

who had previously been engaged on the German excavations at Olympia. The remains uncovered at Tiryns consist of a citadel and palaces almost identical in plan with those of Troy; and these features are repeated with some variations at Mycenæ. It was at this latter place, however, which Homer has celebrated as the capital of Agamemnon's empire, that the greatest variety of remains were found, and Dr. Schuchhardt has devoted nearly half of this book to a description of them. There are at Mycenæ two different kinds of burial places, the bee-hive tombs outside the citadel (so called from the form of the principal vaulted chamber), and the shaft graves within the citadel, which are simple pits sunk in the ground and covered by a slab. The bee-hive tombs, which belong to the later ages of the Mycenaean civilization, have long since been rifled of their contents; but the shaft graves were found to contain remnants of corpses, together with a great variety of utensils, ornaments, and weapons which reveal a high order of workmanship and artistic skill. The shield of Achilles and other works of art spoken of in the "Iliad" have been regarded as extravagant creations of the poet's fancy; but here at Mycenæ we find objects of precisely that character — goblets, diadems, and even shoulder-straps of gold, artistic pottery of various kinds, and sword blades and daggers inlaid with figures of men and animals made of gold, silver, and other rich material. Similar objects have been found in various parts of the Grecian mainland, and on the islands of the Ægean, so that the civilization they betoken must have been widespread; but where its centre was and what particular race were its representatives are questions still unsettled. The period of its prevalence is still more uncertain, but is vaguely assigned to the interval between 1500 and 1000 B.C.

These questions, and others of equal importance, to which Schliemann's discoveries have given rise, have been discussed by Dr. Schuchhardt in his concluding chapter, and by Mr. Leaf in his introduction. We want to trace the connection of the Mycenaean civilization with the nations of the east and with the later developments among the Greeks themselves, and also to find out the relation between that civilization and the one presented in the poems of Homer. The resemblances between the life revealed to us in the Mycenaean remains and that depicted in the "Iliad" and "Odyssey" are numerous and obvious; but there are also discrepancies which our present information does not allow us to account for, and which seem to show that the poems date from a later age than that of the Mycenaean prime. The most important of these differences is in the mode of disposing of the bodies of the dead, which at Mycenæ were buried, whereas in the "Iliad" and "Odyssey" they are burnt on the funeral pyre. The figures portrayed on some of the ornaments and weapons at Mycenæ also show a mode of dress quite different from that described by Homer; and it is evident that we must have further information before the difficulties thus presented can be cleared up. Meanwhile, we cannot withhold our tribute of admiration and respect for the man who has taught us so much about the life and civilization of those early ages.

Stones for Building and Decoration. By GEORGE P. MERRILL. New York, Wiley. 8°. \$5.

THE author of this work is curator of geology in the United States National Museum, and he has succeeded in treating the subject in a way that will make the volume of especial interest to architects and engineers without lessening its value to the student, or, in fact, to any person interested, whether from an economic or a purely scientific standpoint. Though the subject is presented mainly from an American point of view, the volume includes descriptions of all stones of importance found in the American market, from whatever source they may come.

The first chapter gives a brief but very interesting history of stone-working in the United States. The succeeding chapters of Part I. are devoted to the geographical distribution and the chemical and physical properties of such stones as are used for general constructive and decorative purposes.

A systematic description of the rocks, quarries, and quarry regions is given in Part II. Each variety of stone is taken up in turn, its composition, origin, structure, and general adaptability

for any form of work discussed, and the resources of each State and Territory described.

The different methods of quarrying and working, the machines and implements used in such processes, the weathering of building-stone, the selection of stone for building purposes, and the methods employed for the protection and preservation of stone from the ravages of time, are treated of in Part III. Part IV. is made up of appendices, including tables showing the qualities of stone as indicated by their crushing strength, with ratio of absorption, and chemical composition; a table on the prices of stone and the relative cost of dressing, and a list of some of the more important stone buildings in the United States and the dates of their erection. The volume concludes with a bibliography of building-stone and a glossary of terms. It is illustrated with eleven full-page plates and several figures in the text.

Mr. Merrill has made excellent use of the opportunities afforded him by his position in the National Museum to gain a thorough knowledge of his subject, and has given us a most exhaustive and comprehensive treatise on an interesting topic.

AMONG THE PUBLISHERS.

A NEW feature has just been introduced in the *New England Magazine*. It is, "In a Corner at Dodsley's," a gossip about writers and books, by Walter Blackburn Harte.

— Macmillan & Co. have been appointed special agents in the United States for the books published in London by George Bell & Sons, including the well-known collection of standard literature issued under the name of "Bohn's Libraries."

— In *St. Nicholas* for October is a short letter from Meredith Nugent explaining where grasshoppers and crickets tried to hide their ears until Sir John Lubbock rummaged them out for us. It would be a knowing boy indeed who would not be surprised to find a grasshopper's ear on his fore-leg.

— Among the contents of the *Engineering Magazine* for October are the following: "Progress in Aerial Navigation," by O. Chanute; "One View of the Keely Motor," by T. C. Smith; "Railroad Building on the Texas Frontier," by G. W. Rafter; "Marble Quarrying in the United States," by E. R. Morse; "The Conditions Causing a Tornado," by Professor H. A. Hazen; and "The Future of Our Wagon Roads," by W. Claypoole.

— The October number of *The Alienist and Neurologist* contains a paper on the subject of "Traumatic Neuroses and Spinal Concussion," another on "The Insanity of Torquato Tasso," an illustrated study of "Criminals and Their Cranial Development," "The Weight of the Brains of the Feeble-Minded," and "A Study of the Heredity of Inebriety." The respective writers are Guiseppe Seppilli, W. W. Ireland, G. Frank Lydston, A. W. Wilmarth, and T. L. Wright. Besides there are the usual selections, editorials, hospital notes, reviews, etc.

— With the issue of the second number of the *Journal of Comparative Neurology*, the editor, C. L. Herrick, indicates the sphere which it will attempt to occupy. The *Journal* offers to investigators an avenue for immediate publication with full illustration, there being no restrictions as to size or frequency of the fascicules. A feature is the list of current neurological literature, which it is hoped may be made complete and accurate, and in connection with this are given synopses of the more important papers. Critical estimates or reviews of such papers, however, will usually be offered only in connection with special *résumés* or digests of given topics. While especially devoted to original investigation, each volume will contain semi-popular, historical, and controversial matter which may serve to adapt the results of the technical work to the general reader. While it is inevitable that much of the space will, for the present, be occupied with anatomical and morphological matter, it is hoped to devote an increasing amount of attention to physiological problems and to the accumulation of data which may serve, in however indirect a way, as materials for a comparative psychology. All observers are invited to contribute facts having any scientific bearing upon the nervous or psychical activities of animals. It is the intention soon to inaugurate a series of articles to constitute, when completed, a laboratory guide to the study of the nervous system, to which the attention of

teachers is especially invited, with the request that criticism and suggestion be freely offered. Address all communications to C. L. Herrick, University of Cincinnati, Cincinnati, Ohio.

— Dr. Lansdell is engaged on a volume that will embody the results of his last journey in the East. He travelled over 50,000 miles, visiting Little Thibet and the less-known districts of Chinese Central Asia.

— Messrs. Swan Sonnenschein & Co. will issue the following books during the autumn season: "The Colours of Animals," by Professor Beddard, with colored and other plates and woodcuts; "Text-book of Embryology: Man and Mammals," by Dr. Oscar Hertwig, professor of comparative anatomy in the University of Berlin, translated and edited from the third German edition (with the assistance of the author) by Dr. E. L. Mark, professor of anatomy in Harvard University, with 389 illustrations and 2 colored plates; "Text-book of Embryology: Invertebrates," by Drs. Korschelt and Heider of the University of Berlin, translated and edited by Dr. E. L. Mark, with several hundred illustrations; "Text-book of Animal Palæontology," by Dr. Thomas Roberts, designed as a supplement to Claus and Sedwick's "Text-book of Zoology," illustrated; "Text-book of Geology," adapted from the work of Dr. Emanuel Kayser, professor in the University of Marburg, by Philip Lake of St. John's College, Cambridge, with illustrations; "Text-book of Zoology," by Dr. Claus of the University of Vienna, and Adam Sedgwick, F.R.S., Vol. II. "Mol-

lusca to Man," third edition; "The Geographical Distribution of Disease in England and Wales," by Alfred Haviland, M.D., with several colored maps; "Introductory Science Text-books" — Additions: Introductions to the study of "Physiography," by H. M. Hutchinson; "Zoology," by B. Lindsay; "Amphioxus," by Dr. B. Hatschek of the University of Vienna, and James Tuckey; "Geology," by Dr. Edward Aveling; "Physiological Psychology," by Dr. Th. Ziehen of the University of Jena, adapted by Dr. Otto Beyer, with 21 figures. "Young Collector Series" — Additions: "The Telescope," by J. W. Williams; "British Birds," by the Rev. H. C. Macpherson; "Flowering Plants," by James Britten; "Grasses," by W. Hutchinson; "Fishes," by the Rev. H. C. Macpherson; "Mammalia," by the Rev. H. C. Macpherson.

— The *New England Magazine* for October has an article on "The Public Libraries of Massachusetts," by Henry S. Nourse.

— P. Blakiston, Son, & Co., Philadelphia, have brought out a second American edition of Richter's "Chemistry of the Carbon Compounds, or Organic Chemistry." This new edition is based on the sixth German edition. As is well known, Richter is the professor of chemistry at the University of Breslau. The translation is made by Edgar F. Smith, professor of chemistry at the University of Pennsylvania. Professor Smith is widely known as a translator and as the author of a number of chemical works. Richter's "Organic Chemistry" is one of the most comprehensive books on the subject at present available in English. Not only is the theory

Publications received at Editor's Office,
Sept. 30-Oct. 6.

- GILMAN, N. P., and JACKSON, E. P. Conduct as a Fine Art. Boston and New York, Houghton, Mifflin & Co. 230 p. 8°. \$1.50.
GORE, J. H. Geodesy (Riverside Science Series). Boston and New York, Houghton, Mifflin & Co. 218 p. 12°. \$1.25.
IRVING, W. Rip Van Winkle. (Riverside Literature Series). Boston, Houghton, Mifflin & Co. 99 p. 12°. 15 cents.
MACDONALD, M. Harmony of Ancient History, and Chronology of the Egyptians and Jews. Philadelphia, Lippincott. 301 p. 8°. \$2.
SADTLER, S. P. A Hand-Book of Industrial Organic Chemistry. Philadelphia, Lippincott. 518 p. 4°. \$5.

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— In the *Review of Reviews* each month the pages of small print at the end of the periodical contain classified lists of all the new books that have lately appeared, with bits of running comment on them; lists of the contents of all the principal periodicals of America, England, France, Germany, Italy, Belgium, and the Scandi-

navian countries; and a complete index, which under one alphabet lists the important articles that have appeared in the previous month in every important periodical published in the English language.

— The opening article of *The Century* for October is the closing one of Mr. Kennan's series, and is entitled "My Last Days in Siberia." He describes his experiences among the Kachinski Tatars and the political exiles of Minusinsk, and with the "plague-guard" or quarantine, and narrates the journey by way of Tobolsk and Tiumen to St. Petersburg. The promised article by Hiram S. Maxim, the inventor, on "Aerial Navigation" appears in this number, and considers particularly the question of the power required for aviation. Mr. Maxim discusses the philosophy of the subject and relates the progress of his experiments at Kent, England, which are illustrated with drawings of the machine employed. He also adds a forecast of the possible future uses of the new mode of locomotion.

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