

almost disabled him from intellectual work during a large part of his early manhood, and sometimes brought him to the verge of despair. Nevertheless, it was while suffering from this great affliction that he succeeded with some help from his sister in preparing his text-book on chemistry, which at once made him known to the public, and gave him the means of support. This treatise was, in Mr. Fiske's opinion, Youmans's germinal book, all his subsequent work being foreshadowed in it. Next came his career as a scientific lecturer, in which he was successful not only in a pecuniary way but also in increasing the popular interest in the physical sciences.

The rest of the book before us is devoted to those wider enterprises in which Youmans engaged, beginning with his first acquaintance with Herbert Spencer and his agency in securing the publication of Spencer's works in this country. This part of the book is enriched by a large amount of correspondence between the two men, which not only shows their business relations to each other and to their publishers, but reveals many interesting traits of character. There are also letters from Huxley, Tyndall and other scientists, besides many that passed between Youmans and the members of his family. A full account is also given of the establishment of the *Popular Science Monthly*, which, it seems, was successful from the start, and also of the International Scientific Series, which was not started without some difficulty, but which, as our readers well know, proved both scientifically and commercially successful in the end.

The book closes with a series of extracts from Youmans's writings, giving his views on education, on the relations between religion and science and on other subjects; so that readers have before them as full an

account of the life and work of the popular scientist as they are likely to need, and one that is worthy of its subject and of its author.

Elements of Chemistry, Descriptive and Qualitative, Briefer Course. By JAMES H. SHEPARD. Boston, D. C. Heath and Co. 1863, 240 p.

THE success of Shepard's Inorganic Chemistry, as exemplified by its use in over three hundred and fifty colleges and schools, and by the high words of praise which have already been accorded it, is sufficient warrant of Professor Shepard's understanding of the needs of a school text-book in chemistry. The present volume is prepared as a briefer course and is intended to meet the needs of secondary school instruction, particularly where chemistry as a study has been forced into a limited period. In addition to the elements of inorganic chemistry, the author has added to the completeness of the work by a chapter on organic chemistry, treating successfully in an elementary manner this rather difficult department. The book is clear, concise, and well adapted for young pupils. It is interesting to note that Professor Shepard's Inorganic Chemistry has been recommended by the Committee of Secondary School Studies, appointed at the meeting of the National Educational Association.

NOTES AND NEWS.

A CROWDED meeting of the members of the Victoria Institute and their friends took place recently at London, England, in the Theatre of the Society of

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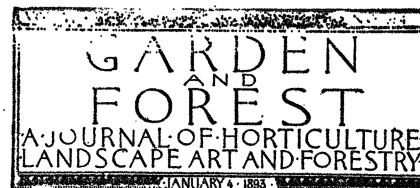
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Arts, to hear Dr. Prestwich, F.R.S., read a paper "On a Possible Cause for the Origin of the Tradition of the Flood," in which he "treated the subject from a purely scientific standpoint." The chair was taken by Sir George Stokes, Bart., F.R.S. On account of recent indisposition Dr. Prestwich was unable to travel up to London to be present, and had deputed Prof. Rupert Jones, F.R.S., to read the paper for him. The paper described at considerable length the various phenomena which came under the author's observation during long years of geological research throughout Europe and the coasts of the Mediterranean. He concluded by giving the reasons why he considered that these were "only explicable upon the hypothesis of a widespread and short submergence of continental dimensions, followed by early re-elevation, and this hypothesis satisfied all the important conditions of the problem." The age of man was held to be divided into Palæolithic and Neolithic, and he considered rightly so. He concluded by saying that thus there seemed cause for the origin of that widespread tradition of a flood. The paper was followed by reference to a communication from Sir W. Dawson, F.R.S., who welcomed the paper as confirming his conclusion, come to on geological and palæontological grounds, as to a physical break in the anthropic age. The evidence of this was afforded by the cave remains and from a vast quantity of other sources. The discussion which ensued was joined in by a considerable number, including Dr. Woodward, F.R.S., President of the Geological Society—who, in referring to Dr. Prestwich, regretted the forced absence of the Nestor of Geology, and expressed the hope that ere long he might be able to be present at another meeting of the Institute—Sir Henry Howorth, F.R.S., and Profs. T.

Rupert Jones, F.R.S., T. McK. Hughes, F.R.S., and E. Hull, F.R.S.

—The latest volume in Appleton's International Education Series is by Susan E. Blow, on "Symbolic Education," being a commentary on Froebel's "Mother's Songs and Games." Miss Blow begins with an attack on Rousseau, which is in the main well deserved and effective; but we cannot agree with the opinion expressed at the end of the chapter that "between the views of Rousseau and those of Froebel there are in my judgment no affinities whatsoever." For the fundamental principle of Froebel's method of teaching is that the child's mind follows a natural course of development to which education, if it is to be successful, must conform; and this principle he obviously borrowed of Rousseau. Nor can we agree with Miss Blow's extreme views about the fondness of children for symbolism and the effectiveness of symbolic teaching in inculcating moral truth and forming virtuous habits. The old symbolic religions were certainly not very successful in improving morality, and we believe that such improvement in children can be much more effectively promoted by direct teaching and the influence of example than by any form of symbolism. In treating of Froebel's practical devices as employed in the kindergarten, Miss Blow has many things to say, some explanatory and some critical, which kindergarten teachers will find interesting and doubtless profitable; but we have no space to enlarge upon them here. We should add that this book contains but a portion of what Miss Blow desires to say on educational subjects, and that she intends to issue another work at some future time to complete the exposition of her views.

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KARYOKINETIC FIGURES IN MAMMALIAN TISSUES.—Since the publication of my Preliminary Notice in *Science* for Dec. 1, 1893, many parties have written me asking for permanent preparations showing mitosis. To these parties I have sent slides, and I now offer to all who desire them slides showing mitotic figures in nuclei of embryo kitten. A good immersion objective is necessary to make out the figures satisfactorily. Send 60 cents in stamps. If the slide is not satisfactory, return it, and I will return the money. I do not care to exchange slides. Frank S. Aby, State University, Iowa City, Iowa.

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WE are engaged in a study of the geographical distribution and osteology of our North American Box Turtles or *Terrapene (Cistude)*. Specimens from Georgia, Tennessee, Alabama and the Dakotas are especially desired. Material from other localities would be welcomed. Would gladly pay expressage and return specimens if desirable. Specimens should be enclosed in a small box with but little paper (without alcohol) and addressed, W. E. Taylor, Walker Museum, University of Chicago, Chicago, Ill.

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