ing by leaps and bounds, but it needed a hall in London and a new garden in place of the old garden at Chiswick. The Belgian Minister responded for the visitors.

SCIENTIFIC BOOKS.

German Higher Schools: the History, Organization and Methods of Secondary Education in Germany. James E. Russell, Ph. D., Dean of Teachers College, Columbia University. New York, London and Bombay, Longmans, Green & Co. 1899.

The magnificent spectacle of German education is something which it is of extreme importance for our own progress, as well as of great interest as an intellectual phenomenon, that we should thoroughly understand. Nothing that has hitherto appeared on the subject is to be compared for comprehensiveness of character or for vividness of presentation with this work of the Dean of the Teachers College of New York. If all works on education were as interesting as this the science of pedagogy would not be the dreary burden which it is now to most persons of any spirit or of any feeling for logical structure. And if the science of pedagogy had more frequently proved attractive to the better order of writers, who knows how much farther advanced the art and practice of teaching might have been than it now is?

Mr. Russell has been European Commissioner of the Regents of the University of the State of New York, and special agent of the Bureau of Education for the study of German schools. He has thus had unusual opportunities for carrying out his investigations; school officials, high and low, have given him generously of their time, and have put him in the way of comprehending the spirit and the ideals of their educational system. The five years that he has devoted to the subject have been put to good use, and their product is a book of an unusual degree of value. We can only touch upon a few of the more striking characteristics of the German system of education as here depicted.

Of first importance, and far more striking than anything that is said in regard to the system of instruction, is the preparation to which the German teacher must be subjected before he can enter upon his career. It should be premised that there are no exceptions in Germany, and that these regulations must be complied with by absolutely every one who proposes to become a teacher in a higher school. After his nine years' course in a gymnasium the candidate for this profession enters the University, where his studies can nominally be completed in three years, but where, as matter of fact, he is sure to spend from four to five years of hard work. He then presents himself for the State examination, the sole test of a candidate's preparation for any professional career, which neither the degree of Doctor of Philosophy nor any other scholarly distinction can enable him to dispense with. The examining board (consisting chiefly of university professors) he must satisfy (1) of his proficiency in pedagogy and philosophy, including psychology, logic and ethics; (2) of his familiarity with the German language and literature; (3) of his acquaintance with the doctrines of religion, and (4) of his thorough knowledge of the special subjects which he expects to teach. These latter subjects must be at least four in number, two major and two minor, and he must never presume to teach any subject in which he has not received a certificate, nor to any extent beyond that corresponding to the grade of his certificate—first, second or third. (There are certain restrictions limiting his combination of subjects; for example, with any grade of French or English, he must have at least third grade Latin, and if one of his majors is religion the accompanying one must be Hebrew.) As a general thing, the future teacher does not take the degree of Ph. D. at his university; that is a luxury costing from one to two hundred dollars, besides the time spent in the preparation of a thesis; and the Staats-Examen is regarded as more of a distinction than that leading to the degree, besides being, in any case, obligatory. The application for examination is itself a serious affair. There is a fee of thirty marks to be paid for each examination; then there are certificates and testimonials to be furnished of the candidate's whole course of preparation, showing precisely what he has done and what his standing has been during his whole school life from the age of nine years; then there is

his *Vita*, in which the candidate tells when he was born, the rank or occupation of his father, his religious adherence, etc.; this is to be written in Latin if his subjects are the classical languages, and in French or English if they are the modern languages. His application is not regarded as satisfactory if the commissioners are left in any doubt as to his moral character, or if they suspect him of being disloyal in either religion or politics. But after all these requirements have been met, and the examination has been successfully passed, the candidate is by no means ready to enter upon his profession; two years of purely pedagogical training must follow, first a year of study in a pedagogical seminary, and then a year of trial-teaching, under inspection. For this year of teaching he receives no remuneration, and if his work is not satisfactory he may, on the report of his director, be dismissed from the service. This last year of his preparation has brought him, counting in the one year of military service which he must have passed through, to the age of twenty-six at the very least, and more frequently he is two or three years older than that; having reached this stage his name is inscribed on the list of teachers eligible to appointment, and after a period of waiting, which lasts on the average from five to six years, he is at the end sure of an occupation for the rest of his life, and of a decent retiring pension at the close of his term of service.

In comparison with the easy-going methods which we are accustomed to in this country, all this looks like hardship in the extreme for the poor teacher. But what admirable provision it makes for the training of the coming scholar! With an educational system which is laid out on such a scale as this, it is no wonder that learning and research have their home in Germany, and that in industrial matters as well England and France have discovered that their supremacy is in imminent danger of passing away. The great pressure in Germany upon the means of subsistence, and in particular the extreme social prestige which attaches to the occupations which presuppose learning, and the social repression which is exerted upon those whose wealth is their only claim to recognition, have brought it about that the profession of teacher, whether in high school or in university, is one of extreme attractiveness; it follows from this that young men are willing to undergo long and expensive training for the privilege of entering it, and that the requirements can be made more and more exacting with only the result of securing better and better material. If a high civilization consists in a form of society in which the real things of life receive their rightful appreciation, in which an unselfish devotion to learning, to art, and to the discharge of the duties of public office is the quality above all others which is rewarded with the respect and honor of the whole community, then Germany may well claim to be at the present moment the most civilized nation upon the face of the earth. Certainly there is no other country where the art of securing the comforts, the artistic enjoyments, and, to a large extent, the elegances of life for a small expenditure of time and of money has been brought to such a state of perfection as here. This is largely, of course, because the Germans are free from the vulgar love of luxury and passion for display which the higher classes, that is, the intellectual classes, have not wholly succeeded in putting down in England and America; 'conspicuous consumption,' to use the happy characterization of Mr. Veblen, has not for them the baneful attractiveness which it has for the English and the Americans.

This is the bright side of the picture. The other and painful feature of intellectual life in Germany is that it is the possession of one-half of the population only; the women have thrown away the inheritance which should have been theirs from their splendid early German ancestors, and have sunk low in the abyss of household drudgery. The only way to effect a change in this sad state of things is to begin at the top; when it has once become not only possible, but a matter of course, for the clever woman to follow university courses, the standard as regards the proper consumption of time will be quickly raised throughout all ranks; professor's wives will no longer sit up all night to finish Christmas presents in worsted work as they do now, but will save their eyes for better uses. Great changes have been effected in

Germany during the past few years, and there are hardly any universities remaining which offer no facilities for the higher education of women, but these changes have been brought about by the courageous and energetic work of a few fair-minded professors, and in the face of the fanatical opposition of the great majority of them. "The boasted freedom of the universities is again contradicted in their attitude towards the education of women. No one expects the state to be liberal, but liberality is looked for in the highest educational centers of the country. But with what results? Determined, almost fanatical, opposition to the extension of university privileges to women * * * For those women who desire to secure a broader education than is afforded by the girls' schools, and who can easily enough take up university work and profit from it, there can be no valid reason for keeping them out. It makes one lose faith in the ideals of university enlightenment" (p. 416). Nevertheless, the first German woman has already taken the degree of Doctor of Philosophy at the University of Berlin, and in 1896 six young ladies of high social position, who had been trained by the enthusiastic and devoted Helene Lange, took the final examination set for the boys of a Berlin *Gymnasium*, and received high rank. "It will be seen," says Professor Russell, "that the woman question will soon supersede the Greek question." The crying need for women at present is the foundation of public *Gymnasia* for girls. In spite of several recent setbacks, progress can be safely predicted in this line. The latest news from Germany is that a *Gymnasium* for girls has been started in Hannover, and that the one in Karlsruhe, which has hitherto been in private hands, has been taken over by the city.

We have no space left for discussing German methods of teaching. The most important general difference between them and those which we know in this country is that less is left to the initiative of the scholar; he does much less of his work out of school hours, and the teacher takes a much more active part in the work of instruction. The joy and refreshment which the American boy gets out of his athletics are unknown to the German, but (what we are less in the habit of remembering) he has an immense resource in music, to which he gives a large part of his hours of recreation. As regards special studies, the account given of the new method in teaching modern languages is most illuminating, and gives record of marvellous results. But the whole book will become the useful companion of those who are interested in securing better and better systems in the education of the young.

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Baltimore.

The Native Tribes of Central Australia. By Spencer Baldwin, M.A., and F. J. Gillen. New York, Macmillan Co. 1899.

This work is an important contribution to Australian anthropology, being a careful monograph on the Arunta tribe, with observations on some neighboring tribes, giving an account of ceremonies, traditions, customs and myths. As Mr. Cushing identified himself with Zuni Indians so the authors became initiated members of the Arunta tribe, and thus came into intimate knowledge of many facts of great interest, especially as throwing light on Totemic organization. The Totemic myths and ceremonies are treated in great detail. The Totem groups at the time of the year when rain may be expected and food animals breed, conduct simple ceremonies of chants of invitation, with representative plays which will insure the multiplying of the food. These ceremonies are essentially childish, are in the same spirit as the 'rain, rain, go away, come again another day' of civilized children. While these ceremonies do not appeal to supernatural beings, that is beings who are over rain, kangaroos, etc., but to the Rain, Kangaroo, etc., as themselves animate beings, yet as conciliatory the acts must be called religious, as coercive, unreligious, and the native mind continually vacillates from one to the other position. As to the origin of Totemism the authors (p. 127) can pronounce no opinion, yet (p. 209) the origin is sufficiently indicated as derived from the dominant food of any section of a tribe. With regard to such a Totem as Rain we see that the whole tribe have a general Rain dance, and the specialization of function is only partial to the Rain group (p. 193).