H. R. PLANTEN.

GELATIN CAPSULE.

APPLICATION FILED DEC. 3, 1914.

1,134,156. Patented Apr. 6, 1915.

Fig. 1.

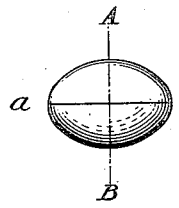


Fig. 2.

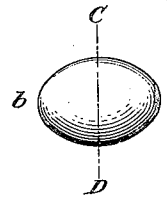


Fig. 3.

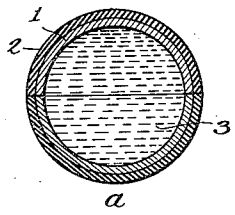


Fig. 4.

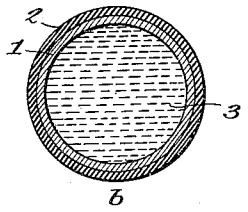


Fig. 5.

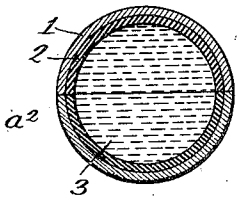


Fig. 6.

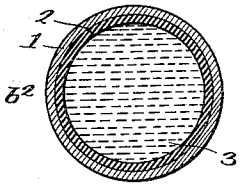
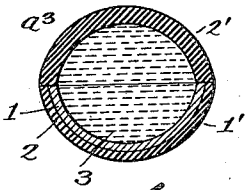


Fig. 7.



Witnesses:
Louis E. Ceder.
M. E. Smoot.

Inventor:
Hermanus Rolf Planten
by his attorney
H. L. Bin.

UNITED STATES PATENT OFFICE.

HERMANUS ROLFF PLANTEN, OF NEW YORK, N. Y.

GELATIN CAPSULE.

1,134,156. Specification of Letters Patent. Patented Apr. 6, 1915.

Application filed December 3, 1914. Serial No. 875,265.

To all whom it may concern:

Be it known that I, HERMANUS ROLFF PLANTEN, a citizen of the United States of America, and a resident of the borough of Brooklyn, in the city and State of New York, have invented a new and useful Improvement in Gelatin Capsules, of which the following is a specification.

This invention relates to what are known as "filled" gelatin capsules, made of suitable gelatin, and inclosing liquids, semi-liquids or dry substances adapted to be so capsuled.

It relates especially but not exclusively to such capsules with medicines for man or beast as the contents.

It is of great importance to physicians and their patients, as well as to the manufacturers of such capsules, that genuine goods only be sold and used. At the same time external trade-marks are in many cases considered objectionable by medical practitioners.

One mode of marking machine-made gelatin capsules for identification without exposing the mark to view externally is set forth in United States Patent No. 1,087,843 for M. H. Smith's improvement in capsules patented February 17, 1914; the means including a "raised identification mark" on the inner surface of the capsule.

The leading object of the present invention is to accomplish the same result by other means applicable in common to machine made and hand made capsules.

Other objects will be set forth in the general description, which follows.

The present invention consists in a filled gelatin capsule embodying such improved means for the prevention or detection of the substitution of spurious goods, as hereinafter particularly described and claimed.

A sheet of drawings accompanies this specification as part thereof.

Figures 1 and 2 are side views respectively of a machine-made and a hand-made ovoidal capsule embodying the present invention; Fig. 3 represents a magnified cross-section on the line A—B, Fig. 1; Fig. 4 represents a magnified cross section on the line C—D, Fig. 2; Figs. 5 and 6 represent magnified cross sections of modifications of said machine-made capsule and said hand-made capsule respectively; and Fig. 7 represents a magnified cross-section of a spheroidal capsule illustrating additional modifications.

Like reference characters refer to like parts or features in all the figures.

The improved gelatin capsule in any of its species or modifications comprises portions 1 and 2 which are respectively light and darker in color, but in common of translucent gelatin, and together, or the darker at least, of the same color as the contents of the capsule, represented at 3, so that the combination of colors cannot be distinguished until a capsule is cut open and emptied to expose its gelatin portions to view for comparison with those of a standard or for inspection. The specific contents represented at 3 in all the sectional figures are medicinal liquids of any kind adapted to be so capsuled.

In the species represented by Figs. 1 and 3 and by Figs. 2 and 4, respectively, the gelatin walls of the improved capsule, whether machine-made as represented at *a*, or hand made as represented at *b*, are composed throughout of light and darker layers constituting the said portions 1 and 2, with the darker layer 2 external.

In the modification represented by Figs. 5 and 6, the darker layer 2 is internal, the capsules a^2 b^2 being respectively machine made and hand made, and otherwise like those above described.

As illustrated by Fig. 7, the improvement is not confined to ovoidal capsules, but may be embodied in other shapes, for example spheroidal capsules or "pearls;" and in any of the machine-made capsules one of the two halves 1′ 2′ may be of ordinary (one color) make as represented at 2′, being preferably of the same color as the outermost of the two indicating portions 1, 2. As shown in Fig. 7, the darker portion 2 is outermost, and the one-color half 2′ is of the same color as said darker portion; both being of the same color as the liquid contents represented at 3, as aforesaid.

The improvement is obviously applicable to filled gelatin capsules of all sizes and varieties; the liquid contents may be artificially or specially colored to facilitate coloring the gelatin to match the color of the contents; and other like modifications will suggest themselves to those skilled in the art.

Having thus described said improvement, I claim as my invention, and desire to patent under this specification:

1. A filled gelatin capsule having gelatin distinguishing portions of two colors, this

characteristic being normally concealed by the color of the contents of the capsule.

2. A medicine filled gelatin capsule having gelatin distinguishing portions of two colors, this characteristic being concealed in the filled capsule by the color of the medicine.

3. A filled gelatin capsule having light colored and darker gelatin portions of which the darker is of the same color as the contents of the capsule.

4. A filled gelatin capsule the walls of which are composed throughout of light colored and darker layers, the darker layer being of the same color as the contents of the capsule.

5. A filled gelatin capsule the walls of which are composed throughout of light colored and darker layers, the darker layer being outermost and of the same color as the contents of the capsule, substantially as hereinbefore specified.

HERMANUS ROLFF PLANTEN.

Witnesses:

THOMAS HOLLAND, Jr.,

F. T. BOYD.