

R, a few of the most simple and important divisions are as follows:—

|                     |                  |
|---------------------|------------------|
| Alcohols, primary   | $R \cdot CH_2OH$ |
| Alcohols, secondary | $R_2CHOH$        |
| Alcohols, tertiary  | $R_3COH$         |
| Aldehydes           | $R \cdot CHO$    |
| Ketones             | $R_2CO$          |
| Acids               | $RCOOH$          |
| Esters              | $RCOOR$          |
| Ethers              | $ROR$            |

By the introduction of oxygen into the molecule any complex hydrocarbon may be converted into a great number of substances, and even in simple cases such derivatives are not few. In the accompanying formulas I have gathered together the possible hydrocarbons containing three carbon atoms (excluding ring compounds), and their possible oxygen derivatives, most of which are capable of existence as substances of varying stability, many of them being in fact well-known common substances like lactic acid, glycerine, propionic acid, propyl alcohol, two of the simplest sugars, etc.

