

1882, *data* to hand are not at present complete enough to afford a practical test of its efficacy. The recently issued report, however, of His Majesty's inspectors of explosives goes to show that the system has been found wanting, and that there is ample justification for the present inquiry. Besides the grants made by the Institute and the Surveyors' Institution, the committee has been aided financially by the government grant committee of the Royal Society and by the Royal Meteorological Society. Valuable help has also been given by the Royal Institute of British Architects, the Surveyors' Institution, the Institute of Electrical Engineers and the Royal Meteorological Society by circularizing their members with a view to getting observers. The committee is constituted as follows: Mr. John Slater, chairman; Major-General E. R. Festing, C.B., F.R.S., Mr. J. Gavey, M.I.C.E., General Post Office; Mr. W. P. Goulding, F.R.G.S., F.S.I., Dr. Oliver Lodge, Birmingham University; Mr. W. N. Shaw, F.R.S., Mr. H. Heathcote Statham, Mr. A. R. Stenning, F.S.I., Mr. Arthur Vernon, F.S.I., Mr. Killingworth Hedges, M.I.C.E., hon. secretary.

THE Secretary of Agriculture has drawn up at the request of the Senate a report on the extinction of the American bison, in which he says: (1) The American bison is on the verge of extermination. Scarcely a handful now remain of the millions which formerly roamed over the plains of the West. (2) So far as the department is aware only two small herds of wild buffalo are in existence in the United States * * * one in the Yellowstone Park, the other in Lost Park, Colo. During the past autumn several of the latter were killed, and while the department has no recent information as to the exact number of animals in these herds at the present time, it has reason to believe that the Yellowstone herd does not exceed 25 and the Lost Park herd eight or ten individuals. (3) There are no wild buffalo in Canada, except in the Peace river country, where a few woodland buffalo, believed to be a different species from our plains buffalo, still exist. (4) A number of buffalo have been domesticated and half-domesticated. In addi-

tion to the small herds in zoological parks and in the hands of private individuals there are three important herds—the Corbin herd on the game preserve of the Blue Mountain Forest Association in New Hampshire, the Allard herd on the Flathead Indian reservation in Montana, and the Goodnight herd (containing about a hundred cross-breeds) at Goodnight, Tex. (5) Both the Allard and Goodnight herds consist in part of cross-breeds known as 'cataloes' obtained by crossing buffalo bulls with domesticated cows. Mr. C. J. Jones, the originator of this breed, states that he has succeeded in crossing the buffalo with almost all the different breeds of cattle, but that he considers the Galloway and the Polled Angus the best for this purpose. (6) Recent information indicates that the Allard herd is being broken. Thirty-five animals were sold last year, and a number of others within the past few months. If the government could acquire possession of these buffaloes they might be placed on some reservation under competent management, and if properly protected could be preserved indefinitely. Unless this is done there is little or no hope of maintaining the herd in its entirety. So far as known the Goodnight herd is not for sale, but a proposition has several times been presented to Congress regarding the reservation of certain public lands in New Mexico for their preservation. Under proper restrictions this plan might result in the perpetuation of the herd for some years. (7) Should the government acquire possession of a considerable number of full-blooded animals, it is possible that the absolute extermination of the species might be long delayed. To avoid danger of destruction by epidemic disease and deterioration by too close inbreeding, the government herd should be divided and kept in at least two widely separated localities. This would admit of interchange of blood when necessary.

UNIVERSITY AND EDUCATIONAL NEWS.

THE General Assembly of the State of Iowa has passed a mill tax for the building support of the three educational institutions of Iowa, as follows: State University at Iowa City, one fifth of a mill to run for five years. This will

realize \$550,000. The Iowa State College of Agriculture and Mechanic Arts at Ames, one fifth of a mill for a similar period, which will realize \$550,000. The State Normal School at Cedar Falls, one tenth of a mill for five years, which will realize \$225,000. The state educational institutions receive in addition \$434,269 for the biennial period, distributed as follows: State University, \$215,000; Iowa State College of Agriculture and Mechanic Arts, \$135,000—of this \$35,000 is for additional general support annually, and \$10,000 annually for the experiment station, \$5,000 for live stock, \$5,000 to begin the building of a barn and \$35,000 to start a main central building; the Iowa State Normal School, \$84,269. Other laws passed affecting science and school matters is a compulsory school attendance law; increasing the pages of the report of the Iowa Academy of Science, and paying for illustration in the same and other state papers and reports.

PRESIDENT RAYMOND has announced that Mr. Andrew Carnegie had given \$40,000 to Union College for the completion of Nott Memorial Hall.

THE Wilson Memorial Fund for Washington and Lee University has just been completed. The amount is \$100,000, and is for the support of the Department of Economics, which was developed through the efforts of President Wm. L. Wilson. For the present the excess of income above the salary of the professor of economics will be allowed to accumulate, until with subsequent gifts it amounts to \$25,000, when a memorial building will be erected.

THE New Jersey Legislature has appropriated \$12,000 for the establishment of a course in ceramics at Rutgers College. The institution has also received a gift of \$20,000 from ex-Governor F. M. Vorhees and Mr. Ralph Vorhees.

THE Lowell Textile School has received a gift of \$21,000 from Miss Charlotte Kitson and Mrs. Emma Stott, daughters of the late Richard Kitson, founder of the Kitson Machine Company. The money is to be devoted to the construction of a spinning building, 275

by 60 feet, adjacent to the group of buildings already under construction, and to be ready for occupancy next September.

MR. GEORGE WESTINGHOUSE, of Pittsburg, has made known his intention to present to St. Paul's School, in Concord, N. H., a new building to be used as a physical and chemical laboratory. Plans are now being drawn and a location has been decided upon nearly opposite the new Sheldon library building.

IN order that officers of the medical corps of the navy may continue their professional studies, Secretary Long has, upon the recommendation of Surgeon General Rixey, proposed to Secretary Root the establishment of a joint Army and Navy College. That officers may be available for study as well as for duty the secretary has also asked Congress for a slight increase of the medical corps.

MR. W. W. ASTOR has given £20,000 to the University of London for the endowment of professorships. This gift is in answer to an appeal by Lord Reay, president of the College, who asked for £700,000 for the endowment of existing chairs and the foundation of new professorships.

By the will of the late Mr. Robert Irvine, of Edinburgh, a chair of bacteriology is endowed in the University of Edinburgh.

BOWDOIN COLLEGE will celebrate its hundredth anniversary at the approaching commencement.

THE REV. HENRY HOPKINS will be installed as president of Williams College on June 24.

MISS E. E. CARLISLE, who has had charge of the work in pedagogy at Wellesley College, has resigned to become one of the supervisors of the Boston schools.

DR. S. SCHLECHTER, the eminent Talmudic scholar, has accepted the presidency of the Jewish Theological Seminary, and arrived last week in New York to assume the duties of the office.

THE Geological and Mineralogical Laboratory at Freiburg has been divided, Professor Steinmann being made director of the Geological Laboratory and Professor Gräff director of the Mineralogical Laboratory.