Professor Hugo Schuchardt is the most distinguished student living of mixed languages or "jargons," and his researches into their structure have been prolific of valuable results. The above is but one—the ninth—of his numerous "Creole Studies." It is one of the most instructive, as exhibiting the results of the commingling of the Portuguese with the Malayan languages, which are particularly widely apart. Like all his essays, it is replete with erudition, and marked by soundness and caution in handling facts.

The logical processes underlying language in general have been analyzed in a number of essays by Dr. Raoul de la Grasserie in his "Studies in Comparative Grammar." He has taken up in turn such topics as "the substantive verb," "pronouns," "tenses," etc., and striven to show by a very wide induction how these fundamental grammatical notions arose in the mind, and in what varied forms they sought expression in speech. The study above referred to, on "the category of moods" extends these comparisons to that feature of the verb. It is a masterly application of the principles of psychology to the evolution of language.

The Elements of Dynamic Electricity and Magnetism. By PHILIP ATKINSON. New York, Van Nostrand. 405 p. 8°.

As this is intended more for learners than for the learned, it appeals to a larger circle than do many other works on the subjects treated, and, for the same reason, mathematical formulæ are conspicuous by their absence. Mathematical reasoning, where required, has been, so far as possible, rendered intelligible to non-mathematical readers by the use of ordinary language and some unavoidable circumlocution, so that the amount of mathematical formulæ required has been practically reduced to a few simple expressions easily understood by persons familiar with afrithmetic.

The work is divided into thirteen chapters, each of which is intended to be a complete treatise on the subject to which it relates, and the whole to embrace all the essential facts pertaining to dynamic electricity.

The chronological order of electrical development has been followed pretty closely, thus not only giving a condensed history of the progress made in the science, but also showing the relations of each successive important invention to those which preceded and followed it. The style of the work is as clear as a due regard for the conciseness necessary in such a treatise will admit.

The different parts of the subject are taken up in the following order, a chapter being devoted to each. The voltaic battery, with definitions of the terms used; one-fluid cells; two-fluid cells, and battery formation; magnetism; electromagnetism; electric measurement; the dynamo and motor; electrolysis; electric storage; the relations of electricity to heat; the relations of electricity to light; the electric telegraph; and the telephone.

Prussian Schools through American Eyes. By James Russell Parsons, Jr. Syracuse. Bardeen. 8° \$1.

THE author of this book was recently United States Consul at Aix-la-Chapelle, and was employed by the authorities of the State of New York to make a report on the organization and methods of the Prussian schools, with a view to obtaining hints from them for the improvement of our own. Having been a school commissioner in New York State for some years, and being greatly interested in the public schools, Mr. Parsons took up the task assigned him with ardor and intelligence, and now gives us in this volume the result of his inquiries. The report is drawn up in the usual style of public documents, with little pretence of literary form, so that it is not so attractive to the reader as it might otherwise have been; but it presents a large amount of information concerning the Prussian schools in a form convenient for reference. It treats of the organization and government of the schools, the methods of discipline and of teaching, with some account of the buildings and apparatus, and gives a very full exposition of the courses of study. The normal schools are also dwelt upon at considerable length, and the mode of training teachers described.

Mr. Parsons is an admirer of the Prussian system, which he declares to be the best in the world; yet he sees that there is much in it which our people, accustomed to greater freedom and not

readily submissive to government drill, would not be willing to adopt. Two of the main points of superiority in the Prussian schools, as compared with those of New York, are, in his view, the compulsory education law, which is rigidly enforced, and the official courses of study for the various schools, which insure a higher average grade of instruction than is usual in New York. Mr. Parsons also calls attention to the fact that school commissioners in Prussia must be properly trained for their work, and must have served for a time as teachers before being appointed to the higher office; whereas in this country the main qualification of such officers is the ability to secure a majority of the votes in a popular election. These are, in his opinion, the points in which we might most advantageously imitate the Prussian system; but he also notices a few others, while in some respects he shows that our own schools are superior. The report may be heartily recommended to all who are interested in the subject.

AMONG THE PUBLISHERS.

PHOTOGRAPHIC amateurs will read with interest Ellerslie Wallace's paper on "Photographic Dark Rooms," in Outing for May.

- —The Home Journal devotes an entire page of its issue of May 6 to what may be called a guide to London hotels, though the formality of a "Guide" is avoided, and the information is put in a style which renders it entertaining even to the stay at-home tourist
- The May 2 issue of *The Medical and Surgical Reporter*, Philadelphia, is the first to appear under the new editor, Edward T. Reichert, M.D. The paper has been enlarged from twenty-eight to forty pages.
- William Cushing, 19 Ware Street, Cambridge, Mass., has been employed during the last year in collecting brief biographical notices of Harvard graduates, which he hopes soon to publish under the title "Harvard Graduates Before 1860."
- John Wiley & Sons have in preparation a work on "Car Lubrication," by W. E. Hall of the Pennsylvania Railroad; "The Mechanical Engineer's Pocket-Book," by William Kent, M.E.; also "The Transitive Curve Field Book," by Clinton R. Howard, C. E.
- The Salem Press Publishing and Printing Company, Salem, Mass., will publish in June, "Salem Witchcraft in Outline," by Caroline E. Upham, a niece of Dr. O. W. Holmes. In August they will publish "Historic Storms," by Sidney Perley; an interesting account of the great storms, cold winters, hot summers, etc., from 1620 to the present.
- Ginn & Co. have just published "Business Book-Keeping," a manual of modern methods in recording business transactions by single entry. George E. Gay of the High School, Malden, Mass., is the author. The forms given in the book are taken from the methods of the best accountants, are well adapted to their purpose, and are presented in a manner that appears to be both practical and satisfactory.
- Babyhood for May contains an article on "Chronic Throat Troubles Resulting from Diphtheria and Scarlet Fever, and How to Prevent Them," by Dr. D. Bryson Delavan, which lays stress on the fact, not generally known, that a considerable proportion of catarrhal diseases of the throat and nose have their origin in one of the above complaints. Many other medical topics of interest to mothers are discussed under "Nursery Problems."
- We have received from C. W. Bardeen of Syracuse a small volume entitled "Apperception," which is intended more especially for teachers. It should have been entitled "Perception," for that is the subject of the book, and indeed the barbarous term "apperception" is nowhere used except upon the title-page. The main purpose of the author is to call attention to the fact that the perception of outward things is largely a matter of interpretation, every new object requiring to be classified and assigned its proper place in the general system of our knowledge. There is nothing new or striking in the book, but it may be suggestive to teachers

who have not been in the habit of attending to this aspect of our mental operations.

- Of the two numbers of the American Journal of Psychology recently issued, one completes the third, and the other begins the fourth, volume of that magazine. The first contains an interesting article on the attitudes of the insane ("Automatic Muscular Movements of the Insane," by Dr. Charles P. Bancroft, superintendent of the New Hampshire asylum), illustrated with a plate showing some typical ones. Mr. Herbert Nichols contributes the historical part of a continued article on the "Psychology of Time," and Dr. C. F. Hodge one on the "Recovery of Ganglion Cells after Electrical Stimulation." Besides the usual reviews and abstracts upon psychological literature ("Nervous System," Dr. H. H. Donaldson; "General Paralysis," Dr. Wm. Noyes; "Experimental"), the number contains a long and vigorous critique, by the editor, of Professor James's "Psychology." With this number is furnished also a complete index to authors of papers received, and a carefully made subject-index to the large amount of matter gathered in the review department. With the first number of the new volume, a change in the title-page and publisher (now J. H. Orpha, Clark University, Worcester, Mass.) has been made. The first article, by Dr. E. W. Scripture, is a very readable account of the arithmetical prodigies that have from time to time astonished the world of less ready reckoners, and of the methods by which their feats have been performed. The other leading article is a continuation from the previous number of Mr. Herbert Nichols's study of the psychology of time. The author first presents the results of his own long course of experimentation, a special phase of this difficult subject, and then makes exposition of an extremely plausible theory of his own with reference to how time is perceived and apperceived. The place of the usual reviews and abstracts is this time taken by four minor contributions, one upon "Cerebral Localization," by Dr H. H. Donaldson, being a report of six lectures on cerebral localization delivered before the Boston Medico-Psychological Society in February and March of this year, and giving in convenient shape, and sifted of unnecessary detail, a summary of recent anatomical contributions to this important subject. Another is upon "Brain Models," and by the same author. The third is the first installment of a laboratory course in physiological psychology, by Dr. E. C. Sanford, in substance a course given in Clark University. The fourth article is the first of a series upon contemporary psychologists, by the editor, this time upon Zeller, and deals largely with his contributions to the psychology of religion. We are confidently assured that there is no thought of permanently displacing the reviews.
- The May number of the Atlantic Monthly contains a number of articles of interest to teachers. Chief among these is a paper by Professor Truman Henry Safford of Williams College, on the "Modern Teaching of Arithmetic." The author traces the teaching of arithmetic from the time of the Greeks and Romans to our own day, shows the great influence of Warren Colburn and his "First Lessons," and ends his paper with a long account of the Grube method and its adaptability to the present times and methods of instruction.
- The March number of the publications of the American Statistical Association contains "The Growth of Cities in Massachusetts," by Hon. Horace G. Wadlin; "Rate of Natural Increase of Population in United States," by Herman Hollerith; "The First Census of Massachusetts," by Hon. Samuel A. Green; "The Commercial Death Rate," by Albert C. Stevens; "Parliamentary Elections in Japan," by Theodore M. MacNair; Reviews and Notices: Reports of Bureaus of Labor Statistics; Notes on President Walker's Article on Statistics of the Colored Race; The Birth Rate in Europe during the Last Twenty Years; United States Census Bulletins; Reports of State Boards of Charities and Corrections; Health and Vital Statistics; Statistical Year-Book of Uruguay; Report of the Comptroller of the Currency; Municipal Finance, Price Statistics; Minor Notices.
- The May issue of *Psyche*, a Journal of Entomology, contains "A List of the Orthoptera of Illinois, IV." (concluded), by Jerome McNeill; "A Supplementary Note on Diabrotica, 12-punc-

- tata," by H. Garman; "Descriptions of the Preparatory Stages of Two Forms of Cerura Cinerea Walk.," by Harrison G. Dyar; "Two New Tachinids," by C. H. Tyler Townsend; "Edwards's Butterflies of North America;" "Packard's Forest-insects;" Personal Notes; and Proceedings of the Cambridge Entomological Club.
- Houghton, Mifflin, & Co. will publish immediately Mr. Fiske's work on the "American Revolution," in two volumes.
- T. Y. Crowell & Co. have just ready the third volume of Sybel's work on "The Founding of the German Empire." This volume is almost wholly occupied with events that occurred between 1848, when King Christian of Denmark died, and 1864, when the preliminaries of peace between Denmark and Germany were signed.
- G. P. Putnam's Sons have just ready, in the Questions of the Day Series, "The Question of Copyright;" the second edition, thoroughly revised and extended, of W. Swan Sonnenschein's "The Best Books," a list of the best available books in every department of literature; and a sketch of the life of Charles Darwin in the Leaders of Science Series.
- D. Appleton & Co. announce for early publication Baldwin's "Applied Psychology and Art of Teaching;" Herbart's "Psychology;" "A Descriptive Guide-Book to Canada," including accounts of the opportunities for sportsmen and tourists, by Charles G. D. Roberts; new editions of Appleton's "Dictionary of New York," "Summer Resorts," and "General Guide to the United States and Canada;" and "North America," Vol. XV. of Reclus's great work, "The Earth and Its Inhabitants."
- Hypnotism, which is now attracting such widespread attention, is considered in No. 3 of the Fowler & Wells Library, under the title of "How to Magnetize; or, Mesmerism and Clairvoyance, a Practical Treatise on the Choice, Management, and Capabilities of Subjects, with Instructions on the Manner of Procedure," by James Victor Wilson. The work closes with a chapter on animal magnetism as a therapeutic means, written by Dr. Fleming.
- The fifth volume of the Century Dictionary has just been issued. The fourth was issued six months ago, and it is expected to complete the book by the publication of the sixth and last volume in the autumn. The present volume brings the work down to Stro-, the words defined numbering now about 185,000. This number is the more surprising when it is considered that no effort has been made to swell the total, but, on the contrary, careful selection has constantly been exercised. It would have been easy, by the admission of self-explaining derivates, and of "new words" from unauthoritative (unscientific and unliterary) sources, to have increased the list by many thousands. In the above enumeration transitive and intransitive uses of the same verb, and substantive and adjective uses of the same word, are counted but once (being entered under one head in the dictionary) instead of twice as in the older dictionaries (where they are entered separately as different "words"). The fifth volume is more distinctively literary in character than those that preceded it, owing to the greater proportion of literary words in R and S. It contains, however, many important scientific terms, as spectrum. spectroscope, Saturn, etc., and a glance at the pages will show many unusually interesting definitions, as under ship, rifle, shoe, relation, relief, run, rack, safe, star, steam-engine, stand, etc., with hundreds of exquisite engravings of art-objects. The bulk of the volume consists of the letter S, which (as far as Stro-) occupies 716 pages, with about 21,500 words. The entire letter will occupy 860 pages, being the largest in the dictionary.
- "Crustacea from the northern coast of Yucatan, the harbor of Vera Cruz, the west coast of Florida, and the Bermuda Islands," is the title of a paper by J. E. Ives, in the Proceedings of the Academy of Natural Sciences, Philadelphia, March 31. The crustacea treated of in this paper were collected for the greater part on the northern coast of Yucatan and in the harbor of Vera Cruz, during the early months of 1890, by the expedition in charge of Professor Angelo Heilprin, sent by the Academy of Natural Sci-

ences of Philadelphia to investigate the natural history of Yucatan and Mexico. The paper also includes a list of the crustacea collected upon the west coast of Florida in the spring of 1886 by Professor Heilprin and Mr. Joseph Willcox, under the auspices of the Wagner Free Institute of Science of Philadelphia, and the description of a new Isopod, collected by the Academy's expedition to the Bermuda Islands in 1888. It is remarkable that the shores of Yucatan and Mexico, portions of the American continent among the first to be discovered by Europeans, should be among the last to have their zoölogy investigated. Nothing whatever, with one or two isolated exceptions, has been known hitherto of the fauna of the shores of Yucatan, and very little of that of the eastern coast of Mexico. The material collected by the expedition has added considerably to the knowledge of this region.

- The late Richard A. Proctor, according to Literary News, was gifted with a remarkable memory. Thackeray was his favorite novelist, and he could repeat verbatim page after page of "The Newcomes;" so much in fact that the dear old Colonel became an unmitigated bore to his former friends.

- The officers for 1891-92 of the Boston Society of Natural History will be: president, George L. Goodale; vice presidents, William H. Niles, B. Joy Jeffries, Samuel Wells; curator, Alpheus Hyatt; secretary, Samuel Dexter; treasurer, Charles W. Scudder; librarian, Samuel Dexter.

- The Fiske range-finder, which was first described in these columns last year, has been very favorably received by the naval departments of several different countries, the remarkable results obtained by the exhaustive trials carried out on board United States war-ships having given a sufficient guarantee of the practical value of the instrument. In the American navy the rangefinder was installed on board the "Baltimore," and from the extensive trials made with it there, during six months at sea, the writers of the official report state that it is accurate within three per cent on ranges up to 5,000 yards. In France, according to Engineering, the range finder has been mounted on board "Le Formidable," the flagship of the French Mediterranean fleet, and extensive trials were made in February last with the instrument to determine the distance between vessels having a relative motion of from 0 to 28 knots. Under these conditions the results were found to be accurate within five per cent. From experiments on fixed objects the commission in charge report that the instrument could be used by trained observers under the conditions of combat, and they remark that a specially valuable feature of the instrument is that it enables the observer to record the distance — to within a very small percentage - between forts or ships, before firing grows heavy. Difficulty in observation would, of course, be increased in a heavy seaway, but not so much as would the accurate pointing of the guns, so that the range-finder can be always relied on to give more accurate work than the guns. The com-

Publications received at Editor's Office. April 27-May 2.

Ammen, D. The Old Navy and the New. Philadelphia, Lippincott. 553 p. 8°. \$3.

Brooks, W. K. The Oyster. Baltimore, Johns Hopkins Press. 230 p. 12°.

D'Anvers, N. The Story of Early Man (2d ed.). New York, Whittaker. 140 p. 12°. 40 cts.

D'Anvers, N. The Life Story of Our Earth (2d ed.). New York. Whittaker. 165 p. 12°. 40 cts.

Fine, H. B. The Number-System of Algebra. Boston and New York, Leach, Shewell, & Sanborn. 131 p. 12°. \$1.

Jones, D. E. Elementary Lessons in Heat, Light, and Sound. London and New York, Macmillan. 280 p. 12°. 70 cts.

Keef, R. P. The Essential Uses of the Moods in Greek and Latin, Set Forth in Parallel Arrangement. Boston, Ginn. 56 p. 16°.

New York, Fifth Annual Report of the Factory Inspectors of the State of, Albany, State. 673 p. 8°.

OTT, I. The Modern Antipyretics: Their Action in Health and Disease. Easton, Pa., Vogel. 52 p.

8°.
Our Language. Vol. I., No. 1. April, 1891. New
York, F. A. Fernald. 8 p. 4°. m. 50 cts. per Seons. J. R., Jr. Prussian Schools through American Eyes. Syracuse, Bardeen. 91 p. 8°.

\$1. ROOPER, T. G.

\$1.

ROOPER, T. G. Apperception; or, The Essential Mental Operation in the Act of Learning. Syracuse, Bardeen. 52 p. 12°. 50 cts.

TRELEASE, W. The Species of Epilobium Occurring North of Mexico. St. Louis, Nixon-Jones Co. Pr. 117 p. 48 pl. 8°.

Von Meyer, E. A History of Chemistry from Earliest Times to the Present Day. London and New York, Macmillan. 556 p. 8°. \$4.50.

WINCHELL, N. H. & H. V. 1ron Ores of Minnesota (Bulletin No. 6, Geol. and Nat. Hist. Survey of

(Bulletin No. 6, Geol. and Nat. Hist. Survey of Minnesota). 430 p. 8°. Geol. Map and 44 pl.

A SYSTEM OF

EASY LETTERING. 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.

OF WHAT USE IS THAT PLANT?

You can find the answer in

SMITH'S "DICTIONARY OF ECONOMIC PLANTS."

Sent postaid on receipt of \$2.80. Publisher's price, \$3.50.

SCIENCE BOOK AGENCY. 47 Lafayette Place, New York

"The Week, one of the ablest papers on the continent."—Descriptive America.

A Canadian Journal of Politics, Literature, Science

PUBLISHED EVERY FRIDAY.

\$3.00 per Year. \$1.00 for Four Months.

THE WEEK has entered on its EIGHTH year of publication, greatly improved in every respect, rendering it more wortby the cordial support of every one interested in the maintenance of a first-

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 efforts 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 sessions of Parliament.

sions of Parliament.

THE WEEK being the same size as "Harper's Weekly," is the largest paper of its class on the continent.

SEND FOR FREE SAMPLE COPY.

BLACKETT ROBINSON, Publisher, 5 Jordan St., Toronto, Canada.

THE AMERICAN GEOLOGIST FOR 1891 BIEN'S NEW ATLAS OF THE METROPOLI-TAN DISTRICT,

will be given to New Subscribers to the 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

THE GEOLOGICAL PUBLISHING COMPANY, Minneapolis, Minn.

THE BOTANICAL GAZETTE.

A monthly illustrated journal of botany in all its departments.

25 cents a number, \$2.50 a year.

Address PUBLISHERS BOTANICAL GAZETTE, Crawfordsville, Ind.

Publications of the University of Pennsylvania.

Philology, Literature and Archæology.

Vol. I. now ready.

Poetic and Verse Criticism of the Reign of Elizabeth. By Felix E. Schelling, A.M., Assistant Professor of English Literature. \$1.00.

A Fragment of the Babylonian "Dibbarra" Epic. By Morris Jastrow, Jr., Ph.D., Professor of Arabic. 60 cents.

a. Πρός with the Accusative. b. Note on a Pas, sage in the Antigone. By William A. Lamberton A.M., Professor of the Greek Language and Literature. 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 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 Archæology and Linguis-

Professor of American Archæology and Linguistics.

A Monograph on the Tempest. By Horace Howard Furness, Ph.D., LL.D.

Recent Archæological Explorations in New Jersey. By Charles C. Abbett, M.D., Curator of the American Collections.

Archæological Notes in Northern Morocco. By Talcott 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 Professor of English Literature.

The Papers of this Series, prepared by Professors and others connected with the University of Pennsylvania, will take the form of Monographs on the subjects of Philology, Literature, and Archæology, 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 than subscribers, \$2.00 per volume.

rolume. 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 sha! be pre-Each author assumes the responsibility of his own contribution.

N. D. C. HODGES,

47 Lafayette Place, New York, N. Y.

BOO! : 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.

mission consider the instrument will be particularly useful at night, as the mere flash of a gun will be sufficient to give the range of the vessel firing it. Even more satisfactory experiments were made on board "Il Terribile," of the Italian navy at Spezzia last month, when it was found that, with the ship moving, the distance of a moving target was ascertained with an error of only 1.3 per cent per 1,000 metres range.

- A series of experiments in treating corn with various substances to prevent its being taken by the striped squirrels was carried on at the Iowa Experiment Station last spring. The corn was treated in the following manner: Smoked with meat in an ordinary smoke-house until the kernels were black; smoked in a barrel with tobacco dust; smoked over night in strong decoctions of tobacco and of quassia chips; soaked in a dilute carbolic-acid mixture, in strong alum water, in salt water, and kerosene. The squirrels would take the corn treated in any of these ways, though the carbolic-acid treatment and the smoking with tobacco made

the corn distasteful, and when in the vicinity of other grain would be left till the last. The best remedy seems to be to harrow the ground immediately after planting to cover the planter tracks, and then to scatter corn about the border of the fields and in the vicinity of the squirrel holes as soon as the corn begins to come

- "Schliemann was thirty-four years old," says the Chicago Tribune, "before he knew a word of Greek, and it was not until he was forty-one that he began the study of archæology, in which he was destined to achieve so much distinction. By the way, there was an interesting clause inserted in the marriage contract between the late Dr. Schliemann and the Greek girl whom he made his second wife, to the effect that she should improve her knowledge of Homer by learning and reciting fifty lines of the Iliad nightly. Schliemann, when telling the story to his friends, always said that neither tears nor entreaties ever induced him to let her off a single line."

Llyspepsia

Horsford's Acid Phosphate.

In dyspepsia the stomach fails to assimilate the food. The Acid Phosphate assists weakened stomach, making the process of digestion natural and easy.

Dr. R. S. McComb, Philadelphia, says: "Used it in nervous dyspepsia, with success.

Dr. W. S. LEONARD. Hinsdale, N. H.,

says:
"The best remedy for dyspepsia that ha ever come under my notice.

Dr. T. H. Andrews, Jefferson Medical College, Philadelphia, says:

"A wonderful remedy which gave me most gratifying results in the worst forms of dyspepsia"

Descriptive pamphlet free.

Rumford Chemical Works, Providence, R. I.

Beware of Substitutes and Imitations.

CAUTION.—Be sure the word "Hors-ford's" is printed on the label. All others are spurious. Never sold in bulk.

POPULAR MANUAL OF VISIBLE SPEECH AND **VOCAL PHYSIOLOGY.**

For use in Colleges and Normal Schools. Price 50 cents Sent free by post by

N. D. C. HODGES, 47 Lafayette Pl., N. Y.

PRIZE ESSAYS OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

Practical Sanitary and Economic Cooking Adapted to Persons of Moderate and Small Means. By MRS. MARY HINMAN ABEL. 12mo, 182 pp. Cloth, 40 cents.

No. 1. Healthy Homes and Foods for the Working-Classes. By Professor C. Vaughan, M.D. Ann Arbor, Mich. 8vo, 62 pp. Paper, 10 cents.

No. 2. The Sanitary Conditions and Necessities of School-Houses and School-Life. By D. F. Lin-coln, M.D., Boston, Mass. 8vo, 38 pp. 5 cents.

10. 3. Disinfection and Individual Prophylaxis against Infectious Diseases. By George M. Sternberg, M.D., Major and Surgeon U.S.A. 8vo, 40 pp. Paper, 5 cents.

No. 4. The Preventable Causes of Disease, Injury, and Death in American Manufactories and Workshops, and the Best Means and Appliances for Preventing and Avoiding Them. By George H. Ireland, Springfield, Mass. 8vo, 20 pp. Paper,

The four essays (Nos. 1, 2, 3, 4) in one volume of nearly two hundred large octavo pages, thoroughly indexed. Cloth, 50 cents.

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

SCIENCE CLUBBING RATES.

10% DISCOUNT.

We will allow the above discount to any subscriber to Science who will send us an order for periodicals exceeding \$10, counting each at its full price.

N. D. C. HODGES, 47 Lafayette Place, N. Y.

Old and Rare Books.

ACK NUMBERS and complete sets of leading Magazines, Rates low. AM, MAG. EXCHANGE, Schoharie N. V

Speech Reading and Articulation Teaching.

By A. MELVILLE BELL.

Price, 25 Cents.

Practical Instructions in the Art of Reading Speech from the Mouth; and in the Art of Teaching Articulation to the Deaf.

[This Work-written at the suggestion of Miss Sarah Fuller, Principal of the Horace Mann School for the Deaf, Boston, Mass.—is, so far as known, the first Treatise published on "Speech Reading."]

From Principals of Institutions for the Deaf.

"Admirable in its conciseness, clearness and free-om from technicality." dom from technicality."
"The simplicity and perfection of this little book."

"Full of exact and helpful observations,"
"A very interesting and valuable work."
"The rules are clearly given and will be of great tillite."

utility."
"Every articulation teacher should study it."
"A model of clearness and simplicity, without having any of the puzzling symbols that trouble the common mind. . . The exercises given in speech-reading from the lips are especially interesting, and of great importance for the student of phonetics."

— Modern Language Notes.

** The above work may be obtained, by order, through any bookseller, or post-free on receipt of price, from

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

AMERICAN HERO-MYTHS.

A Study in the Native Religions of the Western Continent.

By D. G. BRINTON, M.D. 8°. \$1.75.

THE CRADLE OF THE SEMITES.

By D. G. Brinton, M.D., and Morris Jastrow, Jr. Ph.D. 8°. 30 cents.

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



YOU INTEND TO BUILD?

The "Atlas of Sensible Low Cost Houses," 2 vols. (sent postpaid on receipt of \$2), will aid you, no matter what style of house you may intend to build; as will "Colonial Houses for Modern Homes" (sent postpaid on receipt of \$2).

N. D. C. HODGES,

47 Lafayette Place, New York.