

Feb. 17, 1953

J. F. DIEDERICH

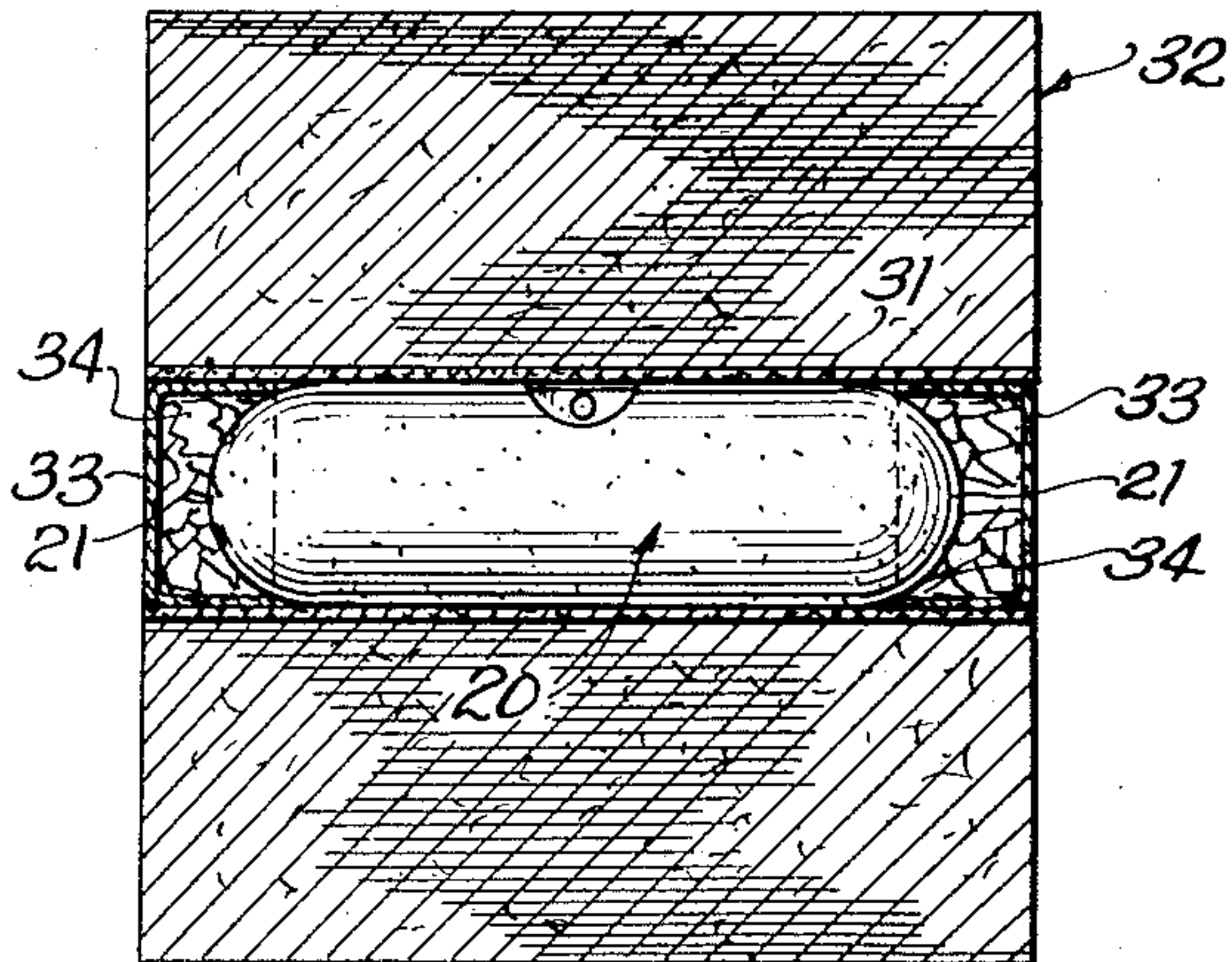
2,628,713

PACKAGE FOR DEODORANTS, STATUARIES AND THE LIKE

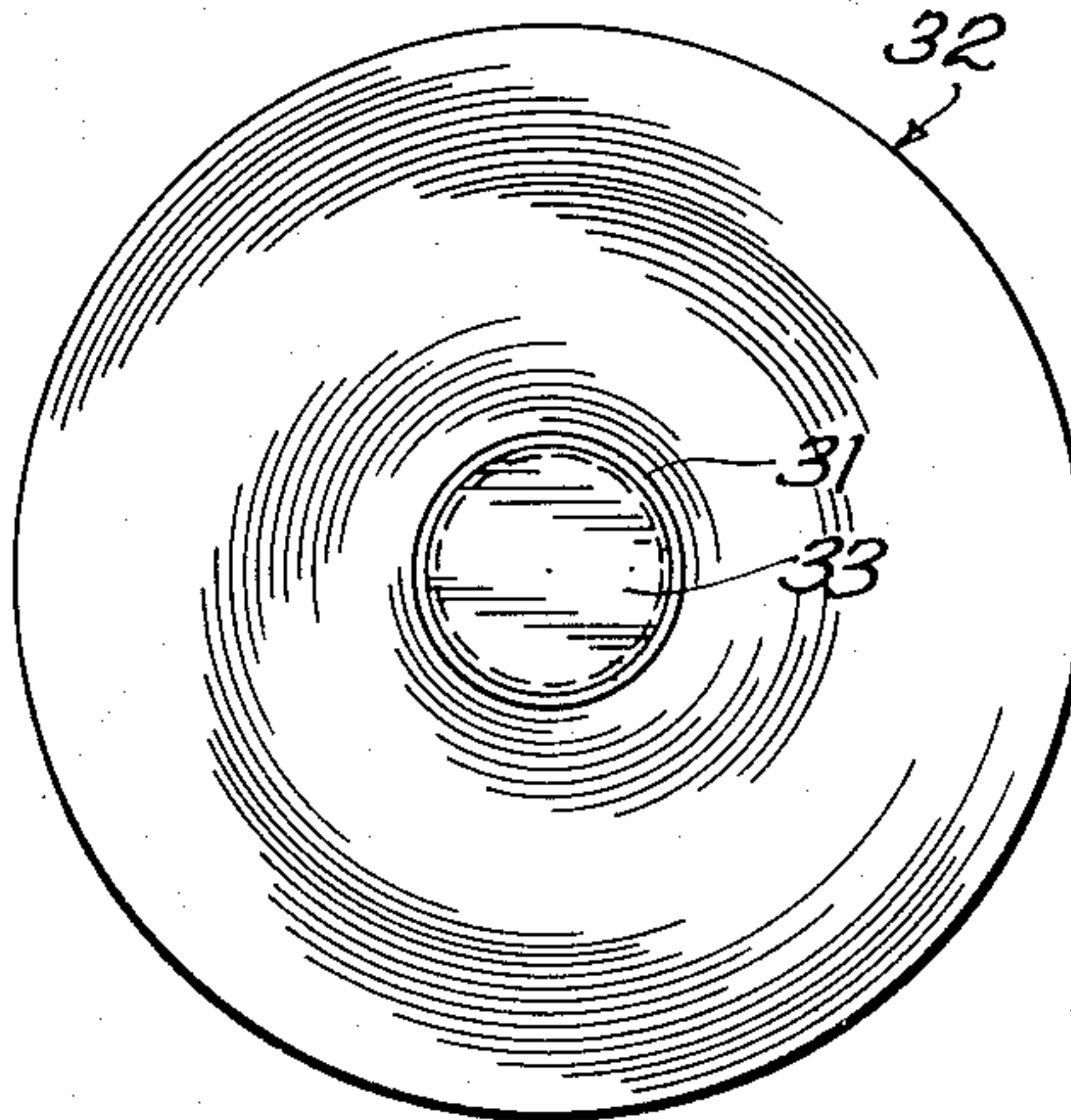
Filed July 11, 1950

2 SHEETS—SHEET 1

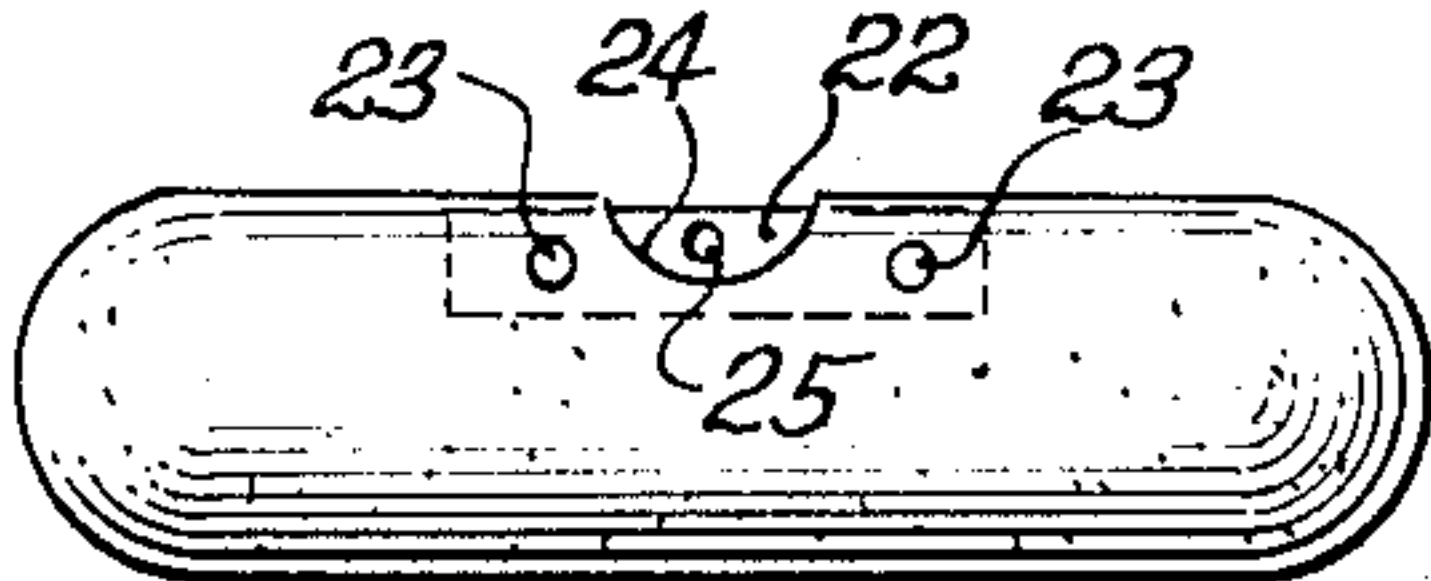
*Fig. 1*



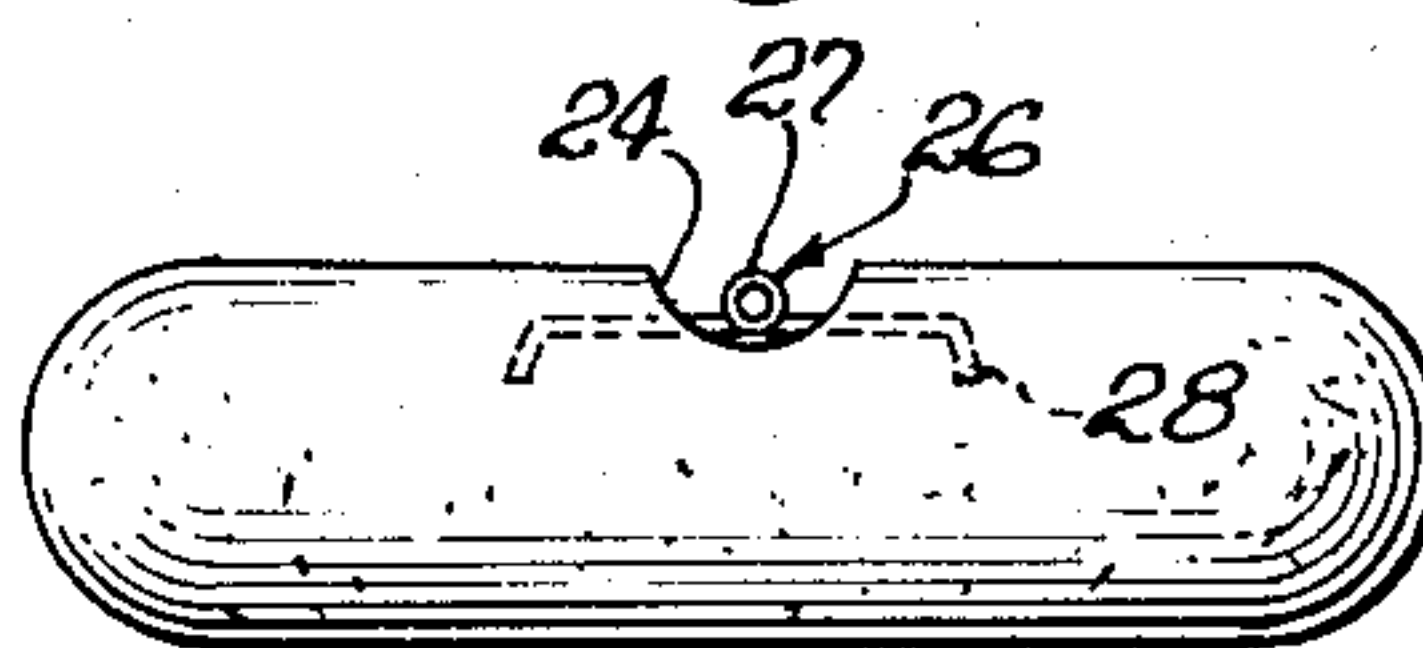
*Fig. 2*



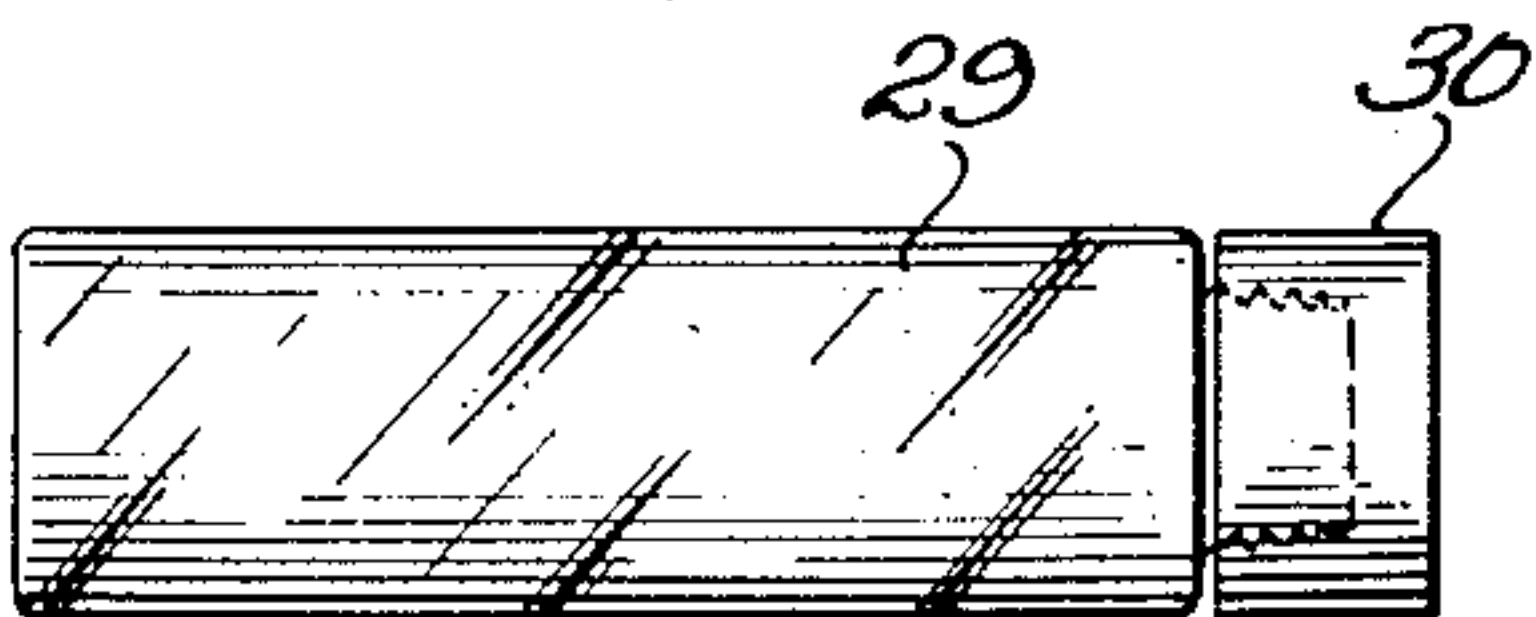
*Fig. 3*



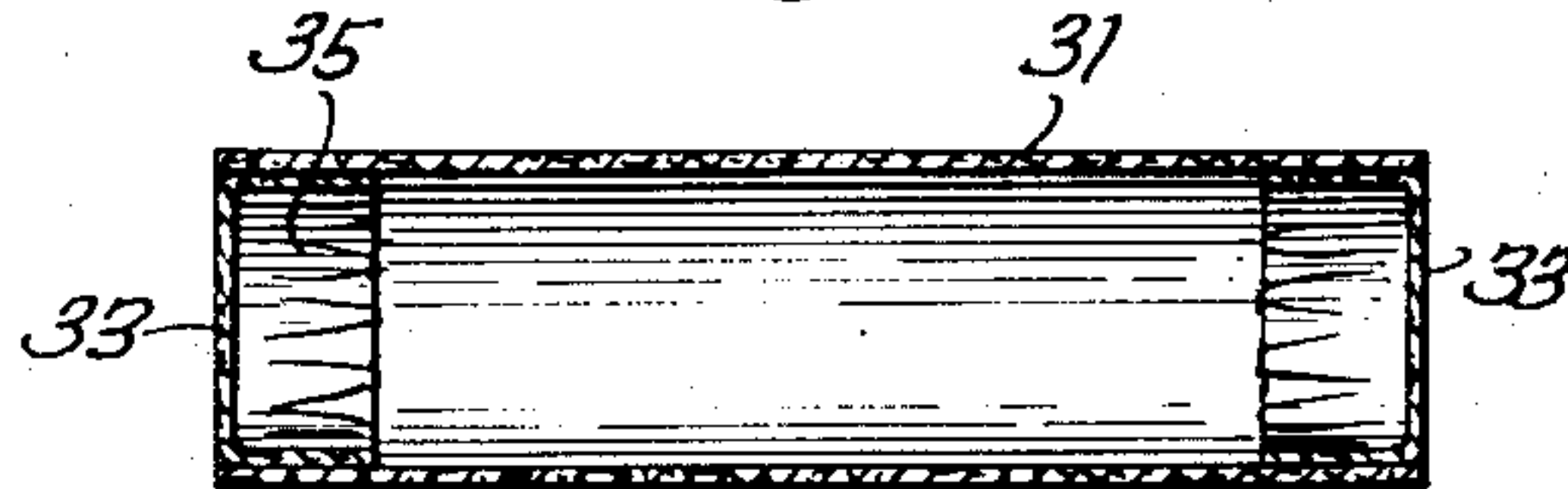
*Fig. 4*



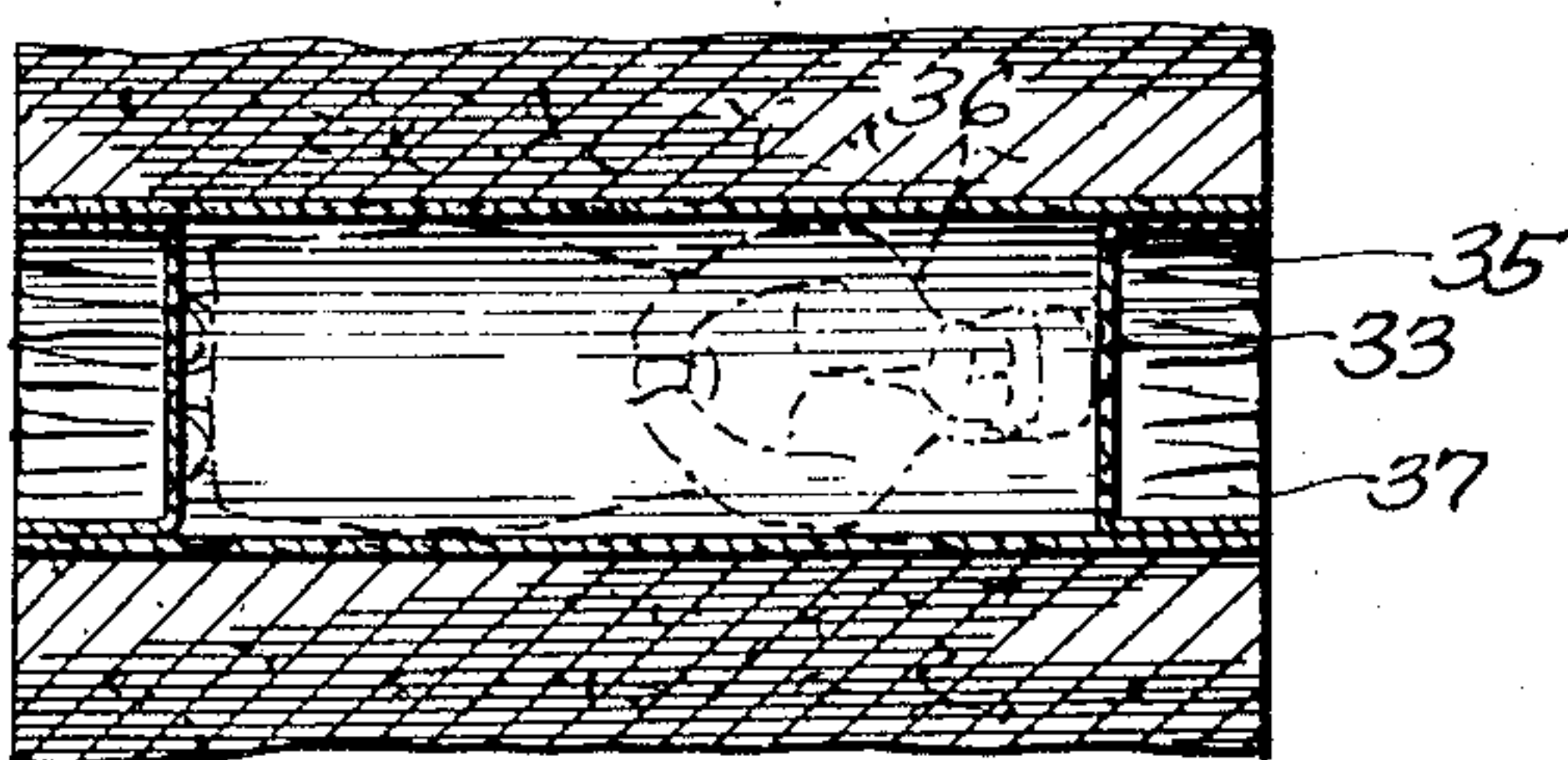
*Fig. 5*



*Fig. 6*



*Fig. 7*



INVENTOR.  
Joseph F. Diederich  
BY  
Robert H. Wendt  
Att'y

Feb. 17, 1953

J. F. DIEDERICH

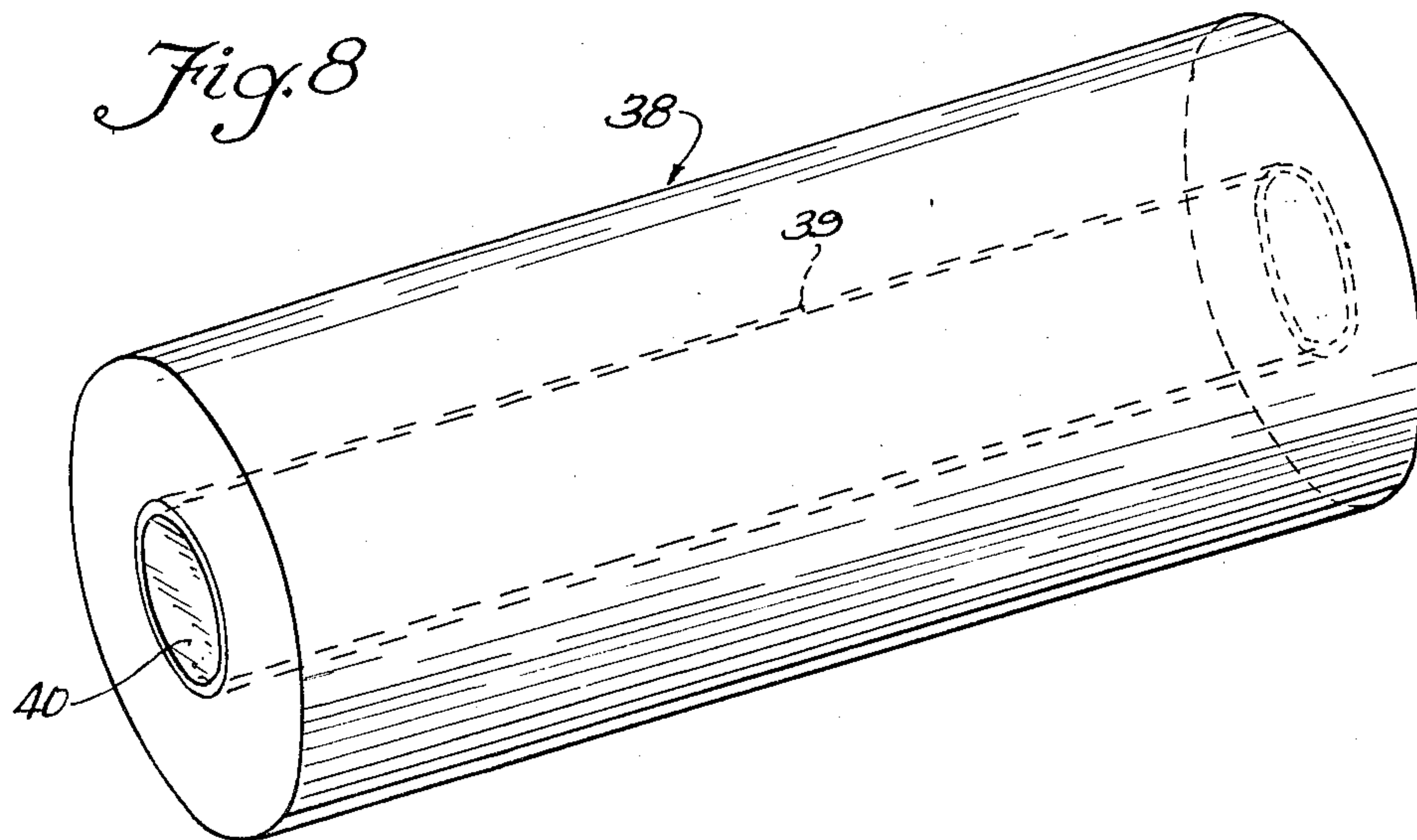
2,628,713

PACKAGE FOR DEODORANTS, STATUARIES AND THE LIKE

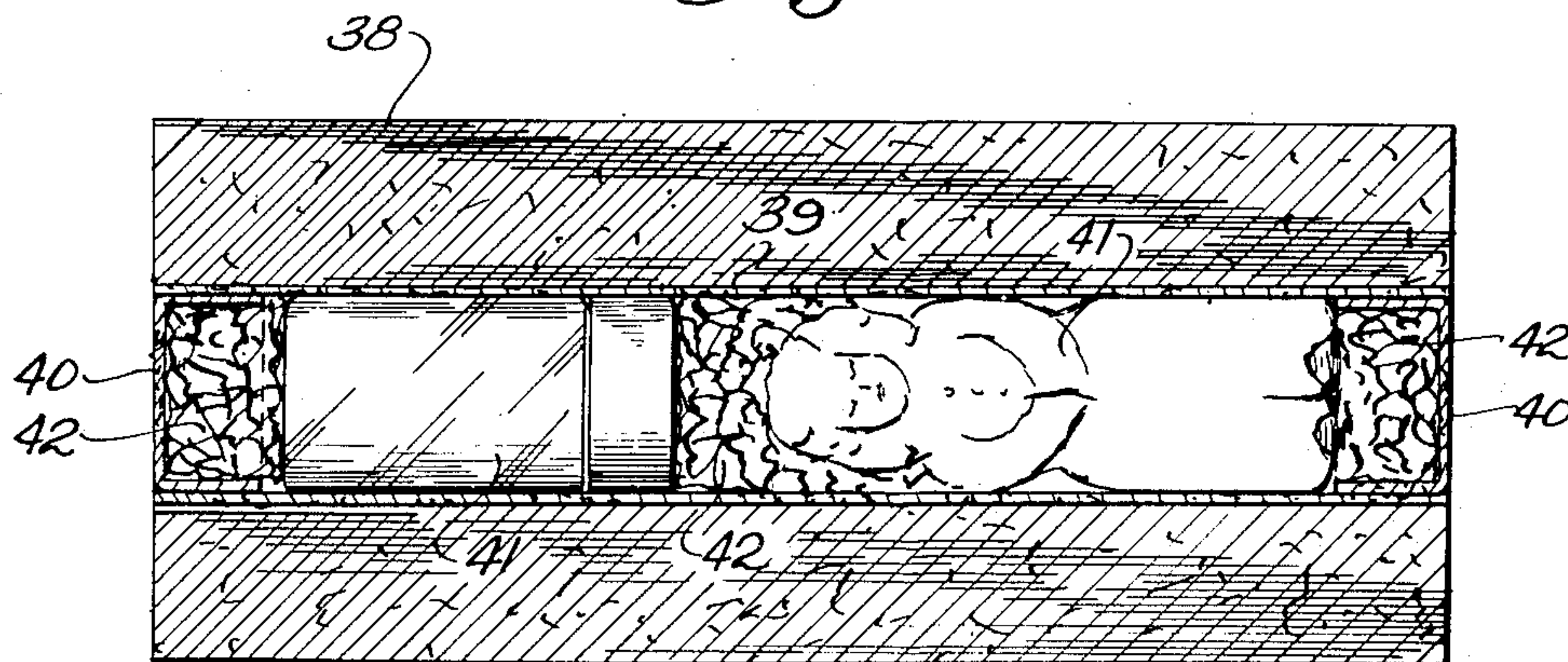
Filed July 11, 1950

2 SHEETS—SHEET 2

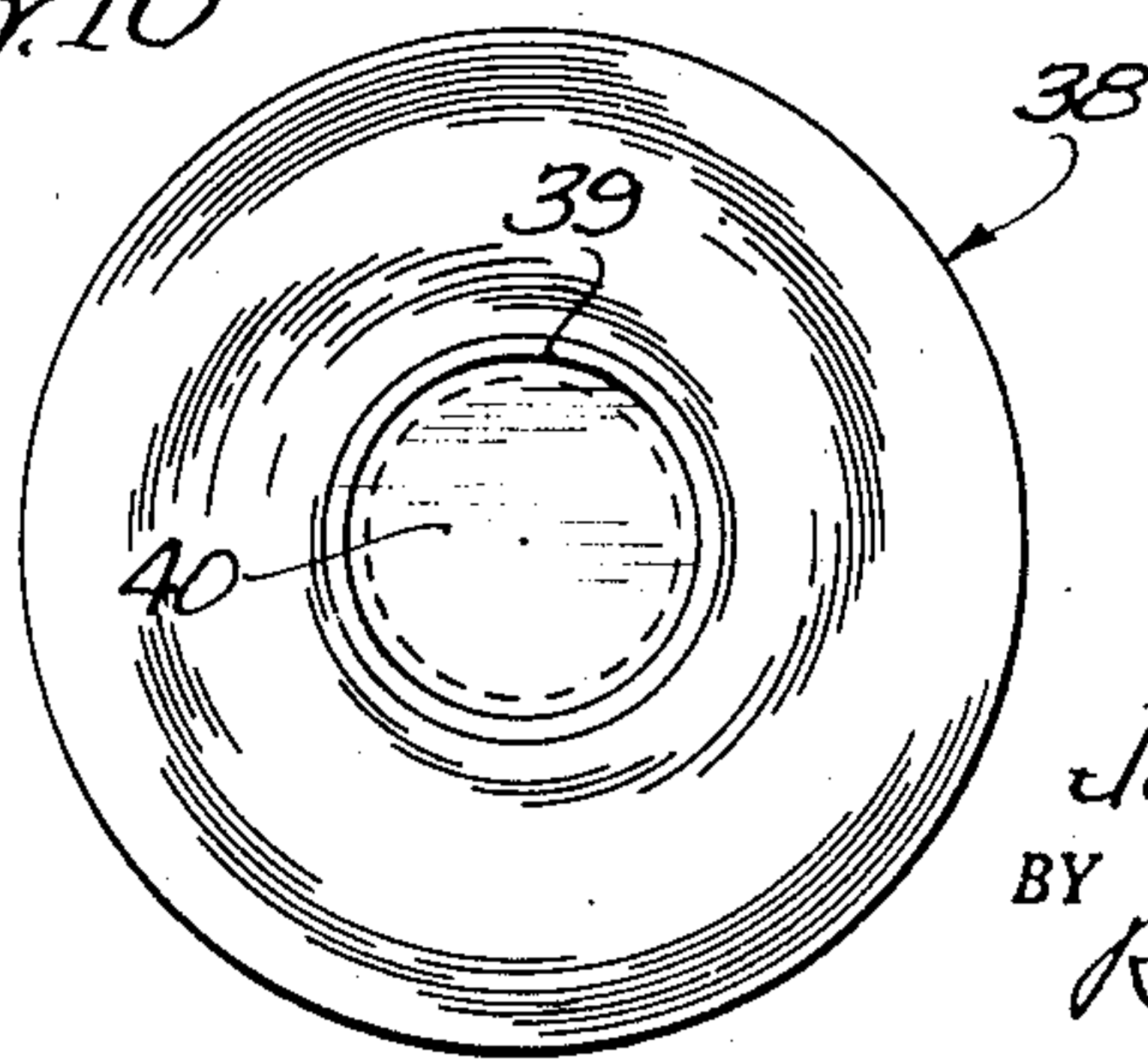
*Fig. 8*



*Fig. 9*



*Fig. 10*



INVENTOR.  
Joseph F. Diederich  
BY Robert H. Wendt  
Att'y



## UNITED STATES PATENT OFFICE

2,628,713

PACKAGE FOR DEODORANTS, STATUARIES,  
AND THE LIKE

Joseph F. Diederich, La Grange, Ill.

Application July 11, 1950, Serial No. 173,035

2 Claims. (Cl. 206—47)

1

The present invention relates to packages for deodorants, statuaries and the like, and is particularly concerned with the provision of an improved package for packaging an improved form of deodorant of the type disclosed in my prior application Serial No. 152,236, Toilet Flush Tank Accessories, filed April 26, 1950, and for other fragile articles.

The present deodorant is adapted to be mounted in the flush tank of a toilet above the water, being supported by one of the brackets shown in my prior application.

Such a deodorant vaporizes into the surrounding air and when the flush tank is operated air is drawn into the flush tank and mixed with the deodorant vapor.

As the flush tank again fills up this air is driven out into the bathroom, carrying with it the vaporized deodorant.

One of the objects of the present invention is the provision of an improved construction for a deodorant unit, which is adapted to be packaged more readily because it has no projecting parts and is made of such a shape that it may be rolled up in paper or housed in a paper tube or the like.

Another object of the invention is the provision of an improved package, by means of which the deodorant may be handled and sold without possibility of breakage and without necessity for separate packaging.

Another object is the provision of an improved deodorant unit and package in which the deodorant is housed in the paper tube core of a roll of toilet paper or a roll of paper towels, so that the deodorant may be sold with the toilet paper without necessity for another package, and so that it can be handled and sold without likelihood of breakage.

Another object is the provision of an improved package suitable for any fragile article, such as porcelain statuaries or the like, and by means of which a wide distribution of the articles may be secured, since the articles may be sold with the toilet paper or paper towels.

Other objects and advantages of the invention will be apparent from the following description and the accompanying drawings, in which similar characters of reference indicate similar parts throughout the several views.

Referring to the two sheets of drawings accompanying the specification,

Fig. 1 is an axial sectional view taken through a roll of toilet paper, which forms a package for an improved deodorant unit;

2

Fig. 2 is an end elevational view of the package;

Fig. 3 is a side elevational view of the deodorant unit;

Fig. 4 is a side elevational view of a modification;

Fig. 5 is a side elevational view of a container for a liquid deodorant;

Fig. 6 is an axial sectional view of the improved paper tube core structure for the toilet roll;

Fig. 7 is a fragmentary axial sectional view of a package for preventing breakage of a fragile article such as a statuary;

Fig. 8 is a view in perspective of a package which includes a roll of paper towels;

Fig. 9 is an axial sectional view; and

Fig. 10 is an end elevational view.

Referring to Figures 1 to 4, the vaporizer unit 20 may consist of any suitable perfumed deodorant adapted to be used for a toilet or a bathroom.

Such a deodorant may include solid paradichloro benzene plus perfume, and any other desired chemical constituents.

The present deodorant is preferably cylindrical in shape and preferably has half spherical ends 21 to avoid breakage of corners. Midway between its ends the deodorant unit 20 has an imbedded supporting member 22 of metal or molded plastic, which is preferably located within the borders of the deodorant but at one of the sides.

For example, a flat plate 22 may have a pair of holes 23 for anchorage, and it may be imbedded in the deodorant but exposed at a recess 24, where the supporting member has an aperture 25.

The aperture 25 is thus located above the center of gravity so that the deodorant hangs in horizontal position when mounted on a hook, as provided by the brackets of my prior application.

As the supporting member 22 is wholly within the boundaries of the cylinder, there are no projecting parts and the deodorant may fit into a tubular package.

Referring to Figure 4, this is a modification, in which the supporting member 26 is made of wire having an eye 27, and a pair of end portions provided with anchoring formations 28.

Referring to Figure 5, this is a screw cap bottle 29 of the same size which may be used as shown in my prior application and which is for containing and dispensing liquid deodorant, the cap 30 being removed at that time.

The present deodorants may be packaged in ordinary paper tubes, but I prefer to use a paper



3

cardboard tube 31, located within a roll 32 of toilet paper, and the size of the deodorant is made such that it has a frictional fit in the core or tube 31.

The end spaces between the two caps 33 and the deodorant in the tube 31 may be filled with crushed paper 34.

The caps 33 are preferably of the type formed out of a cardboard disc by means of a die which produces wrinkles 35, as it forms the cylindrical sides of each cap. These cylindrical sides have a frictional fit and in some cases they may be flared to provide a pressed fit requiring no adhesive. In other cases they may be secured by means of a suitable glue or cement.

The caps may be placed with the flanges or sides 35 inward, as in Figure 6, in which case there may be room for crushed paper packing, such as indicated at 34. In other cases the caps may be turned about with the flat portion 33 inward and the flange 35 outward, as shown in Figure 7, and the caps 33 may then be caused to engage any fragile article 36 which is packaged therein.

In such case the caps may be secured in place by adhesive or glue or by means of suitable wire clips 37.

Referring to Figure 8, this is a perspective of a paper towel roll 38, also having a tubular paper core 39, provided with caps 40 and forming a package for a plurality of deodorants or statuary indicated at 41.

In this case the packaged deodorant or other articles may be separated by crushed paper packing 42, and thus they are protected against breakage from all sides.

It will thus be observed that I have invented an improved deodorant unit which is adapted to be packaged more easily, and, in fact, may be sold with toilet paper rolls which are so constructed that they protect any fragile article against breakage.

The deodorants are used in the same environment as the toilet roll, and the toilet roll may thus be used for securing a large distribution of deodorants without need for additional packing; and paper towels may be used for this purpose as well as toilet paper rolls.

While I have illustrated a preferred embodiment of my invention, many modifications may be made without departing from the spirit of the invention, and I do not wish to be limited to the

4

precise details of construction set forth, but desire to avail myself of all changes within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

1. A package assembly for deodorant comprising a substantially cylindrical core of molded deodorant provided with substantially hemispherical end formations, said core having imbedded therein a substantially rigid member provided with an aperture and said core having a cavity intermediate the ends thereof exposing said member at said aperture, said member lying entirely within the cylindrical surface of said deodorant, a tubular cardboard casing frictionally fitting said core, a pair of cardboard caps secured in each end of said tubular cardboard casing, crushable packings at each end of said core engaging said core and caps and a wrapping of soft toilet tissue spirally about said tubular casing.

2. A package assembly as set forth in claim 1 further characterized in that said caps have cylindrical sides extending within said casing, and wherein the packings have at least portions thereof extending within the cylindrical sides of said caps.

JOSEPH F. DIEDERICH.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
958,678	Pollard	May 17, 1910
1,365,403	Holway	Jan. 11, 1921
1,474,254	Gerstle	Nov. 13, 1923
1,640,272	Gotham	Aug. 23, 1927
1,739,291	Cushing	Dec. 10, 1929
1,763,257	Nielsen	June 24, 1930
1,834,738	Reefer	Dec. 1, 1931
1,842,034	Lewis	Jan. 19, 1932
1,861,294	Bartlett	May 31, 1932
2,201,530	Fuld	May 21, 1940
2,293,785	Wintz	Aug. 25, 1942
2,344,206	Forni	Mar. 14, 1944

FOREIGN PATENTS

Number	Country	Date
798,387	France	Mar. 10, 1936