

Citizen's Atlas of American Politics, 1789-1888. By FLETCHER W. HEWES. New York, Scribner. 10. \$2.

THIS atlas is a campaign publication of peculiar interest, as it gives a clear graphical insight into some of the questions at issue. A number of maps show the comparative condition of the tariff, and the wages of skilled and unskilled labor for any corresponding period during the past forty years. Wages and cost of living are compared, and import and export charts show the country's part in the trade of the world. A large map is devoted to the production of wool and the value of the total product of manufactures. The latter maps are compiled from the returns of the Tenth Census, and are very interesting. The distribution of the foreign-born population receives special attention, one large map showing its ratio to the total population, while four smaller maps show that of the Germans, Irish, English, and Welsh, and of British Americans. These charts have been taken from 'Scribner's Statistical Atlas of the United States.' The first charts of the atlas represent the political history of the country, giving at a single glance a view of the supremacy of parties and of the increase of the popular vote. Another series of maps shows the history of presidential elections. The atlas is of special interest at present, containing, as it does, valuable and accurate information on some of the most important questions to be decided by the imminent election.

PUBLISHERS' FALL ANNOUNCEMENTS.

Houghton, Mifflin, & Co.

IN the American Commonwealths Series, 'Indiana: a Redemption from Slavery,' by J. P. Dunn, jun.; and 'Ohio: Historical Sketches of the First Fruits of the Ordinance of 1787,' by Rufus King. Under the title 'American Religious Leaders,'—a series of biographies of men who have exerted great influence on the religious thought and life of America,—the following will be among the earlier issues: 'Jonathan Edwards,' by Prof. A. V. G. Allen; 'Charles Hodge,' by Pres. Francis L. Patton of Princeton; 'Francis Wayland,' by Prof. J. O. Murray of Princeton; 'Wilbur Fisk,' by Prof. George Prentice of Wesleyan University; 'Archbishop John Hughes,' by John G. Shea, LL.D.; and 'Theodore Parker,' by John Fiske. 'A Latin Grammar,' by E. A. Andrews and S. Stoddard (new edition, thoroughly revised by Henry Preble). 'Colonial Times on Buzzard's Bay,' by W. R. Bliss. 'The Critical Period of American History, 1783-89,' by John Fiske. 'The Chief Contents of the *Gentleman's Magazine*, from 1731 to 1868,' edited by G. Laurence Gomme, F.S.A. (in fourteen volumes): Vol. IX. 'Literary Curiosities'; Vol. X. 'Topography.' 'Essay on Language, and Other Papers,' by Rowland G. Hazard (new edition). 'Freedom of Mind in Willing; or, Every Being that wills a Creative First Cause,' by Rowland G. Hazard (new edition). 'Two Letters on Causation and Freedom in Willing,' addressed to John Stuart Mill, with other papers, by Rowland G. Hazard (new edition). 'Realistic Idealism in Philosophy Itself,' by Nathaniel Holmes (in two volumes, crown 8°, \$5). 'Young Sir Henry Vane,' by James K. Hosmer. 'Ancient Rome in the Light of Recent Discoveries,' by Rodolfo Lanciani, with two maps and about 100 illustrations. 'The Soul of the Far East,' by Percival Lowell. 'The Law of Equivalents, in its Relations to Political and Social Ethics,' by Edward Payson. 'Index to Periodical Literature' (first supplement, Jan. 1, 1882, to Jan. 1, 1887), by William Frederick Poole and William I. Fletcher, with the co-operation of the American Library Association. 'Books and Men,' by Agnes Repplier. 'The Riverside Natural History,' by a corps of forty-three writers, with full bibliography, over 2,200 woodcuts in the text, 168 full-page engravings, and 12 colored plates; in six volumes; sold only by subscription. 'Second Lessons in Arithmetic,' designed to follow Colburn's 'First Lessons,' by H. N. Wheeler. In preparation: 'Narrative and Critical History of America,' edited by Justin Winsor: Vol. I. 'America before Columbus'; Vol. VIII. 'The Later History of British and Spanish America.'

Lee & Shepard.

'Mexico—Picturesque, Political, Progressive,' by Mary E. Blake and Margaret E. Sullivan; 'Physical Development, or the Laws governing the Human System,' by Nathan Allen, M.D.; 'A Phy-

sician's Problems,' by Charles Elam; 'The Story of Evolution, the Development Theory,' by Joseph Y. and Fanny Bergen; 'Methods and Aids in Geography Teaching,' by Charles F. King; 'Primary Methods in Zoölogy Teaching for Teachers in Common Schools,' by Dr. W. P. Manton; 'Chips from Educational Workshops in Europe,' and 'Chips from a Teacher's Workshop, Educational Topics of the Day,' by L. R. Klemm.

J. B. Lippincott Company.

'A Popular History of Music, Musical Instruments, Ballet, and Opera, from St. Ambrose to Mozart,' by James E. Matthew. 'Highways and Horses,' by Athol Maudsley (fully illustrated). In the International Statesman Series, 'Lord Beaconsfield,' by T. E. Kebbel; 'Viscount Palmerston,' by Lloyd C. Sanders; and 'O'Connell,' by J. A. Hamilton. The following volumes are in a state of active preparation, and the date of their appearance will be duly announced: 'Prince Metternich,' by Col. G. B. Malleson, C.S.I.; 'Peel,' by F. C. Montague, fellow of Oriel College, Oxford; 'Lord Bolingbroke,' 'William Pitt,' 'Charles James Fox,' 'The Marquis Wellesley,' 'The Prince Consort,' 'Lord Dalhousie,' 'Earl Russell,' 'Lord Derby,' 'Prince Gortschakoff,' 'Gambetta,' and others. 'The Life of the Right Hon. W. E. Forster,' by T. Wemyss Reid, with portraits and other illustrations. 'Life of Henry M. Stanley,' by Rev. H. W. Little. 'Animal Life of the Sea-Shore,' by Angelo Heilprin. 'With the Camel Corps up the Nile,' by Count Gleichen. 'Practical Microscopy,' by George E. Davis (a new edition). 'An Elementary Treatise on Human Anatomy,' by Joseph Leidy. 'A Cyclopædia of Diseases of Children, and their Treatment, Medical and Surgical,' edited by J. M. Keating, M.D. 'Intracranial Tumors,' by Byron Bramwell, M.D. 'The Chemical Analysis of Iron,' by Andrew Alexander Blair. 'Young Folks' Science in Story,' containing young folks' whys and wherefores, young folks' ideas, and young folks' queries (new edition). 'Animals and Birds, their Homes and their Habits,' a book for young people, by Uncle Warren (new edition). 'Half-Hours with American History,' selected and arranged by Charles Morris.

Macmillan & Co.

'Natural Inheritance,' by Francis Galton, with illustrations and diagrams; 'Electricity and Magnetism, a Popular Treatise,' by Amedee Guillemin, translated and edited, with additions and notes, by Prof. Silvanus P. Thompson, with numerous illustrations; 'A Practical Text-Book of Pathology,' by D. J. Hamilton; 'Popular Lectures and Addresses on Various Subjects in Physical Science,' by Sir William Thomson, D.C.L., with illustrations; 'Scientific Papers by the Late Professor Andrews,' edited by Prof. P. G. Tait, M.A., and Prof. Crum Brown, F.R.S.; 'Alphabet of Economic Science,' by Philip H. Wicksteed, M.A.; 'A Text-Book of Physiology,' by Michael Foster, M.D., F.R.S., with illustrations, a new and thoroughly revised edition, in three parts, 8°. (Part I. immediately); 'Absolute Measurements in Electricity and Magnetism,' by Andrew Gray, M.A., second edition, in two volumes (Vol. I. immediately); 'Examples in Physics,' by D. E. Jones; 'A Text-Book of Practical Metallurgy and Assaying,' by Arthur H. Hiorns, with illustrations; 'A Text-Book on Elementary Theoretical Metallurgy,' by A. H. Hiorns, with illustrations; 'Experimental Mechanics, a Course of Lectures delivered at the Royal College of Science for Ireland,' by Sir R. S. Ball, M.A., new edition; 'Questions and Examples in Experimental Physics,' by B. Loewy; 'Statistics for Schools,' by John Greaves, M.A.; 'Geometrical Conics, an Elementary Treatise, drawn up in Accordance with the Syllabus issued by the Society for the Improvement of Geometrical Teaching,' by A. Cockshott, M.A.; 'Elementary Synthetic Geometry of the Point, Line and Circle in the Plane,' by N. F. Dupuis, M.A., F.R.S.C.; 'Examples for Practice in the Use of Seven-Figure Logarithms,' by Joseph Wolstenholme, D.Sc., new edition, greatly enlarged; 'Practical Logarithms and Trigonometry,' by J. H. Palmer; 'A Treatise on Trigonometry,' by W. E. Johnson; 'The History of Mathematics,' by W. W. Rouse Ball; 'Elementary Statics,' by the Rev. J. B. Lock, M.A.; 'Photographic Chemistry,' by Raphael Meldola, F.R.S. (Nature Series); 'A Key to Mr. Lock's "Arithmetic for Schools,"' by the Rev. R. G. Watson, M.A.; 'A Key to Mr. Lock's "Elementary Trigonometry,"' by Henry Carr;

'A Key to Mr. Charles Smith's "Conic Sections,"' by Charles Smith, M.A.; 'Macmillan's Geographical Series,' edited by Archibald Geikie, F.R.S.; 'Maps and Map-Making,' by Alfred Hughes, M.A.; 'An Elementary General Geography,' by Hugh Robert Mill, D.Sc.; and 'A Geography of Europe,' by James Sime, M.A.

G. P. Putnam's Sons.

'American Literature, 1607-1885,' Part II. (completing the work) 'American Poetry and Fiction,' by Charles F. Richardson; a second impression of Part I. 'The Development of American Thought,' 'Popular Tales from the Norse,' by Sir George Webbe Dasent, D.C.L., etc., with an introductory essay on the origin and diffusion of popular tales (third edition). 'The Best Books: A Reader's Guide to the Choice of the Best Available Books in all Departments of Literature down to 1887,' rewritten and much enlarged, compiled by William Swan Sonnenschein. 'A History of Greece,' by Evelyn Abbott, M.A., LL.D., fellow of Balliol College, Oxford (to be complete in three parts). 'Omitted Chapters of History disclosed in the Life and Papers of Edmund Randolph,' by Moncure D. Conway. 'Governor Chamberlain's Administration in South Carolina,' a chapter of reconstruction in the Southern States, by Walter Allen. 'American Orations,' edited by Alexander Johnston. 'The Life and Letters of Dr. S. Wells Williams,' author of 'The Middle Kingdom,' and many years missionary in China, by Frederick Wells Williams. 'Some Chapters on Judaism and the Science of Religion,' by Rabbi Louis Grossman. 'Emanuel Swedenborg,' an essay, by John Bigelow. 'Proverbs and Phrases of All Ages,' by Robert Christy. 'A Sketch of the Germanic Constitution, from the Early Times to the Dissolution of the Empire,' by Samuel Epes Turner. In the Series of the Great Cities of the Republic, II. 'The Story of Boston,' by Arthur Gilman. In the Story of the Nations Series, XIX. 'The Story of Turkey,' by Stanley Lane-Poole, assisted by E. J. W. Gibb and Arthur Gilman; XX. 'The Story of Media, Babylon, and Persia, including a Study of the Zendavesta or Religion of Zoroaster, from the Fall of Nineveh to the Persian War,' a continuation of 'The Story of Assyria,' by Z. A. Ragozin; XXI. 'The Story of Mediæval France, from the Reign of Hugues Capet to the Beginning of the Sixteenth Century,' by Gustave Masson; 'The Story of Holland,' by James E. Thorold Rogers; 'The Story of Mexico,' by Susan Hale; 'The Story of Phœnicia,' by Prof. George Rawlinson. 'The Economic Interpretation of History,' being the substance of lectures delivered in Worcester College Hall, Oxford University (1887-88), by James E. Thorold Rogers. 'An Introduction to English Economic History and Theory,' by W. J. Ashley. 'Industrial Liberty, an Analysis of the Existing Conditions in the United States, with Special Reference to the Relations to the Public of Railways and Trusts,' by John Bonham. 'The Centennial of a Revolution,' an address by A. Revolutionist. 'In Castle and Cabin, Talks in Ireland in 1887,' by George Pellew. 'Business,' by James Platt, F.S.S. (authorized American edition, reprinted from the seventy-fifth English edition). In the Questions of the Day Series, XLIV. 'The Present Condition of Economic Science, and the Demand for a Radical Change in its Methods and Aims,' by Edward C. Lunt; XLVII. 'The Tariff History of the United States, 1789-1888,' by Prof. F. W. Taussig; XLVIII. 'The President's Message,' with annotations of facts and figures, by R. R. Bowker; XLIX. 'Essays on Practical Politics,' by Theodore Roosevelt; L. 'Friendly Letters to American Farmers and Others,' by J. S. Moore. 'Suggestive Therapeutics, a Study of the Nature and Use of Hypnotism,' by Prof. H. Bernheim, translated by Dr. Christian A. Herter. 'The Insane in Foreign Countries, Notes of an Examination of European Methods of Caring for the Insane,' by the Hon. William P. Letchworth. In the German Classics for American Students, 'Selections from the Prose Works of Lessing,' edited by Horatio S. White.

Roberts Brothers.

'Harvard Vespers'—addresses to Harvard students by the preachers to the university—contains addresses by Francis G. Peabody, Phillips Brooks, Edward Everett Hale, Alexander McKenzie, George A. Gordon, and Andrew P. Peabody. 'The Book of Christmas,' descriptive of the customs, ceremonies, traditions, superstitions, fun, feeling, and festivities of the Christmas season,

by Thomas K. Hervey, with all the original illustrations by R. Seymour. 'Franklin in France,' Part II. 'The Treaty of Peace and Franklin's Life till his Return,' from original documents, by Edward Everett Hale and Edward E. Hale, jun. 'The Study of Politics,' by Prof. W. P. Atkinson. 'New England Legends and Folklore, in Prose and Poetry,' with 100 effective character illustrations, from designs by Merrill and others (a new and cheaper edition). 'London of To-day, 1888,' by Charles E. Pascoe (fourth year of publication). 'The United States of Yesterday and of To-morrow,' by William Barrows, D.D. 'History of the People of Israel till the Time of King David,' by Ernest Renan, author of 'Life of Jesus.'

George Routledge & Sons.

'My Trip round the World,' by W. S. Caine, M.P. 'A Thousand Miles up the Nile,' by Miss Amelia B. Edwards (new edition). 'The Chess-Player's Manual,' by G. H. D. Gossip, with an American appendix by S. Lipschütz. 'The Handy Reference Atlas of the World,' by John Bartholomew, with 100 maps and plans, full geographical statistics, and a complete index. The sixty-three volumes forming Morley's Universal Library will be re-issued in twenty-one monthly volumes, grouped and arranged in historical order. The first of the series will be 'The Iliad of Homer, The Plays of Æschylus, The Plays of Sophocles,' 'The Plays of Euripides,' 'The Achæans, The Knights and the Birds of Aristophanes, Treatise on Government by Aristotle, The Æneid of Virgil,' 'Fables and Proverbs from the Sanskrit (the Hitopadesa), Mediæval Tales, The Chronicle of the Cid,' 'The Imitation of Christ by Thomas à Kempis, Life of Cardinal Wolsey by Cavendish, Ideal Commonwealths.' The first volume of the Carisbrooke Library—a development of Morley's Universal Library (completed with its sixty-third volume), upon the same plan and under the same editorship as that series—will appear in October, 1888; subsequent ones, every other month. 'Schiller's Complete Works,' translated by Lord Lytton, Samuel T. Coleridge, and others; edited by Prof. Henry Morley. 'The Prime Ministers of Queen Victoria: including Sketches of Lord Melbourne, Sir Robert Peel, Earl of Derby, Lord Aberdeen, Lord Palmerston, Lord Beaconsfield, Mr. Gladstone, and the Marquis of Salisbury,' by George B. Smith. 'Lemprière's Classical Dictionary: containing a Copious Account of all the Proper Names mentioned in Ancient Authors, with the Value of Coins, Weights, and Measures used among the Greeks and Romans, and a Chronological Table' (new edition). 'About Robins: Songs, Facts, and Legends,' by Lady Lindsay. 'Warrior Kings from Charlemagne to Frederick the Great,' by Lady Lamb (new edition). 'Harry Trevorton: a tale of Australian Life,' edited by Lady Broome. 'The Hunting of the "Hydra";' or, The Phantom Prahū, a tale of adventure in Southern Africa, by Henry Frith.

Ticknor & Co.

'The Letters of Felix Mendelssohn to Ignaz and Charlotte Moscheles,' translated and edited by Felix Moscheles; 'Four Years with the Army of the Potomac,' by Regis De Trobriand, brevet major-general, U. S. Vols., translated by George K. Dauchy, with maps, and a steel portrait of General De Trobriand; 'The Other Side of War, with the Army of the Potomac, Letters from Headquarters of the United States Sanitary Commission during the Virginia Campaign of 1862,' by Catharine Prescott Wormeley; 'A Short History of the Secession War,' by Rossiter Johnson, author of 'The History of the War of 1812-15,' etc., with maps and plans; 'Pen and Powder,' by Franc B. Wilkie of the *Chicago Times*; 'Western China,' a Journey to the Great Buddhist Centre of Mount Omei, by the Rev. Virgil C. Hart, B.D., fellow of the Royal Asiatic Society, with map and 12 full-page illustrations; 'Safe Building,' by Louis de Coppet Berg, Vol. I., illustrated; 'Ancient and Modern Light-Houses,' by Major D. P. Heap, fully illustrated.

Miscellaneous.

'The Life of Lord Stratford de Redcliffe,' by Mr. Stanley Lane-Poole, will shortly be published by Longmans, Green, & Co. (New York). It will give an inside view of that eternal Eastern question for which every English diplomatist must find an answer, as to the riddle of the Sphinx. Much of the matter in these volumes is autobiographical, and there are boyish recollections of

Sheridan, Byron, Fox, Pitt, Gustavus Adolphus, Wellington, and George Canning. At twenty-six our future Lord Stratford helped to found the *Quarterly Review*, and introduced Gifford to Murray. — Messrs. Fords, Howard, & Hulbert (New York) announce for publication 'The Democratic Party: its History and Influence' (new third edition, revised to date); and 'Tenants of an Old Farm,' an illustrated work on insect-life, by Dr. Henry C. McCook, hitherto sold at \$2.50, sold this season at \$1.50. — William R. Jenkins (New York) announces 'Paul Bercy's Works,' for the study of French by the natural method; 'La Langue Française'; 'La Langue Française' (seconde partie); 'Livre des Enfants,' *pour l'étude du Français*, a primer full of illustrations, which serve as object-lessons for the youngest children; 'Le Second Livre des Enfants' (just published), intended for children also. It is full of illustrations, and, like the first book, these form the basis upon which the text is arranged, rendering it attractive in every way to children who have mastered the first book. — The Burrows Brothers Company (Cleveland, O.) announces 'Christian Science, its Truths and Errors,' by the Rev. H. Melville Tenney; and 'The Pocket Gem Pronouncing Dictionary,' by Lilla M. Tenney, on a new plan. — The Century Company announces 'Ranch Life and the Hunting-Trail,' by Theodore Roosevelt. — 'Principles of the Economic Philosophy of Society, Government and Industry,' by Van Buren Denslow, LL.D., has just been published by Cassell & Co. This firm continues its 'National Library,' edited by Prof. Henry Morley, LL.D., a series of weekly volumes of reprints of standard works.

NOTES AND NEWS.

THE New York Academy of Science held its opening meeting Oct. 1. By the election of Professor Fairchild to the chair of natural history at the University of Rochester, the academy has lost one of its most active members, — a loss which will be felt for a long time to come. The publications of the academy have been pushed forward most energetically, and the active editor, Professor Martin, has succeeded in bringing them up to date, their value being thus greatly enhanced. Mr. George F. Kunz sent in an interesting paper on recent mineralogical discoveries, and several members reported on the results of journeys undertaken during last summer's vacation. Dr. H. Carrington Bolton made some interesting remarks on German and Austrian libraries which he had visited in pursuance of bibliographical studies, and dwelt on the defects of the systems of several of these libraries. On the other hand, he described the management of the library of Strassburg as worthy of the highest commendation. The arrangement is thoroughly systematical. Visitors are allowed the greatest possible facilities, and any citizen of Alsace Lorraine applying for books is entitled to have them sent to his house, whether he lives in Strassburg or in some other part of the province. Dr. Brinton gave a brief description of his studies in English collections and libraries, and noted a large collection from Bolivia which is said to contain an unexpectedly large number of species and genera unknown to science. After a brief discussion of the trap rocks of Pennsylvania and New York, Dr. F. Boas gave a sketch of the ethnological results of his journey to British Columbia, during which he visited most of the peoples of that province.

—The committee on publications and lectures, of the Massachusetts Society for promoting Good Citizenship, have issued a circular requesting the clergymen of Massachusetts to prepare and preach, and as far as possible publish, between now and the general election in November, at least one sermon on the duties and responsibilities of American citizenship.

—A study undertaken by W. von Bezold a number of years ago made it probable that thunder-storms have a period corresponding to that of the rotation of the sun. In his inquiry he had used the material collected at the meteorological stations of Bavaria. As, however, an influence of this kind seemed very improbable, he did not publish the results of his researches. Recently Hertz, Wiedemann, Arrhenius, and others have shown that by the influence of radiation the conductivity of the air is changed, and thus a period of the frequency of thunder-storms corresponding to that of the rotation of the sun does not appear improbable. For this reason Von Bezold has taken up his earlier researches, and carefully

scrutinized the observations of thunder-storms in Bavaria and Wurtemberg from 1880 to 1887. The *Naturwissenschaftliche Rundschau* reports on a paper on this subject read by Von Bezold before the Berlin Academy of Science. He finds that a period exists; and the proofs he gives are so convincing, that he feels encouraged to pursue this subject more fully.

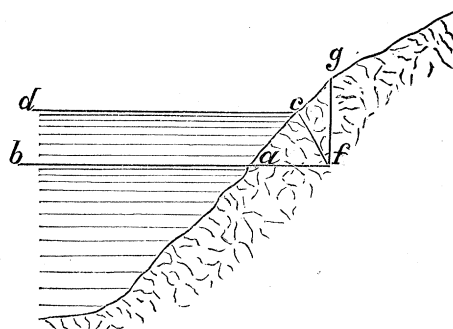
LETTERS TO THE EDITOR.

Floods in the Lower Mississippi.

MAJOR POWELL, in his letter to the New Orleans Chamber of Commerce, suggests as a means of regulating the lower Mississippi the erection of large basins at the head waters of its tributaries in the Rocky Mountains. "The cutting-power of a stream," he says, "increases rapidly with an increase of sedimentary load."

If this be correct, then there must be an increase in either quantity or in velocity by the increasing sedimentary load, those two constituting the working energy of the water, which is: quantity times half the square of the velocity. As to the quantity, there is, in fact, an increase. Draw a cubic foot of water from the river and let it rest. The sediment will settle to the bottom, and is therefore heavier than the amount of water it displaces, as otherwise it would remain in suspension. For this reason a cubic foot of water mixed with sediment is heavier than a cubic foot of clear water.

But how is it that this same sediment was in suspension in the same water when it was in the river? Because the water there had velocity. Velocity has an equivalent in 'head' or water weight



and just as much of this head will be used to carry along the surplus weight of the sediment as is equivalent to this surplus. Diminished head is diminished velocity. Clear water, therefore, will flow quicker (that is, have more working energy) than water mixed with sediment, which will readily be seen when we imagine such an amount of sediment to be added to the water that it would attain the consistency of sirup.

If, now, as Major Powell claims, the product of the two is increased by the increase of sediment, then the gain in weight of the quantity ought to be greater than the loss in velocity. This is not likely, for the reason that the velocity in that product is squared, and every loss in it, therefore, is squared too. It is furthermore not likely, because every gain in weight creates an additional loss in head, part of the latter being used to crush and pulverize the increase of sediment from heavy bowlders in the mountains into fine sand at the mouth of the river. There is only one grand total of power corresponding to a certain head, and every deduction from it is a loss which cannot be made up for again.

The indisputable fact that rivers choked by sediment do more lateral cutting than cleaned rivers, therefore, does not seem to be exactly expressed by attributing this fact to an increase in cutting-power of the water through sediment. If it is, Major Powell should prove it.

Again the letter reads, "The waters of the Missouri come loaded with materials which go on cutting and grinding with constantly increasing energy in their journey to the sea, choking the channel and cutting away the land." I should like to see this sentence more fully explained, as I fail to understand its full meaning.

As a matter of fact, there are other causes besides the action of sediment which increase the amount of river-sediment by bank-