

above all, with free institutions which are the envy of less favoured lands: if, amid all its eager pursuit of material wealth, it could point to no phalanx of labourers aiming at the increase of the wealth of mind; to none who covet being sharers in that glorious advancement of knowledge by which God, who has revealed himself to us in his word, is making ever new revelations of himself in his works; and having made known to us Him who is the wisdom and the power of God, through whom we have the assurance of life and immortality in the gospel of his grace; is anew, in the great volume of nature, adding fresh evidence of man's immortality, by revelations of the inexhaustible wonders of that creation, which, I doubt not, is to employ the purified and enlarged faculties of man in its study through all the ages of that future life to which it is his attribute to aspire. May we, while seeking here the pure and elevating enjoyments which spring from the discovery of nature's truths, find knowledge of the humblest works of God an incitement to the adoration and love of Him, whom to know is life eternal.

ON THE THEORY OF TYPES IN CHEMISTRY.

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In the *Annalen der Chemie und Pharmacie* for March, 1860, (cxiii., 293) Mr. Kolbe has given a paper on the natural relations between mineral and organic compounds, considered as a scientific basis for a new classification of the latter. He objects to the four types admitted by Gerhardt, namely, hydrogen, hydrochloric acid, water, and ammonia, that they sustain to organic compounds only artificial and external relations, while he conceives that between these and certain other bodies there are natural relations having reference to the origin of the organic species. Starting from the fact that all the bodies of the carbon series found in the vegetable kingdom are derived from carbonic acid with the concurrence of water, he proceeds to show how all the compounds of carbon, hydrogen and oxygen may be derived from the type of an oxide of carbon, which is either C_2O_4 , C_2O_2 , or the hypothetical C_2O .

When in the former we replace one atom of oxygen by one of