

drawing-together of the scattered particles, become heated, according to the well-known law for gases.

It will not do, perhaps, to be critical here, any more than one should be of a fairy-tale, for it would destroy the charm of the illusion; and there is no reason why this speculation is not as good as, or perhaps better than, any other cosmological theory.

The book, further, contains an additional part, giving a historical account of the evolution of cosmogonic doctrines; while, as a whole, it contains very full references to the literature of the subjects discussed.

HOVEY'S MIND-READING.

THE title of this book gives no adequate idea of its contents. It is a very full account, indeed in great part a reprint, of such of the Proceedings of the English Society for psychical research as refer to thought-transference, with a few pages of introductory and concluding matter. Why this fact should not be made apparent in the title, we fail to see, as it is distinctly stated in the body of the work, and is evident on every page. The title will naturally suggest to the reader an original discussion of the history or philosophy of the subject, which the book does not pretend to give him. None the less, however, must we thank the author for presenting to the American reader so complete an account of what is really important and interesting in the volumes issued by the society referred to. He has wisely omitted every thing not pertaining to the special subject of mind-reading and telepathy. The matter pertaining to this subject is presented so fully and so faithfully, that it leaves little for the reviewer to say of the general character of the contents of the book.

What are really original, are the author's own discussions in the first and last chapters. These discussions are, we regret to say, of a nature rather to cast discredit upon the whole subject, in the minds of the closest thinkers, than to throw light upon it. The author wholly mistakes the point at issue between the believers and unbelievers in psychic force. He joins the great army of hobby-riders by holding up to ridicule or disapprobation certain real or supposed men who in the past have opposed, on scientific grounds, views which afterward turned out to be correct. This is just what every man does who has an

engine to run without fuel, or a patent gun which is to destroy the largest armored ship. Mr. Hovey represents those who differ from him as men who pronounce untrue that which they cannot explain; and all the way through he imagines himself talking about people who deny his facts. Now, there are no such people worth talking about, and there is no question of fact at issue. The real state of the case is, that he has a theory for explaining admitted facts, and the only men he has to oppose are those who do not believe that he has established his theory. The admitted facts are certain phenomena known as mind-reading, and certain acts of copying drawings by a blind-folded person not in contact with any other person. The contested theory is that these facts prove the transfer of thought from mind to mind without the intervention of any physical agency. Those who refuse to accept this theory may or may not have a theory of their own: it is not at all incumbent on them to form one. They may say that they meet with phenomena which they cannot explain, every day of their lives, and that this is amongst them. The psychic societies were organized for the express purpose of investigating the subject, and finding out what theory, if any, was the correct one. If there were not some question as to how the phenomena should be explained, there would be little occasion for a psychical society.

TEXT-BOOKS IN CHEMISTRY AND MINERALOGY.

THE lecture-notes on general chemistry, by Dr. J. T. Stoddard, are, as the title indicates, merely an outline which should be the basis of a student's notes in a course of experimental lectures. A few general principles of the science are given briefly, and then follow statements of the properties, uses, history, method of preparation, and occurrence, of the commonest of the non-metals and their compounds. The appendix contains some tables and hints as to the methods of chemical calculation. From its briefness, the book can be of little value except as a suggestion of some elementary facts which the beginner should learn; and its use as an outline for the basis of a

Outlines of lecture-notes on general chemistry. Part i, The non-metals. By J. T. STODDARD. Northampton, Gazette publishing company, 1884. 84 p. 8°.

An outline of qualitative analysis for beginners. By J. T. STODDARD. Northampton, Gazette printing company, 1883. 4+54 p. 8°.

Systematic mineral record, with a synopsis of terms and chemical reactions used in describing minerals. By E. M. SHEPARD. New York, Barnes, 1884. 26 p. 8°.

Mind-reading and beyond. By WILLIAM A. HOVEY. Boston, Lee & Shepard, 1885.

student's notes will be confined to institutions where lectures on chemistry are not extensive. The book, describing only a few of the commoner and well-known compounds, is for the most part accurate. Dr. Stoddard has divided the elements into metals and non-metals, according to their periodic functions, placing bismuth, tin, antimony, and arsenic among the latter. We think it simpler and less confusing to the student if only the elements which have no basic properties are included among the non-metals. According to Dr. Stoddard's division, we see no reason why lead should not be classed as a non-metal.

The general arrangement of the qualitative analysis, by the same author, differs but little from that of other manuals. There is a close resemblance to the form of the 'lecture-notes' on the same subject by Prof. Henry B. Hill; the difference, however, in point of clearness and conciseness, not being in favor of the 'outline.' A small manual of qualitative analysis should be of such arrangement that it may be used on the laboratory-desk; and the method of regular analysis should be given in a continuous form. The methods described for the basic analysis are not always those which we have found to give the best results in the average student's hands; and the reactions given for the detection of the acids are decidedly meagre. We see nothing in the book that is new, or of any advantage over the manuals of qualitative analysis now in use.

The systematic mineral record, by Prof. E. M. Shepard, is intended to accompany any text-book of mineralogy, and will be of great help to the student in the systematic examination of minerals. Its chief feature is the extremely clear and minute explanation of the various physical and optical characteristics which enable one to determine the nature of the specimen; and the definitions are illustrated by examples of well-marked types.

NOTES AND NEWS.

DR. BENJAMIN APTHORP GOULD is to return to this country very soon from South America, where he has recently completed the observations upon which he has been engaged for so long a time at the observatory of Cordoba. His fellow-citizens of Boston propose to give him a reception and a dinner on his return.

—The British steamship *Venetian*, Capt. Traut, reports that on March 22, at seven P.M., in 43° north, 51° west, the sea was very much agitated, and breaking in all directions; that this condition lasted half an hour, and could not have been caused by the

changes in the wind. It had the appearance of a very heavy tide race.

—A number of electrical storms are reported by vessels in the North Atlantic from March 9 to 13, and at various points off the coast from Cape Hatteras to Cape Cod. St. Elmo's fire was seen in most of the cases, and many of the storms were accompanied by heavy thundering and lightning.

—The Lyceum of natural history of Williams college, Williamstown, Mass., the oldest natural-history society but one connected with any college in the country, will celebrate its fiftieth anniversary on the 24th of this month, at which a former member, Dr. W. K. Brooks of the class of 1870, now associate of Johns Hopkins university, will deliver an address. The lyceum proposes to take advantage of the occasion to raise funds to enable it to undertake expeditions to some spot, similar to those which it has undertaken in former years to Labrador, Florida, etc.

—The first number of the *American journal of archaeology* reflects much credit upon the editorial management, and warrants the expectation that it will supply a greatly needed want to the students of archeological science in all its numerous branches. For this reason we regret the more, that, in the initial number of an American journal, the topic of American archeology should be conspicuous by its absence. This, we understand, has not arisen from neglect upon the part of the editors; and arrangements have already been made to remedy it. The original articles are not numerous, but all are of undoubted merit and interest. Professor Norton revives the memory of the earliest American classical archeologist, Mr. J. J. Middleton, of the well-known South-Carolina family of that name. He was the companion of Dodwell in his studies of the Pelasgic remains in Italy, but preceded him by six years in publication. Some of his drawings were reproduced in the well-known posthumous publication of Dodwell, but no credit was given to the American scholar. Mr. Waldstein contributes the substance of an important note to his forthcoming 'Essays on the art of Phidias,' correcting the misconception as to the artistic significance of the peplos group on the eastern frieze of the Parthenon. The longest paper is by Prof. Aug. C. Merriam, a study of inscriptions found upon a collection of sepulchral vases from Alexandria, now in New York. It is most creditable to American scholarship, and a decided addition to knowledge. The managing editor, Dr. A. L. Frothingham, jun., begins a series of articles on the relative excellence of Italian and French sculpture during the thirteenth century, in a very entertaining fashion; and Mr. Marsh gives a lucid summary of a remarkable essay by Dörpfeld, which has shed a flood of light upon the origins of Doric architecture, and its relations to earlier crude brick construction. More than half the number is devoted to book-notices, summaries of the contents of the more important archeological periodicals of Europe, and news items about discoveries, and the