Nov. 20, 1956 M. L. HALVERSON 2,771,052

BOAT BAILER

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Fig. 1

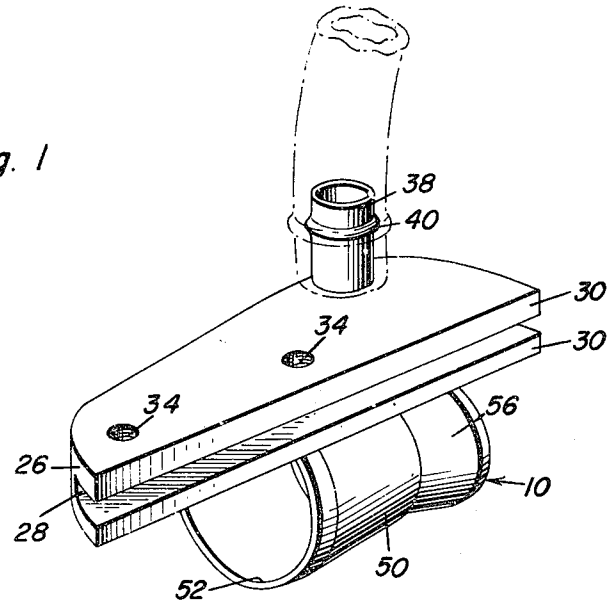
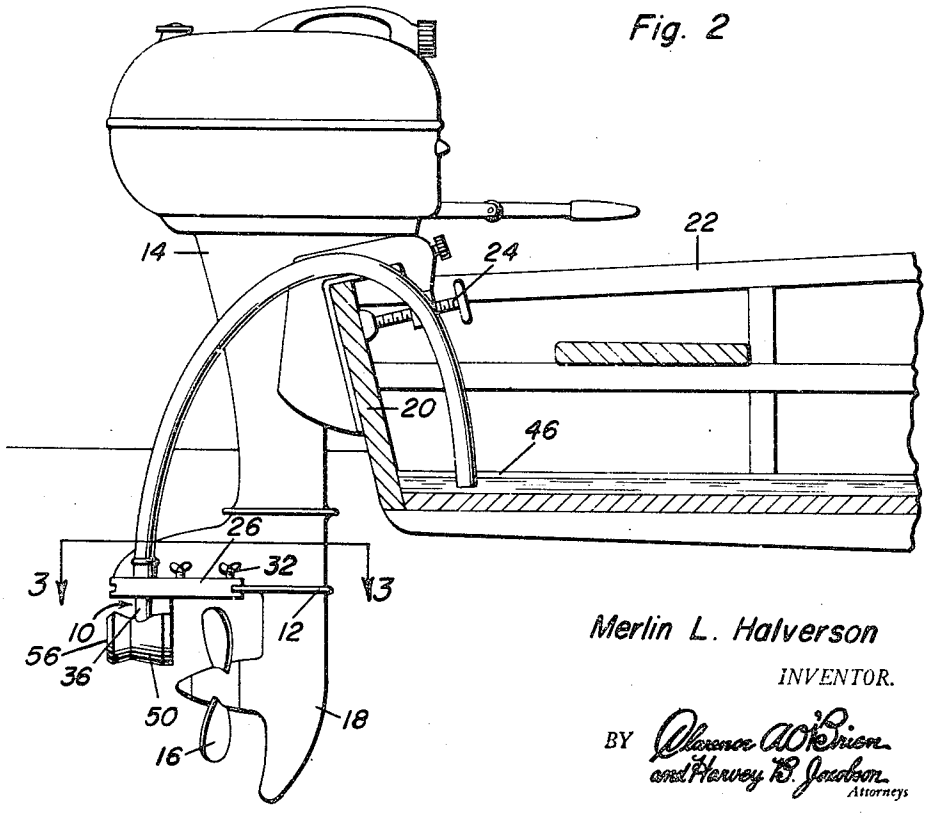


Fig. 2



Merlin L. Halverson

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

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Fig. 3

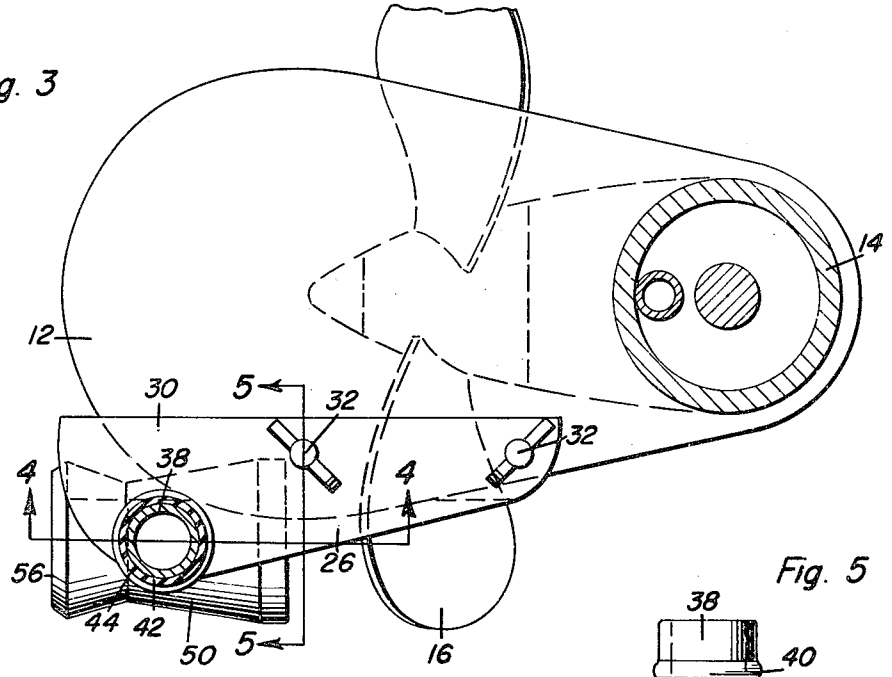


Fig. 4

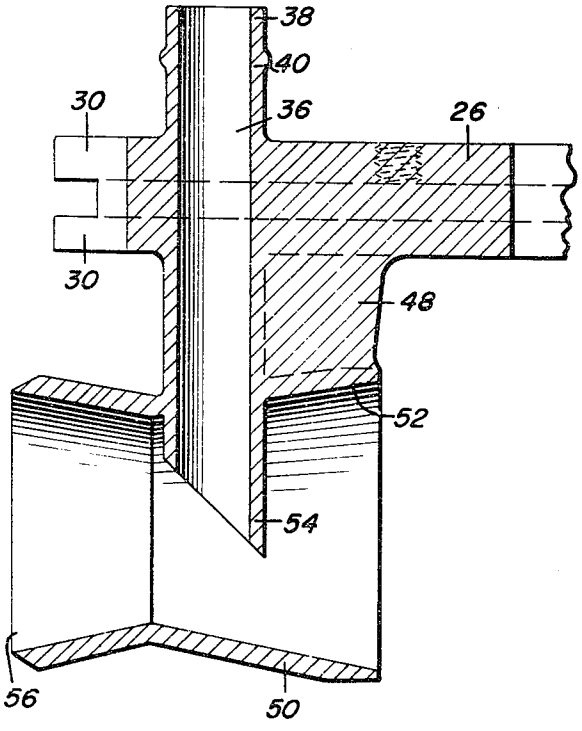
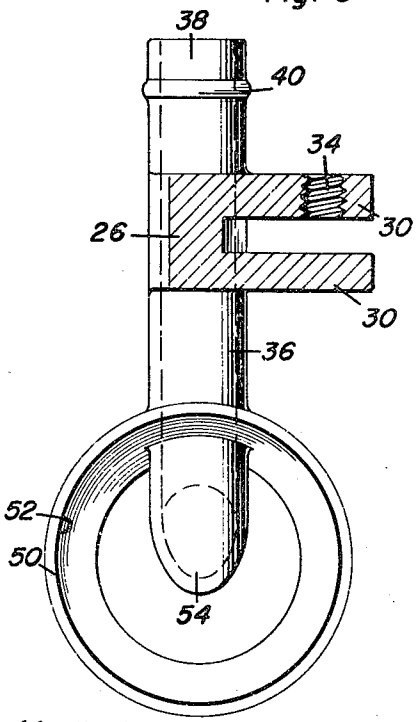


Fig. 5



Merlin L. Halverson

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

United States Patent Office 2,771,052 Patented Nov. 20, 1956

2,771,052

BOAT BAILER

Merlin L. Halverson, Mound, Minn., assignor to Kenneth M. Halverson, Minneapolis, Minn.

Application March 8, 1954, Serial No. 414,728
2 Claims. (Cl. 114—185)

This invention relates to a boat bailer and more specifically provides an attachment for outboard motors for extracting bilge water from the bilges of a small boat.

An object of this invention is to provide a boat bailer which is simple in construction, easy to attach to existing outboard motors and boats, efficient in operation, well adapted for its intended purposes and relatively inexpensive to manufacture.

Another object of this invention is to provide a boat bailer having a venturi positioned rearwardly of the outboard motor propeller and a flexible tube connected to the venturi and terminating in the bilges of a boat for extracting water from the bilges when the propeller of the outboard motor is in operation and forcing water through the venturi.

A still further important object of this invention is to provide a boat bailer including a bracket attached to the cavitation plate of an outboard motor that is disposed adjacent the propeller for positioning a venturi rearwardly of the propeller and in the path of movement of the water engaged by the propeller.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming apart hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of the venturi and bracket of the present invention to be utilized as a boat bailer;

Figure 2 is a side elevational view showing the boat bailer of the present invention secured to the outboard motor and having a flexible tube for extracting water from the bilges of a boat;

Figure 3 is a top plan section taken substantially along section line 3—3 of Figure 2 showing the orientation and positioning of the boat bailer of the present invention;

Figure 4 is a detailed section taken substantially along section line 4—4 of Figure 3 showing the details of construction of the bracket, tubular member and the venturi throat; and

Figure 5 is a detailed section taken substantially along section line 5—5 of Figure 3 showing the construction of the inner tapered end of the tubular member projecting into the venturi throat for creating the vacuum for extracting water from the boat bilges.

Referring now specifically to the drawings, it will be seen that the numeral **10** generally designates the boat bailer of the present invention for attachment to the cavitation plate **12** of an outboard motor **14** having the usual propeller **16** and skeg **18**. The outboard motor **14** is secured to the transom **20** of a small boat **22** by suitable clamp screws **24**. A bracket **26** having an elongated longitudinal groove **28** along one edge defined by two parallel side members **30** is secured to the cavitation plate **12** by suitable clamp set screws **32** threaded into suitable apertures **34** in the upper plate **30** forming the longitudinal groove **28**. A tubular member **36** is formed integral with the bracket **26** and extends therethrough and a projecting portion **38** extends above the upper surface of the bracket **26** and an external rib **40** is provided thereon for securing a flexible hose **42** with a suitable surrounding clamp member **44** in the usual manner. The flexible tube **42** is positioned with its free end extending into the bilges and the bilge water generally indicated by the numeral **46**. The tubular member **36** extends below the bracket **26** and is integrally formed with the depending web **48** which

terminates in a cylindrical venturi throat **50** having inwardly converging side walls **52** wherein the ventiuri throat **50** forms a generally funnel-shaped cylindrical member positioned directly behind one of the blades of the propeller **16**. The tubular member **36** terminates in an inclined end portion **54** with the lowermost end of the tubular member **36** being positioned toward the largest end of the venturi throat **50** and facing the propeller **16** wherein the water from the propeller **16** will flow over the lowermost end of the tubular member **36** thereby creating a vacuum in the tubular member **36** for extracting the bilge water **46** from the boat **22**. The throat **50** is also provided with a rearwardly extending funnel-shaped member **56** for increasing the vacuum and efficiency of the venturi throat **50**.

It will be seen that the boat bailer **10** of the present invention operates all of the time that the propeller is rotating and does not depend upon movement of the boat through the water. Obviously, the device may be constructed of any readily obtainable corrosive resistant material which readily lends itself to this construction.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. In combination with a boat and outboard motor therefor, said motor being provided with a propeller and a cavitation plate, a bilge water bailer of said boat comprising a bracket receivable on the cavitation plate, a tubular venturi projecting below said plate and positioned rearwardly of said propeller, and a flexible tube having one end secured to and in communication with the venturi and the other end terminating in the bilge of the boat for providing passage of the bilge water, said bracket formed integrally with the venturi and providing passage between the tube and venturi and including an elongated slot for receiving the cavitation plate, one side of the slot being provided with screw threaded openings, and clamp screws in said opening for selectively clamping said bracket to the cavitation plate.

2. A boat bailer for use on boats having a driving propeller comprising a tubular venturi positioned rearwardly of the propeller, a bracket formed integrally with the venturi for supporting the venturi, a tubular passage extending through the bracket and communicating with the interior of the venturi, an elongated flexible tube having one end secured to the bracket in communication with the passage and the other end positioned in a boat bilge, and an extension projecting from the tubular passage into the center of said venturi, said extension terminating in an inclined end facing the rear of the venturi for increasing suction in the passage and tube.

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