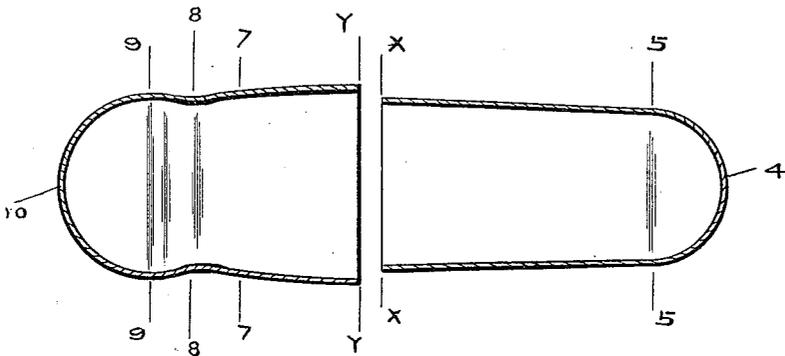


(No Model.)

R. P. HOBBS.
CAPSULE.

No. 525,845.

Patented Sept. 11, 1894.



WITNESSES:

H. D. Neal
Chas. D. Tilford

INVENTOR
Riley P. Hobbs
BY
V. H. Lockwood
ATTORNEY

UNITED STATES PATENT OFFICE.

RILEY P. HOBBS, OF INDIANAPOLIS, INDIANA.

CAPSULE.

SPECIFICATION forming part of Letters Patent No. 525,845, dated September 11, 1894.

Application filed March 5, 1894. Serial No. 502,469. (No model.)

To all whom it may concern:

Be it known that I, RILEY P. HOBBS, of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Capsules; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, in which like letters and figures refer to like parts.

My invention relates to improvements in capsules, the chief object being the production of capsules which can be readily joined, by machinery if desired, and when joined there will be a lock fit between the cap and the body of the capsule, which will prevent the cap from rebounding during the joining and prevent its escape after joining without a considerable pull on it, and which will render the capsule air and fluid tight.

The figure is a longitudinal section of the body and cap of my capsule, shown herein of a large size for the purpose of defining the form more clearly.

The body of the capsule is made in the ordinary form heretofore adopted, but can be made in any well known form. The form shown is one provided with a semi circular end 4, and whose diameter gradually increases from the point 5 near the closed end 4 to the open end of the capsule, at $x-x$. I make no claim to any invention so far as the form of the body is concerned, but my invention relates to the form of the cap. The closed end 10 of the cap, as shown, is substantially semi circular, but may be in any other form. The essential feature of my invention consists in contracting the diameter of the cap between its two ends, as will hereinafter appear more fully. The open end $y-y$ of the cap is made sufficiently large to readily slip over the open end $x-x$ of the body. From $y-y$ to the point 7 the diameter of the cap decreases; from the point $y-y$ to the point 8 the form is substantially that of an ogee. The inner diameter of the cap at 7 is substantially the same as the outer diameter of the mouth

of the body at $x-x$, so that when the cap is inserted over the body it will fit snugly when the mouth of the body has reached the point 7 of the cap. Between the points 7 and 9 of 50 the cap the diameter is contracted, the smallest diameter being at the point 8. The amount of contraction of the diameter at the point 8 is preferably about two thousandths of an inch, in the usual sized capsule. The form between 55 the points 7 and 9 should be such that the contracted portion would be wide enough to furnish considerable bearing surface. When the cap is being placed over the body after the point 7 has reached the mouth of the body 60 $x-x$, because the diameter of the cap at 8 is less than the diameter of the body at $x-x$, the mouth of the body will be slightly contracted as it is pushed in by the point 8, and the cap at the point 8 will be slightly en- 65 larged, so that there will be an exceedingly tight fit between the body and the cap, at the point 8 of the cap. After the mouth of the body has passed the point 8, because of the inclined form of the body, it will quickly 70 spring into the cap until the mouth of the body at $x-x$ contacts with the end 10 of the cap some distance beyond the point 9. Thus the end of the body will contact with the curved end of the cap and the contracted por- 75 tion of the cap will bind tightly about the body of the capsule, and thus the cap will be held very firmly on the body and cannot be withdrawn without a considerable pull. The mouth of the body will always necessarily con- 80 tact with the closed end of the cap, whereby the jointed or filled capsules will always be of the same length, not only giving them a uniform appearance, but assisting in counting them, which is done by measurement. For 85 the above reasons these capsules will be of uniform size, hence every one will hold the same amount of medicine, which is an important requisite in a capsule. The form of the cap form $y-y$ to 8 is substantially of an ogee, and this shape of the mouth of the cap 90 permits the body to get well into the cap be-

fore it begins to encounter the contracted portion of the cap, so that the body cannot escape during the first part of the process of joining.

What I claim as my invention, and desire
5 to secure by Letters Patent, is—

1. A capsule comprising a body, and a cap slightly contracted between its ends, substantially as shown and described.

2 A capsule comprising a body, and a cap
10 whose form near its mouth is substantially an

ogee shape and whose diameter is less near the closed end of the cap than it is at the closed end or at the mouth, substantially as shown and described.

In witness whereof I have hereunto set my hand this 20th day of February, 1894.

RILEY P. HOBBS.

Witnesses:

V. H. LOCKWOOD,
ELMER MARSHALL.