Aug. 2, 1949. P. C. BATTENFELD 2,478,078

RESERVOIR AND APPLICATOR FOR CALKING COMPOUND

Filed May 14, 1945

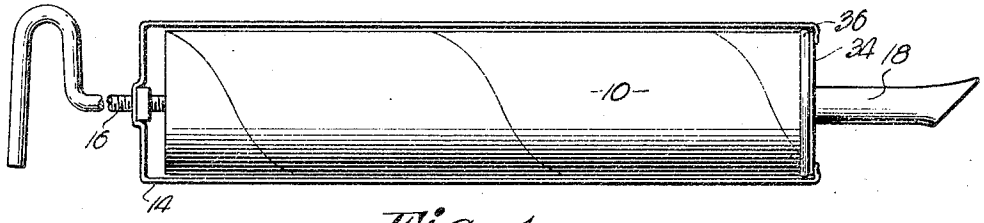


Fig. 1.

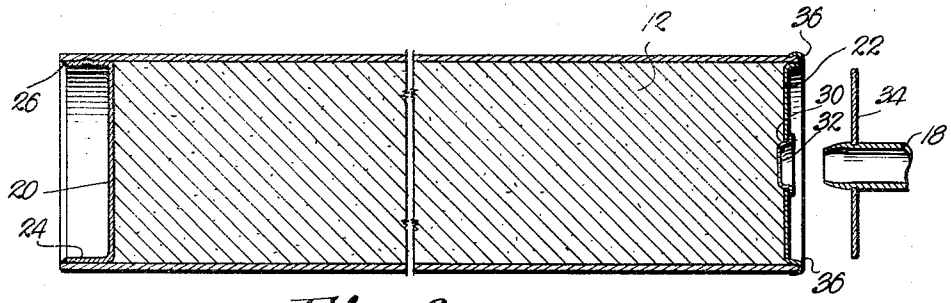


Fig. 2.

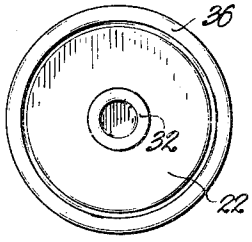


Fig. 3.

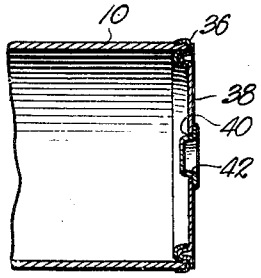


Fig. 4.

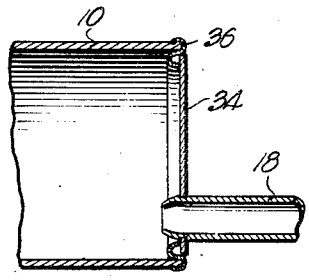


Fig. 5.

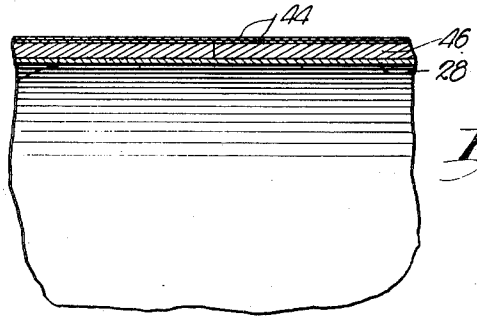


Fig. 6.

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RESERVOIR AND APPLICATOR FOR CALKING COMPOUND

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1 Claim. (Cl. 222—327)

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This invention relates to the art of packaging and applying caulking or sealing compound, and has for its primary aim the provision of a reservoir and applicator for caulking compound, that is specially formed and designed to permit introduction of the material to places inaccessible to the applicators that have heretofore been employed.

Another important aim of this invention is the provision of a reservoir and applicator for caulking compound which has as a component part thereof, an unique cartridge end capable of having the compound extruded through a nozzle either axially or eccentrically disposed.

Another aim of this invention is to provide a reservoir for caulking compound, which reservoir is in the nature of a tubular member having a lining of material that eliminates friction between the wall of the said member and the shiftable cap or extruding part during operation.

Another aim of the instant invention is the provision of a reservoir for caulking compound that is formed of tubular stock, the thickness whereof may be appreciably diminished to lower the cost because of the employment of at least two layers of material around the outer surface of the tube.

Other objects of the invention will appear during the course of the following specification, referring to the accompanying drawing wherein:

Fig. 1 is a side elevational view of a reservoir and applicator for caulking compounds made in accordance with the present invention.

Fig. 2 is a longitudinal central sectional view through the reservoir per se, illustrating the friction type closure used in one of the end walls of the reservoir.

Fig. 3 is an end elevational view of the cartridge illustrated in Fig. 2.

Fig. 4 is a fragmentary sectional view through one end of a caulking compound reservoir illustrating a modified form of end closure.

Fig. 5 is a view similar to Fig. 4, but with the end closure entirely removed and the eccentric nozzle in place; and

Fig. 6 is an enlarged fragmentary detailed sectional view through a portion of the wall of the reservoir illustrating the inner and outer coating of material.

In the drawings, the numeral 10 broadly designates the reservoir for caulking compound 12, which is packaged in reservoir 10 until applied through the use of extruding apparatus of one character or another. The extruding apparatus illustrated in Fig. 1, comprises a yoke 14, a manually manipulable part 16, and the nozzle 18.

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When the reservoir 10 is made ready for the trade, its filling of compound 12 is sealed in through the medium of a cap 20 near one end of reservoir 10 and a closure 22 at the opposite end thereof.

Cap 20 has a laterally extending flange 24 and the free edge thereof is sealed as at 26 to the inner face of reservoir 10. It is this cap 20 which moves longitudinally along reservoir 10 when part 16 is manipulated. The snug fit between flange 24 and the inner surface of reservoir 10, insures complete evacuation of the material 12 without its escaping rearwardly between flange 24 and the face of reservoir 10 along which the flange travels.

A liner 28 is of oil proof parchment and serves to not only preclude the action of compound 12 upon the material from which reservoir 10 is produced, but acts as means for eliminating undue friction between flange 24 and the reservoir wall.

In the form of the invention illustrated in Fig. 2, closure 22 is reamed onto the end of reservoir 10 and has a central opening 30 normally closed by a friction plug 32, that may be easily lifted from place when nozzle 18 is to be inserted. This nozzle 18 is mounted upon a plate 34, the diameter whereof is substantially the same as the diameter of closure 22 between the curled flanges 36 thereof. Thus, when the form of the reservoir illustrated in Fig. 2 is employed, nozzle 18 may quickly enter opening 30 after cap 32 has been removed. Inturned ends of yoke 14 (Fig. 1), will overlie the marginal edge of plate 34, and as the part 16 is being manipulated, adequate force will be exerted to maintain the parts in assembled condition.

In the form of the invention illustrated in Figs. 3, 4 and 5, there is provided a removable lid 38 having an opening 40 at its axis which is normally closed by cap 42. This cap 42 is of the friction type and is quickly removable by the user of the equipment when nozzle 18 is to be inserted through hole 40. If nozzle 18 is to be offset when work requiring such disposition of

the nozzle is encountered, then lid **38** is lifted from its place and plate **34** moved over the open end of reservoir **10** to position nozzle **18** in an off center location.

Plate **34** and nozzle **18** may be shifted by relieving the pressure thereon, which is exerted by yoke **14**, and the applicator will thereby become useful in work where the centrally disposed nozzle could not be used and placement of the compound would of necessity be through the medium of a trowel or putty knife, all of which is objectionable and unsatisfactory.

The outer surface of reservoir **10** has a jacket composed of at least two layers **44** of waterproofing material. This outer jacket cooperates with lining **28** in preserving the intermediate body **46** from which the tube is constructed, and when layers **44** are so combined with inner liner **28**, the thickness of material **46** may be appreciably reduced, to the end that manufacturing cost and consumption of material is minimized. This is an important factor because the tube from which reservoir **10** is constructed, is discarded after the compound **12** therein has been forced therefrom.

The advantages arising from the invention above disclosed and the manner of employing the novel features of the assembly illustrated in the drawing, are apparent from the foregoing specification, and while but two forms of the invention has been illustrated and described, it is obvious that alterations might be made in the construction of the component parts without departing from the scope of the appended claim.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

For a combination reservoir and applicator for caulking compound wherein said reservoir includes a tubular member having one end thereof provided with an internal annulus having an outwardly facing, continuous shoulder, and wherein said applicator includes a frame piece mounted on the reservoir and having a number of ears extending radially inwardly with respect to said one end of the reservoir; a flat, circular plate having a diameter less than the diameter of said reservoir and greater than the diameter of said annulus adjacent said shoulder; and an eccentrically disposed nozzle extending through the plate and rigidly secured thereto, said plate being adapted to bear flatly against said shoulder in closed relationship to said member and to rotate freely on the shoulder between the latter and said ears, whereby to permit quick alteration of the position of said nozzle with respect to the reservoir.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
260,108	Matthews	June 27, 1882
1,041,504	Moore	Oct. 15, 1912
1,484,331	Hopkins	Feb. 19, 1924
2,025,230	Tear	Dec. 24, 1935
2,090,111	Creveling	Aug. 17, 1937
2,106,629	Cox	Jan. 25, 1938
2,236,727	Dewees	Apr. 1, 1941
2,271,261	Hunt	Jan. 27, 1942
2,421,711	Moots et al.	June 3, 1947