A. H. WALCOTT.

PRESERVE JAR AND BOTTLE.

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992,928. Patented May 23, 1911.

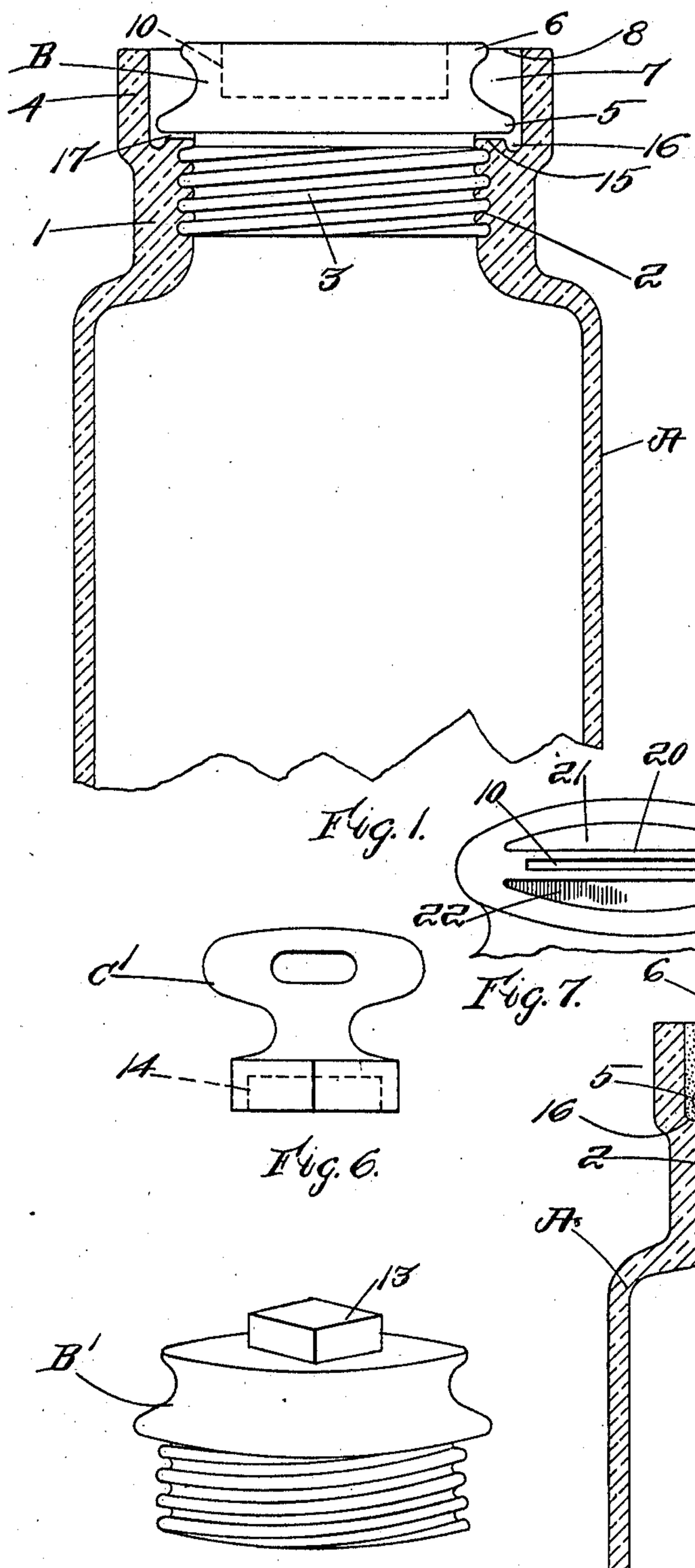

Fig. 1.

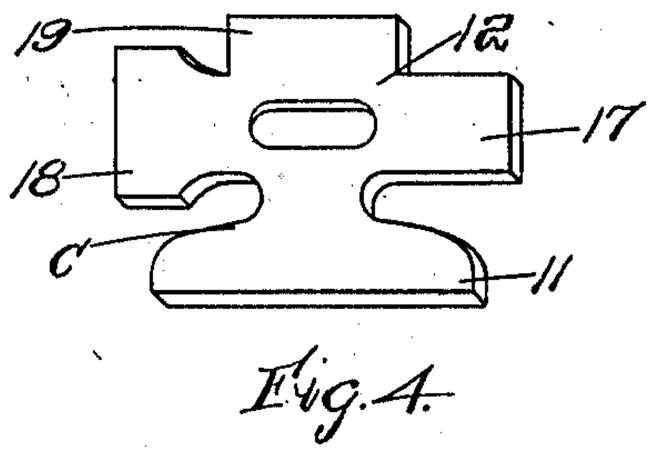

Fig. 4.

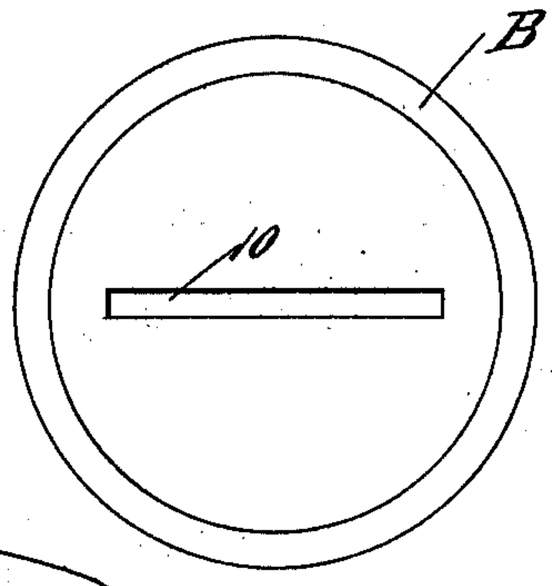

Fig. 3.

Fig. 7.

Fig. 6.

Fig. 5.

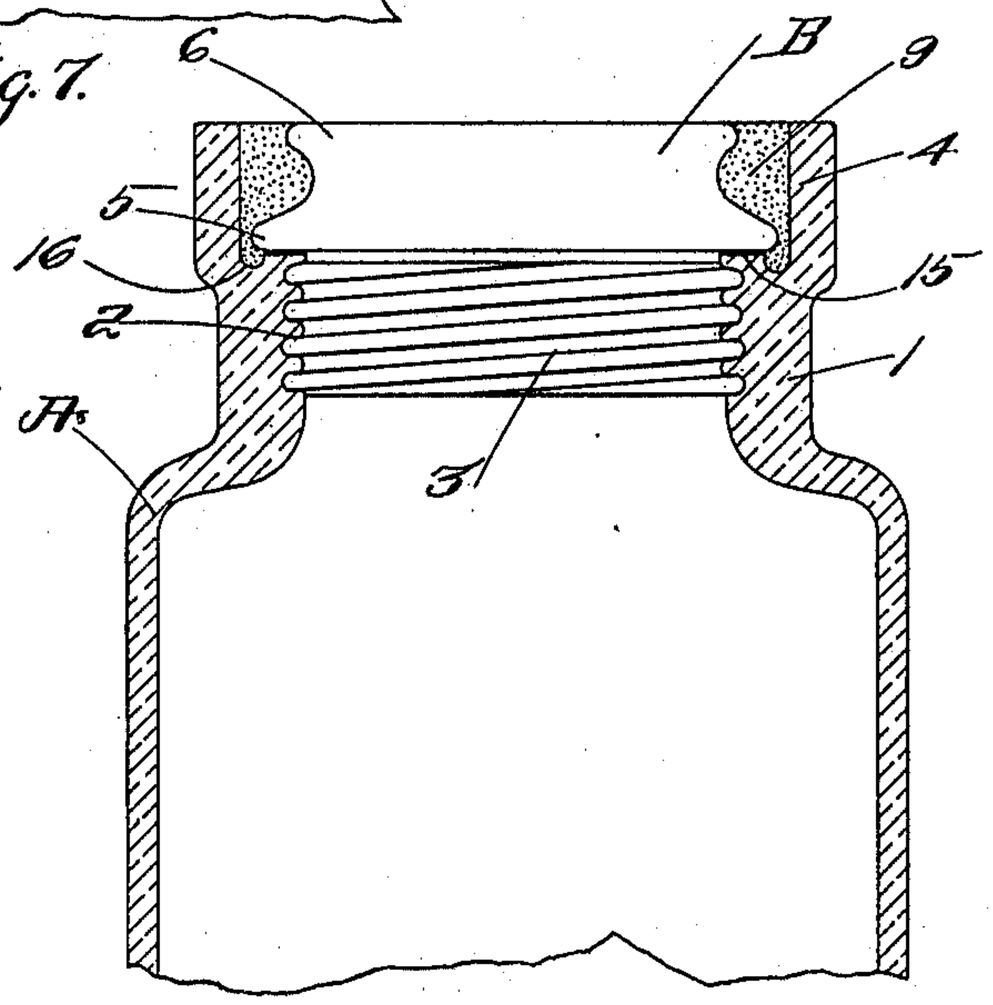

Fig. 2.

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UNITED STATES PATENT OFFICE.

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PRESERVE JAR AND BOTTLE.

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To all whom it may concern:

Be it known that I, ALBERT H. WALCOTT, a citizen of the United States, residing at Canton, in the county of Norfolk and State of Massachusetts, have invented a certain new and useful Improvement in Preserve Jars and Bottles, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to jars, bottles and the like in which preserves, liquids or other materials are to be kept and are sealed to exclude the air.

The object of the invention is to provide a jar or bottle having a neck adapted to receive a stopper and to form the neck with an upwardly projecting annular flange above the stopper engaging portion, the stopper and flange being so constructed that there is a channel or groove above the stopper engaging portion of the neck to receive a sealing composition which shall seal the entrance to the joint between the stopper and the stopper engaging portion of the neck and to so form this channel that when the sealing composition has cooled it will be anchored within the channel.

The invention will be fully understood from the following description taken in connection with the accompanying drawings, and the novel features will be pointed out and clearly defined in the claims at the close of the specification.

In the drawings:—Figure 1 is a vertical section partly broken away of a jar and stopper embodying the invention, the stopper being shown as screwed nearly down to its seat but left with a slight space between the flange of the stopper and the flange on the neck to show the position intended at the time the sealing compound is poured in. Fig. 2 is a similar view to Fig. 1 showing the stopper fully screwed to its seat after the sealing compound has been poured in. Fig. 3 is a plan of the stopper showing the recess to receive the key. Fig. 4 is a detail perspective of the key. Fig. 5 is a perspective of a modified form of stopper having a protuberance instead of a recess to receive the key. Fig. 6 is a modified form of key having a socket adapted to be used with the form of stopper shown in Fig. 5. Fig. 7 shows a modified form of stopper.

Referring now to the drawings,—A represents a jar and B a stopper for the same, both preferably being made of glass. The neck 1 of the jar preferably is formed with a tapped out screw-threaded portion 2 somewhat below the top of the neck and the stopper B is preferably formed with a screw plug portion 3 which is adapted to screw into the threaded portion of the neck although the screw-threads are not essential to the invention.

Rising above the threaded portion of the neck of the jar is an annular flange 4 whose interior diameter is somewhat larger than the interior diameter of the threaded portion of the neck, thus forming an annular chamber or recess 7 above the threaded portion of the neck.

The stopper is formed with an annular flange 5 just above the threaded portion of the stopper, which when the stopper is screwed into the jar projects beyond or overlies the joint between the threaded portion of the stopper and the jar. The stopper is also preferably provided with an annular head 6 which extends toward but not reaching to the upright flange 4 so that there is a contracted passage or space 8 between the flange 4 of the jar and the head 6 of the stopper, leading to the annular chamber 7 between the stopper and the neck of the jar which is to be filled with the sealing compound 9. The upper end of the threaded portion 2 of the neck 1 forms an annular flange or seat 15 for the flange 5 of the stopper and preferably there is an annular groove 16 between the flange seat 15 and the annular rising flange 4. This annular chamber 7 has a contracted opening 8 so that after the sealing compound has solidified by cooling, it will be securely locked so that it will not accidently fall out even when the jar is inverted. Not only is the sealing compound 9 locked in the chamber but the sealing compound itself if it is stiff when cooled forms a lock to prevent the withdrawal of the stopper until the sealing compound is removed.

The preferred method of applying the stopper and introducing the sealing composition is to screw in the stopper very nearly but not quite to its seat 15 after the jar has been filled and while the contents are hot leaving a shallow space 17 between the flange 5 and the seat as shown in Fig. 1 and then to pour in the melted sealing composition which will enter the crevice 17 below the flange 5 and to continue pouring in the compound until it is nearly or quite to the

top of the annular chamber 7 and then to finish screwing in the stopper until it is fully seated, or the compound may be applied to the flange 5 before the stopper is inserted and the stopper is then screwed down to its seat before the compound is poured in. Thus there will be a thin film of the sealing composition between the flange 5 of the stopper and its seat 15 on the neck of the jar. The groove 16 and the chamber 7 will be filled and when the composition hardens or solidifies the seal will be complete and the lock will be effectual on account of the contracted entrance 8.

In order to enable the stopper to be turned for screwing and unscrewing I construct the head of the stopper in such manner as to be adapted to be engaged by a key. In the preferred form as shown in Figs. 1 to 4 inclusive the stopper is made with a recess or key slot 10 extending down from the top of the stopper into the interior, preferably of greater length than width as shown, and I provide a key C having a blade 11 which is adapted to fit into the keyslot 10 in the stopper. The key is provided with a handle 12 whereby the key may be operated. The key may be made with blade projections 17, 18 on its sides and one 19 on its upper end, of varying sizes to adapt the key to use on stoppers of different sizes.

In Figs. 5 and 6 I have shown a modified form of key C′ and coöperating construction of stopper B′, the stopper being formed with a non-circular projection 13 and the key being formed with a socket 14 adapted to fit the projection 13 on the stopper.

In Fig. 7 the stopper is formed with a central rib 20 in which is located the slot 10 for the key and with recesses 21, 22 along side of the rib so that the rib may serve as a finger grip to turn the stopper if desired instead of using the key.

While I have shown and described the engaging portions of the neck and stopper as being screw-threaded, and I prefer that form of construction, it is not essential to my invention that they should be screw-threaded.

What I claim is:—

1. A preserve jar or bottle having a neck formed with an interior portion adapted to receive the neck of a flanged stopper, said stopper-receiving portion terminating in a shoulder which forms a seat for the flanged head of the stopper, a stopper having a neck which engages with said stopper-receiving portion of the jar and a flanged head which is adapted to be seated upon the said shoulder, the neck of the jar being formed with an upwardly extending annular flange and with a space between said upwardly extending flange and the flanged head of the stopper, the neck of the jar being formed with an annular depression between the shoulder which forms the seat for the flange of the stopper and the said annular upwardly extending flange of the jar, said annular depression extending below the shoulder on which the flange of the stopper is seated and communicating with the annular space between said upwardly extending flange and the head of the stopper, the flange of the stopper extending laterally beyond the shoulder of the neck of the jar on which it is seated and partially overlying the said annular depression in the neck of the jar forming a contracted passage between said annular depression in the neck and the annular space between the upwardly extending flange of the jar and the head of the stopper.

2. A preserve jar or bottle having a neck formed with an interior portion adapted to receive the neck of a flanged stopper, said stopper-receiving portion terminating in a shoulder which forms a seat for the flanged head of the stopper, a stopper having a neck which engages with said stopper-receiving portion of the jar and a flanged head which is adapted to be seated upon the said shoulder, the neck of the jar being formed with an upwardly extending annular flange and with a space between said upwardly extending flange and the flanged head of the stopper, the neck of the jar being formed with an annular depression between the shoulder which forms the seat for the flange of the stopper and the said annular upwardly extending flange of the jar, said annular depression extending below the shoulder on which the flange of the stopper is seated and communicating with the annular space between said upwardly extending flange and the head of the stopper, the head of the stopper being also formed with an annular groove in the side of the head forming an annular chamber with a contracted outlet at the top, the flange of the stopper extending beyond the shoulder of the neck of the jar on which it is seated and partially overlying the said annular depression in the neck of the jar.

In testimony whereof I affix my signature, in presence of two witnesses.

ALBERT H. WALCOTT.

Witnesses:
WILLIAM A. COPELAND,
ALICE H. MORRISON.