July 18, 1939. L. L. LIBBY 2,166,307

CONNECTED COLLAPSIBLE TWIN TUBES

Filed Oct. 19, 1938

Fig. 1.

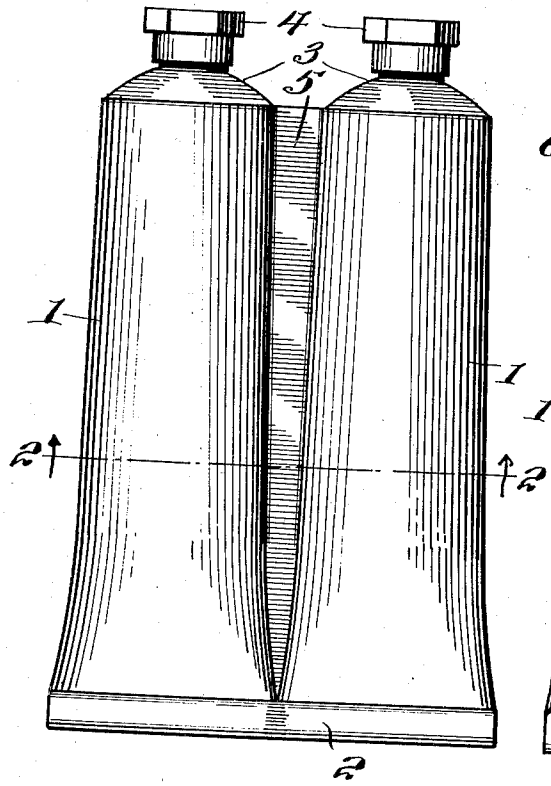

Fig. 3.

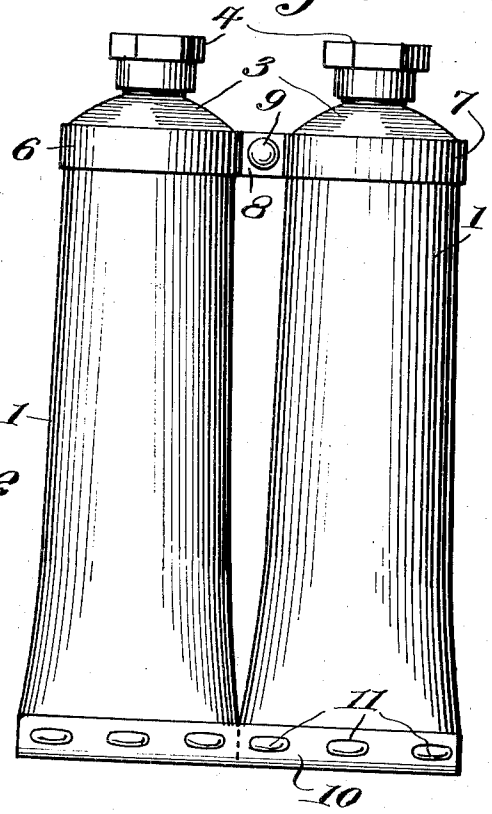

Fig. 2.

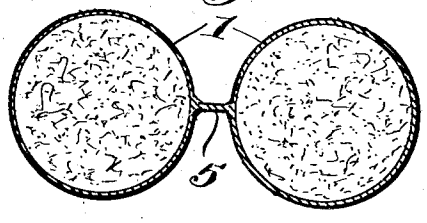

Fig. 4.

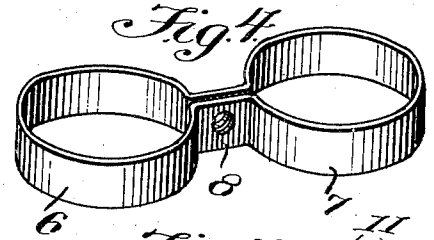

Fig. 5.

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CONNECTED COLLAPSIBLE TWIN TUBES

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Application October 19, 1938, Serial No. 235,837

2 Claims. (Cl. 221—60)

This invention relates to collapsible tubes, and its general object is to provide a pair of identical or twin tubes joined together in companion relation for use of the contents thereof accordingly, that is, the contents of one tube is to be used in connection with the contents of the other, such as for example, one tube may contain a shaving cream for application to the beard to soften the same prior to shaving, and the other a lathering cream to be applied over the beard softening cream to prevent the latter from drying, but of course the tubes can contain any material, such as creams, pastes, ointments or the like, to be used in connection with each other.

A further object is to provide a pair of collapsible tubes with means for permanently or detachably securing them together in longitudinal side by side relation, that will in no way interfere with the removal of the contents therefrom.

A still further object is to provide means for detachably securing or fastening collapsible tubes together, that can be applied and removed with respect thereto in an easy and expeditious manner, but casual removal or displacement is practically impossible.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a front view illustrating my twin tubes permanently secured together.

Figure 2 is a sectional view taken approximately on line 2—2 of Figure 1, looking in the direction of the arrows.

Figure 3 is a front view illustrating the tubes detachably secured together.

Figure 4 is a perspective view of a portion of the detachable securing means and which is to be applied about the bodies of the tubes.

Figure 5 is a perspective view of the clamping strip for the flattened ends of the tubes for cooperation with the collar securing means of Figure 4.

Referring to the drawing in detail, it will be noted that the tubes are shown as being of a type now in general use, in that each includes a body 1 of cylindrical formation for the major portion of its length, and which is provided with a flat, folded or crimped end 2, while the opposite end has a shoulder 3 formed thereon, and a threaded neck is formed on the shoulder to receive a closure cap 4. While the tubes are of the usual construction as set forth, it is to be understood that my invention lies in the combination of a pair of such tubes and coupling or connecting means therefor for securing the same together in longitudinal side by side relation, as shown.

In Figures 1 and 2, I have illustrated one form of my invention which includes a pair of tubes having a relatively narrow web 5 that is preferably co-extensive with the length of the bodies, and formed thereon or otherwise secured thereto for disposal longitudinally thereof to bridge the tubes for permanently connecting them together, with the flattened or crimped end portions 2 aligned and engaged, for the disposal of the capped ends flush with each other.

From the foregoing, it will be obvious that the contents of either tube can be readily dispensed therefrom, as the web is preferably made from the same pliable metal as the bodies of the tubes and will in no way interfere with the application of pressure to either of the tubes for individually removing the contents therefrom, and the web can be rolled with the bodies in the usual manner, as will be apparent.

In Figures 3 to 5 inclusive, I have illustrated a modified form of my invention, in that the tubes of this form are detachably connected together by collar means preferably made from strap metal shaped to provide a pair of identical collars 6 and 7 of a diameter to fit the bodies 1 for disposal about the same at the juncture thereo with the shouldered portions 3, and the collars are joined together by parallel bridging means 8 having registering openings therein, one of which is threaded to receive a screw bolt or the like 9 for drawing the collars in binding engagement with the bodies, as clearly shown in Figure 3.

Cooperating with the collar means for connecting the tubes in side by side longitudinal relation as shown, with the flat crimped ends thereof aligned with each other, is a clamping strip 10 which is preferably of a length co-extensive with that of both of the crimped ends and the strip is folded or bent longitudinally upon itself from end to end to provide a channel for receiving the crimped ends of the tubes therein for clamping engagement therewith. The walls of the channel are shown as having elongated sub-

stantially oval shaped indentations therein to provide projections or lugs 11 on the inner surfaces of the walls, for the purpose of penetrating the clamped ends of the tubes when the strip is pressed in clamping engagement therewith, so that the strip not only sets up a clamping action but also a penetrating or biting action, with the result casual displacement or removal of the clamping strip from the tubes is practically impossible, yet both the strip and collar means can be readily applied and removed for use on any number of tubes for connecting them together in pairs, so that when one pair of tubes are emptied, they can be used with another pair.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:

1. In combination, a pair of collapsible tubes, each including a cylindrical body and a flattened crimped end, means including a collar portion for each tube for disposal about the bodies thereof, parallel means bridging the collar portions and connecting the same together, means mounted in the parallel means for drawing the same together and the collars in binding engagement with the bodies, means to be clamped on the flattened ends of said tubes for cooperation with the first means for detachably securing the tubes together in longitudinal side by side parallel relation.

2. In combination, a pair of collapsible tubes, each including a cylindrical body and a flattened crimped end, means including a collar portion for each tube for disposal about the bodies thereof, means bridging the collar portions and connecting the same together, a clamping strip folded longitudinally upon itself to provide a channel for receiving the flattened ends of said tubes therein, said strip being clamped against said flattened ends for cooperation with the first means for detachably securing the tubes together in longitudinal side by side parallel relation, and said strip having projections formed on the walls thereof for biting engagement with the flattened ends.

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