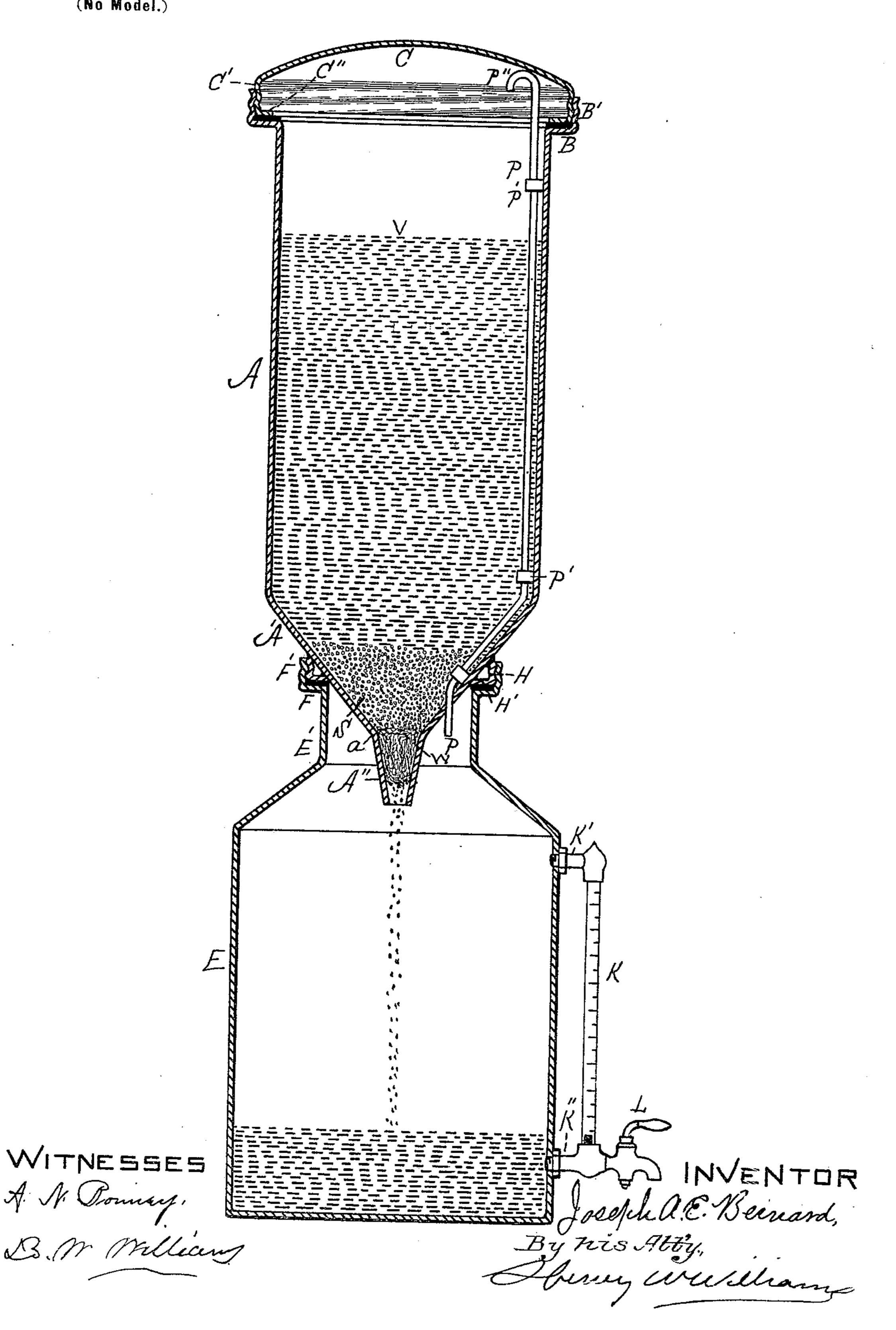
## J. A. E. BERNARD. PERCOLATOR.

(Application filed Dec. 20, 1898.)

(No Model.)



## UNITED STATES PATENT OFFICE.

JOSEPH A. E. BERNARD, OF CENTRAL FALLS, RHODE ISLAND.

## PÉRCOLATOR.

SPECIFICATION forming part of Letters Patent No. 621,990, dated March 28, 1899.

Application filed December 20, 1898. Serial No. 699,819. (No model.)

To all whom it may concern:

Be it known that I, Joseph A. E. Bernard, a subject of the Queen of Great Britain, residing in Central Falls, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Percolators, of which the following is a specification.

This invention relates to the pharmaceutical apparatus known as "percolators;" and it consists in the novel construction and arrangement of parts fully described and claimed below and illustrated in the accompanying drawing, which shows a central vertical section of my improved percolator, the gage being represented in elevation.

A represents a cylindrical vessel made of any suitable strong material and formed at its lower end into the funnel-shaped portion A', which terminates in the open discharge end 20 A". At the end a between the two portions A' and A'' a perforated septum W is laid horizontally. The upper end of the cylinder A is formed with the outwardly-extending annular step B, which is provided with the verti-25 cal flange B', struck up into a screw-thread, as shown. A concavo-convex cover C is formed with vertical sides C', struck up into a screw-thread to engage with the flange B, said sides terminating at their lower edges in the 30 inwardly-extending flange C', which when the cover is in place seats itself on air-tight packing on the step B.

E is a receiver consisting of a cylindrical vessel with closed bottom and relatively small upper portion E', whose upper end is formed into the outwardly-extending annular step F, which is provided with the vertical flange F', struck up into a screw-thread. The outer surface of the portion A' has soldered or otherwise rigidly secured to it an annular shoulder H H', angle-shaped in cross-section, the portion H being formed with a screw-thread to engage with the threaded flange F' and the portion H' seating itself on air-tight packing on the annular step F.

A gage K is connected by the pipes K' and K'' with the interior of the receiver E and is provided with a faucet L.

P is a pipe or tube secured by brackets or ears P' to the inner surface of the percolating vessel A and extending through the wall of

the portion A' thereof into the upper portion of the receiver. This pipe extends well up into the cover C and bends back upon itself at P'', as shown, so that the upper end will 55 be well above the liquid contents of the percolator.

In the drawing, S represents a granulated substance, such as an herb, which rests on the septum and against the sides A'.

V represents the menstruum, which passes through the herb and drops, impregnated thereby, into the receiver, from which it can be drawn off by the faucet L.

As the liquid passes from the vessel A into 65 the vessel E the air in the latter vessel is displaced and passes up through the tube P into the vessel A above the menstruum. As the cover is air-tight, no alcohol can escape. The gage may be graduated to indicate pints, 70 quarts, gallons, &c., and being of glass indicates also the color of the drug.

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

1. In a percolator, the vessel A provided with an air-tight cover at its upper end and a discharge-opening at its lower end; a perforated septum supported within said vessel; the receiving vessel E open at its upper end; an annular step rigid with the upper end of the receiving vessel E; an annular shoulder or flange rigidly secured to the lower portion of the vessel A; an air-tight packing between said step and flange; and the tube P within 85 the vessel A, the upper end of said tube opening into said vessel A at its upper portion, and the lower end thereof extending through the lower portion of the vessel A into the vessel E, substantially as described.

2. The hereinbefore-described improved percolator, comprising the percolating vessel A formed at its upper end into the annular step B and screw-threaded annular flange B'; the cover C, C' adapted to be screwed into 95 said flange and provided with the inwardly-extending flange C" whereby an air-tight connection with said vessel may be provided; the annular shoulder consisting of the threaded portion H and the horizontal portion H' secured to the lower portion of said percolating vessel; the receiving vessel E

formed at its upper end with the annular step F and flange F', the latter being formed with a screw-thread whereby an air-tight connection between the vessels A and E may 5 be provided; a perforated septum supported by and within the vessel A; and the tube or pipe P opening at its upper end in the upper portion of the percolating vessel and at its lower end in the upper portion of the receiver, to the lower portion of the percolating vessel be-

ing funnel-shaped and having an open discharge end and being thereby adapted to rest upon the upper open end of the receiving vessel and to extend down thereinto, substantially as set forth.

JOSEPH A. E. BERNARD.

Witnesses:

ONESIPHASUS B. PARKER, GEORGE H. BERNARD.