March 22, 1938. S. CREWE 2,111,582

CARTRIDGE FOR CAULKING GUNS

Filed July 18, 1936

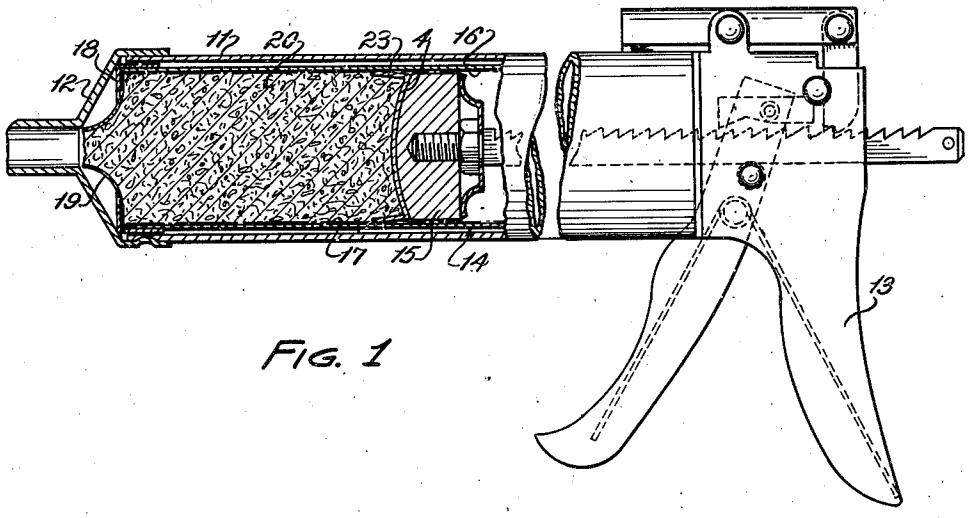

FIG. 1

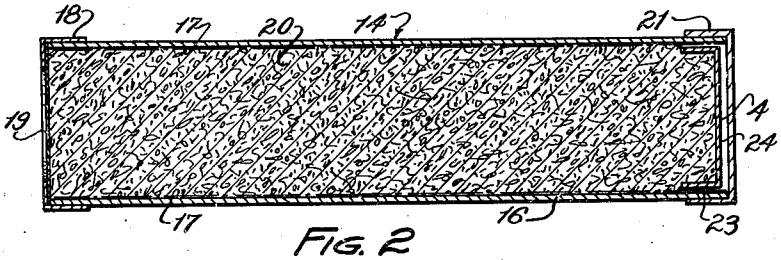

FIG. 2

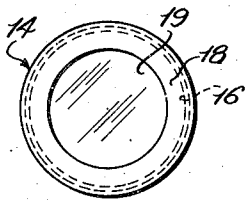

FIG. 3

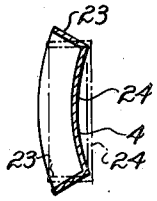

FIG. 4

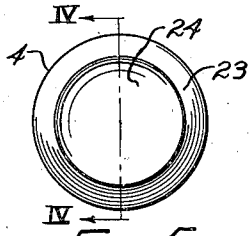

FIG. 5

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CARTRIDGE FOR CAULKING GUNS

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Application July 18, 1936, Serial No. 91,438

1 Claim. (Cl. 221—47.3)

This invention relates to improvements in containers used for handling and discharging plastic grease and the like, and particularly to cartridges for caulking guns of the type referred to in my co-pending application filed January 30, 1936, and known as Serial No. 61,534.

An object of my invention is to provide an inexpensive cartridge, or individual container for plastic grease or caulk compounds which readily fits into the barrel of a gun of the above mentioned character and which obviates the necessity of filling the gun barrel from a bulk container with a spoon, spatula, or similar implement.

Other objects of my invention are to provide a cartridge of the type mentioned with a transparent closure at one end which reveals the color and character of its contents, and also with an ejector cap at the opposite end suitable for engagement with a gun piston so as to form a scraper for the inside surface of the cartridge and which will prevent seepage and waste of the contents behind the said piston.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawing, wherein:

Figure 1 is a section of a caulking gun having a partially empty cartridge therein.

Figure 2 is a side section view of a cartridge containing caulk.

Figure 3 is a front end view of the cartridge.

Figure 4 is a sectional side view of the ejector cup.

Figure 5 is a rear view of the ejector cup.

In the Figure 1, of the drawing there is shown a caulking gun of a type similar to the one described and shown in my United States Patent No. 1,536,477, granted May 5, 1925, which has a cylinder or barrel 11, to which is attached a nozzle 12, and a handle 13. The handle 13, contains a ratchet mechanism similar to the one described in my United States Patent No. 1,883,767, dated October 18, 1932, which handle operates a piston 15. There is also shown a partially empty cartridge 14, within the barrel 11, and the means by which it is emptied by the piston 15.

The cartridge 14, consists of a cardboard, composition, or metal tube 16, cylindrical in shape and open at both ends. The inner wall of the tube 16, is finished with a layer of varnish 17, so as to give the tube 16, a hard and smooth surface, and which prevents the tube from being damaged by the ejector cup or distorted by the absorption of the oils and chemicals in the caulking compound contained therein. Over the front end of the tube 16, there is a cap 18, which has a transparent window. The cap 18, is simply a metal cover having a hole over which a piece of cellophane 19, or other suitable transparent material is secured. The transparent material, however, should be of such thinness and texture that it will burst open when pressure is applied from within the cartridge 14.

The caulk 20, is visible through the cap 18, and is ejected through the nozzle 12, by the forward movement of the plunger 15, when the window in the cap 18, is broken. Over the rear end of the tube 16, there is a closure cap 21, which seals the cartridge before insertion into the barrel 11. The closure cap 21, is made of paper or similar material and is discarded when the cartridge is about to be used.

Within the cartridge 14, there is inserted an ejector cup 4, for the purpose of aiding in the removal of the entire contents of the cartridge 14, and for preventing seepage and waste of the material behind the piston 15. This ejector cup also helps to keep the inside of the gun clean at all times. The ejector cup 4, is made of a comparatively stiff and springy material such as tin, celluloid, or hard cardboard. It is pressed or stamped out of sheet material, has pleated sides 23, and a depressible bottom 24. When the bottom 24, of the ejector cup 4, is pressed forward or inward by the piston 15, the sides 23, of the cup 4, will bell or flare outward and its edge will form a close contact or seal between the smooth inner wall of the tube 16, and the piston 15, so that practically all of the caulk is removed during one stroke of the piston.

Having thus described my invention it is understood that the present disclosure is illustrative only, and that changes in construction may be made without departing from the spirit and scope of the appended claim.

What I claim is:

In a caulking gun, a cartridge for retaining plastic material, consisting of in combination, a cylindrical container having front and rear ends, the said container having a shield formed of a solid layer of varnish, a cap for sealing the front end of the container, a window breakable by pressure from within the container in the said front cap, a closure cap for sealing the rear end of the container, and an ejector cup having a flexible bottom and flarable sides co-active with a convex caulking gun piston whereby the plastic material in the container may be ejected.

SAMUEL CREWE.