March 6, 1956 J. R. KIMPAN 2,737,331

GREASE GUN CARTRIDGE

Filed July 21, 1953

Fig. 1.

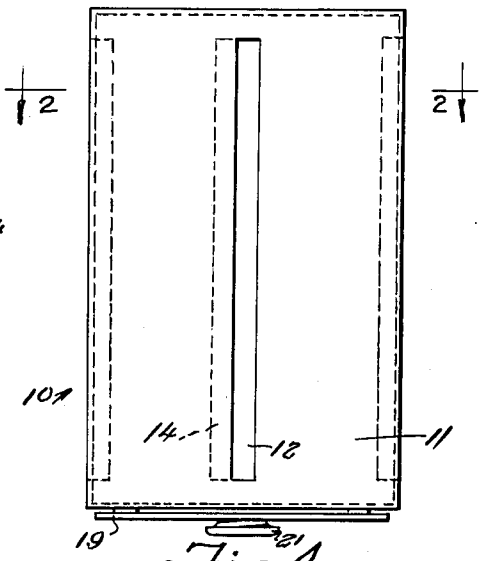


Fig. 2.

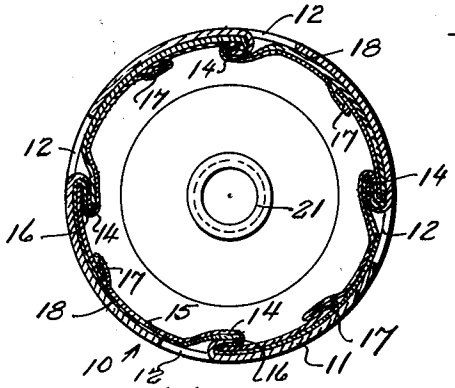


Fig. 3.

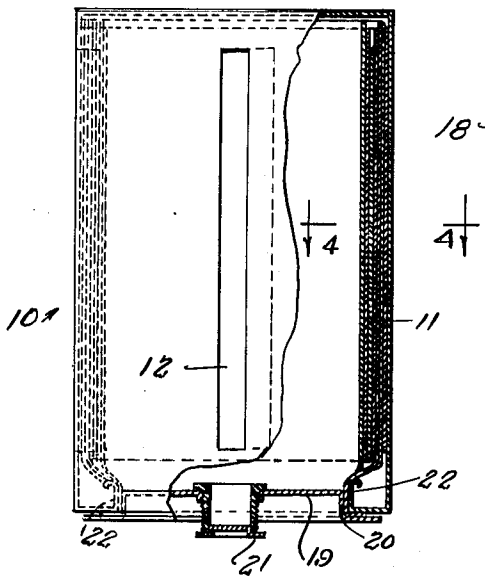
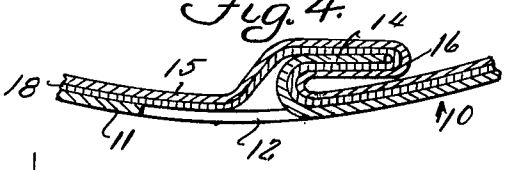


Fig. 4.



INVENTOR.

John R. Kimpan,

BY Victor J. Evans & Co.

ATTORNEYS

United States Patent Office

2,737,331
Patented Mar. 6, 1956

2,737,331

GREASE GUN CARTRIDGE

John R. Kimpan, Woodbury, N. J.

Application July 21, 1953, Serial No. 369,422
4 Claims. (Cl. 226—125)

This invention relates to a cartridge, and more particularly to a grease holding cartridge for attachment to a grease gun.

The object of the invention is to provide a cartridge which is adapted to hold a quantity of grease therein, the cartridge adapted to be attached to a grease gun, whereby grease will be conveniently supplied from the cartridge to the gun to be discharged onto any desired article or object.

Another object of the invention is to provide a grease gun cartridge which will insure that the grease remains free of foreign matter and wherein the grease gun can be easily, conveniently and quickly loaded.

A further object of the invention is to provide a grease gun cartridge which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

Figure 1 is a side elevational view of the grease gun cartridge, constructed according to the present invention.

Figure 2 is a sectional view taken on the line 2—2 of Figure 1.

Figure 3 is a side elevational view, with parts broken away and in section.

Figure 4 is a sectional view on an enlarged scale taken on the line 4—4 of Figure 3.

Referring in detail to the drawings, the numeral **10** designates a case which may be made of any suitable rigid material, and the case **10** includes an annular side wall **11**. The side wall **11** of the case **10** is provided with a plurality of spaced parallel slots **12** for a purpose to be later described.

The material from the side wall **11** which is struck inwardly to form the slots **12** is bent inwardly as at **14** to provide clamps. Positioned within the case **10** is a flexible bag **15** which may be made of any suitable material such as plastic. The bag **15** has a portion **16** arranged in engagement with the inwardly struck clamp **14**. The bag **15** is further provided with a plurality of folded portions **17** and these folded portions **17** permit the flexible bag **15** to move to its fully collapsed position so as to insure that all of the grease from the bag **15** will be discharged or emptied therefrom.

A means is provided for preventing tearing or damage to the flexible bag **15**, and this means includes a liner **18** which is interposed between the bag **15** and the annular wall **11**. The liner **18** may be made of any suitable material such as cardboard.

For closing the open end of the case **10** a lid **19** is provided. The lid **19** serves to clamp the end portion **20** of the bag **15** against the neck **22** of the case **10**. Extending from the lid **19** and secured thereto in any suitable manner is an exteriorly threaded nipple **21**. By means of the nipple **21** the cartridge **10** is adapted to be arranged in engagement with a conventional grease gun.

From the foregoing it is apparent that a grease gun cartridge has been provided which consists of a rigid case **10** that is lined with a flexible air-tight plastic bag **15**. The case **10** is slotted as at **12** and the drawings show four of the slots **12** arranged 90 degrees apart. The material from the slots **12** is bent inwardly as at **14** to clamp onto the plastic bag **15** and onto the light cardboard bag protector **18**. The cardboard bag protector **18** helps to keep the plastic bag **15** from being punctured or cut through the slots while being handled or from any sharp edges from the case **10**. The open end of the plastic bag **15** is sealed by being placed between the rim **22** of the case **10** and the pressed fit lid **19**.

While the charge of grease is being removed by the vacuum of the grease gun plunger cylinder, the plastic bag **15** collapses. The clamps **14** prevent the bag **15** from collapsing in such a manner as to prevent all grease from leaving the cartridge. When the bag has collapsed to its full extent there will be a passageway through the full length of the cartridge. Should the bag **15** collapse completely at the open end of the cartridge, this passageway will allow the grease from the opposite half of the cartridge to reach the nipple or opening **21**. The nipple **21** is threaded so that the cartridge can be screwed into the grease gun air-tight.

The folds **17** in the plastic bag **15** permit the bag to collapse all the way to the center of the case to thus force out all of the grease.

The advantages of the cartridge of the present invention are that the grease will be kept free of foreign matter and the grease gun will not be loaded from an open container. Also, the grease gun can be easily, conveniently and quickly loaded and the grade of grease can be changed simply by changing cartridges. There will be no waste of leftover grease in the gun or cleaning gun, or mixing of grades. Further, it will not be necessary to wipe off the grease gun after loading and spare cartridges or a variety of grades of grease can be conveniently carried and reloaded or changed, and also the grades of grease can be changed right on the job. Furthermore, it will not be necessary to scape the bottom and sides of the can and air pockets caused by hand loading will be eliminated. The folds **17** provide enough material in the plastic bag **15** so that when the bag is fully collapsed it will very nearly reach the center of the cartridge thus forcing out all of the contents thereof.

I claim:

1. In a grease gun cartridge, a rigid case, a flexible bag positioned in said case for holding a quantity of grease therein, and means for attaching the cartridge to a grease gun, said case being provided with a plurality of spaced parallel slots formed by portions of the case extending inwardly to provide clamps for engagement with said bag, and a protecting liner interposed between said case and bag.

2. The apparatus as described in claim 1, and further including folded portions arranged in said bag.

3. A grease gun cartridge comprising a rigid case including an annular side wall provided with a plurality of spaced parallel slots, formed by portions of the case extending inwardly to provide clamps, a flexible bag positioned within said case and engaging said clamps for holding a quantity of grease therein, said bag including a plurality of inner folded portions, a protective liner interposed between said bag and case, a lid mounted on an end of said case and clamping said bag to said case, and an exteriorly threaded nipple extending from said lid.

4. In a grease gun cartridge, a case, a bag positioned in said case for holding a quantity of grease therein, and means for attaching the cartridge to a grease gun, said case being provided with a plurality of slots formed by portions of the case extending inwardly to provide clamps for engagement with said bag, and a protecting liner interposed between said case and bag.

References Cited in the file of this patent

UNITED STATES PATENTS

1,628,834 Frank ..... May 17, 1927