law. Rather in each order of knowledge there is a unique concept which serves to form all the other concepts of the same order. So he cannot with Comte conceive that the highest science consists in the co-ordination of scientific results. "This new specialty, the specialty of generalization is philosophy." No, says Mons. Goblot, the co-ordination of the results of science is purely literary work. It is the literateur and not the savant who has much to say of the 'majestic unity of sicience.' To specialize generalization is to specialize ignorance.

Historically, philosophy was at first simply science: the whole of science. Then it was science minus a few special sciences which began to be organized. And so this went on, philosophy being continually impoverished by new sciences which were formed from time to time. Philosophy is thus ever the residue: the yet unorganized part of human knowledge.

The book nowhere gives evidence of any considerable acquaintance with any branch of physical or natural science at first hand. It does show much acute thinking and a wide range of reading, especially in what the author would call 'the moral sciences.' Of the 296 pages in the book 169 are occupied with cosmology, biology, and sociology.

E. A. S.

GENERAL.

ANNOUNCEMENT is made by Messrs. Archibald Constable & Company of the preparation of a 'Victoria History of the Counties of England,' to be published in no fewer than one hundred and sixty large octavo volumes. According to the prospectus it "will trace county by county the story of England's growth from its prehistoric condition, through the barbarous age, the settlement of alien peoples, and the gradual welding of many races into a nation which is now the greatest on the globe. All the phases of ecclesiastical history; the changes in land tenure; the records of historic and local families; the history of the social life and sports of the villages and towns; the development of art, science, manufactures and industries—all these factors which tell of the progress of England from primitive beginnings to large and successful empire will find a place in the work, and their treatment be entrusted to those who have made a special study of them."

Mr. H. Arthur Doubleday, F.R.G.S., is the general editor of the whole series, and the plan of arrangement under sectional editors is as follows:

Natural History. Edited by Aubyn Trevor-Battye, M.A., F.L. S., etc. Geology, Paleontology, Flora, Fauna, and Meteorology contributed by specialists.

Prehistoric Remains. Edited by W. Boyd Dawkins. M.A., F.R S., F.S.A.

Roman Remains. Edited by F. Haverfield, M.A., F.S.A.

Anglo-Saxon Remains. Edited by C. Hercules Read, F.S.A., and Reginald A. Smith, B.A.

Ethnography. Edited by G. Laurence Gomme. Dialect and Place Names, Folklore, Physical Types contributed by various authorities.

Domesday Book and other kindred Records. Edited by J. Horace Round, M.A.

Architecture. The Sections on the Cathedrals and Monastic Remains. Edited by W. H. St. John Hope, M.A.

Ecclesiastical History and Political History. By various authorities.

Maritime History of Coast Counties. Edited by J. K. Laughton, M.A.

Topographical Accounts of Parishes and Manors. By various authorities.

History of the Feudal Baronage. Edited by J. Horace Round, M.A., and Oswald Barron.

Family History and Heraldry. Edited by Oswald Barron.

Agriculture. Edited by Sir Ernest Clarke, M.A., Sec. to the Royal Agricultural Society.

Industries, Arts, and Manufactures, Social and Economic History, and Persons Eminent in Art, Literature, Science. By various authorities.

Ancient and Modern Sport. Edited by the Duke of Beaufort.

Bibliographies.

It will be seen that the general scheme of the work is at once comprehensive, scientific, and complete. The history of each county will open with its geology, pass on to its paleontology, and so through the ascending scale of the floral and animal kingdoms until prehistoric man is reached.

THE Scientific Society of Colorado College has just issued Vol. 8 of *Colorado College Studies*, containing the following articles:

'Equations of Motion of a Perfect Liquid and

a Viscous Liquid when Referred to Cylindrical and Polar Co-ordinates,' by Professor P. E. Doudna, 'The Capricorns, Mammals of an Asiatic Type, Former Inhabitants of the Pike's Peak Region,' by Dr. F. W. Cragin; 'Buchiceras (Sphenodiscus) Belviderensis and its Varieties,' by Dr. F. W. Cragin; 'The Number Concept,' by Dr. F. Cajori.

BOOKS RECEIVED.

Das Tierreich, 9 Lieferung, *Aves-Trochilidae*. ERNST HARTERT. Berlin, R. Friedländer und Sohn. 1900. Pp. ix + 254. Subscription price, 12 mark.

Bird Studies with Camera. FRANK M. CHAPMAN. New York, D. Appleton & Co. 1900. Pp. xiv + 214.

La spéléologie ou science des cavernes. E. A. MARTEL. Paris, Georges Carré & C. Naud. 1900. Pp. 126.

Æther and Matter. JOSEPH LARMOR. Cambridge, The University Press. New York, The Macmillan Company. 1900. Pp. xxviii + 365. 10s.

SCIENTIFIC JOURNALS AND ARTICLES.

THE *American Journal of Science* for June contains the following articles:

Method of Studying the Diffusion (Transpiration) of Air through Water, and on a Method of Barometry. C. BARUS.

Separation and Determination of Mercury as Mercurous Oxalate. C. A. PETERS.

Electrical Resistance of Thin Films Deposited by Cathode Discharge. A. C. LONGDEN.

New Meteorite from Oakley, Logan County, Kansas. H. L. PRESTON.

Observations on Certain Well-Marked Stages in the Evolution of the Testudinate Humerus. G. R. WIELAND.

Chemical Composition of Sulphohalite. S. L. PENFIELD.

Phases of the Dakota Cretaceous in Nebraska. C. N. GOULD.

Geothermal Gradient in Michigan. A. C. LANE.

Production of the X-Rays by a Battery Current. J. TROWBRIDGE.

American Chemical Journal, May, 1900. "Preparation and properties of the so-called 'Nitrogen Iodide,'" by F. D. Chattaway and K. J. P. Orton. Preparation from iodine monochloride and ammonia; 'The action of reducing agents upon nitrogen iodide,' by F. D. Chattaway and H. P. Stevens. Decomposition with formation in every case of hydriodic acid; 'On certain colored substances derived from nitro compounds,' by C. L. Jackson and F. H. Gazzolo; 'The solution-tension of zinc in ethyl alcohol,' by H. C. Jones and A. W. Smith; 'Notes on lecture experiments to illustrate equilibrium and dissociation,' by J. Stieglitz; 'A contribution to the knowledge of tellurium,' by F. D. Crane. Method of purifying tellurium and detecting small quantities of it; 'The constitution of gallein and coeruleïn,' by W. R. Orndorff and C. L. Brewer; 'Permanganic acid by electrolysis,' by H. N. Morse and J. C. Olsen; 'On chlorine heptoxide,' by A. Michael and W. T. Conn.

J. ELLIOTT GILPIN.

SOCIETIES AND ACADEMIES.

SCIENCE CLUB OF THE UNIVERSITY OF WISCONSIN.

AT the meeting of the Science Club of the University of Wisconsin, held May 22d, Mr. J. B. Johnson presented a paper on 'Recently improved Methods of Sewage disposal.' The paper was devoted to a consideration of the principles underlying modern methods of treatment rather than the details of construction of sewage plants. The chemical and the bacteriological methods of sewage disposal were contrasted and the former shown to be too largely an artificial process, since it fails to make use of nature's effective agents—the bacteria—which when afforded suitable conditions change organic wastes into soluble products and finally into the inorganic nitrates and nitrites which constitute so largely the food of plants. The chemical precipitation plants were considered as belonging to a past stage in the development of sanitary science, and wherever installed are now looked upon as an incubus to be got rid of as soon as possible.

The combined septic tank and contact bed method, which was first used at Exeter, England, in 1896, and which is throughout a bacteriological method, Mr. Johnson regards as the most satisfactory solution of the sewage problem. The essential peculiarity of the method is that it affords in the septic tank to which the sewage is first conducted the ideal conditions for the action of the anærobic bacteria whose function