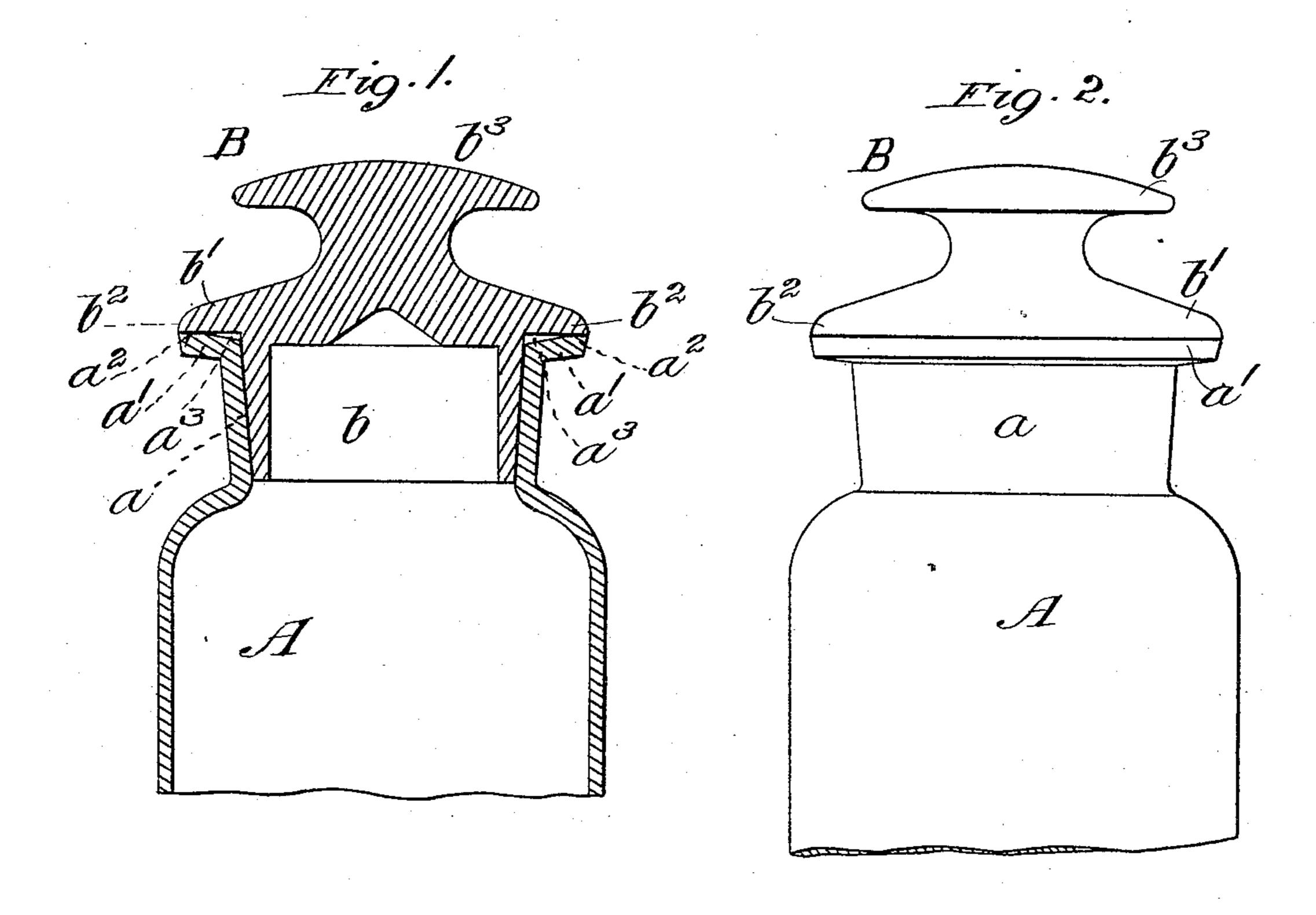
(No Model.)

H. W. FAY.
BOTTLE.

No. 486,418.

Patented Nov. 15, 1892.



TITNESSES Edward betweell a Bonville

INVENTOR

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United States Patent Office.

HERMAN W. FAY, OF ST. LOUIS, MISSOURI.

SPECIFICATION forming part of Letters Patent No. 486,418, dated November 15, 1892.

Application filed April 2, 1892. Serial No. 427,528. (No model.)

To all whom it may concern:

Be it known that I, HERMAN W. FAY, of St. Louis, Missouri, have made a new and useful Improvement in Bottles, of which the follow-5 ing is a full, clear, and exact description.

The improvement relates to the stopper and that portion of the bottle which immediately coacts therewith; and it consists, mainly, in the provision whereby a bottle is not only efto fectually closed, but also protected against dust, all substantially as is hereinafter set forth and claimed, aided by the annexed drawings, making part of this specification, in which—

Figure 1 is a view of a bottle and stopper constructed according to the principle of the improvement, the view being in central vertical section and only the upper portion of the bottle being shown; and Fig. 2, a side ele-20 vation thereof.

The same letters of reference denote the

same parts. The bottle A and stopper B, saving as they are modified by the embodiment therein of 25 the improvement under consideration, are of the customary description. The body b of the stopper is ground to fit the opening in the neck a of the bottle. The stopper is also provided with a flange b', which extends lat-30 erally to be equal in diameter to the flange a' upon the bottle-neck, and said flanges by grinding or otherwise are accurately fitted together—that is, the peripheral portion b^2 of the stopper-flange is closely fitted to the pe-35 ripheral portion a^2 of the neck-flange. The inner portion a^3 of the neck-flange is slightly dished, as shown, to be out of contact with the stopper-flange. Thus when the stopper is in position its body is tightly fitted in the 40 neck of the bottle, and at the same time its flange at the outer portion thereof is also closely fitted to the neck-flange. By this means these two advantages, among others, are obtained: The admission of dust into the 45 vicinity of the joint between the stopper and the bottle-neck, a difficulty hitherto experienced in the use of bottles, is effectually pre-

vented. Whatever dust settles upon the bot-

tle-stopper can be readily removed therefrom I

before the stopper is withdrawn from the bot- 50 tle, and when the stopper is removed the upper surface of the neck-flange is clean and ready for use; secondly, by reason of the stopper-flange bearing, as described, upon the neck-flange the body of the stopper is more 55 securely held in its own seat, and in turn, because of the stopper-body being ground into its seat, the bearing of the stopper-flange upon its support is rendered firmer—that is, the two mentioned bearings for the stopper mu- 60 tually assist in securing the stopper from dis-

placement.

I am aware that ground stoppers are in use; also, that what are termed "sirup-bottle stoppers" are employed in drug-stores and other 65 places—namely, a form of stopper having a stem-like portion, which when the stopper is applied to the bottle passes downward into the bottle-neck, but which, however, is smaller in diameter than is the neck-opening, and 70 therefore not serving as a stopper, but rather as a guide for readily directing the upper portion of the stopper into position upon the top of the bottle-neck. Such a construction as last referred to is unfitted for the purpose 75 I have in view, not only in being something quite easily displaced, but also in not affording protection against dust. The present stopper is rendered more complete by extending it upward to form a head or handle b^3 to 80 be used in the manipulation of the stopper. I claim—

In a bottle, the combination of a bottleneck and a bottle-stopper, said neck and said stopper each having a flange, the peripheral 85 portions of said flanges when the stopper is in position closely meeting each other, but within such peripheral portions being separated from each other, the neck-flange within said peripheral portion being dished and the 90 dish extending to meet the neck-opening, substantially as described.

Witness my hand this 30th day of March,

HERMAN W. FAY.

Witnesses:

C. D. Moody, A. BONVILLE.