

Professor Drown. It is much to be desired that extended and accurate determinations of normal chlorine should be made in all parts of the country. The importance to the water-analyst of such knowledge has been clearly demonstrated by Professor Drown, and there seems no reason why boards of health should fail to take advantage of so useful a key to the purity of a water. Regarding the disagreeable odors and tastes which often arise in waters Dr. Smith coincides with Professor Drown in concluding that these phenomena are rarely due to putrefactive change, but are "the specific odors of certain organisms."

The microscopical examinations were conducted under the charge of Dr. Williston, who used in his work the method devised by Professor Sedgwick, modifying it, however, in more or less important details. Valuable facts are here presented concerning the occurrence and relative abundance of the different groups of small aquatic organisms. A very interesting description is given of the trouble caused in the Meriden reservoir by the Volvox-like Uroglena. An epidemic of Uroglena has since broken out in several Massachusetts water-supplies, and new light upon the history of this obscure and troublesome organism may soon be hoped for. "In conclusion, it may be interesting to observe that on the average about seven thousand plants and animals, aside from the bacteria, are swallowed with every glassful of Connecticut reservoir water that is drunk!"

Dr. Lee reports upon the microscopical examination for 1890-91 and also upon the bacteriological examination for the two years covered by the report. The bacterial examination of the reservoir waters reveals some interesting facts. "The periods of greatest number [of bacteria] were principally during the fall months, while the smaller numbers were largely during the summer months." There is a decrease in the numbers in both February and March, the months of melting snow. It is evident that extended and systematic bacterial analyses of this character are still greatly needed, and it is to be hoped not only that Connecticut will enlarge this branch of the work, but that the Massa-

chusetts authorities will find it possible to make an early beginning in this same field.

The specific bacteria commonly found in Connecticut waters were studied by Dr. Charles J. Foote, who describes in this report sixteen forms. The species are not named, and the author says "No attempt at identification has . . . been made, since the data in most cases seemed insufficient to warrant it." This, we think, is a fact to be regretted. The species "XXI," for example, might perhaps have turned out to be *Bacillus janthinus* if a few more facts regarding it had been obtained. Attempts to identify, however unsatisfactory in themselves, lead to the accumulation of new data and result in more adequate descriptions. The growth of the different species in gelatin is described with more than usual discrimination, and with the use of several apt comparisons.

A valuable study of the Connecticut River by Dr. Smith concludes the report.

The Hygienic Treatment of Consumption. By M. L. HOLBROOK, M.D. New York, M. L. Holbrook & Co.

By far the larger part of this book is devoted to the discussion of the prevention and treatment of consumption in its earlier stages. Under this head are given the author's views upon suitable exercises for persons of consumptive tendencies, upon clothing, climate, baths, and other familiar topics. These subjects are in the main handled with common sense and with perhaps more than the usual freshness of illustration.

The author calls attention to the dangerous weakening of the constitution arising from an incessant course of "colds," and gives some sensible practical suggestions for individual hygiene. The connection of colds with indigestion is clearly recognized. "Overloading the stomach with indigestible food is a frequent cause of colds. It is far better to wait a little before eating if one is very tired, or to eat slowly and moderately, so as to give the stomach time to regain its power" (p. 44).

CALENDAR OF SOCIETIES.

Society of Natural History, Boston.

Nov. 2.—George L. Goodale, Certain Aspects of the Vegetation of New Zealand.

Philosophical Society, Washington.

Oct. 29—A. W. Harris, Agricultural Experiment Station Exhibit by the Department of Agriculture at the World's Fair; C. D. Walcott, Notes on the Lower Paleozoic Rocks Between the Susquehanna and Potomac Rivers; T. Russell, Relation of Rain-Fall to River Rise; W. Harkness, Flexure of Telescope Tubes.

Publications Received at Editor's Office.

- ACLAND, SIR HENRY W. The Inaugural Robert Boyle Lecture. Oxford, Henry Frowde. 12°. Paper. 45 p.
- ALLEN, HARRISON. On a New Sub-family of Phyllostome Bats. Washington, Government. 8°. Paper. 7 p.
- BAILEY, M. A. American Mental Arithmetic. New York, American Book Co. 16°. 160 p. 35 cts.
- BAKER & Co. Data Concerning Platinum, etc. Newark, Baker & Co. 11 p.
- DOUGHTY, FRANCIS F. Evidences of Man in the Drift. New York, Privately Printed. 8°. Paper. 18 p.
- HURST, J. T. Tables and Memoranda for Engineers. 11th ed. New York, Spon & Chamberlain. 182 p. 50 cts.
- JAMES, BUSHROD W. ALASKANA. Philadelphia, Porter & Coates. 12°. 386 p.
- LUBBOCK, SIR JOHN. The Beauties of Nature. New York, Macmillan & Co. 12°. 443 p. \$1.50.
- NADAILLAC, MARQUIS DE. Manners and Monuments of Prehistoric Peoples. Trans. by Nancy Bell. New York, G. P. Putnam's Sons. 8°. 424 p. ill. \$3.
- PEDDIE, WILLIAM. A Manual of Physics. New York, G. P. Putnam's Sons. 12°. 513 p. ill. \$2.50.
- SIMPSON, CHARLES T. Notes on the Unionidae of Florida and the Southeastern States. Washington, Government. 8°. Paper. 31 p. ill.
- TRUE, FREDERICK W. Annotated Catalogue of Mammals Collected by W. L. Abbott. Washington, Government. 8°. Paper. 35 p. ill.

Exchanges.

[Free of charge to all, if of satisfactory character. Address N. D. C. Hodges, 874 Broadway, New York.]

For Exchange—"The Birds of Kansas,"—Goss, for Gray's Anatomy, or Medical Dictionary. Must be in good condition. Address, J. H. SIMPSON, Buchtel College, Akron, Ohio.

For Sale or Exchange.—The subscriber would like to receive cash offers, or an offer in exchange for the earlier volumes of Poggendorf's *Annalen* and the later volumes of Silliman's *Journal*, upon the following list: Cheen—*Manuel de Conchyliologie*. 2 vols. Nearly 5,000 figures, some hand-colored. Paper. Paris, 1859. Edwards.—*Butterflies of N. A.* 2 vols. Plates hand-colored. Vol. I., half calf. Vol. II. in parts. Leyman, Agassiz, Hagen.—*Ills. Cat. Mus. Comp. Zool. at Harvard*. No. I. Ophiuridae. No. II. Acalephae. No. III. Astacidae. All bound in one volume. American Naturalist. Vols. I.-VII. Cloth. Silliman's *Am. Jour. of Science and Arts*. Third Series. Vols. I.-X. Cloth. Binney.—*Terrestrial Mollusks of N. A.* Colored plates. 4 vols. Stretch.—*Zygaenidae and Bombycidae of N. A.* Colored plates. Also a considerable library of monographs, reports, and scientific books, and a large number of duplicates of fossils, minerals and shells. E. A. STRONG, Ypsilanti, Mich., Sept., 1892.

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The American Geologist for 1892.

Edited by PROF. S. CALVIN, University of Iowa; DR. E. W. CLAYPOLE, Buchtel College; JOHN EVERMAN, Lafayette College; DR. PERSIFOR FRAZER, Penn. Hort. Soc.; PROF. F. W. CRAGIN, Colorado College; PROF. ROBT. T. HILL, U. S. Irrigation Survey; DR. ANDREW C. LAWSON, University of California; R. D. SALISBURY, University of Wisconsin; JOSEPH B. TYRRELL, Geol. Sur. of Canada; E. O. ULRICH, Minnesota Geological Survey; PROF. I. C. WHITE, University of West Virginia; PROF. N. H. WINCHELL, University of Minnesota. Now in its IXth volume. \$3.50 per year. Sample copies, 20 cents. Address

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We question if every one would regard rowing in quite as favorable light as does our author. Paddling in a canoe, which is in many respects a much superior exercise, is unmentioned. Lawn-tennis, also, which is one of the best tools of recreative hygiene, does not find a place in our author's discussion. Horse-back riding gets its full due as an admirable form of combined diversion and exercise. Throughout this portion of the book the value of good digestion as an aid to good nutrition is justly insisted upon; and exercise is conservatively regarded as simply a means to the welfare of the whole organism and not as an end in itself.

It seems to us that the author does not emphasize as much as is desirable the means of prevention advocated by many professional bacteriologists. The destruction of tuberculous sputum, if any sort of concerted action can be obtained, will go far towards diminishing the chances of infection. The herding together of the consumptives at "health resorts," and the journeys thither in cars infected by their tuberculous predecessors are raising many serious problems. It will seem to many readers that this side of our author's subject receives inadequate attention.

Physical Education in the Public Schools. By R. ANNA MORRIS. New York, American Book Company.

THIS little manual, designed for the use of teachers in the public schools, is well worth reading by all those who have anything to do with the training of children. It contains a simple yet complete course of instruction in school gymnastics, including a brief description of the Delsartian principles of elocution and expression. The author has not confined herself to any one system of calisthenics, but has selected and adapted the movements of several well-known systems. The exercises have been arranged to cover a period of time included by the kindergarten and succeeding grades through the high-school, and consist of a regular progression of movements.

The principal idea is that of training and not straining the

body. Many of the exercises may be taken between the rows of desks, or in the front of the school-room, without the aid of other apparatus than wands, rings, dumb-bells, and clubs. Especial attention is paid to the discussion of the best methods for inducing the correct breathing and carriage of the pupils. The high importance of good ventilation of the school-room is also emphasized. There is included a chapter on temperance-teaching in the public schools, which may give some useful hints.

Finally, a brief course of instruction in reading aloud is outlined, and the manual is completed with a few selections of marches and other music adapted to the accompaniment of the calisthenics. The book contains illustrations and explanatory figures throughout.

AMONG THE PUBLISHERS.

MACMILLAN & Co. announce the issue of a collection of papers by the late Sir Daniel Wilson, entitled "The Lost Atlantis, and Other Ethnographic Studies." It contains essays on Trade and Commerce in the Stone Age, The Aesthetic Faculty in Aboriginal Races, Hybridity and Heredity, etc.

—In the same line as Miss Jordan's "College for Women," published in the last number of the *Atlantic Monthly*, there is in the November number an article by Samuel W. Dike, LL.D., entitled "Sociology in the Higher Education of Women." The author discusses the subject at length, and shows that now the problem is to put the education that young women are getting into its true relation to their future, and to do more to equip the girl for what may be called the great profession of being a woman in her social trinity of wife, mother, and member of society. The many suggestions for the carrying-out of this problem make this paper a valuable one. Among other articles in this number may be mentioned Theodore Bacon's "Some Breton Folk-Songs" and a timely political article, "The Two Programmes of 1892."

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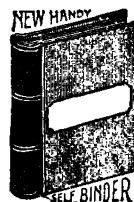
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