July 26, 1955 H. C. STIGALL 2,713,840

SIPHON BOAT PUMP

Filed April 27, 1954

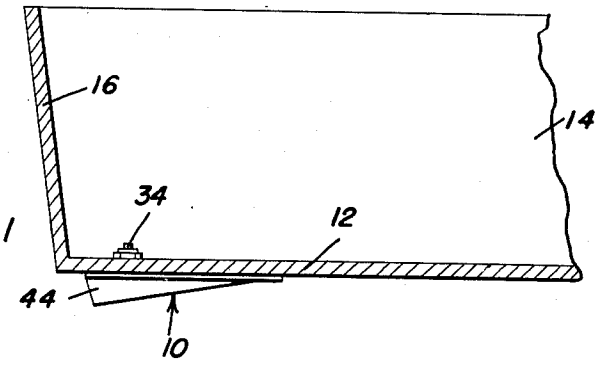


Fig. 1

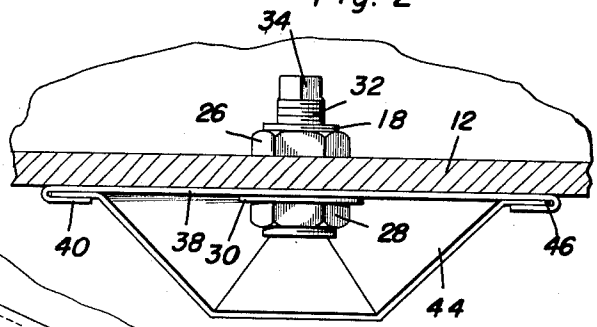


Fig. 2

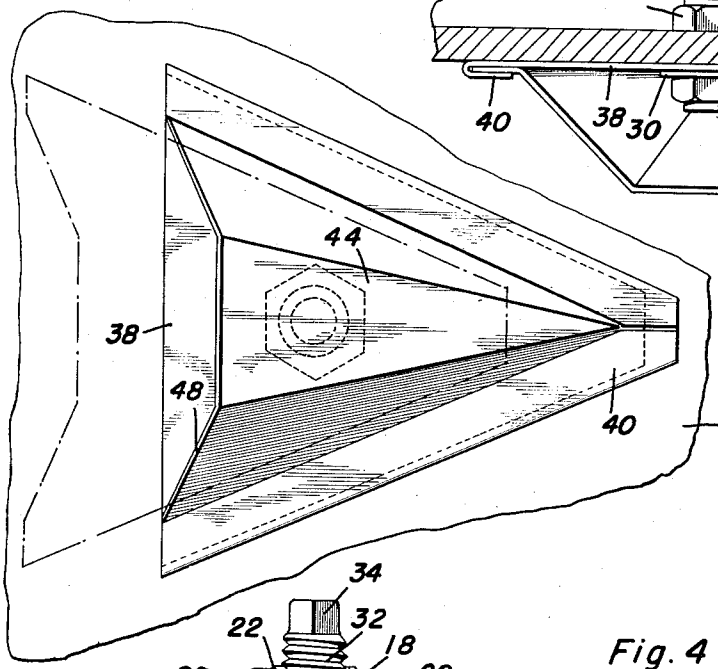


Fig. 3

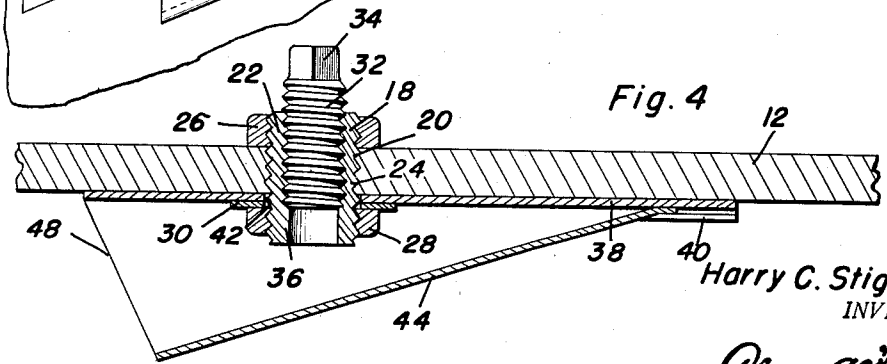


Fig. 4

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United States Patent Office 2,713,840
Patented July 26, 1955

2,713,840

SIPHON BOAT PUMP

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Application April 27, 1954, Serial No. 425,791

2 Claims. (Cl. 114—185)

This invention relates to a siphon boat pump, and more specifically provides a device for the attachment to the undersurface of a boat bottom including means for extracting bilge water from the interior of a boat as the boat moves forwardly through the water by utilizing a vacuum siphon effect caused by the passage of a forwardly and inwardly tapering housing which forms a reduced pressure area adjacent the opened rear end thereof and means for communication of the reduced pressure area to the interior of the boat thereby extracting the bilge water therefrom.

An object of this invention is to provide a siphon boat pump as set forth in the preceding paragraph, which is simple in construction, easy to attach, efficient in operation, well adapted for its intended purposes and relatively inexpensive to manufacture.

Another object of this invention is to provide a siphon boat pump including a sleeve projecting through the bottom of a boat with a removable plug positioned therein and a tapered housing overlying the sleeve and terminating at its rear end in an enlarged open area and at its front end in an abutment against the undersurface of the boat bottom thereby providing a venturi effect when the boat moves rapidly through the water in a forward direction.

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 a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view showing the siphon boat pump of the present invention attached to the undersurface of a boat bottom adjacent the stern thereof;

Figure 2 is a rear end elevation of the construction of the present invention;

Figure 3 is a bottom plan view showing the details of construction of the siphon boat pump; and

Figure 4 is a longitudinal, vertical sectional view taken along a plane passing along the longitudinal center line of the boat pump of the present invention showing the details of construction of the tubular sleeve, mounting plate and housing.

Referring now specifically to the drawings, it will be seen that the numeral **10** generally designates the siphon boat pump of the present invention for securing to the bottom **12** of a boat **14** adjacent the stern board **16** thereof.

The siphon boat pump **10** includes a tubular sleeve **18** that is provided with external threads **20** and internal threads **22** and a sleeve **18** is positioned in an opening **24** in the boat bottom **12**. A clamping nut **26** is threadedly engaged with the external threads **20** on the upper end of the sleeve **18** and a clamping nut **28** is engaged with the external threads **20** on the lower end of the sleeve **18** and a sealing washer **30** is provided on the inner surface of the lower clamp nut **28**. An externally threaded plug **32** having a polygonal upper end **34** for engagement by a suitable wrench is positioned in the tubular sleeve **18** for closing the opening **36** extending therethrough. A mounting plate **38** provided with reversely bent side edges **40** which are forwardly and inwardly converging is secured to the undersurface of the boat bottom **12** by positioning over the externally threaded sleeve **18**. It will be seen that the mounting plate **38** is provided with an opening **42** for receiving the sleeve **18** and the mounting plate **38** is disposed between the sealing washer **30** and the undersurface of the boat bottom **12**. A generally U-shaped housing **44** has forwardly and inwardly converging side edges **46** which project horizontally outwardly for engagement and reception within the reversely bent side edges **40** of the mounting plate **38** thereby securing the housing **44** to the mounting plate **38**. The rear end of the housing **44** is open and terminates in an upwardly and rearwardly inclined rear edge **48** and it will be seen that the opening **36** extending through the tubular sleeve **18** is positioned centrally of the housing **44** with the lower end thereof spaced from the bottom of the housing **44** and the upper end of the sleeve **18** positioned slightly above the bottom of the boat for extracting substantially all of the bilge water contained therein.

In operation, the boat **14** is moved rapidly forwardly through the water and the plug **32** may be removed and the bilge water extracted from the boat **14** due to the suction created by the rearwardly and downwardly tapered housing **44** passing through the water thereby creating an area of reduced pressure within the housing **44** thereby extracting the bilge water from the upper surface of the bottom **12** of the boat **14**. The relatively flat lower surface of the housing **44** assures that the water will be directed away from the opened rear end of the housing **44**. Obviously, the plug **32** may be utilized when the boat is withdrawn from the water in the usual manner. Further, the device may be constructed of relatively inexpensive material, such as sheet aluminum or any other well known noncorrosive material.

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. A siphon boat pump comprising a sleeve positioned in the bottom of a boat thereby forming a passage therethrough, a removable plug positioned in said sleeve, and a housing secured to the outer surface of a boat bottom in spaced overlying relation to the opening formed by the sleeve, said housing being generally U-shaped in cross-section and tapered rearwardly and downwardly, the forward end of said housing positioned against the undersurface of the boat bottom and the rear end of the housing positioned below the boat bottom thereby producing an area of reduced pressure within the housing when the boat moves forwardly through water for siphoning bilge water through the sleeve when the plug is removed, said housing including a mounting plate secured to the undersurface of the boat bottom and having forwardly converging reversely bent side edges, said housing having forwardly converging outwardly projecting side edges for reception under the reversely bent edges of the mounting plate thereby securing the housing to the undersurface of the boat bottom.

2. The structure as defined in claim 1 wherein said sleeve is tubular and threaded externally and internally, clamp nuts on each end of said sleeve for engaging the top surface of the boat bottom and the under surface of

said mounting plate, and an externally threaded plug engaging the internally threaded sleeve for closing the passage through the tubular sleeve.

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