

C. W. MOORE.

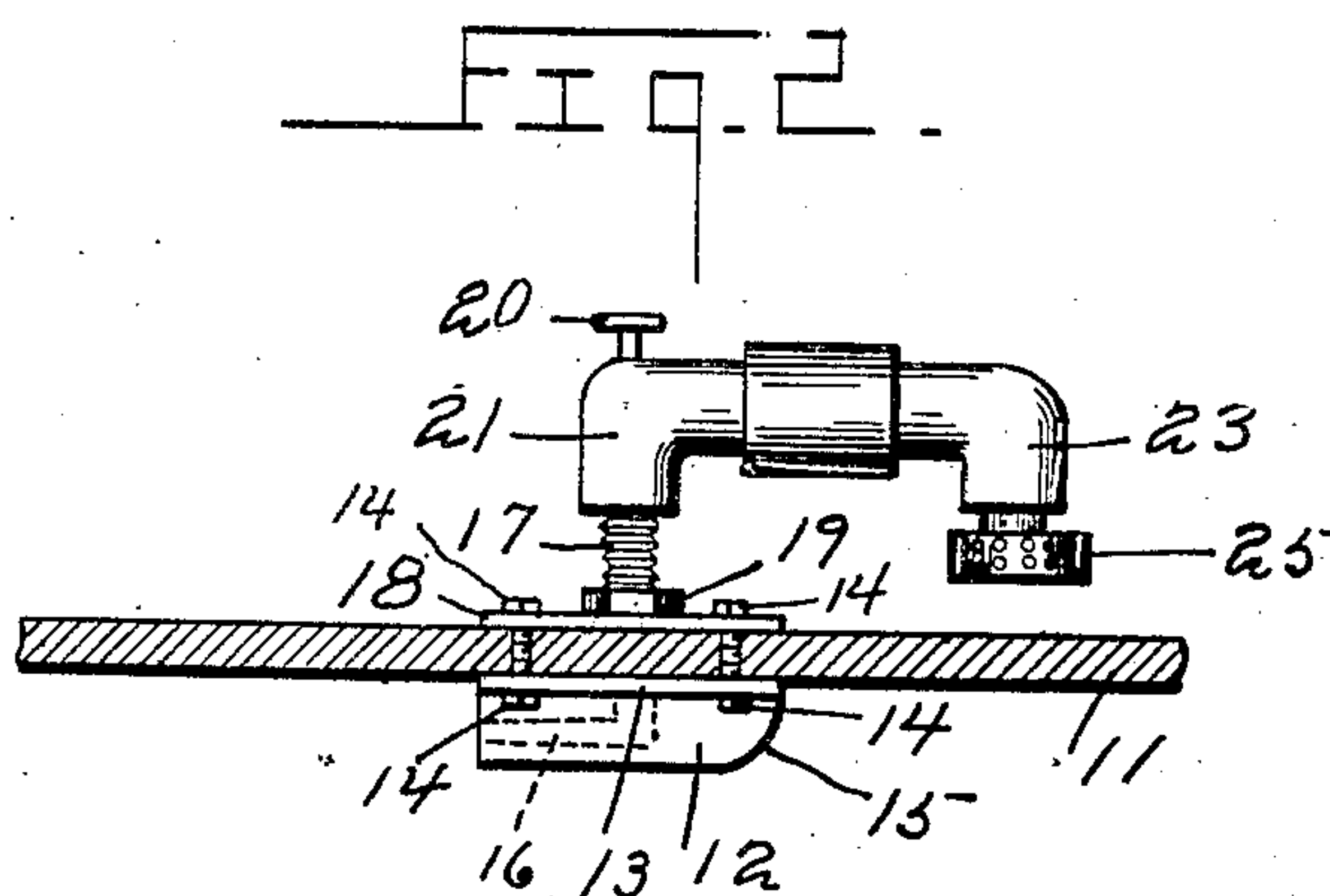
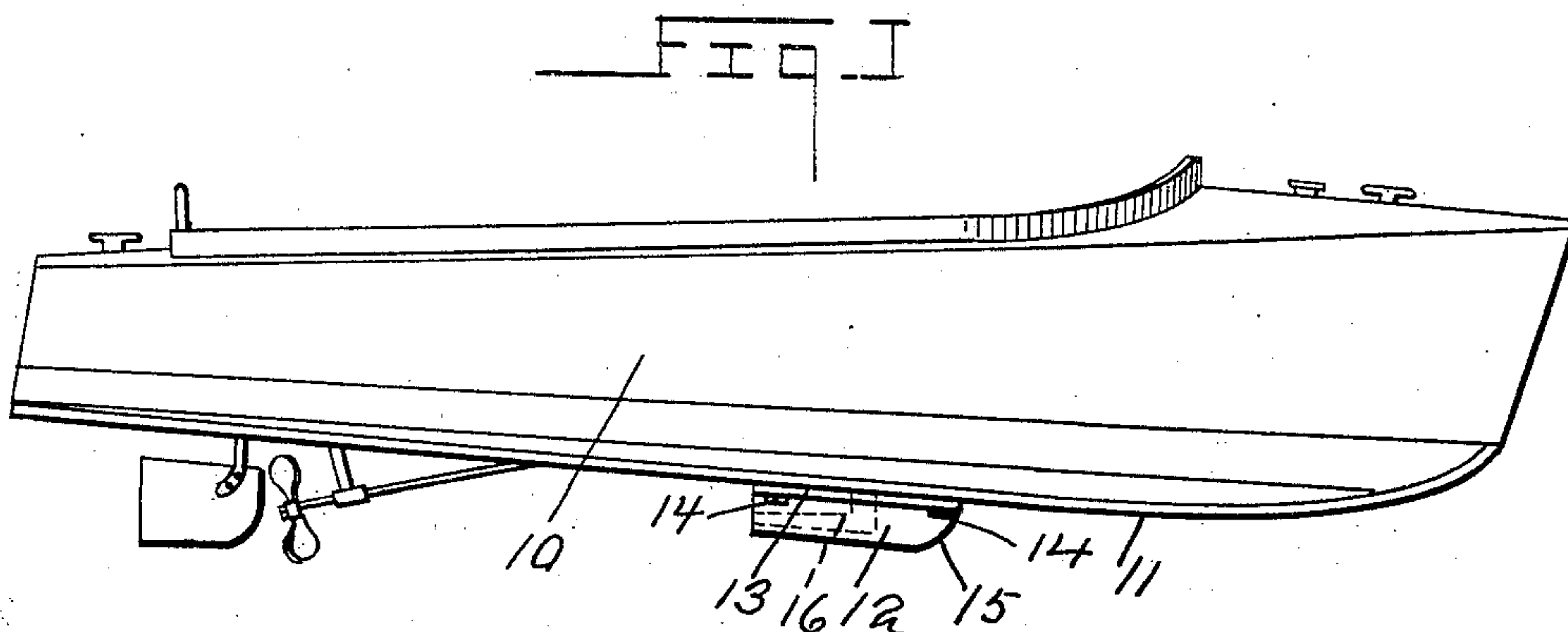
BILGE DRAINER.

APPLICATION FILED NOV. 20, 1908.

931,633.

Patented Aug. 17, 1909.

2 SHEETS—SHEET 1.



Inventor  
Charles W. Moore

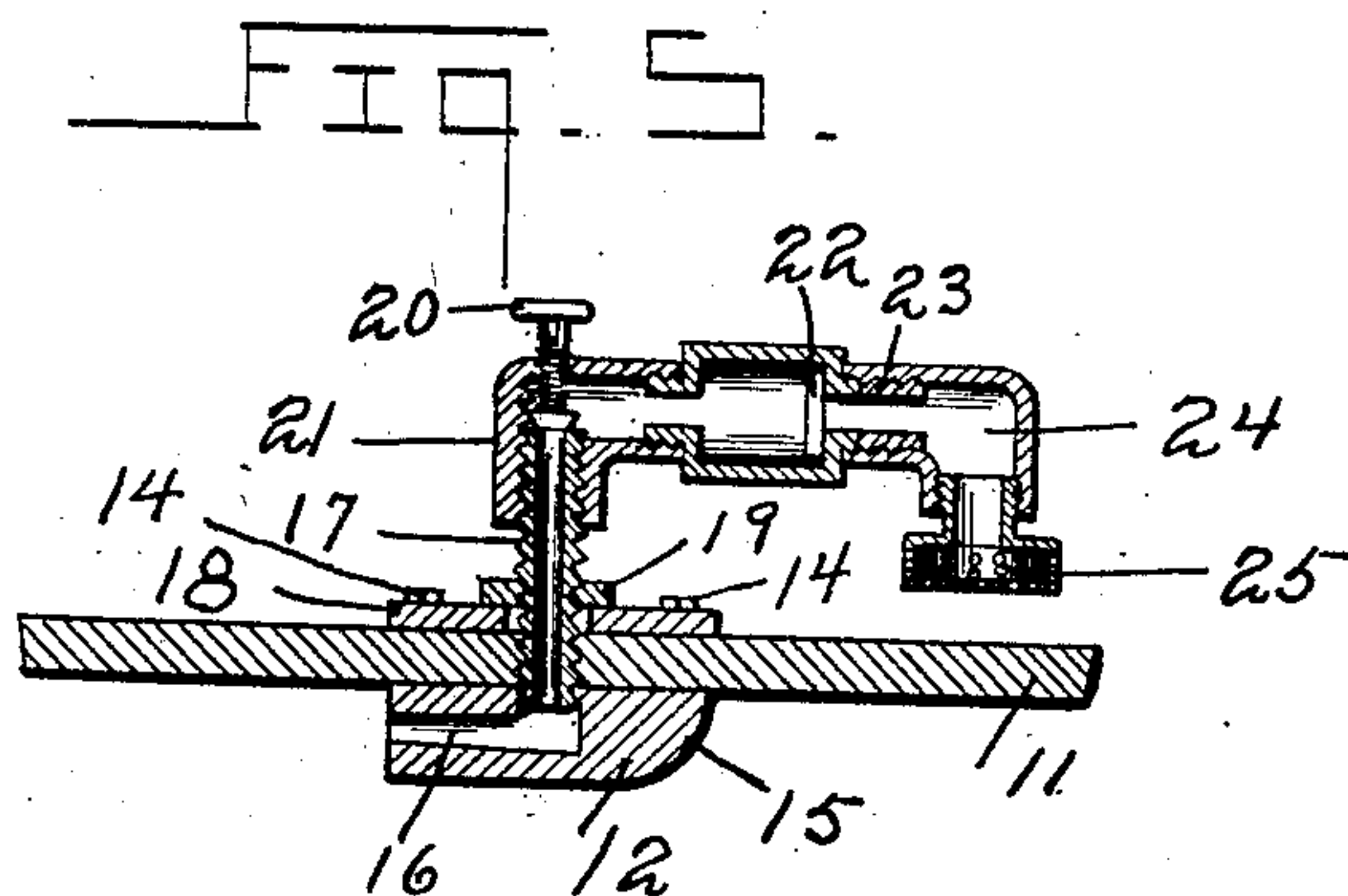
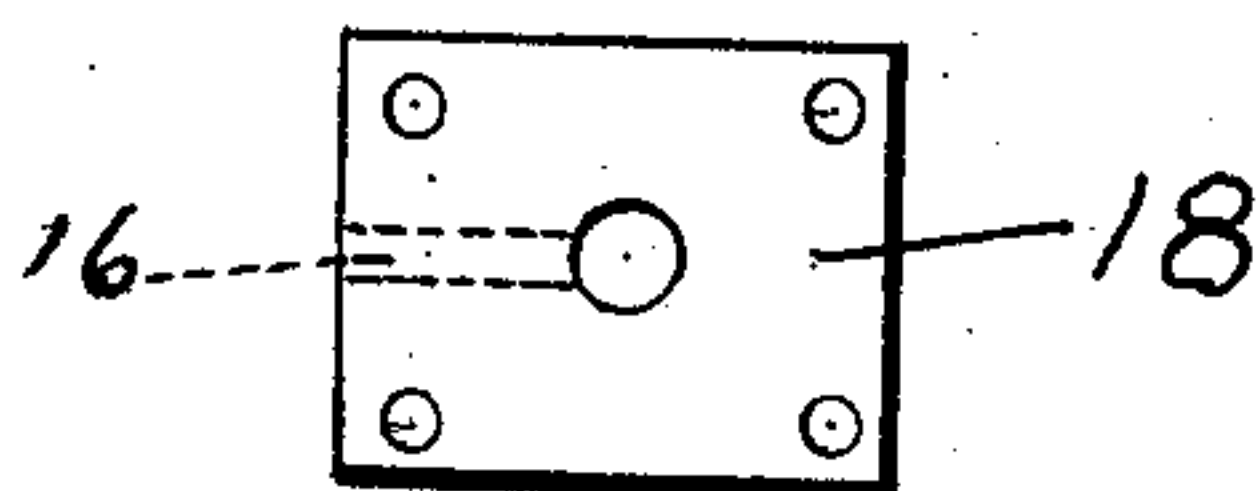
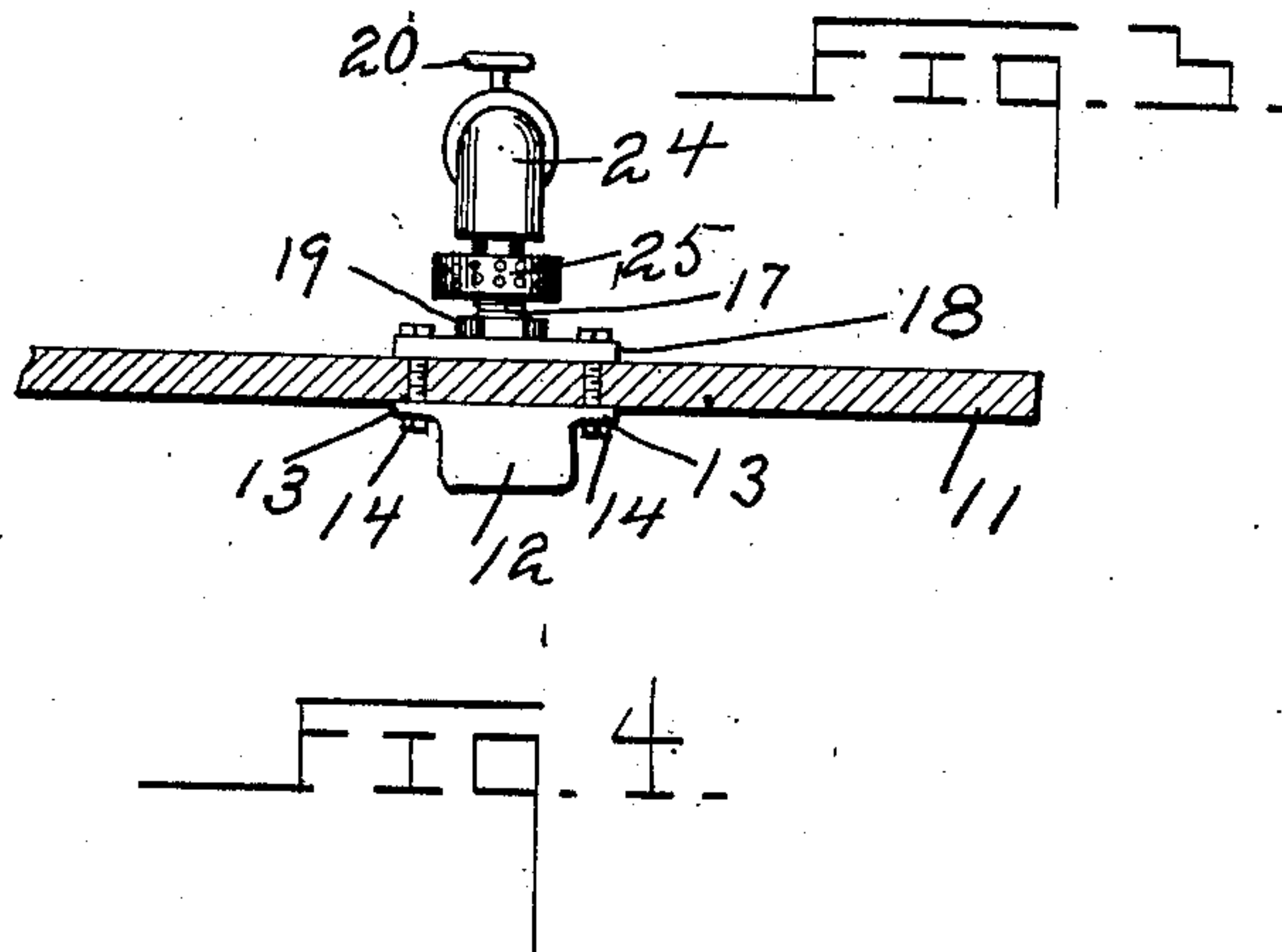
Witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLES W. MOORE, OF NEW ORLEANS, LOUISIANA.

## BILGE-DRAINER.

No. 931,633.

Specification of Letters Patent.

Patented Aug. 17, 1909.

Application filed November 20, 1908. Serial No. 463,644.

*To all whom it may concern:*

Be it known that I, CHARLES W. MOORE, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Bilge-Drainers, of which the following is a specification.

This invention relates to boats and has special reference to such devices that are known as bilge drainers.

An object of the invention is to provide a boat with a device which will automatically drain the water collected in the bottom of the same.

Another object of the invention is to provide the device with an automatic valve which will prevent the inflow of water when the boat is not in motion.

The invention has for a further object the provision of a valve operated by hand which can be used when the device is to be thrown out of operation.

A still further object of this invention is the provision of a device of this character which by its peculiar formation is more effective and simple in operation than devices heretofore employed and one which can be readily applied to a boat of ordinary construction.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structures shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of a boat having the attachment applied thereto, Fig. 2 is a detailed sectional view of the boat showing the device in longitudinal elevation, Fig. 3 is a front elevation of the device showing a fragmentary view of the bottom of the boat, Fig. 4 is a top plan view of the bottom plate detached, Fig. 5 is a longitudinal section through the complete device showing a fragmentary view of the boat.

Referring to the drawings, 10 designates a boat of common construction having a bottom 11 through which the device is positioned. Upon the under face of the bottom 11 a plate 12 is positioned which is provided with laterally extended flanges 13 through

which are passed bolts 14 which extend upwardly through the bottom 11 for the purpose of securing the plate 12 thereto. The forward end of the plate 12 is provided with a beveled face 15 for contact with the water so as to offer but slight resistance to the same. The plate 12 is provided with a channel 16 which extends from the rear extremity thereof forwardly toward the central portion of the plate 12 where it is curved upwardly and terminated in the upper face thereof. The upper extremity of the channel 16 is internally threaded for the reception of a pipe 17 which is positioned through the bottom 11 for the purpose of conveying water therethrough. A second plate 18 is positioned upon the upper face of the bottom 11 which is provided with a centrally formed aperture to admit of the passage of the pipe 17 therethrough and which is also provided with apertures at the opposite corners thereof to receive the upper extremities of the bolts 14 which pass upwardly from the plate 12.

A jam nut 19 is positioned about the pipe 17 against the plate 18 for rigidly securing the pipe in position. A reciprocating valve 20 disposed in a valve casing 21 is positioned upon the upper extremity of the pipe 17 for the purpose of regulating the passage from the same. A check valve 22 is mounted at the side of the casing 21 which admits of the passage of the water outwardly through the pipe 17 but which closes when an outside pressure is exerted. A pipe 23 is led from the check valve 22 to any desired position in the boat where an elbow 24 is positioned to extend downwardly toward the bottom 11 to carry a strainer 25 through which the water within the boat is adapted to be drawn.

In operation, the forward movement of the boat causes the water under the same to impinge against the beveled portion 15 and to flow about the plate 12 causing the formation of a vacuum behind the same at the mouth of the channel 16 which pressure is exerted through the pipe 17, valve 22 and pipe 23 to draw the water from the boat. When the boat is arrested in its motion the pressure of the water upwardly through the pipe 17 causes the check valve 22 to close and prevent the water from entering into the boat. The valve 20 may be closed if the operator so desires to throw the device out of operation by preventing the passage of water in either direction through the pipe 17.



What is claimed is:—

1. A bilge drainer comprising a channeled plate adapted to be secured upon the under side of a boat bottom, a pipe adapted to be  
5 extended through the bottom into said plate, a second plate adapted to be disposed upon the upper side of said bottom and engaged about said pipe, a reciprocating valve mounted upon the upper extremity of said  
10 pipe, a check valve adjacent said reciprocating valve, a second pipe connected with the first pipe and a strainer disposed at the outer end of said second pipe.

2. A device of the class described comprising a channeled plate, a forward rounded  
15 portion on said plate, a pipe extended upwardly from said plate, a second plate mounted upon the pipe said plates being adapted to receive the bottom of a boat  
20 therebetween, a check valve disposed in juxtaposition to said pipe for controlling the flow of water therethrough and a strainer disposed upon the inner side of said check valve for preventing the access of material  
25 to interfere with the operation of said valve.

3. In a bilge drainer the combination with a boat bottom of a plate secured beneath the same having a channel formed therethrough,  
30 a pipe upwardly extended from said plate through the bottom, a second plate mounted upon the upper face of the bottom and engaged about said pipe, a reciprocating valve

disposed upon the upper extremity of the pipe, a check valve mounted adjacent said reciprocating valve, a pipe extended from  
35 said check valve and a strainer disposed upon the depended extremity of said pipe.

4. In a bilge drainer the combination of a plate having a channel formed therethrough  
40 and adapted to be secured to the under side of a boat, a pipe upwardly extended from said plate in registration with said channel and means disposed upon the upper extremity of said pipe for admitting of the draining of water from a boat and of checking  
45 the inflow of the same.

5. In a device of the character described the combination of a plate adapted to be secured upon the under side of the bottom of a boat, said plate having a channel formed  
50 therethrough extended from the rear end thereof to the intermediate portion of the same, a curved portion formed upon the forward extremity of said plate and means connected to said plate in registration with the  
55 channel formed therein for admitting of the draining of water from a boat and of preventing the inflow of the same.

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

CHARLES W. MOORE.

Witnesses:

A. BREWER,

JOHN T. BATH.