of the book. Though hardly any explicit statements of the division of these nations into gentes is given by the ancient authors, numerous remarks indicate that these divisions existed. Each gens had its own chief, and owned a certain tract of land. In case of war, the whole army was divided according to gentes, each gens being commanded by its own chief. A further proof for this theory is found in the laws of inheritance and marriage, and in the terms of relationship. Every gens had even its own deities, temples, worship, and its separate myths. Brühl considers the great states of Mexico and Central and South America as confederations of tribes who subjected other neighboring tribes, whom they compelled to pay a tribute. Nowhere were states formed by uniform nations.

## Die Erde in Karten und Bildern. Vienna, Hartleben. 4°.

THE publication under review is an atlas, accompanied by text and numerous illustrations. It belongs to a class of publications which unfortunately is still entirely wanting in America. Our atlases are expensive, gorgeously colored, and generally not well drawn, while there are a number of European atlases which are sold at a moderate price, the drawing of which meets all reasonable expectations, and which are tastefully colored. The present atlas belongs to this class, but its characteristic feature is the accompanying text. The illustrations are carefully compiled from works of travel, and represent characteristic views, animals, plants, and ethnological objects, and may be used to advantage in schools, as they convey a good idea of geographical phenomena to the reader. The text, so far as we can judge from the numbers that have reached us, is not intended to be of a scientific character, but it is a popular treatise on geography. First, physical geography is treated. This will be followed by a special part on the geography of the separate continents and countries, and the last part will treat of commercial geography. The maps are well drawn, and the lettering and the topography are clear. The physical features are distinct, as the maps are not crowded with names. This atlas shows how far German cartography is advanced as compared to our own. There is no American atlas that can compare to this cheap publication, or to the well-known 'Handatlas' by Andree. Even the large and costly maps which are published in our country do not meet the wants of geographers so well as the German publications. But there is little demand for good maps so far. So long as our teachers are content with the low class of text-books and maps which are used in most schools, publishers will be reluctant to attempt the publication of costly works of this kind: but as soon as there is a demand, good maps and good atlases will be forthcoming; for there is no absolute want of cartographers, as the publications of our government, particularly those of the Coast and Geological Surveys, show.

Comparative Morphology and Biology of the Fungi, Mycetozoa, and Bacteria. By A. DE BARY. Tr. by HENRY E. F. GARNSEY, and revised by ISAAC BAYLEY BALFOUR. Oxford Clarendon Pr. 8°.

ONE sometimes feels that English translations of German works above the grade of comparatively elementary treatises are unnecessary, since all persons qualified to understand the subject are presumed to be able to read the original. The present translation, however, shows that this feeling is erroneous. The original work of De Bary appeared in 1884. We say original, because, although, in one sense, the work of 1884 is a second edition of the second volume of Hofmeister's 'Handbuch der physiologischen Botanik,' published in 1886, the treatment is so different, and our knowledge of the subject has widened so rapidly within the last twenty years, that there is not much resemblance between the two editions. The work of De Bary is so well and favorably known, that we need not speak at length of its merits. In the chapters on Mycetozoa the author includes Myxomycetes, Acrasia, and some doubtful forms, but excludes many amœboid forms classed by Zopf among the Schleimpilze. The chapters on bacteria have been to some extent replaced by the more recent 'Vorlesungen über Bacterien,' by the same author. The original, it must be admitted, is rather hard reading for foreigners, in spite of its clear scientific treatment of the subject; and all English-speaking botanists will be glad to welcome the present excellent translation, which, while preserving the sense and spirit of the original, presents it in a form which can be much more quickly and easily absorbed, even by those who have a good knowledge of German, and are acquainted with the subject treated. American botanists will now be able to read the admirable treatise of De Bary with ease as well as with profit.

A Course of Practical Instruction in Botany. By F. O. BOWER and SYDNEY H. VINES. Part II. Bryophyta and Thallophyta. New York, Macmillan. 8°.

The second part of the practical botany by Bower and Vines is similar in form to the first part, which appeared in 1885, and is intended to be a guide to the student who is studying botany by the type methods. The common *Polytrichum* and *Marchantia* are used as illustrations of mosses and *Hepaticæ*; but the bulk of the work is devoted to *Thallophytes*,—a group which does not lend itself to popular treatment in a short space, for the types of reproduction are numerous, and the illustrations must be taken largely from plants which have no common names, in this country at least. The present volume is a valuable aid in the laboratory where the instructor prepares and selects the material, but it is not adapted to those who are obliged to pursue their studies independently of competent instructors. For the latter class of students, the chapters on *Thallophytes* are, as a rule, too condensed, and the absence of plates necessarily makes the text a little obscure for beginners.

The Making of the Great West. By SAMUEL ADAMS DRAKE. New York, Scribner. 12°.

THIS is a thoroughly commendable volume. It is constructed on the same general plan as 'The Making of New England,' by the same author, though dealing with a far larger and more complex subject.

It is too often the case that brief histories of the United States are written so entirely from an Atlantic coast standpoint that the great territory west of the Mississippi receives scant treatment at the authors' hands. Mr. Drake's plan of treating the various sections separately avoids this lack of proportion, and affords an opportunity of bringing the important facts in the history of each section into the prominence which properly belongs to them. In this volume the author makes three subdivisions. In the first we find a lucid and well-illustrated account of the planting of the Spanish, French, and English civilizations on this continent. In the second the territory acquired by the Louisiana purchase is treated, and then follows the story of the advance of civilization in the West up to the time that gold was discovered in California. The third section completes the story from 1848. Mr. Drake's conception of history is that of the late John Richard Green, and his narrative is accompanied with excellent sketches of the aboriginal and conquering civilizations. For that reason, as well as because of its pleasant style, 'The Making of the Great West' would be a valuable reading-book for grammar and high-school use.

Three Good Giants, whose Famous Deeds are recorded in the Ancient Chronicles of François Rabelais. Compiled from the French by JOHN DIMITRY. Boston, Ticknor. 12°.

In this volume the works of the old French humorist are presented in an expurgated form, and profusely illustrated by Gustave Doré and A. Robida. The result is a book for children; but what its value in that respect may be, can only be determined by experience. There is certainly not much in it that is interesting to grown-up people, the humor of it being so extravagant that it often ceases to be humor. Children's tastes, however, are different, and with them the book may become a favorite. Such attempts to preserve what is best in old writers are in themselves praiseworthy; for the world is not so rich in good literature that it can afford to part with any of it. The illustrations, which are of the same fantastic type as the story itself, will add to the attractiveness of the book.

A Collection of Letters of Thackeray. New York, Scribner. 8°.

THE series of letters from Thackeray to Mr. and Mrs. Brookfield, which were lately published in *Scribner's Magazine*, are here offered in book form. They were written between the years 1847 and 1855, after the death of Mrs. Thackeray, and when their author was in the full flush of early fame. They show him in various moods, the humorous predominating, of course, yet oftentimes with