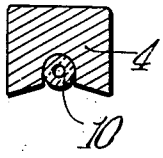
April 18, 1944. A. J. LOGIE 2,346,852

PRESSURE GAUGE

Filed April 23, 1943

Fig. 2.



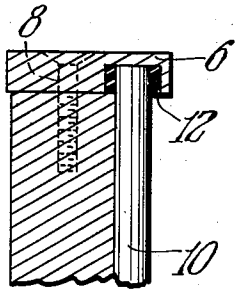




Fig. 1.

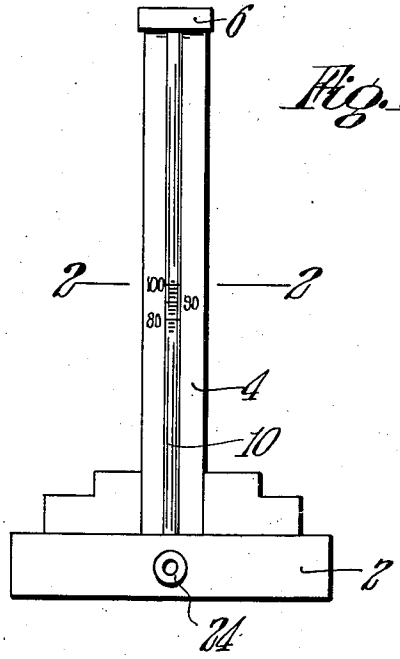
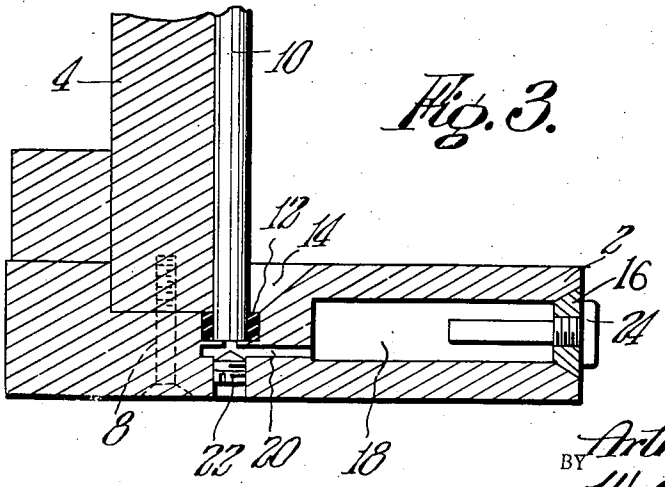



Fig. 3.




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Patented Apr. 18, 1944 2,346,852

# UNITED STATES PATENT OFFICE

2,346,852

## PRESSURE GAUGE

Arthur J. Logie, Westfield, Mass.

Application April 23, 1943, Serial No. 484,289

2 Claims. (Cl. 73—31)

This invention relates to improvements in indicating apparatus.

The principal objects of the invention are directed to the provision of indicating apparatus of novel form and pertains to means used by physicians and others for indicating a person's blood pressure.

The device of the invention is characterized by its novel form and construction and among important objects of the invention the device is strong and rugged, pleasing in appearance and efficient in operation.

Various changes and modifications may be made in the form of the apparatus and therefor it is desired if at all to be limited by the accompanying claims rather than by the foregoing description.

In the drawing:

Fig. 1 is a front elevational view of the apparatus embodying the novel features of the invention;

Fig. 2 is a sectional plan view on the line 2—2 of Fig. 1; and

Fig. 3 is a vertical sectional elevational view of the apparatus shown in Fig. 1.

Referring now to the drawing more in detail, the invention will be fully described.

A base is shown at 2 from which a post 4 extends. A cap 6 is provided on top of the post and the base, cap and post are secured together in some convenient manner as by screws, such as 8.

The parts just described may be made from plastic material which is not only suitable for constructional purposes but lends itself readily to machinery operations and presents a pleasing appearance.

A hollow or tubular column member 10 of glass or the like is provided which carries suitably spaced markings or graduations, as shown. The upper and lower ends of the tube 10 have washers 12 of rubber or the like therearound for fitting in suitable sockets in the cap and base, as shown. The washers protect the tube 10 against shock and breakage and provide seals for the ends of the tube in the adjacent parts.

The post 4 on its forward face is provided with a longitudinal groove or channel to receive the tube 10. The forward face of the post is preferably arranged as shown in Fig. 2 and at either side of the tube 10 indicia are provided for the purposes of indication in connection with the markings or graduations on the tube 10. The markings and indicia may be arranged as may be desired and may vary within wide limits.

A well 14 is provided in the base adjacent the lower end of the tube 10, as shown.

A plug 16 is provided to close the open end of a chamber or reservoir 18 provided in the base and may be secured in place by cement or other suitable means. The reservoir or chamber 18 may contain mercury.

Passageways 20 are in communication with the reservoir and the tube 10, as shown, and a valve member 22 which may be in the form of a screw threaded in the base is provided and disposed so as to function as valve means in the passageway 20 and thereby control communication or the flow of mercury between the chamber 18 and the tube 10.

A hollow connection 24 in engagement with plug member 16 is provided to receive and connect to tubing which extends to the arm band or bag and the pumping means usual in apparatus of the kind to which the invention relates.

By making the base, post and cap from plastic material, it is not only possible to provide a device that is strong and rugged but one which may be pleasing in appearance which is an obvious advantage in connection with the uses for which the apparatus of the invention is adapted.

The parts are permanently secured together or at least are secured in such a way as to provide a unitary device that is in readiness for use at all times.

The invention may be embodied in other specific forms without departing from the essential characteristics thereof. Hence, the present embodiments are therefore to be considered in all respects merely as being illustrative and not as being restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all modifications and variations as fall within the meaning and purview and range of equivalency of the appended claims are therefore intended to be embraced therein.

What it is desired to claim and secure by Letters Patent of the United States is:

1. Indicating apparatus of the class described comprising in combination, a base having a socket therein for the lower end of a mercury tube, a post fixed to and extending upwardly from said base having its lower end secured to the base and provided with a longitudinal groove for a mercury tube in its forward face in alignment with the socket of said base, a cap secured to the upper end of said post having a socket in its lower face to receive and close the upper end of a mercury tube that is in alignment with the groove of the

post, a mercury tube in the groove of the post having upper and lower ends in the sockets of said cap and base respectively and sealing means in said sockets around the ends of said tube, said base provided with a mercury reservoir remote from the socket therein and a restricted passageway from said reservoir to said socket, and valve means in said passageway for controlling the flow of mercury between said reservoir and socket.

2. Indicating apparatus of the class described comprising in combination, a base having a socket in the upper side thereof for a post and a tube-socket therebelow for the lower end of a mercury tube, a post having a lower end fixed in the first named socket and extending upwardly from the base with the forward face thereof provided with a longitudinal tube groove therein in alignment with the tube-socket of the base, a cap fixed to the upper end of the post having a tube-socket on the under face thereof for receiving and closing the upper end of a mercury tube, a mercury tube in said groove with upper and lower ends in the tube-sockets of the cap and base respectively, sealing means in said tube-sockets around the ends of said mercury tube, said base provided with a mercury reservoir remote from the tube-socket therein and a restricted passageway extending from said reservoir to said tube-socket, and a screw member threadedly engaging said base having an end portion disposed to open and close said restricted passageway.

ARTHUR J. LOGIE.