

mengeschichte.—Diestel on the Moabite Inscription. [A survey of recent discussions, with remarks on the striking analogy between the cultus of Chemosh and the religion of Jehovah in its lower forms.]—Herrlinger on the Theology of Melancthon, II. [Draws out the distinctive characteristics of Mel.'s doctrine of the Eucharist; *e.g.* he did not, like Luther, believe in the ubiquity of Christ's body.]—Fleiderer's *Wesen und Geschichte der Religion*, rev. by Besser. [Laudatory.]—Among the small-print notices, see Diestel's, of a scholarly treatise on Obadiah by Seydel; and Möller's, of Kienlen's lucid and concise *Commentaire sur l'Apocalypse*.

New Publications.

- ALABASTER, H. *The Wheel of the Law; or, Three Phases of Buddhism.* Illustrated from Siamese sources by the Speculations of a Siamese philosopher. A Buddhist Gospel; or, Life of Buddha. And an account of a Visit to the Phra Bat, or Holy Footprint of Siam; with notes, and a preface on Buddhism. Trübner.
- BENDER, W. *Der Wunderbegriff des Neuen Testaments.* Eine historisch-dogmat. Untersuchung. Frankfurt a. M.: Heyder u. Zimmer.
- BIBLE, THE HOLY, according to the Auth. Vers., with an explanatory and critical Commentary, and a Revision of the Translation, by Bishops and other Clergy of the Anglican Church. Edited by F. C. Cook, M.A. Vol. I. in two parts: the Pentateuch. Murray.
- BIBLIA SACRA. *Graecus codex Vaticanus . . . collatis studiis C. Vercellone . . . et Jos. Cozza . . . editus.* Car. Vercellonem excepit Cajetanus . . . Tom. II. Romæ: 1870.
- KINKEL, G. *Die Ueberlieferung der Paraphrase des Evang. Johannis von Nonnos.* Erstes Heft: Bericht üb. den Cod. Florentinus u. den Cod. Venetus. Zürich: Herzog.
- LUZZATTO, S. D. *Il Pentateuco volgarizzato (col testo a fronte) e commentato, con introd. critica ed ermeneutica.* Opera postuma. Vol. I.: *Genesi.* Padova.
- M'CAUL, J. B. *The Epistle to the Hebrews, with Commentary and Illustrations.*
- WERNER, A. *Herder als Theologe.* Berlin: Henschel.

Philosophy and Science.

The Politics of Aristotle. [*Die Staatslehre des Aristoteles.* Von W. Oncken. Erste Hälfte.] Leipzig: 1870.

THIS work deserves respectful notice from those who are interested in the political thought of ancient Greece. Its author is already known by a series of essays on leading Athenian statesmen, in which, while accepting for the most part the conclusions of Grote, he leaves on each subject the mark of his own original research and independent judgment.

Of the present treatise on the *Politics* of Aristotle, the first part deals with the literary history of the work, and with the relations of its author to the political thought and action of his times; the second will attempt to distinguish the peculiar and modern elements of the work from the common stock of Greek associations [or separate the two currents of Aristotelian thought referred to in a well-known passage quoted from Wilhelm von Humboldt]. The early chapters treat perhaps with unnecessary fulness subjects adequately discussed already in more special works; but on most points the author has something of interest to add, if we except a short account of Aristotle's logical method, the authorities for which are obviously taken from G. H. Lewes; and a survey of the questions connected with the order of the books of the *Politics*, which adds little to the exhaustive discussions of Hildenbrand and Bendixen.

But the comparison of the literary style of Aristotle with the rules furnished in his *Rhetoric* presents forcibly an old conclusion, and the summary of Bernays' arguments on the lost dialogues prepares the way for some remarks on a treatise of *Aristotle on Monarchy*, and on the attitude of its writer towards the Macedonian rule, which will probably be developed in the second part.

Certainly fresh arguments seemed needed to justify the

statement that Aristotle was "a zealous partisan of the Hellenizing mission of the ruling dynasty," or that he "looked upon the contemporary state of Greece with the more satisfaction as it ripened for the growth of a national unity under the supremacy of Macedonia" (p. 19). In later pages he characterizes clearly the different classes of political malcontents at Athens, and the peculiarity of Aristotle's position as an alien, estranged from public life, with little sympathy for the hopes and fears of the statesmen of his day, with scant respect alike for the ambition of reformers and the prejudices of a narrow conservatism. These points are brought out more fully in the elaborate chapters devoted to criticism of Plato's *Republic* and the Spartan constitution. In the former, justice is done to Plato by paying more regard than is usual to some of the dominant tendencies of Greek society; in the latter, the distinctive features of the Spartan system are ably treated, and the view of Grote, that the division of property attributed to Lycurgus was a romantic afterthought of a later age, is defended with spirit against Schömann and others.

[There is weight in the author's remarks on the extent to which the importance of capital, other than land, is ignored by Aristotle as well as Plato, at the very time when it had become a power of the first class (p. 183); on the probability that the greater freedom enjoyed by the Helots accounted for the constant danger from the servile population which threatened Sparta alone of Greek states (p. 260); and on the want of self-restraint among the Spartan women, as a natural consequence of the tyranny of state discipline and public life over the other sex.]

The writer's style is clear and vigorous, relieved at times by epigrammatic points, and by historical analogies very tersely presented, which have not indeed escaped hostile criticism in Germany as presenting ancient facts and ideas in too modern a dress, but in regard to which he may fairly plead the defence urged in like case by the veteran and conservative Schömann, that the charge is levelled frequently against historical views for which the critic has either a lack of discernment or sympathy. Thus the admirers of Sparta, such as O. Müller, he terms "Epigonen unserer Romantik" (p. 285); they write in the spirit of ancient partisans, and reproduce "die empfindsame Verherrlichung der fossilen Zustände einer angeblich 'guten alten Zeit'" (p. 21). The rule of the Ephors was a "Schreckensregiment gemildert durch Bestechung" (p. 281). He speaks of the outward resemblances between certain philosophers and monks: "die Grenzlinie zwischen den *Tonnenheiligen der Heiden* und den *Säulenheiligen der Christen*, zwischen dem Cynismus griechischer Philosophen und der Weltverachtung christlicher Büsser, ist oft kaum mehr festzuhalten" (p. 153); of the aliens in the Greek cities content to ply their trade, "ohne die Lasten des Bürgerthums, *gleich den Juden des Mittelalters*" (p. 150); of the uses of the philosophic advisers at the petty courts of the later Greek tyrants, "wie es den *italienischen Kleinfürsten* des 14/15. Jahrhunderts die Humanisten gewesen sind" (p. 156). Such historical analogies are frequently indicated, and add much to the force and liveliness of the style.

W. W. CAPES.

Notes of a Naturalist in the Nile Valley and Malta. A Narrative of Exploration and Research in connection with the Natural History, Geology, and Archaeology of the Lower Nile and Maltese Islands. By Andrew Leith Adams, M.B., author of *Wanderings of a Naturalist in India.* Edinburgh: Edmonston and Douglas, 1870.

MR. ADAMS is so enthusiastic a naturalist, and has done such excellent work among the ossiferous caverns of Malta, that we are somewhat disappointed to find his valuable materials

presented to us in a form so much like that in which they must have existed in his original note-books. The result is, that while the volume will be an invaluable handbook to every naturalist or archaeologist visiting Malta, it will not prove very attractive to the general reader. As a guide to the natural history and pre-historic archaeology of the Maltese islands, it leaves little to be desired. The geology of the islands is fully described, and is illustrated by an excellent coloured map. The best localities for fossils are indicated, and there is a full account of the caverns and superficial deposits which yielded to Captain Spratt and the author those wonderful relics of a by-gone age—the pigmy elephants, the hippopotamus, the great extinct swan and fresh-water turtle, and the great dormouse. This assemblage of animals points unmistakably to the connection of what is now Malta with Africa, and indicates the existence of great rivers, marshy plains, and a luxuriant vegetation where there is now only bare rock, stunted shrubs, and burnt-up herbage. Three fossil elephants were determined by Dr. Falconer and Professor Busk, from the remains sent home by Mr. Adams. The largest of these would have stood about 7 feet high, the next under 5 feet, while the smallest was not more than 2 feet 6 inches to 3 feet! Yet these were undoubtedly adult animals, sufficient materials having been found to trace all the stages of growth of some of them. We have here a very striking exception to the rule of extinct being larger than existing species. There seems however to be still a little doubt about the specific distinctness of these three forms, for we are told that, "in every situation in which more than one individual was discovered, teeth and bones of the two larger species were found lying side by side, and, what is also of importance, and should be well borne in mind, there are several general characters as regards the crown pattern of the molars common to all the Maltese elephantine fossils." The dormouse was as much a giant as the elephants were dwarfs, being as large as a squirrel; while the swan and tortoise were larger than any existing species.

We have also a very full account of the aspects of Malta at different seasons of the year, of the character of the vegetation, and of the birds (most of which are migratory), and of the few indigenous reptiles and mammalia; while a complete list is given of the fossils, the birds, and the fishes, which have been yet discovered. An interesting chapter is devoted to the great pre-historic rock-temple of Hhagiar-Kim, with its strange pitted ornamentation and curious idols, and to the various dolmens, towers, rock-tombs, and other antiquities of the islands.

That part of the work which treats of the Nile is of much less interest, consisting of notes on such objects of natural history as were observed during a three months' tour, with the determination of some of the species represented in the Egyptian sculptures.

ALFRED R. WALLACE.

Journeys in North China, Manchuria, and Eastern Mongolia; with some Account of Corea. By the Rev. Alexander Williamson, B.A., Agent of the National Bible Society of Scotland. With Illustrations and two Maps. Two vols. London: Smith, Elder, and Co., 1870.

MR. WILLIAMSON travelled over an immense deal of ground, some of it quite new, and from his thorough knowledge of the Chinese language had great facilities for obtaining information. Yet for want of knowing how to sift and arrange his materials, and from a deficiency of literary taste and judgment, his book, though abounding in facts and containing much solid information, is very heavy reading. The first part of the work consists of a kind of gazetteer

account of Northern China, bristling with statistics and topographical details. Afterwards we have the journal of travels, crowded with the unimportant daily occurrences of such journeys, but entirely wanting in all those picturesque details and vivid pictures of Chinese life and character which gave such a charm to the pages of the Abbé Huc.

Our author has a high opinion of the Chinese nation, which he believes is destined to dominate the whole of Eastern Asia; and he altogether denies that they are less inclined than Europeans to advance and improve. Many of his readers will be astonished to learn what excellent work the English and American Protestant missionaries have done in making the Chinese acquainted with modern science and literature, by translating such works as *Euclid*, Newton's *Principia*, Loones' *Analytical Geometry and Differential and Integral Calculus*, Herschel's *Astronomy*, Whewell's *Mechanics*, Wheaton's *International Law*, and others on almost every branch of modern science and European knowledge. And these works are so appreciated, and are in such demand, that the greater portion of them have been reprinted by Chinese of rank and position. Fire-engines, life-boats, and vaccination have also been adopted in China; and the government have employed translators of works on engineering, metallurgy, chemistry, electricity, and all the arts connected with the manufacture of warlike implements.

Mr. Williamson has evidently been much influenced by long association with an almost exclusively mercantile and naval European community, or he would hardly express the opinion (and support it on high moral grounds) that it is our duty to force a trade with Corea, even at the expense of a war. Notwithstanding the many defects of the book, the patient reader will find much curious information on the history, literature, and antiquities of China, and will obtain some notion of Chinese life, and of the scenery and agriculture of the northern provinces.

A. R. WALLACE.

Scientific Notes.

Physiology.

Velocity of Light.—Dr. J. J. Müller, physical assistant to Prof. Ludwig, who in 1870 communicated to the Royal Society of Saxony an account of a new method of demonstrating and measuring the increase of velocity of transmission of sounds, caused by an increase in their intensity, viz. by means of a modification of Kundt's lycopodium figures in glass tubes, has lately been investigating the same phenomenon in the case of light, and has come to some very remarkable results, which he gives in the *Berichte der Kön. Sächs. Ges. der Wissensch.* of Feb. 11. The light used was that of a vapour ignited in a Bunsen's burner. This light was split up by means of a prism, the spectrum obtained from which was allowed to fall upon a vertical screen. On the screen was a slit through which a single spectral line was allowed to pass. A real image of this line was cast by means of a lens on the hypotenuse face of a small reflecting prism, which was placed in the focus of a collimator lens, beneath which was an interference apparatus for obtaining Newton's rings. Between this apparatus and the collimator lens cross threads were stretched. In the first series of experiments made, a bead of a sodium, lithium, or thallium salt was first held on the outside of the Bunsen's flame, and then pushed into it, an increase of intensity in the light being thus obtained. It was found that when the bead was pushed into the flame a movement of the Newton's rings was obtained, which showed an increase in the wave length of the light in question. This movement was partly due to a small decrease in the mean refrangibility caused by an increase of the quantity of ignited vapour observed. Dr. Müller has found that when the amount of vapour is increased the lines broaden themselves out more towards the less refrangible side. This fact he has verified in the case of the sodium, lithium, and thallium lines. Prof. Zöllner has since succeeded in making the same observation in the case of the sodium line with a simple reversion spectroscopie. These results are in agreement with the observations