damental reform of the methods of teaching geography. Most of the scientists who were appointed professors were originally not well acquainted with the needs of the Gymnasium and of other higher schools. They were so much engrossed by their subject as to be too exacting in their demands upon the pupil. These excessive demands, however, found their corrective when their students became experienced teachers. Thus the methods of teaching geography, after about twenty years of discussion, have been established on a firm and sound basis.

While material progress was thus being made in Germany, England and America had not even made the slightest attempt to bring about the much-needed improvement in the teaching of geography. A few years ago the attention of the Royal Geographical Society was called to this subject, and a thorough study of the methods used on the continent, particularly in Germany, was published. Here, also, the movement began among scientists, not among teachers; and therefore we observe again that too much was asked for. Since that time the movement has reached the schools, and innumerable attempts have been made to find a 'royal road' to the knowledge of geography. We may divide these into two classes: the first embracing suggestions of geographers or geologists; the second, those of teachers. While among the first class we find highly suggestive books which show that geography might be made the foundation of teaching natural science, they are deficient in not being written by experienced teachers. The second class shows the sad lack of trained teachers of geography, and the necessity that a reform of the teaching of geography must begin with training teachers.

Recently a number of valuable books have been published in England, but in America little has been done. Text-book after text-book and map after map are being published, but the new ones are in no way superior to the preceding ones. Since Guyot imported Ritter's ideas of geography into this country, the study has continued to move on this line, wherever it was more than mere memorizing of names. That geography which has recently developed in Europe has not reached our continent; the tendency here being to cultivate all the sciences contiguous to geography, while the complex geographical phenomenon does not attract the attention of the American scientist.

It seems to us that Parker's book marks a new step in the development of geography in our country. It is the first time that a leading educationist tries to solve the question how to study geography, and gives it its proper place in the course of study. Although not a geographer himself, and although a number of his statements are not in correspondence with the views held by geographers nowadays, he has a true conception of the ultimate aim of geography. "The study of geography, elementary and scientific, cultivates systematically the faculty of imagination, and the products of this faculty arouse and develop at every step emotions of beauty that culminate in the emotion of grandeur. The mentally pictured hill is 'a thing of beauty,' which, in time, towers up into the grand image of the lofty mountain. The lake is the inception of a picture of 'old ocean's solitary waste.' Gradually, under skilful teaching, hills, mountains, and plains, oceans and continents, are united in one sublime image of the round world. Life-bearing and life-giving, it stands out before the exalted imagination." This view is fundamental in giving geography its proper place in school and in life. It is not the sole object of geography to analyze observations, and thus to train the mental power of the child, although it is well adapted to this purpose: its more important function is to train the imagination and the power of feeling, to bring home the grand truth of the unity of nature.

This being the concept of the book, Parker omits physiography, which is the favorite subject of many writers of school-geographies, altogether, and defines geography as purely and simply a description of the earth's surface; and the primary purpose of teaching geography, to develop in the pupil's mind a concept corresponding to the earth's surface.

The book opens with a general introduction on the aim and scope of teaching geography. This is followed by a chapter intended to aid teachers in laying out their plans for teaching. The third part is an outline of a course of study of elementary geography, which is followed by very interesting directions and suggestions. The rest of the book is taken up by notes on the course of study. We do not intend to enter into the details of this plan, but confine ourselves to a few remarks. Parker's directions on the use of maps ought to be read and borne in mind by every teacher. There are very few persons who are able to interpret a map; and teachers ought to bear in mind constantly the fact that the map only represents part of the earth's surface, and that its object in teaching is exclusively to convey the concept corresponding to the country it represents. In order to reach this end, Parker strongly advocates moulding and the use of relief-maps, although he is aware of the serious objections raised to this method. Until better school-maps are provided, it will be impossible to dispense with this means of teaching.

The course of study which he recommends begins, of course, with systematic observations of nature, of the surroundings of the child. Thus the concepts of the natural features and elements of land and water are gained; and, these once obtained, he rightly turns at once to considering the widest generalizations, the continents, and works the detail into their general outline. It may seem doubtful whether his widest generalizations, slopes and river-basins, are the best from a geographical point of view. He considers the continents as formed of a short and long slope, and next subdivides the slopes and adds the necessary detail. This method fails in the case of Africa, and seems undesirable in teaching the geography of North America and Asia and their large plateaus. But Parker himself does not consider the course suggested in his book as final. There will probably be much discussion regarding detail, and on the important question, 'In how far, if the principal generalizations are derived from form, should the origin and development of that form be considered?' But a careful study of this important book will not fail to exert a most wholesome influence upon the progress of geography in our schools, and it may be that it will open the road to that science of geography which has so far hardly any representatives in America.

The History of Protective Tariff Laws. By R. W. THOMPSON. Chicago, R. S. Peale & Co.

THIS book is not to be taken seriously as a history of the tariff. Of independent or original historical investigation there is hardly a trace. There is nowhere any reference to the author's source of information; nor, indeed, is this necessary for the sort of information he gives. We are told in the volume chiefly about the opinions which various statesmen have held at one time or another on the tariff, — the sort of historical knowledge which can be got readily enough by glancing through files of presidential messages and of the congressional debates. Even this information, whose value is dubious enough at best, is distorted and worthless. One would imagine, from Mr. Thompson's quotations and copious Italics, that all the statesmen we ever had were the stiffest of protectionists. Of other information there is very little. Various tariff acts are described in the vaguest way, so that the reader is unable to guess what the general range of duties under them was, still less what was the duty on any particular article. There is no pretence of investigation of economic history, of the development of protected industries, of the difficult and perhaps insoluble problem as to the effect of protective duties on general prosperity.

In fact, Mr. Thompson writes, not a history, but a voluminous campaign pamphlet. That he has a strong bias (to put it mildly) for protection, is not inconsistent with his doing good historical work, even though not the best. But he has done no such work, and the student of history will turn over his chapters with a sigh of disappointment. Nor will the book appeal to those who want solid and serious argument on the tariff controversy. The reasoning is of the most watery sort, and consists chiefly of vague paragraphs on industrial independence, the home market, the disastrous effects of importing more than we export, the designs of England, and what not. Only those who want campaign thunder would find any thing to their purpose; and they are not the sort to wade through 526 pages, when they can get their thunder in compact form, and gratis, from campaign committees. Mr. Thompson's history belongs to that class of books by public men which are bought for their title and their large print by respectable philistine families, and repose unread on scanty book-shelves.

History, at its best, cannot help us much in the tariff controversy. The crucial question as to the effect of protective duties on general prosperity eludes a specific answer. The tariff is but one of a thousand factors affecting the country's welfare, and by no means among the most important. Its effects are so covered and hidden by the effects of other causes, that it is practically impossible to follow them out to their end. There is no subject on which so much unwarranted nonsense is talked, on both sides, as on the question of protection. He who approaches it with so cock-sure an air as Mr. Thompson, and tells us glibly about the beneficent effect every high tariff has exercised, and about "the general embarrassment" which followed low duties, is, on the face of it, incompetent to tell us any thing worth listening to.

NOTES AND NEWS.

THE third number of the *Internationales Archiv für Ethnologie* is full of interesting material. The journal has rapidly become the principal source of information to those whose studies refer to ethnological collections. Each number contains beautifully engraved color-plates showing interesting specimens. The text gives elaborate descriptions of these plates, and reports of numerous museums; descriptions of important accessions, of the organization of the collections, and information regarding smaller collections, which would otherwise be inaccessible to the student. The last number contains a description of the extensive collection made by Adrian Jacobsen among the Golds and Gilyaks, and a description of the native tribes of Liberia. Besides this, it contains interesting reports of current literature, recent explorations, and new collections.

— The second annual meeting of the Iowa Association for Scientific Research was held at Des Moines, Io., Sept. 5 and 6. Among the papers presented were, 'Local Problems in Science' (presidential address), by Herbert Osborn; 'My Experience in rearing *Vanessa antiopa*,' by F. M. Witter; 'On the Sedentary Habits of *Platyceras*,' by Charles R. Keyes; 'On the Folding of Carboniferous Strata in South-western Iowa,' by J. E. Todd; 'Descriptions of New *Cynipidæ*,' by B. T. Gillette; 'The Pustulate *Unionidæ*,' by R. Ellsworth Call; 'The Fauna of the Lower Coal-Measures at Des Moines, Io.,' by Charles R. Keyes; 'The *Cicadidæ* of Iowa,' by Herbert Osborn; 'The Lineage of Lake Agassiz,' by J. E. Todd; 'From the Stamen-Petal,' by B. D. Halsted; 'Some Additional Observations on the Loess in and about Muscatine,' by F. M. Witter; 'The Geology of Crowley's Ridge, Arkansas,' by R. Ellsworth Call; 'On the Glacial Drift and Loess of a Portion of the North-Central Basin of Iowa,' by Clement L. Webster; and 'Descriptions of Two New Fossils from the Devonian of Iowa,' by Charles R. Keyes.

— An Italian engineer, M. Bocca, has just finished estimates for a ship-canal to cross Italy. The canal would start from Castro on the Mediterranean Sea, and end at Fano on the Adriatic. The length would be 282 kilometres, the width 100 metres, and the depth 12 metres, allowing large ironclads to pass. The canal would drain Lakes Perugia and Bolsena, and would allow of a systematic irrigation of that whole region. The cost is estimated at $100,000,000. The work would occupy 200,000 men for five years.

— Dr. M. Eschenhagen, in a recent number of *Petermann's Mitteilungen*, calls attention to an attempt to explain the magnetic polarity of the earth and the situation of the magnetic poles. The theory was first propounded by Dr. Menzzer. He assumes that electrical currents flowing from east to west cause the magnetic polarity of the earth. If the surface of the earth were solid, these currents which depend upon the rotation of the earth would run exactly east by west. This is approximately the case in the strata lying below the average depth of the ocean. In the highest layers, however, the distribution of land and water affects these currents. When entering the ocean, they cause a locomotion of the water, and thus the geographical features of the earth's surface affect the polarity of the globe. Eschenhagen shows by a simple construction what this effect would be on the southern hemisphere. He assumes that there are no electrical currents whatever in the ocean, and computes the influence of those of the continents according to the size, shape, and position of the latter. The result of this computation shows that the magnetic pole would be situated in latitude 76° 50′ south, and longitude 183°48′. According to Ross, its position is latitude 75° 6′ south, and longitude 171° 50′. As the influence of the Antarctic continent has not been included in this computation, the result must be considered very satisfactory and encouraging to further work on Menzzer's hypothesis.

— The *Political Science Quarterly* for September contains three articles on constitutional questions, the most important of them being that by Sydney G. Fisher on the 'Suspension of *Habeas Corpus* during the War of the Rebellion.' Mr. Fisher reviews the action of President Lincoln in suspending the *habeas corpus* by his own fiat, and, after considering the arguments on both sides, comes to the conclusion that such action by the executive authority was wholly unwarranted. The Constitution, in his opinion, gives the power to suspend the writ to Congress, and not to the President, and with this opinion we cordially agree. The subject is one of great importance, and it is unfortunate that the Supreme Court has never had the opportunity of passing judgment upon it, so as to settle the question authoritatively. Mr. William A. Dunning has a somewhat rambling article on the 'Inequality of the States,' in which he expresses the opinion, that, owing to certain conditions imposed by Congress at the time of reconstruction, some of the Southern States are not on an equality with their sisters. Mr. Dougherty's paper, on the 'Constitutions of the State of New York,' is the first of a series, and will interest the people of the State, and students of institutions elsewhere. Prof. R. M. Smith concludes his discussion of the immigration question, expressing himself strongly in favor of restriction; yet he has little to propose in the way of restrictive measures beyond the more rigid enforcement of existing laws. The article in the *Quarterly* that will be likely to attract most attention is the opening one, by George Gunton, on the 'Economic and Social Aspect of Trusts,' in which he takes the ground that these colossal combinations of capital "are the natural consequence of modern industrial differentiation, and in their nature are economically wholesome, and politically and socially harmless." He confines himself mainly to the economic aspect of the subject, and overlooks some important facts connected with it; but his essay will be useful as a corrective of extravagant and unintelligent views on the other side of the question. On the whole, this number of the *Quarterly* is one of the best that has yet appeared.

— Harper & Brothers have in preparation Sir J. W. Dawson's 'Modern Science in Bible Lands.' —— E. & F. N. Spon have now ready the third edition of 'Dynamo-Electric Machinery: a Manual for Students of Electrotechnics,' by Silvanus P. Thompson. Most of this treatise has been re-written for this edition, and much new matter has been added. Tne same firm announces as ready Sept. 1, 'The Elements of Electric Lighting,' including electric generation, measurement, storage, and distribution, by Philip Atkinson. They also publish 'Crystal Models,' by John Gorham, and the second edition of 'Short Lectures to Electrical Artisans,' being a course of experimental lectures delivered to a practical audience, by J. A. Fleming. —— The September issue of the *American Magazine* opens with an article on 'The American Navy of To-day,' by Lieut. William F. Fullam, U.S.N. A feature of the article is a description of Captain Zalinski's dynamite cruiser, the 'Vesuvius.' The new cruisers are fully described. —— With the issue of Aug. 30, *Light, Heat, and Power* becomes a weekly journal. —— The Electric Light Convention, just closed in New York, was the most largely attended meeting yet held by the association, and the papers, reports, discussions, and addresses were of unusual interest and importance. Although the business of the convention only came to a close late Friday afternoon, Aug. 31, *The Electrical World* was out on Saturday morning with its usual full, carefully prepared stenographic report of the proceedings. —— Dr. McCook's 'Tenants of an Old Farm' (New York, Fords, Howard, & Hulbert), published at $2.50, will be sold this season at $1.50.