(No Model.)

# L. WEIHE.

## LEAK STOPPER FOR VESSELS.

No. 381,302. Patented Apr. 17, 1888.

Fig. 1.

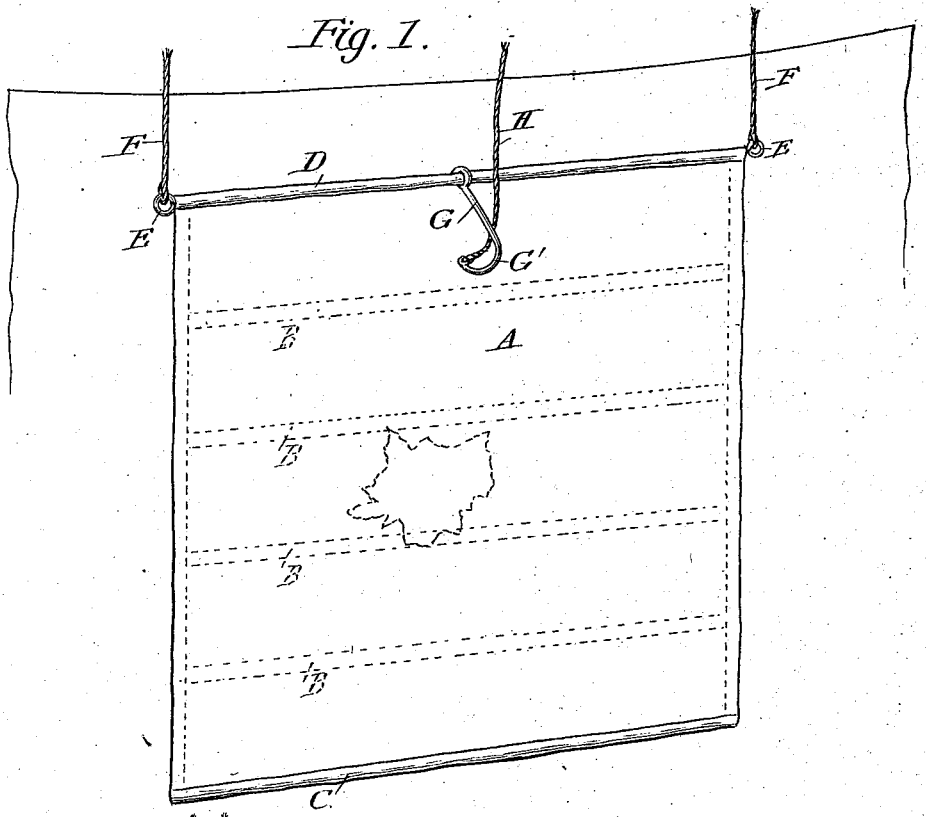



Fig. 2.

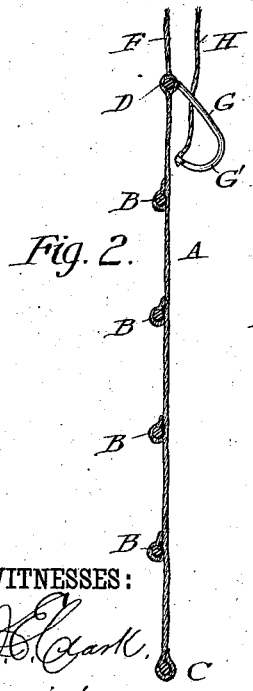
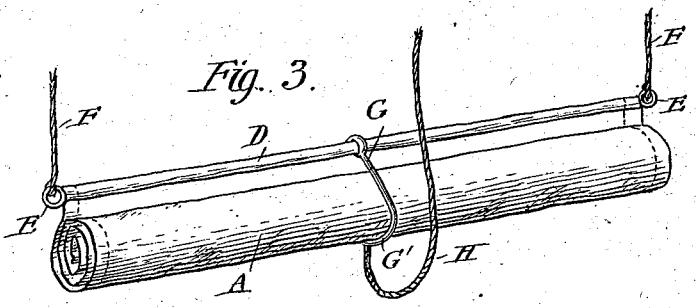



Fig. 3.

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LOUIS WEIHE, OF CONNELLSVILLE, PENNSYLVANIA.

## LEAK-STOPPER FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 381,302, dated April 17, 1888.

Application filed July 8, 1887. Serial No. 243,793. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS WEIHE, of Connellsville, in the county of Fayette and State of Pennsylvania, have invented a new and Improved Leak-Stop for Vessels, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device for closing a leak in the side of a marine vessel.

The invention consists of a canvas sheet provided with horizontal stay-rods placed suitable distances apart, ropes for suspending the canvas sheet, and means for releasing the rolled-up canvas sheet, so that the latter will cover the leak fully.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improvement as applied. Fig. 2 is a vertical cross-section of the same, and Fig. 3 is a perspective view of the same when rolled up ready to be applied to a leak.

The canvas sheet A, of suitable size and strength, is provided with the horizontal stay-rods B, placed suitable distances apart and fastened to the sheet A in any suitable manner. The canvas sheet A is also provided with the bottom stay-rod, C, and the top stay-rod, D, which latter projects slightly beyond the ends of the sheet and forms the eyes E, to which are secured the ends of the ropes F, by which the leak-stop is suspended over the leak in the vessel.

In the middle of the top stay, D, is secured a hook, G, which extends downward and inward. At its hook end G′ it is formed with an eye, in which is secured one end of the rope H, which is for releasing the rolled-up canvas sheet A, as hereinafter more fully described.

The operation is as follows: When it is necessary to use the leak-stop, then its canvas sheet A is rolled up, as shown in Fig. 3, the roll being placed in the hook end G′ of the hook G, with the rope H extending in front of the leak-stop, as illustrated. When the vessel has sprung a leak by a collision or other accident, the rolled-up leak-stop is placed over the side of the vessel near the leak in such a manner that when unrolled it will cover the leak fully, as illustrated in Fig. 1.

The rolled-up leak-stop is suspended over the side of the ship by the ropes F, which are made fast on deck, and then the rope H, which is drawn over the front of the rolled-up leak-stop, is also secured on the deck of the vessel, after which the ropes F are slackened, so that the weight of the rolled-up canvas sheet A pulls downward on the top stay, D, thus throwing all the weight on the rope H, whereby the top stay, D, moves downward, swinging on its fulcrum at the end of the hook G, which is supported at this end in a fixed position by the rope H. This downward movement of the stay-rod D causes the rolled up canvas sheet to fall out of the hook end G′ of the hook G, and after becoming free throws itself downward along the side of the vessel, thereby passing over the leak in the side of the vessel.

The stay-rods B are on the inside of the canvas sheet A, and prevent the canvas sheet from being pressed into the leak by the water surrounding the vessel, as said stays B rest firmly along the side of the vessel. The leak will thus be effectually stopped. If the leak should be of very large dimensions, so as not to be fully stopped by one canvas sheet A, several of the latter may be employed in the manner above stated.

I am aware that it is not new, broadly, to employ a suspended canvas for temporarily stopping a leakage produced by the crushing in of a portion of the side or other part of a vessel from a collision or other cause.

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

In a leak-stop for marine vessels, the combination, with a canvas sheet and horizontal stay-rods secured to one side of said sheet, of ropes for supporting the uppermost stay-rod, a hook secured in the middle of the uppermost stay-rod and adapted to support the rolled-up canvas sheet, and a rope secured to the end of said hook and used for releasing the hook from the canvas-sheet roll, substantially as shown and described.

LOUIS WEIHE.

Witnesses:
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