V. A. BOKER.

JAR COVER REMOVER.

APPLICATION FILED MAR. 6, 1920.

1,376,395. Patented May 3, 1921.

Fig. 1

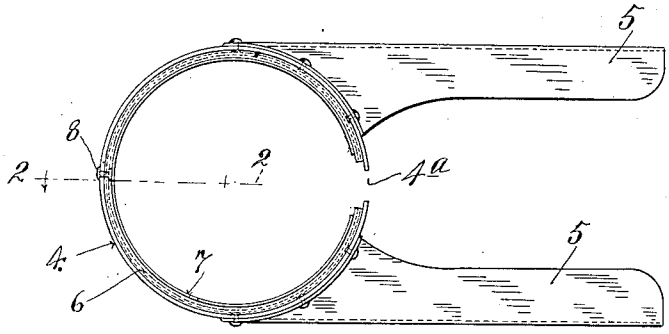


Fig. 2

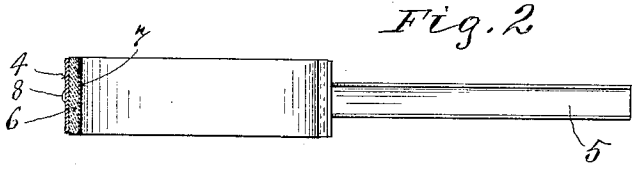
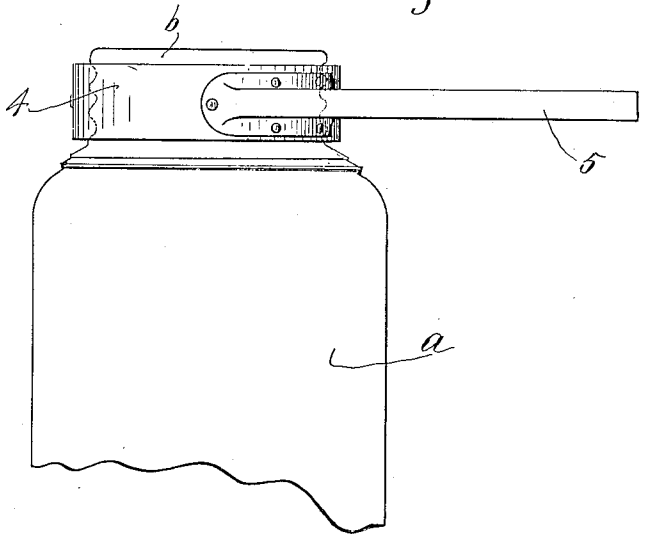


Fig. 3



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UNITED STATES PATENT OFFICE.

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JAR-COVER REMOVER.

1,376,395. Specification of Letters Patent. Patented May 3, 1921.

Application filed March 6, 1920. Serial No. 363,728.

To all whom it may concern:

Be it known that I, VITUS A. BOKER, citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Jar-Cover Removers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an extremely simple and highly efficient device for removing screw-threaded covers of jars of the type generally known as "Mason jars," and to such ends generally stated, the invention consists of the novel devices and combinations of devices, hereinafter described and defined in the claims.

The covers of jars of the above character are, as is well known, made from thin, sheet metal, formed with coarse pressed threads that are very easily crushed or distorted by external pressure.

Various cover removing devices have hitherto been devised, but all thereof, so far as I am informed, are objectionable because they will operate with sufficient friction to rotate the jar cover only when such external pressure is applied to the cover as is likely to crush or distort the same.

My invention provides a cover clamp, which will grip the cover with very great friction, even of comparatively light external pressure. The invention involves a spring clamping ring preferably of metal, provided with handles or arms, and having a pliable lining, that is itself lined with a rough, gritty or abrasive material such as emery cloth.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Referring to the drawings:

Figure 1 is a plan view of the improved clamp;

Fig. 2 is a section on the line 2—2 of Fig. 1; and

Fig. 3 is a side elevation showing the clamp applied to the cover of a jar, some parts of the latter being broken away.

The character *a* indicates a glass jar such as a Mason jar and the character *b* indicates the metal cover thereof.

The numeral 4 indicates a thin, flat spring metal ring or band split at one point 4^a only, and having rigidly secured to its end portions, preferably by means of rivets, projecting arms 5, which, as shown and preferred, are stamped channel-shape from sheet metal and provided with base flanges through which the rivets are applied.

The interior of the clamp ring 4, is lined with a pliable material 6, such as felt, and this lining 6 is again lined with a flexible abrasive material such as emery cloth 7. The felt lining is preferably secured to the ring 4 by means of one or more rivets 8, but the emery cloth 7 is advisably secured to the felt lining 6 by glue.

Obviously, by separating the hand pieces or arms 5, the clamping ring and its lining may be increased in diameter so that it may be later placed over the jar cover or cap *b*, and then when the two arms or hand pieces 5 are forced toward each other, the rough surface of the emery cloth 7 will be forced against the cover and will very firmly hold the same against slipping, even when the external pressure on the cover is not great.

In actual usage, I have found that this cover remover will remove covers even when tightly stuck to the jars, without in any way crushing or damaging the same. The device is also of small cost to manufacture.

What I claim is:

1. In a jar cap remover, the combination with cap embracing jaws, of a layer of abrasive material adapted to contact the cap, and a yielding backing therefor.

2. A jar cap remover having in combination cap embracing jaws, a band of abrasive material and a thicker band of yielding and slightly elastic material disposed between the first mentioned band and the jaws.

3. A jar cap remover having in combination a split ring of spring metal, handles secured at each side of the split adapted to be pressed together in clamping a jar cap, a split ring of yielding material secured inside of said first mentioned split ring and a split ring of abrasive material secured inside of said last mentioned ring and adapted to contact the jar cap.

4. In a jar cap remover, the combination of a cap embracing member, a layer of felt inside thereof and a layer of emery cloth inside of said felt layer, the abrasive surface of said cloth adapted to contact the jar.

5. A lining for a jar cap remover consisting of a layer of abrasive material in com-

bination with a layer of yielding and slightly elastic material forming a backing for said first mentioned layer.

6. A lining for a jar cap remover comprising a layer of emery cloth and a layer of backing material therefor, consisting of felt.

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

VITUS A. BOKER.

Witnesses:
ETHEL E. LUNDSTROM,
EVA E. KÖNIG.