(No Model.) 2 Sheets—Sheet 1.

S. B. OLNEY.

MOVABLE JETTY.

No. 560,530. Patented May 19, 1896.

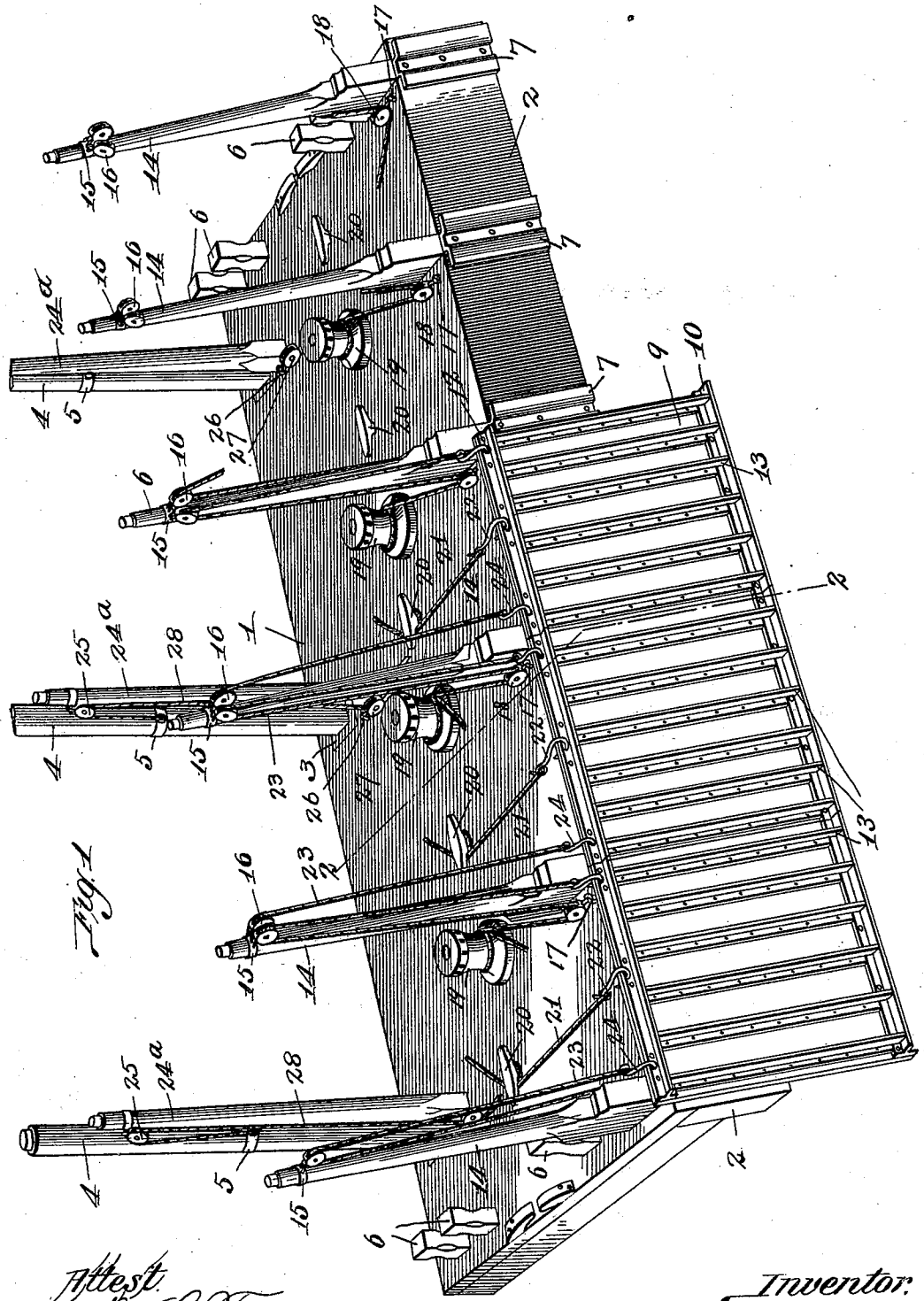

Fig. 1.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 2

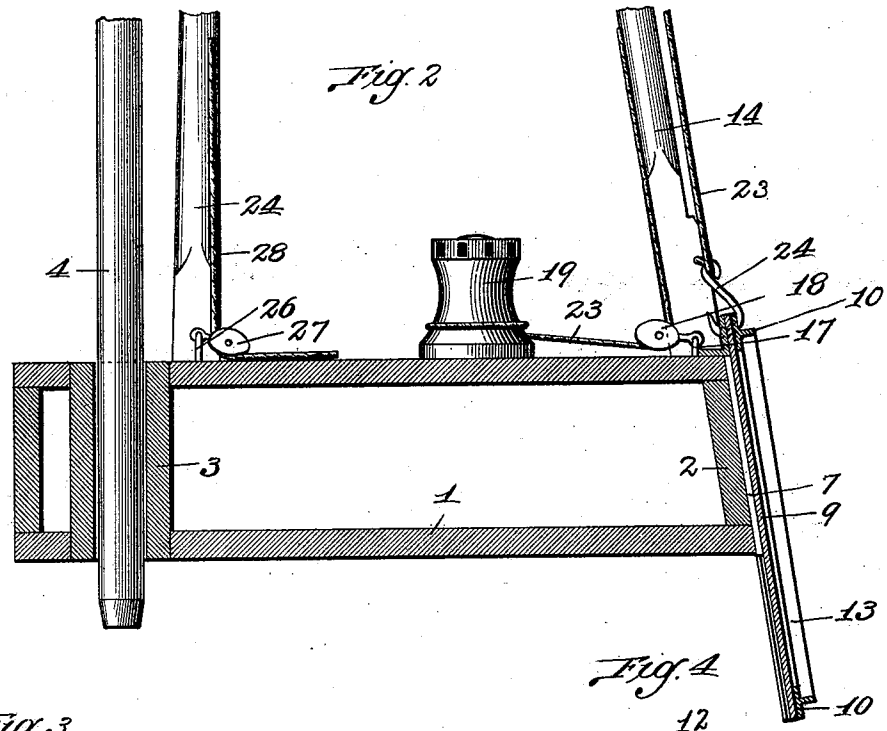


Fig. 3

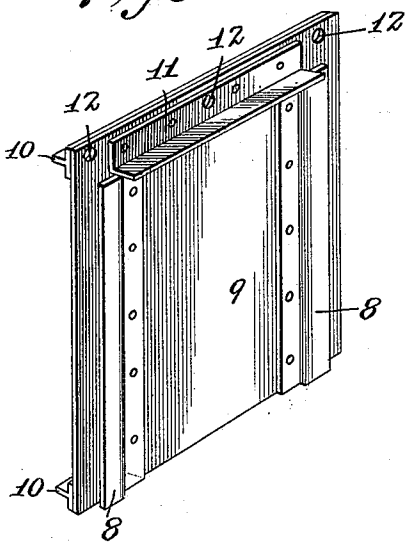
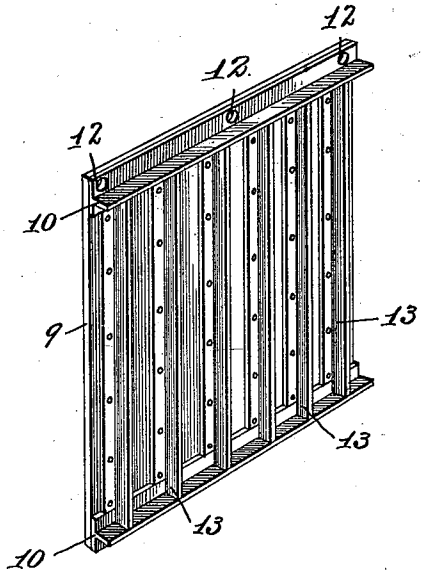


Fig. 4



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UNITED STATES PATENT OFFICE.

SILAS B. OLNEY, OF ST. CHARLES, MISSOURI.

MOVABLE JETTY.

SPECIFICATION forming part of Letters Patent No. 560,530, dated May 19, 1896.

Application filed January 13, 1896. Serial No. 575,375. (No model.)

To all whom it may concern:

Be it known that I, SILAS B. OLNEY, of the city of St. Charles, St. Charles county, State of Missouri, have invented certain new and useful Improvements in Movable Jetties, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved movable jetty; and it consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

In the drawings, Figure 1 is a view in perspective of one section of the movable jetty as contemplated by my invention. Fig. 2 is a transverse sectional view taken approximately on the indicated line 2 2 of Fig. 1. Fig. 3 is a view in perspective of the rear side of one of the plates made use of in carrying out my invention. Fig. 4 is a perspective view of the front side of this plate.

Referring by numerals to the accompanying drawings, 1 indicates a rectangular watertight wooden structure, which may be of any size desired, the front wall 2 of said structure being slightly inclined. Extending vertically through the structure 1, at points adjacent its rear side, are wells 3, through which pass posts 4, used for anchoring the jetty when the same has been properly located. Carried by said posts 4, at points adjacent their centers, are rings 5. Extending upwardly from the top of the structure 1, at each end thereof, are stationary posts 6, around which cables or chains pass which lash a series of the jetties together. Horizontally arranged upon the face of the front wall 2 of the structure 1, at equal distances apart, are guide-plates 7, the same being for the purpose of engaging the vertically-arranged bars 8, that are riveted to the rear sides of plates 9. These plates 9 may properly be termed "deflecting-plates," for the reason that the water of the stream in which the jetty is located is deflected or turned by said plates. Said plates are constructed, preferably, of rectangular sections of sheet metal, and are provided with horizontally-extending strengthening-ribs 10 along the top and bottom edges of their front faces and with an angle-bar 11 along the top edge of their rear faces, said angle-bar being intended as a stop to limit the downward movement of said plates. Formed in the top edge of each of the plates 9 is a series of apertures 12, and riveted to the front face of each of said plates are vertically-extending strengthening-ribs 13.

Extending upwardly and rearwardly from the forward edge of the structure 1, immediately in the rear of each of the guide-plates 7, are posts 14. Carried by the upper ends of each of these posts 14 is a ring 15, from which depends a pair of blocks 16. Swiveled to hooks 17 at the foot of each of the posts 14 is a block 18, and arranged for rotation upon top of the structure 1, immediately in the rear of each of the posts 14, is a windlass 19. Cleats 20 are located upon the top of the structure 1 between each of said windlasses, to which cleats 20 are made fast the cables 21, the forward ends of which carry the hooks 22, that engage in the apertures 12 at the tops and centers of each of the plates 9. Cables 23 are provided with hooks 24 at their lower ends, which hooks engage in the apertures at the tops and sides of the plates 9. These cables 23 extend upwardly over the pulleys carried by the blocks 16, from thence downwardly around the pulleys carried by the blocks 18, and from thence rearwardly and are wound upon the windlasses 19.

Fixed to and extending upwardly from the top of the structure 1, immediately in front of each of the wells 3, is a post 24^a, to the upper end of which is attached a block 25. Swiveled to hooks 26, located on the top of the structure 1, adjacent the base of each of the posts 24^a, are blocks 27. Cables 28 are fixed to the rings 5, carried by the posts 4, said cables extending from thence around the pulleys carried by the blocks 27, these cables being normally made fast to certain of the cleats 20 and at times being wound upon certain of the windlasses 19.

In the practical use of my improved movable jetty the desired number of the structures 1 are floated or towed to the points in the stream where it is desired to form the jetty, the plates 9 having previously been raised until their lower ends are brought into a plane above the under sides of said structures. These plates are raised by operating the windlasses 19 in the proper direction upon which the cables 23 wind, said cables 23 being hooked to said plates 9. When the struc-

tures have been properly positioned, the ends of the same are lashed together by passing cables or chains around the posts 6. The structures 1 are now anchored in proper position by passing the cables 28 downwardly direct from the rings 5, around the pulleys carried by the blocks 27, and from thence passing said cables onto the windlasses 19. As said windlasses are rotated in the usual manner said cables 28 will wind thereupon, and the anchored posts 4 will be moved downwardly through the wells 3 and the lower ends of said posts engage or pass into the river-bed. This firmly anchors the structures 1, after which the plates 9 are allowed to lower, this being done by loosening and paying out the cables 21 and 23. When said plates have reached their lowermost limit of movement, the cables 21 are drawn taut and made fast to the cleats 20. These cables, when so positioned, act as braces for the tops of the plates 9. When it is desired to raise the anchor-posts 4, the cables 28 are passed upwardly over the pulleys carried by the blocks 25, from thence downwardly and fixed to the rings 5. By now winding the cables 28 upon the windlasses 19 the posts 4 will be drawn upwardly through the wells 3 and their lower ends disengaged from the river-bed.

A movable jetty of my improved construction is easily manipulated, the deflecting-plates can be readily elevated to any height desired within their limit of movement, and said jetty is very substantial and effective in use.

I claim—

1. A movable jetty, constructed with a floating structure, and a series of independently-operating vertically-adjustable deflecting-plates carried by one side of said structure each of said deflecting-plates being provided with strengthening-ribs along its top and bottom front face, vertically-arranged strengthening-ribs upon its front face, vertically-arranged bars upon its rear face, a stop arranged along the top edge of its rear face, and a series of apertures along its top edge to be engaged by the hooks of the operating-cables.

2. A movable jetty, constructed with a floating structure, a series of independently-operating vertically-adjustable deflecting-plates carried by one side of said structure, each of said deflecting-plates being provided with strengthening-ribs along its top and bottom front face, vertically-arranged strengthening-ribs upon its front face, vertically-arranged bars upon its rear face, a stop arranged along the top edge of its rear face, and a series of apertures along its top edge to be engaged by the hooks of the operating-cables and means carried by said structure for raising and lowering said plates.

3. A movable jetty, constructed with a floating structure, a series of independently-operating vertically-adjustable plates carried by one side of said structure, means carried by the floating structure for raising and lowering said plates, and a series of anchor-posts passing through said structure, each of said deflecting-plates being provided with strengthening-ribs along its top and bottom front face, vertically-arranged strengthening-ribs upon its front face, vertically-arranged bars upon its rear face, a stop arranged along the top edge of its rear face, and a series of apertures along its top edge to be engaged by the hooks of the operating-cables.

4. A movable jetty, constructed with a floating structure, a series of independently-operating vertically-adjustable deflecting-plates carried by one side of said structure, a series of anchor-posts passing through said structure, and means carried by said structure for raising and lowering the deflecting-plates and operating the anchor-posts each of said deflecting-plates being provided with strengthening-ribs along its top and bottom front face, vertically-arranged strengthening-ribs upon its front face, vertically-arranged bars upon its rear face, a stop arranged along the top edge of its rear face, and a series of apertures along its top edge to be engaged by the hooks of the operating-cables.

5. A movable jetty, constructed with a floating structure, a series of guide-strips arranged upon one side of said structure, deflecting-plates arranged to move vertically between said guide-strips, each of said deflecting-plates being provided with strengthening-ribs along its top and bottom front face, vertically-arranged strengthening-ribs upon its front face, vertically-arranged bars upon its rear face, a stop arranged along the top edge of its rear face, and a series of apertures along its top edge to be engaged by the hooks of the operating-cables, a series of anchor-posts passing through said structure, a series of posts extending upwardly from said structure, blocks carried by said posts, a series of windlasses operating upon top of said structure, and cables fixed to the deflecting-plates, to the anchor-posts and passing through the blocks and to the windlasses.

6. In a movable jetty, a deflecting-plate provided with strengthening-ribs along its top and bottom front face, vertically-arranged strengthening-ribs upon its front face, vertically-arranged bars upon its rear face, and a stop arranged along the top edge of its rear face, said plate being constructed with a series of apertures along its top edge to be engaged by hooks of the operating-cables.

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

SILAS B. OLNEY.

Witnesses:
EDWARD E. LONGAN,
MAUD GRIFFIN.