E. P. LARSH.

MOUNTING FOR FLUID PRESSURE SYSTEMS.

APPLICATION FILED MAY 1, 1916.

1,308,850.

Patented July 8, 1919.

Fig. 1

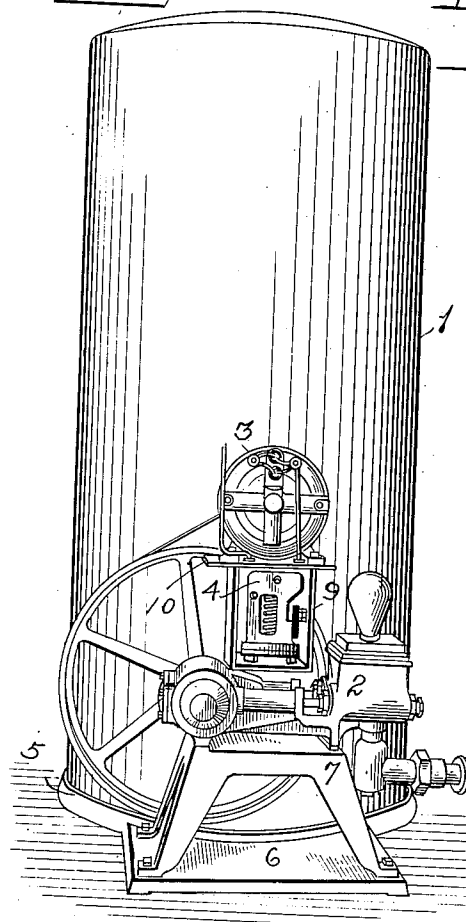


Fig. 3

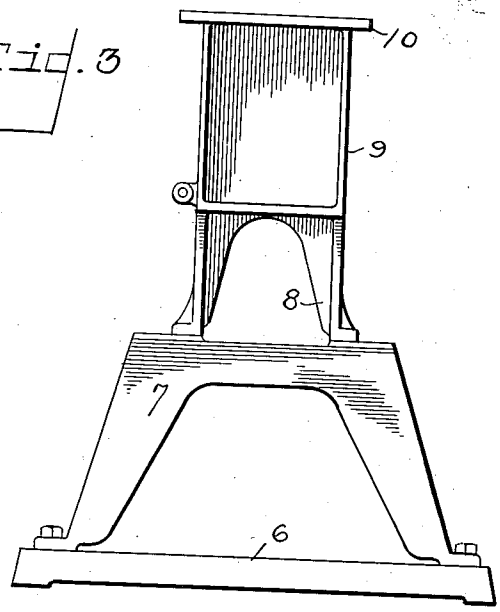


Fig. 2

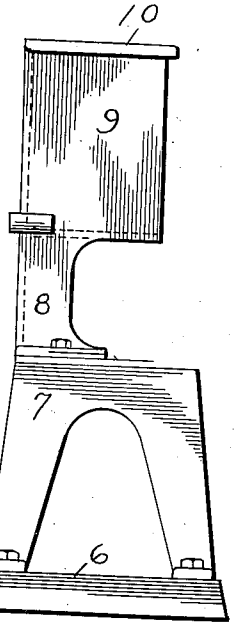


Fig. 4

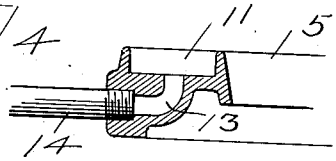
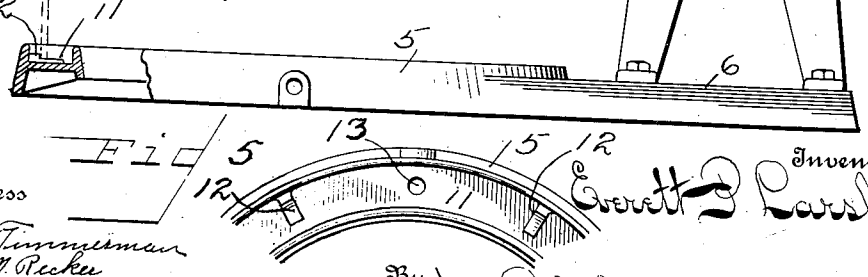


Fig. 5



Witness

Della Timmerman

Carrie M. Rucker

Inventor

Everett P. Larsh

By D. L. Walker

Attorney

UNITED STATES PATENT OFFICE.

EVERETT P. LARSH, OF DAYTON, OHIO, ASSIGNOR TO THE BURNETT-LARSH MANUFACTURING COMPANY, OF DAYTON, OHIO, A CORPORATION OF OHIO.

MOUNTING FOR FLUID-PRESSURE SYSTEMS.

1,308,850. Specification of Letters Patent. Patented July 8, 1919.

Application filed May 1, 1916. Serial No. 94,806.

To all whom it may concern:

Be it known that I, EVERETT P. LARSH, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Mountings for Fluid-Pressure Systems, of which the following is a specification.

My invention relates to fluid pressure supply systems and more particularly to a mounting for the operative parts thereof whereby the several parts of the apparatus may be combined into a unitary structure.

Systems of this character ordinarily comprise a tank or reservoir, a pump for supplying the fluid under pressure to the reservoir, a driving motor for the pump, and a governor or cut-out device usually controlled by fluid pressure for setting the actuating motor in operation when the fluid pressure falls to or below a predetermined point and for disconnecting or arresting the actuating motor when the pressure has been restored to normal.

These elements are ordinarily arranged in haphazard relation in such positions and upon such supports as may be found convenient at each point of installation.

The object of the present invention is to provide a suitable mounting or support common to all the elements of the system upon which the several elements may be assembled and arranged in an orderly and compact formation, thereby economizing space and enabling the apparatus to be readily transported in assembled condition or readily and quickly assembled at the point of installation without the necessity of providing special supports for each element.

A further object of the invention is to provide a support upon which the elements will be conveniently arranged for interconnection one with the other and whereby the several elements may be protected against injury.

With the above primary and other incidental objects in view, as will more fully appear in the specification, the invention consists of the features of construction, the parts and combinations thereof and the mode of operation or their equivalents, as hereinafter described and set forth in the claims.

Referring to the drawings, Figure 1 is a perspective view of an assembled fluid pressure supply apparatus embodying the mounting forming the subject matter hereof. Fig. 2 is a side elevation of the mounting or support with the operative elements of the apparatus or system removed. Fig. 3 is a front elevation of the pedestal. Figs. 4 and 5 are detail views of the base.

Like parts are indicated by similar characters of reference throughout the several views.

Referring to the drawings, 1 is a supply reservoir or tank arranged in upright position to which fluid is supplied under pressure by a pump 2. The pump 2 is actuated by means of an electric motor 3 which is in turn automatically controlled by a governing device or cut out 4 whereby the motor 3 will be intermittently operated to maintain the pressure within the tank or reservoir 1 within prescribed limits. The construction and operation of the pump and governor or cut-out will not be here described in detail but reference is made to my co-pending applications Serial No. 78081 and Serial No. 78082, both filed February 12, 1916, in which the pump and cut-out device are respectively set forth and described.

The mounting or support forming the subject matter hereof is best illustrated in Fig. 2 and comprises a base and pedestal connected thereto. The base consists of an annular channel or rim 5 and a laterally disposed wing or extension 6 upon which the pedestal is located. The pedestal consists of a bench or table 7 elevated upon suitable supporting legs adapted to carry the pump 2 and to the top of which are secured the supporting legs 8 of an overhanging receptacle or compartment 9 in which is located the governor or cut off device 4, while the top surface or cover of the receptacle 9 affords convenient support for the actuating motor 3.

The charging of the tank 1 with cold water or other fluid frequently causes condensation of moisture upon the exterior wall of the tank or reservoir. In order to collect and dispose of the moisture condensed upon the tank the rim portion 5 of the base is channeled or recessed in its upper side as at 11 within which recess the tank or reservoir is seated. The exterior flange of the base rim channel is slightly greater in diameter

than the exterior diameter of the tank or reservoir whereby there is formed about the periphery of the tank a narrow annular channel or slot into which the moisture or condensation is drained. Within the channel 11 of the rim 5 there are located a plurality of shouldered lugs or projections 12 upon which the walls of the tank or reservoir rest. The shoulders or offsets of these lugs or projections serve to locate the tank or reservoir concentrically within the channel of the rim and the lugs further elevate the tank walls slightly above the bottom of the channel 11 whereby the annular crevice or slot between the periphery of the tank and the interior of the channel flange is in constant and direct communication with the main portion of the channel 11 beneath the tank and within the periphery thereof.

Leading from the channel 11 is an outlet 13 with which communicates an offtake conduit 14. By this means the water of condensation is collected and disposed of without producing an unsanitary and unsightly condition about the apparatus.

The pump 2 is connected by bolts or otherwise to the table or bench 7. Overhanging the pump is a box like compartment 9 in which the governor or cut off 4 is mounted. This overhanging compartment serves to protect the exposed movable portions of the pump from interference and injury. The compartment 9 is preferably, though not necessarily, provided with a cover or closure not shown in the drawing. The motor 3 is bolted to the top of the pedestal. Thus the pump, the cut off or governor and the motor are arranged in substantially a common vertical plane, each on a separate shelf or ledge, one above the other whereby the assembly presents as nearly a symmetrical appearance as is possible and the elements are conveniently located for interconnection, the one with another. The construction is such that small installations may be assembled at the point of manufacture or in the sales room and transported to the place of use in assembled condition. This is very convenient and economical as it enables the apparatus to be installed in less time and by unskilled labor. The mounting is further valuable in the assembly of the apparatus into a compact relation, thereby saving space and enabling the apparatus to be installed at any desired point, regardless of the available adjacent sites for the several elements.

While the invention is particularly designed for water pressure systems, it is equally applicable to compressed air or gas apparatus and to refrigerating apparatus. While a pump and cut out or governor of particular style or design has been shown, it is to be understood that the mounting or support is not limited to these particular elements nor to elements of like character, but while designed for this purpose, may be employed in conjunction with different mechanisms.

From the above description it will be apparent that there is thus provided a device of the character described possessing the particular features of advantage before enumerated as desirable but which obviously is susceptible of modification in its form, proportion, detail construction or arrangement of parts without departing from the principle involved or sacrificing any of its advantages.

While in order to comply with the statute the invention has been described in language more or less specific as to certain structural features, it is to be understood that the means and construction herein described comprise but one mode of putting the invention into effect and the invention is therefore claimed broadly in any of its possible forms or modifications within the scope of the appended claims.

Having thus described my invention, I claim:

1. A mounting of the character described comprising a base adapted to support a tank or reservoir, a lateral extension on said base, a pedestal located upon said extension and a plurality of superposed spaced shelves upon said pedestal adapted to support a pump, a cutout and a motor, substantially as specified.

2. A mounting of the character described comprising a circular base having a lateral extension, a supporting table located upon the extension and a receptacle or inclosure supported upon the table and overhanging the top thereof.

3. A mounting of the character described comprising a pedestal having therein a plurality of niches arranged one above the other in a substantially common plane and a circular base having a lateral extension on which the pedestal is located.

4. A mounting of the character described comprising a circular base having an annular recess in the upper face thereof in which the walls of a tank may be seated, an offtake drain conduit leading from the recess, and a pedestal connected to said base adapted to support a pump, a motor and a control device, substantially as specified.

5. A mounting of the character described, a circular base having an annular channel in the upper face thereof, supporting lugs within the channel adapted to support the walls of a tank above the bottom of the channel, a drain conduit leading from the channel, and a supporting pedestal connected with said base.

6. A mounting of the character described, a circular base having an annular channel in the upper face thereof, shouldered lugs within the channel adapted to support the

walls of a tank in spaced relation with both the exterior wall and the bottom of the channel, a drain conduit leading from the channel and a supporting pedestal connected to the base.

7. A mounting of the character described comprising a tank base, a bench or table adapted to support a pump, and a superstructure adapted to support a motor and control device attached to the table and overhanging the top thereof.

8. A fluid supply apparatus wherein a motor driven pump is automatically started and stopped by the action of an automatic governing device, characterized by a table or pedestal adapted to support the pump, an upright or standard mounted thereon, and a housing supported upon the upright or standard above and overhanging the pump table or pedestal adapted to support the pump accessories, substantially as specified.

9. A fluid supply apparatus wherein a motor driven pump is automatically started and stopped by the action of an automatic governing device, characterized by a pedestal having a pump supporting ledge, a motor supporting ledge and a governor supporting ledge arranged in different horizontal planes, one above the other, substantially as specified.

10. A fluid supply apparatus wherein a motor driven pump is automatically started and stopped by the action of an automatic governing device, characterized by a table or pedestal adapted to support the pump, and a housing for the adjunct mechanism overhanging the table or pedestal, substantially as specified.

11. A fluid supply apparatus wherein a motor driven pump is automatically started and stopped by the action of an automatic governing device, characterized by a table or pedestal adapted to support the pump and a plurality of supporting ledges for the adjunct mechanism overhanging said table or pedestal and extending in a common vertical plane with the table, but in different horizontal planes, substantially as specified.

In testimony whereof, I have hereunto set my hand this 27th day of April, A. D. 1916.

EVERETT P. LARSH.

Witnesses:
HARRY F. NOLAN,
CARRIE M. RECKER.