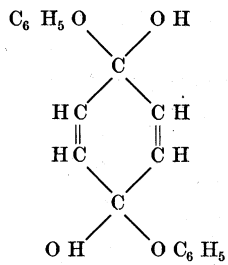
related compounds. They would represent the structure of phenoquinone, for example, by the following formula, in which the phenol is added to the carbonyl groups:



A number of derivatives of this class were made and studied and various lines of research mapped out for the future.

A. S. Miller describes experiments made to determine the results of the action of ammonia on ferric and ferrous chloride. He found that the ferric chloride formed unstable compounds with ammonia, the product formed at ordinary temperatures being Fe Cl_3.6 NH_3. At 100° this becomes Fe Cl_3.4 NH_3 and dissociates when heated higher. The compound formed with ferrous chloride was Fe Cl_2.6 NH_3. Mead and Kremers show that, when so-called 'nitrosopinene' is hydrolysed, carvacrol and not thymol is formed, and as the nitrosopinene is made from pinene we can pass from pinene to carvacrol. Wheeler contributes a preliminary paper on halogen addition products of the anilides. He has obtained bromine addition products of metanitroacetanilide which form substitution products by the loss of hydrobromic acid.

Noyes and Ellis have prepared diphenylbiphenyl synthetically by the action of sodium on brombiphenyl and shown it to be identical with the hydrocarbon benzerythrene, which is made from benzene by the action of heat. Reviews of several books are given, among them that of Cross and Bevan on Cellulose. A note on helium calls attention to its occurrence in many minerals and also in the free state, its properties, especially its low density and slight solubility, and the analogies in the spectra of helium and argon. J. Elliott Gilpin.

PSYCHE, NOVEMBER.

Mr. and Mrs. G. W. Peckham give an interesting account of the differences between two wasps of the genus Trypoxylon in their habits of making and storing nests. H. G. Dyar describes the larva of *Harrisina coracina* found on the vine in New Mexico; and A. P. Morse describes the colors of *Enallagma pictum*, an agrionid, during life. There is also a review of the last part of Edwards' Butterflies of North America and a brief notice of the late Mr. Riley. A supplement contains descriptions of a new genus and several new species of New Mexican bees, with notes on their habits, and a notice of the early stages of *Doryphora lineolata*, both by T. D. A. Cockerell; and the description, with figure, of a new New Mexican Thamnotettix, by C. F. Baker.

NEW BOOKS.

The Scientific Foundations of Analytical Chemistry. Wilhelm Ostwald. Translated by George M'Gowan. London and New York, Macmillan & Co. 1895. Pp. ix+207. $1.60.

Dynamics. P. G. Tait. London. Adam and Charles Black. New York, Macmillan & Co. 1895. Pp. xii+361. $2.50.

The Structure of Man. By R. Wiedersheim. Translated by H. and M. Bernard. London and New York, Macmillan & Co. 1895. Pp. x+227. $2.60.

An Introduction to the Study of Seaweeds. London and New York, Macmillan & Co. 1895. Pp. xvi+271. $1.75.

Handbook of Grasses. William Hutchinson, London, Swan Sonnenschein & Co. New York, Macmillan & Co. 1895. Pp. 92. 75 cents.

Elements of Plant Anatomy. Emily L. Gregory. Boston and London, Ginn & Co. Pp. viii+148.

Iowa Geological Survey, Vol. IV. Third Annual Report, 1894. Des Moines, published for the Iowa Geological Survey. Pp. 461.

On the Densities of Oxygen and Hydrogen and on the Ratio of their Atomic Weights. Edward W. Morley. Washington, The Smithsonian Institution. 1895. 4° pp. xii.+117.

Determinaçao das Posicões Geographicas. Pp. 57. *O clima do Rio de Janeiro.* Pp. 71. *Eclipses du soleil et occultations.* Pp. 54. L. Cruls. Rio de Janeiro, H. Lombaerts & C. 1894.