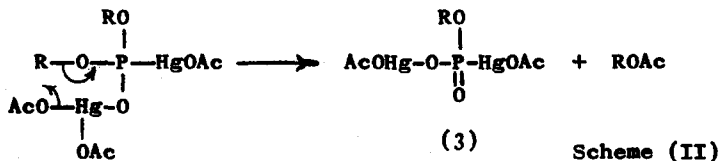


The last step (a) can be considered as an internal Arbuzov rearrangement.⁴ Analytical figures⁵ fit the structure proposed. NMR⁶ of (2) proved to be devoid of aromatic protons. The i.r. spectra of (2) showed bands at 1052 cm^{-1} and 968 cm^{-1} due to P-O-C (aliphatic).⁷ The phosphoryl band was found at 1300 cm^{-1} .

Compounds (2) are crystallised from polar media such as acetic acid. However, in benzene or toluene when the temperature is slightly raised they decompose to give mercury.

These compounds (2) react further with mercuric acetate in acetic acid at 100°C to give a dimercurated product (3) according to the following scheme (II).



The i.r. of (3) showed a strong depression in the intensity of the P-O-C (aliphatic) at 1052 cm^{-1} and 986 cm^{-1} .

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