People," by Edward A. Freeman; "England after the Norman Conquest," Part III., by Sarah Orne Jewett; "The English Towns," III., by Augustus I. Jessopp, D.D.; "The United States of the Pacific," by Fred. Perry Powers; "Coxcomb and Coquette in Tudor Times," by James A. Harrison, LL.D.; "Social Reform and the Socialists," by Robert Ellis Thompson, D.D.; "Studies in Astronomy," VI., by Garrett P. Serviss; "Singapore," by Rev. W. F. Oldham, D.D.; "Dr. Koch and Consumption," by J. P. Hassler, M.D.; "Politics and Politicians," by Judge Frederick G. Gedney; "The Story of the Opium Carse in India," by Bishop John F. Hurst, LL.D.; "The Woman's World of London," by Elizabeth Robbins Pennell; "How Marriage affects a Woman's Property," by Lelia Robinson Sawtelle, LL.B.; and "To What Kingdom does Woman belong?" by Kate C. Bushnell, M.D.

- C. W. Bardeen of Syracuse sends us a small pamphlet entitled "Tiedemann's Record of Infant Life." It is from the French translation of a German work, with a commentary interwoven by M. Michelan, the English version being by Bernard Perez. The original author, who lived about a century ago, records in this work his observations of his own son in the first two years of his life, noting down many points that will be interesting to those who are engaged in similar researches. The phenomena of childlife, as thus recorded by him, differ in many respects from those noticed by Darwin and other recent observers,-a fact which

shows that caution is necessary in generalizing from such observations; but we cannot enter into particulars here. Mr. Bardeen also sends us three papers read before the National Educational Association at St. Paul in July last. One is by himself, on the "Effect of the College Preparatory High School upon Attendance and Scholarship in the Lower Grades," in which he takes the ground that the maintenance of a classical course in the public high schools helps to raise the whole tone of the school, and is therefore useful even to those who take the English course. He does not quite make clear, however, how the requisite classical of examinations, but without offering any thing new, and showing, as it seems to us, an insufficient sense of the abuses to which examinations are apt to lead. Mr. Henry Sabin, State superintendent of Iowa, treats of "Organization, and System vs. Originality and Individuality," taking strong ground against the mechanical system of teaching and school organization now so much in vogue as injurious to both teacher and pupil. All the papers have merit; but we cannot help thinking that the authors might have done better if they had taken a little more pains.

- J. B. Lippincott Company announce as in press " The Design of Structures : A Practical Treatise on the Building of Bridges,



"The Week, one of the ablest papers on the con-tinent." -Descriptive America. Publications received at Editor's Office, Publications of the University of Pennsylvania. Feb. 9-14. SERIES IN WEEK, AGRICULTURAL Experiment Station. Ithaca, N. Y. Third Annual Report of the, 1890. Ithaca, Cornell Univ. 187 p. 8°.
ELECTRIC Railways and Systems in Operation, Maps of the United States, showing the Central Station Plants and. Boston, Thomson-Houston Electric Co. 110 p. f°.
HARVARD COLLEGE, Annals of the Astronomical Ob-servatory of. Vol. XXVII. The Draper Cata-logue of Stellar Spectra photographed with the 8-inch Bache Telescope as a Part of the Henry Draper Memorial. Cambridge, John Wilson & Son. 388 p. 4°.
HIORNS, A. H. Mixed Metals or Metallic Alloys. London and New York, Macmillan. 384 p. 16°. ΗE Philology, Literature and A Canadian Journal of Politics, Literature, Science Archæology. and Art. PUBLISHED EVERY FRIDAY. \$1.00 for Four Months. \$3.00 per Year. THE WEEK has entered on its EIGHTH year of publication, greatly improved in every respect, rendering it more worthy the cordial support of every one interested in the maintenance of a first-class literary journal. The independence in politics and criticism which has characterized THE WEEK ever since its first issue will be rigidly maintained; and unceasing éf-forts will be rigidly maintained; and unceasing éf-forts will be made to improve its literary character and increase its attractiveness as a journal for the cultured home. Many new and able writers are now, or have promised to become, contributors to its columns, and the constant aim of the Publisher will be to make THE WEEK fully equal to the best literary journals in Britain and the United States. As heretofore, PROF. GOLDWIN SMITH will, from time to time, contribute articles. London, Paris, Washington and Montreal letters from accomplished correspondents will appear at regular intervals. Special Ottawa Letters will appear during the ses-sions of Parliament. THE WEEK being the same size as "Harper's \$3.00 per Year. Vol. I. No. 1 now ready 1. Poetic and Verse Criticism of the Reign of Eliza-beth. By Felix E Schelling, A.M., Assistant Professor of English Literature. \$1.00. Ready at an early date. Ready at an early date. A Fragment of the Babylonian "Dibbarra" Epie. By Morris Jastrow, Jr., Ph.D., Professor of Arabic. 60 cents. a. IIpós with the Accusative. "b. Note on a Pas-sage in the Antigone. By William A. Lamberton, A. M., Professor of the Greek Language and Lit-erature. 50 cents. The Gambling Games of the Chinese in America. Fán tán and Pák köp piú. By Stewart Culin, Secretary of the Museum of Archæology and Palæontology. 40 cents. In menaration. 2 London and New Fork, Internman. Sor p. 16.
\$1.50.
HUXLEY, T. H. Social Diseases and Worse Remedies. London and New York, Macmillan. 128 p. 16°. 30 cents.
PICKERING, E. C. Forty-fifth Annual Report of the Director of the Astronomical Observatory of Harvard College for the Year ending Oct. 31, 1890. Cambridge, Harvard Univ. 12 p. 8°.
PICKERING, E. C., and WENDELL, O. C. Annals of the Astronomical Observatory of Harvard College. Vol. XXIII. Part I. Discussion of Observations made with the Meridian Photometer during the Years 1882-88. Cambridge, John Wilson & Son. 136 p. 4°. \$1 50 4. In preparation In preparation. The Terrace at Persepolis. By Morton W. Easton, Ph.D., Professor of Comparative Philology. An Aztec Manuscript. By Daniel G. Brinton, M.D., Professor of American Archeology and Linguis-tiac THE WEEK being the same size as "Harper's Weekly," is the largest paper of its class on the An Azece manuscript. By Daniel G. Brinton, M.D., Professor of American Archaeology and Linguis-tics.
A Monograph on the Tempest. By Horace Howard Furness, Ph.D., LL.D.
Recent Archaeological Explorations in New Jersey. By Charles C. Abbett, M.D., Curator of the American Collections.
Archaeological Notes in Northern Morocco. By Tal-cott Williams, A.M., Secretary of the Museum of Egyptian Antiquities.
a. On the Aristotelian Dative. b. On a Passage in Aristotle's Rhetoric. By William A. Lamberton, A.M., Professor of the Greek Language and Literature.
A Hebrew Bowl Inscription. By Morris Jastrow, Jr., Ph.D., Professor of Arabic.
The Life and Writings of George Gascoigne. By Felix E. Schelling, A.M., Assistant Professors of English Literature.
The Papers of this Series, prepared by Professors and others connected with the University of Penn-sylvania, will take the form of Monographs on the subjects of Philogy, Literature, and Archaeology, whereof about 200 or 250 pages will form a volume. The price to subscribers to the Series will be \$1.50 per volume; to others and subscribers, \$2.00 per volume.
Each Monograph, however, is complete in itself, and will be sold separately.
It is the intention of the University to issue these Monographs from time to time as they shall be pre-pared. A SYSTEM OF continent. SEND FOR FREE SAMPLE COPY. EASY LETTERING. C. BLACKETT ROBINSON, Publisher, 5 Jordan St., Toronto, Canada. By J. H. CROMWELL, Ph.B. Twenty six different forms of Alphabets. The space to be lettered is divided into squares, and with these as a guide the different letters are drawn and inked. *Price*, 50 cents, postpaid. E. & F. N. SPON, 12 Cortlandt Street, New York. THE **AMERICAN GEOLOGIST FOR 1891** AND BIEN'S NEW ATLAS OF THE METROPOLI-**HEAVEN AND HELL.** 416 pages, paper cover. TAN DISTRICT. **DIVINE LOVE AND WISDOM.** will be given to New Subscribers to the 383 pages, paper cover, by EMANUEL SWEDEN BORG, Mailed prepaid for 14 cts. each (or both for 25 cts.) by the American Swedenborg P. and P. Society, 20 Cooper Union, New York. GEOLOGIST for \$25.00 (which is the regular price of the Atlas alone), if ordered through the GEOLOGIST. For other premiums see the GEOLOGIST for Nov., Dec., and Jan. Address SCIENCE CLUBBING RATES. THE GEOLOGICAL PUBLISHING COMPANY. 10% DISCOUNT. Minneapolis, Minn. We will allow the above discount to any Each author assumes the responsibility of his own subscriber to Science who will send us an order for periodicals exceeding \$10, counting each at its full price. THE BOTANICAL GAZETTE. contribution A monthly illustrated journal of botany in N. D. C. HODGES, Agent for United States, Canada and England, N. D. C. HODGES, all its departments. 47 Lafayette Place, New York, N. Y. 47 Lafayette Place, New York. 25 cents a number, \$2.50 a year. Address PUBLISHERS BOTANICAL GAZETTE, **BOOKS: How to get them.** If there is any book or pamphlet that you want, write to the Science Book Agency, 47 Lafayette Place, New York. **BOOKS: How to Sell them.** Send a list, stating condition, edition, etc., to Science Book Agency, 47 Lafayette Place, New York. Crawfordsville, Ind.

FEBRUARY 20, 1891.]

Roofs, etc.," by S. Anglin; "An Introduction to the Study of Metallurgy," by C. Roberts Austen, C.B., F.R.S.; "Chambers's Encyclopædia," Vol. VII. (entirely new edition, revised and rewritten); "The Old Navy and the New," by Rear-Admiral Daniel Ammen, U.S.N.; "Tables for the Determination of Minerals," by Persifor Frazer, jun., A.M. (new edition, revised and enlarged); "Aids in Practical Geology," by G. A. J. Cole, F.G.S.; "Historic Note-Book," by the Rev. E. Cobham Brewer, LL.D., Trinity College, Cambridge; and "Regional Anatomy in its Relation to Medicine and Surgery," by George McClellan, M.D. (illustrated from photographs taken by the author of his own dissections, expressly designed and prepared for this work, and colored by him after nature).

- The next number of the "Publications of the American Academy of Political and Social Science" will consist of an address on "Municipal Government and Public Health," by the eminent editor of the *Index Medicus*, Dr. John S. Billings, of the United States Army. The author sets forth in a clear way the proper municipal organization of health. Every city councilman in the country, as well as every other citizen interested in this important subject, should read this paper.

47 Lafayette Place, New York.



A NEW MONTHLY THE INTERNATIONAL JOURNAL OF MICROSCOPY AND NATURAL SCIENCE.

THE JOURNAL OF THE

POSTAL MICROSCOPICAL AND WESLEY NATURALISTS' SOCIETIES.

Edited by ALFRED ALLEN and Rev. WILLIAM SPIERS.

We have great pleasure in announcing to our readers that we have decided to publish the journal monthly instead of quarterly. For the present year, as an experiment, the annual subscription will remain the same as heretofore.

CONTENTS OF JANUARY NUMBER:

To Our Readers

Presidential Address

Steps in our Knowledge of the Organic World.

The Mountain Sphinx.

Appendicularia, with its, "Haus," Illustrated

Koch's Remedy for Tuberculosis.

Aspect of the Heavens-January.

Half-an-Hour at the Microscope, with Mr. Tuffen West.

Foraminifera from Atlantic Soundings. Skin of Echinus.

Lingual Ribbon of Cyclostoma elegans. Correspondence.

Queries.

Sale and Exchange Column.

Reviews.

The Wesley Naturalists' Society. Two Lithographic Plates.

\$1.75 Per Year.

To Science subscribers, \$1.00 for one year. " " 50 cents for six mos. 12

READY SOON. LABRADOR COAST. THE

A Journal of two Summer Cruises to that region; with notes on its early discovery, on the Eskimo, on its physical geography geology and natural history, together with a bibliography of charts, works and articles relating to the civil and natural history of the Labrador Peninsula.

By ALPHEUS SPRING PACKARD, M.D., Ph.D. 8°, about 400 pp., \$3.50.

FOSSIL RESINS. By CLARENCE LOWN and HENRY BOOTH. This book is the result of an attempt to collect the scattered notices of fossil resins, exclusive of those on amber. The work is of interest also on account of descriptions given of the insects found embedded in these long-preserved exudations from early vegetation. 12°. \$1.50. "The story is a piquant, good-humored, entertain-ing narrative of a cance voyage. A neater, prettier book is seldom seen."—*Literary World.* "This is a sprightly narrative of personal inci-dent. The book will be a pleasant reminder to many of rough experiences on a frontier which is rapidly receding."—*Booton Transcript.* "The picture of our desolate North-western terri-tory twenty-five years ago, in contrast with its civilized aspect to-day, and the pleasant features of the writer's style, constitute the claims of his little book to present attention."—*The Dial.*

SCIENCE.

NEW BOOKS. RACES AND PEOPLES.

By DANIEL G. BRINTON, M.D.

By DANIEL G. BRINTON, M.D. "The book is good, thoroughly good, and will long remain the best accessible elementary ethnography in our language."—The Christian Union. "We strongly recommend Dr. Brinton's 'Baces and Peoples' to both beginners and scholars. We are not aware of any other recent work on the science of which it treats in the English language." —Asiatic Quarterly. "His book is an excellent one, and we can heartily recommend it as an introductory manual of ethnol-ogy."—The Monist. "A useful and really interesting work, which de-serves to be widely read and studied both in Europe and America."—Brighton (Eng.) Herald. "This volume is most stimulating. It is written with great clearness, so that anybody can under-stand, and while in some ways, perforce, superficial, grasps very well the complete field of humanity."— "Dr. Brinton invests his scientific illustrations and measurements with an indescribable charm of nar-ration, so that 'Races and Peoples.' avowedly a rec-ord of discovered facts, is in reality a strong stim-ulant to the imagination."—Philadelphia Public Ledger. "The New Kris indispensable to the student who re-

"The work is indispensable to the student who re-quires an intelligent guide to a course of ethno-graphic reading."—*Philadelphia Times*.

Price, postpaid, \$1.75.

BY THE SAME AUTHOR. IN PREPARATION.

THE AMERICAN KACE: A Linguistic Classification and Ethnographic Description of the Native Tribes of North and South America. This is the first at-tempt ever made to classify all the Indian tribes by their languages, and it also treats of their customs, religions, physical traits, arts, antiquities, and traditions. The work comprises the results of several years of study in this special field.

THE MODERN MALADY; or, Sufferers from 'Nerves.'

An introduction to public consideration, from a non-medical point of view, of a condition of ill-health which is increasingly prevalent in all ranks of society. In the first part of this work the author dwells on the errors in our mode of treating Neurasthenia, consequent on the wide ignorance of the subject which still prevails; in the sec-ond part, attention is drawn to the principal causes of the malady. The allegory forming the Introduction to Part I. gives a brief his-ter of neurons exhausting and the medes of tory of nervous exhaustion and the modes of treatment which have at various times been thought suitable to this most painful and trying disease.

By CYRIL BENNETT. 12°, 184 pp., \$1.50.

THE WINNIPEG COUNTRY;

ROUGHING IT WITH AN ECLIPSE PARTY.

BY

A. ROCHESTER FELLOW. (S. H. SCUDDER.)

With thirty-two Illustrations and a Map. 12°. \$1.50.

Fact and Theory Papers

. THE SUPPRESSION OF CON-SUMPTION. By GODFREY W. HAMBLETON, M.D. 12°. 40c. "The inestimable importance of the subject, the minance of the author and the applications of the authors of the subject. Ι.

"The Inestimable importance of the subject, the eminence of the author, and the novelty of his work, all combine to render the little treatise worthy of special consideration. . . We heartily commend Dr. Hambleton's booklet, and wish there were more such works."—Editorial, Boston Daily Advertiser. "The monograph is interesting in style, scholarly, and well worthy of careful consideration. It is de-void of technical expressions, and can be easily read and digested."—Pharmaceutical Era.

II. THE SOCIETY AND THE "FAD."

By APPLETON MORGAN, Esq. 12°. 20 cents. "Mr. Morgan founds a sensible and interesting address upon a text furnished by a sentence from a young ladies' magazine; namely, 'Browning and Ibsen are the only really dramatic authors of their century."—New York Sun.

century."—New York Sun. III. PROTOPLASM AND LIFE. By C. F. Cox. 12°. 75 cents. "To be commended to those who are not special-ists."—Christian Union. "Physicians will enjoy their reading, and find in them much food for thought."—St. Louis Medical and Surgical Journal. "Mr. Cox reviews toe history of his subject with knowledge and skill."—Open Court. "It is of extreme interest."—Medical Age. "Worthy of a careful perusal."—Indiana Medica 1 Journal.

Journal

Journal. "An interesting and popular account of the ten-dencies of modern biological thought."—Popular Science News. "All interested in biological questions will find the book fascinating."—Pharmaceutical Era. "The author displays a very comprehensive grasp of his subject."—Public Opinion. "Deserves the attention of students of natural science."—Critic.

"Deserves the attention of students of natural science."-Critic. IV. THE CHEROKEES IN PRE-CO-LUMBIAN TIMES. By CYRUS THOMAS, 12°, \$1. Dr. Thomas has already presented to the public some reasons for believing the Cherokees were mound-builders, but additional evidence bearing on the subject has been obtained. A more careful study of the Delaware tradition respecting the Tal-legwi satisfies him that we have in the Bark Record (Walam Olum) itself proof that they were Chero-kees. He thinks the mounds enable us to trace back their line of migration even beyond their residence in Ohio to the western bank of the Mississippi. The object is therefore threefold: 1. An illustration of the reverse method of dealing with prehistoric sub-jects; 2. Incidental proof that some of the Indians were mound-builders; 3. A study of a single tribe in the light of the mound testimony. This work will be an important contribution to the literature of the Columbian discovery which will doubtless appear during the coming two years. "A valuable contribution to the question, 'Who were the mound-builders?"."-New York Times. "Professor Cyrus Thomas undertakes to trace back the evidences of a single Indian tribe into the prehistoric or mound-building age."-N. Y. Sun. "An interesting paper."-Christian Union. V. THE TORNADO. By H. A. HAZEN.

V. THE TORNADO. By H. A. HAZEN.

V. THE TORNADO. By H. A. HAZEN. 12°. \$1. "The little book is extremely interesting."—Bos-ton Transcript. "A book which will find many readers. The chapter on 'Tornado Insurance' is of interest to all property-holders in the tornado States."—Boston Herald, "'The Tornado' is a popular treatise on an impor-tant province of meteorology, in which science, the author, Professor Hazen of the United States Signal Service, may be regarded as an expert."—Philadel-phia Ledger.

phia Ledger. VI. TIME-RELATIONS OF MENTAL PHENOMENA. By JOSEPH JASTROW. 13°. 50c. "All students of psychology will find the book full of interesting facts. Professor Jastrow's good qual-tites as a thinker and as a writter are too well and too widely known to require comment."—Public Opinion. "A useful work for psychologists—as well as the general reader—by setting forth in brief and easily intelligible form the present state of knowledge in regard to the time required for the performance of mental acts."—The Critic.

mental acts."—The Critic. VII. HOUSEHOLD HYGIENE. By MARY TAYLOR BISSELL, 12°. 75 cents. "A sensible brochure."—Brooklyn Eagle. "Practical and sensible."—Public Opinion. "The advice and excellent information which it contains are tersely and intelligently expressed."— Boston Medical and Surgical Journal "Practical and simply written."—Springfield Re-publican. "The best monograph on home hygiene."—St. Lowis Globe-Democrat.

In Preparation. VIII. THE FIRST YEAR OF CHILD-HOOD. By J. MARK BALDWIN.

N. D. C. HODGES, 47 Lafayette Place, New York.