hydrogen we have C_2O_3H, or anhydrous formic acid; the replacement of a second equivalent would yield $C_2O_2H_2$, or the unknown formic aldelyde; a third, $C_2O{\cdot}H_3$, the oxide of methyle; and a fourth, C_2H_4, or formene. By substituting methyle for one or more atoms of hydrogen in the previous formula, we obtain those of the corresponding bodies of the vinic series, and it will be readily seen that by introducing the higher alcoholic radicals we may derive from C_2O_4 the formulas of all the alcoholic series. A grave objection to this view is however found in the fact that while this compound may be made the type of the aldehydes, acetones, and hydrocarbons, it becomes necessary to assume the hypothetical C_2O_2, HO, as the type of the acids and alcohols. Oxide of carbon, C_2O_2, is according to Kolbe, to be received as the type of hydrocarbons like olefiant gas, (C_2HMe,) while C_2O, in which ethyle replaces oxygen, is C_6H_5 or lipyle, the supposed triatomic base of glycerine.

The monobasic organic acids are thus derived from one atom of C_2O_4, while the bibasic acids, like the succinic, are by Kolbe, deduced from a double molecule C_4O_8, and tribasic acids, like the citric, from a triple molecule C_6O_{12}. He moreover compares sulphuric acid to carbonic acid, and derives from it by substitution the various sulphuric organic compounds. Ammonia, arseniuretted and phosphuretted hydrogen, are regarded as so many types; and by an extension of his view of the replacement of oxygen by electro-positive groups, the ethylids ZnEt, $PbEt_2$, and $BiEt_3$, are, by Kolbe, assimilated to the oxides of ZnO, PbO_2, and BiO_3.

Ad. Wurtz, in the *Repertoire de Chimie Pure* for October, 1860, has given an analysis of Kolbe's memoir, (to which, not having the original before me, I am indebted for the preceding sketch) and follows it by a judicious criticism. While Kolbe adopts as types a number of mineral species, including the oxides of carbon, of sulphur and the metals, Wurtz would maintain but three, hydrogen, (H_2) water, (H_2O_2) and ammonia, (NH_3); and these three types, as he endeavoured to show in 1855, represent different degrees of condensation of matter. The molecule of hydrogen, H_2 (M_2), corresponding to four volumes, combines with two volumes of oxygen (O_2) to form four volumes of water, and may thus be regarded as condensed to one-half in its union with oxygen, and derived from a double molecule, M_2M_2. In like manner four volumes of ammonia contain two