

the glimpses of cold nature which we obtain here and there scattered through the pages, and the inner vista into the natural life of those peculiar children of the north, the Samoyads. Mr. Jackson lived with them in cleanliness and dirt, in health and distemper, and behind pony and reindeer, and is, therefore, in a position to give a picture that is neither under-colored nor over-colored. Apart, however, from a general broad description of both people and country there is little in the book to tax the mind of the inquiring scholar, and least that of the scientist. Zoölogical, botanical and geological data are exceedingly meagre, and, owing largely to the loss of the thermometer record-book for the months of December and January, there is little to add to meteorology. The lowest reading of the thermometer was found on December 5th,—36°.5 F. Mr. Arthur Montefiore, the editor of Mr. Jackson's journals, contributes a chapter on the Samoyad language, a series of translations on Samoyad folk-tales from Castren's *Ethnologische Vorlesungen*, and an appendix on the 'object, method and equipments' of the Jackson-Harmsworth Polar Expedition.

The tone of the book, both as it is found in the main text and in the contributions of the editor, leads to a lingering suspicion that it is conceived too much in a spirit of enthusiasm to permit it everywhere to be followed as a safe guide. Thus, in the prefatory remarks the reader is led to believe that the journey was undertaken in the region of 'the Pole of Extreme Cold,' but between the minimum thermometric registry that has been above noted (−36°.5 F.) and the cold of Yakutsk and Verkshojansk, minus 75°–82° F. (or, according to report two years ago, −92°), there is a vast difference—the difference, in fact, between Minnesota and what is experienced by almost every Arctic expedition wintering in the far north. We are informed on page 160 that a journey of 700 versts (about 470 miles) was accomplished in seven and a-half days, on two sledges, 'one horse to each sledge,' and that at the end of the journey the horses 'trotted into Pinega apparently as fresh as paint.' To travel sixty miles a day for seven days in succession is certainly no ordinary feat for horses even of the Russian type, and many a carrier would be welcomed

for this undertaking into the camps of the Russian or German military posts; but what dignity or honor would be conferred upon a Zirian who drove three reindeer, within a period of twenty-four hours, over a distance of 1200 versts (800 miles)! It is hardly to be wondered at that the team died on the following day (p. 74).

Almost the only fact of physiographic importance which is noted is the occurrence of raised beaches near the mouth of the Piatso-woryaha River, where the amphitheatre of an old bay extends backward a distance of some nine miles from the present seashore. "Step above step there ranged the old seabeaches, following the lines of the higher land immediately behind them, and girding with a terraced rampart the level basin of salt marsh into which the waves once rolled. * * * * * These old seabeaches, I may add, continued for many miles westward—notably that which is now six miles from the sea, and lies just to the east of the Pechora River—and most certainly would repay the attention of a geologist if he could visit them in summer" (p. 129).

Mr. Jackson is now working in an important field of exploration, and scientists, no less than geographers, cannot but wish him success in an undertaking which requires for its accomplishment a more than ordinary amount of courage and determination, and a knowledge of the kind which must be forced upon every traveler who attempts the long passage of the Great Frozen Land.

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ACADEMY OF NATURAL SCIENCES,
PHILADELPHIA, January 11, 1896.

A Complete Geography. By ALEX. E. FRYE.
Ginn & Co., Boston, Mass. 1895.

Since the publication, last year, of Frye's *Primary Geography*, the appearance of a larger book for grammar school use, promised by the same author, has been awaited with much interest. This book is now at hand. Its plan, like that of the *Primary Geography*, departs widely from the beaten track followed by most writers of school geographies. This has generally consisted of an introductory chapter on the earth's mathematical features, followed by a condensed review of physical geography, after

which the several continents are successively described in their various aspects, the United States naturally receiving the chief attention, and the physical features of each region being considered in close connection with its political and industrial features. But in the new book the most striking feature is the division of the entire subject into two well-marked fields: the first, which occupies some two-thirds of the book, being devoted to the physical features of the earth, and the rest dealing with political geography.

This plan will commend itself to many. The physical features of the earth are the foundation upon which the history of the nations has been wrought out to its consummation in the political geography of our own day; are, in fact, the mould which has determined the present aspect of political geography. It seems appropriate, therefore, that these relatively permanent physical features should receive primary, and the relatively transient political facts secondary attention, and that a full and clear understanding of these fundamental elements of the earth's surface should give the pupil a sound and thorough basis for all future knowledge which he may acquire, either during or after his school days, about the earth and all that happens thereon.

In accordance with sound pedagogical principles, the broader physical facts are first treated, so that an outline of the subject is built up in the pupil's mind, to be filled in later by more specific details when each region is taken up in its turn. Here it is gratifying to see that the author has kept closely in touch with the most recent scientific studies upon the form and development of the land surface. It is exceptional to find a geography that recognizes so fully the changes in the land surface by wear (Lesson 11), or the rise of the sea floor to become new land (Lesson 18), or the growth and relative age of mountain ranges (Lessons 19, 77, 89), or the work of the North American ice sheet during the glacial epoch (Lesson 45). The appearance also of such current scientific phrases as 'drowned valley,' 'distributary,' 'drumlin,' 'fiord,' 'alluvial fan,' etc., is another mark of the recognition of the labors of modern scientific geographers.

The illustrations and maps, which in any geography are quite as important an educational element as the text itself, are numerous, closely connected with the text, and for the most part carefully executed and well arranged. Most of the pictures are engraved directly from photographs, a sure means of securing truthfulness. The numerous little globe maps will commend themselves for the views that they give of the relations of the continents and oceans. The usefulness of such a map as that on page 102, however, where the earth's crust is as it were peeled off from the hidden side, and bent around so as to bring all the lands into view at once, may be questioned. The curved distortion necessarily resulting is such as to make the earth here appear neither flat nor round. Such features as this map illustrates, are better shown upon Mercator maps, which, of course, are distorted, but in a manner simple and easily understood. The clearness and simplicity of the study maps throughout the book is worthy of mention, as is also the presence of an entirely separate, large collection of reference maps, abounding in detail, at the end of the book.

The book, of course, is not without its defects. The useful system of cross-references contains some misprints, which escaped notice in the final revision; and in the reference-maps we observe the omission of so noted a volcano as Krakatoa, the insertion of the long-since ruined and abandoned Chenango canal (N. Y.), and the failure to distinguish the political boundaries of Russia from the conventional limits of Europe, where the two happen not to coincide. A good index would be a valuable addition.

The meagre and almost purely categorical treatment of many countries in the latter part of the book is also disappointing. Their physical features are well set forth in the first part, and many facts of interest are mentioned in connection therewith; but in the second part, which deals expressly with political and industrial geography, we regret to see Italy dismissed with but ninety-two words, Greece with but nineteen, and the governments, cities, people, customs and industries of many other foreign countries treated with similar inadequacy. But the book already exceeds the size of the average

grammar school geography by more than fifty pages, and the necessary limits to the size of such a book are evident. Such matter might, of course, be supplied by the use of supplementary geographical reading, or by the teacher; but, unfortunately, few schools have the access to good libraries which will make the former possible; and few teachers have a sufficient fund of general information to enable them to supply this need.

To use this book, with all its excellent features, as it should be used to reap the full benefit of its contents, calls for a degree of skill and ability on the part of our teachers beyond that of the average instructor; and school superintendents in places which have adopted it will find it no easy task to educate their teachers to this end. But as the book sets before us a higher standard and ideal of geographical teaching than our schools have ever known before, and as it tends to bring them into closer relations with the best scientific work of the day, it deserves a hearty welcome.

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KEENE, N. H.

The Religions of India. By EDWARD W. HOPKINS. Boston, Ginn & Co. 1895. 1 vol., 8vo., pp. 612.

The Teaching of the Vedas; what light does it throw on the Origin and Development of Religion? By MAURICE PHILLIPS. London, 1895. 1 vol. 8vo.

Of these two books, appearing almost simultaneously, the first mentioned is much the more important in scope and scholarship. It is volume I. of the 'Handbooks on the History of Religions,' edited by Dr. Morris Jastrow, Jr., of the University of Pennsylvania, and its author is Professor of Sanscrit in Yale College.

The plan of his work may be briefly stated. He begins with an examination of the date of the oldest Vedas, reaching the conclusion that the bulk of the Rig Veda was composed about a thousand years before the Christian Era. This is a late date to assign it, and we are inclined to believe that the author has been too much influenced by a certain French school who have set themselves to modernize everything ancient by one-sided arguments. A chapter follows

devoted to the ethnography of India, illustrated by a map. The leading questions are touched lightly, dates of monuments are not attempted, and the main points averred are the close relationship of the Vedic Aryans to the Iranians, the entrance of the early hordes through the open pass of Herat, and the existence of castes among them before their settlement in India.

Four chapters are assigned to an exposition of the pantheon of the Rig Veda, and one to the religion of the Atharva Veda, which are followed by a careful and clear comparison (Chap. VIII.) of the early Hindu divinities with those of other Aryan and some non-Aryan peoples. From the Vedic epoch the Indian religions rapidly assumed varied forms. Earliest of these was Brahmanism, which is described in three chapters, followed by Jainism, Buddhism, and the numerous early and late sects of Hinduism, with the worship of Vishnu, Siva and the wild polytheism of later centuries. These are depicted in their chief traits and their historic connections pointed out with learning and clearness. The chapter on the religious traits of the present wild tribes is less satisfactory. Their faiths do not seem to be so familiar to the author, or he has less sympathy and less patience with them. The volume closes with a discussion of the probable influence which Indian religion and philosophy exerted on the analogous mental products of the early Semites and Aryans. It is natural that the author, steeped in the lore of Indian thought, should discover traces of it in the teachings of Jew and Greek; but it is likely that many will think he goes too far in deriving so much of the latter from the former.

It is a question of great moment to the historian of religions whether this long period of continued growth—at least three thousand years—developed in India higher conceptions of divinity and duty, a finer spirituality in the votary, a nobler sentiment toward his fellow man.

On this Prof. Hopkins speaks with clear conviction. He believes that tracing back the numerous branches of Hindu sectarianism to the Vedic period, one finds that throughout the long intervening time the direction has been true, and the higher aim 'steadily kept in view.' "Nor can one judge otherwise even when he