H. W. CHENEY.

DASHPOT.

APPLICATION FILED MAR. 29, 1920.

1,426,460. Patented Aug. 22, 1922.

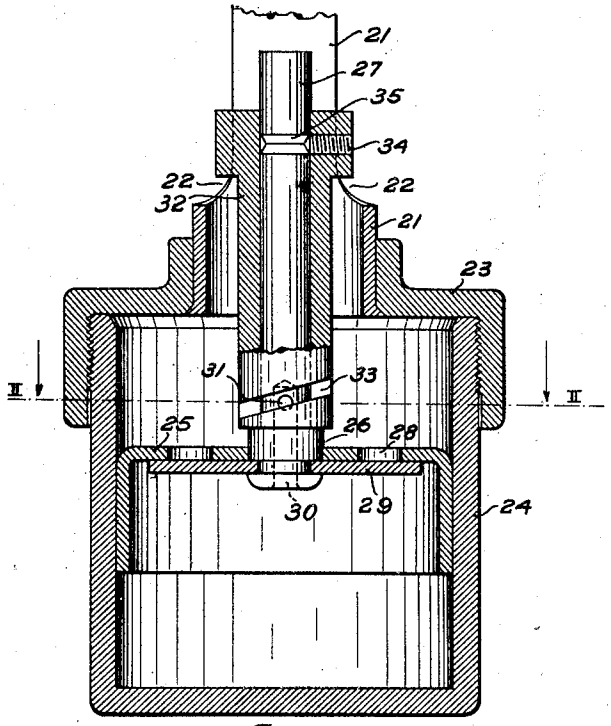


Fig. 1

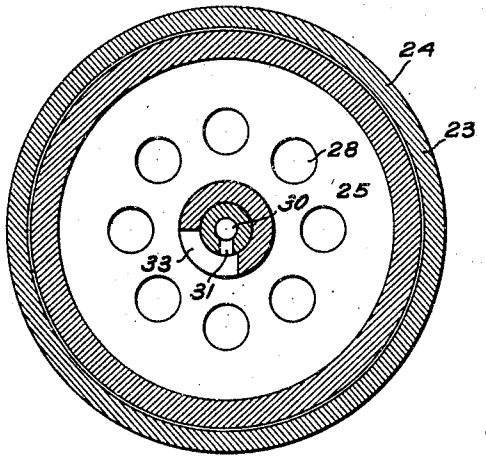


Fig. 2

Inventor

H. W. Cheney

By

Attorney

UNITED STATES PATENT OFFICE.

HERBERT W. CHENEY, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO ALLIS-CHALMERS MANUFACTURING COMPANY, OF MILWAUKEE, WISCONSIN, A CORPORATION OF DELAWARE.

DASHPOT.

1,426,460. Specification of Letters Patent. Patented Aug. 22, 1922.

Original application filed August 5, 1918, Serial No. 249,578. Divided and this application filed March 29, 1920. Serial No. 370,289.

To all whom it may concern:

Be it known that HERBERT W. CHENEY, a citizen of the United States of America, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, has invented a certain new and useful Improvement in Dashpots, of which the following is a specification.

This invention relates to dash-pots. One of the uses to which the invention may be put is in contact mechanisms such as the retarded switch disclosed in applicant's copending application, Serial No. 249,578, filed August 5, 1918, of which this application is a division. The invention is, however, clearly generally applicable where retarded action by means of a dash-pot is desired.

One of the objects of the invention is the provision of a mechanism which is simply and efficiently adjustable. Another object of the invention is the provision of means whereby a fine adjustment of the leak valve mechanism of the dash-pot may be secured by simple and inexpensive mechanism.

Other objects will appear hereinafter as the description of the invention proceeds.

The various novel features of the invention will appear from this specification and the accompanying drawings which form a part thereof and disclose one embodiment of the invention, and all these novel features are intended to be pointed out in the claims.

In the drawings, Fig. 1 is a sectional elevation of a dash-pot embodying the invention.

Fig. 2 is a horizontal section on the line II—II of Fig. 1 looking in the direction of the arrows.

Referring to Fig. 1, a dash-pot 24 is provided with a lid member 23 secured thereto in any suitable fashion and this lid member may be supported by means of a tube 21 fastened to the lid member. The dash-pot is provided with a piston 25 slidable on a collar 26 on the piston rod 27. The piston is provided with any suitable number of holes 28 which, in the up-stroke of the mechanism as it is here embodied, are closed by means of a closure plate 29. The plate 29 is fastened in any suitable manner to the rod 27 as by spinning the lower end of the rod over the plate, as is plain from the drawing.

The dash-pot is provided with a leak valve mechanism which includes an axial hole 30 in the piston rod 27, the lower end of the hole communicating with the space below the piston. Near the other end of the hole, that is, that portion above the piston, a transverse hole 31 in the piston rod communicating with the axial hole is provided. In order to provide for adjustment of the amount of fluid leaking through the hole 31, a tube 32 rotatably fitting over the piston rod is provided. The tube 32 is provided with a slanting slot 33 here shown as cut half way through the tube. It is clear from Figs. 1 and 2 that as the tube 32 is rotated, from its illustrated position, with respect to the piston rod, the hole 31 will be opened or closed more or less depending upon the direction of rotation. By making the slot slanting, a longer range and open scale of adjustment is provided and it is possible to secure very small increments in adjustment. The tube 32 may be set in any position by means of the set screw 34 which engages in an annular groove 35 in the piston rod. The piston 27 may of course be connected with any desired actuating means.

The tube 21 has a portion of its walls cut away at 22 so that the tube 32 may be rotated.

The operation of the dash-pot is thought to be clear from the preceding description.

It should be understood that it is not desired to limit the invention claimed to the exact details of construction herein shown and described, for obvious modifications may occur to persons skilled in the art.

It is claimed and desired to secure by Letters Patent:

1. A dash-pot having a lid, a piston for said dash-pot, a tube fastened to said lid, a piston rod passing through said tube, a leak valve carried by said piston, and means extending into said tube for adjusting said leak valve.

2. A dash-pot having a lid, a piston for said dash-pot, a tube having a portion of its walls cut away fastened to said lid, a piston rod passing through said tube, a leak valve carried by said piston, and means extending into said tube for adjusting said leak valve.

3. A dash-pot having a lid, a piston for said dash-pot, a tube having a portion of its walls cut away fastened to said lid, a piston rod passing through said tube, a leak valve

carried by said piston, and means extending into said tube manipulable through said cut away portion for adjusting said leak valve.

4. A dash-pot having a piston and a rod therefor, an axial hole in said rod, a transverse hole communicating with said axial hole, and a tube fitting over said rod having a transverse opening therein registerable with said transverse hole in said rod.

5. A dash-pot having a piston and a rod therefor, an axial hole in said rod, a transverse hole communicating with said axial hole, and a tube fitting over said rod having a slanting transverse slot therein registerable in whole or part with said transverse hole in said rod.

In testimony whereof, the signature of the inventor is affixed hereto.

HERBERT W. CHENEY.