

are a committee of the board to select the state geologist and arrange other matters requisite for the inauguration of the survey. The annual appropriation is \$15,000.

At a meeting of the board of managers of the National Geographic Society the following resolutions were adopted:

The National Geographic Society believes that it is of importance to science that tidal, magnetic and meteorological observations shall be obtained at or in the vicinity of Coats Land during the same period that the British expedition under Captain Robert F. Scott, R. N., is making similar observations on the other side of the Antarctic area, 1,800 miles distant, and at the same time that this recently discovered land shall be explored.

That the society is ready to accept Mr. Peary's proposition that it shall undertake jointly with the Peary Arctic Club an expedition to the Antarctic regions as outlined above, provided that the board of managers, after consultation with the members of the society, finds that the project will receive sufficient financial assistance to warrant the undertaking.

ACCORDING to the daily papers, a delegation which included Dr. Ira Remsen, president of Johns Hopkins University; Brigadier General George H. Torney, surgeon general of the army; Dr. William H. Welch, president of the American Medical Association, and several others, have called on President Taft and urged the necessity for the cities of the country to adopt more scientific methods of sewage disposal. They asked the president to appoint a temporary commission to inquire into the matter. Mr. Taft said he was interested in the subject, but that he was without authority to appoint a commission.

DURING the summer of 1910 the University of Michigan Museum will be connected with three expeditions. As the depository of the state collections it will receive the specimens of the botanical investigations of a portion of the "peach belt" of Michigan, carried on by H. C. Kauffman and L. H. Pennington for the State Geological and Natural History Survey. Under a gift from Mr. Bryant Walker and an appropriation from the university the curator, Dr. Alexander G. Ruthven and Mr. H. B. Baker will make collec-

tions in southern Vera Cruz, Mexico, with the principal aim of enlarging the synoptic collection of molluscs and vertebrates. A third expedition financed by W. B. Mershon, Saginaw, Michigan, and to be known as the Mershon expedition will be sent to the Charity Islands, Saginaw Bay, Michigan, to continue the biological survey of the state that has been going forward for a number of years on appropriations from the state, university and private individuals.

UNIVERSITY AND EDUCATIONAL NEWS

MR. ANDREW CARNEGIE has promised to give to Cornell University the \$50,000 required to enlarge Morse Hall, housing the department of chemistry.

THE new biology building of the University of Wisconsin is to be placed on the upper campus, at the south end of the court of honor, between University and South Halls, facing the Lincoln statue. Originally plans were drawn to suit the site formerly chosen in the ravine between University and Observatory Hills. New plans appropriate to the new site will be prepared at once by the architects.

THE New York *Evening Post* states that Mr. S. G. Iverson, state auditor, who recently made a thorough inspection of the school lands granted to Minnesota by congress in 1851, many years before the state government was organized, has compiled figures which show that the fund now amounts to more than \$21,500,000, and that the state still holds approximately 3,000,000 acres of unsold land. These remaining lands have great wealth, fertile soil, abundance of growing timber, and the value of the iron ore deposits is almost beyond comprehension. "We have already 1,000 forty-acre tracts of land under mineral contracts in the iron-bearing districts," Mr. Iverson reports, "from which I believe we shall receive an average of 1,000,000 tons per forty, or a grand total of 1,000,000,000 tons, which, at a royalty of twenty-five cents a ton, the contract price, will produce the sum of \$250,000,000. This endowment will be realized within fifty years, or before the state is a hundred years old. Of this sum I estimate that the school

fund will receive \$170,000,000, the university fund \$30,000,000, and the remainder will go to the swamp-land fund, the income from one half of which goes to the school fund and the remainder to assist in maintaining our state institutions."

A DEPARTMENT of experimental breeding has been established in the College of Agriculture of the University of Wisconsin by the regents, who have appointed Dr. Leon J. Cole, of the Sheffield Scientific School at Yale, an associate professor of experimental breeding. Dr. Cole will take up his new work with the opening of the second semester, conducting investigations in the subject of experimental breeding with special reference to the laws of heredity and improvement of animal life. He will also give instruction to advanced students. Dr. Cole graduated from the Michigan Agricultural College and the University of Michigan in 1901. He continued at Michigan as a graduate assistant for two years before entering Harvard University, where he obtained the degree of doctor of philosophy in 1906, and was appointed representative of the United States Bureau of Animal Industry in breeding work at the Rhode Island Agricultural College, whence he removed to Yale University in 1908.

THE Kansas State Agricultural College has established a new department, that of milling industry, and selected to head this department Mr. Leslie A. Fitz, now in the office of grain standardization, United States Department of Agriculture, and in charge of cooperative milling experiments and other work at the Fargo, N. D., Station. Mr. Fitz will enter upon his new field March 1. The object of the new department is to take cognizance more fully of the great importance of bringing to the market a more perfect grain and to investigate means of utilizing this to the greatest advantage. It will concern itself with all questions touching upon the wheat crop, flour making and bread baking. Mr. Fitz has been connected with the Department of Agriculture for several years and has been intimately associated with several lines of wheat investigation. He was also engaged in the same work

previously at the Kansas State Agricultural College, of which institution he is a graduate.

E. K. SOPER, of Cornell University, has been appointed instructor in economic geology in the University of Minnesota.

MR. W. ASTON, M.A., demonstrator in physics, Birmingham University, has been appointed assistant to Sir J. J. Thomson in the Cavendish Laboratory, Cambridge. He is succeeded at Birmingham by Mr. E. E. Fourrier d'Albe.

DISCUSSION AND CORRESPONDENCE

EARLIER REFERENCES TO THE RELATION OF FLIES TO DISEASE

IN the last number of SCIENCE (January 7) there is an interesting note by Dr. E. W. Gudger on Edward Bancroft's reference, in 1769, to the belief that flies transmit the tropical disease known as "yaws." It is not generally known that as early as the sixteenth century there was definitely promulgated the theory that flies play a rôle in the transmission of the plague.

Dr. Josiah Nott, 1849, lists Athanasius Kircher as among the earlier writers who believed that insects served as transmitters of disease. Dr. Kelly, in his fascinating volume "Walter Reed and Yellow Fever," goes further and quotes from Kircher's "Scrutinium Physico-medicum," published at Rome in 1658, the remarkable statement:

There can be no doubt that flies feed on the internal secretions of the diseased and dying, then flying away, they deposit their excretions on the food in neighboring dwellings, and persons who eat it are thus infected.¹

Unfortunately, Dr. Kelly's translation stops

¹ Apropos of the present-day belief that blood-sucking and stinging insects may occasionally be direct inoculators of disease germs, the following statement from the same work is of interest: "In a recent plague at Naples, while a certain nobleman was looking out a window a hornet flew in and lighted on his nose and stinging him with the sharp point of its proboscis, caused a swelling. And when the poison had gradually spread and crept into the vital organs, within a space of two days (without doubt from the contagious humours which the insect had sucked up from a corpse), he contracted the disease and died."