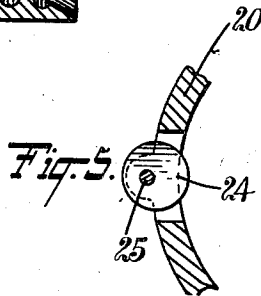
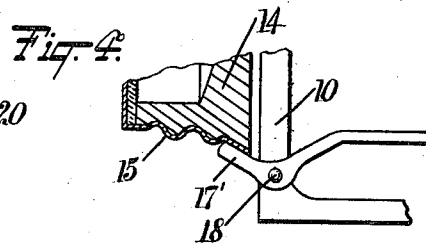
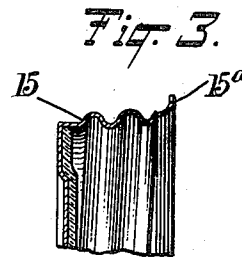
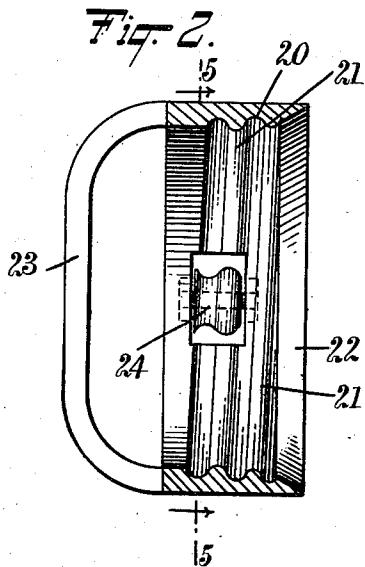
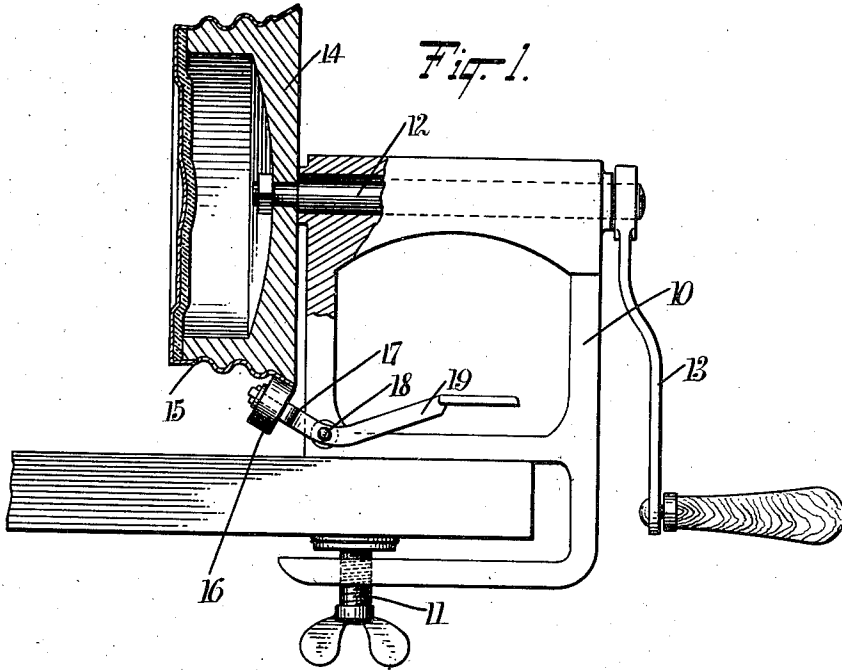


B. S. KNUTSON.
 JAR COVER STRAIGHTENER.
 APPLICATION FILED MAY 3, 1912.

1,045,040.

Patented Nov. 19, 1912.



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BENNIE S. KNUTSON, OF STEWARD, ILLINOIS.

JAR-COVER STRAIGHTENER.

1,045,040.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed May 3, 1912. Serial No. 694,816.

To all whom it may concern:

Be it known that I, BENNIE S. KNUTSON, a citizen of the United States, and a resident of Steward, in the county of Lee and State of Illinois, have invented a new and Improved Jar-Cover Straightener, of which the following is a full, clear, and exact description.

This invention relates to household devices, and particularly to means whereby common metal fruit jar tops may be straightened after being distorted, and used repeatedly, instead of discarding them unnecessarily. It is well known that a fruit jar cover is commonly bent or distorted either in opening the jar or preparatory to opening it, either by means of a tool to admit air or by the operation of a jar opener applied to the cap. Such a cap must be straightened before it can be used again with safety, or else it must be thrown away, a bent cap being unreliable because it is impossible to preserve a jar airtight with such a cap.

Among the objects, therefore, of this invention, is to provide a device of comparatively cheap and simple nature, whereby the ordinary householder may have and use one for the purpose above indicated.

Reference is to be had to the accompanying drawings forming a part of this specification in which like characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is an elevation of a preferred embodiment of this invention shown as in use, a portion being broken away; Fig. 2 is a vertical section of a part of the device; Fig. 3 is a fragment of a common metal jar cap indicating the nature of a distorted rim or part which renders such a cap useless; Fig. 4 is a modification described below; and Fig. 5 is a transverse section on the line 5—5 of Fig. 2.

As illustrated, this device comprises a frame 10 of any suitable design or construction which may be temporarily clamped to a table or other support by means of a screw 11. In the upper portion of the frame is journaled a shaft 12 adapted to be rotated by a crank 13 or by any other suitable means. On the opposite end of the shaft 12 is secured a mandrel 14 of a suitable rigid nature and shaped to conform to the normal shape of the inner surface of a common

metal fruit jar cover 15 which is adapted to be applied on the outside of the mandrel.

As indicated in Fig. 3, the flared edge of the cover at 15^a is bent out of the normal form, and when applied to the mandrel will be restored or straightened to its proper shape by the application of suitable means on the exterior of the cover in coöperation with said mandrel.

As shown in Fig. 1, I provide a roller 16 pivotally mounted upon an arm 17 which may be movably connected to the frame as at 18. Any suitable means may be used to keep the roller 16 in proper operative relation to the mandrel, or to withdraw it therefrom, such means being indicated somewhat conventionally by the extension 19 of the lever 17 which may be operated by hand or any other suitable way.

The modification indicated in Fig. 4 differs in the omission of the roller and providing that the end 17' of the lever be made to engage directly with the flange of the cover.

The construction shown in Fig. 2 consists of a die 20 adapted to be applied as by screwing thereon to the exterior of the cover. The thread 21 of the die is adapted to conform to the threaded part of the cover and serves to straighten any irregularities which may have been formed in the thread of the cover, and the lower rim 22 of the die is adapted to coöperate with the opposing portion of the mandrel in establishing a proper shape to the flanged portion of the cover. The die is provided with means in the form of a bail 23 whereby it may be manipulated or held stationary while the mandrel is being turned with relation thereto. In order to secure the die to the jar cover 15 for the purpose of unscrewing the cover, I provide any suitable locking means, the same being indicated as a roller 24 pivoted eccentrically at 25 in the wall of the die. The periphery of the roller 24 is threaded or grooved to conform to the threads above mentioned, and is mounted upon the pivot 25 with sufficient looseness to enable it to coöperate with the thread on the cover, even though when rotating on its axis, due to the gripping effect of the cam.

The several parts of this invention may be made of any suitable materials and the relative sizes and proportions thereof may be varied to suit the standard types of jar

covers which are commonly used, without departing from the spirit of the invention.

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

1. In a device of the character set forth, the combination of a threaded mandrel adapted to snugly receive a jar cover on its outer surface with which the cover is adapted to conform, means to manipulate the mandrel, a die adapted to be snugly fitted to the outer surface of the cover to cooperate with the mandrel, said die having a thread conforming to the threaded portion of the cover and mandrel, and means to hold the die stationary with respect to the mandrel.

2. In a device of the character set forth, the combination of a rotary mandrel adapted to receive on its outer surface a jar cover, means rigidly and permanently connected to the mandrel to control its rotation, and means on the outside of the cover and cooperating with said mandrel, said means adapted upon rotation thereof independently of the rotation of the mandrel to straighten the distorted edge of the cover.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BENNIE S. KNUTSON.

Witnesses:

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F. P. BURNETT.