

significance in this field [Whitmore, *THIS JOURNAL*, **54**, 3274 (1932); Whitmore and Rothrock, *ibid.*, **54**, 3431 (1932)].

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#### DEHYDRATION OF DIETHYLCARBINOL

*Sir:*

By dehydrating diethylcarbinol in a flow reactor at 40 lb. pressure and at 365–410° with a phosphoric acid catalyst on silica gel we have obtained a mixture of olefins of b. p. 65–70° which on ozonolysis gives formaldehyde, acetaldehyde, propionaldehyde and butyraldehyde. The first two were identified by the resorcinol-sulfuric acid test and as acetaldehyde-ammonia, respectively. The last two were converted to the 2,4-dinitrophenylhydrazones, which were identified by melting point and mixed melting point determinations. Small amounts of impure 2,4-dinitrophenylhydrazones probably corresponding to methyl ethyl ketone and diethyl ketone were also obtained. These results show that the dehydration of diethylcarbinol gives both the normal and rearranged products. This study is to be continued on a larger scale in an endeavor to determine quantitatively the various modes of dehydration.

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#### THE REACTION OF ACID IODIDES WITH ETHERS

*Sir:*

In a recent paper by Meerwein and Maier-Hüser [*J. prakt. Chem.*, **134**, 51 (1932)] on the cleavage of ethers by acid halides and anhydrides in the presence of catalysts, these workers have called attention to the isolated observation of Kishner [*J. Russ. Phys.-Chem. Soc.*, **41**, 651–659 (1909); *Chem. Zentr.*, II, 1132 (1909)] that benzoyl iodide is capable of splitting primary aliphatic ethers at 100° without the presence of a catalyst, giving alkyl iodides and benzoates. This work has not previously received the further study which its suggestive character would indicate.

With the hope that aliphatic acid iodides might prove more reactive, permitting the cleavage of ethers at ordinary temperatures, we have investigated the behavior of acetyl iodide and the chloro substituted acetyl iodides with a number of aliphatic ethers, thio ethers and oxides. This