and A. D. Hirschfelder. Substances were tested by placing 1 gram on a piece of underwear cloth 6 × 8 cm. and wearing next to the skin. Small strips were cut off every 12 hours and placed in a glass vessel with lice and eggs. When 100 per cent. were killed in 24 hours the substance was regarded as active. Of 170 substances previously tested cresol was found to be the best, but killing properties lasted only 24 hours when worn. Mono-, di- and tribrom cresols were prepared. Dibrommeta cresol was active for 10 days and dichlor monobrom meta cresol for 13 days and the sodium salts of tribrominated crude cresol lasted 15 days. These outlasted any substances thus far used in practise.

ORGANIC DIVISION

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The use of sulfur chlorides and chlorine for the production of organic acid chlorides from organic acids: Roger Adams.

Synthesis of chlorine derivatives, III.: R. R. Renshaw and C. E. Greenlaw.

Trimethyl phosphine and certain of its derivatives: R. R. Renshaw and F. K. Bell.

Trimethyl arsine and its selenide: R. R. Renshaw and G. E. Holm.

Phenylimido phosgene and some reactions of formanilide: W. Lee Lewis and G. A. Perkins. Phenylimido phosgene was prepared in 95 per cent. yields from thiocarbanilide by chlorinating in carbon disulphide or carbon tetrachloride solution. Phenylimido phosgene itself may be used as a solvent for the thiocarbanilide on chlorinating. No difficulty was experienced with ring chlorination and Nef's method of adding water to the reaction mixture before purification was found unnecessary. With a view to obtaining phenylimido phosgene from formanilide, it was found that chlorination in the presence of sulphur chlorides led to the formation of 2–4 di-chlor formanilide. In the presence of thionyl chloride chlorination of formanilide yields phenylamido chloroform.

The ammono-carbonous and ammono-carbonic acids: E. C. Franklin.

The reaction between dimethyl sulfate and benzene: Oliver Kamm and S. D. Kirkpatrick.

Contribution to the study of the relationship between chemical constitution and physiological action: Oliver Kamm.

A study of some of the carbohydrates of the corn cob: R. R. Renshaw and W. J. Suer.

Synthesis and properties of certain dyes containing the furane cycle: R. R. Renshaw and Nellie M. Naylor.

The preparation of pure organic chemicals: H. T. Clark.

Acetylene: William Malisoff and Gustav Egloff.

Ethane: William Malisoff and Gustav Egloff.

The occurrence of melezitose in honey: C. S. Hudson and S. F. Sherwood.

The chemistry of electrical insulators: H. C. P. Weber.

The estimation of mercaptans: R. L. Kramer and E. Emmet Reid.

Alcoholysis as a factor in the determination of saponification values: A. M. Pardee and E. Emmet Reid.

1, 2-dicholoroether: E. A. Wildman and Harold Gray. In the preparation of 1, 2-dichloroether by direct chlorination of ether it has been found that the process may be readily carried out if two precautions are observed: (1) In order to prevent the material catching fire spontaneously the ether must be at first cooled with an ice and water bath and the chlorine passed in very slowly. (2) To facilitate the escape of the hydrogen chloride formed in the reaction it is practically essential to agitate the mixture violently. Otherwise it tends to accumulate and then suddenly escape with sufficient violence to blow the contents out of the flask.

Aromatic ethers: J. M. Johlin. This paper outlines new methods for making aromatic ethers which are symmetrical, and for certain non-symmetrical aromatic ethers which have not been made heretofore.

Charles L. Parsons,
Secretary

(To be concluded)

SCIENCE

A Weekly Journal devoted to the Advancement of Science, publishing the official notices and proceedings of the American Association for the Advancement of Science

Published every Friday by

THE SCIENCE PRESS

LANCASTER, PA. GARRISON, N. Y.

NEW YORK, N. Y.

Entered in the post-office at Lancaster, Pa., as second class matter