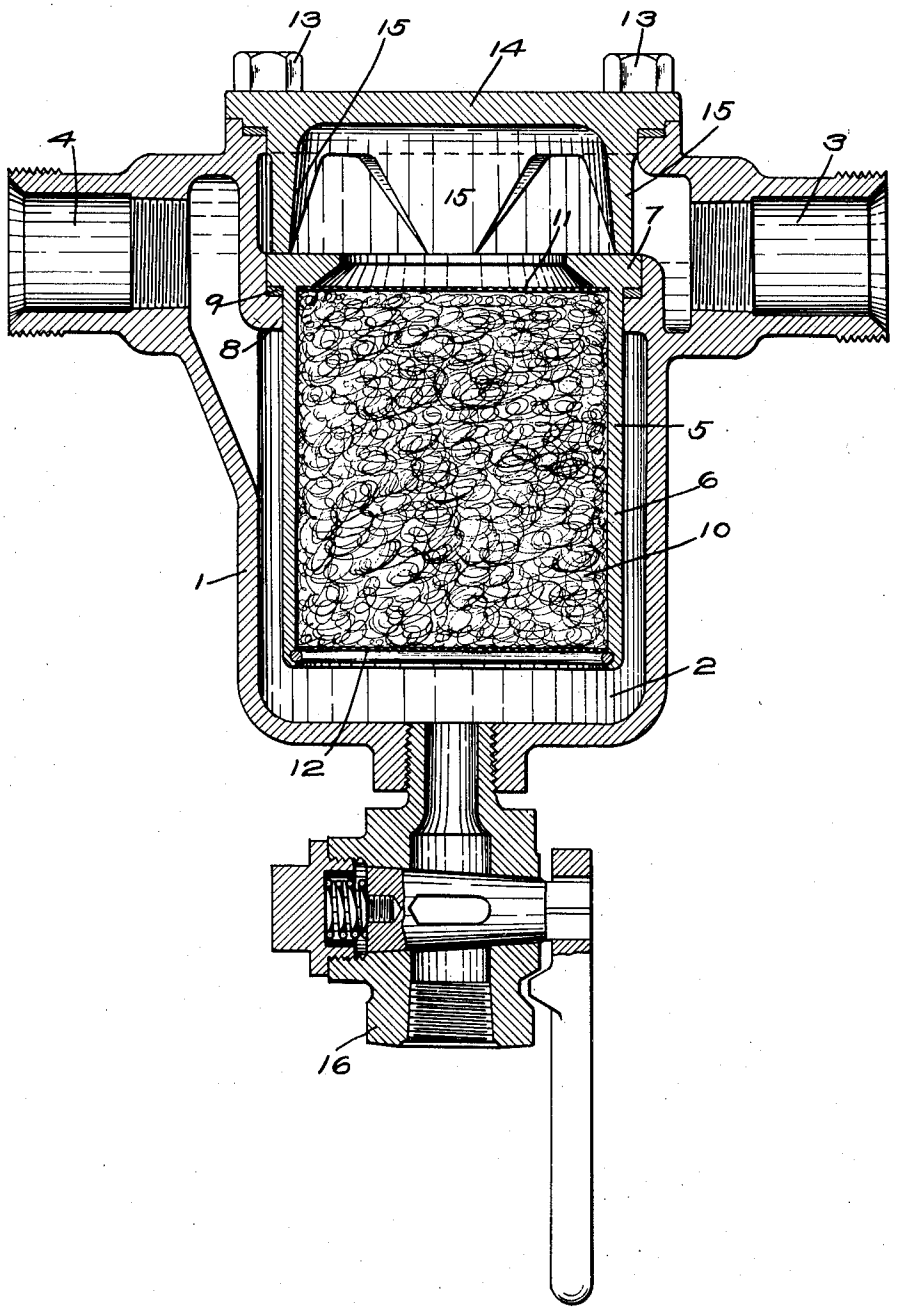
March 18, 1930. C. C. FARMER 1,750,632

AIR STRAINING DEVICE

Filed April 1, 1927



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UNITED STATES PATENT OFFICE

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AIR-STRAINING DEVICE

Application filed April 1, 1927. Serial No. 180,156.

This invention relates to air strainers as employed for straining compressed air for use in fluid pressure systems such, for example, as a fluid pressure brake system.

An object of the invention is to provide an air straining or cleansing device, for fluid pressure systems, in which the strainer portion thereof may be readily removed or replaced without in any way disconnecting the device from the fluid pressure system.

In the accompanying drawing, the single figure is a sectional view taken vertically through an air straining device constructed in accordance with the invention.

As shown in the drawing, the air straining device may comprise a casing 1 having a chamber 2 into which, fluid under pressure is admitted through a passage 3, and from which this fluid is discharged through a passage 4 and may also comprise a strainer 5 which may be readily removed from the casing.

The strainer 5 is located within the chamber 2 and preferably comprises a container having a vertically disposed annular wall 6 which, adjacent its upper end is provided with an outwardly extending annular lug 7 adapted to be supported upon an inwardly extending annular lug 8 of the casing 1, there being preferably a washer 9 interposed between these lugs for the purpose of forming a seal between the container and the casing 1, so that fluid under pressure will not flow from the passage 3 to the passage 4 without first flowing through the strainer 5. The container is filled with curled hair 10, or any other suitable cleansing medium, which is held in place by top and bottom perforated plates 11 and 12 respectively, preferably removably connected with the wall 6.

Secured to the casing 1, by bolts 13, or any other suitable removable means, there is a cap member 14, preferably having spaced downwardly depending lugs 15 which engage the strainer 5 and hold it in its proper position against relative movement with the casing 1.

Fluid under pressure from the passage 3 will flow through the spaces between the lugs 15 and through the perforations in the plate 11 and through the curled hair 10, where it is cleansed of any foreign matter that it may contain, and then through the perforations in the plate 12 to the chamber 2 and from thence through the passage 4 to other portions of the fluid pressure system. Any foreign matter, which has been separated from the fluid and collects in the chamber 2, may be discharged through a cock 16.

By removal of the bolts 13 and cap member 14, the strainer 5 may be lifted from the casing 1, thus rendering it possible to repair, clean or replace the strainer, without in any way distributing the usual connections between the air straining device and other parts of the fluid pressure system.

I am aware that changes may be made in the details and arrangement of the several parts forming the invention without departing from the spirit and scope of the appended claims.

Having now described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In an air straining device for fluid pressure systems, the combination with a casing having an internal horizontally disposed lug, of a strainer supported by said lug, a member removably secured to said casing, and a plurality of spaced lugs integral with said member adapted to engage said strainer in the vertical plane of said horizontally disposed lug, the space between said lugs being adapted to permit fluid to flow into said strainer.

2. In an air straining device for fluid pressure systems, the combination with a casing having an annular internal horizontally disposed lug, of a strainer supported by said lug, a member removably secured to said casing, and spaced lugs on said member adapted to engage the top of said strainer adjacent its periphery directly over said lug, the space between said lugs permitting the flow of fluid into said strainer.

In testimony whereof I have hereunto set my hand.

CLYDE C. FARMER.