

frequent use in English conversation calls for an appreciation, on the part of English speakers, of the sounds peculiar to these imported words. There are also the helps and suggestions as to the way of using the book. But the suggestion to use the book will be willingly accepted by all to whom it may be available, it is so well suited to its purpose.

The State. Elements of Historical and Practical Politics. By WOODROW WILSON. Boston, Heath. 12°.

THIS is one of the most ambitious books that we remember to have met with, but we are sorry to say that the execution is by no means adequate to the design. The work is mainly descriptive and historical, and attempts to give an account of all the more important constitutional governments on record, including those of Athens, Sparta, Rome, France, Germany, Switzerland, England, the United States, and several others. In the case of the United States, not only is the Federal Government described, but also those of the States, of the Colonies before the Revolution, and even of the counties, cities, and towns. But this is by no means all. The author has undertaken not only to describe these various governments as they now are or as they were at some particular epoch, but also to give a history of them all from the days of Homer to the present time. He has, besides, several chapters on the origin of government and on its nature and functions, on the nature and development of law, and so forth; and all this is crowded into one duodecimo volume. The necessary result is that the work is so condensed and so crammed with facts that it is almost impossible to read it through; and the broad outlines of the subjects treated are obscured by the mass of insignificant detail.

We are obliged to add that the author's conception of politics and political history seems to us defective. He confines his attention mainly to the mere machinery of government, the details of organization and administration, and has little or nothing to say on the all-important subject of the relations between the government and the people. The main question about any government is as to what rights it guarantees to the people, and how these rights are secured; but on these points Professor Wilson gives scarcely any information. His remarks, too, on the nature and functions of government are slight and superficial, and the philosophy of the book generally is very thin.

After finding so much fault, we are glad to add that the facts recorded seem to have been carefully and conscientiously collected; and, though we have not undertaken to verify them, we have no doubt they are trustworthy, and they also are pretty well arranged. The book has an elaborate table of contents, as well as an index; and it will, no doubt, be of considerable value as a book of reference, but it can hardly be used for any other purpose.

AMONG THE PUBLISHERS.

THE J. B. Lippincott Company have published a new edition, revised, of Professor Joseph P. Remington's text-book on the "Practice of Pharmacy."

— Sidney S. Rider, Providence, R.I., has in preparation for the series of Rhode Island Historical Tracts a "History of Privateering," as connected with Rhode Island during the Revolution (1776-83).

— D. Appleton & Co. have published a volume on the land question, entitled "The Land and the Community," by the Rev. S. W. Thackeray, with an introduction by Henry George; and a new edition of Bellamy's "Dr. Heidenhoff's Process."

— Beginning with the coming year, the *North American Review* will be printed on a larger page. Among the attractions of the year is announced a "Duel between Free Trade and Protection: a Great Discussion between Two Prime-Ministers, the Right Hon. W. E. Gladstone and the Hon. James G. Blaine."

— In view of the unceasing efforts for the suppression of the African slave-trade, interest will be taken in the announcement that Longmans, Green, & Co. are about to publish an authorized life of Cardinal Lavigerie, the primate of Africa, which will contain a full statement of the means by which he proposes to check this infamous traffic.

— "The Descendants of Palæolithic Man in America" is the subject of an article, by Dr. Charles C. Abbott, which will open the December *Popular Science Monthly*. It describes the surroundings and occupations of the men who made the rough pottery and the implements of slaty rock which Dr. Abbott has found so abundantly in the Delaware valley. Another of Professor C. H. Henderson's illustrated articles on "Glass-making" will appear in the same number. In this one the evolution of a glass bottle is picturesquely described. Some new phases in the Chinese problem will also be presented by Willard B. Farwell. The writer asks, in view of the wretchedness of millions of the Chinese at home, whether exclusion will exclude, and invites more thoughtful consideration of the Chinese problem, which is made especially serious by the peculiar constitution of the Chinese mind. Col. Garrick Mallery's American Association address on "Israelite and Indian" will be concluded in this number. This portion of the essay deals especially with the similarity in the myths and social institutions of the two peoples.

— One of the most accurate pictures ever given of the slums of New York will appear in *Scribner's* for December under the title "How the Other Half Lives." The author is Jacob A. Riis, for many years police reporter of the Associated Press, who has had every facility during his very active career to collect definite information on the subject. The illustrations are from flash-light photographs taken by the author. Edward J. Phelps, ex-minister to England, in his article in the same number, says, "Never since the creation has there come upon the earth such a deluge of talk as the latter half of the nineteenth century has heard. The orator is everywhere, and has all subjects for his own. The writer stayeth not his hand by day or by night. Every successive day brings forth in the English tongue more discourse than all the great speakers of the past have left behind them, and more printed matter, such as it is, than the contents of an ordinary library. . . . We certainly seem to be approaching the time when hardly any thing will be left to be said on any subject that has not been said before — perhaps many times over; when all known topics will begin to be exhausted."

— Professor Paul Haupt of the Johns Hopkins University is editing, in connection with Professor Friedrich Delitzsch of the University of Leipzig, a new periodical, *Beiträge zur Assyriologie und vergleichenden semitischen Sprachwissenschaft* ("Contributions to Assyriology and Comparative Semitic Philology"). The plan of such a series was conceived by Professor Haupt as early as 1878, but various circumstances prevented its realization. This new series will form a *pendant* to the quarto volumes of the Assyriological Library, edited by Friedrich Delitzsch and Paul Haupt, which now includes Haupt's "Akkadian and Sumerian Texts" and his "Babylonian Nimrod Epic," Bezold's "Achaemenian Inscriptions, with the Cuneiform Text of the Smaller Achaemenian Inscriptions," autographed by Professor Haupt, Strassmaier's "Alphabetical List of Assyrian and Akkadian Words," Lyon's "Sargon," Zimmern's "Babylonian Penitential Psalms," Delitzsch's "Assyrian Dictionary," Lehmann's "Samassumukin," Weisbach's "Second Species of the Achaemenian Inscriptions," and Bang's "Old Persian Texts." Due regard will be given to the principles of comparative philology, and this will be a distinctive feature of the contributions published in the *Beiträge*. Naturally the *Beiträge* will chiefly contain the work of the German Semitic School; though articles in other languages, especially in English, French, or Latin, will not be excluded. The editors do not propose to issue the journal at fixed intervals, but from time to time, as sufficient satisfactory material is at hand. Part I. of Vol. I. is now ready. Subscription and orders may be addressed to the Publication Agency of the Johns Hopkins University, Baltimore, Md.

— G. P. Putnam's Sons announce a new edition (the nineteenth) of "Haydn's Dictionary of Dates," brought down to the fall of 1889; a revised edition of Edward L. Anderson's treatise on "Modern Horsemanship;" the first volume of Charles Booth's "Labor and Life of the People," describing East London; "A History of Austro-Hungary from the Earliest Time to the Year 1889," by Louis Leger, translated from the French by Mrs. Birkbeck Hill, with a preface by Edward A. Freeman; "The First In-

ternational Railway and the Early Colonization of New England," a history of the railway system which opened Canada to the United States, together with an account of the settlement which established the English title to New England, both subjects being presented in a study of the life and writings of John Alfred Poor, edited by Laura E. Poor; "A Handbook of Precious Stones," by M. D. Rothschild; "The Sayings of Poor Richard," a collection of the wit and wisdom of Benjamin Franklin, edited by Paul Leicester Ford, in The Knickerbocker Nuggets Series; and "Thomas Jefferson's Views on Public Education," by John C. Henderson.

— J. B. Lippincott Company have in preparation George W. Childs's reminiscences, a portion of which have been given in *Lippincott's Magazine*.

— Dulau & Co., 37 Soho Square, London, W., announce to be ready early in December "A Catalogue of British Fossil Vertebrata," by Arthur Smith Woodward, F.G.S., and Charles Davies Sherborn, F.G.S. The earliest list of British fossil *Vertebrata* was published by Samuel Woodward, in his "Synoptical Table of British Organic Remains," in 1830, and occupied two pages of the volume; while thirty-five years ago the late John Morris published a "Catalogue of British Fossils," of which fifty pages were devoted to this group. The present volume will consist of about three hundred and fifty pages, and will deal with the *Vertebrata* alone, tabulating the results of researches upon the British fossil forms of this group since the time of Linnæus. In the synonymy, the latest authorities have, for the most part, been followed, though a critical study of some genera has led to the adoption of certain modifications. The nature of the type specimen in each case is stated, and, whenever traceable, the museum or collection in which it is now preserved is mentioned. The type species of each genus, when founded upon a British fossil, is also distinctly marked. In order to render the work as complete as possible, the authors have consulted the publications of all provincial societies; most of the principal collections of British fossil *Vertebrata*, both public and pri-

vate, have been visited; and it is therefore hoped that all essential references to each genus and species are included. Special attention has been given to the distribution of the pleistocene *Mammalia*, every well-authenticated locality for each species being recorded. The work will be prefaced by a general introduction, giving particulars of the principal collections available to the student, and a table of the stratigraphical distribution of the genera. The published price will be 12s. 6d.; subscriptions (if received before Dec. 1), 10s. 6d.

— The author of "An Honest Hypocrite," a theological novel in the sense that its hero is a young clergyman who is troubled with doubts and fears after he has taken orders, is the Rev. Edward Staats de Grote Tompkins, who is the rector of a church in Troy, N.Y. Mr. Tompkins is a graduate of Yale College, and is of Dutch ancestry; his family having come from Holland, and settled in Westchester County, N.Y., in 1620, which refutes the charge that the story is autobiographical. A young Englishman in New York with whom Mr. Tompkins is acquainted, and whose waverings and doubts form the basis of the plot, gave him his leading motive. The book is really the author's own beliefs put into the form of a story instead of into a sermon. The point that is at once raised by this story is, "Is Christianity a sham, or is it not?" The question is not as to its theological, historical, or liturgical truth, but as to its actual practical workings. Mr. Tompkins denies the portraits he is said to have painted. The fashionable "Dr. Grady" is not the well-known clergyman he is supposed to be, nor is "Adrienne" intended for the Duchess of Marlborough. To be sure, the Duchess of Marlborough came from Troy, where the scene of the story is laid, but the author did not know her when she was a young woman. Her character was formed before he had the pleasure of meeting her. Such, in brief, is the idea of one of the most striking novels of the day, the readers of which may be interested to know that Mr. Tompkins is a young man and unmarried.

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By EDWARD CAIRD, LL.D., Professor of Moral Philosophy in the University of Glasgow, late Fellow and Tutor of Merton College, Oxford. 2 Vols. 8vo, \$7.50.

The object of this book is to give a connected view of the Critical Philosophy, showing the relation of the three "Critiques" to each other and to the other works of Kant, which may be regarded as illustrations or developments of the main arguments. The first part, on the "Critique of Pure Reason," deals with the same subject as my former work entitled, "The Philosophy of Kant," but, except in a few passages, it is not a reproduction of it.—*Extract from Preface.*

Just Published, Volume Two, Completing Dr. McKendrick's work on Physiology.

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HANDBOOK OF PRACTICAL BOTANY for the Botanical Laboratory and Private Student. By E. STRASBURGER, Professor of Botany in the University of Bonn. Edited from the German by W. HILLHOUSE, M.A., F.L.S. Revised by the author, and with many additional notes by author and editor. Second edition, revised and enlarged. With 116 original and 33 additional illustrations. 8vo, \$2.50.

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TIMBER AND SOME OF ITS DISEASES. By H. MARSHALL WARD, F.R.S., F.L.S. With Illustrations. 12mo, \$1.75.

MACMILLAN & CO., 112 Fourth Avenue, New York.

— Estes and Lauriat have published the "Salon of 1889," containing 100 photogravures of prize paintings, prepared by Goupil & Co. of Paris.

— Harper & Brothers publish "The Political Problem," by Albert Stickney, brought out by the discontent that can be observed in Europe and in this country with the practical working of existing forms of democratic government; "Winter in Algeria," written and illustrated by Frederick A. Bridgman; "A Little Journey in the World," a satire upon modern social life in America, by Charles Dudley Warner; "Cradle and Nursery," by Christine Terhune Herrick, advocating the treatment of "the baby" as a reasonable being.

— The publishing committee of the Appalachian Mountain Club announces the appearance, from the press of John Wilson & Son, of a volume with the title "Mountaineering in Colorado: the Peaks about Estes Park," by Frederick H. Chapin, one of the club's most widely known members. The book contains one hundred and sixty-eight pages. The work will be embellished with eleven full-page heliotype plates, besides other illustrations, all from photographs taken by the author upon expeditions described in the text. The work will have an interest for lovers of mountain scenery.

— P. Blakiston, Son, & Co., Philadelphia, make the important announcement of a "Chemical Technology; or, Chemistry in its Application to Arts and Manufactures," to be edited by Charles Edward Groves and William Thorp. Vol. I. is now ready, entitled "Fuel and its Applications," by E. J. Mills and F. J. Rowan, assisted by others, including Mr. F. P. Dewey of the Smithsonian Institute, Washington, D.C. This new edition of "Chemical Technology" is founded on that written by Richardson and Ronalds, and subsequently enlarged and rewritten by Richardson and Watts. As the German technology of Dr. Knapp was taken as the basis of the original, Richardson and Watts's work has long been familiarly known as "Knapp's Technology." The historical portions of the original have been retained, but supplemented by a full account of the methods and appliances introduced of late years in the application of chemistry to the arts. This work will be divided into sections, of which the most important are, "Fuel and its Applications;" "Lighting;" "Acids and Alkalies;" "Glass and Pottery;" "Metallurgy;" "Textile Fabrics;" "Leather, Paper, etc.;" "Coloring Matters and Dyes;" "Oils and Varnishes;" "Brewing and Distilling;" "Sugar, Starch, Flour, etc." The first volume treats of fuel and its applications generally; its special employment in various branches of chemical manufacture being reserved for detailed consideration in the volumes devoted to the special subjects enumerated above.

LETTERS TO THE EDITOR.

A Precocious Botanist.

ACCORDING to the "English Annals of Botany," vol. ii. p. 418, Jean Baptiste Lieurry appears to have been unusually precocious, having published a paper in 1874 on Polyporus. He was born, it is affirmed, on Dec. 14, 1888: so his researches were perpetrated fourteen years before his birth, which was subsequent to his death, that having occurred on Sept. 3, 1888. For these unusual biographical data, the editors state, they are indebted to M. Eugène Niel of Rouen. Such cases of posthumous rejuvenation are fortunately very rare in this country. C. S. M.

The Champlain Period in the Susquehanna Valley.

I HAVE lately made some observations on the drift along the river at this point, — Harrisburg, — which I wish to report. This district, being only eighty-five miles from the Terminal Moraine, was consequently much influenced by the post-glacial floods.

The stream is very shallow; and its bed, composed for five or six miles of Hudson slates, is laid bare almost every summer, offering exceptional advantages for observing the overlying drifts. The deposit consists, for the most part, of clay variously intermixed with gravel. At one point I noted a bottom layer of gravel one foot thick, overlaid by twenty feet of fine clay. Scattered through the deposit are boulders of various sizes — the largest be-

ing from six to ten tons in weight — composed of conglomerate and sandstone from the mountains beyond.

The height of the drift varies, of course, with the local topography. From one hundred feet in the mountain-gorges, to thirty feet in the lowlands opposite Harrisburg, is a fair general average.

The width of the deposit is not very great, owing to the narrowness of the valley; still it has furnished ground for most of the towns in the neighborhood, Harrisburg itself being built to a great extent on a level flood-plain thirty feet above the present water-level.

At no place in this locality has the terrace formation been noted. One level flood-plain, of equal height on both sides of the stream, is all that marks the limit of the great post-glacial river.

HARVEY B. BASHORE.

West Fairview, Penn., Nov. 7.

INDUSTRIAL NOTES.

Microscopes and Photographic Supplies.

MR. MORRIS EARLE, of the late firm of Morris Earle & Co., 1016 Chestnut Street, Philadelphia, informs his friends and former customers that he is now a member of the firm of Williams, Brown, & Earle, 33, 35, and 39 South Tenth Street, corner of Chestnut. The new firm has been appointed sole agents in the United States for Messrs. R. & J. Beck of London, the well-known manufacturers of microscopes and "Autograph" photographic lenses. In addition to the manufactures of the latter firm, there will be a complete stock of goods of foreign or domestic manufacture pertaining to the business. Mr. Earle will give his personal attention to the photographic supplies, photographic printing, and microscopical branches of the business.

Sanitary Ventilation.

ONE of the most important sanitary problems of the day is that of the adequate ventilation of our schoolrooms, factories, churches, theatres, and other buildings in which many people are gathered together for any considerable time. Even in the best of modern dwelling-houses the atmosphere is none too good, while in crowded places, such as those mentioned, the air is positively poisonous unless proper means of ventilation are employed. The air exhaled in breathing contains, besides the vapor given off by the lungs, from four to five per cent of carbonic-acid gas, at least a hundred times the normal proportion found in pure air. This gas, though not poisonous in itself, is to some extent a measure of other impurities in the air which are poisonous, and, taking the place of the oxygen, obstructs respiration by preventing that necessary gas from being absorbed by the lungs.

Careful observations and experiments show that the air of a room designed to be occupied for any length of time should not be allowed to become vitiated to an extent indicated by the presence of six or eight parts of carbonic-acid gas in ten thousand. Yet careful analyses made some years ago showed that the average atmosphere in sixty schools in this city and Boston contained, in ten thousand parts, fifteen parts, the air in one of the schools containing thirty-one parts. The mean of the air in the New York theatres had twenty-six parts of carbonic-acid gas in ten thousand, one of them being vitiated to the extent of seventy-six parts.

For healthful ventilation it has been found that different quantities of air are required under different circumstances. One authority gives as the proper quantity of fresh air per hour for each person, in ordinary hospitals, 2,400 cubic feet; epidemic hospitals, 5,000; workshops for ordinary trades, 2,100, for unhealthy trades, 3,600; halls for long meetings, 2,000; schools for youths, 1,000.

The problem of introducing this large quantity of fresh air into a building has been attacked from various directions, and with varying degrees of success. One method, much in use in this city, is that of positive ventilation, by means of a ventilator-wheel or air-propeller. One of these devices, the Blackman power ventilator-wheel, is now on exhibition at the American Institute Fair in this city, where it attracts much attention from persons interested in sanitary matters as well as from architects and builders. This wheel, and one of the means for actuating it, a high-speed steam-engine, are shown in the accompanying illustrations.