NOTES.

Note on the Decomposition of Alloxan.—I recently observed the notes of Professor Wheeler and Professor Bogert in THIS JOURNAL on "The Instability of Alloxan," **32**, 809, and it occurred to me that I should examin a specimen of 10 grams of alloxan which I obtained about a year ago from Kahlbaum.

The neck of the small glass-stoppered bottle was found to be coated with a fine, dry mass varying in color from white to deep red, in spots. This mass had, evidently, been forced out between the glass stopper and the bottle. On attempting to remove the stopper, I found it was firmly fixed in place and the bottle was finally opened by breaking off the neck. When the neck was broken there was a violent puff of gas showing that the contents of the bottle had been under considerable pressure, and it seems probable that if the bottle had not been opened at this time I might shortly have experienced such an explosion as Professor Wheeler reports.

In an examination of the contents of the bottle, a portion taken from near the bottom proved to be unchanged alloxan. The residue of gas in the bottle contained a large amount of carbon dioxide. Of principal interest, however, was the incrustation on the outer surface of the bottle, which was found to consist, chiefly, of urea, oxalic acid and alloxantin.

It would thus appear that the decomposition of alloxan, on standing, proceeds slowly and follows well-known reactions (see Liebig and Wöhler, *Ann.*, **38**, 359 and Strecker, *Ibid.*, **113**, 53) only reaching explosive violence when the carbon dioxide is unable to escape from the bottle. This observation is in accord with the suggestion offered by Professor Franklin, THIS JOURNAL, **32**, 1362. Ross AIKEN GORTNER.

THE CARNEGIE INSTITUTION OF WASHINGTON, COLD SPRING HARBOR, N. Y.

NEW BOOKS.

Progressive Problems in General Chemistry. By CHARLES BASKERVILLE and W. L. ESTABROOKE. Boston: D. C. Heath and Co. 13×19 cm., pp. 243. Cloth. Price, \$1.00.

This little work consists entirely of a list of problems in chemistry systematically arranged. These problems are in part collected from various sources and in part original. Uniform nomenclature has not been introduced in order that the student may become familiar with the various terms that are actually in use. The book contains quite a number of problems of the same type, so that a selection may be made and the book may be used for a number of years before solutions of the problems may be handed down from one class to another.