

(No Model.)

J. DAVIS.
BOTTLE CASE.

No. 353,021.

Patented Nov. 23, 1886.

Fig. 1.

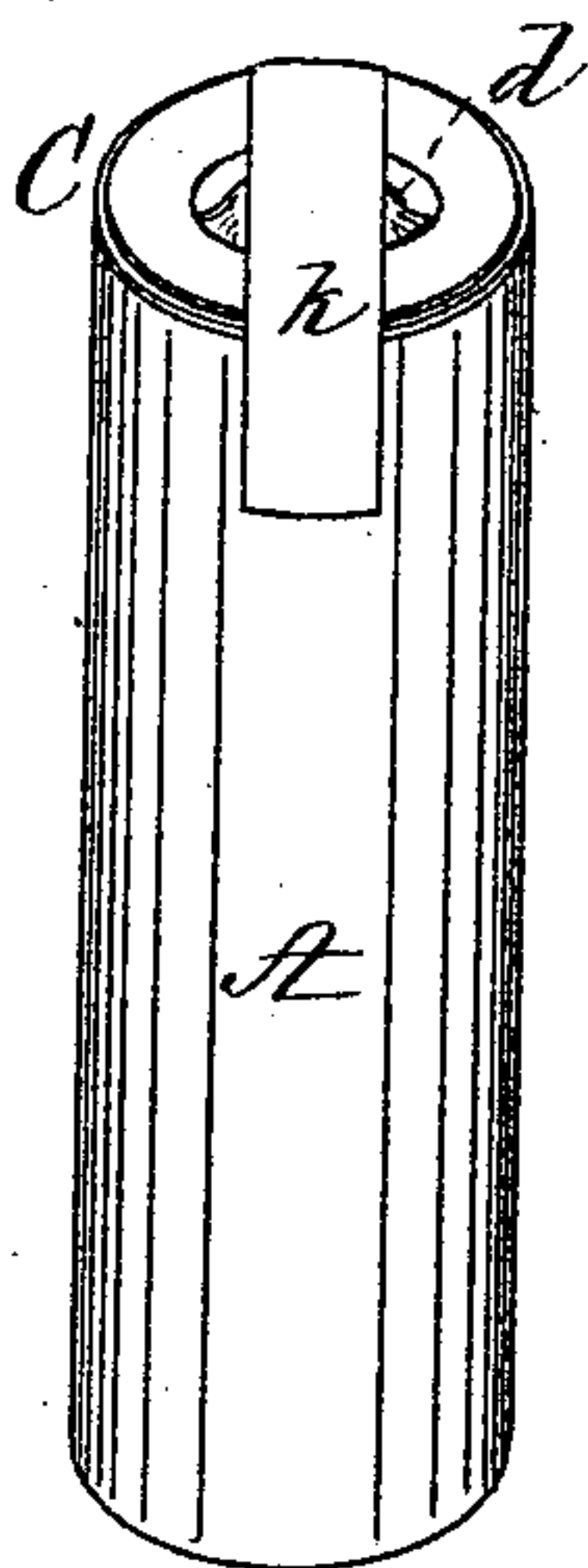


Fig. 2.

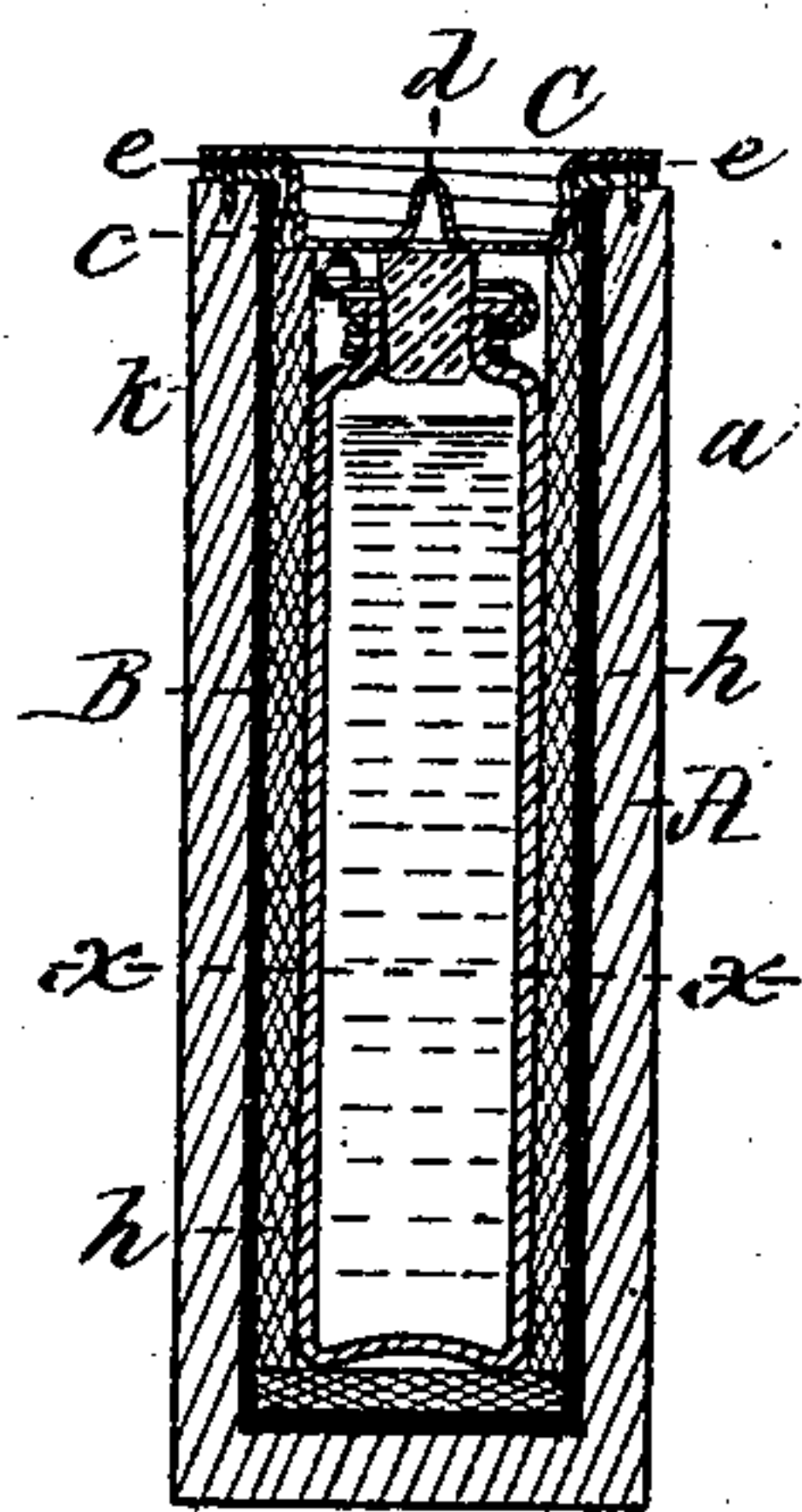


Fig. 3.

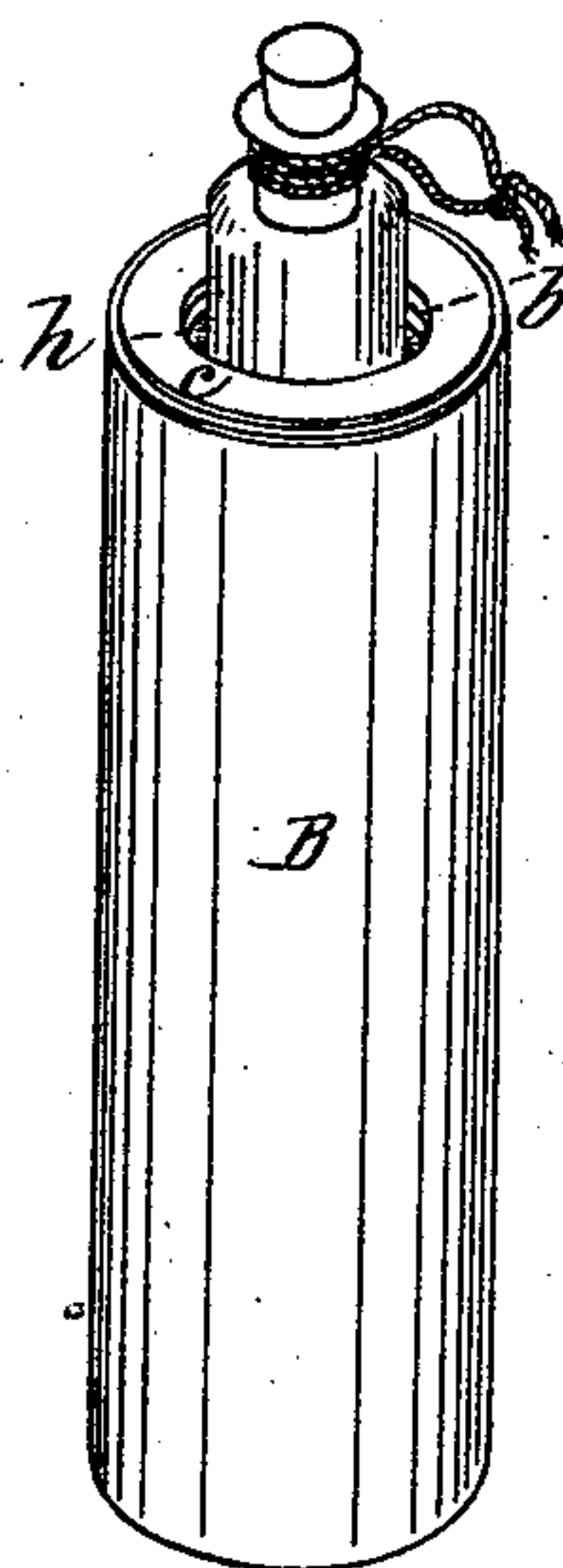


Fig. 4.

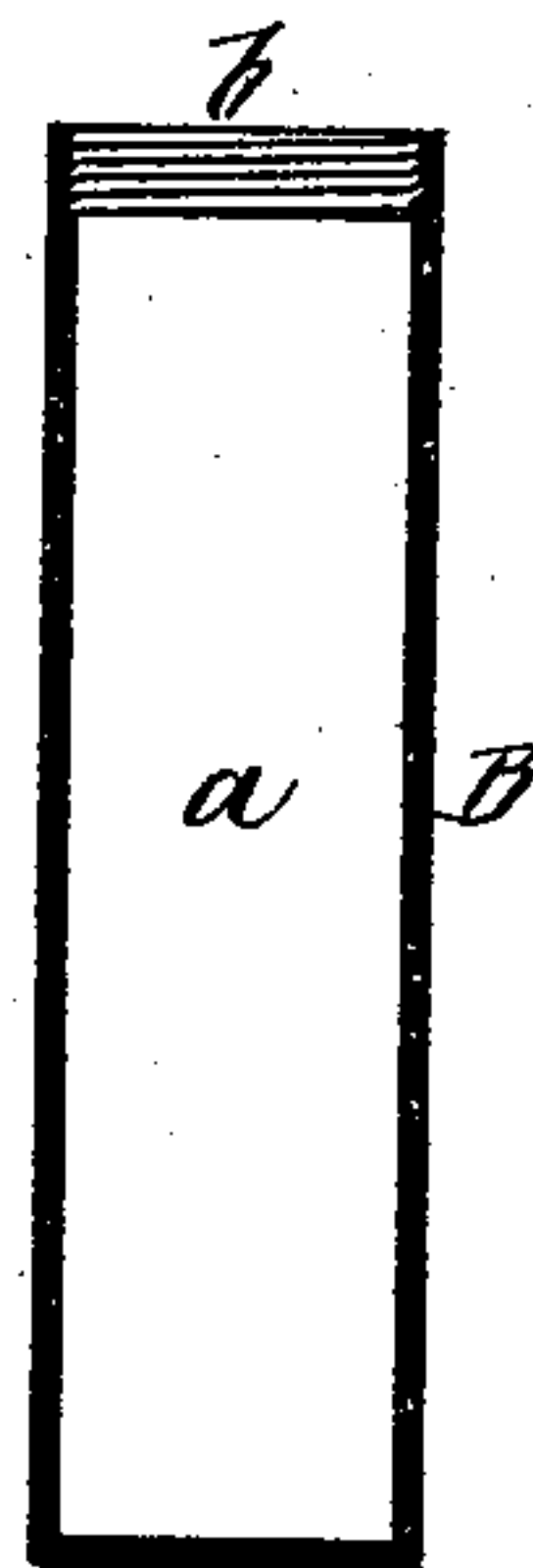


Fig. 5.

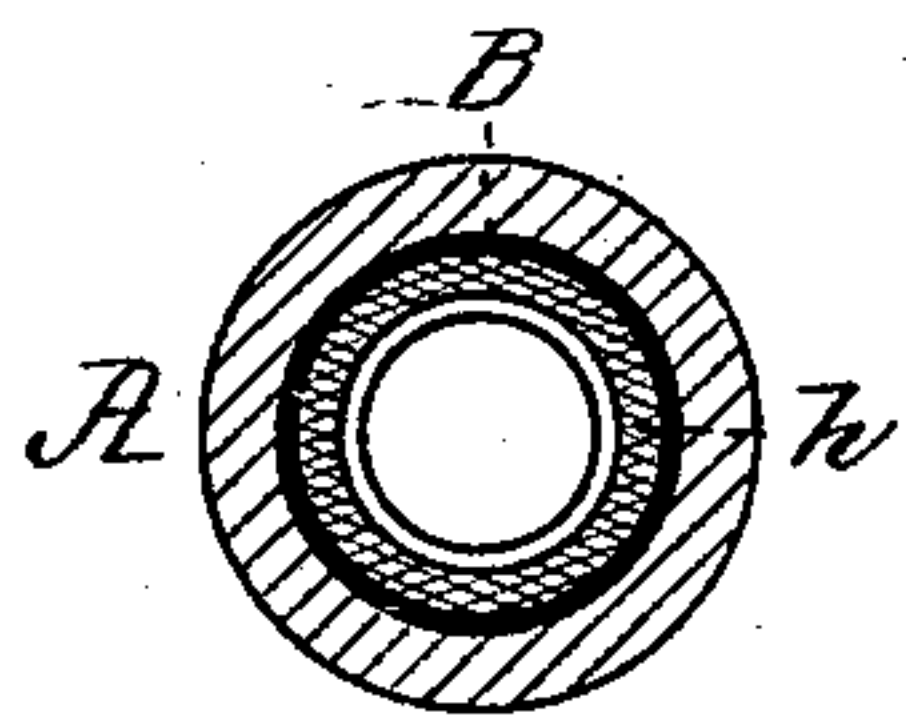


Fig. 6.

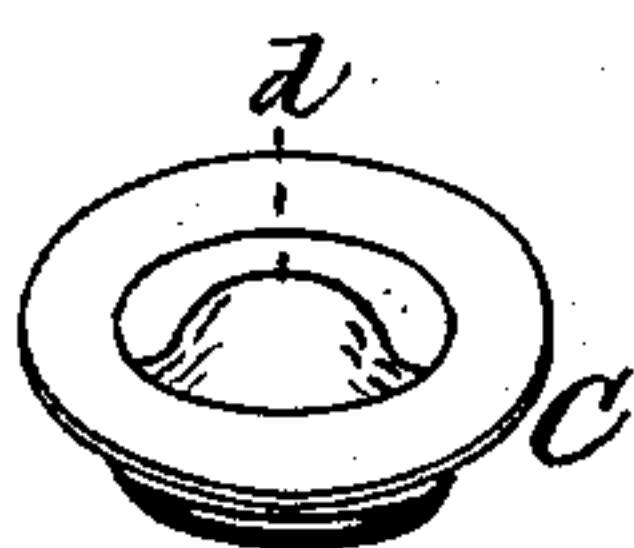


Fig. 7.

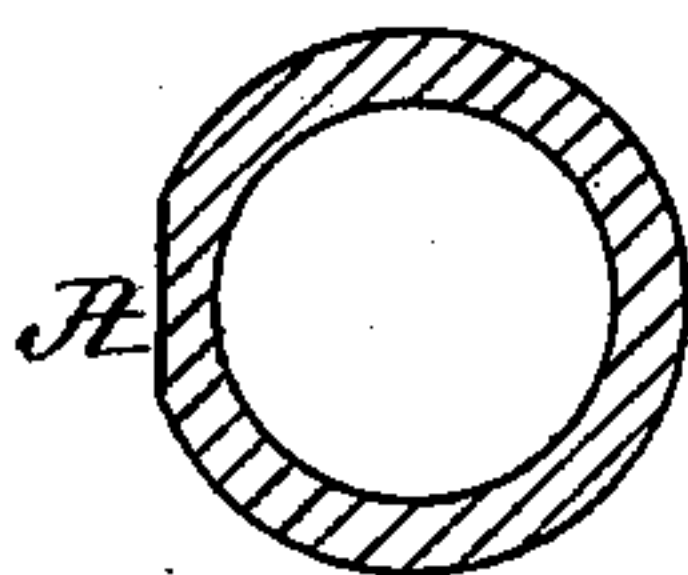


Fig. 8.

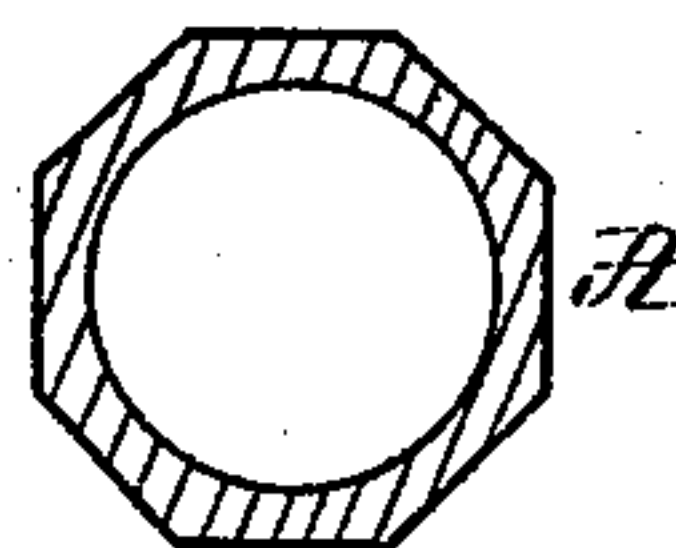


Fig. 10.

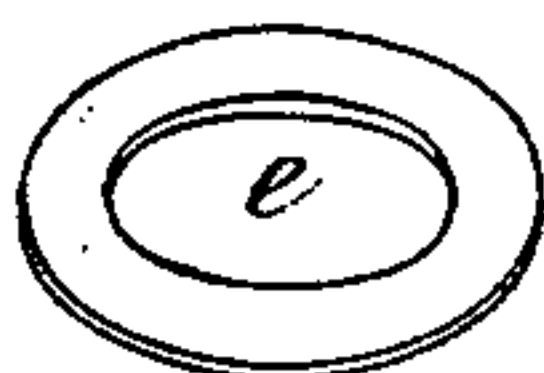
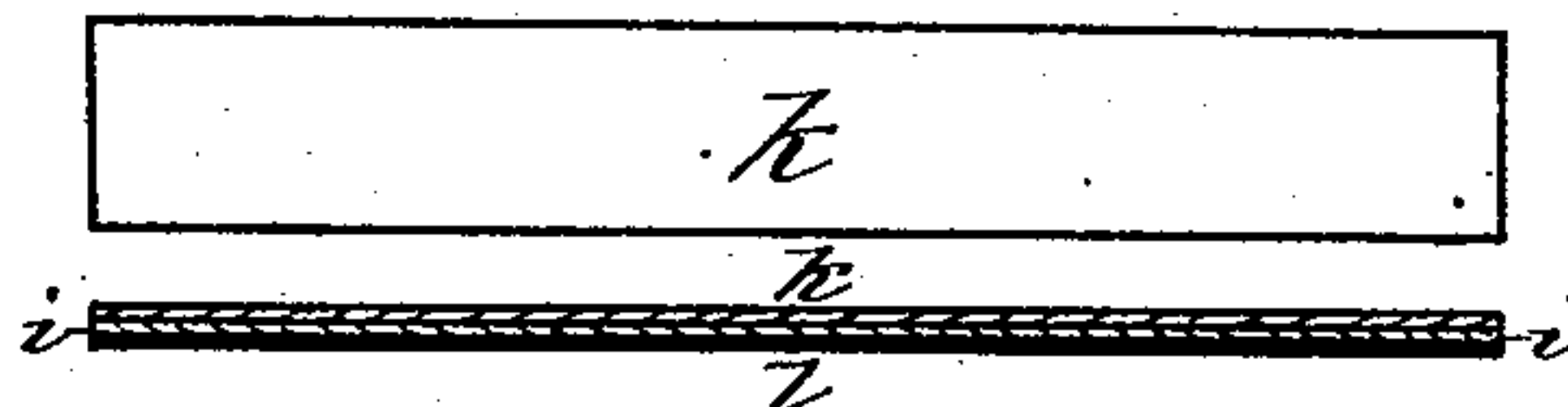


Fig. 9.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOSEPH DAVIS, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, AND NORMAN W. STEARNS, OF BOSTON, MASSACHUSETTS.

BOTTLE-CASE.

SPECIFICATION forming part of Letters Patent No. 353,021, dated November 23, 1886.

Application filed December 29, 1885. Serial No. 187,014. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH DAVIS, of New York, in the county and State of New York, have invented certain improvements in mailing-cases for containing liquids, inclosed or not in bottles, semi-liquids, plastic, semi-plastic, and powdered substances, sharp-pointed articles and instruments, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a closed case of the class referred to having my improvements applied thereto. Fig. 2 is a longitudinal vertical section through the center of the same with a bottle in place therein. Fig. 3 is a view of a bottle containing liquid partially entered within an inner case. Fig. 4 is a view of an empty inner shell with the screw-thread when cut on its interior. Fig. 5 is a horizontal section on the line *xx* of Fig. 2; Fig. 6, the screw-cap detached; Figs. 7 and 8, transverse sections through two outer shells of different exterior forms. Fig. 9 represents the locking device on an enlarged scale. Fig. 10 represents a washer.

My present invention has special reference to the subject-matter embodied in the United States Patent No. 281,845, granted to me July 24, 1883, the object of the within-described improvements being to impart additional strength and further re-enforce the case therein referred to, and also to adapt it for carrying other articles or matter than liquid contained in bottles—such, for instance, as powdered, plastic, or semi-plastic substances, seed, needles, horse-shoe-nails, and other pointed instruments—the within-described improvements endowing the case with the ability to successfully protect and resist the breakage of a bottle and prevent the escape of its contents or injury to other articles which may be inclosed within the case when the latter is exposed to the severest tests which might be encountered were it transmitted through the mails; and my present invention consists in the following features grouped together, to wit: an outer shell or casing open at one end only, an inner tightly-fitting but removable metallic shell open at the end or ends and flush or nearly flush at

one end when in place with the open end of the outer shell or casing, the openings in the shells extending from wall to wall, and a screw-cap applicable at once to both shells, also a soft or elastic cushion when the case contains a bottle, said cushion being interposed between the bottle and its inclosing and inner casing, whereby the independent movement and displacement of the bottle is prevented, the cushion being either secured to the inside of the inner casing or simply placed loosely against its interior or wrapped around the bottle or other article, whereby the gradual necessary play or yielding of the contents is permitted should the case be forcibly struck by or suddenly impinged against a rigid object, said cushion being omitted, if desired, when the case is employed for transporting some descriptions of substances or articles—such as seed, powders, sharp-pointed instruments, &c.—which may not need cushioning, the metal case without the cushion being also employed for containing liquids when not inclosed in a bottle.

My invention also consists in the combination, with elements above set forth, of an elastic washer.

In the said drawings, A represents an outer shell or casing having its bottom closed and its top open—shown in cylindrical form (both inside and outside) in Figs. 1, 2, and 5, and with a portion of its exterior flattened in Figs. 7 and 8, to prevent its rolling from a table or other desired position—the interior of the shell in all cases being preferably but not necessarily of cylindrical form.

B is an inner shell or casing of metal having its top open and its bottom closed, and preferably of cylindrical form both inside and out to endow it with the maximum resisting power, the diameter of the outside of the inner shell, B, being the same as the diameter of the interior of the outer shell, A, in order to fit snugly therein. The length of the inner shell is such that when located within the outer shell the tops of both are flush or nearly flush with each other. The interior of the inner shell forms the chamber *a*, for the bottle or other matter to be transported therein, the top of said shell being provided with a thread—as, for example, in Fig. 4; or a metal collar having a thread cut

or spun thereon and provided with a flange may be brazed or otherwise secured to the case for the reception of the thread of a screw-cap, the top of which may be struck up at its center *d* to form a projection for the convenient application thereto of the thumb and fingers in turning the cap in either direction, though with this or instead of this the screw-cap may have a milled edge.

e is a thin elastic washer, which, when liquids are contained in the case, is preferably employed between the flange of the screw-cap and flange of the collar *c*, or where the latter is not employed between the flange of the screw-cap and top of the shells A B, the washer adding to security from leakage and serving as a spring retaining or locking device from the cap. Said washer, however, may be omitted, if desired, if neither liquids nor semi-liquids are to be transmitted in the case.

When a bottle is to be inclosed in the case, the diameter of the interior of the chamber *a* of the shell B is greater than that of the bottle, the annular space between them being for the reception of a soft elastic cushion, *h*, for protecting the bottle. This cushion may be composed of cork, rubber, sponge, woolen or cotton waste, sawdust, paper, felt, &c., and may be ground (if required) into small pieces and fixed to the wall and bottom of the chamber by any suitable adhesive substance; or the cushion may be formed of a strip or sheet of any such material loosely packed in contact with or cemented to the wall of the chamber; or said cushion may be simply wrapped around the bottle or other article requiring a cushion.

In the selection of the materials for the construction of the two shells of the case I shall be guided by the character of the matter to be conveyed therein.

An outer shell of papier-maché, molded paper-pulp, pasteboard, &c., and an inner shell of metal, or an outer shell of wood veneering, or a block of wood bored out, may be employed in the formation of my within-described case. I use a metal inner case, as it will withstand a great pressure, or as much pressure as the case would be liable to be exposed to were it transmitted through the mails; and no cement impervious to liquids need to be applied to its interior, for should, by any uncommon or extreme circumstance, the bottle be broken, the integrity of the metal case will not be impaired, and the liquid contents cannot escape therefrom, owing to its density.

One form of device which is adequate and efficient for locking the screw-cap when turned into and closing the chamber consists of a strip of cloth and a strip of paper united together

by cement, and with a coating of adhesive material on the under side of the cloth, in order that it may be attached to the case over the screw-cap C. (See Figs. 1 and 9.)

A case consisting of an inner shell and an outer shell with a screw-cap for closing the mouths of both shells supplies a want generally experienced by parties engaged in many classes of trade and manufacturers who wish to forward samples to purchasers who may desire to order therefrom, and were the samples inclosed in a secure case and forwarded by mail in pouches or bags exclusively devoted to matter of this nature no danger or injury could arise and no inconvenience be experienced by those who handle the same.

A spring such as that described and claimed in my Letters Patent No. 281,845 will serve as a compensating device for taking up or reducing any unnecessary play which might otherwise take place between the bearings at the ends of the bottle and its stopper.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A mailing-case consisting of an outer shell or casing open at one end only, an inner tightly-fitting but removable metallic shell open at the end or ends and flush or nearly flush at one end (when in position) with the open end of the outer casing, the openings in the shells extending from wall to wall, combined with a screw-cap applicable at once to both shells, substantially as set forth.

2. A mailing-case consisting of an outer shell or casing open at one end only, an inner tightly-fitting but removable metallic shell open at the end, and flush or nearly flush at one end when in position with the open end of the outer casing, the openings in the shells extending from wall to wall, a screw-cap applicable at once to both shells, and a cushion of suitable soft elastic or absorbent substance within the inner shell, to be interposed between it and the object mailed and to be protected, substantially as described.

3. A mailing-case consisting of an outer shell or casing open at one end only, an inner tightly-fitting but removable metallic shell flush at the top with the top of the outer shell, combined with a screw-cap applicable at once to both shells, and with a washer between the screw-cap and its end of the case, substantially as and for the purpose set forth.

Witness my hand this 16th day of December, 1885.

JOSEPH DAVIS.

In presence of—

J. MCG. STEWART,
MANLEY A. RAYMOND.