faster than those without a preservative), however, not quite so rapidly as those containing the free acid anhydride.

THEORETICAL CONSIDERATIONS.

The experimental data herein outlined have shown that certain amides including saccharin react with sodium hypochlorite and that the chlorine ultimately enters the organic molecule, oxidizes the carbon to which it attaches itself and becomes negative chlorine, *i. e.*, nonavailable chlorine. These postulates may be deduced from these experiments. In accordance with the modern views of organic substitution proposed by Kharasch and Jacobsohn,¹ the authors assume the following changes to take place:



CONCLUSIONS.

1. The effect of certain amides on the stability of Modified Dakin's Solution has been studied.

2. Saccharin does not preserve solutions of sodium hypochlorite but causes their rapid deterioration.

3. A theory has been proposed to account for the behavior of sodium hypochlorite in the presence of saccharin.

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A NEW PROCESS OF MAKING BETAINE HYDROCHLORIDE.

Recently a novel process of manufacturing betaine hydrochloride and glutamic acid has been developed by a Multiple Industrial Fellowship of Mellon Institute of Industrial Research, University of Pittsburgh. The construction of a factory for the production of these substances is planned by the Fellowship donor. The proposed plant will produce five hundred thousand pounds of betaine hydrochloride annually. Heretofore this hydrochloride has been available only at a very high price, and consequently the use of it has been limited. Unique properties make it especially desirable for certain therapeutic purposes. It is also a potential source of trimethylamine and other methyl amines, and may perhaps be used as a substitute for tartaric acid in the preparation of effervescent salts.

The investigations concerning the properties and uses of this interesting acid are being continued at Mellon Institute.

¹ Kharasch-Jacobsohn, J. Am. Chem. Soc., 43, 1894 (1921).