(No Model.)

J. E. FABER.

PRESERVING JAR.

No. 481,939. Patented Sept. 6, 1892.

Fig. 1.

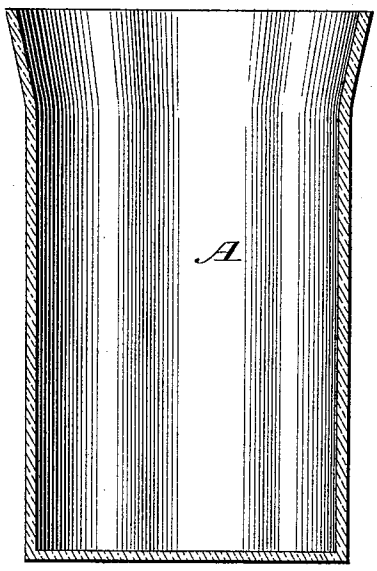


Fig. 3.

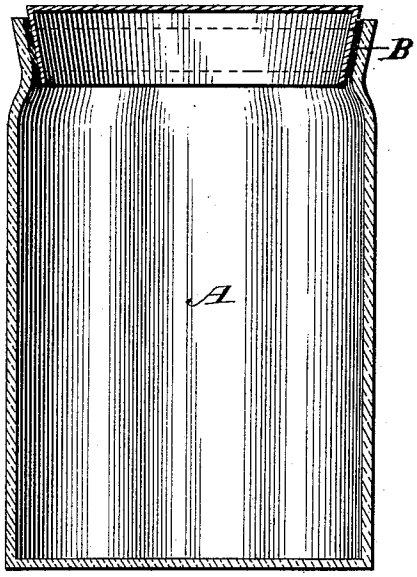
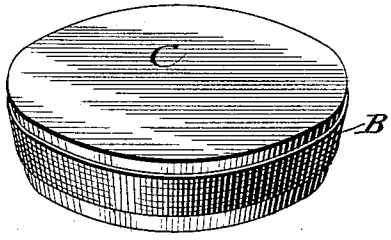


Fig. 2.



Witnesses:
Paul W. Barber
George Phyfer

Inventor
John E. Faber

UNITED STATES PATENT OFFICE.

JOHN E. FABER, OF ST. LOUIS, MISSOURI.

PRESERVING-JAR.

SPECIFICATION forming part of Letters Patent No. 481,939, dated September 6, 1892.

Application filed April 21, 1892. Serial No. 430,159. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. FABER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Improvement in Preserving Jars and Cans and the Lids Thereto, of which the following is a specification.

My invention relates to improvements in preserving jars or cans, more particularly in the manner of sealing them with lids or stoppers.

The objects of my improvement are, first, to provide a lid or stopper to fit into the neck of the jar or can so as to hermetically seal the same; second, to facilitate the closing (or sealing) of the preserving jar or can by the u of such lid or stopper, saving both time and labor by the use of such lid or stopper; third, to prevent an explosion or breaking of glass, porcelain, or other brittle jar in case of the fermentation of the matter therein contained. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of the upper portion of a jar or can, showing the shape of the neck which it is proper to use in my invention. Fig. 2 is a side view of the lid or stopper, showing its shape, and letter B of Fig. 2 is the elastic band stretched around the side or body of the stopper. Fig. 3 represents the jar or can having the lid or stopper adjusted.

Letter A shows a jar of the proper shape.

Letter C represents the lid or stopper when adjusted in the neck of the jar, and letter B represents an elastic band stretched around the side or body of the lid or stopper.

Fig. 1 is the upper portion of the jar or can, showing the shape of the neck thereof which it is proper to use in my invention. The jar or can may have a neck of either narrow or short or wide diameter. I prefer, however, that a jar or can be used the diameter of whose neck be somewhat smaller than the body of the jar or can, so that there may be a slight shoulder from which the neck takes its beginning. It is not essential, however, that the jar or can have a shoulder at all. The neck of the jar or can is to be inclined inwardly from the mouth of the jar downwardly; but no particular angle of such inclination is necessary, nor is any particular depth of the neck of the jar necessary. I should prefer to have the neck of, say, one-half to two inches in depth. The body of the jar or can may be of any size or shape desired.

Fig. 2 is an illustration of the lid or stopper which is to be fitted into the neck of the jar or can heretofore described. This lid or stopper is to be made of tin or other suitable elastic metallic substance, and consists of a disk turned down at the edge—that is, the whole edge of whose circumferonce is to be turned down and bent inward, so as to form an acute angle with the bottom of the lid or stopper. This angle should approximate a complement to the angle formed by the incline of the neck of the jar or can, so that the lid or stopper will fit easily into the neck of the jar or can. The edge of the lid thus turned down may be of any depth, but should not be of greater depth than the neck of the jar or can. The periphery of the top of the lid or stopper should of course be larger than that of the bottom of the neck of the jar or can and should about equal and be of the same shape as the mouth of the jar or can. Around the turned-down portion of the lid or stopper a band of rubber or other elastic substance is stretched, as is shown by letter B in Fig. 2.

When the jar or can is filled with the hot material to be preserved, the lid or stopper above described is inserted into the neck of the jar or can. No pressure on the part of the workman is required in inserting the lid. The matter in the jar or can then begins to cool and a partial vacuum is created under the lid or stopper, which is in consequence forced tight into the neck of the jar by the pressure of the air on the outside thereof. The stopper being hollow and the sides thereof of elastic metal, the lower portion of the stopper will yield to the pressure against the side of the neck as the pressure of the air on the outside forces the stopper in and contract, while the upper portion of the sides of the stopper, being supported by the top of the stopper, will not yield, but remain firm against the sides of the neck of the jar. The stopper thus fits itself snugly to the sides of the neck of the can or jar, but owing to the elastic quality of the stopper cannot break the jar should it be made of brittle material.

The ring or band of rubber or elastic substance stretched around the side of the stopper prevents the entrance into or escape from the jar or can of air, and the jar is consequently hermetically sealed.

I am aware that preserving-jars have been made having covers or lids which close them hermetically and by the pressure of the air upon the outside thereof; but I know of none in which this result is brought about by the application of the mechanical means used in my invention.

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, in a preserving jar or can, of a jar or can having the neck thereof inclining from the mouth of the vessel downwardly and inclining inwardly, substantially as set forth, with a lid or stopper consisting of a disk, of tin or other elastic metallic substance, having the edge thereof turned downward and forming an acute angle with the bottom of the lid or stopper and having a band, of rubber or elastic substance, stretched around the side of the lid or stopper, substantially as set forth.

2. The stopper or lid consisting of a disk, of tin or other elastic metallic substance, having the edge thereof turned downward and forming an acute angle with the bottom of the stopper or lid and having a band, of rubber or elastic substance, stretched around the side of the stopper or lid, in combination with a jar or can having a neck inclining downwardly and inwardly from the mouth, substantially as set forth.

JOHN E. FABER.

Witnesses:
HUGO H. KOHLER,
THEODORE ILEY.