

bon-atoms, are solid, while the intermediate compounds are liquids, becoming more and more viscid and less volatile, as they contain a greater number of carbon-atoms, and exhibiting a constant rise of about 20° C. (36° F.) in their boiling points for each addition of CH_2 to the molecule.

The individual series are given in the following table, with the names proposed for them by A. W. Hoffmann:

Methane	Methene			
CH_4	CH_2			
Ethane	Ethene	Ethine		
C_2H_6	C_2H_4	C_2H_2		
Propane	Propene	Propine	Propone	
C_3H_8	C_3H_6	C_3H_4	C_3H_2	
Quartane	Quartene	Quartine	Quartone	Quartune
C_4H_{10}	C_4H_8	C_4H_6	C_4H_4	C_4H_2
Quintane	Quintene	Quintine	Quintone	Quintune
C_5H_{12}	C_5H_{10}	C_5H_8	C_5H_6	C_5H_4
Sextane	Sextene	Sextine	Sextone	Sextune
C_6H_{14}	C_6H_{12}	C_6H_{10}	C_6H_8	C_6H_6

The formulæ in the preceding tables represent hydrocarbons all of which are capable of existing in the separate state, and many of which have been actually obtained. They are all derived from saturated molecules, $\text{C}_n\text{H}_{2n+2}$, by abstraction of one or more *pairs* of hydrogen-atoms.

But a saturated hydrocarbon, CH_4 , for example, may