

season is diminished in proportion, as, of course, no new buds can be formed.

This late blooming is not at all uncommon, although I do not remember having noticed any as early as September. One season in the first week of November the pear trees in the garden were quite white with blossoms, but unfortunately I cannot recall the year.

Dr. Mendelson may enjoy a very pretty bouquet in February or March by placing in water in a sunny window the fruit-bearing branches of pears, apples or cherries; in a short time they will develop their beautiful and fragrant blossoms.

F. J. THOMPSON.

New Brighton, Staten Island.

A CORRECTION.

Science is so generally exact in following copy that I must have left out one important word in a recent communication. I should have said that the *early* Iroquois had no council wampum. When the Dutch came they obtained it fast enough, but it is found on no earlier sites in their territory. The later ones have furnished it in abundance.

I wish to record the occurrence of the thick-billed guillemot in this part of New York. A young one was shot on the Seneca River, at Baldwinsville, Dec. 15, 1893. It has not been reported so far inland before. Two species of cormorant have been shot on Onondaga Lake, and I heard that a pelican was recently killed there, but have not seen it.

W. M. BEAUCHAMP.

Baldwinsville, N. Y., Dec. 28, 1893.

LATE-BLOOMING TREES.

TREES or shrubs if stripped of their foliage during the summer will put out new buds and new leaves and blossoms. It is a common saying with farmers that when a tree blossoms in the fall it is about to die, which is generally the case, as it mostly occurs on diseased trees. On such a tree the leaves will often turn yellow and fall off during a dry summer. The later rains will put a little new life into it, and it will often put forth buds and blossom. The same occurs if healthy trees are stripped of their foliage during the summer.

The phenomenon of "the late blossoming of trees," referred to by Dr. Walter Mendelson in *Science* of Dec. 15, 1893, was observed here. During the latter part of September and the first of October great numbers of fruit trees were in bloom, and on many green fruit set and grew; but they all occurred in the track of a severe hail storm which in August passed over a strip of country about half-a-mile in width, cutting the foliage completely from the trees. Possibly Brielle and Alpine, N. J., were in the track of that hail storm.

THOMAS S. STEVENS.

Trenton, N. J., Dec. 28, 1893.

AS TO FEIGNED DEATH IN SNAKES.

WHILE on a trip to the Bad Lands in northwest Nebraska and South Dakota in the summer of 1892, collections of rattlesnakes were made. Being much interested in the recent articles on "Feigned Death in Snakes," I have the following statement to make: Whenever a freshly captured rattlesnake was introduced in the box with the former captures it usually vented its rage on them by striking and biting. No ill effects whatever ensued. Also, when teased, the snakes would bite one another. We lost no rattlesnakes whatever on the trip. We often teased the snakes before capture, and in not one instance did they show any tendency to feign death.

H. H. EVERETT.

Lincoln, Neb., Dec. 27, 1893.

THE LEAST BITTERN.

LAST summer a wounded bittern, the smallest of them all, *Botaurus exilis*, came into the grounds of the New York State Fishery Commission, at this place, and as its wing was hanging down one of my men caught it and amputated the wing. It remained and fished in a swampy bit of land where the minnows are plenty, in a pool fed by tide water, and promises to winter there. Its habit of remaining motionless when I approach it slowly and in plain sight is interesting, perched on a stick, or standing in the mud with its neck drawn up close and bill pointed upward. I can go within two

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feet of it and walk all around it, and the bird will not betray a sign of life, even by winking. This I do several times a week, but, if I come on it suddenly, over the bank it will utter a cry and flop into the water and wade or swim off. I am getting fond of seeing it simulate an inanimate thing.

FRED MATHER.

Cold Spring Harbor, N. Y.

BOOK-REVIEWS.

Handbook of Public Health and Demography. By EDWARD F. WILLOUGHBY, M.D., Lond. London and New York, Macmillan & Co. 509 p., 1893. \$1.50.

THOUGH appearing for the first time under the present title, this is, in fact, a third edition, greatly enlarged and improved, of the "Principles of Hygiene," published in London, 1884 and 1888. To this latest edition several important chapters have been added, as, for instance, those on "Vital Statistics," "Sewage Disposal," "Unhealthy Trades," and "Sanitary Law," while some other matter entirely irrelevant to the subject in hand has been omitted. The author, as stated in his preface, has endeavored throughout so to combine scientific accuracy with the popular treatment of personal health and social problems as to render the work a clear and comprehensive manual of the principles and practice of public health, equally adapted to the purposes of the medical man, the student, the teacher and the general reader. Hygiene is treated under the general heads of "Health of the Man," "Health of the House," "Health of the City" and "Health of the People," with sub-divisions into sections on "Dietetics," "Clothing," "Exercise," "Air, Warmth and Light," "General Sanitary Arrangements," "Water Supply," "School Hygiene," "Preventable Diseases," etc. The remaining chapters include an admirable treatise on "Demography," in which many common errors, statistical and otherwise, are exposed; a chapter on "Meteorology," another on "Sanitary Law," and an

appendix of tables, etc. These various subjects are discussed so thoroughly and are so comprehensive that we are provided with a most excellent book of reference in all matters pertaining to hygiene.

Particularly noteworthy are the sections on "Dietetics" and those dealing with "House Drainage and Sanitation," and also that which discusses the neglected question of "School Hygiene." We say neglected, for even in the face of modern enlightenment on these subjects many, if not most, of our school buildings continue on the same general lines of the last generation, remodelled only so far as to gain a greater seating capacity. We do not refer to the "sanitary arrangements" of the plumber; the school building is always a favorite place for costly experiments in that direction, but rather to the heating, ventilating, school desks and seats, etc. One defect which is probably the last thought of in school building, and yet the surest in its evil effects, is that of school lighting, and in treating this all-important section the author has given us the benefit of such authorities as Professors Cohn and Förster, of Breslau, the eminent oculists. How important this subject is at once comes home to one when we remember the alarming increase of weak eyes among school children, the headaches, and the so often repeated complaint that "It hurts my eyes to look at the black-board." The chapter on "Dietetics" embraces a discussion of food stuffs, the classification and uses of food, the relative values of the common foods, their proper preparation and the adulterations which they may contain. It will be seen that the subject matter is most general, and embraces practically all that is of moment in sanitary matters, while, moreover, the arrangement and treatment are most admirably suited for convenient reference. Methods of hygienic chemical analysis are given in so far as is deemed necessary, and these sections will prove particularly valuable as an aid to the interpretation of results obtained through an expert chemist.

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Wants.

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OUR GREAT WEST.—\$2.50.

THE contents of the volume appeared serially in *Harper's Magazine* and *Harper's Weekly*, in which periodicals they attracted wide attention and favorable comment. Their importance fully justified their republication in a more permanent form. The book affords a more minute insight into the present condition of the West than can be found elsewhere. What it tells is the result of personal experience, fortified by information obtained from the best-informed and most reliable men in the localities under discussion, and set forth with admirable clearness and impartiality. It is a work to be read and pondered by those interested in the growth of the nation westward, and is of permanent standard value.—*Boston Gazette*.

STATESMEN.—\$2.00.

IN the preparation of this work Noah Brooks has aimed to present a series of character sketches of the eminent persons selected for portraiture. The object is to place before the present generation of Americans salient points in the careers of public men whose attainments in statesmanship were the result of their own individual exertions and force of character rather than of fortunate circumstances. Therefore these brief studies are not biographies. Mr. Brooks had the good fortune of personal acquaintance with most of the statesmen of the latter part of the period illustrated by his pen, and he considers it an advantage to his readers that they may thus receive from him some of the impressions which these conspicuous personages made upon the mental vision of those who heard and saw them while they were living examples of nobility of aim and success of achievement in American statesmanship.

MEN OF BUSINESS.—\$2.00.

W. O. STODDARD, who has just written a book published by the Scribners, on "Men of Business," tells

how the late Senator Stanford chopped his way to the law. "He had grown tall and strong," says Mr. Stoddard, "and was a capital hand in a hay-field, behind a plough, or with an axe in the timber; but how could this help him into his chosen profession? Nevertheless it was a feat of wood-chopping which raised him to the bar. When he was eighteen years of age his father purchased a tract of woodland; wished to clear it, but had not the means to do so. At the same time he was anxious to give his son a lift. He told Leand, therefore, that he could have all he could make from the timber, if he would leave the land clear of trees. Leand took the offer, for a new market had latterly been created for cord-wood. He had saved money enough to hire other choppers to help him, and he chopped for the law and his future career. Over 2,000 cords of wood were cut and sold to the Mohawk and Hudson River Railroad, and the net profit to the young contractor was \$2,600. It had been earned by severe toil, in cold and heat, and it stood for something more than dollars.—*Brooklyn Times*.

ORTHOMETRY.—\$2.00.

IN "Orthometry" Mr. R. F. Brewer has attempted a fuller treatment of the art of versification than is to be found in the popular treatises on that subject. While the preface shows a tendency to encourage verse-making, as unnecessary as it is undesirable, the work may be regarded as useful so far as it tends to cultivate an intelligent taste for good poetry. The rhyming dictionary at the end is a new feature, which will undoubtedly commend itself to those having a use for such aids. A specially interesting chapter is that on "Poetic Trifles," in which are included the various imitations of foreign verse in English. The discussion of the sonnet, too, though failing to bring out fully the spiritual nature of this difficult verse form, is more accurate than might be expected from the following sentence: "The form of the sonnet is of Italian origin, and came into use in the fifteenth [*sic*] century, towards the end of which its construction was perfected, and its utmost melodious sweetness attained in the verse of Petrarch and Dante." In the chapter on Alliteration there are several misleading statements, such as calling "Piers the Plowman" an "Old English" poem. In the bibliography one is surprised not to find Mr. F. B. Gummere's admirable "Handbook of Poetics," now in its third edition. In spite of these and other shortcomings, which can be readily corrected in a later issue, this work may be recommended as a satisfactory treatment of the mechanics of verse. A careful reading will improve the critical faculties.—*The Dial*.

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