

extent confirmed by M. Variot, who made a communication to the Société de Biologie on June 29. The patients chosen were debilitated men, aged fifty-four, fifty-six, and sixty-eight years respectively; and they were not informed of the nature of the treatment adopted. In all three cases the injections were followed by general nervous excitement, increased muscular power, and stimulation and regulation of digestion. M. Brown-Séquard said that M. Variot's observations disposed of the objection that the results he had observed in himself were due to "suggestion."

THE HEREDITY OF MYOPIA.—If the opinions of various ophthalmologists concerning the heredity of myopia were recorded here, the result would be an accumulation of vastly conflicting statements. This, however, would be largely due to lack of precision in investigating the subject. Lately Dr. Motais has carefully studied both the history and course of disease in 330 cases of myopia occurring in young people, and has arrived at the following conclusions, which are given in *The Medical News*: 1. The hereditary influence of myopia is manifest; 2. Out of 330 cases, the families of 219 were afflicted with the same disease (this shows a percentage of 65 per cent); 3. Hereditary myopia is distinguished from acquired myopia by (a) its more early appearance, (b) its more rapid development, (c) its greater severity, (d) its being more frequently followed by other complications (in short, hereditary myopia is far more serious than the acquired form of the disease); 4. Myopia is usually transmitted from the father to the daughter (86 per cent), and from the mother to the son (79 per cent); 5. The principal conditions which favor the transmission of hereditary myopia are, (a) use of the eyesight under bad hygienic surroundings (whether in school or at home), (b) Astigmatism (14 per cent), (c) Microsæmia (diminution of the orbital arch), 16 per cent; 6. The increase of the disease in hereditary cases was, in 6 per cent of the cases, found to be mainly the fault of those who had charge of the child's education. If care is not taken, acquired myopia will not restrict itself to the individual, but may also be transmitted unto their children.

ELECTRICAL NEWS.

WIRING OF SHIPS.—In order to avoid any disturbance of the magnetism of the compass of a vessel by the powerful currents used in electric lighting, Sir William Thomson recommends the exclusive employment of a two-wire system, the positive and negative mains being not far apart save in those cases, of rare occurrence at present, in which alternating currents are employed. A galvanometer of simple construction should also be made use of, for the purpose of ascertaining that the outgoing and return currents are of the same strength, or, in other words, that no leakage is occurring. Further, the magnetic leakage from the dynamo should not be sufficient to cause any appreciable disturbance of the compass-needle, which may be tested by observing this needle at the moments of starting and stopping the dynamo. In opposition to Sir William, says *Engineering*, Mr. Alexander Siemens, whose firm have fitted up a large number of vessels with the electric light, has not found any special precautions necessary, the single-wire system being employed in every case. As for the dynamo, he has never found any disturbance from this cause, provided that there was a distance of fifty feet between the dynamo and the binnacle.

BOOK-REVIEWS.

Autobiography of Friedrich Froebel. Tr. by EMILIE MICHAELIS and H. KEATLEY MOORE. Syracuse, C. W. Bardeen. 12°. \$1.50.

THE bulk of this volume consists of a letter from Froebel to the Duke of Meiningen, to which is added an extract from another of his letters, and several notes by the translators. The letter to the duke relates to the early part of the author's life, from his birth to the establishment of his school at Keilhau, where his system of education, since known as the kindergarten system, was first definitely carried into practice. The letter to the duke of Meiningen is unfinished, and whether it was ever delivered to the duke at all is uncertain. But, however that may be, the letter gives a full ac-

count, not only of the writer's early life and education, but also of his theory of education in general. His practical method, unfortunately, receives but scant mention; and, if we had no other sources of information than this book contains, we should be at a loss to know what his improvements in education really were. His theories however, and the pantheistic philosophy on which they are based, are expounded superabundantly, page after page being filled with what is little better than vapor. He is forever talking about the "unity and inner connection" of things, "the inner law and order embracing all things." Whenever he studied any subject, he always sought for this "inner connection," and he complains of Pestalozzi's school, which he visited, as lacking in inner harmony and unity. Precisely what he meant by these phrases it is sometimes difficult to ascertain; but they are repeated till the reader is weary of them. He had, as even his translators admit, an absurdly exaggerated sense of the importance of his educational methods. He seems to have thought that the wisdom of ages and the accumulated experience of mankind were worthless, and declared that he wanted "the exact opposite of what now serves as educational method and as teaching-system in general." Indeed, he seems to have thought that he was going to revolutionize the culture and life of humanity, whereas all he has accomplished is some slight improvements in the education of children. Of his ardent devotion and spirit of sacrifice for the good of others, this book bears abundant evidence. He was often in pecuniary difficulties, yet, amid them all, he steadfastly pursued his course after he had once learned his true vocation as an educator. It is to be regretted that the translators have not given a fuller account of Froebel's more elaborate experiments in teaching, to which he really owes his influence and fame, and which are scarcely touched upon in his autobiographical letter. As it is, we get from this book an interesting account of his early life, and of his theories and aspirations, but very little information as to the inception and introduction of those practical methods in which his real life-work consisted. However, we must be thankful to the translators for giving us the autobiography in English, and, as they themselves remark, wait till some adequate biography appears for the fuller information we desire.

AMONG THE PUBLISHERS.

"THE Life of Harriet Beecher Stowe," by her son, Rev. Charles E. Stowe, is now passing through the Riverside Press, and will be given to the public early in the autumn. It will be a book of peculiar personal and literary interest, and will appeal to a host of readers on both sides of the Atlantic. It is to be a handsome volume, embellished with fine portraits and other illustrations, and will be sold by Houghton, Mifflin, & Co. by subscriptions.

—Messrs. Ginn & Co. announce for publication in August "Myers's General History," by P. V. N. Myers, president of Belmont College. This book is based upon the author's "Ancient History" and "Mediaeval and Modern History," and is characterized by the same qualities as mark the earlier works. It is believed that the difficult task which the author set for himself, of compressing the fourteen hundred or more pages comprising the two text-books mentioned into a single volume of about seven hundred pages, has been accomplished without impairment either of the interest or of the easy flow of the narration. The greatest care has been taken to verify every statement, and to give the latest results of discovery and criticism. The book is provided with between twenty and thirty colored maps, besides nearly two hundred sketch-maps, woodcuts, and photogravures. The illustrations have been drawn from the most authentic sources, and nothing has been admitted save what is illustrative and truthful.

—Sampson Low & Co. have published a work entitled "Englishmen in the French Revolution," by Mr. J. G. Alger, which is based upon much personal research among unpublished documents both at the Record Office and in Paris. Besides incorporating two articles that originally appeared in the *Edinburgh Review*, dealing with the early days of the Revolution and the Terror, chapters are added about the prisoners of war, the opening of Paris by the peace of Amiens, and the subsequent imprisonment

of visitors in France by Napoleon. Attention has been given not only to spectators, deputations, and victims, but also to those writers who sympathized with the downfall of the *ancien régime*.

— Dr. Nansen, the Arctic explorer, has made arrangements with Longmans, Green, & Co. for the publication of an account of his recent Greenland expedition. The book will be ready early next spring, and will be illustrated with maps and plates.

— Kegan Paul, Trench, & Co. will shortly publish the first number of a new serial devoted to the reproduction of selected works of the foremost photographers of the day. It is proposed to issue quarterly a portfolio of four photogravure pictures from the negatives of "Sun Artists," such as will tend to advance photography in the estimation of the art-loving public, and obtain for it the position which it now claims. The first number of "Sun Artists" will consist of four studies by Mr. J. Gale, on imperial quarto paper, with letterpress.

— Funk & Wagnalls have just issued a practical little book, entitled "Emergency Notes," in which Dr. Glentworth R. Butler tells in a clear, easily understood way what to do in the emergencies that are ever arising in this world of multiplied diseases and accidents.

— A. C. Armstrong & Son have, by arrangements with Rev. C. H. Spurgeon and his English publisher, issued the first volume of his new work entitled "The Salt Cellars," being proverbs and quaint sayings, together with homely notes thereon. It is alphabetical in arrangement, and brings the proverbs down to the letter M.

— D. Appleton & Co. will publish immediately "Christianity and Agnosticism," a controversy consisting of the papers by Henry Wace, Professor Huxley, W. H. Mallock, the Bishop of Peterborough, and Mrs. Humphry Ward, which have been appearing in different periodicals, and which many persons desiring to get at the complete discussion will be glad to have in one volume.

— George O. Seilhamer, 112 North 12th Street, Philadelphia, has nearly ready the second volume of his "History of the American Theatre," treating of the period during the Revolution and after. The last volume, which is in preparation, will treat the subject in the "Last Years of the Eighteenth Century."

— Little, Brown, & Co. have in preparation "Myth and Folk-Lore of Ireland," by Jeremiah Curtin, an original and fresh contribution to the already rich store of the folk-lore of the "Emerald Isle," extracted by the author from Gaelic sources.

— Messrs. Ginn & Co. announce for publication about Oct. 1, "History of the Roman People," by Professor W. F. Allen of the University of Wisconsin. This will replace the second part of Myers's "Outlines of Ancient History." This sketch of Roman history will place especial emphasis upon two series of events, — first, the policy and process by which the Roman Dominion was secured and organized during the republic, its re-organization under the empire, and final disruption at the time of the German migrations; second, the social and economical causes of the failure of self-government among the Romans, and the working of the same forces under the empire (in this point of view, the history of religion among the Romans will be carefully traced).

— Hereafter the *American Journal of Psychology* will be published from Clark University, Worcester, instead of from Johns Hopkins University, Baltimore. Remittances and business communications should be addressed to the clerk of Clark University, Worcester, Mass., and scientific and editorial communications to G. Stanley Hall, editor, Clark University, Worcester, Mass.

— G. P. Putnam's Sons announce among their first autumn publications, "The Industrial Progress of the Nation, Consumption Limited, Production Unlimited," by Edward Atkinson, author of "The Distribution of Products," etc.; "A Race with the Sun," a sixteen-months' trip around the world, by Hon. Carter H. Harrison of Chicago, illustrated by many full-page plates; "The Modern Chess Instructor," by W. Steinitz; "Christian Theism, its Claims and Sanctions," by D. B. Purinton, LL.D., vice-president of West

Virginia University, and professor of metaphysics; "To the Lions," by Alfred Church; "A Woman's War Record, 1861-1865," by Mrs. Gen. Charles H. T. Collis; "Lectures on Russian Literature," by Ivan Panin; "The Practical Pocket Dictionary in Four Languages, — English, French, German, and Italian;" and "Tales from the Korea," collected and translated by Henry N. Allen, secretary of the Korean Legation. In the Story of the Nations Series they will publish "The Story of the Hansa Towns," by Helen Zimmern; and in the Knickerbocker Nuggets, "Sesame and Lilies," by John Ruskin; "The Autobiography of Benjamin Franklin;" "Tales by Heinrich Zschokke;" and "Great Words from Great Americans," the last comprising the Declaration of Independence, the Constitution of the United States, Washington's Inaugural Addresses, Lincoln's Inaugural Addresses, Lincoln's Gettysburg Address.

LETTERS TO THE EDITOR.

*. *Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

The editor will be glad to publish any queries consonant with the character of the journal.

Twenty copies of the number containing his communication will be furnished free to any correspondent on request.

A Circular Note to Working Entomologists.

MOSQUITOES and house-flies are perhaps the most numerous, widely distributed, and persistent of the creatures that attack the health and comfort of human beings. Of their attacks upon our comfort every one is aware. Scientific investigation favors the belief that tuberculosis and ophthalmia are carried from diseased persons to healthy ones by the house-fly, and German experimenters have shown that serious blood maladies may be transmitted by the mosquito.

Certainly, therefore, any suggestion, however remote, of a means of decreasing the numbers of or exterminating these pests, should be followed with all possible skill and patience.

I have observed dragon-flies gathering in scores around my camp in Minnesota to feed on the mosquitoes. I recently saw a dragon-fly that had devoured over thirty house-flies still voracious for more. Entomologists have observed the larvæ of the dragon-fly swallowing undeveloped mosquitoes in large numbers.

Now, may we not have in the active, voracious, harmless "mosquito-hawk," an agency for greatly diminishing the numbers of the smaller insects?

Professor Baird's success in producing millions of healthy fish in a few laboratory boxes and jars, the propagation of silkworms by scores of millions from eggs carried half around the world to Italy, the success of the plan for breeding foreign humble-bees in Australasia to fertilize the red clover, — these and many other similar facts seem to show that scientific methods have reached a stage where it is reasonable to hope that a plan may be devised whereby whole tribes of noxious insects may be exterminated by the artificial multiplication of their innoxious enemies.

Not being an entomologist, I have consulted with several distinguished students of that science as to the best means of reaching some practical result in the direction above indicated, and they agree with me that the following preliminary step may be usefully taken: —

For the purpose of drawing the attention of entomologists to the subject mentioned, I have placed in the hands of Morris K. Jesup, Esq., president of the American Museum of Natural History, New York City, \$200, to be paid by him in three prizes of \$150, \$30, and \$20, for the three best essays, based on original observations and experiments, on the destruction of mosquitoes and flies by other insects.

The following suggestions are made as to the direction in which the investigation should be carried and the essay formulated: 1. Observations and experiments upon various insects that destroy mosquitoes and house-flies, stating the method of and capacity of destruction; 2. Observations and experiments to determine the best dragon-flies to be artificially multiplied for the two above-named objects, — probably species of *Æschna*, *Libellula*, or *Di-*