No. 752,903. PATENTED FEB. 23, 1904.

O. K. HOGAN.

DREDGE.

APPLICATION FILED JULY 20, 1903.

NO MODEL.

Fig. 1

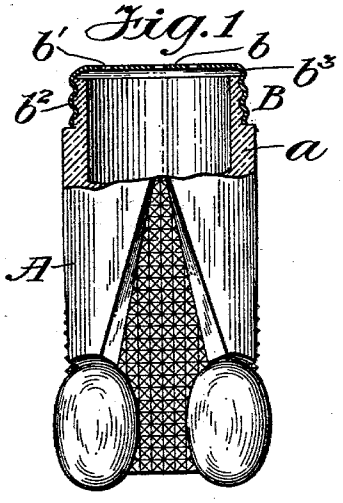


Fig. 2

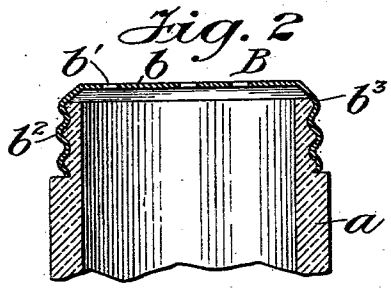
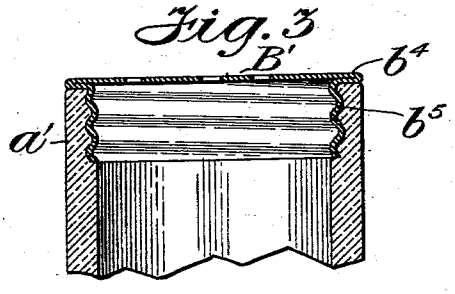


Fig. 4



Fig. 3



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 752,903. Patented February 23, 1904.

UNITED STATES PATENT OFFICE.

OLIVER K. HOGAN, OF NEW YORK, N. Y.

DREDGE.

SPECIFICATION forming part of Letters Patent No. 752,903, dated February 23, 1904.

Application filed July 20, 1903. Serial No. 166,239. (No model.)

To all whom it may concern:

Be it known that I, OLIVER K. HOGAN, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Dredges, of which the following is a specification.

This invention relates to dredges for salt, pepper, flour, &c., but more particularly for salt, and has for its more prominent object the production of an article of the character described which while being simple and efficient in construction also involves features of hygiene and cleanliness not heretofore presented by articles of this class.

With the above and other purposes in view the invention primarily comprehends a dredge consisting of a body of non-metallic material the neck of which is provided with molded threads and a cap, the latter in one piece and wholly of celluloid, said cap having a depending screw-threaded flange, the thickness of the material forming the said flange and the character of its connection with the rest of the cap being such as to result in a certain amount of flexibility, enabling a proper engagement of the flange with the threaded portion of the non-metallic body irrespective of lack of uniformity in the threads of either part, a characteristic generally present in articles where the threads are produced by a molding operation.

Practice has demonstrated that where two glass or vitreous articles are molded with threads for mutual engagement the non-uniform character of the threads resulting from the molding operation renders the connection of such parts by their threads extremely difficult. This may be obviated to some extent by making the threads relatively coarse and the engaging portion of one of the parts sufficiently ample to facilitate its taking over its companion; but such expedient would manifestly preclude a tight fit. Another remedy would be to grind the threads after they have been molded, so as to render them accurate; but such recourse would be both tedious and expensive and not warranted in the production of a cheap class of articles. Hard rubber might be employed in the formation of a dredge-cap, and when the dredge-cap was so constituted it would avoid some of the serious features of metal. Moreover, a hard-rubber cap might be made to possess the flexibility required on account of irregularity in the threads of the engaging parts; but were such cap employed in connection with a salt-dredge even the comparatively small percentage of hydrochloric acid evolved would be sufficient to unite with the sulfur in the rubber composition and ultimately result in the disintegration of the latter and consequent injury of the cap.

By my invention I avoid all the objections noted and secure important advantages not hitherto obtained. Certain novel structural features and combinations of parts are also embodied in my improved dredge, which features and parts, as well as those previously alluded to, are clearly referred to in the subsequent detailed description.

In the accompanying drawings, forming part of this specification, Figure 1 is a part-elevational and part-sectional view of a salt-dredge embodying my invention. Fig. 2 is an enlarged detail sectional view of the upper portion of the dredge disclosed in the preceding figure. Fig. 3 is a view somewhat similar to Fig. 2, but illustrating a modification. Fig. 4 is a detail sectional view illustrating a slightly-modified form of cap.

Similar reference characters are employed to designate corresponding parts in the several figures of the drawings wherein they occur.

Referring now more particularly to Figs. 1 and 2, A indicates the body portion of the dredge, which body portion is of a non-corrosive material, and preferably of vitreous character, such as glass. This body portion may be of any suitable shape or configuration and includes an upper circular neck a, shown as being externally screw-threaded contiguous to its upper end. The cap B of the dredge is embodied in a single piece of celluloid and comprises the flat top b, having a series of perforations b' and a depending annular flange b^2, screw-threaded to engage the threads of the neck a. I prefer to make the cap B of the thin shell-like character illustrated, so that the variations or corrugations in the flange b^2

will be present at both the inner and outer sides of the same, such arrangement, together with the shell-like character of such flange, conferring a limited amount of flexibility, sufficient, however, to permit the flange-threads to readily accommodate themselves to the threads on the neck for securing a positive engagement and close fit irrespective of any lack of uniformity in the threads of either part. This flexibility will be promoted to a considerable extent by reason of the curved character of that portion b^3 of the flange which merges in the flat top b. The plain character of the top b imparts considerable strength to the cap and practically presents a substantially rigid portion capable of serving as a fulcrum for the flange while undergoing yielding movements due to its flexibility. Another distinct advantage a cap of celluloid has has over a dredge-cap of glass or similar vitreous material is that in molding the article of the last-mentioned material it will be found difficult to produce the openings b' of the required smallness and number and at the same time of uniform circular contour, while the comparatively thin top of the celluloid cap admits of the formation of all the openings with circular accuracy during the operation of molding.

The construction shown in Fig. 3 embodies some of the characteristics set forth in the preceding figures, with the difference, however, that the cap B′ is shown as adapted for engaging threads internally within the neck portion a' of the glass body, said cap being provided with a marginal fold b^4 at the point where the flange b^5 connects with the flat top, so that a stiffened horizontal flange is provided adapted to bear on the upper edge of the neck when the cap is engaged in position.

The cap B^2 illustrated in Fig. 4 is of somewhat larger diameter than the form shown in the previous figures, the flange b^6 of this cap, however, being somewhat shorter in height.

By making the cap with a shell-like flange in which the thread corrugations or variations are impressed entirely through the same in addition to securing the flexibility heretofore adverted to the cap can be used in connection with either an externally or internally threaded flange, conditions of proportions being suitable.

It will be appreciated from the foregoing description that a dredge embodying my invention is extremely hygienic, of finished and attractive appearance, and highly efficient, as well as comparatively inexpensive. The lightness of weight of the improved article when considered with respect to dredges wholly of glass or other similar vitreous material is appreciable. Such reduced weight also constitutes a favorable factor in the shipment of large quantities of these dredges. Due allowance being made on account of its limited thickness and bearing in mind its several novel advantages the cap used in my improved dredge is quite durable.

I do not wish to be understood as limiting myself to the precise features of details of construction shown and described, but reserve the right to such modifications as may be fairly considered within the scope of my invention.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A two-part dredge comprising a body of non-corrosive material having integrally an upper threaded portion, and a cap made wholly of a material insensible to the emanations from the salt, said cap embodying a top containing perforations and a flexible threaded flange, the latter in direct engagement with said threaded body portion.

2. A two-part dredge comprising a body of non-corrosive material having integrally an upper threaded portion, and a thin shell-like cap made wholly of celluloid, said cap embodying a top containing perforations and a flexible threaded flange, the latter in direct engagement with said threaded body portion.

3. A two-part dredge comprising a body of non-corrosive material having integrally an upper threaded portion, and a cap made wholly of celluloid, said cap embodying a top containing perforations, and a thin flange having threads impressed through the thickness thereof and in direct engagement with said threaded body portion.

4. A two-part dredge comprising a body of glass having an upper portion with molded threads, and a thin shell-like cap made wholly of celluloid, said cap embodying a top containing perforations and a flexible flange having threads impressed through the thickness thereof and in direct engagement with said molded threads of the body portion.

Signed at New York city, in the county of New York and State of New York, this 17th day of July, A. D. 1903.

OLIVER K. HOGAN.

Witnesses:
CHARLES A. STEPHENS,
M. BENDER.