

nuts. However, when a dose is taken, it leaves a taste similar to that of chloral; but, unlike the latter, it immediately disappears upon taking a couple of mouthfuls of water. I have administered it in some forty different cases, and have not found any unpleasant effects to occur. The dose has been from 5 to 20 grains.

In all the instances, but three, mentioned above there was an increase in the number of respirations and in the pulse rate, for as long as I observed them, usually from half an hour to an hour. In some cases (nine) the increase was slight. In three the respiration and pulse remained the same.

The symptoms manifested immediately on taking the drug were a feeling of fullness or tension in the head, particularly noticeable in the region of the nostrils, and a pleasant diffusible warmth radiating from the stomach over the abdomen. The tension disappeared in a few minutes. In five observations with doses of five grains, made on myself, the symptoms were fully manifested, the respirations increased at the regular rate of about two per ten minutes for half an hour, the pulse increasing about twelve beats for that time.

For these latter *auto-observations*, however, I do not ask much credence, because, well knowing the close relations existing between the cerebrum and other nerve-centres, it is impossible to say, in this

instance, just how far the *wish*, for favorable results, was *father* to the observed physiological action.

That there is, however, an undoubted stimulating action I am convinced, which I think is easily accounted for if we consider the amount of amidogen present. According to the molecular weight of trichloramido-ethylic alcohol, 164.5 parts of it will contain 16 parts of amidogen, and 1 part will contain a little less than  $\frac{1}{16}$ , or 1 gramme (15  $\frac{1}{2}$  grains) will contain 1 centigramme, or 1  $\frac{1}{2}$  grains of amidogen, so that we have in a dose of 15 grains of chloral ammonia 1  $\frac{1}{2}$  grains of amidogen, which would undoubtedly produce considerable stimulation. In comparison, with urethan, it may be administered in any desired dose at once without disturbing the stomach. Indeed, it has a pleasant rather than an unpleasant influence on that organ, whereas urethan has to be administered in small doses that it may not cause vomiting. As to whether the chloral ammonium lessens the blood-tension, like chloral, especially in the kidneys, in the diseases of which the latter is such value, I did not have the apparatus to determine, but from the close similarity in chemical constitution I should think it would, especially as the stimulating effects were much more noticeable on the respiration than on the pulse.

## EDITORIAL.

### RELATION OF PUTREFACTION TO INFECTIOUS DISEASES.

THIS question lying at the basis of all practical measures which have for their aim the removal of the causes lying at the bottom of all septicæmias whether of an erysipelatous, carbuncular or puerperal character, or belonging to that class known *par excellence* as zymotic, such as typhoid, diphtheria, and eruptive fevers, has once more been brought before the scientific public by an address by Dr. Hueppe on the above subject, delivered at the recent meeting of the German Scientific and Medical Association, at Wiesbaden. It is an attempt to reconcile the existing discrepancies between bacteriology and clinical medicine. He gives an historical sketch of the various theories relating to infectious diseases before the age of the microscope. Hippocrates and Diodorus believed them to be connected with putrefaction processes,

and the latter associated with the plague at Athens, previously occurring copious rains, followed by great heat, thereby causing the former to give evil vapors which poisoned the air. Frascatori, in the Middle Ages ascribed to putrefaction, plagues, typhus, sporadic fevers and diarrhœa, and states that it could cause both contagious and un-contagious diseases. Stall, Baglivi and others in the eighteenth century professed the humoral pathology, and ascribed the fevers to alterations of the body fluids; but Roederer and Pringle reverted to the theory of putrefaction, the first believing it present in the intestines during typhoid, and the latter connected "putrid fevers" with external putrefaction. Pathology began to make immense strides with the present century, again causing external putrefaction to be in large part neglected. "Malignancy" which in a previous period had been regarded as synonymous with putridity, now came