

(No Model.)

J. T. SMITH.
DEPURATOR.

No. 536,707.

Patented Apr. 2, 1895.

Fig. 1.

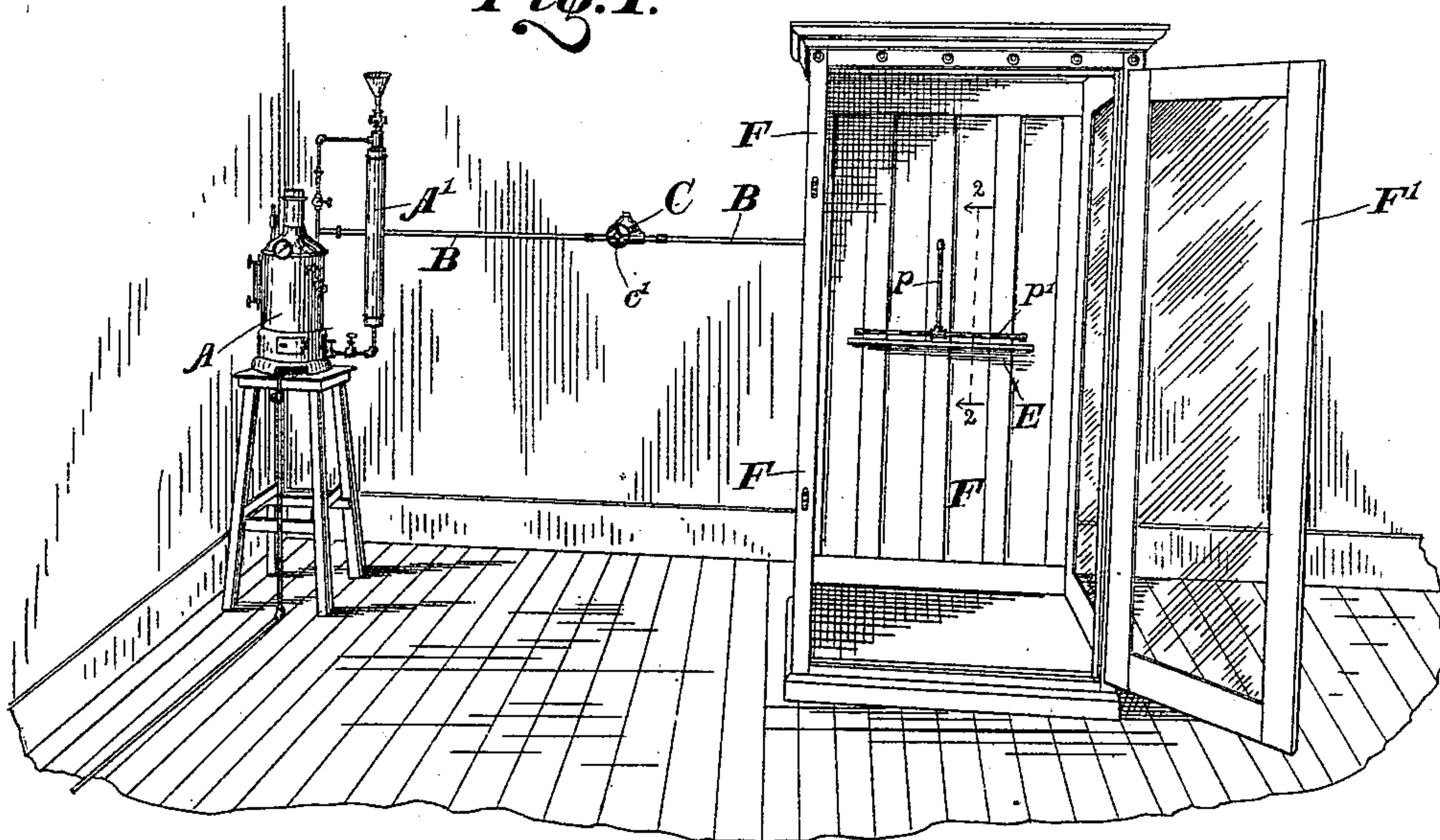


Fig. 2.

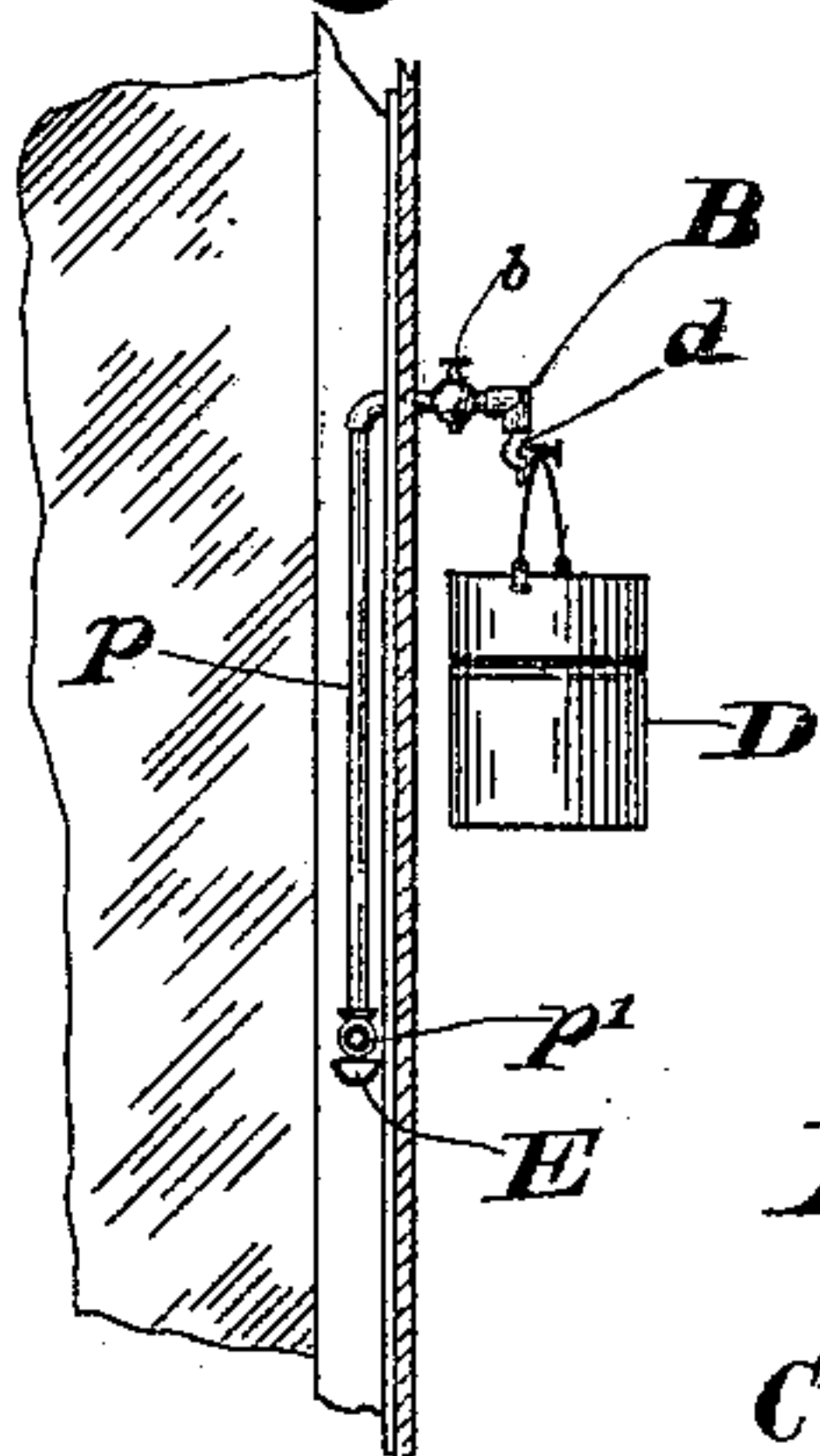


Fig. 3.

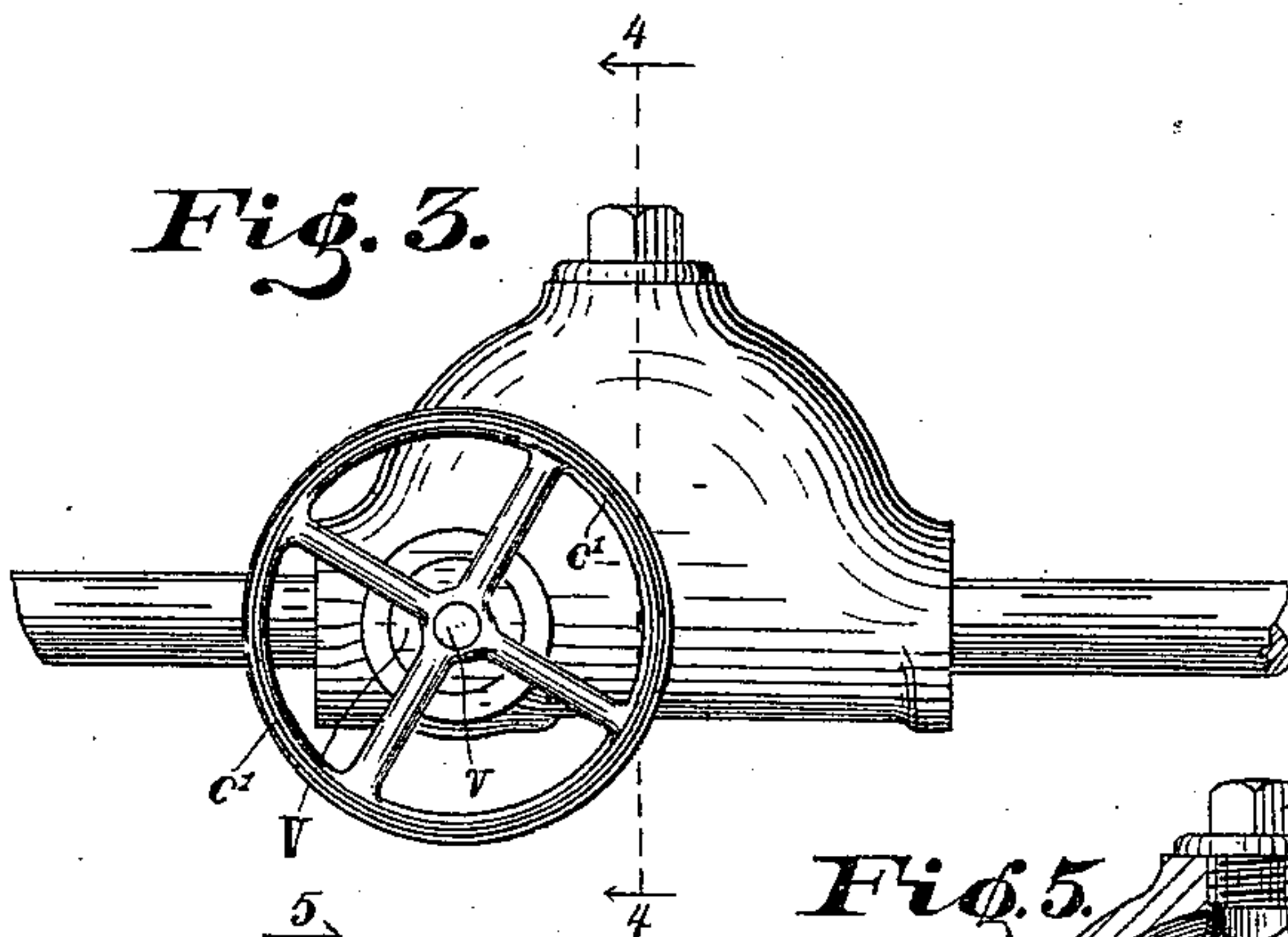


Fig. 4.

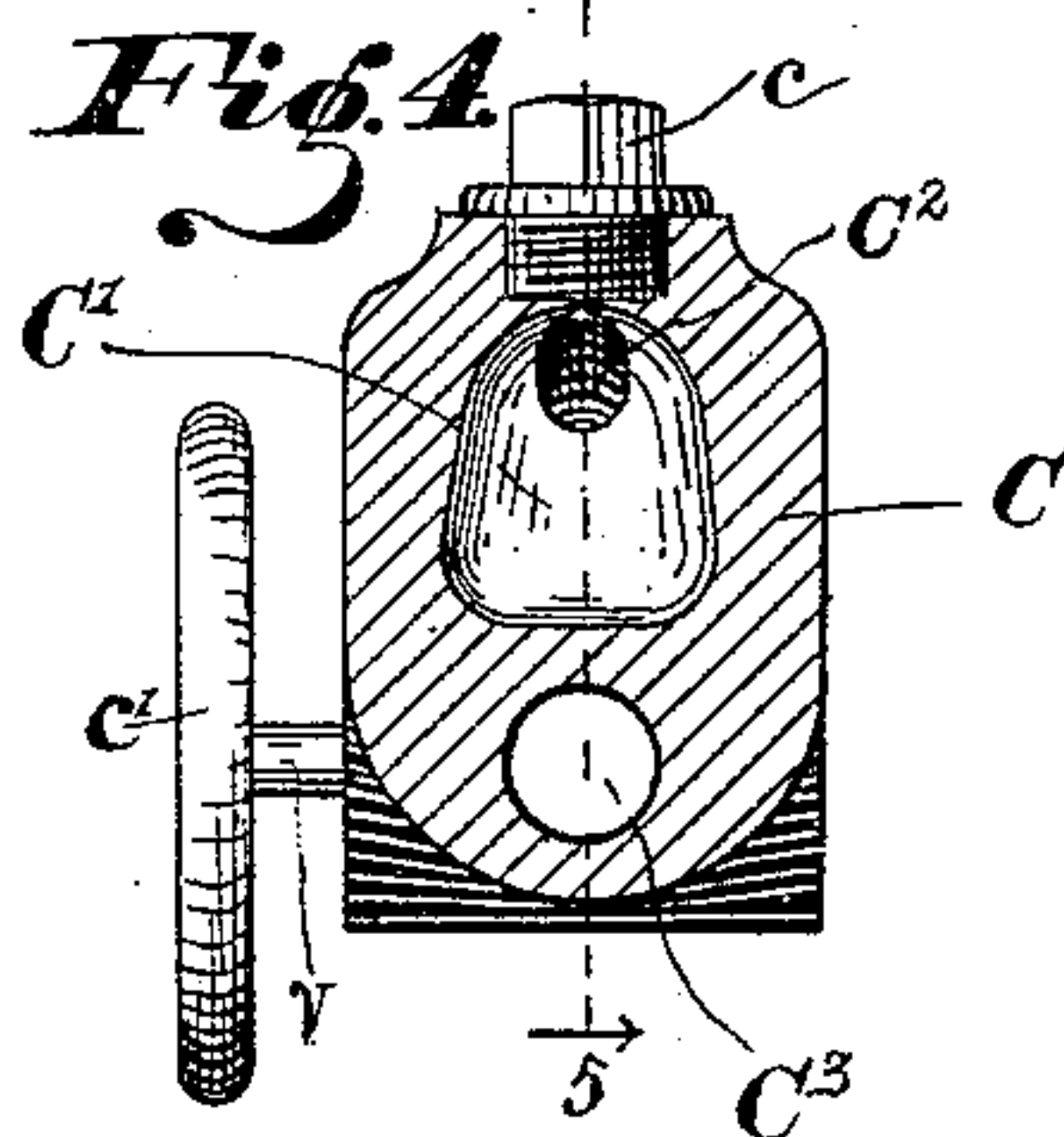
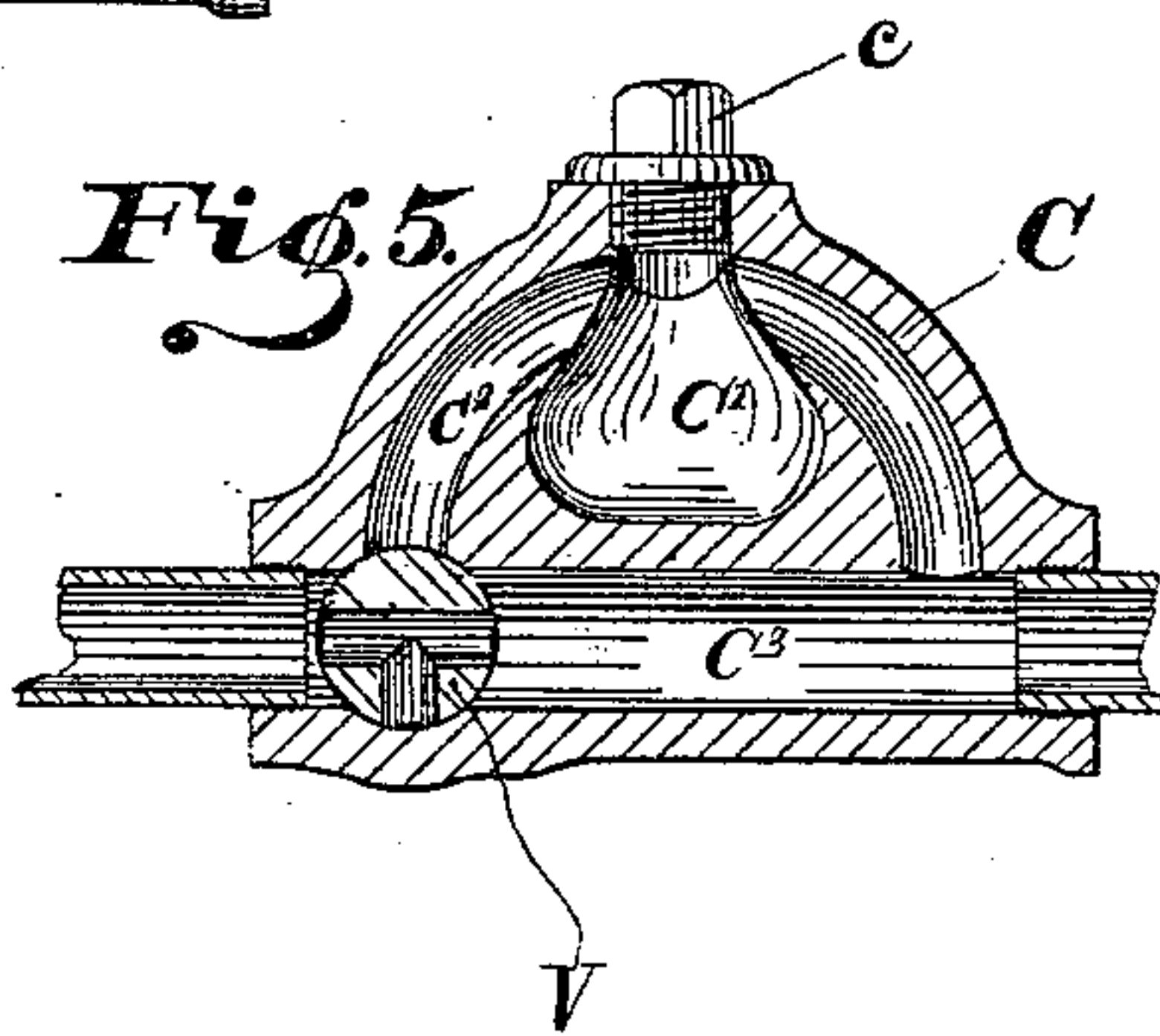


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN T. SMITH, OF KOKOMO, INDIANA.

DEPURATOR.

SPECIFICATION forming part of Letters Patent No. 536,707, dated April 2, 1895.

Application filed July 13, 1894. Serial No. 517,430. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. SMITH, a citizen of the United States, residing at Kokomo, in the county of Howard and State of Indiana, have invented certain new and useful Improvements in Depurators, of which the following is a specification.

My present invention consists of certain improvements in that class of medical apparatus known as "depurators" tending to simplicity and efficiency.

An apparatus embodying my said invention will be first fully described and the novel features thereof then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view illustrating the complete apparatus, the door of the cabinet being open to better show the interior thereof; Fig. 2, a detail sectional view, on an enlarged scale, through the back of the cabinet and the pipes connected therewith, as seen from the dotted line 2 2 in Fig. 1; Fig. 3, a side elevation, on a still larger scale, of that part of the apparatus by which medication of the vapor is effected; Fig. 4, a transverse sectional view of the same, and Fig. 5 a longitudinal sectional view.

In said drawings the portion marked A represents a boiler suitable to be used with my improved apparatus; B, a steam pipe leading therefrom to the cabinet; C, a device inserted in said pipe at a point between the boiler and the cabinet, by which medication of the steam or vapor is effected; D, a receptacle for products of condensation; E, a small drip trough, and F a cabinet within which the patient remains while being treated.

The boiler A is or may be of any usual or desired form. The form which I have illustrated is a desirable one for the purpose, and is provided with a small filling tank A', and also with the usual cocks, gages and other devices commonly accompanying such a boiler.

The pipe B leads from a convenient point of attachment on the boiler A to behind the cabinet F, and thence through the back of said cabinet to the inside, as shown in Figs. 1 and 2, and on the inside of said cabinet it develops into the downwardly-extending pipe p, and thence, preferably, into the transverse

pipe p', the latter of which has fine perforations for the discharge of the medicated vapor. Outside the cabinet is a drip cock d, and below this the receptacle D is provided, for the purpose of receiving the water formed by condensation of the steam. In use I prefer to turn on the steam, and open this drip cock d, leaving it open until condensation has practically ceased and the steam has become substantially dry;—the valve b being meanwhile closed, and the valve c in the device C being set to allow the passage of the steam through the by-path, as will be presently described.

As best shown in Fig. 5, the device C is a shell containing a chamber C' in which a medicated absorbent material may be inserted, said device having a hole in its top (ordinarily closed by a plug c) for this purpose. The main way through this device is curved and passes through the top of the chamber C', and through this curved passage C² the steam passes when the apparatus is in use. By means of a valve V (operated by means of a stem v and handle c',) however, the steam can be caused to pass through the straight by-path, C³, in the lower side of this device.

The receptacle D may be any convenient vessel for the purpose. A tin bucket is shown.

The drip trough E is secured within the cabinet immediately below the pipe p', and while, because of the manipulations of my apparatus above described, there is only a trifling amount of condensation within the cabinet, this trough is provided to receive the few drops that may form, and thus keep the floor of the cabinet perfectly dry. This trough may be supported on brackets, or in any other desired manner, and is preferably removable.

The cabinet F is of sufficient size to permit the patient to readily stand within it, and is provided with a door F' by which it can be completely closed. I have shown this cabinet with the sides and door mainly of glass, so that the physician or attendant can readily observe all that is going on within, but of course this may be varied without departing from my invention.

The operation of my depurator may be briefly recapitulated as follows: When the boiler is heated, and steam generated, the

valve c' is turned so that the steam will pass through the by-path C^3 in the device C. The valve b is closed and the drip cock d opened, and the steam is thus allowed to travel in the path thus provided, until the parts are thoroughly heated and condensation is substantially at an end. The valve V is then turned to drive the steam through the path C^3 in the device C, passing through the medicated absorbent or other material in the chamber C' . The valve b is opened, and the drip cock d closed. This produces a medicated vapor which is driven to the inside of the cabinet and escapes thereinto through the perforations in the pipe p' . The pipe p may also be perforated if desired, in which case, of course, the medicated vapor will escape through the perforations therein also. The patient has meanwhile been put in the cabinet, and the door closed, and he is subjected to the indicated treatment so long as in the judgment of the physician is necessary. When the treatment is finished, the proper manipulations to cause the operation of the apparatus to cease are of course had.

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

1. The combination, in a depurator, with the boiler, the cabinet, and the pipe running from said boiler to said cabinet; of the device C having a chamber to contain the medi-

cated material, a steam path running through or over said chamber, a by-path running by said chamber, and a valve by which the steam may be switched either through the chamber or around it by way of the by-path, substantially as set forth. 35

2. The combination, in a depurator, of a boiler, a cabinet, a pipe running from said boiler to said cabinet, and a device connected to the pipe at a point between the boiler and the cabinet, containing a chamber for the medicated material, a steam path running to and over said chamber, a by-path running by said chamber, and a valve by which the steam may be switched either through the chamber and the medicated material therein or around it by way of the by-path free of the medicated material. 40 45 50

3. The combination, in a depurator, of the boiler, the cabinet, the pipe leading from the boiler to the cabinet and extending thereinto, the pipes p and p' within the cabinet, and the drip trough E under said pipe p' , said several parts being arranged and operating substantially as set forth. 55

In witness whereof I have hereunto set my hand and seal, at Kokomo, Indiana, this 9th day of July, A. D. 1894.

JOHN T. SMITH. [L. S.]

Witnesses:

MILTON BELL,
W. C. PURDUM.