

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.

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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