

(No Model.)

E. LORD.
AIR EXHAUST DEVICE.

No. 578,410.

Patented Mar. 9, 1897.

Fig. 1.

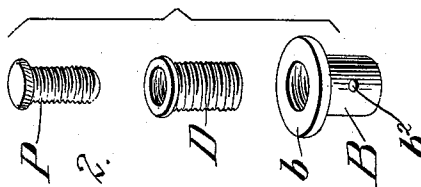
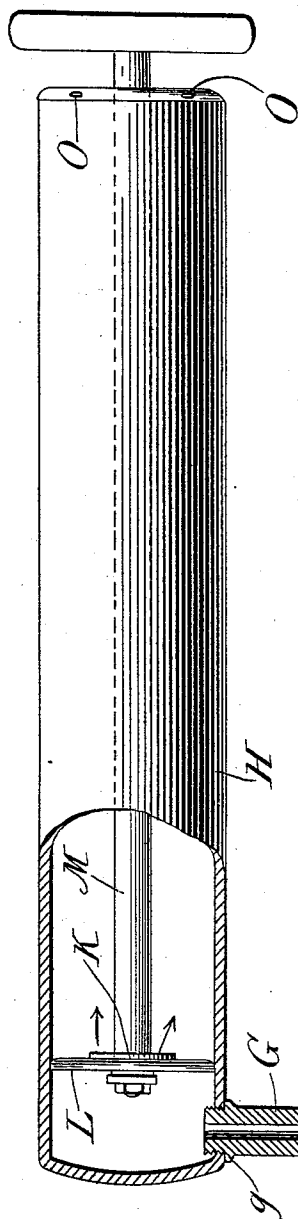
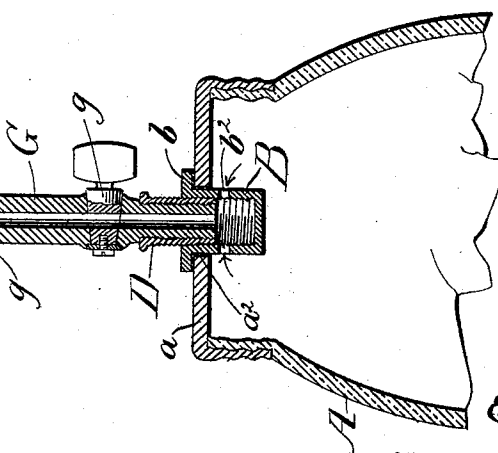


Fig. 2.



WITNESSES

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ERNEST LORD, OF SCHAGHTICOKE, NEW YORK.

AIR-EXHAUST DEVICE.

SPECIFICATION forming part of Letters Patent No. 578,410, dated March 9, 1897.

Application filed July 9, 1896. Serial No. 598,518. (No model.)

To all whom it may concern:

Be it known that I, ERNEST LORD, a citizen of the United States, and a resident of Schaghticoke, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Air-Exhaust Devices, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to air-exhaust devices for fruit cans, jars, and similar vessels; and the object thereof is to provide an improved device of this class which is simple in construction and operation, and which is also comparatively inexpensive, while being well adapted to accomplish the result for which it is intended.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a sectional side view of a portion of a jar or can with my improved air-exhaust device connected therewith, and Fig. 2 is a perspective view of separate parts or details of the construction.

In the drawings forming part of this specification I have shown at A the upper portion of an ordinary fruit-jar, and said jar is provided with a cap or cover *a*, which may be secured thereto in the usual manner or any desired manner, and said cap or cover is provided with a central circular opening *a*², and in practice I place or secure in said opening a tubular plug B, which is closed at the bottom and provided at its upper end with an annular flange or rim *b*, and said tubular plug is also provided in its sides with ports or passages *b*³.

The inner walls of the tubular plug are screw-threaded, and I also provide a sleeve D, which is screw-threaded on both the outer and inner walls thereof and which is adapted to be screwed into the tubular plug B, and in connection therewith I employ a tube G, which is screw-threaded at its lower end and adapted to be screwed into the sleeve D, and said tube G is provided with a valve *g*, which may be of any desired form or construction.

The upper end of the tube G is provided with an annular flange or rim *g* and above

which said tube is screw-threaded, and I also provide an air-pump H, which is adapted to be connected to said tube G, as shown in Fig. 1, and said air-pump H is of the ordinary form, with the exception that the flexible washer K, which is mounted back of the piston rod or valve L, on the piston-shaft M, works in the reverse direction, the air passing through the piston head or valve L in the direction indicated by the arrows, and the opposite end of the cylinder of the pump is provided with openings, as shown at O, for the egress of the air.

The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof. Whenever it is desired to exhaust the air from a can or jar, the tubular plug D is inserted through the cap *a*, the sleeve is screwed into said tubular plug, as shown in Fig. 1, and the tube G is then connected to said sleeve, and the operation of exhausting the air will be readily understood without further description.

When the air is exhausted, the sleeve D is screwed down until it closes the ports or openings *b*², after which the tube G is removed and with it the exhaust-pump, and the sleeve D may then be closed by a screw-threaded plug P.

The plug P is not absolutely essential, but may be employed simply as an additional security to prevent the air from again entering the can or jar A.

The advantages of this device will be apparent to all housekeepers, and may be employed wherever it is necessary to exhaust the air from any form of vessel, and my invention is not limited to the exact form, construction, and arrangement of the various parts thereof as herein shown and described, as it is evident that changes in and modifications of said construction may be made without departing from the spirit of my invention or sacrificing its advantages.

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

1. In a device for exhausting the air from cans, jars or other vessels, the combination with an air-pump of a tube provided with a

valve which is secured in one end thereof, a sleeve mounted on the lower end of said tube and a tubular plug closed at its lower end and provided with side ports or openings, substantially as shown and described

2. In a device for exhausting the air from cans, jars or other vessels, the combination with an air-pump of a tube provided with a valve which is secured in one end thereof, a sleeve mounted on the lower end of said tube and a tubular plug closed at its lower end and provided with side ports or openings, said tubular plug being adapted to be secured in the cap or cover of the can, jar or other vessel, substantially as shown and described.

3. In a device for exhausting the air from cans, jars or other vessels, the combination with an air-pump of a tube provided with a valve which is secured in one end thereof, a sleeve mounted on the lower end of said tube and a tubular plug closed at its lower end and provided with side ports or openings, said tubular plug being adapted to be secured in the cap or cover of the can, jar or other vessel, and the air-pump being provided with

a piston and piston-shaft, on which is mounted a flexible washer, said washer being reversed on said piston and the air in the operation thereof being passed backwardly through the piston, substantially as shown and described.

4. In an air-exhaust device for cans, jars or other vessels, the combination of the tubular plug as B which is secured in the cap or cover thereof, a screw-threaded sleeve as D which is mounted in said tubular plug, a tube as G mounted in said sleeve and provided with an air-pump, said tubular plug being closed at the bottom and provided with side ports or openings and said sleeve being adapted to be closed after the tube is removed therefrom by a screw-threaded plug, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 4th day of July, 1896.

ERNEST LORD.

Witnesses:

CLARENCE JOHN LAPE,
IRA EDWARD ATKINS.