UNITED STATES PATENT OFFICE.

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SEALING ATTACHMENT FOR FRUIT-JARS.

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To all whom it may concern:

Be it known that I, William H. F. Young, a citizen of the United States, residing at Muncie, in the county of Delaware and State of Indiana, have invented certain new and useful Improvements in Sealing Attachments for Fruit-Jars, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in sealing attachments for fruit jars, and is particularly designed for use in connection with glass fruit jars.

The primary object of my invention is to furnish an attachment for jars which holds the jar cover under spring-clamped tension against a suitable packing, whereby a tight closure is insured for excluding air from the jar.

A further object of my invention is to provide an attachment for jars which comprises two members which extend over and engage the jar cover, a coiled spring having one end engaging one of the said members, a screw bolt passing through the spring and having one end connected with the other member and the opposite free end of the bolt carrying an adjustable nut for compressing the spring and drawing the members tightly against the top of the jar under spring tension.

A further object of my invention is to provide a closure attachment for jars which utilizes two loops that extend up over the top of the cover of the jar, a horizontally extending bolt having one end connected with one of the loops, a coiled spring surrounding the bolt and having one end connected with the other loop, the free end of the bolt being screw-threaded and carrying a nut for forcing the spring along the bolt and causing it and the bolt to draw the loops under spring tension against the top of the cover and hold it tightly with spring tension against a suitable packing between the cover and the mouth of the jar.

Further objects of my improvement will appear from the following description and drawings.

In the accompanying drawings—

Figure 1 is a perspective view of the upper end of a jar, showing my improvement applied thereto.
Fig. 2 is a side elevation of Fig. 1, the jar being shown partly in section.

Referring now to the drawings, 1 is a jar having the usual mouth 2. This mouth is provided with a shoulder 3, upon which rests a suitable packing ring preferably rubber, and 5 is the cover.

My improved sealing attachment comprises two loops 6 and 7, which are approximately triangular in outline. The lower ends of these loops 6 and 7 are provided with suitable hooks or eyes 8, which pass through eyes 9, formed in a wire ring 10. This wire ring 10 has its ends 11 twisted together, whereby it is adapted to be applied under the usual shoulder 12 below the end of the mouth of the jar.

The upper end or apex of the loop 6 is provided with a vertical eye 13, formed by one or more coils. A bolt 14 has one end bent downward, as at 15, and passes through the eye 13 and is suitably headed as at 16. The bolt 14 extends horizontally across the cover 5, as shown, and is provided with screw threads 17 extending a suitable distance throughout its length.

A coiled spring 18 surrounds the screw threaded part of the bolt 14, and has its inner end 19 bent outward longitudinal its coil and provided at its extremity with a hook 20, which passes through a horizontally arranged eye 21, which is formed at 25 the upper end or apex of the loop 7. A thumb nut 22 is placed on the screw threaded end of the bolt 14 and engages the outer end of the coiled spring 18.

The loops 6 and 7 extend upward and curve inward over the cover 5 and engage it to press it down for forcing the edge of the cover against the packing 4, and compressing it and making it a tight closure.

The coiled spring 18 is of the expanding type. That is to say when not compressed by the screw nut 22, the coil expands, but the expansion is less than the adjusted outer movement of the nut 22 on the bolt 14.

In Figs. 1 and 2, the jar and the attachment are shown in their closed positions. The nut 22 has been turned inward on the bolt 14, compressing the coiled spring 18 and causing its hooked end 19 and the end 15 of the bolt to pull the upper ends of the loops 6 and 7, toward each other and forcing them down on the top 5 and in turn forcing the top 5 down tightly against the packing ring 4, and compresses it to make a tight joint. By turning the nut 22 upward on the...
the bolt, the tension of the spring will be released and the hook 20 can be disengaged from the eye 21 and the bolt and loops 6 and 7 turned away from the jar cover 5, to permit it to be removed to have access to the jar to fill it, or to remove anything from the jar. The jar can be again closed by swinging the loops inward and causing the hook 20 to engage the eye 21 and then turning inward on the nut 22.

In this way the jar can be quickly and tightly closed or quickly and conveniently opened.

This invention can be sold as an attachment to be attached to jars and it is designed so that it can be so sold and attached to jars. In this event, of course, the ends 11 of the ring 10 are not twisted together until the attachment is applied to the jar. On the other hand jars can be equipped with this attachment and sold as a jar and a closing attachment.

While I have shown my invention as applied to a jar, having a cover 5 with a curved top, like that shown in the drawing, the attachment is adapted to be used with other types of covers, it being only necessary that the turned upper ends of the loops 6 and 7 should extend over and engage the cover, when they are drawn together by compressing the spring on the bolt 14. The spring 18 is forced endwise on the bolt, as it is being compressed and draws the loops toward each other, for forcing the cover down.

I do not limit my invention to the exact details of construction here shown, for variations may be made in them without departing from the scope and spirit of the invention, as defined in the following claims.

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

1. A closure attachment for jars, comprising a screw-threaded bolt, a coiled spring therearound, members extending over the top of a jar cover, one end of the bolt connected to one of the members, the inner end of the spring connected with the other member, and means on the bolt for compressing the spring and drawing the upper ends of the members together over and in engagement with the jar top.

2. The combination with a jar and its cover, of a closure attachment comprising oppositely disposed members having their lower ends connected with the jar, a bolt having one end connected with one member, a coiled spring around the bolt and having one end connected with the other member, and means carried by the bolt for compressing the spring and drawing the members together over the cover of the jar.

3. The combination with a jar and its cover, of a closure attachment comprising two members having their lower ends pivotally connected with the jar below its mouth and their upper ends extending upwardly over the cover, a horizontally extending screw-threaded bolt having one end connected to the upper end of one pivoted member, a coiled spring surrounding the bolt and having its inner end connected with the other member, and a nut on the bolt for compressing the spring.

4. The combination with a jar and its cover, of two members having their lower ends pivotally connected with the jar below its mouth and extending upward and inward over the cover, a horizontally screw-threaded bolt having one end connected to the upper end of one of the pivoted members, a coiled spring surrounding the bolt and having its inner end detachably connected with the upper end of the other pivoted member, and a nut on the bolt for compressing the spring.

5. The combination of a jar and its cover, of two members having their lower ends pivotally connected with the jar below its mouth, the upper end of each pivoted member provided with an eye, a screw-threaded bolt having one end connected with the eye of one pivoted member, a coiled spring surrounding the bolt and having its inner end connected with the eye of the other pivoted member and a nut on the bolt for compressing the spring drawing the upper ends of the pivoted members toward each other.

6. The combination with a jar and its cover, of a closure attachment comprising two members having their lower ends pivotally connected with the jar below its mouth, each pivoted member having at its upper end a horizontal eye, a horizontally screw-threaded bolt having one end turned downward and engaging an eye of one of the pivoted members, a coiled spring surrounding the bolt and having its inner end turned downward and engaging the eye of the other pivoted member, and a nut on the bolt for compressing the spring.

7. The combination with a jar and its cover, of a closure attachment comprising two members having their lower ends pivotally connected with the jar below its mouth and extending upward and over in engagement with the top of the cover, a screw-threaded bolt having one end connected with the upper end of one pivoted member, a coiled spring around the bolt having its inner end connected with the upper end of the other member, and means carried by the bolt for compressing the spring.

8. A closure attachment for jars, comprising two members having their lower ends pivotally connected with the jar thereto and extending upward, a screw-threaded bolt extending transverse the ring, one end of the bolt connected with the upper end of one member, a coiled spring around the bolt having its inner end connected with the jar.
connected with the upper end of the other pivoted member, and means carried by the bolt for compressing the coiled spring.

9. A closure attachment for jars, comprising a ring, members having their lower ends pivoted to the ring and extending upward and inward, a screw-threaded bolt extending transverse the ring and having one end connected to the upper end of one member, a coiled spring surrounding the bolt and having its inner end connected to the upper end of the other pivoted member and a nut on the bolt for compressing the spring.

10. A closure attachment for jars, comprising a ring, two loop members having their lower ends pivoted to the ring, and their converging ends extending inward, a screw-threaded bolt extending transverse the ring and having one end connected to the upper end of one of the loops, a coiled spring surrounding the bolt and having its inner end extending upward and its extremity formed into an inwardly extending hook detachably engaging the upper end of the other pivoted loop and nut on the bolt for compressing the spring.

In testimony whereof I hereunto affix my signature.

WILLIAM H. F. YOUNG.