Selections

CHLORETONE IN DENTISTRY.

BY AUGUSTINE J. WALSH, D.D.S., NEW YORK.

Among the more recent advances in dental anesthesia is the preparation of Parke, Davis & Co., to which the name of chloretone has been given. It is a trichlor-tertiary-butyl alcohol formed from chloroform and acetone by the addition of caustic potash. After processes of chemical manufacture are completed it appears as acicular crystals, with a strong flavor of camphor. It is represented by the formula :

$$CCl_{3} - CH_{3} - OH$$

 CH_{3}

This material is highly soluble in chloroform and in acetone, in alcohol and in glacial acetic acid. In water it forms a solution of one per cent, which is the anesthetic equivalent of a four per cent. cocaine solution, with this advantage, that the amount of the chloretone solution which may be employed is practically without limit. The aqueous solution of one per cent. seemed to me, after my first experiments, a little too weak for the prompt action which our dental patients expect from us. Believing in the great advantages of this product, I made it my purpose to find a solution which would better meet dental needs. After several futile experiments, I found reason to congratulate myself on this formula :

Chloretone, $\frac{1}{2}$ drachm. Etheri sulph., 2 drachms. Water q.s. at 1 oz.

This took up all the chloretone readily. After standing, the solution, which is non-miscible in theory, divided in the container into a floating solution of chloretone and ether, and a solution of chloretone and water; but by reason of the admixture of the ether there is reason to believe that the aqueous solution was in possession of more chloretone than would be the case without the presence of the ether. I conducted my experiments on the two parts of the solution independently, drawing from the surface or from the deeper solution as needed.

The floating ethereal solution was used in three dozen cases on sensitive dentine with marked success. It enabled me to drill out cavities with greater ease to the patient and caused but little pain as compared to drilling without chloretone. Although complete