

Society of South Africa, which was founded last year for the purpose of preserving the records of the earlier geologists who have written on South Africa, as well as of promoting discussion and investigations on the more recently discovered portions of the colony, has lately come into possession of a most valuable collection of manuscripts and papers, written principally by the late Mr. Andrew Geddes Bain and Mr. G. W. Stow. Among these are the original drawings on a large scale, colored, of all the sections taken across the country by the late Mr. Stow, and also the numerous papers, including lectures, read before various scientific societies by the father of South African geology, Mr. Andrew Geddes Bain. The Society is at present discussing the advisability of erecting a permanent building, to be used as a museum and meeting room; upon its walls the drawings of Mr. Stow would be exhibited. Mr. David Draper, the secretary of the Society, is at present on a short visit to England.

WE have already noticed among the numerous international congresses meeting this year, the Congress of Hydrology, Climatology and Geology, held at Clermont-Ferrand, Puy de Dôme, from September 28th to October 4th. Among the subjects proposed for discussion in the Section of Hydrology are: The therapeutic action of various mineral waters; what is thermal treatment? carbonic acid and alkaline bicarbonates in mineral waters, and their therapeutic action; legislation relative to mineral waters, and sanitary police of thermal stations; collection, sterilization and bottling of mineral waters. In the Climatological Section the subjects for discussion include such questions as the influence of altitude, of light, of dust in the atmosphere, etc. The list of excursions includes visits to Royat, Châtel Guyon, Vichy, Nérès, Bourbon-les-Bains, Mont Dore and Saint Nectaire, and ascent of the Puy de Dôme, and other expeditions.

UNIVERSITY AND EDUCATIONAL NEWS.

THE first volume of the Report of the Commissioner of Education for 1893-94, presented on June 20, 1895, has but just been issued by the government printing office. The volume contains, in addition to the usual statistics of American schools and universities, extended

reports of the condition of education abroad, and a number of papers on special subjects. It appears that there are now 476 colleges and universities in the United States in addition to 156 colleges for women only and 63 colleges of agriculture and the mechanic arts. In the 476 colleges and universities there were 10,897 professors and instructors, 60,415 collegiate students, 3,026 resident graduates and 21,265 professional students. A much larger percentage of the population attend college in the New England States than in New York, New Jersey and Pennsylvania, and some of the Western States have a large representation. Thus while for each 100,000 of the population there are in New York 117 students in college and in Pennsylvania 94, there are in Oregon 184 and in Nevada 197.

THE main building of Mt. Holyoke College, at South Hadley, Mass., was destroyed by fire on September 27th. The loss will probably amount to \$200,000, but there was that amount of insurance on the buildings. The building of the Northern Illinois College, at Fulton, was destroyed by fire on September 26th. The loss is estimated at \$100,000.

THE State Veterinary College, located at Cornell University, for which the State has provided \$250,000 for buildings and \$30,000 annually, will open with more than two hundred students.

THE Polytechnic school, the establishment of which, at Peoria, Ill., by Mrs. Julia Bradley, we announced sometime ago, will be affiliated with the University of Chicago, two of the seven trustees being members of the University. Mrs. Bradley will support the school during her life and at her death the entire estate, estimated at over \$2,000,000, will be bequeathed to it.

SEVERAL universities report a large increase in the freshman class this autumn. 350 freshmen have been admitted to the University of Pennsylvania, which is an increase of 134 over the class of last year. The Sheffield Scientific School has this year a class of 180, as compared with 150 last year.

At the Teachers' College, New York, Dr. James Newcombe has been appointed lecturer

on physiology, and Mrs. F. C. Torrance to be assistant in mathematics. Mr. Richard E. Dodge has been promoted to an associate professorship of natural science, and Miss E. B. Sebring to an associate professorship of the history of education.

MR. JAMES R. BAILEY, M. A., a graduate of the University of Texas, after a three years' course at the University of Munich, has just been appointed instructor in chemistry in his *alma mater*. He will be associated with Prof. Henry Winston Harper.

A POST-GRADUATE course of bacteriology has been established at the University of Sydney, N. S. W.

DR. H. MINKOWSKI, professor of mathematics in the University of Königsberg, has been called to the Zurich Polytechnic Institute. Dr. Graeff, of the University of Freiburg, i. Br., has been made assistant professor of mineralogy and petrography. Prof. Erismann has resigned the chair of hygiene at the University of Moscow.

DISCUSSION AND CORRESPONDENCE.

GEOLOGY IN THE COLLEGES AND UNIVERSITIES OF THE UNITED STATES.

UNDER this title* Prof. T. C. Hopkins has collated some very interesting data concerning the teaching of geology in the United States, which, if properly analyzed, cannot fail to impress upon the reader the fact that in some branches, at least, our university instruction is not only defective, but largely in the hands of amateurs.

As is well known, geologic study and research are not only growing in favor, but are now recognized as essential in any institution offering instruction in pure science. Moreover, the practical application of geologic truth earns for geology a place in many of the technical schools. That so important a study should be so neglected by American universities and colleges is, indeed, surprising. In Mr. Hopkins'

* 'Geology in the Colleges and Universities of the United States,' by T. C. Hopkins, being Chapter III. of the forthcoming Report of the Commissioner of Education, United States Bureau of Education, Washington, 1896.

paper 382 institutions are reported as teaching geology. By an examination of the tables furnished, corrected in a few instances by reference to the text, I find but 54 of that number offer instruction exceeding one year in length. Of the 54 thus selected four are not recognized in the body of the report as possessing any professional merit. Of the 50 now remaining 40 have established separate chairs, while 10 have geology combined with some other subject.

Another fact is interesting in this connection: The Geological Society of America, an association embracing, it is thought, not less than 90 per cent. of the trained geologists of this country, is represented in but 58 of the 382 institutions.* In the 50 institutions of reputation, giving instructions exceeding one year, the Geological Society is represented in 39; in the 40 with separate departments it is represented in 34.

The conclusion to be drawn is now apparent, viz.: That the instruction offered in the majority of American universities and colleges is given by amateur geologists, who claim no recognition in the science they teach; offer no contributions; conduct no investigations; who are content to read with a class or hear a class recite. The true teacher must be able not only to read a text, but to interpret a text as well, and, what is of still greater importance, read nature and interpret her actions. A teacher inspires a student in precisely the degree in which he himself is inspired. If he be a 'text-book geologist,' it is reasonable to expect that his students will take their geology from books rather than from nature; if he be a 'working geologist,' that his students will seek the field, will frequent the laboratory.

The point I wish to make is this: Without a doubt the majority of institutions are teaching geology in an utterly inadequate manner, without proper facilities and by means of teachers unknown and unrecognized in the science. Some of these may be doing fairly good work; but the presumption is that the work will not, cannot, be of a high order.

But the mischief does not end here. Students from these institutions go forth with the

* See list of Fellows, April 1896, *Bulletin of the Geological Society of America*, Vol. VII., p. 530, et seq.