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A NUMBER OF REPORTS have been received which dispel the apprehensions in regard to the safety of Emin Pacha. When Osman Digma's letter arrived, announcing the capture of the Equatorial Province, this news did not seem unlikely, as it was known that the Mahdi had sent a large expedition up the Nile to attack Emin; but, as the news came at the moment when Osman expected an attack of the English, it appeared not improbable that the alleged news might be a trap to prevent the English from taking the offensive. A few days ago a Greek trader was reported to have arrived from Khartum with the news that the Mahdi's troops had failed to defeat Emin, and additional favorable news is said to have reached Cairo. It seems that ere long the mystery shrouding the events that have taken place in the region of the upper Nile since November, 1887, will be cleared up.

THOSE WHO CRITICISE the weather forecasts of the Signal Service, and at the same time would like to see discontinued meteorological work which does not directly bear upon practical questions, ought to read carefully the following remarks of Professor Cleveland Abbe, which are found in the preface to his "Treatise on Meteorological Apparatus and Methods:" "Meteorology can only be worthy of a place among the exact sciences in proportion to the improvements in its methods of observation, and to the extent to which they cover the field of the phenomena. Thus the comparison between theory and observation requires the amount of solar radiation to be known to within 1 per cent, whereas it is at present uncertain by 15 per cent; it requires the temperature of the air to be known within 0.5° F., whereas published observations are not always reliable to within one or two degrees; it requires the general movement of the air to be known, whereas we have only very uncertain records of the stratum below 100 feet, nothing of the stratum between 100 and 3,000 feet, and scanty record of the cloud-stratum between 3,000 and 30,000 feet. Every effort to explain the ordinary phenomena of storms is embarrassed by the fact that assumptions as to the temperature, moisture, and wind have to be made because of the absence of actual observations. Weather-prediction will undoubtedly be more satisfactory when the present round of observations is enlarged so as to include the condition and movement of the great mass of air above us, while at the same time increasing the accuracy of measuring the lowest stratum."

THE COMMITTEE of the American Philosophical Society appointed to consider an international language continues its work. In a supplementary report made last month, the new attempts at forming an artificial international language are criticised, primarily Professor Melville Bell's "World-English." If the report characterizes this attempt as "English written on a new phonetic system," this view seems to be founded on a misunderstanding of Professor Bell's principle, which advocates a simplification of the English grammar somewhat in the sense of the opinions expressed in the first report of the committee. The greater portion of the supplementary report is taken up by restrictions upon the criticisms of Alexander J. Ellis of the Philological Society of London, who advocates the adoption of Volapük. It appears that a considerable number of scientists support the scheme of the American Philosophical Society, — to convene a congress for establishing the principles of such a language,— and that most of them concur in the view that it must have those characteristic features toward which Aryan speech is tending. An artificial language of such kind, if generally adopted, would undoubtedly be of great benefit to scientists, and make many publications, such as Hungarian, Bohemian, Roumanian, etc., available. But there seems little hope that in this period of nationalism the majority of scientists will forego the claim that their language is the language of the most accomplished and most cultured people of the world, and that it has a right to become one of the "world-languages." When this period has passed, English, French, and German will continue to be better means of international intercourse than any artificial language, which is necessarily a dead language, could be.

BOOK-REVIEWS.

The American Commonwealth. By JAMES BRYCE, M.P. London and New York, Macmillan. 2 vols. 12°. $6.

THIS is pre-eminently the book of the season. It has been so long looked for, and so eagerly anticipated, that it will now be even more eagerly read. Dedicated to two such eminent publicists as Albert Venn Dicey and Thomas Erskine Holland, it is, first of all, a publicist's book; but the style is so clear, and the arrangement so logical, that it can and will be read by thousands of persons in this country whose better instincts stimulate them to improve the quality of their citizenship by studying a careful and impartial account of their national institutions. Professor Bryce's equipment for writing the book is of the highest order, and is not rivalled either in Europe or in this country. As a member of Parliament for Aberdeen and a member of the recent Liberal Ministry, as professor of civil law in the University of Oxford, as a careful and conscientious student of history, and as an accurate and painstaking man of affairs, whose knowledge of America is extraordinarily full and accurate, Professor Bryce combines in himself both the knowledge and the temper necessary to write a treatise on Ameri-

can institutions; and he has written one which will rank for years to come as the most thoroughgoing examination of them.

Professor Bryce's book will naturally be compared with the work of De Tocqueville, and it merits such comparison; yet it is in some respects a greater book than that of the French student of our public life. If De Tocqueville made a philosophical examination of American institutions, Professor Bryce has made a scientific dissection of them. He enters into detail elaborately and accurately. He illustrates fully and freely. He rarely speculates. The book falls into three divisions, corresponding to the volumes as issued in the English edition. The first deals with our National Government; the second, with our State governments; and the third, with what, for want of a better term, we may call our politico-social institutions. Under the latter head are included the party system, public opinion, the bar and the bench, railroads, universities, and allied topics. The book is too large to be condensed, and too detailed to be described within the limits of a review: it must be read to be understood and appreciated, and it should be read by all classes of our intelligent citizens. It will serve to clarify the ideas of many people as to what our institutions really are, and how they work. It will make plain for the first time, to thousands of citizens who consider themselves intelligent, how public opinion is formed — or, rather, grows — in this country, how it finds expression, and how it rules. It will suggest to the careless democratic enthusiast certain points of weakness in our institutions, and certain dangers which we must sedulously strive to avoid.

Professor Bryce is unquestionably a democrat both by nature and by conviction, and an ardent admirer of democracy. This is perhaps the reason why some of the English critics have not been able to fully appreciate his work. It is the reason, also, which will serve to increase its popularity among our own people. It has been criticised abroad as too large, too diffuse, repetitious. It may be all of these; but these are merely defects of form, which the excellence of the matter more than counterbalances. That Professor Bryce's book will be widely read goes without saying. We can only add an expression of the hope that it may be intelligently read and pondered over; for it is a book that is meant to do good, and which will do good if it is read in the spirit in which it is written. We owe Professor Bryce a debt of gratitude for the time, the labor, and the patience that he has bestowed upon our national life. That his work will make us better known and better understood abroad, and better known and better understood by ourselves, is, we believe, a necessary result of its publication.

Aspects of Education. By OSCAR BROWNING, M.A. New York, Industr. Educ. Assoc. 16°.

The Slöjd in the Service of the School. By OTTO SALOMON. New York, Industr. Educ. Assoc. 16°.

Manual Training in Elementary Schools for Boys. Part. I. By A. SLUYS. New York, Industr. Educ. Assoc. 16°.

THESE are the three latest issues in the admirable series of educational monographs published by the Industrial Education Association of New York City, the growing circulation and general appreciation of which mark a gratifying public interest in matters pertaining to education. Mr. Browning's paper on "Aspects of Education" is known to readers of *Science*, inasmuch as its four chapters appeared in these columns some months ago. They are now rewritten and put together in a connected paper. As trenchant and accurate summaries of the movements apparent in modern educational thought, Mr. Browning's articles are not surpassed anywhere, and we are glad to find them reproduced in this permanent form.

Mr. Salomon, the author of the paper on "Slöjd," is well known as the director of the famous normal school at Nääs in Sweden. As the chief master of slöjd (sloyd), he is fully competent to treat it in its philosophic and pedagogic relations, as is done in the book before us. The translation by Dr. W. H. Carpenter of Columbia College is pleasantly done.

The third paper, by Professor Sluys of Brussels, is the most valuable and important yet issued, and we notice that Part II. of it will follow in March. Professor Sluys was the Belgian commissioner to investigate and report on manual training, and his paper is full of citations of facts actually seen and known. The book is free from speculation, and is practical, complete, and unanswerable. We trust that it may fall under the eyes of such men as Superintendents Dickinson of Massachusetts, Marble of Worcester, White of Cincinnati, Gove of Denver, and Dr. Harris of Concord; for it will show them, impartially and dispassionately, how crude and unscientific their thinking on the subject of manual training is. We shall await the appearance of Part II. with interest.

The Roman Catholic Church and the School Question. By EDWIN D. MEAD. Boston, G. H. Ellis. 12°. 15 cents.

THE substance of this pamphlet consists of a lecture delivered before the Woman Suffrage League, Boston, but it has been expanded and revised for publication. It is a discussion of the question raised in Boston by the rejection, by the school committee, of Swinton's "History" as a text-book, the ground of the rejection being the opposition of the Catholics to Swinton's treatment of the sale of indulgences in the time of Luther. Mr. Mead here discusses the points at issue in an impartial spirit, and with a clear perception of the merits of the case. His style is not always so clear as might be wished, and shows marks of German influence; but, on the whole, the form and temper of the work are excellent. The address begins with a rebuke to the Protestants for some of the foolish things they have said during the late dispute, and intimates that their religion is not so decidedly superior to the Catholic as they are apt to suppose. But on the actual question at issue he takes strong ground against the Catholics, intimating pretty plainly that they opposed the use of Swinton's work for the sole reason that it tells the truth about the abuses once prevailing in their church. He condemns the parochial schools, and indeed private schools generally, holding that all American citizens ought to send their children to the schools maintained by the State. He then goes on to quote from certain Catholic school-books, showing how false to historical truth they are, not so much from actual misstatement as because of omissions, evasions, and exaggerated representations of what Catholics have done for the good of the world. To all persons interested in the questions at issue, and who realize the importance of correct teaching, the pamphlet will be of interest.

AMONG THE PUBLISHERS.

SOME of our readers may be interested in the second and third numbers of the new series of publications by the American Statistical Association. The former, by E. R. L. Gould, is on the subject of "Park Areas and Open Spaces in American and European Cities." Tables are given showing the number of open spaces in all the leading cities, with the amount of space and other items of interest. The author points out the importance of having many small breathing-spaces scattered about the city, especially in the quarters inhabited by the working-classes, and shows that many of our principal towns are deficient in this respect. It appears that some manufacturing cities have sadly failed of their duty, Pittsburgh having only one and a third acres of open space, and Scranton and some other towns none at all. Mr. Gould's general conclusion is, that the policy of American cities in this important matter has been very defective. The other paper is by Edward Clark Lunt, and is a "Key to the Publications of the United States Census." It gives a brief history of the taking of the various censuses, and then presents an epitome, or analysis, of all the census publications from 1790 to 1887. The different subjects dealt with in the census, such as population, races, agriculture, and so on, are treated separately; and under each head reference is made to the volume and page of each census report which gives information upon it. The United States census is so complicated a thing, and yet so important, that such help as Mr. Lunt gives must be of service to students of statistics.

— Professor Cleveland Abbe's "Treatise on Meteorological Apparatus and Methods" forms the second part of the "Annual Report of the Chief Signal Officer for the Year 1887," which has just been published. This admirable work is a handbook equal in value to Ferrel's theoretical meteorology and Hann's and Woeikof's cli-