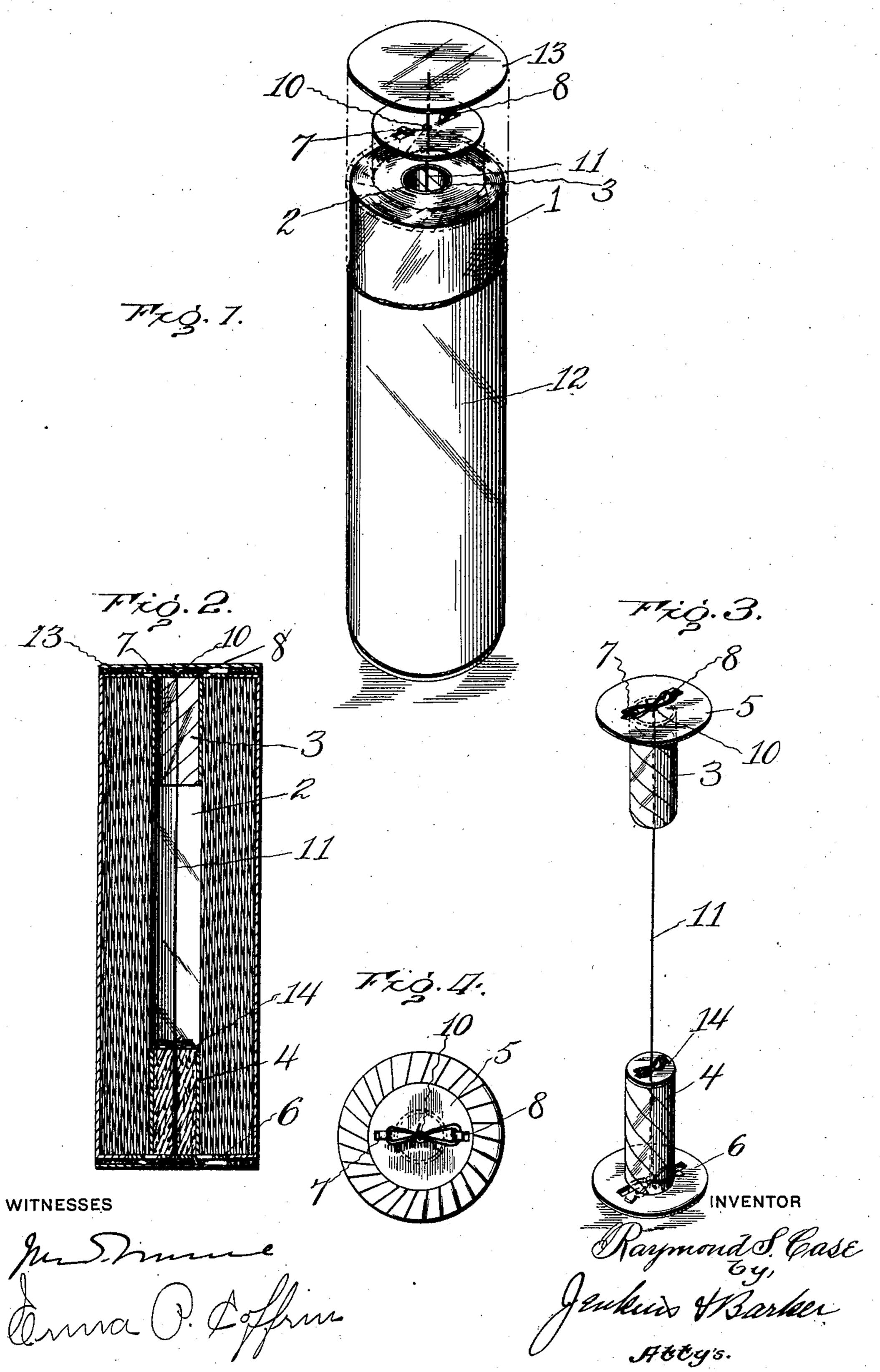
R. S. CASE.

PACKAGE AND CLOSURE THEREFOR.

APPLICATION FILED JULY 17, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



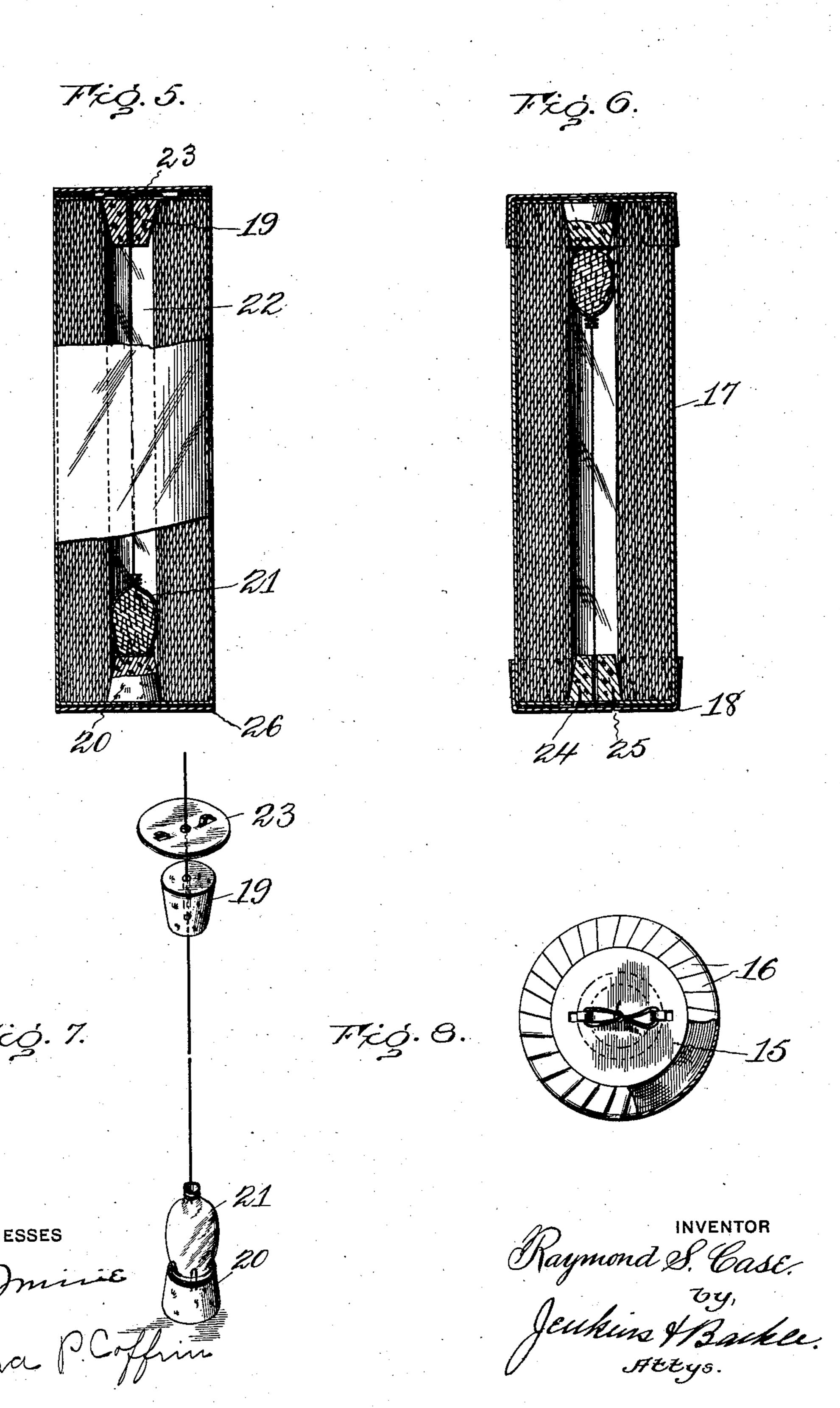
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NO MODEL.

2 SHEETS—SHEET 2



United States Patent Office.

RAYMOND S. CASE, OF UNIONVILLE, CONNECTICUT.

PACKAGE AND CLOSURE THEREFOR.

SPECIFICATION forming part of Letters Patent No. 753,543, dated March 1, 1904.

Application filed July 17, 1903. Serial No. 165,937. (No model.)

To all whom it may concern:

Be it known that I, RAYMOND S. CASE, a citizen of the United States, and a resident of Unionville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Packages and Closures Therefor, of which the following is a specification.

The invention relates to a complete package, and more particularly to a closure for the end

of a package.

It also relates to the closure for a package combined with a package secured in positive

and fixed relation to the closure.

The invention relates, more specifically, to a package of combination form in which the material of the walls of the package is used for a specific purpose and so arranged with relation to closures and an opening through the package age that other materials for use in connection with the material of the walls of the package may be safely packed and transported.

The objects of the invention are to provide a closure for a package which may be readily secured in place or detached, and thus provide, in connection with the securing means, an arrangement whereby a package of material may be securely held in fixed relation with re-

spect to the closures.

A further object of the invention is to provide a closure for a package which upon removal will withdraw a second package of material from the opening in the first-named package; and a still further object is to provide a package and closure for a rolled material which will effectually and efficiently protect said material from injury and at the same time permit the packing without liability of injury of substances within the rolled material.

Referring to the drawings, Figure 1 is a perspective view embodying one form of the invention. Fig. 2 is a longitudinal sectional view through the package. Fig. 3 is a perspective view illustrating the arrangement of the several parts of the closure and package contained therein. Fig. 4 is an end view of the package with the outer covering removed, the said covering being folded down. Fig. 5 is a partial vertical section through a package,

showing a slightly-different form of closure from that shown in Fig. 1 and with disk-like headers. Fig. 6 illustrates the same form of package and closure as that of Fig. 5, with the end parts plaited down on the sides of the package. Fig. 7 is a perspective view of the several parts of the closure and removable package illustrated in Fig. 5. Fig. 8 is a plan view of the end of the package and used without an inclosing header other than the closure-disk. 60

The improved closure shown in the accompanying drawings is illustrated in connection with a roll of material which is ordinarily wound upon a mandrel, thus leaving an open central bore, although, obviously, the closure 65 herein described might be used in any sort of a package having a central opening, and its uses are of course not limited to the rolled ma-

terial herein shown.

In the accompanying drawings the numeral 70 1 denotes a package of material, which in the precise instance is a web rolled into the form of a cylinder. This roll has a central opening 2 extending from end to end thereof, and within the outer ends of the opening are pref- 75 erably arranged tubular members 3 4, which may or may not be securely attached to closure-plates 5 6. These closure-plates are preferably formed of metal and have struck up from their surfaces lugs 78, which may be 80 arranged in any desired position with reference to a central opening through the plate 10, although it is preferred to place them on diametrically opposite sides thereof. These projections have upturned lips 7 8 from what is 85 practically a cleat about which a connecting wire or string 11 may be wound and the lugs forced downward to securely bind and lock the cord or wire to the plates. In the use of the closure the cord or wire is first placed 90 about the cleats on one plate, then inserted through the bore of the roll, and passed through the central opening of the second plate and secured to its cleat. It is customary to cover the roll of material with a suitable 95 protecting-sheet 12, which may be applied in various manners. As shown in Figs. 1, 2, and 4, this sheet extends beyond the end of the main roll and is then turned downward and plaited upon the end of the roll adjacent to 100 the closure-plates 5 6. After the plates have been secured in position by securing the connecting cord or wire heads 13 are fastened to the plaited ends of the outer casing, which 5 thus completely incloses the roll of material as well as holds the closure-plates within a casing and where the fastenings cannot be molested or disturbed by rust due to climatic changes. In fact, the package when ready for ro shipment is to all intents and purposes her-

metically sealed.

In addition to the above-described features there is a special advantage in using tubular parts inserted in the bore at each end of the 15 roll. These tubes prevent the material from crushing down and at the same time may be used for securely holding in the central opening of the package any desired material, as nails, washers, cement, or other substance or 20 substances, that may be used in applying the rolled material referred to. When these tubes are so used, the connecting cord or wire 11 is first secured to one of the plates, as 6, then passed through the tube 4, and a closing-plate 25 14, similar in construction to the plate 6, covers the inner end of the tube 4. The cord 11 is wound about lugs on the plate 14 and then passed through the central bore tube 3, orifice in the plate 5, and securely interlaced in the 30 lugs 7 8 of each plate.

In place of using the header, as 13, of course it is obvious that the closure-plates may be made of a diameter equal to the diameter of the roll or of any size which will overlie the 35 plaited inturned side covering at the end of the roll. Such an arrangement is illustrated in Fig. 8, where the plate 15 is of large enough diameter to overlie the plaited ends 16 and when secured in position to bind these plaited 40 ends of the covering material securely in place

upon the roll.

In place of using the form of outer wrapper shown and described in connection with Figs. 1 and 8 such a form as is illustrated in Fig. 6 45 may obviously be used to form a complete inclosing casing. In this instance the wrapper for the ends of the cylinder 17 is covered at the ends by headers 18, which are turned down over the edges of the cylinder and plaited 50 down, as illustrated. These of course are secured in any desired manner, as by an adhesive, and the effect is much the same as a sealed package is secured.

In Figs. 5 to 7 of the drawings there is shown 55 a slightly-modified form of device in which instead of using the thin wall-tubes illustrated in connection with Figs. 1 to 4 a plug-like tube 19 is provided, and this arrangement has some advantages, inasmuch as a package may

60 be readily secured to the plug 20—as, for instance, a bag 21—and this in turn may be filled with any desired material and securely held in place. In case the bag is used which is secured to the plug, as 20, a cord or wire may 65 form the tie for the bag, and when drawn

through the central opening 22 and passed through the part 19 and secured either to a closure-plate 23 of the form above described, as illustrated in Fig. 5, or by winding it about the pair of nails 24 25, as illustrated in Fig. 7° 6. When the latter arrangement is used, the nail upon being driven home securely holds the cord or wire and forms the necessary cleat about which the cord or wire may be wound.

In either instance the end of the package is 75 tightly inclosed by headers 26 of a diameter equal to the end of the roll and illustrated in Fig. 5 or by the headers 18 illustrated in Fig. 6.

It is apparent that the plugs with a receptacle formed integral with or secured thereto 80 may be inserted and held in the central bore of the package without the connecting wires or cords, inasmuch as the headers which seal the end of the roll will prevent displacement of the plugs and attached package, and it is 85 apparent that a receptacle might be used in connection with one or both of the plugs or material might be filled into the central bore between the plugs and contained receptacles. In fact, the invention herein described pro- 9° vides a ready means of conveying small packages of material in a large package without liability of injury to either and in such manner as to preclude displacement of the packages carried in the interior, and one of the 95 features of the complete package is its absolute manner in which it is sealed, so that all dust is excluded, and the material carried within the central bore is not only prevented from "chucking" about, (which would cause dislo- 100 cation of the plugs,) but is absolutely insured against dust and damage.

Obviously many changes in the arrangement of the several parts might be used without materially departing from the intent or 105 purpose of the invention, and the plugs illustrated in Figs. 5 and 7 might be used either in connection with the closure-plates having cleats formed thereon or with nails or tacks, providing the necessary cleat for securing the 110 connecting-cord when it is used. It is also apparent that the closure-plates might be used either in connection with a roll of material or in connection with an ordinary tube, such as is used for the safe transmission of 115

papers in the mails.

What I claim as my invention, and desire to

secure by Letters Patent, is—

1. A package having a central bore, closureplates arranged at the end of the package and 120 closing said bore and provided with lugs struck up from the material of the plates and forming means of attachment of a connection, and a connection extending through the bore and cooperating with the lugs for holding the 125 closure-plates in position.

2. A package having a central bore, a closure for each end of the bore, a receptacle secured upon one of said closures, and a connection extending through the bore from the recep- 130

tacle to the opposite closure for holding the

several parts in place.

3. A package having a central bore, a closure for each end of the bore, a receptacle secured 5 to one of said closures and extending within the bore, a connection extending from one end of the receptacle to the opposite closure, and means for attaching said connection to the closure whereby the several parts are 10 firmly held in position.

4. In a package having a central bore, a closure for each end of the bore, a receptacle secured to one of said closures and projecting within the bore, and means for retaining the

15 closures and receptacle in position.

5. A package having a central bore, a closure for said bore comprising a plug-like member arranged to be inserted in each end of the bore, a receptacle attached to one of said plug-like 20 members and projecting within the bore, and means for securing the plug-like member and receptacle against movement with reference to each other.

6. A package having a central bore and a 25 closure for said bore including a disk-like plate having struck up from the material thereof a plurality of lugs, and means cooperating with said lugs for holding the closure

in position.

7. A package having a central opening, a clo- 30 sure for both ends of the opening comprising a disk-like plate having formed from the material thereof a plurality of projections, tubular members operatively arranged with relation to the closures and extending within the 35 bore, and means cooperating with the projections of the closures for securing the parts in position.

8. A package having a central opening, a closure for each end of the opening comprising 40 disk-like plates and means thereon for the attachment of a cord or wire extending between the closures, a cord or wire, tubular members operatively arranged with relation to the closures, and disk-like members inclosing the in- 45 ner ends of the tubes and having means of attachment for the connecting cord or wire, whereby the disk-like members are held firmly in position against the ends of the tubular members.

RAYMOND S. CASE.

Witnesses:

WM. H. BARKER, ARTHUR B. JENKINS.