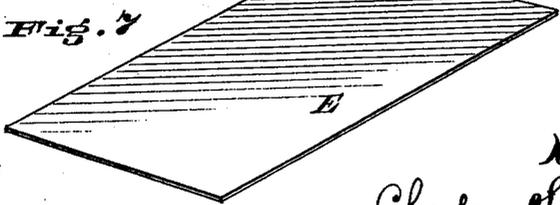
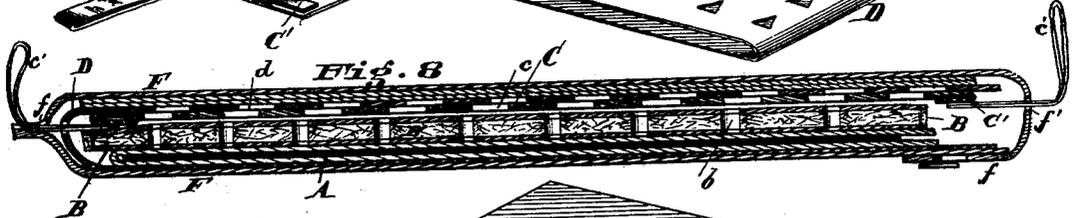
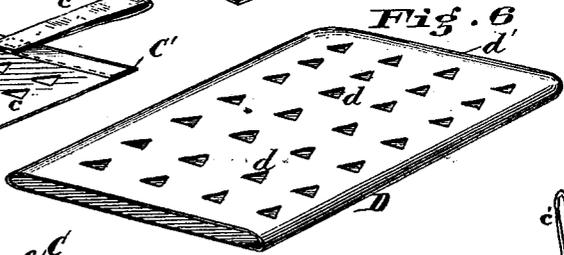
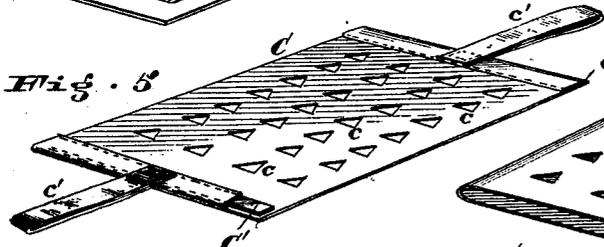
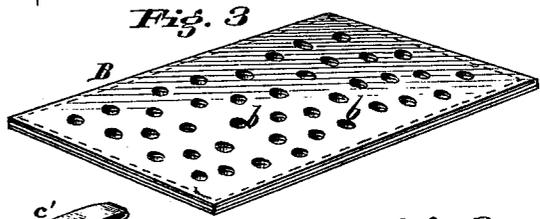
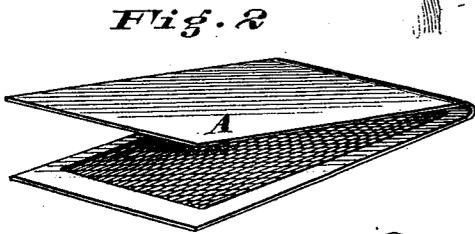
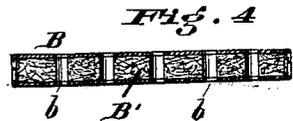
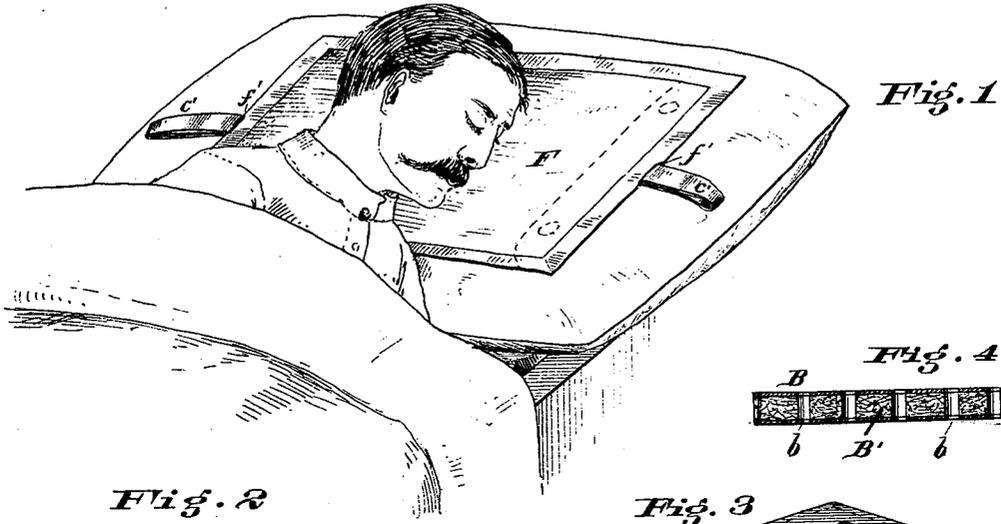


(No Model.)

C. S. THOMPSON.  
Vapor Inhaling Pad.

No. 233,954.

Patented Nov. 2, 1880.



Attests  
*L. J. Matos.*

Inventor  
 Charles S. Thompson  
 By his atty.  
*A. M. Hunter*

# UNITED STATES PATENT OFFICE.

CHARLES S. THOMPSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO JOSEPH W. SNYDER, OF SAME PLACE.

## VAPOR-INHALING PAD.

SPECIFICATION forming part of Letters Patent No. 233,954, dated November 2, 1880.

Application filed August 30, 1880. (No model.)

*To all whom it may concern :*

Be it known that I, CHARLES S. THOMPSON, of the city and county of Philadelphia, in the State of Pennsylvania, have invented new and useful Improvements in Felt or Porous Vapor-Pads, of which the following is a specification, reference being had to the accompanying drawings, which form part thereof.

My invention relates to medical inhalers designed to contain and carry the medicine in a plastic state and regulate its supply, and which are used without direct application to the mouth or nostrils; and it consists in a suitably-arranged pad containing the medicines the vapors of which are to be inhaled, and placed within a receptacle or a series of bags or sachets, with or without porous intermediate layers, in combination with suitable valves to govern and regulate the supply of the vapor, said pad and its appendages to be spread upon a pillow, and upon which the patient will lay his head when sleeping, for the purpose of inhaling the vapors which may arise during the night; further, in the detailed construction of the various parts which make up the inhaler, all of which are fully set forth in the specification, shown in the accompanying drawings, and referred to in the appended claims.

Heretofore inhalers for medicinal purposes have been so constructed that they contained liquid medicine either in a fluid or absorbed state, and which inhalers were to be used by direct application to the mouth or nostrils, and could not be used during the night when the patient was asleep. In some cases these inhalers are in the form of bottles which cause the air to pass through the liquid, while in others they are used as a cigar, and are made of porous material which absorbs the medicine and medicates the air drawn through them; but never, to my knowledge, has an inhaler been designed to lie upon a pillow, where the patient will be able to breathe the medicated vapors throughout the night.

Heretofore it has been customary, in medical practice, to have the patient use the inhaler for fifteen minutes at a time, and for two or three times a day. All of the blood passes once through the lungs in about two and one-half minutes. In health there are about twenty-five

pints of blood in the system, so that an inhalation which lasts fifteen minutes medicates every drop of blood in the body six times over with whatever is inhaled, and which medicated blood is carried with the rapidity of circulation through every organ of the body. Now, with my improved inhaler a patient sleeping eight hours would medicate every drop of blood in the body one hundred and ninety-two times over; but, supposing the process of medication was not as perfect by my improved method, it would still be one hundred and fifty, or more, times. Hence the value of my invention comes in the fact that with less inconvenience the blood in the body of a patient can be medicated to a far greater extent during the day of twenty-four hours than with any of the inhalers as heretofore used.

The object of my invention is to design an inhaler which can be used by a patient during the night-time and while he is asleep, and one which, with less inconvenience to the user, will give more benefit than any at present in the market.

In the drawings, Figure 1 is a perspective view of my improvement, showing the method of using the same. Fig. 2 is a perspective view of the medicine-pad. Fig. 3 is a perspective view of the porous pad. Fig. 4 is a cross-section of the porous pad. Fig. 5 is a perspective view of the vapor-valve. Fig. 6 is a perspective view of the inner bag to contain the parts heretofore referred to, and is provided with valved openings. Fig. 7 is a porous pad to cover the valved openings. Fig. 8 is a longitudinal section of the inhaler when ready for use, as shown in Fig. 1.

A is the medicinal pad, and is preferably made of some porous material, and after the medicine is spread upon one-half of its surface the other side is doubled down, as shown in Figs. 2 and 8. Upon this is placed the porous pad B, which is composed of two outer layers of felt or similar material, which inclose a layer of some open porous material, B'—as sponge—and the whole is secured together and perforated by numerous small holes, *b*. Upon this pad B is placed the vapor-valve C, which consists of a piece of rubber or oil-silk provided with spring-strip C', secured in either end

tab *c'*, attached to either end, and the surface perforated with numerous openings, *c*, of any desired shape. The spring-strips *C'* cause the whole surface to be moved when the tabs are pulled, and yet yield to the pressure of the head, so as not to hurt the patient. These parts are then inserted into the inner bag, *D*, so that the valve *C* covers in the openings *d*, and to which it acts as the valve. One of the tabs is projected through the opening *d'* in the closed end of the bag *D*. Over the valved openings a porous mat of felt or open flannel, *E*, is placed, and the whole is inserted within the outer bag or sachet, of flannel or other porous material, and the end lap, *f*, is doubled over and buttoned, and the inhaler is complete.

The tabs *c'* project through holes or slits *f'* in the ends of the casing or bag *F*. If too much vapor escapes, the valve *C* is pulled by the tabs *c'*, so as to close or open the holes or perforations *d* in the bag *D*.

When thus completed it is placed upon a pillow or under the slip, and the patient lays his head upon it and sleeps, and during such sleep inhales the ascending vapors during the natural progress of respiration, and does not overcharge the lungs with a foreign vapor, shutting out the necessary oxygen which goes to keep up the heat of the body and purify the blood of the effete carbon brought up by the same from the waste tissues of the body, and yet, at the same time, it medicates the air breathed sufficiently to soothe and heal the inflamed mucous linings or membrane of the bronchial tubes and cause the secreted pus or mucus and tubercular matter to be expectorated.

I do not confine myself to the exact con-

struction of inhaler-pad described, for my invention consists, broadly, in any kind of inhaler-pad upon which a patient lays his head when sleeping or resting, and which is not applied directly to the mouth or nostrils, in combination with a valve to regulate the supply of the vapor to the patient as may be desired.

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

1. In an inhaler-pad, the combination of the medicinal pad *A*, porous pad *B*, valve *C*, valved bag *D*, porous pad *E*, and bag or sachet *F*, all constructed substantially as and for the purpose specified.

2. In an inhaler-pad, the combination of a medicinal pad, *A*, valved bag *D*, and valve *C*, substantially as and for the purpose specified.

3. In an inhaler-pad, the combination of a medicinal pad, *A*, porous pad *B*, valved bag *D*, valve *C*, provided with metal spring-strips *C'* and tabs *c'*, and a casing or sachet, *F*, to inclose the whole, substantially as and for the purpose specified.

4. In an inhaler-pad, the combination of the medicinal pad *A*, valved bag *D*, valve *C*, provided with spring-strips *C'* and tabs *c'*, and an exterior casing or sachet, *F*, provided with slits *f'* and flap *f*, adapted to be fastened down, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

CHARLES S. THOMPSON.

Witnesses:

JOSEPH W. SNYDER,  
R. M. HUNTER.