

May 31, 1932.

S. E. ARMSTRONG

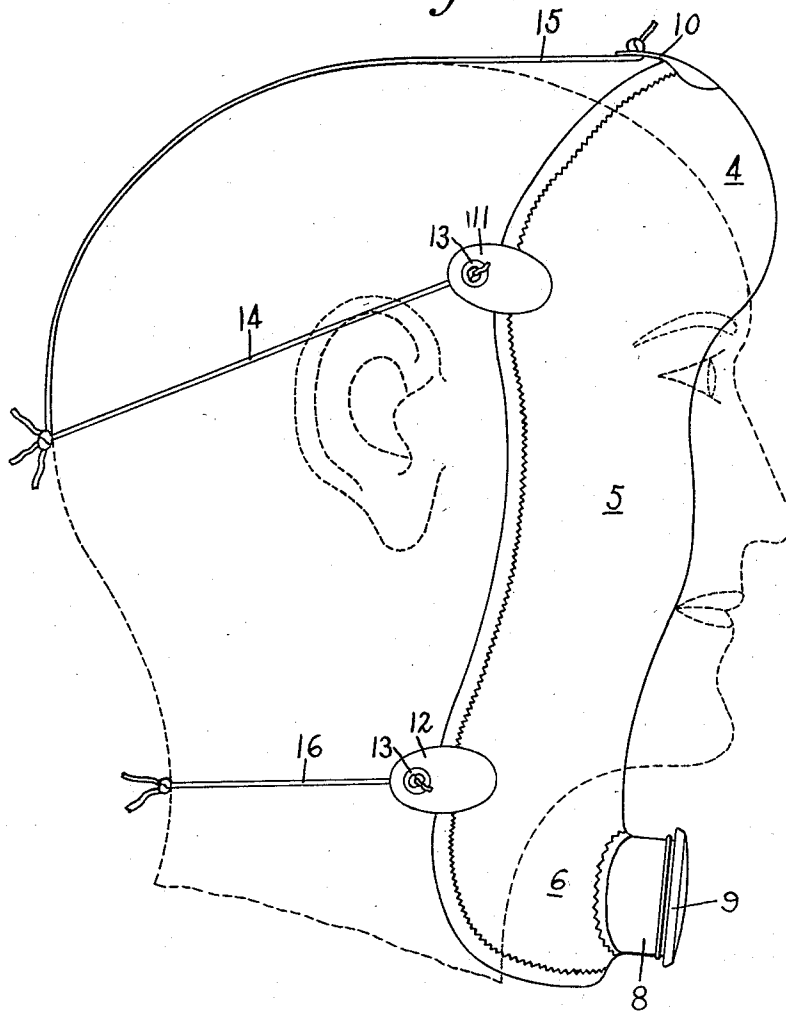
1,860,847

APPLIANCE FOR THE TREATMENT OF COLDS, INFLUENZA, AND SIMILAR AILMENTS

Filed June 18, 1930

2 Sheets-Sheet 1

Fig.1.



Inventor

Stanley E. Armstrong

ॐ५ Rockwell Bartholomew
 Attorneys

Attorneys

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2 Sheets-Sheet 2

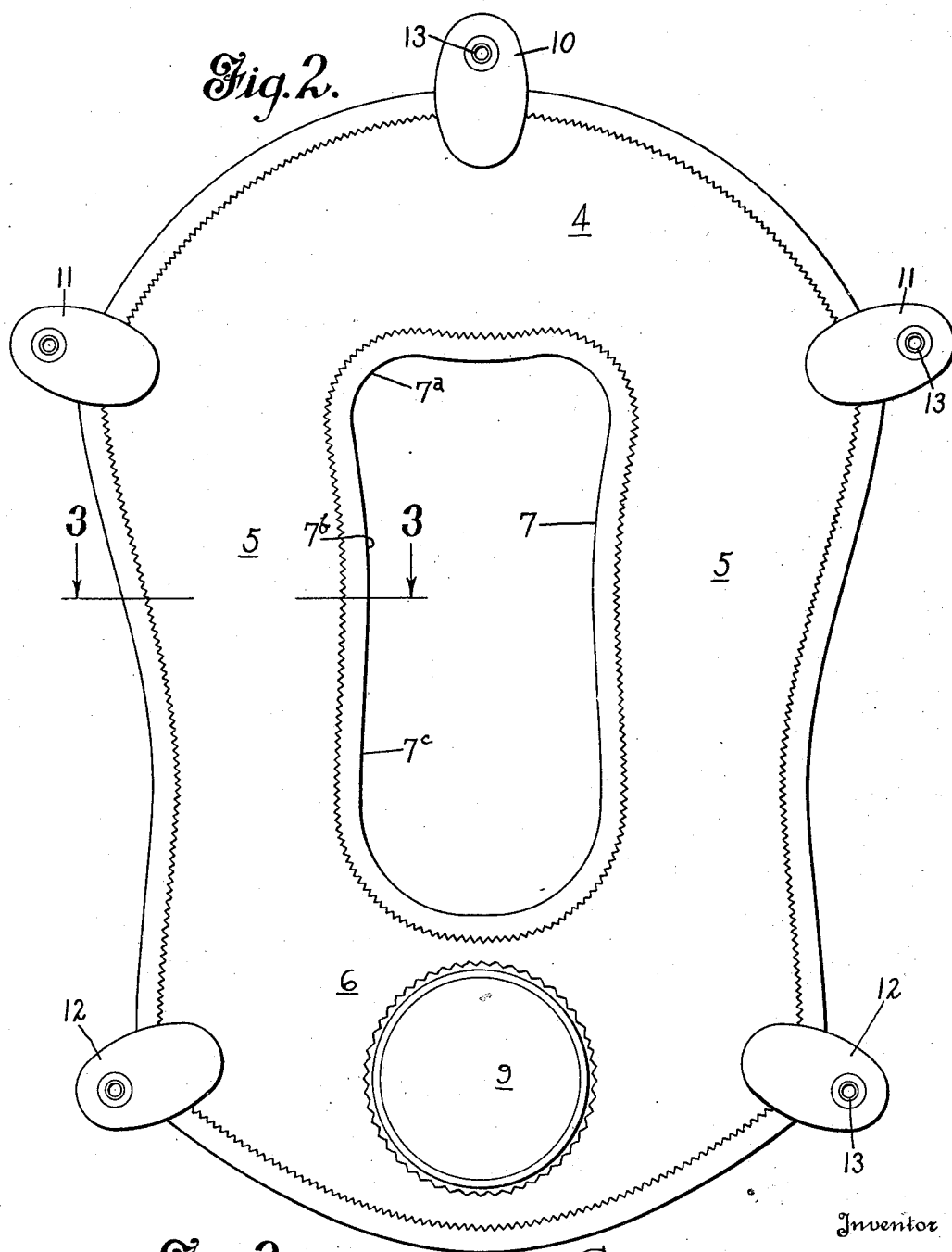
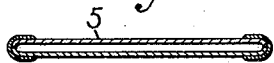


Fig. 3.



Inventor

Stanley E. Armstrong

By Rockwell & Buchala

Attorneys

UNITED STATES PATENT OFFICE

STANLEY E. ARMSTRONG, OF NEW HAVEN, CONNECTICUT

APPLIANCE FOR THE TREATMENT OF COLDS, INFLUENZA AND SIMILAR AILMENTS

Application filed June 18, 1930. Serial No. 461,997.

This invention relates to an appliance in the nature of a flexible fluid-containing bag or like receptacle for the treatment of colds, influenza and similar ailments by the application of heat or cold, or both, to regions of the patient's anatomy in which congestion or like morbid conditions are found.

In treating head colds, for example, it has in the past been the practice in some instances to apply to the patient's forehead a cloth saturated with warm water and then continue the treatment by the application over some period of time of a cloth or cloths saturated with ice water. By such treatment the tissues are contracted and the blood driven therefrom with consequent relief of congestion and inflammation, and usually with considerable improvement in the patient's general condition. A hot application is customarily the initial step in the treatment of colds by this method as it has been found that this properly conditions the tissues for the subsequent use of ice water or other very cold water.

One of the objects of the present invention is to furnish an appliance which can be employed much more readily and conveniently and with better results than cloths saturated with liquid of the desired temperature.

Another object is to facilitate the application of the heat or cold as the case may be to the congested parts of the patient's head and to furnish an appliance by means of which the treatment can be continued for a sufficient length of time for the purpose in view.

Another object of my invention is to provide an appliance in the nature of a flexible water bag which is so constructed as to permit hot or cold applications to parts which it has not heretofore been practicable to so treat, and, specifically, to provide for the application of the heat or cooling effect not only to the forehead of the patient (for the treatment of the frontal sinuses), but also to those regions of the face extending down along the sides of the face and near to the nose which are over or close to the antrum and the smaller cavities or sinuses at the sides of the nose, whereby the elimination of congestion in the

principal sinuses can be effected at one and the same time.

Another object which I have in view is to provide an appliance by means of which the throat of the patient, in addition to the parts heretofore mentioned, can be treated by the application of heat or cold to the neck so that all those regions of the head and neck in which colds, inflammation and infections are most liable to occur can be treated at the same time in a very convenient manner. Further, it is aimed to provide an appliance of such a character that when it is applied to the head of the patient the latter may wear it with a maximum amount of comfort, and, in fact, sleep while the appliance is in place, so that the treatment can conveniently be continued over sufficient periods of time to insure beneficial results.

To these and other ends the invention consists in the novel features and combinations of parts to be hereinafter described and claimed.

In the accompanying drawings:

Fig. 1 is a view showing the manner in which my appliance is applied to and held on the head of the patient;

Fig. 2 is a face view of the appliance on a larger scale as it appears when empty and with the attaching bands or strings omitted; and

Fig. 3 is a section on line 3—3 of Fig. 2.

The article of my invention is in the nature of a flexible bag for containing hot or cold water, and for the particular purposes which I have in view it has the peculiar form or shape hereinafter more particularly described. Usually the bag is constructed of rubber, and is built up of parts cut to the required shapes from rubber sheets and cemented or vulcanized to form a unitary structure. It will be observed that the bag is elongated in shape so as to extend from the forehead of the patient down to the neck and has a portion 4 adapted to be applied to the forehead of the patient, portions 5 adapted to extend down along the sides of the face, and a portion 6 at the bottom adapted to extend across the front of the neck. The bag is flat in cross-section as shown in Fig. 3 and is

provided with an elongated opening 7 in the middle part which clears the eyes, nose, mouth and chin of the patient. While, however, the bag when in use does not cover these parts of the face, it does provide portions covering the forehead and particularly the frontal sinuses and other portions extending down along the sides of the face over or close to the antrum and the smaller cavities or sinuses at the sides of the nose.

The lower part of the bag extends across the throat under the chin and provides, in combination with the side portions and the forehead portion, a channel or conduit which is continuous and into and from which liquid of the desired temperature can be introduced or emptied by way of a filler neck 8 having a suitable filler cap 9, which filler cap usually is provided with exterior screw threads that screw into internal threads in the neck 8.

For the application of the article to the head of the patient, the bag is preferably provided with attaching means such as flexible tabs at the outer edge portion for the attachment of suitable attaching bands or strings. In the particular form shown there are five such tabs, there being one at the top of the bag, as shown at 10, two tabs 11 at the respective sides of the bag somewhat below the top, and two additional tabs 12 at the sides of the bag somewhat above the extreme lower edge thereof. All of these tabs are preferably provided with metallic eyelets 13 by means of which strings or tapes of suitable character can be attached to the bag for holding it on the head of the wearer.

The manner of filling the bag with the hot or cold liquid will be obvious from the foregoing description. The manner in which it is usually applied to the patient's head is shown in Fig. 1, and it will be observed that customarily strings or tapes 14 extending from the respective tabs 11 are interconnected by tying them together at the back of the head. To the strings running around the head is attached the string 15 which extends over the top of the head from tab 10. Strings 16 from the lower tabs 12 pass rearwardly about the patient's neck and are tied together in such a manner as to hold the lower part of the bag in place across the front of the neck.

It will be observed that the face opening 7 above mentioned is preferably so shaped as to provide an upper portion insuring full vision to the wearer of the appliance. The upper edge of the opening is substantially horizontal and substantially in line with the lower margin of the forehead and the curved upper corners 7^a of this opening are so separated from each other as to pass laterally beyond and clear the eyes of the average person so that the wearer can have full use of his eyes. It will also be observed that below

the corner portions 7^a, the face opening is somewhat contracted laterally by the provision of curved portions 7^b, which are intended to extend over or close to and permit effective treatment of the sinuses at the sides of the nose. Below the portions 7^b the face opening 7 is again somewhat widened, as shown at 7^c, so that the wearer of the appliance can use his mouth for talking, eating, etc., without inconvenience and it will be observed further that the face opening will be of such area as to clear at its lower portion the chin of the average person so that without discomfort or inconvenience the chin may be lowered as the mouth is opened.

By locating the filler neck and filler cap at that portion which extends across the throat beneath the chin, and more especially in the central region of that portion, these parts are most conveniently disposed and they will not interfere with the act of opening the mouth, nor will they interfere with the downward bending to a considerable degree of the patient's head. The appliance can be worn with comfort, although it is understood, of course, that usually it will be worn while the patient is in a recumbent or semi-recumbent position. The appliance is of such a character as not to interfere with the patient's reading or going to sleep if he desires to do so.

My appliance permits the treatment of colds and like ailments, and even such ailments as toothaches, etc., by the use of hot or cold applications in a very convenient manner. My invention also provides for the thorough treatment of certain regions of the head and neck, and, in fact, all of those regions of the head and neck in which colds are most liable to occur, and as all of the regions above mentioned can conveniently be treated simultaneously by the application of heat or cold, the article is very effective and in most cases provides for the prompt cure of ordinary colds. If the patient has a head cold, the treatment of the throat simultaneously with the treatment of the sinuses and the nose region will in many cases prevent the congestion from passing over or being transferred to the throat; and similarly if the abnormal condition is localized in the throat it will usually be kept from spreading to the nasal region.

Various changes can be made in the details of the structure without departing from the scope of my invention as defined in the claims.

What I claim is:

1. An appliance for application to the face of a patient for the treatment of colds and similar conditions, comprising a flexible shallow bag adapted to contain liquid of the required temperature, said bag being of greater length than width and having a top portion adapted to overlie the forehead for the treatment of the frontal sinuses, side por-

tions adapted to lie adjacent the sinuses at the sides of the nose, and a lower portion adapted to lie against the front of the neck so as to treat the patient's throat, said bag being constructed to clear the eyes, nose, mouth and chin of the patient and being provided for that purpose with a vertically elongated opening which extends from the forehead-engaging portion of the bag below the chin, the upper boundary of said neck-engaging lower portion of the bag being shaped to permit free movement of the chin, and means for holding the bag in place on the patient's head.

2. An appliance for application to the face of a patient for the treatment of colds and similar conditions, comprising a flexible shallow bag adapted to contain liquid of the required temperature, said bag being of greater length than width and having a top portion adapted to overlie the forehead for the treatment of the frontal sinuses, side portions adapted to lie adjacent the sinuses at the sides of the nose, and a lower portion adapted to lie against the front of the neck so as to treat the patient's throat, said bag being constructed to clear the eyes, nose, mouth and chin of the patient and being provided for that purpose with a vertically elongated opening which extends from the forehead-engaging portion of the bag below the chin, the upper boundary of said neck-engaging lower portion of the bag being shaped to permit free movement of the chin, the portions of the bag at opposite sides of the nose being curved in slightly toward the nose and said elongated opening being of greater width above and below said portions.

In witness whereof I have hereunto set my hand this 17th day of June, 1930.

STANLEY E. ARMSTRONG.