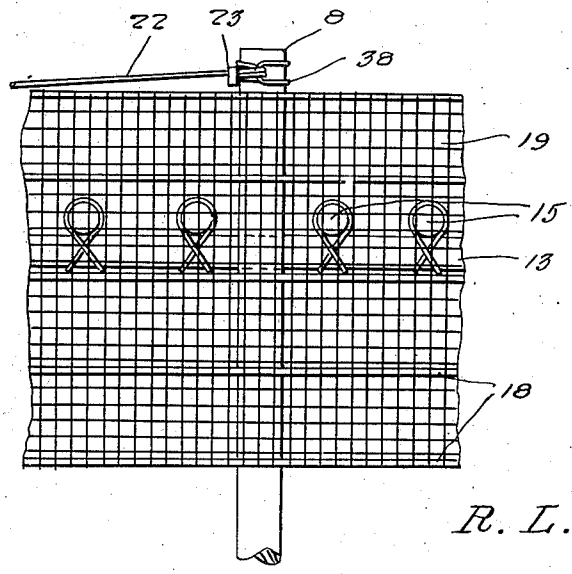


Fig. 4.



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2,055,150

WATER DEFLECTOR

Russell Lee Heskett, McCook, Nebr.

Application April 11, 1936, Serial No. 73,953

3 Claims. (Cl. 61—3)

My invention relates generally to water deflecting means for use in rivers and streams, and particularly to devices of this character comprising frames formed of timber, mounting various water retarding and deflecting means, and an important object of my invention is to provide generally adaptable water deflectors of the character indicated which can be easily and inexpensively constructed and installed.

Another important object of my invention is to provide devices of the character indicated above which can be readily adapted for use on mud or sand bottoms or hard strata bottoms and which can be constructed in different lengths and heights to suit requirements.

Other important objects of my invention will be apparent from a reading of the following description in connection with the drawings, wherein for purposes of illustration I have shown preferred embodiments of my invention.

In the drawings:—

Figure 1 is a side elevational view showing one embodiment of the invention adapted for installation on mud or sand bottoms, and showing the top of the device approximately on a level with the top of the bank of the stream or river.

Figure 2 is a top plan view of Figure 1.

Figure 3 is a view similar to Figure 1 of another embodiment of the invention especially adapted for hard strata stream or river bottoms.

Figure 4 is an elevational view of the front of a portion of either of the embodiments showing the screen and the front ends of the tree trunks which are mounted on the frame and extend rearwardly in a downstream direction.

Referring in detail to the drawings, and particularly to the soft bottom type of water deflector shown in Figures 1 and 2, the numeral 5 generally designates the level of the stream bank, the numeral 6 generally designates the soft sand or mud bottom of the stream, and the numeral 7 generally designates the embodiment which comprises the frame which is composed of the substantially perpendicular pilings 8, the forwardly and downwardly declining timbers 9 which are fastened by spikes or the like 10 to the upper part of the pilings 8 which have their upper ends approximately on a level with the bank 5. The lower parts of the pilings 8 and the lower parts of the timbers 9 are sunk a considerable distance in the soft bottom 6 so as to gain adequate support therefrom. Rearwardly declining timbers 11 are fastened to the rear side of a portion of the pilings 8 intermediate the upper and lower ends thereof as shown in Figure 1 by means of spikes 12 and have their lower portion thereof buried in the bottom 6. The upper part of the timbers 11 rest against the upper side of a timber cross bar 13 which is mounted by means of spikes 14 to the rear face of the pilings 8.

Trees 15 have their trunks 16 lying on top of the cross bar 13 and intermediate the timbers 11 and are fastened to the cross bar by means of wire fastenings 17 which are looped around the cross bar 13 and crossed over the tops of the trunks 16 as shown in Figure 2, whereby the trees are held in a rearwardly declining position with their tops resting on the bottom 6 of the stream or river.

Strung in vertically spaced manner between adjacent ones of the timbers 9 are horizontal cables 18 which are fastened to the respective timbers 9 by half hitches and cable clamps. The top cables are designated 18'. Across the front of the various cables 18 and 18' is laid the wire mesh screen which is generally designated 19 and which extends from the top of the frame to a point close to the bottom 6 of the stream or river. The screen 19 is tied to the cables by wiring which is generally designated 20 whereby the screen is securely fastened in place. The trees 15 are provided in sufficient number and are sufficiently closely spaced to actually retard the flow of the stream. The arrow in Figure 1 shows the direction of the flow of the stream, relative to the water deflector.

Looped around spaced ones of the perpendicular pilings 8 at the upper ends thereof are anchor cables 21 and 22 which are provided in suitable numbers, the loops being brought back along the cable and fastened with cable clamps 23 as shown in Figure 2. The opposite ends are looped as indicated by the numerals 24 and likewise brought back along the cable and clamped with cable clamps 25, these loops being placed around a deadman or anchor 26 which is buried in the bank 5. The anchor cables strengthen the resistance of the deflector to the push of the water in the downstream direction and prevent also lateral shifting.

Referring now to the embodiment of the invention shown in Figure 3 and which is especially adapted for use on a hard impenetrable bottom 6a, the top of the bank is designated 5a and the device itself is generally designated 7a and includes the vertical or perpendicular pilings 8a, the forwardly and downwardly leaning timbers 9a and the rearwardly declining timbers 11a as well as the cross bar 13a. In the case of the present embodiment the lower part of the timbers 9a, of the pilings 8a, and of the timbers 11a

are much shorter and have less penetration into the bottom of the stream. In addition to these members the embodiment shown in Figure 3 has the horizontal timbers **27** which rest on the top of the bed of the stream and are connected by means respectively designated **28, 29,** and **30** to the timbers *9a, 8a,* and *11a.* Additional horizontal cross members **31** and **32** are laid in front of and in back of the timbers *9a* and on top of the horizontal timbers **27** and around these and around the timbers **27** and the timbers *9a* are looped in dual manner as indicated by the numeral **33** the depressed end of the lower anchor cable **34** which has its upper end looped and clamped as indicated by the numeral **35** to the deadman *26a* which is buried in the bank *5a.* Upper cables **36** have their front ends looped and clamped as indicated by the numeral **37** to the deadman *26a* and have their rearward ends doubled and hitched around the tops of the pilings *8a* as indicated by the numeral **38,** with the ends brought forward along the cable **36** and clamped with a cable clamp **39.** These arrangements of the anchor cables **34** and **36** prevent backward tipping of the frame of the device as well as lateral and rearward shifting in horizontal planes.

Although I have shown and described herein preferred embodiments of my invention, it is to be definitely understood that I do not desire to limit the application of the invention thereto, and any change or changes may be made in the materials, and in the structure and arrangement of the parts, within the spirit of the invention and the scope of the subjoined claims.

What is claimed is:—

1. A water deflector for use in a stream having a bottom and a bank, said deflector comprising a frame engaged with the bottom and including an upstream screen and downstream water retarding means, said frame including perpendicular piling penetrating the bottom, forwardly declining timbers and rearwardly declining timbers penetrating the bottom, and horizontal timbers resting on the bottom and connected to and between said pilings, said forward timbers and said rearward timbers.

2. A water deflector for use in a stream having a bottom and a bank, said deflector comprising a frame engaged with the bottom and including an upstream screen and downstream water retarding means, said frame including perpendicular piling penetrating the bottom, inclined pilings secured at one end to the perpendicular piling and having their other ends penetrating the bottom, and a cross bar attached to said pilings and to which said downstream water retarding means are trailingly attached, said crossbar being positioned within the angle formed by said inclined piling and perpendicular piling so as to lie under the inclined piling.

3. A water deflector for use in a stream having a bottom and a bank, said deflector comprising a frame engaged with the bottom and including an upstream screen and downstream water retarding means, said frame including perpendicular piling penetrating the bottom, inclined pilings secured at one end to the perpendicular piling and having their other ends penetrating the bottom, and a cross bar attached to said pilings and to which said downstream water retarding means are trailingly attached, said means comprising trees, said crossbar being positioned within the angle formed by said inclined piling and perpendicular piling so as to lie under the inclined piling.

RUSSELL LEE HESKETT.