

portion of the Bulletin is devoted to the figures showing the chemical composition of the different articles of food. As a rule only maximum, minimum and average figures are given, but in a few cases the individual analyses are quoted.

The animal foods whose composition is given include the different cuts of beef, veal, mutton and pork; fish, shellfish, etc.; poultry; game, eggs and dairy products; canned meats, soups, etc.; sausages and other manufactured products. The foods of vegetable origin include flour, meal, etc.; bread, crackers and pastry; sugar and starch; fresh and canned vegetables; pickles and condiments; fruits, fresh and preserved; and nuts. Little information has hitherto been available concerning the composition of some of these foods, for instance, nuts.

The literature of the subject has been thoroughly gone over and the present compilation is based upon over four thousand analyses. Many of these were in out-of-the-way publications not readily accessible to students of the subject.

Such a compilation is useful to specialists and also to those interested in nutrition from a more practical standpoint. With the aid of these figures it is possible to compare one food with another as a source of nutrients. The food value of any dietary may be computed if the amount of different foods consumed is determined, and by comparing the dietary with commonly accepted dietary standards its relative value may be seen. Analyses of foods have accumulated very rapidly in recent years, and it is probable that many more will be made in the near future. This Bulletin is designed to serve as a reference book until it shall be superseded by a more extended compilation.

#### SCIENTIFIC NOTES AND NEWS.

CHARLES P. DALY died on the 19th of September in his 84th year. He had served forty-two years as Judge of the Court of Common Pleas in the city of New York, and twenty-seven years as Chief Justice, his legal decisions being regarded as of the highest authority, many of them establishing precedents in questions of international importance. He had a wide sympathy and knowledge in many subjects of art, literature and science, and a memory and

facility which made him friends all over the world. He had been president of the American Geographical Society for thirty-six years, and honorary member of the Geographical societies of London, Berlin and Russia. He was largely instrumental in accumulating the fine library of the American Geographical Society, and in securing the endowment for its new home near the American Museum of Natural History of which he was also a member. He and Mrs. Daly were members of the Torrey Botanical Club, which they joined expressly in order to aid in the foundation of the New York Botanical Garden. It was largely due to their wide acquaintance with prominent and intellectual men and women that the gardens were incorporated and endowed, and they were among the first and most liberal contributors. As one of the managers of the garden, Judge Daly had an active interest in its work, being always ready with advice and contributions to aid any of its enterprises. His death, following within one week that of Cornelius Vanderbilt, deprives New York of two of its most liberal citizens, and scientific institutions of friends and patrons, whose like is seldom seen.

ADMIRAL WALKER, Professor Burr, of Columbia University, Colonel Haines and Colonel Ernst, of the Isthmian Canal Commission, have been abroad during the summer studying the plans and documents of the Panama Canal, at Paris, and examining the Kiel Ship Canal. They went later to England to visit the Manchester Ship Canal, and expected to sail from Southampton for New York on September 23d. The Commission will leave New York probably about the beginning of November for Colon, and will make a careful study of the Panama, Nicaragua and other routes.

As the daily papers report in great detail, Signor Marconi with several assistants, has arrived in America. He intends to report the yacht races for the newspapers, and afterwards to conduct experiments for the War and Navy Departments.

PROFESSOR A. W. RÜCKER, F.R.S., will deliver an address on the occasion of the distribution of medals at the Royal College of Science, London, on October 5th.

PROFESSORS WILLIAM LIBBEY and CHARLES MCCLURE, members of the Peary Relief Expedition have returned to Princeton with valuable collections, both of vertebrates and invertebrates.

MR. W. D. HUNTER, special agent of the Division of Entomology, Department of Agriculture, has returned to Washington, after having studied the Turtle Mountain region in North Dakota and Manitoba, supposed to be a permanent breeding ground of the Rocky Mountain locust. This he found not to be the case, and he thinks that the probable breeding ground is on the Assiniboine River, north and east of Regina, a region that will be investigated next season.

ON the occasion of the centenary of the Technical Institute at Charlottenburg, which will take place on October 19th, monuments to Siemens and Krupp will be unveiled.

THE death is announced of M. Gaston Tissandier, well known as aeronaut and writer on scientific topics, and founder and editor of the weekly scientific journal *La Nature*. He was 56 years of age.

WE also regret to record the deaths of Professor Theodore Elbert, the German geologist, at the age of 42 years, and of Dr. Max Barth, director of the Agricultural Station of Rufach, in Alsace, at the age of 44 years.

THE new institute, free library and Royal museum just erected at Canterbury was opened on September 11th by the mayor of that city, Alderman George Collard. The bulk of the cost is covered by a bequest of £10,000 left to the city by the late Dr. Beaney, of Melbourne, who was a native of Canterbury. The building was used as the place of reception on the occasion of the visit of the members of the British and French Associations.

It will be remembered that sometime since, Mr. J. M. Tata, of Bombay, offered a large sum for the establishment of a scientific research institute in India. It appears that some conditions regarding a family settlement were attached, but these have now been withdrawn, and it is hoped that the government may be able to proceed with the establishment of the institute.

THE building for the German Chemical Society of Berlin, to be named Hofmannhaus, in memory of the great German chemist, is now in course of erection, and it is expected that the exterior will be finished before the winter.

MR. ANDREW CARNEGIE has given \$50,000 for a free library of Dallas, Texas.

THE Texas Agricultural College and Experiment Station has been provided by the legislature with a new building that will cost \$31,000, and also with a dormitory costing \$24,000.

THE last session of the legislature of Utah made an appropriation of \$6,000 for a State Experiment Station, which will be located in Washington county. It is to be supported entirely by State funds and will not be connected with the station at Logan.

THE *Allgemeine Wissenschaftliche Berichte* learn from Christiana that the Norwegian Störthing will appoint a commission to award the first Nobel prize for the promotion of peace. The award will be made, as we have already stated, on December 10, 1901, the anniversary of Nobel's death, and on the same day the corner-stone will be laid of the Nobel Institute at Christiana. This Institute will have the disposal of 300,000 crowns and a yearly income of 50,000 crowns. It will be devoted especially to the study of international law, and will aim to draw students and lecturers from all nations.

It appears from letters in the London *Times* that a syndicate bought up all the rooms in Dover for the weeks of the meeting of the British Association and sold them to members at extortionate rates.

A CIVIL service examination will be held on October 17th with a view to filling the position of civil and electrical engineer in the engineering department-at-large with a salary of \$125 per month.

IN view of the occurrence of cases of the plague in the village of Koloboreka in the Russian Government of Astrakhan, the Prince of Oldenburg has been made President of a commission, consisting of members of the medical council and other experts which will carry out an investigation of the subject. An outbreak of the plague is also reported at Asuncion, Paraguay.

A STUDY of the effect of pressure on the preservation of milk at the Experiment Station of West Virginia University gave such encouraging results that the effect of the same agent in preserving fruits and fruit juices is being studied now while these are in season. It is yet too soon to say whether the work will lead to a practical method for preserving these materials, but it may be said, however, that samples have been prevented from fermenting for five months; also that milk has been kept for three months and meats for seven months.

#### UNIVERSITY AND EDUCATIONAL NEWS.

MR. EDWARD TUCK, of New York City, has given \$300,000 to Dartmouth College to be used for purposes of instruction.

By the will of Mrs. Mary D. Goddard, of Newton, Mass., \$60,000 is given to Tufts College.

PRINCETON UNIVERSITY has received from Mr. Stafford Little, of Trenton, N. J., \$10,000 to endow a lectureship on themes connected with public life. Ex-president Cleveland will, during the coming year, deliver the first course of lectures.

THE medical students of Bowdoin College will receive instruction during their last year at Portland, where suitable buildings are now being erected, and where they will have improved clinical facilities. After 1900 the course will be four years in length, the first two years being spent at Brunswick, and the second two years at Portland.

THE following appointments are announced at Dartmouth College: Dr. Gordon F. Hull, of Colorado College, to be assistant professor of physics; Mr. George T. Moore, assistant in Harvard University, to be instructor in botany; and H. H. Horne to be instructor in philosophy.

SAMUEL AVERY, B.Sc. and A.M. (Nebraska), and Ph.D. (Heidelberg), for some years adjunct professor of chemistry in the University of Nebraska, has accepted the professorship of chemistry in the University of Idaho. The position left vacant at Nebraska has been filled by the appointment, as instructor, of Robert Silver Hellner, B.Sc., A.M., assistant chemist in the

Nebraska Experiment Station. Mr. Roscoe Wilfred Thatcher, B.Sc. (Nebraska), has been appointed successor to Mr. Hiltner.

PROMOTIONS and changes, as follows, were made this year in the force of the Zoological Department at the University of Nebraska, Lincoln: Henry B. Ward, professor; Robert H. Wolcott, adjunct professor; Albert B. Lewis, assistant instructor; Frank E. Watson, fellow and graduate assistant.

MR. PETER FIELD, fellow in mathematics in Cornell University, has been appointed professor of mathematics in Carthage College.

MR. EDWIN HAVILAND, B.S. (Swarthmore, 1895), and A.M. (Cornell, 1899), has been appointed assistant in mathematics in Swarthmore College.

PROFESSOR W. H. SQUIRES, who holds the chair of psychology and pedagogics in Hamilton College, has been given a two years' leave of absence, which he will spend in study in Germany. W. B. Elkin, Ph.D. (Cornell), Teachers College, Columbia University, has been appointed acting professor.

AT Brown University, Frederic P. Gorham, biology, Ralph W. Tower, chemical physiology, and Arthur E. Watson, physics, have been promoted to assistant professorships.

FRANK T. DANIELS, assistant professor of civil engineering, at Tufts College, has resigned.

JAMES P. C. SOUTHALL, of the University of Virginia, has been appointed instructor in physics at Hobart College; Lindsay Duncan has been made instructor in mathematics, surveying and draughting at Union College. At Smith College, Annie Lyons has been appointed assistant in zoology.

THE following appointments as instructors, at Lehigh University, have been made: Robert M. Wilson, E.E. (Cornell), Barry MacNutt M.S. (Lehigh), and J. S. Viehe, E.E. (Lehigh), to be instructors in electrical engineering; Herman Schneider, B.S. (Lehigh), to be instructor in civil engineering, and Amasa Trowbridge, Ph.B. (Sheffield Scientific School), and chief engineer, U. S. S., *Catskill*, during the late war, to be instructor in mechanical engineering.