

greatly that unless additional space is provided for their proper administration and exhibition, the efficiency of the Museum will be greatly impaired; but though the collections are growing rapidly in certain directions, they are not increasing as symmetrically and consistently as is manifestly desirable—a very common cause of complaint. A defect which calls for instant attention, however, relates to the most undesirable and dangerous storage of collections in wooden sheds near the Smithsonian building, and in the basement of the building itself, where large alcoholic collections in bottles containing, in the bulk, many thousands of gallons of alcohol, have been put away, as space cannot be found for the specimens in the Museum. It appears that a fire communicated to these rooms would sweep through the entire length of the building, and although the building itself is fireproof as against any ordinary danger, it may well be doubted whether any of the collections therein exhibited can be regarded as safe, if the rooms immediately below should be exposed to so peculiarly severe a conflagration as would be caused by the ignition of these large quantities of inflammable material. Such a calamity would affect the whole scientific world, and we trust that the appeal for a change of the present condition of affairs will not be disregarded.

The investigations relating to the ethnology of the American Indians were carried forward during the year, under the efficient control of Major J. W. Powell, the director, aided by Mr. W. J. McGee, ethnologist in charge, as executive officers. These researches of the Bureau of American Ethnology embrace the subjects of archæology, descriptive ethnology, sociology, pictography and sign language, linguistics, mythology, psychology, and bibliography, and the results obtained during the year have never been exceeded in value.

The Smithsonian Exchange Service was inaugurated nearly half a century ago, with the object of carrying out one of the purposes of the founder of the Institution in the diffusion of that knowledge which the Institution itself helped to create. For this purpose it established correspondence with scientific men all over the world, until there is no civilized country or people, however remote, upon the surface of our planet, so far as is known, where the Institution is not thus represented. These correspondents have grown in numbers until at the present time those external to the United States alone number nearly 17,000. More than one hundred tons of books passed through the exchange office during the fiscal year 1893-94.

It was only five years ago since an appropriation was made for the National Zoological Park at Washington. The park has an area of nearly 167 acres, but there are as yet only four permanent buildings, while the animals number 510, of which 200 are of the larger size. Comparing this with similar establishments at other capitals, it is noted that the Gardens of our Zoological Society cover about 36 acres, are crowded with buildings, and that the magnificent collection of animals, some 2300 in number, is housed in a fairly comfortable manner. In Paris the portion of the Jardin des Plantes assigned to animals is a plat of ground some 17 acres in extent, crowded with 900 animals. In Berlin the portion of the Thiergarten appropriated for animals occupies about 60 acres. Fifteen hundred animals are accommodated and, necessarily, much overcrowded. In the United States the principal collections are in Philadelphia, where the grounds occupy about 40 acres, and the collection comprises 881 animals; in Cincinnati, where 36 acres are occupied with about 800 animals; and in New York, where the city maintains about 700 animals in Central Park, occupying an area of approximately 10 acres. In none of these collections are the grounds of sufficient size to give any extensive range for the animals.

Appended to Mr. Langley's general account of the affairs of the Institution and of its bureaus, are the detailed and statistical reports from the officers in charge of the different branches of work. The whole shows how very great and valuable is the work done in the United States "for the increase and diffusion of knowledge among men."

#### UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

PROF. C. S. SHERRINGTON, F.R.S., has been appointed to the George Holt Chair of Physiology in University College, Liverpool.

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DR. A. W. CROSSLEY, Berkeley Fellow, and Demonstrator of Organic Chemistry, in the Owens College, Manchester, has been elected Demonstrator of Chemistry in the Medical School of St. Thomas's Hospital, in succession to Dr. W. H. Ince, who has been appointed Government Chemist at Trinidad.

SIR DINSHAW MANOCKJEE PETIT, BART., has, through the Principal, Mr. S. Cooke, offered to the Indian Government the sum of 5000 rupees towards the cost of providing residential quarters for Parsee students attending the College of Science at Poona.

THE Governors of Colfe's Foundation have selected Mr. F. W. Lucas to be Head Master of Colfe's Grammar School, Lewisham, from September next. Mr. Lucas is at present Head Master of Hipperholme Grammar School, Yorks, and was formerly Senior Assistant and Science Master at Roan School, Greenwich.

WE learn from the *Lancet*, that in accordance with the will of the late Dr. G. Y. Heath, Professor of Surgery in the University of Durham, and President of the University of Durham College of Medicine, the trustees of the Heath Scholarship, Prof. W. C. Arnison and Mr. Frederick Page, will award and pay to the writer of the best essay on Surgical Diseases of the Jaws the sum of £200. All graduates in medicine or in surgery of the University of Durham are eligible to compete for this prize. The essay must be typewritten or printed, and delivered to the trustees not later than March 31, 1896. The essay, together with any specimens, drawings, casts, microscopical preparations, or other means of illustration accompanying it, will become the property of the College of Medicine, Newcastle-upon-Tyne, but by permission the essay may be printed for general circulation by the Heath Scholar. Mr. Stephen Scott, of Harrogate, has generously presented to the College of Medicine the sum of £1000, which has been devoted, in accordance with Mr. Scott's wish, to founding a scholarship to promote the study of hernia and allied subjects. Any graduate in medicine or surgery of the University of Durham, or any student of the University of Durham College of Medicine is eligible to compete for the scholarship, provided that such student shall have had at least one academical year in attendance at the College, and that in any case his age does not exceed thirty years at the time when the essay is sent in. The competition takes place every year. Essays for this year's competition must be sent not later than July 31, 1895, to Prof. Arnison, University of Durham College of Medicine, Newcastle-upon-Tyne.

ON Friday last, Mr. Acland received a deputation at the Education Office, from the representatives of the Association of Head Masters, respecting the recent regulations which have been issued by the Science and Art Department with reference to organised science schools. After hearing the views of the deputation, Mr. Acland, in reply, said it was not desired to make an upheaval of the arrangements for these schools, but to join together in improving the method and the system on which the teaching was carried on. They were all agreed that to lessen too frequent examination, and to introduce the element of inspection, if reasonably carried on in a friendly spirit, would be of great value to these schools. One of the objects of the Department had been to make it clear that, besides the teaching of science, which was the primary object of these schools, they also desired fully to recognise the element of literature and the teaching of special subjects. In order to meet a point which had been raised, as to the change from the old system of organised science schools to the new, the closing words of the syllabus would be:—"Reasonable latitude will be allowed for two years in any departures which may be made from the prescribed course while the changes from the present to the new system are being brought about." Taking these words, together with the words in the earlier part of the syllabus, as to reasonable latitude being allowed to teachers as to the nature of the course which they might pursue, provided that the instruction was sound, satisfactory in amount, and combined with proper practical work, it would be seen that the Department had no intention of being too despotic, and that if really good and reasonable work was done under some more elastic system, these organised science schools would be found of even more benefit in the future than they had been in the past.