

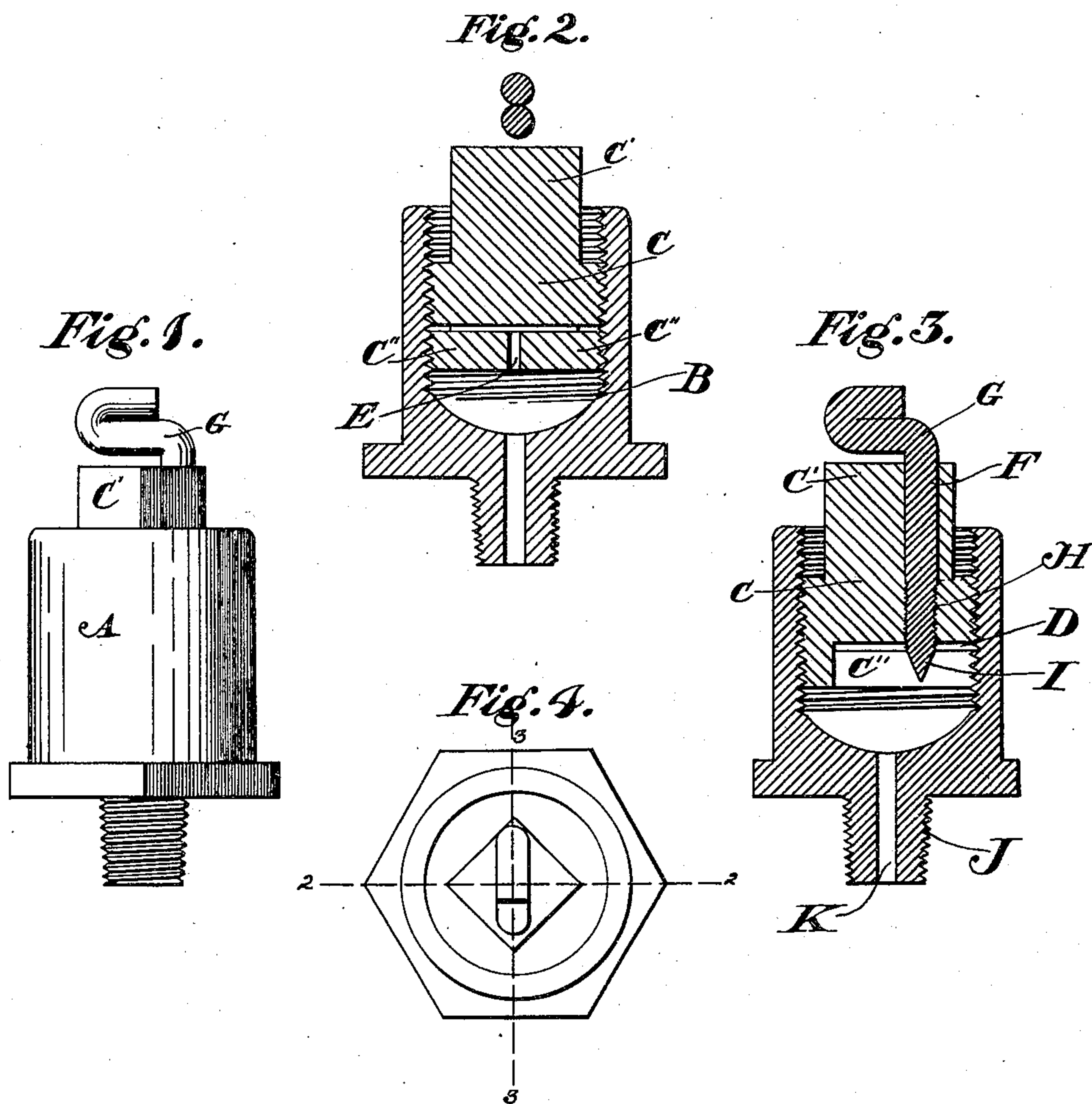
No. 776,953.

PATENTED DEC. 6, 1904.

F. SOLER.
GREASE CUP.

APPLICATION FILED JAN. 14, 1904.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK SOLER, OF SAN BERNARDINO, CALIFORNIA.

GREASE-CUP.

SPECIFICATION forming part of Letters Patent No. 776,953, dated December 6, 1904.

Application filed January 14, 1904. Serial No. 189,057. (No model.)

To all whom it may concern:

Be it known that I, FRANK SOLER, a citizen of the United States, residing at San Bernardino, in the county of San Bernardino and State of California, have invented new and useful Improvements in Grease-Cups, of which the following is a specification.

My invention relates to a cup for holding grease to lubricate bearing parts, in which cup the grease is forced out of an aperture in the bottom of the cup by means of a plug screwed down into the cup; and the object thereof is to produce a cup in which the plug may be screwed in and out of the cup by hand and which may be locked by hand at any desired position in the cup to prevent its accidental displacement therefrom. I accomplish this object by the mechanism described herein and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a grease-cup detached from the bearing parts and containing my improvement. Fig. 2 is a longitudinal central section on the line 2 2 of Fig. 1. Fig. 3 is a longitudinal central section on the line 3 3 of Fig. 4. Fig. 4 is a top plan view.

In the drawings, A is the outer casing of the grease-cup and is provided on the inner side thereof with the threads B, which extend from the top to nearly the bottom of the cup. Working in threaded contact with these threads is a screw-threaded plug C, having the shank C' for the reception of the wrench or to enable the same to be turned with the fingers. Near the lower end of the plug is a transverse slot D, which extends nearly across the plug, as shown in Fig. 3. The portion C' below this slot I will term the "locking-wing" of the plug. This portion of the plug below the slot is centrally slotted vertically by slot E, as shown in Fig. 2, thereby constituting two wings. Extending longitudinally from slot D to the upper end of the plug is an aperture F for the reception of the expanding-rod G, which has the lower end thereof threaded and working in threaded contact with threads H in the lower end of aperture F. The lower end of this rod is cone-shaped and fits into a conical socket between the two expandible wings, as shown at I in Fig. 3. The

upper end of the expanding-rod is bent to form a handle by means of which the rod can be operated. The lower end of the cup has a screw-threaded shank J, which screws into the part to which the cup is attached. A central aperture K affords a passage for the grease out of the interior of the cup to lubricate the desired part. The vertical slot E may be omitted, if desired.

In the operation of my device the plug is removed from the body of the cup, and the same is filled with grease to nearly the top thereof, when the plug is screwed into the top until the transverse slot D passes below the top thereof, when by rotating the expanding-rod it is screwed downwardly into the plug and the conical point thereof expands the wings and securely locks the plug in the cup.

It will be understood that the threads on the plug work loosely in the cup and that it can be readily turned with the fingers and that when the wings are expanded by the expanding-rod the plug is securely locked in the cup and that to unlock it all that is necessary is to rotate the expanding-rod in the reverse direction.

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

1. A grease-cup having an internally-threaded body and a port extending through the bottom thereof a plug working in threaded contact within said body said plug having expandible wings at the bottom thereof, a rod passing in threaded contact through the upper part of said plug and having the lower end thereof adapted to contact with and spread the wings of the plug when being screwed therein.

2. In a grease-cup an internally-threaded body, a screw-threaded plug having expandible wings at the bottom thereof working in threaded contact in said body; a rod having the lower end thereof threaded and passing through the upper part of said plug and adapted to cause the wings of the plug to bind against the body of the cup.

3. In combination, a grease-cup having a port in the bottom thereof and internally-screw-threaded side walls; a closure-plug

therefor having external threads adapted to work in the internal threads of the cup, said closure-plug having a transverse cut extending nearly across the same near the lower end thereof and a vertical internally-screw-threaded hole extending from said cut to the top thereof; an externally-screw-threaded rod working in threaded contact in the hole in said plug.

10 4. A grease-cup for the reception of grease having its side walls internally screw-threaded and a port in the lower end thereof for the passage therethrough of grease; a screw-threaded plug adapted to be screwed into said

15 cup, the said plug being provided on its inner end with expansible members and having a screw-threaded hole extending from near the outer edge of said expansible members to the upper end thereof; an expanding-rod having

20 the lower end thereof externally threaded in said hole in said plug, said screw-threaded portion having a working fit in the plug and having its inner end cone-shaped and adapted to expand the expansible members of the plug

as it is screwed thereinto, said expanding-rod 25 having means on its outer end by which it can be screwed into and out of said plug.

5. A grease-cup of the character herein described having a chamber for the reception of the grease, the said cup having its side walls 30 internally screw-threaded; a closure-plug for insertion in said grease-chamber and having means to lock said plug in said chamber comprising expansible members on the inner end of said closure-plug; said plug having a screw- 35 threaded hole leading to a point between said expansible members; a rod having external screw-threads thereon for screwing into said threaded hole and being pointed at the inner end and having on its outer end means by 40 which the same can be rotated.

In witness that I claim the foregoing I have hereunto subscribed my name this 2d day of January, 1904.

FRANK SOLER.

Witnesses:

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