Feb. 17, 1925. 1,526,568

W. J. RUDOLPH

GREASE COMPRESSOR

Filed Jan. 24, 1920

Fig. 1.

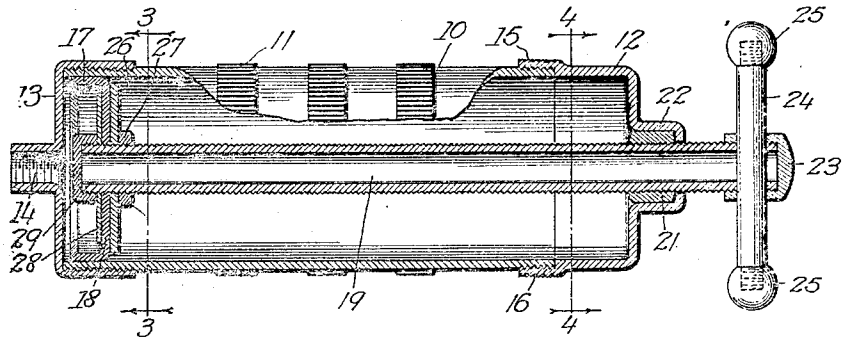


Fig. 2.

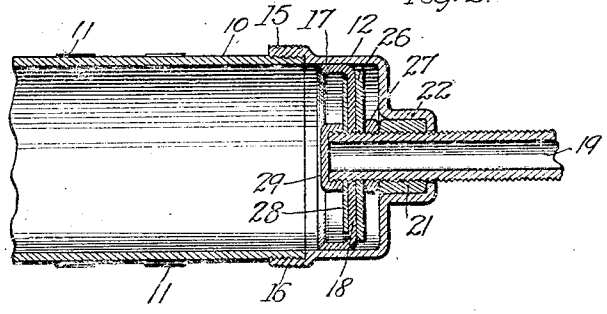


Fig. 3.

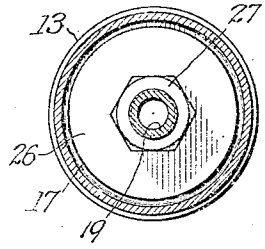
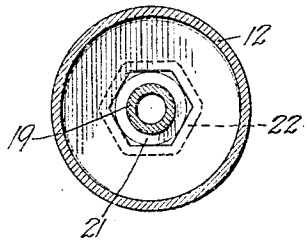


Fig. 4.



Inventor:
Walter J. Rudolph,
by John Howard McElroy Atty.

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UNITED STATES PATENT OFFICE.

WALTER J. RUDOLPH, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE IMPERIAL BRASS MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

GREASE COMPRESSOR.

Application filed January 24, 1920. Serial No. 353,796.

To all whom it may concern:

Be it known that I, WALTER J. RUDOLPH, a citizen of the United States and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Grease Compressors, of which the following is a full, clear, and exact specification.

My invention is concerned with grease compressors employed to force grease to bearings, and is designed to produce a compressor of the class described that shall be simple, strong, light in weight, and which can be readily charged with grease.

To these ends, it consists of a novel construction as hereinafter set forth.

To illustrate my invention, I annex hereto a sheet of drawings in which the same reference characters are used to designate identical parts in all the figures, of which—

Fig. 1 is a central longitudinal section throughout the compressor with the piston screwed to its innermost position;

Fig. 2 is a similar fragmentary section showing the piston screwed to its outermost position; and

Figs. 3 and 4 are views in cross-section on the lines 3—3 and 4—4 respectively of Fig. 1.

In forming my grease gun, the body of the barrel is formed of a tube 10, which preferably has portions of the surface thereof knurled, as seen at 11, to give a good grip when the cap 12 is to be removed to fill the compressor. The discharge end of the tube is closed in any convenient manner, as by the head 13 screwed thereon and having the discharge aperture 14 therein, which may be constructed as is necessary for the particular use to which the compressor has to be put.

The cap 12 is formed with an internally threaded flange 15, the exterior of which is preferably diamond-knurled, as seen at 16, to improve the grip in removing the cap. The interior of the cap 12 is preferably flush with or slightly smaller than the interior of the cylinder 10, so that when the annular flange portion 17 of the leather piston disk 18 is drawn back to the position shown in Fig. 2, where it will be when the cap 12 is to be removed to fill the barrel, the edge of the flange 17 will not have any difficulty in passing the joint when it is again screwed outward.

The piston rod 19 is formed of a tube of some considerable diameter so that the threads formed thereon will have a larger shearing surface than they would if a small solid rod were employed. This piston tube 19 is threaded though a hexagonal nut 21 which is held in the hexagonal extension 22 of the end of the cap. The piston tube 19 has the cap 23 secured on its outer end. The handle 24 formed of a rod with the enlarged ends 25 secured thereon is passed through suitable apertures in the cap and the tube. The piston is formed of the leather 18 previously mentioned with the metallic washer 26 backing it and presses against the nut 27 threaded on the piston tube and constituting an abutment. A metallic washer 28 is placed against the front of the leather 18 and a cap 29 closing the end of the tube and threaded thereon holds the washers 28 and 26 with the intermediate leather 18 firmly against the nut 27.

What I claim as new, and desire to secure by Letters Patent of the United States, is:

In a grease compressor, the combination with a cylinder having a discharge outlet at one end, of a removable cap for the other end having a polygonal extension with an aperture therethrough, a correspondingly shaped polygonal nut held in said extension, a threaded piston rod co-operating with the nut, a handle for the piston rod, and a piston secured on the inner end of the piston rod.

In witness whereof, I have hereunto set my hand and affixed my seal, this 30th day of December, A. D. 1919.

WALTER J. RUDOLPH. [L. S.]

Witness:

JOHN HOWARD MCELROY.