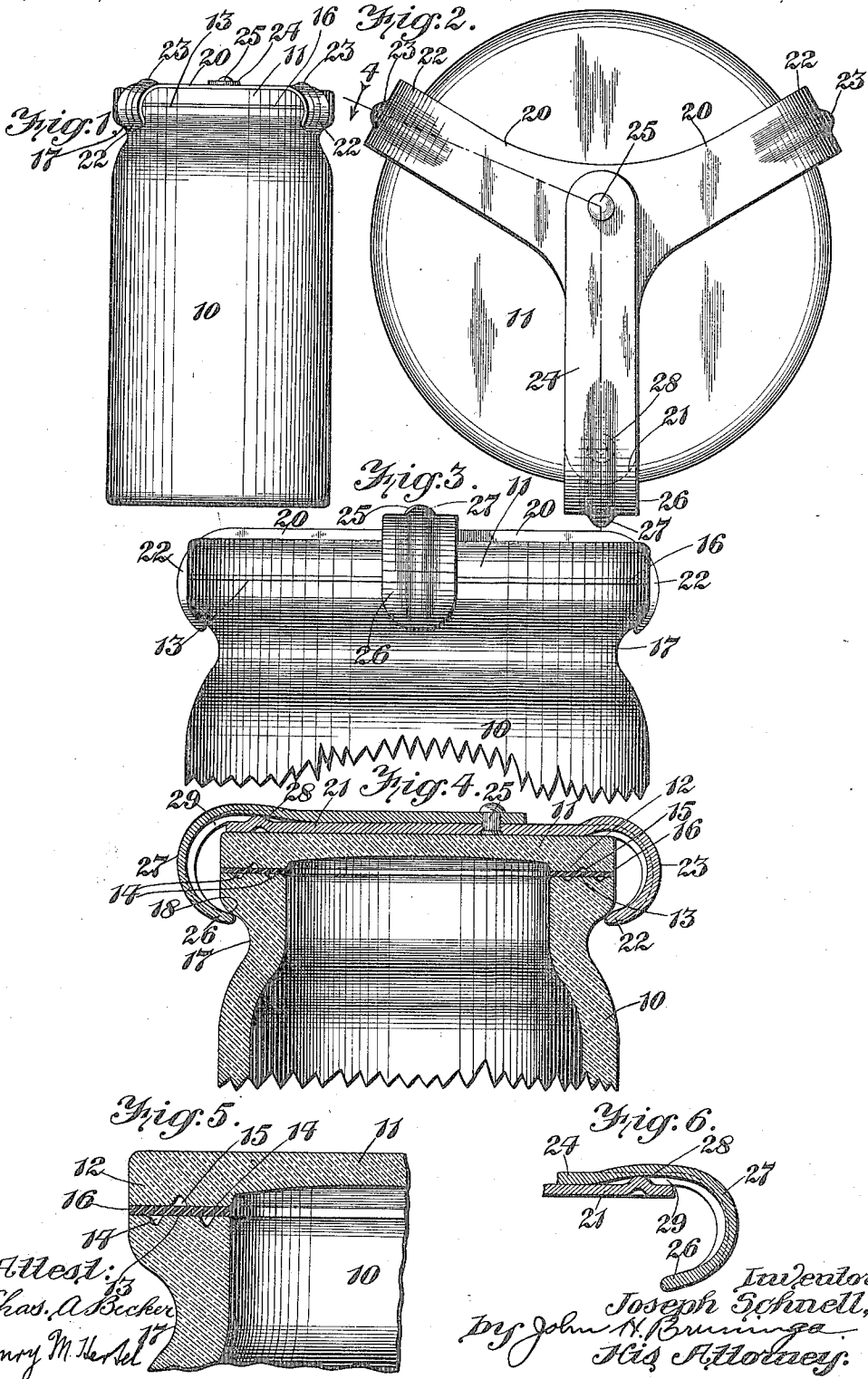


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FRUIT JAR.

APPLICATION FILED SEPT. 29, 1913.

1,164,553.

Patented Dec. 14, 1915.



UNITED STATES PATENT OFFICE.

JOSEPH SCHNELL, OF ST. LOUIS, MISSOURI.

FRUIT-JAR.

1,164,553.

Specification of Letters Patent.

Patented Dec. 14, 1915.

Application filed September 29, 1913. Serial No. 792,338.

To all whom it may concern:

Be it known that I, JOSEPH SCHNELL, a citizen of the United States, and residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Fruit-Jars, of which the following is a specification.

This invention relates to jars or the like used for the preserving of fruit and other canned materials.

Some of the objects of this invention are to provide a novel jar, together with novel means for closing the same, whereby the jar will be held closely and tightly sealed, and which closing means is so constructed that while it will effectually lock the cap in sealed position, still can be operated easily to unseal the jar.

Another object is to provide a jar and closing means which is simple in construction and operation, cheap to manufacture, not liable to get out of repair or adjustment, and which can be kept in a clean and sanitary condition.

Further objects will appear from the detail description taken in connection with the accompanying drawings in which:

Figure 1 is a side elevation of a jar embodying this invention, Fig. 2 is an enlarged plan, Fig. 3 is an enlarged detail side elevation taken from the opposite side of the jar from that shown in Fig. 1, Fig. 4 is a section on the line 4 Fig. 2, Fig. 5 is an enlarged section through the jar and cap, and, Fig. 6 is a detail showing the latching means.

Referring to the accompanying drawing, 10 designates a jar and 11 a cap, both of which may be constructed of glass or of any other suitable material. The cap has a narrow rim 12 which may be ground to form a flat surface adapted to cooperate with a ground flat surface 13 on the jar. The jar and cap are preferably provided with circumferential grooves 14 and 15 respectively sunk into the flat surfaces thereof, the groove or grooves on one part being out of alinement and out of communication with the groove or grooves on the other part when the cap is in position on the jar. A washer 16 of rubber or the like may be interposed between the jar and the cap.

The neck of the jar has a depression 17 forming an uninterrupted circumferential shoulder 18 which is spaced uniformly from the top face of the cap, and the edge

of which is rounded so as to form a circumferential cam surface. The means for clamping the cap on the jar comprises a pair of arms 20 and a third arm 21, all of which are formed integral of a resilient material, such as sheet steel, and lie in one plane so as to extend along the flat top surface of the cap. The arms 20 are bent to form hooks 22 adapted to take under and engage the cam shoulder 18 on the jar. These hooks are rounded where they engage the cam shoulder and are furthermore ribbed as shown at 23 to render them highly elastic. An arm 24 is pivoted to the arms 20 and 21 at 25, eccentrically with respect to the jar center, and therefore, eccentrically with respect to the shoulder 18. This arm 24 is provided with a hook 26 also adapted to extend under and engage the cam shoulder 18 and also rounded at its point of engagement. This hook is also ribbed as shown at 27 to provide an elastic construction. The arm 21 has a struck up lug 28 adapted to engage the groove 29 formed by the rib 27 so as to form a snap fastener for holding the arm 24 in alinement with the arm 21 as shown in the drawing.

In order to clamp the cap in position on the jar, the arm 24 is swung out of alinement with the arm 21, and the device is then placed on the cap with the arms 22 in engagement with the cam shoulder 18. The arm 24 is now swung laterally into alinement with the arm 21, and as this arm 24 moves into position, the end of the hook will engage the rounded cam surface or shoulder 18, move therealong and downwardly by a camming action, and gradually move thereunder. During this movement of the arm the cap will be clamped in position on the jar by a cam action, so that when the arm 24 is in alinement with the arm 21, the hooks 22 and 26 will firmly grasp the cam shoulders 18 so as to form a three point bearing and securely clamp the cap in position on the jar. As the arm 24 moves into alinement with the arm 21, the lug 28 will snap into the groove 29 and securely latch the parts in position. After the parts are thus in position, the hooks 22 and 26 will have been placed under tension, as the arms are of resilient material, so that the cap will be yieldingly but firmly held on the jar under the spring tension of the spring arms.

Since these arms are always under spring tension, the cap will be held indefinitely in clamping engagement with the jar, no matter how long the jar stands. The ribbed construction of the hooks permits a strong permanent spring tension to be obtained. It will be noted, however, that the hooks or curved parts only of the arms are ribbed, and that the remaining parts of the arms are unribbed. This results in an elastic construction. The arm 21 extending to the edge of the cap furnishes a support for the arm 24 and results in a better and more uniform clamping action. The jar can be readily opened by swinging the arm 24 on its pivot, as the eccentric construction will immediately cause the grip to be released. It will be noted that the jar itself has an absolutely smooth contour, and has no cam ribs, grooves or threads to accumulate dirt or the canned material. Moreover the metal clamp is absolutely out of contact with the joint itself and will therefore not be corroded by the action of the acids in the canned material. The jar as well as the clamp can be readily cleaned, since it has no recesses or cracks which accumulate dust and dirt. The jar is therefore entirely sanitary.

It is obvious that various changes may be made in details of construction without departing from the spirit of this invention, and it is therefore to be understood that this invention is not to be limited to the specific construction shown and described.

Having thus described the invention what is claimed is:

1. A jar having a cap and means for securing said cap on the jar comprising a plurality of arms, one of said arms being movable to and from clamping position, and another of the arms being stationary, the movable arm having a ribbed hook, and the stationary arm having a lug for engaging the rib on the movable arm to latch said arm in clamping position.

2. A jar having a cap, and means for securing said cap on the jar comprising a pair of hooked arms, together with a third arm, all adapted to lie on the cap and extend to the edge thereof, and a hooked arm pivoted to said arms and adapted to lie on and along said third arm, and interlocking means between said last two arms.

3. A jar having a cap, the jar and cap being provided with cooperating flat surfaces having circumferential grooves sunk therein, the groove on one member being positioned out of alinement and out of communication with the groove on the other member when the cap is in position on the jar, said grooves forming unfilled spaces when the cap is in position on the jar.

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

JOSEPH SCHNELL.

Witnesses:

J. H. BRUNINGA,
FRANKLIN MILLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."