

ican Welding Society Building Code, which now is in standard use in more than 200 municipalities, including New York City, Chicago and Pittsburgh.

THE CHICAGO MEETING OF THE INSTITUTE OF FOOD TECHNOLOGISTS

FINAL plans for the first annual meeting of the Institute of Food Technologists are taking definite form. As announced early in January, the meeting is to be held in the Morrison Hotel, Chicago, from June 17 to 19, inclusive. Registration will begin at 3:00 P.M. on Sunday, June 16.

The technical sessions open at 9:30 A.M. on Monday, with a discussion of the "Process Engineering in Food Technology." Dr. L. V. Burton, editor of *Food Industries* and chairman of the session, will speak on "Engineering a Food Manufacturing Process"; W. L. Badger, of the Dow Chemical Company, on "Application of the Unit Operations of Chemical Engineering to the Food Industries"; G. T. Reich, of the Pennsylvania Sugar Company, on "Engineering a Continuous Evaporation and Hydrolysis Process," and Dr. N. E. Berry, of the General Foods Corporation, on "The Chemical Engineer Looks at a Food Process."

The Monday afternoon session will be presided over by the president of the institute, Professor Samuel C. Prescott, dean of science of the Massachusetts Institute of Technology, and will be devoted to a program of seven voluntary papers on food technology. Subjects ranging from mechanism of heat transfer, sanitary principles in dairy equipment design and germicidal efficiency of washing solutions for glass containers to moisture content of staple dietary foods, vitamin B₁ potency of malt and brewed beverages and securing food for an army complete the program for the session.

"The Effect of Processing on the Vitamin Content of Foods" will be discussed in a symposium under the chairmanship of Dr. George C. Supplee, of Borden and Company, when Dr. C. A. Elvehjem, of the University of Wisconsin, will discuss "The Nature of Vitamins with Particular Reference to the B Complex." Vitamins A, B₁, C, D and G will be taken up in turn and dealt with in respect to their stability under food-processing conditions.

Contrary to the procedure followed in the first three technical sessions, the Tuesday afternoon program will be presented in four divisions with each division having its own program of six or seven papers with meetings held concurrently. Division A will discuss problems and practices relative to the packaging of foods; Division B will deal with the technology of food preservation with emphasis on the chemical aspect of the subject; Division C, while spending some time on methods of analysis, will focus attention on the control of unit operations in food processing; Division D will

emphasize the microbiology of foods with respect to flavor development and preservation factors.

A smoker is planned for Monday evening. All men registrants at the meeting will be guests of the Chicago group. The annual dinner will be given on Tuesday evening. The last day has been reserved for plant visits in the Chicago area.

EXHIBITION OF THE WORKS OF LEONARDO DA VINCI

THE exhibition of the works of Leonardo da Vinci, held for over a year in the Palace of Arts in Milan, Italy, is being brought to the United States. Eighteen large roomfuls of material pertaining to his life and work, including working models of his inventions and his works of art, were shipped on April 30 on the *Barberigo* from Genoa. The exhibition will first be shown to the American public at New York's Museum of Science and Industry in Radio City and will be opened to the public in the early part of June.

Three years were spent by the Italian Government in assembling the exhibition, many items of which, such as the fourteen volumes of Leonardo's original autograph writings and his studies for works of art lost or unfinished, have for centuries remained in private collections. Hundreds of thousands of dollars have been spent by the Italian Government in building models of one hundred and seventy of Leonardo's scientific inventions, which range from an apparatus for measuring the earth to a heat-operated roasting oven. All these inventions, including his plans for flying machines, his submarine, his differential gear for vehicles and other features of modern life, conceived 400 years ago, will be represented by full-size or scale models made from his own drawings and specifications, which will be exhibited together with the models themselves. The announcement points out:

Most popularly known as the painter of the "Mona Lisa" and the "Last Supper," Leonardo da Vinci was centuries ahead of his age in every department of art and science he put his mind to. In the days when ships were propelled by wind and oars he understood the power of steam. He planned cities of the future with superimposed highways, and designed circular forts with underground passages that are not a far cry from France's Maginot Line or Germany's West Wall. A hundred years before Gutenberg was born he had invented a printing press; his anatomical studies with Antonio della Torre, of Pavia, revolutionized the world of medicine. He was a great biologist, physicist and musician. He even invented a diving apparatus, but refused to disclose his plans to any one because, as he said, man's "wickedness and ferocity" would enable him to walk on the bed of the ocean and do damage to ships and those sailing in them.

One of the features of the New York exhibition, ac-

cording to Robert P. Shaw, director of the museum, will be the actual operation of the Leonardo models. His printing press will be operated as in his own day, and his mint, made at the behest of the Medici, will turn out such coins as were minted for the Florentine

Republic 400 years ago. So many and varied are the inventions that only those that corresponded with his own age were used during his lifetime. The majority remained on paper, awaiting the day when civilization should advance to the point where it could use them.

SCIENTIFIC NOTES AND NEWS

PROFESSOR CASWELL GRAVE, head of the department of zoology at Washington University, St. Louis, having reached the age of seventy years, retired from active work on February 1 and became professor emeritus of zoology. At a dinner given on May 11, widely attended by his colleagues, students and friends, it was stated that a scholarship had been established in his honor, which had been made possible by contributions from his many friends. It will be called the Caswell Grave Scholarship for Biological Research and will be awarded annually to a qualified student at Washington University to defray the cost of tuition and partial expenses of attending course work at the Marine Biological Laboratory, Woods Hole, Mass. At the dinner Professor Grave was also presented with a bound volume of personal letters of greeting. He plans to spend his summers at Woods Hole and his winters at Winter Park, Fla.

At the recent meeting of the trustees of Science Service, Dr. Harlow Shapley, Paine professor of astronomy at Harvard University and director of the Harvard Observatory, was elected vice-president and chairman of the executive committee. He succeeds Dr. William H. Howell, emeritus professor of physiology at the Medical School of the Johns Hopkins University, who wished to retire after serving for ten years. An informal luncheon to welcome Dr. Shapley was given by the staff of Science Service at the Cosmos Club, Washington, on May 15.

AN honorary degree will be conferred on Dr. Thomas Parran, Surgeon General of the U. S. Public Health Service, in connection with the commencement exercises in June of St. Bonaventure College, New York.

DR. STUART LESSLEY CRAIG, an alumnus of the Medical College of Virginia, Richmond, surgeon and a director of the New York Eye and Ear Infirmary, New York City, will be awarded the honorary degree of doctor of science at the graduation exercises of the college.

At the forty-third annual meeting of the American Society for Testing Materials during the week beginning on June 24, the fourteenth award of the Charles B. Dudley Medal will be made to T. F. Willis and M. E. De Reus, research engineer and junior engineer, respectively, of the Bureau of Materials of the Missouri

State Highway Department, Jefferson City, Mo., for their paper on "Thermal Volume Change and Elasticity of Aggregates and Their Effect on Concrete." The fifteenth Edgar Marburg Lecture will be presented by P. H. Bates, chemist of the National Bureau of Standards. He will speak on "Portland Cement—Theories and Specifications."

ROYAL MEDALS of the Royal Geographical Society have been awarded as follows: The *Founder's Medal* to Mr. and Mrs. Harold Ingrams for their exploration, travel and studies in the Hadhramaut and the *Patron's Medal* to Lieutenant Alexander R. Glen, for his expeditions in Spitsbergen and North-East Land. The council has made the following awards: The *Victoria Medal* to O. G. S. Crawford, for his archeological maps prepared for the Ordnance Survey and his work on the *Tabula Imperii Romani*. The *Murchison Grant* to Peter Mott, for his surveys in West Greenland; the *Back Grant* to Gerald Seligman, for his glacier studies on the Jungfrau-Joch; the *Cuthbert Peek Grant* to John Hanbury-Tracy, for his work in southeastern Tibet with Mr. Kaulback and his journey in the north of South America; the *Gill Memorial* to Alexander King, for his work in Jan Mayen in 1938.

THE Ettore Marchiafava Prize, founded by the University of Rome in October, 1938, for the best work on morbid anatomy or general pathology, has been awarded to Professor Mario Monacelli, director of the Dermatological Clinic of the University of Messina, and Professor Giulio Raffaele, of the University of Rome.

DR. HENRY A. SCHUETTE, professor of chemistry at the University of Wisconsin, was elected president of the American Oil Chemists' Society at the close of the annual meeting in New Orleans on May 10.

DR. SAMUEL FREDERICK HILDEBRAND, senior ichthyologist of the U. S. Bureau of Fisheries, has been elected to resident membership in the Washington Academy of Sciences in recognition of his "demonstration of the utility of fishes in mosquito control, his work on the life histories of marine fishes of the Atlantic coast and his contributions to the ichthyology of Central America."

AFTER forty years of teaching, Professor Cora J. Beckwith, chairman of the department of zoology at Vassar College, will resign in June. Professor Rudolf