Dec. 8, 1959 M. F. ECKER 2,916,233

PUMP BASE

Filed Feb. 14, 1955

Fig. 1.

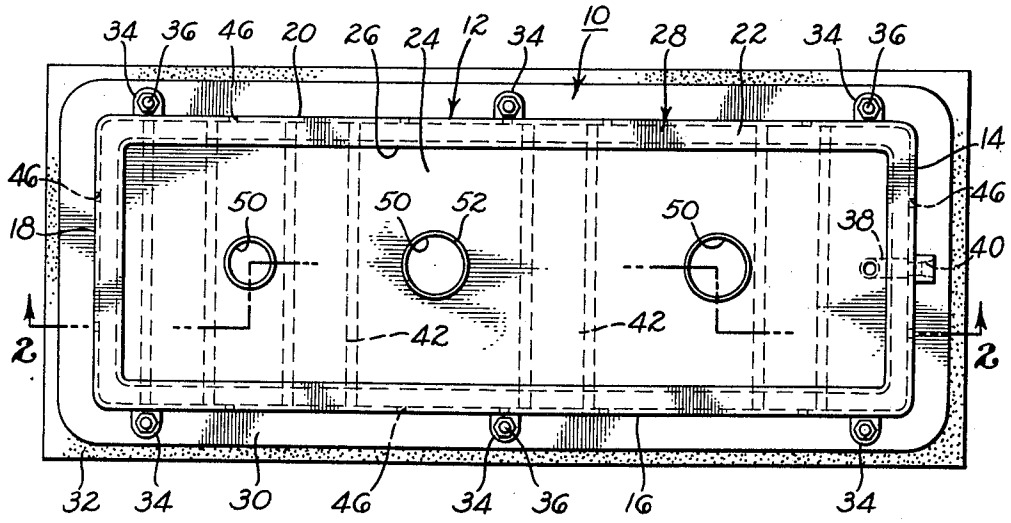


Fig. 2.

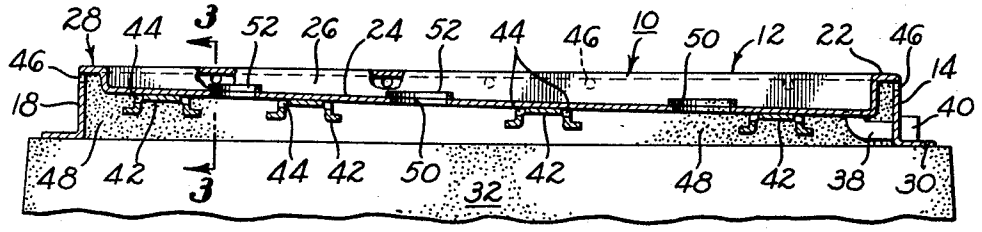
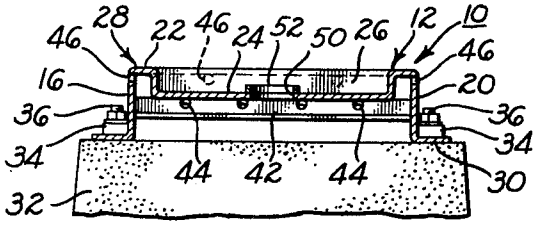


Fig. 3.



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United States Patent Office 2,916,233 Patented Dec. 8, 1959

2,916,233

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Application February 14, 1955, Serial No. 487,755

3 Claims. (Cl. 248—19)

The present invention relates to a supporting base on which may be mounted equipment of various types, such as motors, pumps, motor-pump combinations, and the like, a primary object of the invention being to provide a simple, sturdy base which may be utilized as the nucleus of a supporting structure for a wide variety of equipment by adding thereto pedestals, or other supports, for adapting it to a particular piece of equipment.

An important object of the invention is to provide an equipment base having means for draining off any liquids, such as oil, for example, leaking from equipment mounted thereon to prevent potentially dangerous accumulations of such liquids.

Another important object is to provide an equipment base having provisions for substantially completely filling the interior thereof with grout, or other suitable material, to prevent accumulations in the interior thereof of potentially explosive vapors, such as oil vapors, for example.

Another important object of the invention is to provide an equipment base the principal component of which is a pressed steel plate providing side walls and a top wall having a depressed or recessed central portion which slopes downwardly toward one side thereof.

With the foregoing construction, any liquids leaking from equipment mounted on the base are collected by the recessed top of the base and run down the sloping central portion of the top wall thereof. In this connection, an important object is to provide a drain passage which extends through the depressed central portion of the top wall at the lower end thereof and which extends through the adjacent side wall to convey away any liquids draining down the sloping central portion of the top wall. A related object is to provide the drain passage with means for connection to a drain line for conveying such leakage away to a suitable point of disposal.

Another object is to provide the pressed steel plate forming the principal component of the base with a marginal rim, in the shape of an inverted channel, which encompasses the depressed central portion of the top wall of the base to provide a rigid structure.

Another object is to provide stiffeners, preferably in the form of hat sections, i.e., hat-shaped in cross section, on the underside of the depressed central portion of the top wall.

Another object is to provide vent holes in the stiffeners and in the marginal rim adjacent the tops thereof to permit the escape of air as the interior of the base is filled with grout, or other suitable material, through a filling opening provided in the base. With this construction, substantially the entire interior of the base can be filled to exclude air therefrom, thereby eliminating any possibility of potentially explosive accumulations of vapors, such as oil vapors, or the like, in the interior of the base.

Another object is to provide the base with a marginal flange extending outwardly from the lower edges of the side walls thereof, such flange preferably being a part of the pressed steel plate forming the principal component

of the base and being adapted to receive bolts therethrough for bolting the base down to a suitable supporting surface, such as a concrete floor, or the like. In this connection, an object is to provide the marginal flange with bosses having holes therethrough for bolts, or other anchoring devices.

The foregoing objects, advantages and features of the present invention, together with various other objects, advantages and features thereof which will become apparent, may be attained with the exemplary embodiment of the invention illustrated in the accompanying drawing and described in detail hereinafter. Referring to the drawing:

Fig. 1 is a plan view of an equipment base embodying the invention;

Fig. 2 is a longitudinal sectional view taken along the arrowed line 2—2 of Fig. 1; and

Fig. 3 is a transverse sectional view taken along the arrowed line 3—3 of Fig. 2.

Referring to the drawing, the equipment base of the invention is designated generally by the numeral **10** and includes as its principal component a pressed steel plate **12** having side walls **14**, **16**, **18** and **20** and a top wall **22**. The latter is provided with a depressed central portion **24** providing a recess **26** in the top of the base **10**, the depressed central portion **24** being above the lower edges of the side walls **14**, **16**, **18** and **20**, as clearly shown in Figs. 2 and 3, and sloping downwardly in a direction from the side wall **18** toward the side wall **14**. With the structure just described, the upper portions of the side walls **14**, **16**, **18** and **20**, the undepressed, marginal portion of the top wall **22**, and the side walls of the recess **26**, which side walls are spaced inwardly from the respective side walls **14**, **16**, **18** and **20**, cooperate to provide a marginal rim **28**, in the shape of an inverted channel, which surrounds the recess **26** and which is continuous, as clearly shown in Fig. 1, to provide a very rigid structure. The plate **12** includes a marginal flange **30** which extends outwardly from the lower edges of the side walls **14**, **16**, **18** and **20** and which is adapted to seat on any suitable supporting structure, such as a floor, or such as the block **32** shown in the drawing. Connected to the marginal flange **30** and the side walls **16** and **20**, as by welding, for example, are bosses **34** through which extend bolts **36** for anchoring the base **10**.

A drain passage **38** extends through the depressed central portion **24** of the top wall **22** at the lower end thereof, and extends through the adjacent side wall **14**, the drain passage **38** preferably being an L-shaped pipe or tube welded or otherwise secured to the depressed central portion **24** and the side wall **14**. Preferably, the drain passage **38** communicates at its outer end with an internally threaded coupling **40** to receive a drain line, not shown, for conveying away to a suitable point of disposal any liquid leaking from equipment mounted on the base **10**. Such leakage is trapped in the recess **26** and drains down the depressed central portion **24** of the top wall **22** to the drain passage **38**, which is an important feature.

Connected to the underside of the depressed central portion **24** of the top wall **22**, as by welding, for example, are stiffeners **42**, preferably in the form of hat sections, i.e., preferably hat-shaped in cross section, as shown. While these hat sections are shown as relatively shallow, they may be deeper so as to extend downwardly substantially to the upper surface of the block **32**, if desired. The stiffeners **42** and the marginal rim **28** are provided with vent holes **44** and **46** therein, respectively, adjacent the tops thereof. These vent holes permit the escape of air from the interior of the base **10** as it is filled with grout, or other suitable material, as indicated at **48**. Consequently, substantially the entire interior of

the base can be filled with grout to substantially completely exclude air from the interior thereof, thereby preventing any possibility of accumulations of potentially explosive vapors, such as oil vapors, or the like. This feature, together with the drainage feature hereinbefore discussed, greatly minimizes possibilities of fire or explosion due to leakage of combustible liquids or vapors from equipment mounted on the base **10**.

Considering the manner in which the interior of the base **10** may be filled with grout, the central portion **24** of the top wall **22** is provided with openings **50** which may be used for this purpose. Preferably, the openings **50** are encircled by upwardly projecting flanges **52** welded, or otherwise secured, to the plate **12**. Thus, tubular risers may be slipped over such flanges and filled with grout to provide the head necessary to insure substantially complete filling of the interior of the base **10**.

It will be understood that the base **10** is intended to be used as the nucleus of a supporting structure for equipment of various types, it being intended that various supports, such as pedestals, not shown, for example, may be welded or otherwise secured to the base **10** to support the piece of equipment desired to be mounted on the base. Such pedestals, or other supports, may vary in number, shape and size, depending upon the nature of the piece of equipment to be mounted on the base of the invention.

Although I have disclosed an exemplary embodiment of the invention herein for purposes of illustration, it will be understood that various changes, modifications and substitutions may be incorporated in such embodiment without departing from the spirit of the invention as defined by the claims allowed me and appearing hereinafter.

I claim as my invention:

1. An equipment base having side walls and a top wall, said top wall being provided with a depressed central portion which slopes downwardly in a direction extending from one of said side walls of said base toward an opposite one of said side walls thereof and which forms a recess in said top wall, said depressed central portion of said top wall being above the lower edges of said side walls of said base, said recess having side walls respectively paralleling and spaced inwardly from said side walls of said base, said top wall having an undepressed, continuous marginal portion which surrounds said recess and which interconnects said side walls of said base and the respective side walls of said recess, said undepressed marginal portion of said top wall, said side walls of said base and said side walls of said recess forming a continuous marginal rim in the form of an inverted channel surrounding said recess, said marginal rim being open at the bottom and communicating openly with the space beneath said depressed central portion of said top wall, the lower end of said depressed central portion being provided with a drain opening therein, said base including a drain passage communicating at one end with said drain opening and extending through one of said side walls of said base.

2. An equipment base as defined in claim 1 wherein said marginal rim is provided with vent openings adjacent the top thereof, said base having a filling opening communicating with the space beneath said depressed central portion and the interior of said marginal rim.

3. An equipment base as defined in claim 2 including a continuous filling of solid, set material occupying the space beneath said depressed central portion, and the interior of said marginal rim.

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