

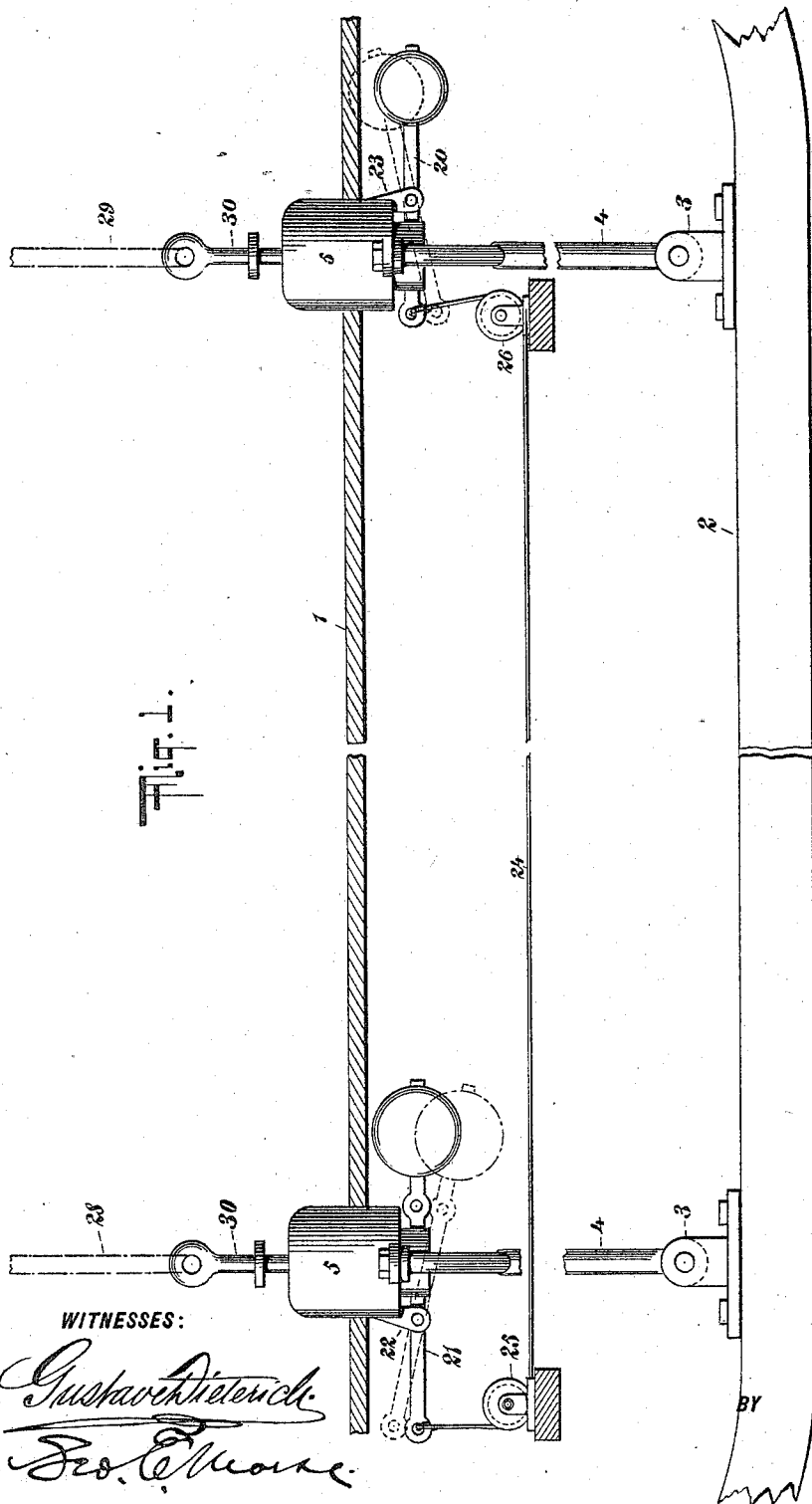
(No Model.)

2 Sheets—Sheet 1.

B. A. W. HOLTORP.
BOAT DETACHER.

No. 579,434.

Patented Mar. 23, 1897.



WITNESSES:

Gustav Dietrich
Geo. E. Moore

INVENTOR

Berkald A. W.
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BY

Briesen & Smith
his
ATTORNEYS.

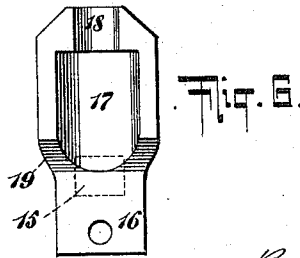
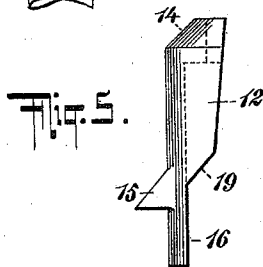
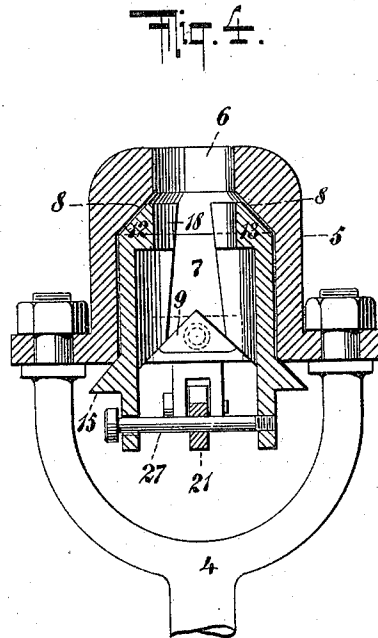
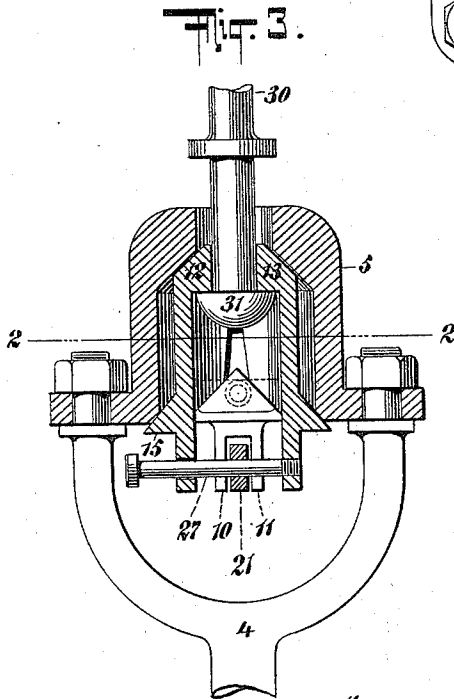
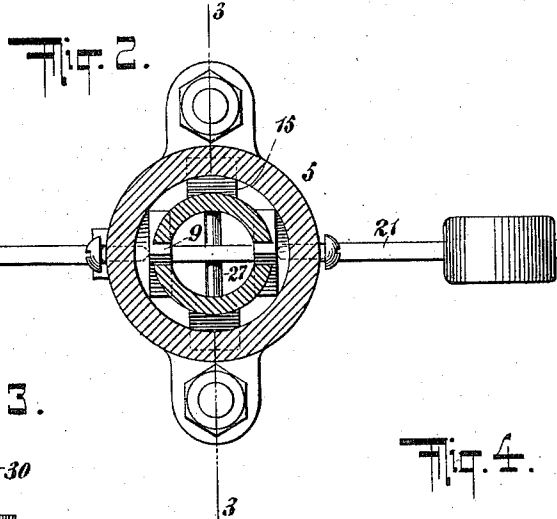
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2 Sheets—Sheet 2.

B. A. W. HOLTORP.
BOAT DETACHER.

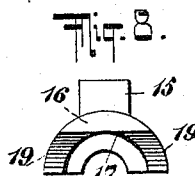
No. 579,434.

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Fig. 7.



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UNITED STATES PATENT OFFICE.

BERTHOLD A. W. HOLTORP, OF HAMBURG, GERMANY, ASSIGNOR OF ONE-HALF TO LEOPOLD KATZENSTEIN, OF NEW YORK, N. Y.

BOAT-DETACHER.

SPECIFICATION forming part of Letters Patent No. 579,434, dated March 23, 1897.

Application filed July 10, 1896. Serial No. 598,634. (No model.)

To all whom it may concern:

Be it known that I, BERTHOLD A. W. HOLTORP, residing at Hamburg, Germany, have invented certain new and useful Improvements in Boat-Detachers, of which the following is a specification.

My invention relates to detachers for life-boats and the like, and has for its object to produce a device which will safely and automatically detach a boat when it has been lowered into the water without liability of swamping the boat.

To this end my invention consists in the construction hereinafter set forth and claimed.

My invention will be understood by referring to the accompanying drawings, in which—

Figure 1 is a side elevation of a boat-detaching device embodying my invention. Fig. 2 is a horizontal section through one of the members of my boat-detaching device, the section being taken on line 2 2 of Fig. 3. Fig. 3 is a vertical section through Fig. 2 on line 3 3 thereof. Fig. 4 is a similar section showing the jaws opened, as will be hereinafter described. Fig. 5 is a side elevation showing one of the jaws in detail. Fig. 6 is a face view of the jaw shown in Fig. 5. Fig. 7 is a plan view looking down upon Fig. 5. Fig. 8 is an underneath plan view looking upward upon the device shown in Fig. 6.

In the drawings, 1 represents the deck of a boat, and 2 the false keel thereof. Bolted to the false keel are brackets 3, to which yoked rods 4 are pivoted, which yoked rods are in turn bolted to the clutch-casings 5, as will clearly appear upon Figs. 1, 3, and 4. The clutch-casing is apertured at 6 and recessed to form the recess 7, which has inclined walls 8, for the purposes hereinafter set forth. Mounted within the clutch-casing is an incline or wedge 9, which has lugs 10 and 11 depending therefrom. Sliding within the casing are a pair of jaws 12 13, one of which is clearly shown in Figs. 5 to 8 as having an incline 14 at the top thereof, a wedge 15 intermediate its ends, and a depending apertured ear 16. The jaws are recessed with a recess 17 and a recess 18. The jaws are also provided with inclines 19 upon the inside thereof. The jaws 12 13 are carried in the recess 7 of the casing 5, the inclines 14 of the said jaws

coöperating with the incline 8 of the casing, the inclines 19 coöperating with the sides of the wedge 9, which serves the purpose of forcing the jaws apart. The wedges 15 on the jaws coöperate with the lower edges of the casing 5. Weighted levers 20 21, the weight of 21 preponderating that of 20, are pivoted in brackets 22 23 adjacent to the casings and are connected by a cord or analogous device 24, which is shown as passing over pulleys 25 26, appropriately mounted, so that one lever swinging will swing the other. The levers 21 22 are connected to the jaws by means of pins 27, over which at least one of the jaws can freely move laterally. Attached to the davit-falls 28 29 are bolts 30 or equivalent devices to be engaged by a clutch, and wherever in this specification I use the term "bolt" I wish to be understood as including such structures as are capable of being engaged by a clutch whose heads 31 (see Fig. 3) can be engaged by the jaws 12 13 when the said jaws are in their highest or constricted position, which position is shown in Fig. 3. When the jaws are in their expanded position, which is shown in Fig. 4, the bolt will freely pass between the jaws and through the opening in the casing.

The operation of my device is as follows: The bolts 30 being entered into the clutch-casings and the parts being in the positions shown in Figs. 1 and 3, the boat may be suspended from the davits, and the weight thereof on the casings 5 will hold the said jaws together by virtue of the interaction of the inclines and wedges. When, however, the boat touches the water, the weight thereof being no longer on the davit-falls, the weighted levers 20 21 will swing into the positions shown in dotted lines, drawing the jaws downward, the said jaws being separated by the wedge 9 into the position shown in Fig. 4, when the bolts 30 will readily pass out of the casing. It will be observed that if one end of the boat only should strike the water no releasing of the boat will occur, as the weight which is on the end of the boat which does not touch the water will not be permitted to descend by reason of the fact that the weight of the boat is on the jaws, it being remembered that the weights being connected together one cannot

move without the other, so that the bolts 30 will still be firmly held by the clutches, so that the boat remains attached to the davit-falls until both bow and stern are afloat.

5 What I claim, and desire to secure by Letters Patent, is—

1. In a boat-detacher, the combination of a bolt, a vertically and laterally moving clutch mechanism, and a lever and incline for so
10 moving the said clutch mechanism, substantially as described.

2. Automatic boat-detaching apparatus, comprising bolts 30, casings 5, movable jaws

within the casings, inclines upon the jaws and upon the casings cooperating with each other 15 to open and close the jaws, weighted levers attached to the jaws and adapted to fall automatically, whereby the jaws will be opened by the fall of the weighted levers and connections between the weighted levers as and for 20 the purposes set forth.

BERTHOLD A. W. HOLTORP.

Witnesses:

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HARRY M. TURK.