

on mathematics and is particularly rich in complete sets of all important mathematical journals.

THE International Institute of Agriculture announces that the proceedings of the World Forestry Congress at Rome, April 29 to May 5, 1926, will be published by it before the end of the present year. The proceedings will include some three hundred reports submitted to the congress, of which about one fourth are in English, and will form five octavo volumes of about 3,500 pages.

THE seventh field conference under the direction of the Oklahoma Geological Survey was held in the Ouachita Mountains of southeastern Oklahoma, beginning October 11, and continuing six days. Nineteen men attended, including geologists from Oklahoma, Texas, Louisiana and Washington, D. C. Studies were made of the lower Paleozoics and of the Mississippian and Pennsylvanian formations of the Ouachita Mountains. The eighth field conference will be held in November in western Oklahoma, the Panhandle of Texas and northeastern New Mexico. The object of the conference will be to study the outcrops of the Permian beds on the east and west sides of the High Plains basin, and to attempt to find some key bed which will serve for correlation purposes.

THE United States Coast and Geodetic Survey has begun work on the complete offshore surveys of the gulf coast. The survey ship, *Bache*, under the command of Lieutenant R. L. Schopps, is off the coast of Florida, engaged in mapping work. The gulf coast for approximately 15 miles east of the Pensacola Entrance was resurveyed in 1920 and 1922, and complete coast charts for that section prepared. Eastward of that limit the present charts are based on surveys made just before, and immediately after, the war of 1861, with the exception of recent work in some of the bays and entrances. The present survey will begin at meridian 87, about 15 miles east of Pensacola Entrance, and will be carried out to a depth of 100 fathoms and as close inshore as survey launches can work.

THE newly-created Society of British Foresters held its inaugural meeting during the recent meeting of the British Association at Oxford. According to *Nature*, the object of this society is to help in the technical development of forestry in Great Britain. Forestry is coming more and more into prominence, and it is felt that the time has arrived for the establishment of an association of those engaged in it and in allied sciences. A journal will be published, and this will provide a place for the publication of the results of forestry investigation and practice in Great Britain, and for the dissemination of results obtained else-

where. The officers of the society are: *President*, Mr. R. L. Robinson; *vice-president*, Professor R. S. Troup; *members of council*, Mr. C. O. Hanson, Major F. M. Oliphant, Mr. R. S. Pearson, Mr. Frank Scott, Mr. J. D. Sutherland, Dr. Malcolm Wilson; *editor of journal*, Dr. H. M. Steven; *business editor*, Mr. J. Lyford Pike; *secretary and treasurer*, Mr. R. Angus Galloway.

UNIVERSITY AND EDUCATIONAL NOTES

IN the state election of November 2, the citizens of California, by an approximately 3 to 1 vote, authorized an immediate bond issue, in amount \$6,000,000, to provide academic buildings on the new campus of the Southern Branch of the University of California at Los Angeles, and for permanent buildings on the campus of the university in Berkeley, to replace temporary wooden buildings.

LEHIGH UNIVERSITY has announced plans for the erection of a new electrical and mechanical engineering laboratory, which will be the largest building on the campus and will cost about \$1,000,000. In addition to laboratories it will include an auditorium seating 500, a museum for the display of apparatus and data pertinent to instruction in engineering and an engineering library.

THE Italian government has granted 20,000,000 lire to the University of Rome for repairs and new construction work. The plans contemplate the creation of a university city comprising three groups of edifices, one devoted to medical study, the second to scientific and the third to include the faculties of law, letters and political science. A residential hall for 800 students and a large athletic field also will be built.

DR. GEORGE D. OLDS has asked to be relieved of his duties as president of Amherst College at such time as a successor can be appointed. Dr. Olds was formerly dean of the college and professor of mathematics.

At the University of Illinois, Professor Roger Adams has been appointed head of the department of chemistry to succeed Professor W. A. Noyes, who was retired under the new retirement provision. Dr. Donald B. Keyes, director of research and development of the United States Industrial Alcohol Company, succeeds Professor S. W. Parr as professor of industrial chemistry.

DRS. G. H. WOOLLETT and V. A. Coulter have been advanced to the rank of professor in the department of chemistry of the University of Mississippi. Dr.

H. F. Johnstone, Ph.D. (Iowa, '26), has been appointed assistant professor in the same department.

At the Rice Institute, A. C. Chandler, Ph.D. (California), head of the department of helminthology at the Calcutta School of Tropical Medicine, has been elected professor of biology; Szolen Mandelbrojt, D.Sc. (Paris), has been appointed to a lectureship in mathematics, and C. F. Arrowood, Ph.D. (Chicago), A. D. Garrison, Ph.D. (Rice), and L. B. Ryon, C.E. (Lehigh), have been promoted to assistant professorships in education, physical chemistry and civil engineering, respectively.

In the school of medicine at the University of Texas, Dr. Henry C. Hartman began his work as dean at the opening of the fall term. Dr. Charles T. Stone, after a year's study abroad, has taken up the professorship of medicine. Dr. Titus H. Harris will be in charge of the new department of mental and nervous diseases. Dr. John K. Glen becomes professor of anatomy, Dr. Meyer Bodansky, associate professor of biological chemistry and Dr. Paul Brindley, adjunct professor in pathology.

AMONG the deans of faculties elected by the University of London for the period 1926-28 are the following: Medicine, Sir Cuthbert Wallace (St. Thomas's Hospital Medical School); science, Professor L. N. G. Filon (University College); engineering, Professor E. H. Lamb (East London College).

DR. MAURICE ROCH, professor of clinical medicine, has been appointed dean of the medical faculty at Geneva.

PROFESSOR TRENDLENBURG, of Freiburg, has received a call to the chair of pharmacology at the University of Berlin as the successor to Professor Heffter.

DISCUSSION AND CORRESPONDENCE

MIGRATION OF BONITOS OR VICTOR-FISH IN THE NORTH PACIFIC

THE most abundant fish in the open waters of the Pacific is the oceanic bonito, *Katsuwonus vagans*. This is known to the Japanese as Katsuwo or Victor fish and in Hawaii as the aku. It is a mackerel-like fish, ranging in length to about three feet, and its red flesh is now very extensively canned as "tuna" along with other fishes of similar character.

I learned in Honolulu, on good authority, that a school of these fishes ninety-six miles in length had once been noticed passing Hawaii. I had occasion to discuss this with a business man who frequently went from San Francisco to Hawaii, Mr. A. C. Lovekin, and he gave me a similar account of an experience of

his own. I am sending this for publication, for I am sure that the matter is one of interest to many naturalists. With the Victor fish which Mr. Lovekin calls Bonito there were a considerable number of tuna (*Thunnus*) and other large fishes and they were easily caught with improvised harpoons. In Honolulu the aku is generally obtained by securing numbers of small fishes, particularly anchovies and throwing them into the water. The aku pick them up. They are then taken on a hook and cut into pieces to be used as bait for tuna and other large fishes.

DAVID STARR JORDAN

STANFORD UNIVERSITY

DURING the months of July and August, 1893, I made a voyage from Honolulu to San Francisco on the bark "Andrew Welch," Captain Drew, and observed what to me was an interesting thing in the life of two of our North Pacific fishes.

It was a period of light winds and our ship was drifting with a headway of but a few knots an hour some hundreds of miles almost due north of Hawaii and about in the latitude of San Francisco. Upon coming on deck one morning we found that we were surrounded by a school of tuna and bonitos.

There seemed to be no limit to their number and far as we could see on all sides the ocean was packed with fish. I observed them for the ten or more days that they accompanied us, noting that they appeared to have arranged themselves in uniform ranks in swimming and kept their individual position continuously, adopting our vessel as guardian and guide, always following the same course as taken by the ship. They apparently were not feeding, although I caught many of the smaller bonito using a bit of white rag attached to a common fishhook and harpooned and landed a few of the larger tuna, some of which weighed up to eighty pounds.

Captain Drew, who had been in the sailing vessel service between San Francisco and Hawaii for over twenty years, assured me that he had not observed a similar migration on any of his former voyages and all the sailors on board assured me it was the first time they had seen anything of the kind.

The school accompanied the ship for some ten or more days and it was only after a strong breeze had given our vessel good headway that we finally parted company with our finny friends.

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BOVERI ON CANCER

THE article in SCIENCE for October 1 on "The Present State of Scientific Knowledge of Cancer" is illuminating as to the state of ignorance by physicians of the nature of cancer. Boveri's studies of