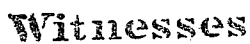


D. N. PHELPS.
Apparatus for Exhausting Air from Fruit Cans.
No. 123,418.  Patented Feb. 6, 1872.

No. 123,418.



Inventor

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By his Atty's
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UNITED STATES PATENT OFFICE.

DAVID N. PHELPS, OF SAN LEANDRO, CALIFORNIA.

IMPROVEMENT IN APPARATUS FOR EXHAUSTING AIR FROM PRESERVE-CANS.

Specification forming part of Letters Patent No. 123,418, dated February 6, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, DAVID N. PHELPS, of San Leandro, county of Alameda, and State of California, have invented an Improved Apparatus for exhausting air from Preserve-Cans; and I do hereby declare that the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

My invention relates to an improved apparatus to be used in connection with an air-pump for the purpose of exhausting air from cans, jars, and other air-tight vessels for various purposes, but applicable, more especially, for sealing up fruit-cans and jars in order to exhaust the air, preserve the fruit, and seal the cans; and it consists in so constructing and arranging the receiver or covering-vessel that the orifice through which the air is extracted from the fruit-can or other vessel can be closed before removing the receiver from over it.

In order to explain my invention so that others can understand the same, reference is had to the accompanying drawing forming a part of this specification, in which—

A represents a glass or other receiver, having its lower end bound with a suitable casing, *b*, which is secured upon it so that the connection will be air-tight. To the lower end of this covering, either inside or outside, as most convenient, I secure a yielding or elastic band, *c*, which shall project down below the covering, and form an elastic base for the receiver to stand upon. In the upper end of the receiver is also an opening, *d*, in which I secure tightly a cork or other air-tight stopper, *e*. Passing down through the cork or other stopper *e* is a rod or piston, *f*, which works air-tight in the stopper, and to the lower end of which, inside of the receiver, is fixed a block, *g*, the under face of which is flat and smooth. A suitable knob, *h*, can be secured at the upper end of this rod, if desired,

for convenience in working it. Pipes *i* and *j* are connected with the covering or casing *b* on opposite sides or at different points, the pipe *i* being made, preferably, conical or tapering, at least outside, as shown, so that a rubber hose, *k*, can be readily attached or detached by slipping it on or off as desired, while the pipe *j* is provided with a cock, *m*, for admitting to or shutting off the air from the receiver. The rubber hose *k* extends to and is connected with an air-pump conveniently placed, a short pipe—which is also provided with a cock—serving to connect the two.

The operation of my apparatus is as follows: The piston-rod *f* is pushed down until the block *g* is at the lower opening of the receiver, and a leather disk or other suitable cover secured upon its under flat face by means of a weak mucilage or other adhesive substance, while its under surface is provided with a much stronger adhesive substance, and then raised a short distance above the lower end. The receiver *A* is then placed over the opening or orifice in the jar, can, or other vessel from which it is desired to exhaust the air, so that the block *g* will be directly over it, the rubber or other yielding ring *c* resting upon the top of the vessel. The cock *m* is then closed, and the air withdrawn from the vessel, and received through the pipes *i* and hose *k* by means of the air-pump, after which the cock *o* is closed, and the rod *f* pushed forcibly down so as to cause the leather or other cover on the under face of the block *g* to adhere to the top of the can and close the orifice. Air can then be admitted through the pipe *j* and the receiver removed, after which the cover can be better secured by melted wax or other convenient means. Several of these receivers can be connected with the same air-pump, and, for convenience when this is the case, the hose *k* is employed; otherwise a single pipe might be used. The pipe *j* is also employed for this purpose, as it would not be necessary in case only one receiver was operated at a time by the pump. By the use of this apparatus I am enabled to seal up fruit and other substances in

cans, jars, and other air-tight vessels with but little trouble so that it will be preserved in all its beauty and flavor for an indefinite length of time.

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

The receiver *A* with its casing *b*, elastic bearing-ring *c*, piston-rod *f*, and block *g*, in combination with the pipes *i*, *j*, and *n*, with

their cocks *m* *o*, and hose *k*, substantially as and for the purpose above described.

In witness that the above-described invention is claimed by me, I have hereunto set my hand and seal.

DAVID NEVINS PHELPS. [L. S.]

Witnesses:

J. V. SHRYOCK,

J. L. BOONE.