Experimental. The materials and the thermostat equipment were as specified earlier.\(^1\) The equilibrated solution (1 g/100 ml) was silylated with trimethylchlorosilane and hexamethyl-disilazane as described by Sweeley \textit{et al.}\(^2\) To secure full silylation the reaction mixture was kept at room temperature for 8 h. The precipitated salts were removed by decantation and the solution was concentrated in vacuo, and the TMS-ethers were extracted with hexane.

The gas chromatograph used was a Varian Aerograph, Model 80-P, equipped with a thermal conductivity detector. The chromatography was carried out isothermally (225°C) in an aluminium column (1.7 m × 6 mm) containing 20 % SE-30 on Chromosorb W (60—80 mesh). The combined GLC-mass spectrometric studies were carried out with an Atlas Varian CH7 mass spectrometer using an ionizing energy of 70 eV. Again the GLC was performed with SE-30 as the stationary phase.

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Sterical Orientation in Diels-Alder Dimerisation of o-Quinols

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The Diels-Alder dimerisation of o-quinols and similar o-quinoid compounds gives usually only one of the conceivable stereoisomers. The reaction is considered to be governed by the \textit{endo} rule, by the rule of the lowest dipole moment of the transition state,\(^1\) and by steric requirements.\(^2\) From these it follows that the dimer structure should be one of the types 4—6 (Fig. 1). For a discussion of this subject, see Adler \textit{et al.} A complete structure has, however, been established only for the dimer (Fig. 1, 4) of 2-methyl-o-quinol (Fig. 1, 1) by a chemical and spectral investigation\(^1\) and an X-ray diffraction analysis.\(^5\)

By X-ray analysis we have now found that the dimers of 2,6-dimethyl-o-quinol (Fig. 1, 2) and 2,4-dimethyl-o-quinol (Fig.

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