ized in detail, and whales, whose adaptation to aquatic life formed a major chapter in his text on evolution. The evolution of the horse and of ancient man were also the subjects of important books and papers from his pen.

Fossil footprints were of particular interest to him because they were records of living animals. His dissertation on Triassic footprints was expanded into a comprehensive study of the Triassic life of the Connecticut Valley, which was revised and republished shortly before his death.

In his later years, some of his most popular lectures were accounts of experiences on the American Museum of Natural History expeditions to Wyoming, in 1899, and to Montana, in 1902; on these he helped collect the *Brontosaurus* skeleton that is now mounted in New York and various *Triceratops* skulls. Fossil collecting in those days involved slow travel, by horse team, and camping in remote spots for weeks at a time, quite unlike conditions under which paleontologists work today. After coming to Yale, Lull organized collecting expeditions to Nebraska, Wyoming, and Texas, which brought back a variety of fossil mammals to enrich the collections of the Peabody Museum.

His carefully organized lectures on organic evolution were published in 1917 in a textbook of that title, which was widely used for many years. He wrote many popular articles about evolution, paleontology, and fossil collecting, contributing toward understanding of science.

Rutgers conferred an honorary D.Sc. degree upon him in 1915. In 1933 he received the Daniel Giraud Elliot medal of the National Academy of Sciences for his memoir on Ceratopsia. Lull belonged to many scientific and honor societies; in 1925 he was president of the Paleontological Society.

Failing eyesight compelled him to relinquish his research in 1955, and he died on 22 April 1957, in his 90th year.

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# News of Science

## Trough in Ocean Bottom

The Coast and Geodetic Survey has announced the discovery of a deep, long crack in the bottom of the Gulf of Alaska that may cause major tidal waves.

The crack, which is 500 to 700 feet below the ocean floor and probably 2 to 3 miles wide, stretches in a southwesterly direction across much of the gulf below southern Alaska. It is known to be at least 250 miles long, and may possibly be 400.

The existence of the trough has been suspected for many years as a result of scattered depth soundings in the area. Its presence has now been confirmed by soundings obtained by survey ships as they crisscrossed the gulf between the Bering Sea and the Aleutian Islands.

In the last 40 years, 37 seismic sea waves have been recorded in the Pacific, 16 of them since 1950. One of the most destructive hit the Hawaiian Islands in 1946. The discovery of the trough may help the Coast and Geodetic Survey to improve its detection and warning system for tidal waves in the Pacific Ocean.

## Revised Curriculum at Harvard

Approximately 230 first- and second-year students in the Harvard Medical School, and 29 students in the Harvard School of Dental Medicine, will this year start upon a revised curriculum in the preclinical sciences. The new curriculum stresses interdepartmental teaching, broadens the tutorial system, and increases the amount of unscheduled time available to the students. It retains the current emphasis on the study of the normal body and biological processes in the first year, then shifts to studies of disease states in the second year. The program also preserves the research time available to members of the faculty of medicine. Much of the revised preclinical curriculum derives from observations of the operation of a unified teaching program in the basic medical sciences that was established in 1952 in the Division of Medical Sciences of the Graduate School of Arts and Sciences.

## Idaho Reactor

The Atomic Energy Commission will conduct an industrial preview 2–3 Oct. of its Engineering Test Reactor (ETR) at the National Reactor Testing Station, Idaho Falls, Idaho. The program will include a day-long symposium on the reactor's design, construction costs, experimental facilities, and operation. Approximately 250 representatives of U.S. industries concerned with building and employing nuclear test and research reactors for civilian and industrial use have been invited to participate. They will be joined by members of Congress, the Atomic Energy Commission, and the press.

The ETR will provide the highest neutron flux of any known reactor and the largest spaces within an enriched uranium core for determining the effects of intense neutron and gamma-ray bombardment on engineered components and materials to be used in nuclear power plants and nuclear propulsion units for aircraft and ships.

The primary ETR facilities were designed and constructed by Kaiser Engineers Division of Henry J. Kaiser Company; they will be operated for the commission by Phillips Petroleum Company. General Electric Company designed the reactor, the core, and the controls. The cost of the reactor is about $14 million. Other experimental facilities and equipment associated with the reactor will cost an additional $2 million.

## USDA Research Facilities for Conservation

The U.S. Department of Agriculture has announced that funds have been made available by the Congress to provide new Federal research facilities in various areas of the country for work on problems of soil and water conservation and for pilot-plant study of new wool-processing methods. New laboratories for soil and water conservation research will be located at Oxford, Miss.; Watkinsville, Ga.; Phoenix, Ariz.; and Morris, Minn. A pilot plant for wool research will be established at Albany, Calif. The facilities for soils research will be operated by the Soil and Water Conservation Research Division, and the wool pilot plant will be operated by the Western Utilization Research and Development Division, both of USDA's Agricultural Research Service.