

No. 629,390.

Patented July 25, 1899.

B. S. PALMER.

VAPORIZER.

(Application filed May 8, 1899.)

(No Model.)

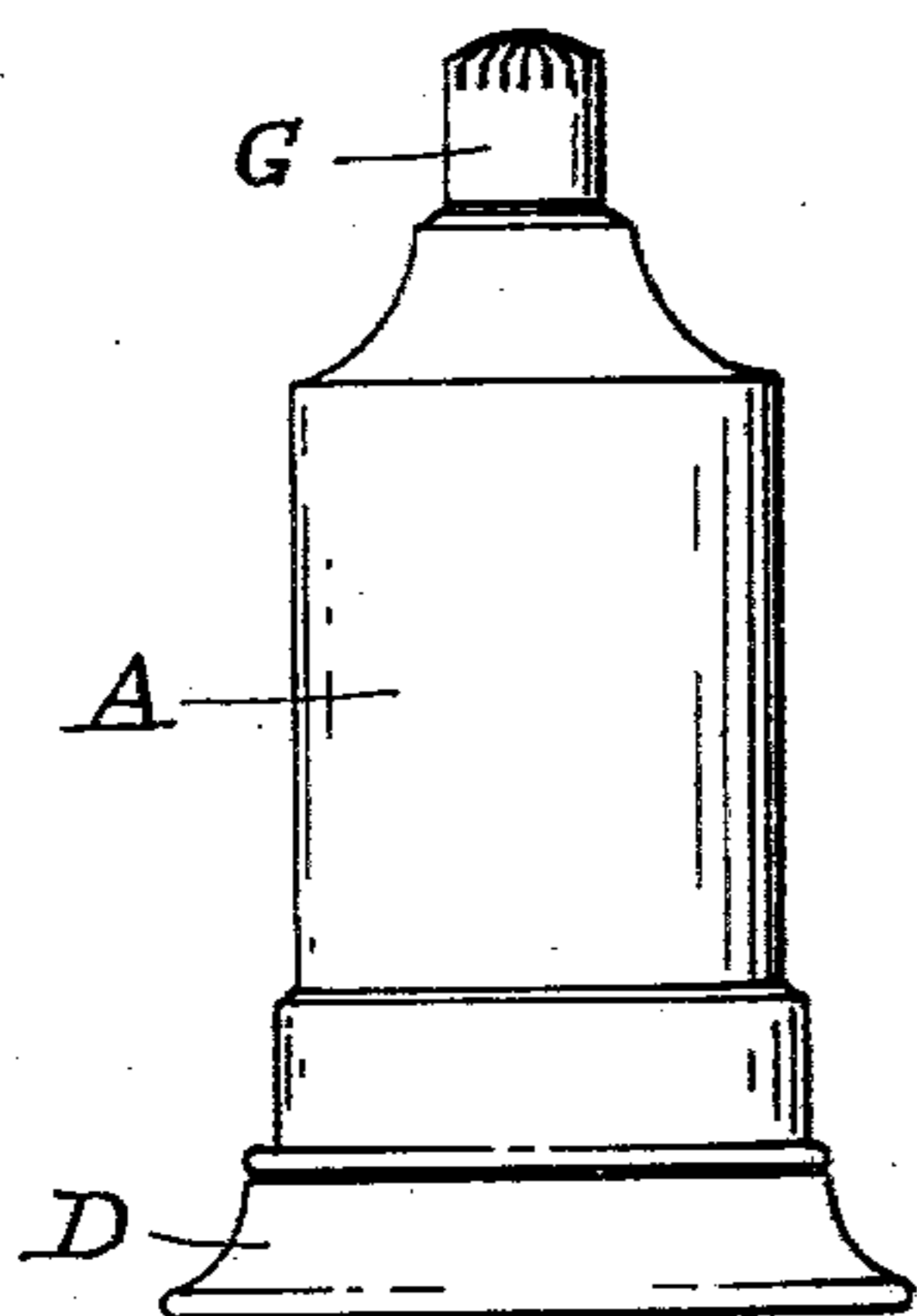


Fig. 1.

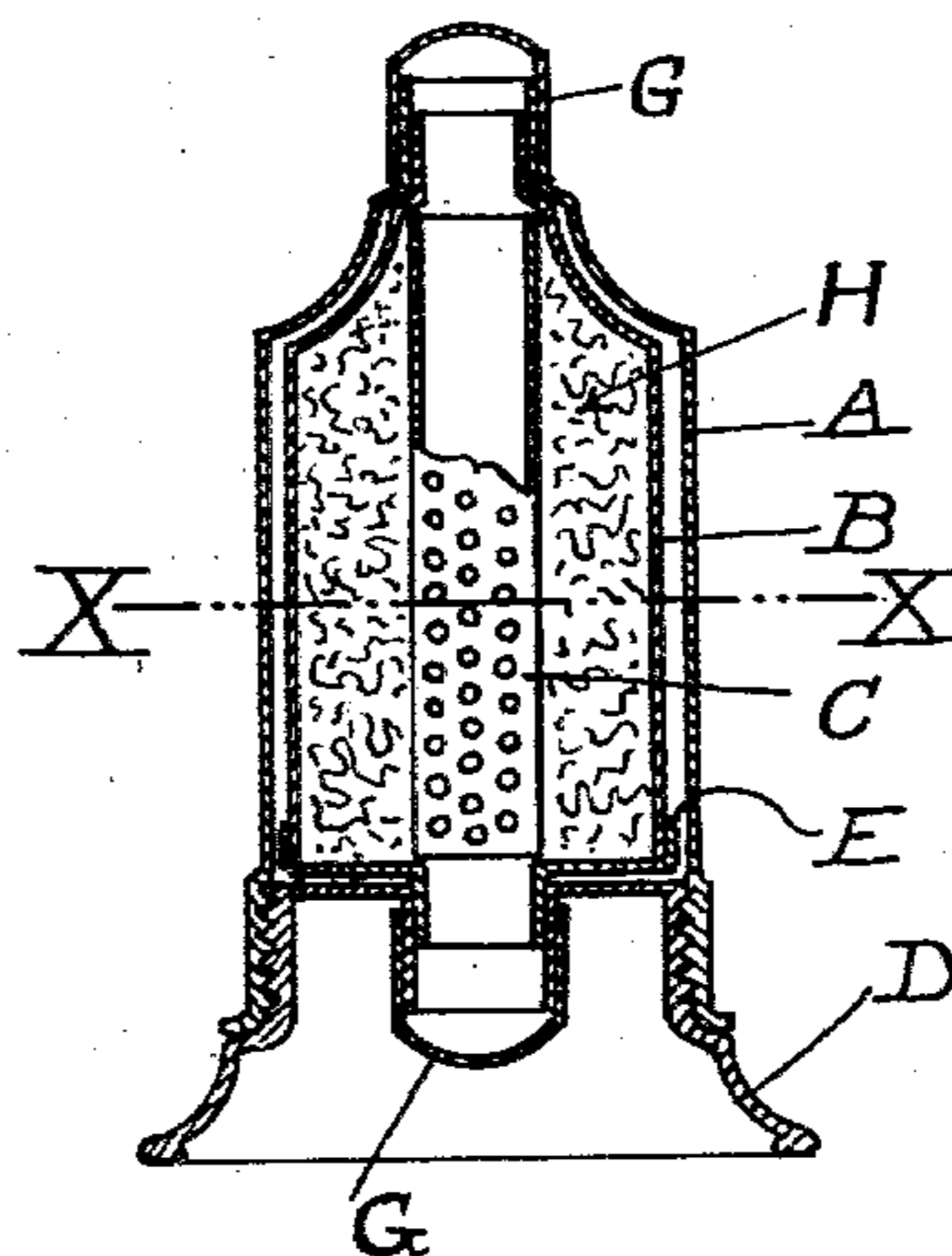


Fig. 2.

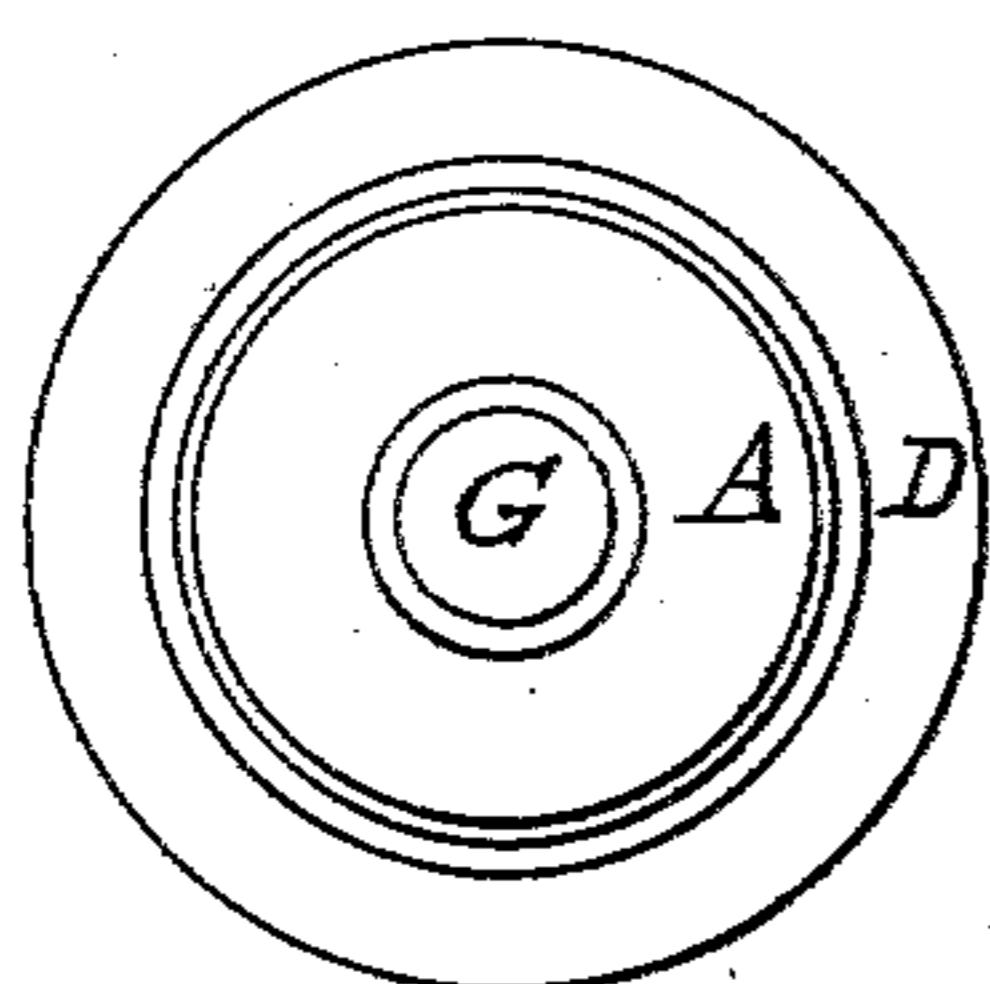


Fig. 3.

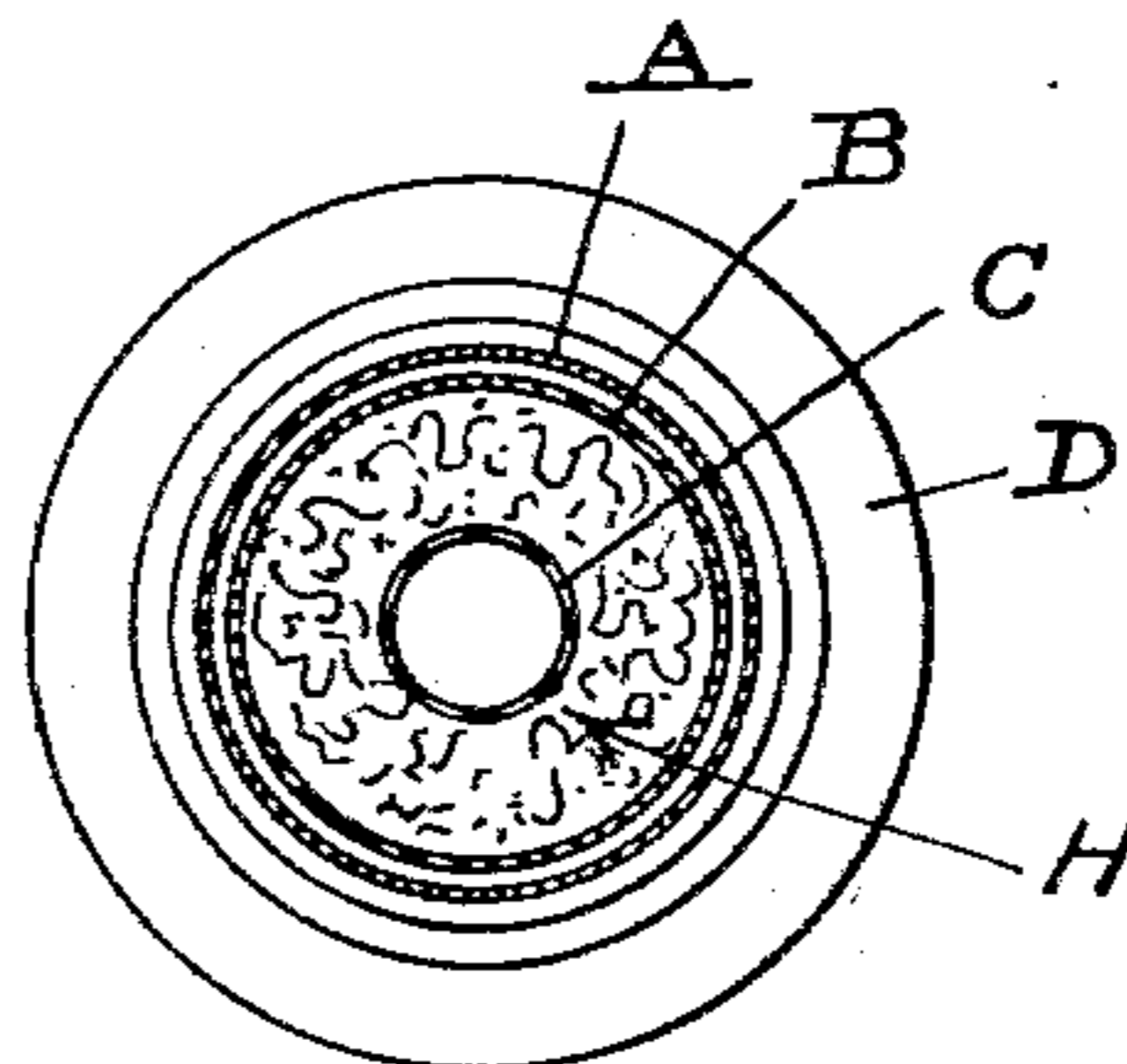


Fig. 4.

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UNITED STATES PATENT OFFICE.

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VAPORIZER.

SPECIFICATION forming part of Letters Patent No. 629,390, dated July 25, 1899.

Application filed May 8, 1899. Serial No. 715,935. (No model.)

To all whom it may concern:

Be it known that I, BYRON S. PALMER, a citizen of the United States of America, and a resident of the village of Glens Falls, Warren county, State of New York, have invented certain new and useful Improvements in Vaporizers, of which the following is a specification.

My invention relates to a vaporizing device for the purpose of applying medicine to such portions of the body as the eye, ear, nose, and throat; and the objects of my invention are, first, to produce a vaporizer in which different medicines may be used by removing the inner cylinder which contains one medicine and inserting cylinders containing other medicines in the same vaporizer; second, to so construct a vaporizer that it may have several inner cylinders charged with medicine, so that when the medicine is exhausted from one inner cylinder the vaporizer may be recharged by simply removing the exhausted cylinder and inserting a fresh one and returning the exhausted cylinder to the manufacturer or the physician furnishing the same to be recharged, and thus avoid the inconvenience and loss of the use of the vaporizer while it is being recharged, and, third, to so construct my vaporizer that the powerful medicines used will not so act upon any part of it as to produce a vapor which will be injurious to the user. I attain these objects by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of my vaporizer. Fig. 2 represents a vertical section. Fig. 3 represents a top plan view, and Fig. 4 represents a horizontal section at X X on Fig. 2.

Similar letters refer to similar parts throughout the several views.

My vaporizer consists of an outside shell or case A, made in the common form of a vaporizer or inhaler, having caps G G, which when removed leave a clear space through the entire center from the bottom to the top. The bottom D screws off, so as to leave the shell or case A open at the bottom.

B is an inner cylinder, which is inserted in the shell or case A when the bottom D is removed and has tubes on each end to fit in the upper and lower tubes of the shell or case A, which can be closed by caps similar to the

caps G G when the cylinder B is not in use or inserted in the shell or case A, but which caps are removed when the cylinder B is within the shell or case A.

C is a perforated hollow cylinder the length of the cylinder B and of the size of the two projecting tubes of B.

E is a cap which forms the entire bottom of the inner cylinder B and which can be removed for the purpose of inserting the perforated cylinder C and the absorbent H.

H is an absorbent, preferably constructed of asbestos raveled out or picked to pieces and is packed compactly around the hollow cylinder C in the inner cylinder B, and when thus packed the medicine which is desired to be applied is poured upon the absorbent H until the absorbent H becomes saturated as much as is desired.

Many of the medicines used are of a powerful nature, and if they come in contact with certain metals, such as tin or brass, or with joints soldered together they produce a poisonous or injurious vapor. Therefore to prevent any such undesirable action, which often neutralizes or renders positively harmful the administration of medicine by such means, I make the inner cylinder B and the perforated cylinder C of aluminium, which is non-corrosive and unaffected by the medicines used, and by spinning these parts from aluminium or stamping them from the sheet metal without joints the medicine comes in contact with no other portion of the vaporizer and with no other foreign substance. When thus made, several inner cylinders may be used with the same vaporizer, and by having interchangeable cylinders the same instrument may be used for different forms of medicine and for different purposes, and by removing one cylinder from the vaporizer it can be replaced by another charged for an entirely different purpose or one having an entirely different effect. Thus by using these cylinders a counter-irritant may be applied or a stimulant, a hypnotic, antiseptic, germicide, or a sedative, thus adapting the same instrument to many different uses; also, cylinders may be sent away to be recharged without interfering with the use of the vaporizer while they are absent.

The use of my vaporizer is similar to the

use of other instruments of a like character. When the cylinder B is charged with the medicine desired to be applied to a particular part, the bottom D of the vaporizer is removed and the cylinder B inserted and the bottom D returned to its place. Then the caps G G are removed from the cylinder, leaving a clear course for a draft of air through the cylinder. Then one end of the vaporizer is placed at or near the part to which the medicine is to be applied. The draft of air will carry the vaporized medicine from the absorbent through the vaporizer, and the desired result will be attained. When the vaporizer is not in use, the caps G G are returned to their places, so as to prevent the medicine from wasting.

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

1. A vaporizer consisting of an outer shell or case, having projecting tubes at the bottom and top; caps to inclose said tubes; an inner cylinder adapted to hold an absorbent material and readily removable from the outer shell or case; a perforated cylinder extending lengthwise of said inner cylinder, around which the absorbent may be packed in said inner cylinder, leaving a clear, open space through the center of the entire vaporizer, between the two caps of the shell or case, substantially as described and for the purposes set forth.

2. In a vaporizer, the combination of an outer shell or case, having projecting tubes at the center of each end; caps to fit said

tubes; an inner cylinder with projecting tubes at the center of each end, corresponding with and fitting into the projecting tubes of the case, said cylinder having a removable bottom; a perforated, hollow cylinder extending from one tube to the other of the hollow cylinder, leaving a clear, open space between the said tubes; an absorbent material packed about said perforated cylinder, within said inner cylinder; the bottom of said outer shell or case being capable of being removed, substantially as described and for the purposes set forth.

3. A vaporizer for medicinal purposes, consisting of an outer shell or case, having projecting tubes on each end, inclosed by caps, in combination with an inner cylinder stamped or spun from aluminium, said cylinder having a removable bottom and no other joints, and, having tubes on each end to correspond with and fit into the tubes on said case; a perforated hollow cylinder of like material, extending from one tube to the other of said inner cylinder; an absorbent material packed around said perforated tube, adapted to hold vaporizing medicine, and means for removing the bottom of said outer shell or case, sufficiently for inserting said inner cylinder, substantially as described and for the purposes set forth.

BYRON S. PALMER.

Witnesses:

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