

The positions of the groups in the mercurated product were not determined. The results of other oxidation and substitution reactions on alizarin would make it appear probable that the product was 1,2,5,8-tetrahydroxy-4-acetoxymercuri-anthraquinone. Treatment of this product with halogens should give interesting halogenated tetrahydroxyanthraquinones.

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The Reaction of Mercuric Acetate with *p*-Bromodiethylaniline.—

The present observations are published because of their wide divergence from the results obtained with closely analogous substances. Dialkylanilines, including dimethyl, diethyl, di-*n*-propyl, di-*n*-butyl, methyl-ethyl, and ethylbenzyl, react readily with mercuric acetate to give products containing acetoxymercuri groups in the para position.¹ If the para position is occupied, mercuration would be expected to take place in one of the free ortho positions. This proved to be the case with *p*-bromodimethylaniline, which gave an excellent yield of the ortho mercurated product.² At the time that work was done, attempts were made to extend it to the homologous dialkylanilines. Contrary to expectations, this proved to be impossible. The experiments have been repeated many times since under a great variety of conditions, but the results have been consistently negative. No organic mercury compound has been obtained.

The attempts at mercuration of *p*-bromodiethylaniline were carried out in 95% alcohol, 50% alcohol, glacial acetic acid, 50% acetic acid, ether, water and without a solvent. The temperature was varied from 0° to the boiling point of the solvent used and the times from a few hours to weeks. The concentrations of the reactants were varied over a wide range. In all experiments similar results were obtained; the products were unchanged material, mercurous acetate and unmanageable oxidation products.

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¹ Whitmore, Hanson and Carnahan, *THIS JOURNAL*, **51**, 894 (1929).

² Whitmore, *ibid.*, **41**, 1841 (1919).