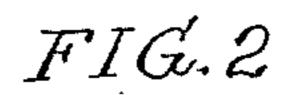
(No Model.)

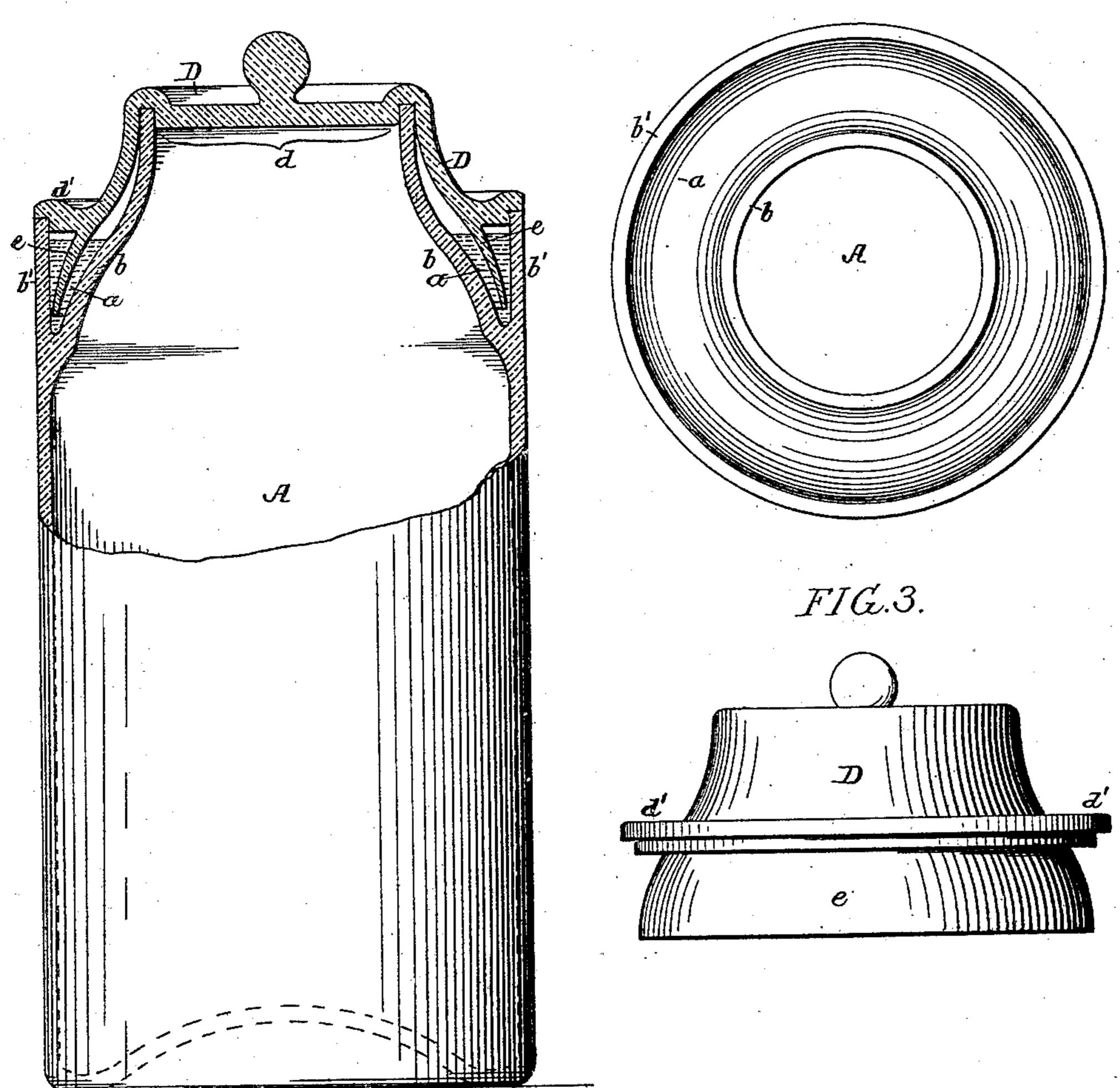
C. FRIES & W. H. RICHARDSON. FRUIT JAR.

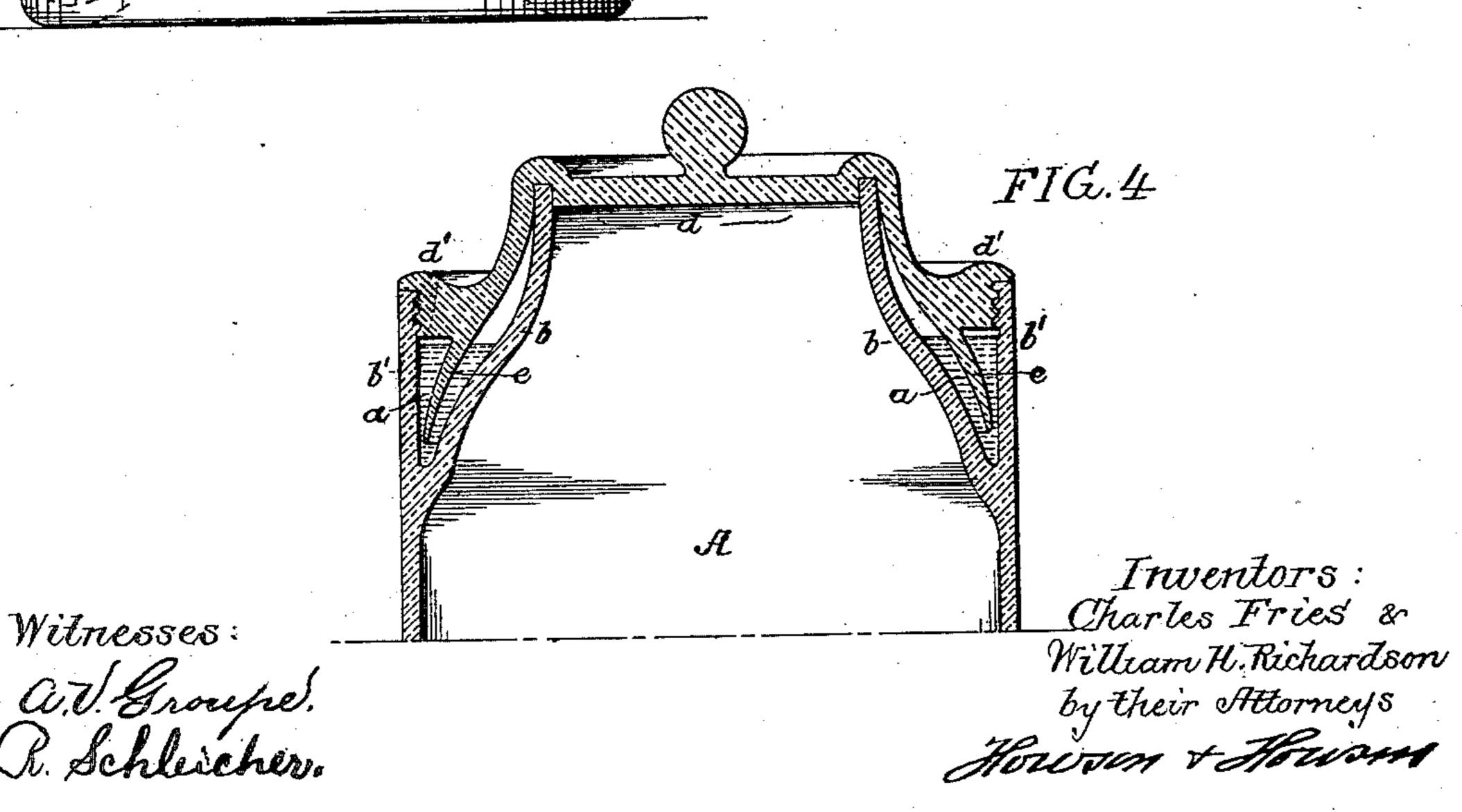
No. 442,431.

Patented Dec. 9, 1890.

FIG.1.







United States Patent Office.

CHARLES FRIES AND WILLIAM H. RICHARDSON, OF PHILADELPHIA, PENN-SYLVANIA, ASSIGNORS OF ONE-THIRD TO LEVI T. BALLINGER, OF BEDFORD, NEW JERSEY.

FRUIT-JAR.

SPECIFICATION forming part of Letters Patent No. 442,431, dated December 9, 1890.

Application filed February 20, 1890. Serial No. 341,113. (No model.)

To all whom it may concern:

Be it known that we, Charles Fries and William H. Richardson, both citizens of the United States, and residents of Philadelphia, Pennsylvania, have invented certain Improvements in Fruit-Jars, of which the following is a specification.

The object of our invention is to so construct a jar and its lid that an air-tight joint may be formed between the two, doing away with the usual rubber gaskets and other similar packing. This object we attain in the manner which we will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a side view, partly in section, illustrating our invention. Fig. 2 is a plan view of the jar with the lip or cap removed. Fig. 3 is a side view of the lid or cap. Fig. 4 20 is a view showing the lid secured to the jar through the medium of a screw-thread.

The jar shown in Figs. 1, 2, and 3 is intended mainly for domestic use, the lid not being secured to the jar, but merely placed 25 upon it, the jar being stored away and not handled until used; but when the jar is packed by a canner or shipper of goods a fastening device is used. The seal used is what may be termed a "water seal," and around the 30 head of the jar A is a deep groove or channel a, formed by the inner wall b and the outer wall b' of the jar. The wall b extends above the wall b', forming the pouring-mouth of the jar. A cap D rests upon the walls b 35 and b', as clearly shown in Fig. 1, a depending portion d passing into the mouth of the jar, making a comparatively tight joint between the wall b and the cap. An annular flange e of the cap extends down into the 40 space a between the outer and inner walls of the jar, as clearly shown. When liquid is poured into the space a and the cap is placed in position on the jar, this extension or i

flange passes into the water, thus forming a water seal. The sealing-liquid may be water 45 or the liquid from the preserves put up, or may be a paste especially prepared. The flange d' of the cap, which rests upon the wall b', need not be an accurate fit; but by preference it is ground to fit, so as to prevent the 50 escape of the sealing-liquid when the jar is accidentally tilted.

When the jar is used by packers and shippers of canned goods, a thread is formed on the wall b' and a corresponding thread on 55 the flange d' of the lid, as shown clearly in Fig. 4, thus securely retaining the lid on the jar. The screw-thread may be at the mouth of the jar and the cap threaded to fit.

Other forms of fastening may be used with- 30 out departing from our invention.

We claim as our invention—

1. The combination of the jar A, the two annular walls bb' thereof forming a space a for the reception of the sealing-liquid, with a cap 65 adapted to rest upon the wall b and the wall b', a depending flange on the cap adapted to the space a, and a depending portion d of the cap extending into the mouth of the jar, substantially as set forth.

2. The combination of the jar, two annular walls b b' thereof forming a space for a sealing-liquid, the said wall b' being screwthreaded, with a cap having a screw-threaded portion adapted to the screw-thread on the 75 wall b', and having a flange e adapted to the sealing-space, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CHARLES FRIES. WILLIAM H. RICHARDSON.

Witnesses:
HENRY HOWSON,
HARRY SMITH.