Feb. 9, 1926. 1,572,190

W. DON

FRUIT PRESERVER

Filed Feb. 5, 1925

Fig. 1

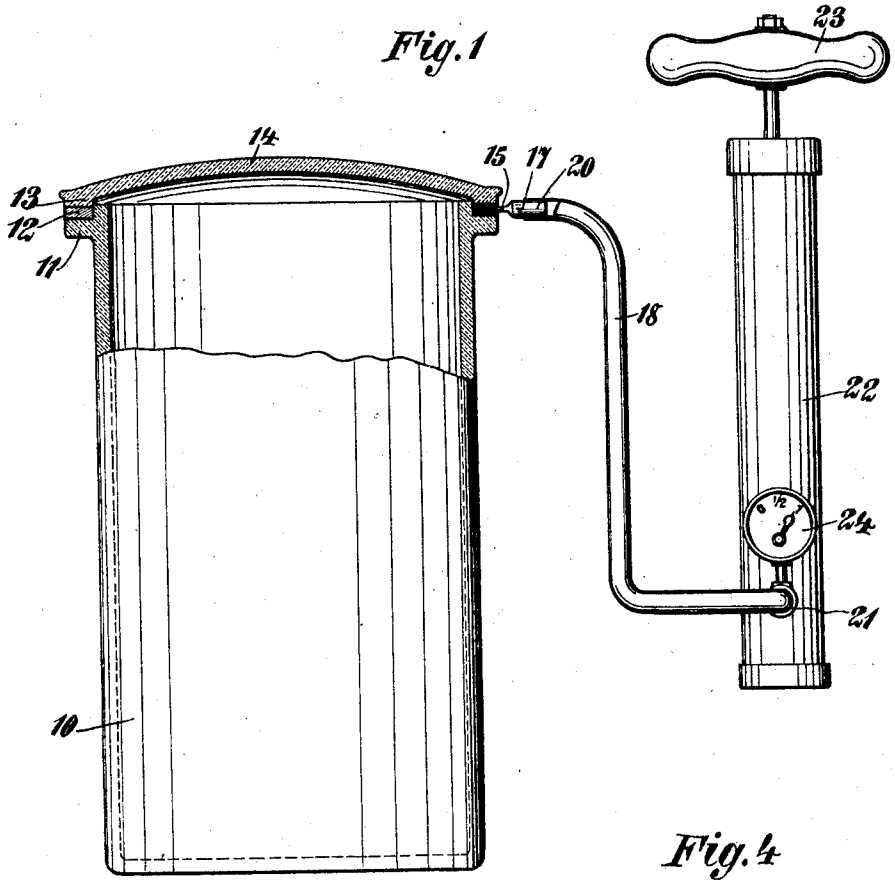


Fig. 4

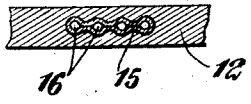


Fig. 2

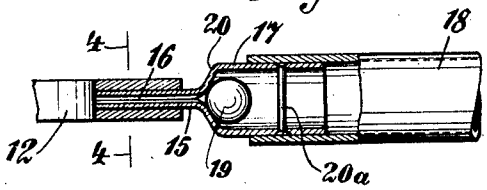
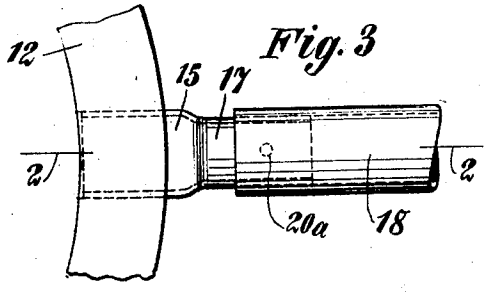


Fig. 3



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UNITED STATES PATENT OFFICE.

WILLIAM DON, OF NEW BRUNSWICK, NEW JERSEY, ASSIGNOR TO FRANK J. MALTHANER, OF NEW BRUNSWICK, NEW JERSEY.

FRUIT PRESERVER.

Application filed February 5, 1925. Serial No. 6,950.

To all whom it may concern:

Be it known that I, WILLIAM DON, a citizen of Germany, residing at New Brunswick, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Fruit Preservers, of which the following is a specification.

This invention relates to jars used in preserving fruits, vegetables and the like by means of creating a vacuum and has as one of its objects to provide a jar having a hermetically closing cover and means for exhausting the air from within.

Another purpose is to produce an efficient hand pump provided with a gauge to indicate the extent of the vacuum attained.

A further aim is in the provision of means to prevent an inflow of air upon the removal of the suction pump.

These several objects and others of like character, which include simplicity, ease of operation and low cost of construction, are attained by the novel design, combination and arrangement of parts hereinafter described and shown in the accompanying drawing, forming a material part of this disclosure, and in which:—

Figure 1 is a front elevational view showing a complete embodiment of the apparatus, partially in section to disclose the construction.

Figure 2 is an enlarged fragmentary sectional view of the air extracting connections, looking on line 2—2 of Fig. 3.

Figure 3 is a fragmentary top plan view of the jar and its air exhausting connection.

Figure 4 is a transverse sectional view taken on line 4—4 of Figure 2.

Referring more in detail to the drawing, the numeral 10 designates in general a cylindrical jar or crock having an imperforate bottom and an outstanding annular flange 11 adjacent its open upper edge.

Seated on the flange 11 is a packing ring 12 and normally disposed on the ring is a wide faced band 13 formed on the cover 14 which is guided by the extending edge of the jar as clearly shown.

Fixed centrally in the ring 12 is the flattened portion 15 of a thin metal suction head, shaped to present a plurality of orifices 16 open at the end extending through the ring 12 and communicating with the bore of the cylindrical portion 17 adapted to be engaged within a flexible tube 18.

A soft rubber sphere 19 is freely movable within the bore of the head 17 and prevented from being drawn out by a pin 20^a set transversely in the head, the sphere 19 acting in the manner of a check valve in the chamber 20, effectually closing the several orifices 16.

The tube 18 is connected at its opposite end with the suction inlet 21 of a manually operated suction pump having a cylinder 22 and operating handle 23, the inlet being provided with a vacuum indicator 24.

In operation, the articles to be preserved, such as whole apples or fruits and the like, in a sound condition, uncooked and free of sugar or other substances, are placed in the jar, the cover applied over the ring and the tube 18 connected to the suction head.

Thereafter the pump may be vigorously operated, exhausting the air to the point of forming a partial vacuum and creating a suction on the cover sufficient to hold it tightly in place.

The more nearly perfect the vacuum is, the better the articles will keep and if no air be permitted to enter, the fruit can be maintained in good condition indefinitely.

When the air has been exhausted so far as is possible by the pump, the tube is removed from the suction head, sucking the sphere to its seat and maintaining in operative position until displaced by hand at such time as the articles are required.

Although the foregoing is generally descriptive of the preferred embodiment of the invention, it is to be understood that minor changes may be made within the scope of the appended claims.

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

1. A packing ring comprising a thin flat annulus composed of flexible material, and of uniform thickness, a head having a plurality of flattened tubular elements extending radially through said annulus, said tubes being open at their inner ends and merging into a cylinder at their outer ends, means for exhausting air from said head, and a rubber sphere freely movable in said cylinder to prevent air from entering said tubes.

2. A packing ring comprising a thin flat

annulus composed of flexible material, and of uniform thickness, a head having a plurality of flattened tubular elements extending radially through said annulus, said tubes being open at their inner ends and merging into a cylinder at their outer ends, a flexible tube engageable with said cylinder, said tube engaging with a suction means, a ball valve in said cylinder to close the openings to said flattened tubular elements, and means to retain said valve in the cylinder.

In witness whereof I have affixed my signature.

WILLIAM DON.