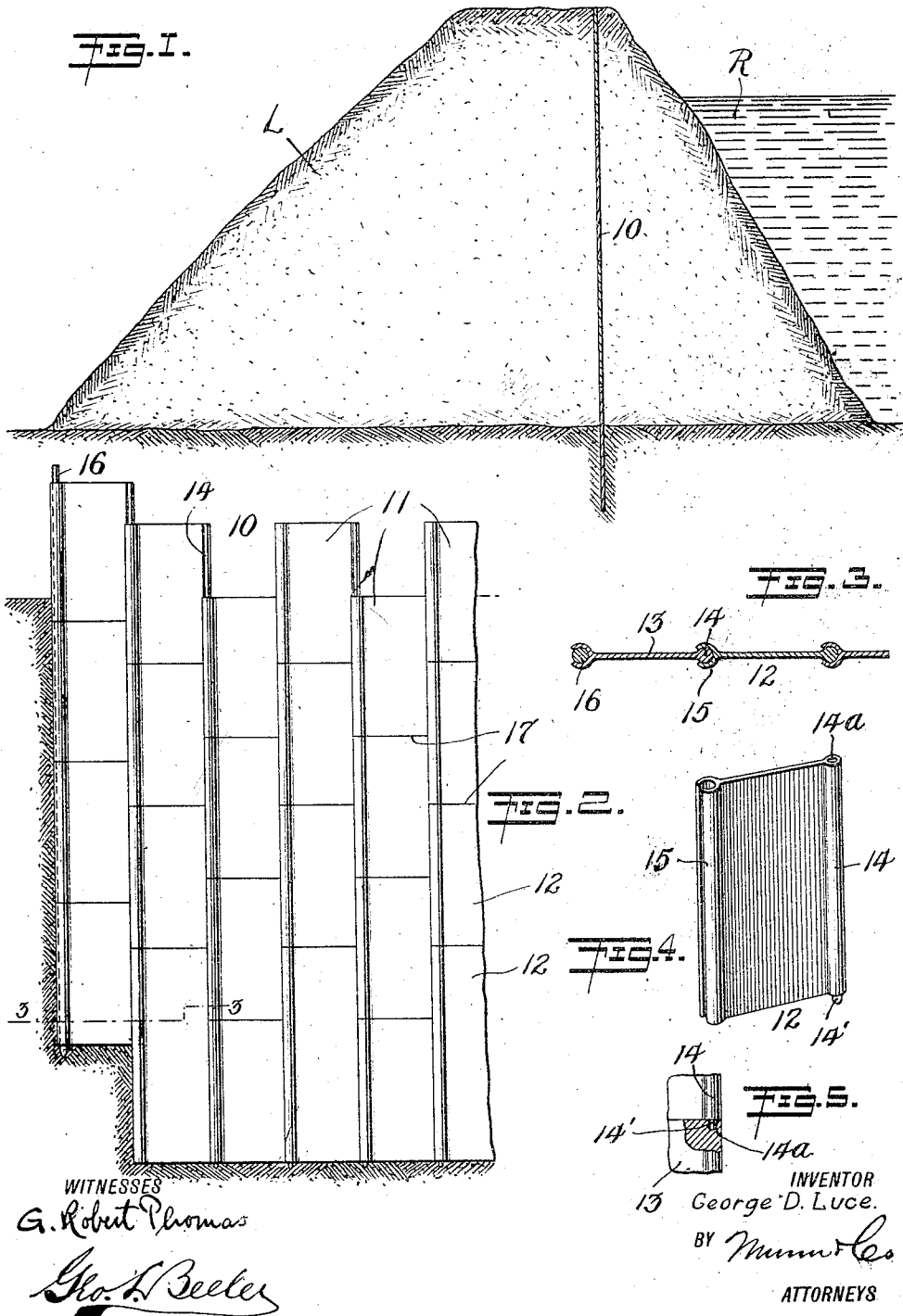


G. D. LUCE.
CORE PLATE FOR LEVEES.
APPLICATION FILED AUG. 9, 1912.

1,058,077.

Patented Apr. 8, 1913.



UNITED STATES PATENT OFFICE.

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CORE-PLATE FOR LEVEES.

1,058,077.

Specification of Letters Patent.

Patented Apr. 8, 1913.

Application filed August 9, 1912. Serial No. 714,188.

To all whom it may concern:

Be it known that I, GEORGE D. LUCE, a citizen of the United States, and a resident of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Core-Plate for Levees, of which the following is a full, clear, and exact description.

This invention relates to means for damming or controlling the flow of water, and has particular reference to means of this character adapted for reinforcing levees or the like, whereby it is impossible for such embankments to be damaged by the operations of musk rats or craw fish.

A further object of the invention is to provide a means for strengthening levees already built and also to provide a means for adding to the height thereof in a simple, convenient and reliable manner.

The foregoing and other objects of this invention will be hereinafter more fully described and claimed and illustrated in the drawings accompanying this specification in which like characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a vertical transverse section of a levee fitted in accordance with this invention; Fig. 2 is a fragmentary longitudinal section of a levee showing my improved construction in elevation; Fig. 3 is a transverse sectional detail on the line 3—3 of Fig. 2; and Figs. 4 and 5 are details hereinafter described.

Referring particularly to the drawings, the letter L indicates a section of a levee adapted to prevent the overflow from a body of water R. In this levee is shown a metallic structure 10 shown in particular in the remaining figures.

The metallic reinforcement above set forth comprises a series of panels 11, each panel comprising a series of plates 12 arranged one above another vertically. Each plate comprises a flat web 13, a marginal rib 14 on one side and a slotted head 15 on the opposite side. The rib 14 is provided at one end with a projecting finger or stud 14' and at the other end with a socket 14" adapted to receive the stud 14' of the next adjoining plate. By this means all of the ribs 14 of each panel are maintained in substantial vertical alinement. The slotted head 15 is adapted to receive the rib 14 of the next

adjoining panel when the structure is in its completed form.

The manner of using this improved device is substantially as follows: Any desired number of plates 12 are arranged one above another, as above described, in accordance with the height of the reinforcement desired. With the plates arranged in substantially the same plane, a rigid bar 16 is inserted into the alined heads 15 of said panel. The panel thus arranged is then driven into place, as, for instance, by the use of a pile driver. The plates being comparatively thin, and the soil at such places being of a comparatively soft nature, the panels may thus be readily driven. After a panel is driven, the bar 16 is withdrawn from the heads 15 and a second panel is prepared and arranged with the ribs 14 thereof inserted into the upper end of the uppermost head 15 of the last panel. The bar 16 then being inserted in the heads of the second panel, said second panel will be driven as before. It is preferable, as indicated in Fig. 2, for the several plates of the respective panels to be arranged with broken joints, as indicated at 17. If desired, the meeting edges of adjacent sections and adjacent panels may be filled with cement or other material for the purpose of rendering the reinforcement waterproof. As a convenient manner for thus uniting adjacent panels, the hole formed by the alined heads 15 of the panel last driven may be filled with a soft, thin cement, whereby, when the next panel is driven into place, the meeting surfaces of the panels will be subjected to the action of the cement.

The plates may be made of any suitable material, preferably metal, and may be made of any suitable size or weight, depending upon the character of the service to be performed thereby.

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

1. The herein described metallic reinforcement for levees comprising a connected succession of panels, each panel comprising a series of metal plates arranged one above another, each plate having a projection and also having a socket adapted to receive the projection of the next adjacent plate.

2. The herein described reinforcement for levees comprising a plurality of panels, each

panel comprising a series of vertical plates arranged one above another, each plate having along one edge a head and along the opposite edge a rib, the ribs of one panel fitting into the heads of the next panel, and each rib having a lug and also having a socket adapted to receive the lug of the next adjacent plate, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE D. LUCE.

Witnesses:

JOHN STUMPH,
C. S. HERO.