## TWO GIFT-BOOKS ON GEOLOGY.1

T may be presumed that both these antedated works are intended for the Christmas season, and their print, illustrations, and binding make them highly attractive as gift-books for the young. Both, however, contain matter based on recent observation, and both will probably bring the results of research before many who have no acquaintance with scientific journals. There was a delightful book, entitled "The Wonders of the World," published somewhere about the time of the battle of Waterloo, which we used to read side by side with Brewster's "Natural Magic." It is more to the point to say that to this

book Charles Darwin owed his earliest inspiration. Mr. Grew's far handsomer volume shows how far we have progressed in style and picturesqueness; but it depends equally on its fascinating appeal to what the earth is actually doing. Some of the examples of natural processes necessarily remain the same, but Lisbon and Calabria are now overshadowed by San Francisco and the Montagne Pelée. A fine series of photographic plates, mostly from Underwood's well-known American series, has been chosen to illustrate the phenomena described. Extinct animals, mainly from Miss Woodward's skilful drawings, which were first published in Knipe's "From Nebula to Man," are used to emphasise the romance of palæontology.

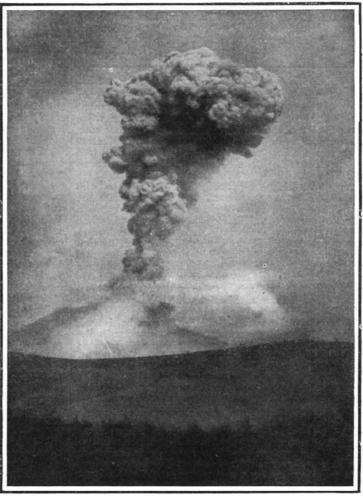
Many of the chapters, such as viii., ix., x., xi., and xvi., are somewhat speculative for a work that seeks to convince the reader of the romance of ordinary things. In chapter xvi., on volcanoes and mountain formation, views are propounded that still require a great deal of thinking over, and in chapter xiv. we are not sure that the author distinguishes between volcanic accumulation and elevation of the ocean floor. Matters are clearer in the pages dealing with the long history of life upon the globe, though there is still a tendency to dwell on the uncertain rather than on the known. This is seen in the attempts to picture the geography of past geological periods; what evidence have we, for instance, for any of the statements on p. 211? Does the author really mean that Ben Nevis and the Pennine Chain, to mention two of the details, stood above the sea in late Silurian times?

The note of modernity struck in the

second chapter by the introduction of the pear-shaped earth is maintained in the twenty-second chapter by the account of the rise of the proboscideans. The literary style is so direct and agreeable that few will open the book without wishing to read further, and some may be led on to borrow from a library the old classics of geology, which are less "modern," but on which we all are glad to build.

1"The Romance of Modern Geology: describing in Simple but Exact Language the Making of the Earth, with Some Account of Prehistoric Animal Life." By E. S. Grew. Pp. 308. (London: Seeley and Co., Ltd., 1909 [actually September, 1908.]) Price 5s.
"The Romance of Early British Life from the Earliest Times to the Coming of the Danes." By G. F. Scott Elliot. Pp. 358. (London: Seeley and Co., Ltd., 1909 [actually September, 1908.]) Price 5s.

Mr. Scott Elliot's book follows aptly on that which narrates the building of the world. "The Romance of Early British Life" is cleverly written by means of a series of stories, in which the manners of successive peoples are rendered with the insight and humour of a Dutch genre painter, and yet with the sober references to authorities that befit a man of science. Such a book, cheerful and romantic as it is, has involved a wide extent of reading. Incidents and evidences are gathered from archæological journals, and appear quite naturally in their places as parts of a connected tale. This, like the sad fate of Bardolph, is in the true Shakespearean We do not like the names, such as manner.



Eruption of Mount Asama, Japan. From "The Romance of Modern Geology."

Eolithicus and O'Wookey, selected for primeval savages, but none of their real titles have come down to us. Mr. Jack London, whose modern seamen often realise the savage, has, of course, done far better in his vivid perception of the Stone age; we may all the more congratulate Mr. Scott Elliot on having given us an independent and convincing picture. On p. 29 he states that Eolithic man, whom he has shown as terribly individualistic, "nearly carried out, as only a society of squirrels and hedgehogs could do, the beautiful ideals of modern Socialism." This is indeed a puzzle, as is the equally unnecessary reference to the editors of radical newspapers on

p. 212. It requires a Charles Kingsley to carry such remarks off lightly. The Romans in Britain are shown in the usual colours, but we must remember that even the modern English are not loved as predominant partners and invaders. The Mediterranean race, however, here styled Picts, comes off fairly well, even when invading; but we fancy that too little credit is given to it for moulding the so-called Celtic modern Irishman.

The spirited illustrations, by Messrs. L. Speed and J. F. Campbell, will favourably attract the eyes of parents and guardians. The map of Britain opposite p. 226 contains too great a mixture of languages, and does not give a picture of any special epoch. This, however, can be remedied in school libraries, and we confess that we should like to conduct a class through Mr. Scott Elliot's volume, with the aid of a good atlas and a fortnight of excursions in the field. Those would indeed be happy days for all of us.

G. A. J. C.

## THE ARCHÆOLOGICAL SURVEY OF NUBIA.

THE objects of the archæological survey of Nubia which has been undertaken by the Government of Egypt are, first, to ascertain the extent and value of the historical material buried under the soil; secondly, to make this material available for the reconstruction of the early history of that country and of its relations with the Nile valley. There is reason to believe that in the pre-dynastic period Lower Nubia formed with Egypt a single region of culture, and possibly a single ethnological district. Later on the northern lands developed more rapidly, and Nubia failed to keep pace with Egypt. At any rate, when the Egyptians pushed southwards under the twelfth dynasty, some of the products of Nubian civilisation are found closely to resemble, in technique and material, products of the pre-dynastic age common to both countries. The present survey aims at reconstructing the culture development of some fifteen centuries of Nubian civilisation which at present are a blank.

The first and second Bulletins, recently issued, supply a preliminary account of investigations in the district which, owing to the re-modelling of the Aswan dam, will now be permanently submerged. This archæological material would, in default of such an inquiry, have been permanently lost to science.

The survey illustrates the variety of races and culture which prevails within this area. We have a succession of interments starting from the archaic period through post-Roman, Christian, and Moslem times. The extensive denudation which has occurred has exposed the burials of the earliest age. One group of later graves contains a number of male negro bodies, most of whom met their death by hanging or decapitation—doubtless the record of a tragedy which followed one of the local revolts so frequent during the Roman or Byzantine occupations of the country.

The survey of these cemeteries, conducted by Dr. G. A. Reisner, is supplemented by a very valuable anatomical report by Drs. Elliot Smith and F. Wood Jones, which illustrates the complexity of the ethnological materials now under detailed examination. From the earliest predynastic times down to the early dynastic, the whole region, according to Dr. Reisner, was characteristically Egyptian in culture; and the race occupying it is believed by Prof. Elliot Smith to be pure Egyptian. At a later period the population became isolated from Egyptian influence, and therefore assimilated Negroid elements. We find some contracted burials of the Egyptian predynastic

of pure and half-bred negroes, period, corpses while the majority of the bodies examined conform to a quite different physical type, the origin of which we have to seek in Syria and the south-eastern shores of Europe. The remains are in most cases excellently preserved, being packed with salt and fruits of certain plants not yet identified, and then wrapped in coarse cloth. Some of these persons, even one who bore on his arm a wooden cross as the emblem of the Christian faith, had been circumcised. Other interments, again, appear from the anatomical evidence to represent family burial places, the structural identity of the occupants being remarkably apparent. In one case, that of a young woman, the cause of death was plainly appendicitis; in another, longstanding pleuritic adhesions, and in a third osteoarthritis, so-called rheumatic gout, were identified. This is the disease which shows itself with the greatest frequency in the bodies of all periods. The older skulls show no signs of dental caries, except in the case of the "milk" teeth of three children, which is believed to be the first recorded occurrence of dental caries in an ancient Egyptian or Nubian under the age of sixteen; but this is common in the foreign Christian group. The discovery of a case of tuberculosis in the Biga cemetery is exceptionally interesting, the only other known early Egyptian instance of this disease being that of a corpse of an infant from the ancient Empire burying-ground at the Giza pyramids, which presented the typical lesion of advanced hip disease which may have been of the tubercular type. But this is not quite certain, because tubercle bacilli have not been as yet definitely traced, and Dr. A. R. Ferguson is disposed to doubt the diagnosis of tubercular lesions. The same is the case with syphilitic lesions. Dr. Elliot Smith has never observed a case in ancient Egyptian bones, and regards most of the instances hitherto reported as due to the post-mortem destruction of the bones by beetles. It is also remarkable that there is no occurrence of tattooing so common in modern times, nor of the custom of skin gashing, which is almost universal in Nubia and the Sudan at the present

The present Bulletin is intended merely to describe some of the facts which have been elicited in the course of a summary investigation of the great mass of ethnological material unearthed by Dr. Reisner. It will be followed by a detailed archæological and anatomical report, the appearance of which will be awaited with interest. Meanwhile the anatomical and craniometrical observations by Dr. Elliot Smith, and Dr. Wood Jones's pathological report, supply a large amount of fresh anthropological material.

The Government of Egypt deserves congratulations for the initiation of a most important survey, which will supply abundant materials from which the archæological and ethnological conditions of a hitherto unexplored region can be safely reconstructed.

## HIMALAYAN PHYSIOGRAPHY.1

In response to a proposal made in 1906 by the "Board of Scientific Advice" to the Survey of India that a paper should be compiled "summarising the geographical position of the Himalayas and Tibet" for the benefit of travellers in those regions, a series of papers on these parts has been issued which is not only of great scientific value in itself, but will surely answer the purpose of directing scien-

<sup>1 &</sup>quot;A Sketch of the Geography and Geology of the Himalayan Mountains and Tibet." By Col. S. G. Burrard, R.E., F.R.S., and H. II. Hayden. (Calcutta: Superintendent of Government Printing, 1907.) 3 Parts, price Rs. 2 each.