

Forty or fifty dry cups applied over the chest, produce enormous dilatation of cutaneous and subcutaneous capillaries and arterioles, which, when considered in the aggregate, constitutes a very extensive temporary diverticulum, capable of retaining, for some little time, a pound or more of blood, which forms a freer and larger channel for the diversion of blood, which it is desirable to save, from the internal and now embarrassed channels. It is remarkable how long this extensive dilatation of these external vessels will continue to invite this free and abundant supply of blood to themselves from the internal organs.

All are familiar with the troublesome and excessive hæmorrhages which a few dilated capillaries of the mucous surface will cause by creating a new and free channel for the circulation. The principle of action of this remedy is very similar. This diversion of a large portion of blood from the internal circulation to the external, by dilating the arterioles to two or three times their natural calibre, relieves the right ventricle from much of its labour in these cases, and the pulmonary circulation from its overloaded condition, and, in part, from the danger of thrombosis.

EXCESSIVE MUCOUS ACCUMULATIONS AND BRONCHIAL PARALYSIS AS A CAUSE OF DYSPNOEA.—Bronchitis as a complication of acute pneumonitis, is not unusual. In many of this class of cases, the mucous secretion is copious and rapid. The accumulation in the bronchial tubes is greater than its expulsion by cough. This accumulation continuing to increase, dilatation necessarily follows, terminating ultimately in complete relaxation of the bronchial tubes and bronchial paralysis, with a very dangerous state of insensibility, or anæsthesia of the respiratory system of nerves, and those of the vaso-motor system distributed to the lungs. Under these circumstances, cough and expectoration either decline or cease entirely.

In this class of cases, bronchial occlusion from mucous collection and paralysis is, if extensive, fraught with extreme danger, and is always the cause of intense dyspnoea. When perfect occlusion of a bronchial tube from the presence of a mucous plug occurs, the venous blood in the pulmonary capillaries distributed over its

mucous coat, remains fixed, and consequently charged with carbonic acid gas. This poison acts the part of a sedative on the respiratory and vaso-motor systems, as potent as aconite or veratrum, producing a state of anæsthesia, and ultimately paralysis of the muscular structure of the bronchi.

We often see grave cases of pneumonitis, in which there are extensive moist bronchial râles with very laboured breathing, much lividity of complexion, frequent, feeble pulse, with either very inefficient cough or its entire absence. While the râles are often loud and noisy, the patient is partially insensible to suffering, except from difficult breathing. Without prompt relief, these cases go on from bad to worse, the mucus accumulating in the bronchial tubes, dyspnoea and lividity continuing to increase, while the cough is not only suppressed, but the patient feels no desire to cough, and but little pain or inconvenience. In truth, at this stage of the case, there is a universal state of anæsthesia pervading not only the vaso-motor and respiratory system of nerves, but also affecting those of sensation and volition through the great nervous centres, from the presence of carbonic acid gas—an anæsthetic as effective, and far more deadly, than chloroform. Here is a cause of dyspnoea which must and will come under the observation of every practical physician.

TREATMENT OF BRONCHIAL OBSTRUCTION AND PARALYSIS.—There are two leading objects to be accomplished in treating these conditions—one, to stimulate bronchial action and relieve paralysis; the other, to remove excessive accumulation.

In relaxation of the bronchiæ and loss of sensibility, with defective expectoration when the mucus secretion is copious, but thin, inconsistent, and not tenacious, the free administration of nitric acid, combined with minute quantities of nux vomica and ipecac, constitute the most potent means of exciting bronchial expulsive action, and correcting this state of paralysis, which we have. The ipecac acts on the muscular coat of the bronchial tubes as a stimulant, causing active contraction and expulsion of contents. In this manner, cough and expectoration may be restored under al-