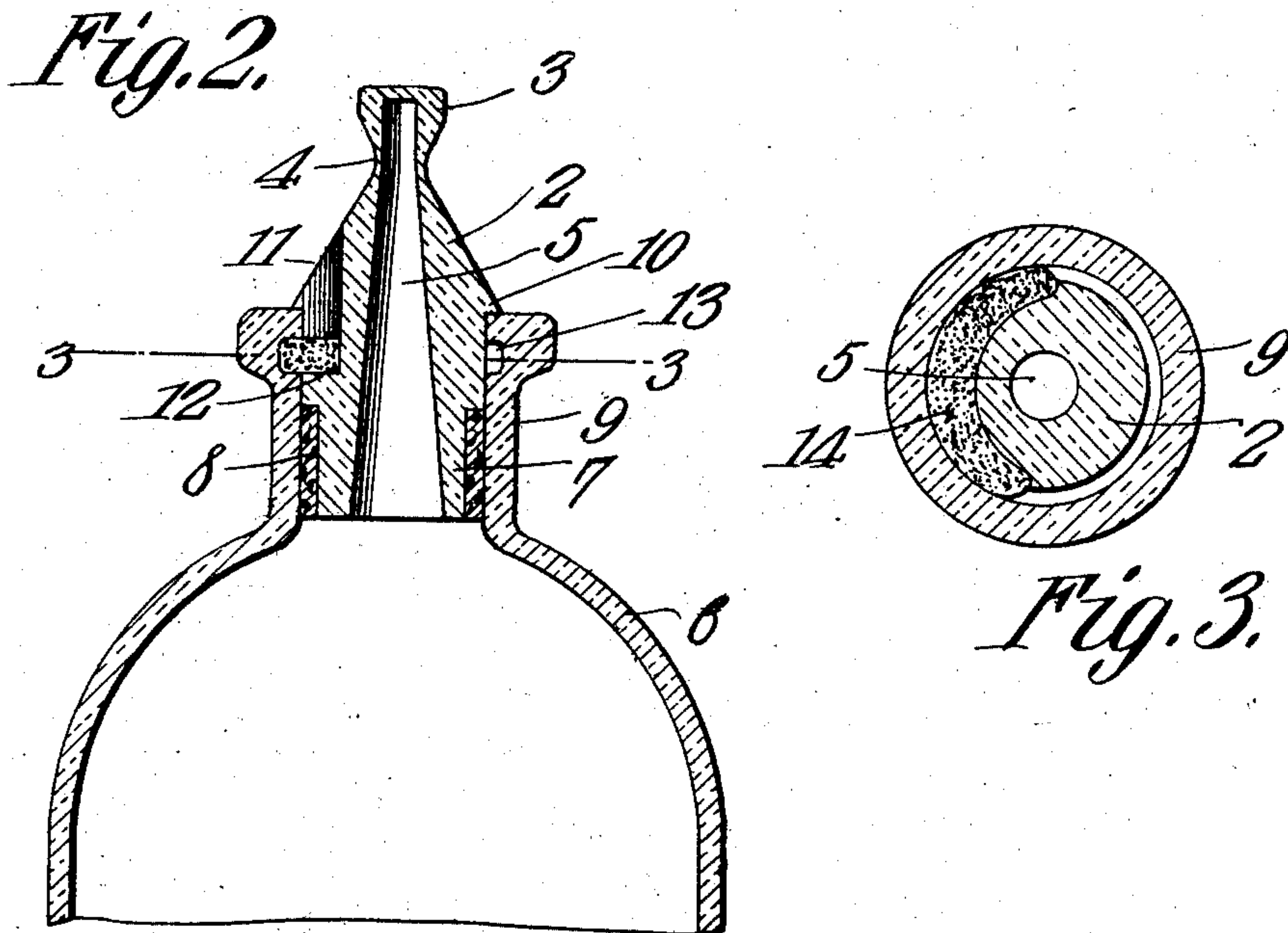
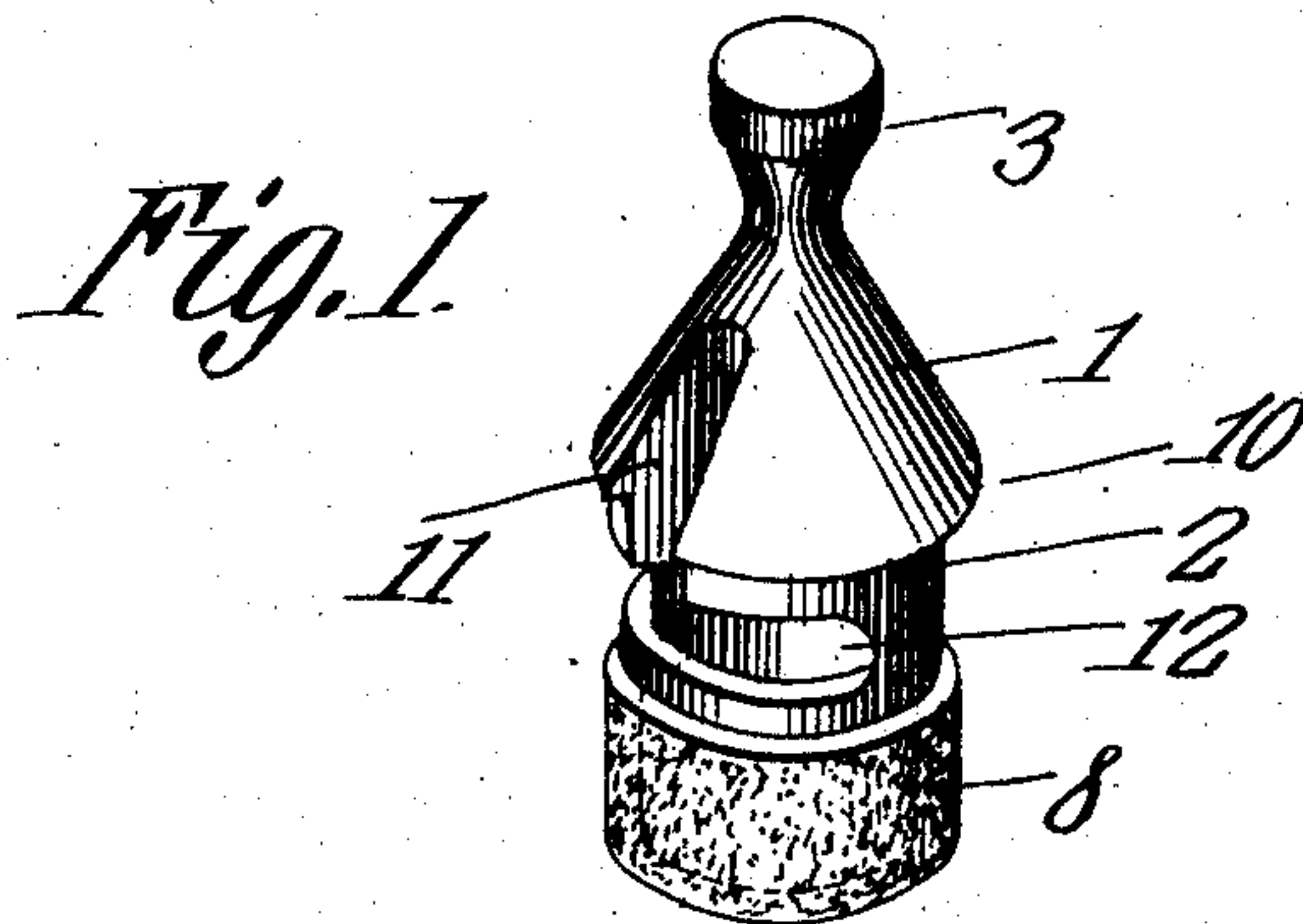


No. 883,657.

PATENTED MAR. 31, 1908.

H. C. A. LÜTGE.
BOTTLE STOPPER.

APPLICATION FILED NOV. 8, 1907.



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UNITED STATES PATENT OFFICE.

HENRY C. A. LÜTGE, OF ANDERSON, INDIANA.

BOTTLE-STOPPER.

No. 883,657.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed November 6, 1907. Serial No. 401,006.

To all whom it may concern:

Be it known that I, HENRY C. A. LÜTGE, a citizen of the United States, residing at Anderson, in the county of Madison and State of Indiana, have invented a new and useful Bottle-Stopper, of which the following is a specification.

This invention relates to bottle stoppers.

The object of the invention is in a ready and practical manner to prevent the refilling of a bottle without the certainty of detection, and further, practically to render it impossible to remove the stopper from the bottle for the purpose of replacing it by a new one, thus additionally to preclude the perpetration of frauds on the public.

With the above and other objects in view, as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a bottle stopper as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification and in which like characters of reference indicate corresponding parts: Figure 1 is a view in perspective of the stopper. Fig. 2 is a vertical sectional view through the upper portion of a bottle, displaying the stopper of the present invention applied thereto. Fig. 3 is a transverse sectional view taken on the line 3—3, Fig. 2.

The stopper is constructed of a frangible material, preferably of glass, and comprises a head 1 and a body 2. As shown in Fig. 1, the head is approximately cone-shaped throughout the greater portion of its length and merges at its upper end into a teat 3 which is sealed by a closure integral with the teat. As will be seen by reference to Fig. 2, at the point of juncture of the teat and the head the material is very thin, this arrangement being adopted in order to permit the ready breaking off of the teat by scratching the neck 4 thereof with a file, or by striking it a sharp blow. The stopper is provided throughout its length with a passage 5, which, as shown in Fig. 2, is approximately cone-shaped, and through which the liquid contained in the bottle 6 will escape.

The body 2 has its lower portion 7 reduced in cross section to receive a sealing member 8 which may be of cork or rubber, and is nor-

mally of somewhat greater cross diameter than the like diameter of the bottle neck 9, so that when the stopper is seated within the mouth of the bottle a liquid-tight joint will be secured. The base of the head 1 is of somewhat greater diameter than the body 2 in order to provide the circumferential shoulder 10 that will bear upon the outer end or surface of the bottle neck and thus limit the insertion of a stopper therein.

Extending longitudinally of one side of the stopper is a groove or passage 11 which extends below the shoulder 10 and communicates with a channel 12 that extends substantially one-half of the way round the body, as clearly shown in Fig. 3. This channel, by reason of the shoulder 10, is caused to register with a circumferential seat 13 formed in the inner wall of the neck adjacent to the mouth, and to receive a filling 14, of a suitable cement, such as plaster of paris, that is supplied thereto through the groove 11 and fills the channel 12. By the provision of this cement seal the stopper is assembled with the neck of the bottle in such manner as practically to render it impossible to become detached therefrom, so that the bottle cannot be reused by providing it with a spurious stopper, while the fracture left by the removal of the teat will be a positive visual proof that the bottle has once been emptied of its contents.

Generally, it will be preferred to construct the head on the lines shown, but it will be obvious, that this exact contour is not essential and may be departed from if found necessary or desirable.

Having thus described the invention what is claimed is:—

1. The combination with a bottle having its neck provided with an internal circumferential seat, of a stopper having a channel and a groove intersecting the channel, means for causing the channel and the seat to register, and a cement seal filling the channel and a portion of the seat.

2. The combination with a bottle having its neck provided with an internal circumferential seat, of a bottle stopper constructed of frangible material, having a passage therethrough, the outer end of which is

sealed, the intermediate portion of the stop-
per being provided with a channel and a
groove intersecting the channel, means for
causing the channel and seat to register, and
5 a cement seal filling the channel and a por-
tion of the seat.

In testimony that I claim the foregoing as

my own, I have hereto affixed my signature
in the presence of two witnesses.

HENRY C. A. LÜTGE.

Witnesses:

PHILIP B. O'NEILL,
JOHN H. O. BRYANT.