

United States because the prevailing winds are from the land and the sand is blown into the sea. On the west coast the situation is more serious. The most notable example of reclaimed sand areas there is furnished by Golden Gate Park, San Francisco, where grasses, acacias and, later, trees and shrubs have converted sand wastes into pleasure grounds of great beauty. The attention of the Palestine colony is called to the wonderful reclamation of the Landes, France, where a wealth-producing forest of maritime pine, the source of the French turpentine, has been grown to take the place of shifting dunes. The American foresters also give the address of the French seedsman who furnished this government with the maritime pine seed which has been used in planting experiments on the Florida national forest, near the Gulf coast.

THE Secretary of Agriculture has signed an agreement with the state of North Carolina for a cooperative study of forest conditions in the eastern piedmont region. The work will be carried on by the forest service and by the state geological and economic survey with one half of the cost paid by each. The study will determine the distribution and proportion of forest lands, and the relative value of lands for timber and for agriculture. It will take into account the present status of lumbering, the causes and effects of forest fires, and will recommend a system of fire protection and of forest planting. The study arranged supplements two already completed in the more mountainous regions of the state. The first, a study of forest conditions in the Appalachians, has been published as a state report. A study of the forests of the western piedmont region was completed recently and the results are being prepared for publication. When the study of the eastern piedmont region is finished it is planned to proceed to a similar study of the coastal plain region, so that eventually the entire state will be covered by a forest survey.

UNIVERSITY AND EDUCATIONAL NEWS

GOVERNOR TENER, of Pennsylvania, has, after revision, approved the following state appropriations made at the last session of the

legislature: The Pennsylvania State College, \$1,240,000, in addition to income from Land Grant Fund and congressional appropriation to Land Grant Colleges; University of Pennsylvania, \$820,000; University of Pittsburgh, \$400,000 and Temple University, \$100,000, making the total state appropriation for higher education \$2,560,000.

FRANKLIN COLLEGE, Indiana, has secured pledges aggregating two hundred and fifty thousand dollars for additional endowment. Three sixteenths of this amount is from the General Education Board.

MIDDLEBURY COLLEGE has received \$30,000 as the residuary legatee of the late Henry M. Barnum.

SIR WILLIAM RAMSAY, emeritus professor in University College, London, has given the college £500 for books and journals for the chemical library.

THE medical department of Tulane University will hereafter be known as the Tulane College of Medicine and will be divided into four schools, each with a separate dean and staff, namely: the School of Medicine and Pharmacy, dean, Dr. Isadore Dyer; the Post-Graduate School, dean, Dr. Charles Chassaignac; the School of Hygiene and Tropical Medicine, dean, Dr. Creighton Wellman, and Dentistry, dean, Dr. Andrew Friedrichs. The following elections and changes have been made in the Post-Graduate School: Dr. Henry Dickson Bruns, transferred from the emeritus to the active list, as professor of diseases of the eye; Dean Creighton Wellman, elected professor of tropical diseases and preventive medicine; Dr. J. T. Halsey, elected professor of clinical therapeutics; Dr. C. C. Bass, elected professor of clinical microscopy; Dr. W. W. Butterworth, elected professor of diseases of children, and Dr. George S. Bel, elected professor of internal medicine.

PROFESSOR W. A. STOCKING, JR., of the dairy department of the New York State Agricultural College at Cornell University, has been appointed to succeed Dr. L. H. Bailey as acting director of the Agricultural College.

MRS. ELLA FLAGG YOUNG has withdrawn her resignation as superintendent of the Chicago

public schools, the newly organized school board having declined to accept it, by vote of fourteen to one.

DR. ARTHUR D. HIRSCHFELDER, of Johns Hopkins Medical School, has accepted the appointment of professor of pharmacy and director of the pharmaceutical department of the University of Minnesota.

DR. J. M. SLEMONS, associate professor of obstetrics at Johns Hopkins Medical School, has been appointed head of the department of obstetrics and gynecology and director of the woman's clinic in the University of California.

MR. HAROLD S. OSLER has been elected assistant professor of agronomy, in charge of the crops section at the University of Maine.

MR. J. B. DEMAREE, recently of the Ohio Agricultural Experiment Station, and for the last six months engaged in the study of plant rusts at the Indiana Experiment Station, has accepted a position in the State College of Pennsylvania as instructor in botany.

PROFESSOR KRUSE has accepted the call as director of the Hygienic Institute at Leipzig as successor of Professor Hofmann.

DISCUSSION AND CORRESPONDENCE

THREE ICE STORMS

DURING the last two weeks in February, 1913, two ice storms which were of rather unusual meteorological interest, were observed at Blue Hill Observatory (10 miles south of Boston, Mass.). An "ice storm" (*glatteis*, *verglas*) occurs when raindrops falling on trees and other objects, cover them with ice. In both cases the ice storms began at the base station (400 feet below the summit and one half mile northwest) nearly three hours earlier than at the summit. The first ice storm occurred during the night of February 16-17. Throughout the sixteenth at the summit of Blue Hill, the wind was southerly, with the temperature in the forties (F.). In the middle of the afternoon, a low fog appeared over Boston. By sunset, this fog filled the entire Boston basin and was beginning to send long fingers southward through the notches in the

Blue Hill Range and up the low Neponset Valley. Not till three hours later did the fog overtop Great Blue Hill with its accompanying northeast wind and freezing temperature. The warm south wind, whose lower boundary had now risen above the hill, continued above the lower wedge of cold air and with its rain supplied the material for the ice storm below.

The second storm began in the morning, February 27, and continued for twenty-four hours, the ice attaining a thickness of one inch. The night before, at a temperature of 26° a fine thick snow had set in with a brisk southeast wind. In the early morning, the temperature passed 32°, the snow changing to rain. At 5:20 A.M. the first influence of a cold current of air from the north was recorded on the thermograph at the base station (temperature fell rapidly from 35° to 31°). Not till 8:15 A.M. did the wind on the summit swing to the north, lowering the temperature to that of the base station. The warmer air current continued above, unabated, for at 9 P.M. the light rain had become heavy (rain temperature 32.3°) and the cold, northeast wind (27°-31°) had increased to brisk. On the following morning in the warm sunshine and rapidly rising temperature, the ice melted off the trees so rapidly that for half an hour the sound of falling ice resembled that of a heavy hailstorm.

Another ice storm deserving mention here was that of February 21-22. The weather map of February 21 showed an ice storm in progress over a strip of country 100-200 miles wide, extending from northern Texas to southern Michigan. The next morning, this ice-storm belt was shown as a strip about forty miles wide from northern Vermont to southern Maine. The geographical distribution of the different forms taken by the heavy precipitation throughout New Hampshire was particularly interesting as viewed from a train window two days later. At Jackson, N. H., the precipitation on February 22 had been about seven inches of snow and one inch of ice pellets. Southward, this snow-covering decreased rapidly into a thin, compact blanket of ice pellets and frozen rain, ice appearing on