FRIEDEL AND CRAFTS' REACTION.

aminobenzoic acid. Kliegl¹ reduced "o-benzoyl-p-nitrobenzoic acid" (which he obtained from phenylnitro-fluoren) and isolated a product which melted at 195° with decomposition. This isomeric compound is 2-benzoyl-4-aminobenzoic acid and is the other acid obtained by the Freidel and Crafts reaction.

Summary.

1. The reactions of aluminum chloride and benzene with 3-nitrophthalic anhydride, 4-nitro-phthalic anhydride, 3-acetylamino-phthalic anhydride and 4-acetylamino-phthalic anhydride, respectively, have been studied and the 2 possible derivatives of benzoylbenzoic acid have been obtained in each case.

2. In only one reaction was a derivative of diphenyl-phthalide isolated and, in this instance, Rubidge and Qua's method for increasing the yield of phthalide gave good results.

3. Seven new compounds have 'zeen prepared:

	M. p.
6-Benzoyl-2-nitrobenzoic acid	220-21* (decomp.)
2-Benzoyl-3-nitrobenzoic acid	157-60° (decomp.)
6-Benzoyl-2-aminobenzoic acid	159-60 [*]
2-Benzoyl-3-aminobenzoic acid	193-4 [•]
Diphenyl-?-amino-phthalide	86-9°
2-Carbethoxy-3-nitrobenzoyl chloride	76-7°
6-Carbethoxy-2-nitrobenzoyl chloride	Oil

4. Detailed directions are given for the preparation of several of the compounds used in the experiments and an improved method for the preparation of the benzoyl-3-aminobenzoic acids.

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TORONTO, CANADA.

¹ Ber., 38, 296 (1905).