

that in most universities the "college" would form a separate school. In which case, the collegiate faculty should, of course, divide and meet at times with the members of the various other schools. (4) I believe in the financial and educational autonomy of the schools. But in regard to nominations of professors, I see no advantage in the "board of advisers"; I think the senate should have the final authority. I doubt the need of giving veto power to the board of trustees. Each school should have the duty of initiating plans for new professorships. There may be certain "standard" or minimum salaries; but I do not believe uniformity is possible or indeed advisable. (5) I would emphasize the duties of the senate, and would, I think, allow the board of trustees to appoint from the faculty a certain number of members. Certainly the membership should be small, less than twenty. The chairman, elected for one year, subject to the approval of the board of trustees, might well perform the so-called duties of the president. You do not make any definite proposal concerning means of contract with the alumni and the public. There should be, I think, an office charged with this duty. At its head should be a most capable man, not a member of the faculty, who might be also the secretary of the senate.

SCIENTIFIC BOOKS

In Northern Mists: Arctic Exploration in Early Times. By FRIDTJOF NANSEN. Translated by ARTHUR G. CHATER. In two volumes. Frederick A. Stokes Company. \$8.

These beautifully printed and lavishly illustrated volumes are most interesting, but the reader who turns to them solely for "arctic explorations in early times" will be surprised, for less than one fifth of the matter pertains to polar voyages. Dr. Nansen properly had misgivings when he said, "Many think that too much has been included here." Among such matter falls amber, tin, ship-building from 1,200 years B.C., and other similar and slightly related matter.

Marred though it is by discursive and heterogeneous treatment, the work is of historic value and literary interest. Most comprehensive in its scope of investigation, and in its wealth of assembled material, it will unquestionably prove of value to geographical students as a source whence can be drawn information of, and textual extracts from many rare and little-known works and manuscripts. Its extent and thoroughness may be surmised from the three hundred consulted volumes, and in a dozen languages, whose citations could not be verified under months of labor, let alone the judicial consideration of their pertinency and value.

For the general reader the volumes have value and interest along two lines especially, Greenland and cartography. It is gratifying to find brought together such extended details relative to the early exploration of Greenland by Europeans, and to the interrelated history of the Scandinavian colonization.

In cartography there are more than seventy maps reproduced, in whole or in part, those from the geographical works of the middle ages being the most interesting and valuable.

It is strange that the attractive and well-known woodcuts of Olaus Magnus were not reproduced from the original edition (Rome, 1555). One would have gained a much better idea of the landscapes of Greenland and of Iceland if there had been reproductions of the excellent available photographs made by the Danish officers, instead of the present drawings, which—artistic though they may be—utterly fail to convey clear and accurate conceptions of the polar world.

Neither in novel views nor in their relations to arctic explorations do the accounts of the voyages of Cabot and of the Portuguese merit publication herein. The rehabilitation of Pytheas, of 300 B.C., is ingenious, though much over-elaborated and qualified—necessarily.

The giving of about one sixth of the work to the much-disputed subject of Wineland the Good appears to little purpose. Dr. Nansen's views will not prove acceptable to all the authorities on this mooted subject, which is not finally decided.

Heterogeneous and negative as are Dr. Nansen's opinions that Wineland is a myth based on the Fortunate Isles, yet they are well-considered and merit close attention. His conclusions are briefly as follows: (1) Adam of Bremen is untrustworthy. (2) The oldest Icelandic authorities mention Lief Ericson unconnected with Wineland. (3-4) Lief's discovery is not mentioned until the 13th century, and definite statements as to Wineland only appear at the end of that century. (5) The Flateyjarbok narratives differ widely from the earlier. (6) The first saga contains only mythical and borrowed matter. (7-8) The Greek myths mention wild-growing vines and wheat in the Fortunate Isles. (9) The association of wine and wheat with North America is artificial. (10-15) Before the 11th century Ireland had myths of happy lands to the west in the ocean, thus affording a common basis for the sid-people of Ireland, the elf-people of Iceland, and the huldre-people of Norway. (16-17) The Norse name "*Vinland hit Gooa*" is a translation of "*Insulae Fortunatae*." (18) The name of the inhabitants, Skraelings, indicates that Wineland was a fairy country. (19) Icelandic and Norse geography connecting Wineland with Africa, is evidence of its identity with the Fortunate Isles. (20) Though the saga of Eric the Red and the "*Groenlendinga-pattyr*" contain no reliable data as to the discovery of America by the Greenlanders, yet the mention of the arrival of voyagers from Markland in 1347, and other references, show that they must have reached the coast of America. (21) Hvitramanna-land is a mythical country, modified by christian beliefs. (22) "Finally, from the ancient Greeks to the Icelanders, Chinese and Japanese, we meet with similar myths about countries out in the ocean and voyages to them."

The intense patriotism of Dr. Nansen in pushing to the broadest possible extent the importance, if not almost universal claims of superiority for Norway in arctic explorations may be viewed as pardonable, though his views will not always gain acceptance.

In his general line of argument it may be said that similar methods by hostile critics

would work havoc with many of his finely spun and vigorously advocated conclusions. It is to be regretted that so scholarly a work should not invariably display that fine spirit of judicial calmness, and considerate acceptance of the opposing views, so general in these days on subjects widely controverted. Argument is not made convincing, nor acceptable even, through describing the conclusions of other historical students and investigators as "pure guess work," "absurdity" or as "imaginativeness."

It is to be hoped that the distinguished author will soon contribute a work wherein arctic work shall be fully correlated and brought down to the conquest of the two poles.

A. W. GREELY

Cocoa and Chocolate. Their Chemistry and Manufacture. By R. WHYMPER. Philadelphia, P. Blakiston's Son & Co. Octavo. Pp. xii+319 and index. \$5.00.

This work, which does credit to author, printer and publisher, is a striking example of the development that characterizes present-day science. Not many years ago a few pages in a work on food production or food analysis would have been deemed sufficient for the subject.

The author brings to the consideration of the subject matter of the book not only experience and scientific judgment but an earnest interest in the cacao products and we can have but little doubt that he enjoys a cup of "cocoa," in which enjoyment the reviewer shares.

Brief but comprehensive chapters are given on the history of the introduction and use of cacao products, on the botany and nomenclature of the several preparations, after which the growth, manufacture and marketing are considered. A table shows comparison of the calories of cacao preparations with those of common food articles by which it appears that chocolate has three times the heat energy of an equal weight of hen's eggs and nearly double that of peas and bread. Of course, these comparisons, considered by themselves,