

# C. I. T. NEWS



Photo courtesy U. S. Signal Corps

MAJOR M. M. BOWER

## RETURNS FROM SERVICE IN NORTH AFRICA

**M**AJOR M. M. BOWER has recently returned to the United States from North Africa. He has visited Casablanca, Rabat, Oran, Algiers, Philippeville and Tebourba. He has been in places which were bombed shortly before he arrived and again shortly after he left, but at no time did he experience any actual action. Following is an excerpt from a recent letter to Harry K. Farrar, '27:

"I was attached to Allied Headquarters in Africa from February to June of this year. Since I was there to assist in the introduction of new types of signal equipment, my duties carried me over the entire area and gave me an unusual opportunity to see everything that was going on during an interesting period.

"I was tremendously impressed by North Africa itself, which is so much like California in its geography, climate, and vegetation that I could have imagined I was 'at home' as far as those factors are concerned. They raise oranges, lemons, grapes, wheat, etc., on as beautiful farms as you could see anywhere. A trip from San Diego to L. A. and then to San Bernardino, Needles, Phoenix, and Albuquerque would offer countless opportunities to take pictures of scenes which have their counterpart in North Africa. The length of the trip would be of interest in this regard too, because it was over a thousand miles from Casablanca to the front in Tunisia. I find that few people here have any conception of the distances we were wrestling with in a battle which seems such a small part of a global war.

"I traveled both ways by boat and the Navy took such good care of me that both trips were entirely without incident as far as I was concerned. We did have to run a heavy gantlet of submarines both ways, and did seem to be crossing at two relative peaks in submarine activity, but that was the captain's worry and not mine, luckily."

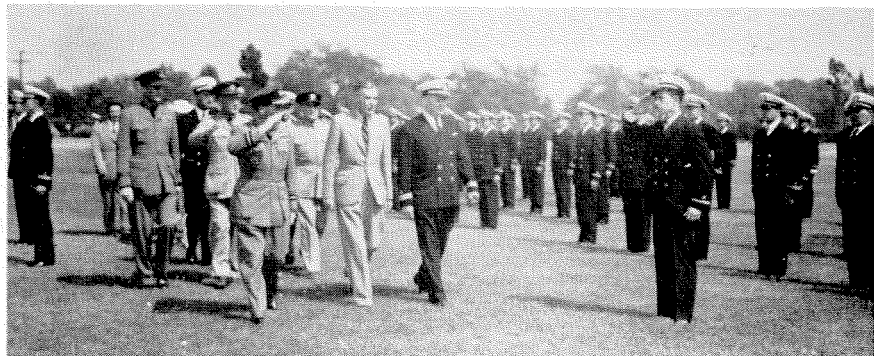
## ARMY AND NAVY GRADUATION

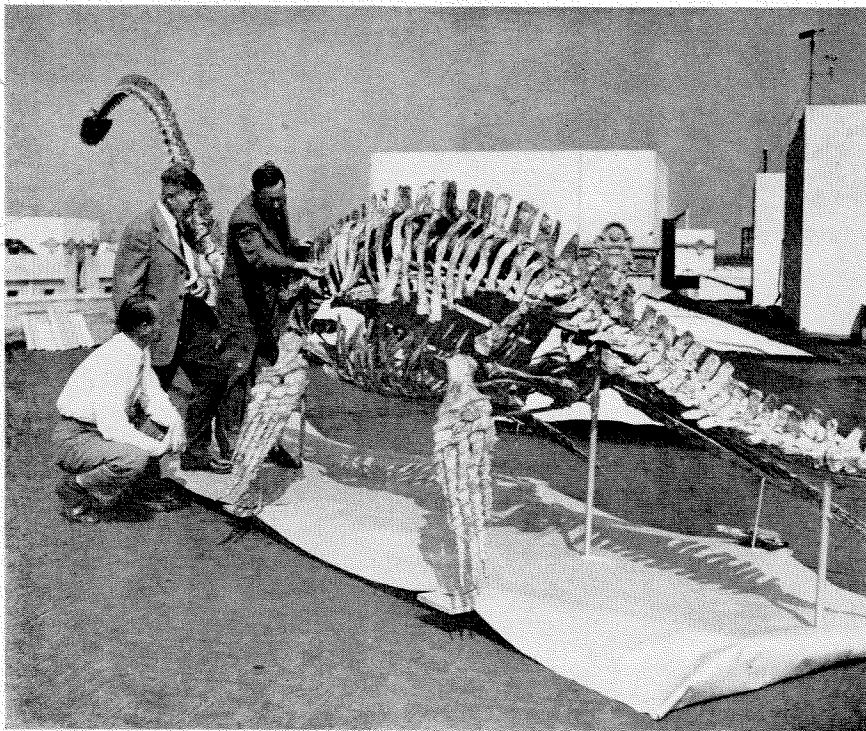
**A** TOTAL of 154 Naval Reserve Officers, detailed to Caltech for special courses in aeronautical engineering and aerology, were graduated in ceremonies held at Tournament Park on Saturday, September 4. Before the graduation, the officers were inspected by Rear Admiral Ernest L. Gunther, U. S. N. 11th Naval District Air Officer, Dr. Robert A. Millikan, and James R. Page, president of Caltech's board of trustees. The program included a report on the Naval Training School by the officers in charge, and addresses by Admiral Gunther and Dr. Millikan.

In afternoon ceremonies of the same day 180 United States Army Air Corps cadets received certificates of master of science degrees in meteorology from Dr. Robert A. Millikan. Dr. William B. Munro told of the value of history in being able to get the true value of current happenings. Dr. Millikan spoke on postwar responsibilities of the graduates. After receiving their commissions, the cadets received orders assigning them to their posts as weather observers.

### AT RIGHT:

Inspection of graduates before ceremonies at Tournament Park, Pasadena, on Saturday, September 4, 1943.





AT LEFT:

Dr. Chester Stock and his associates, E. L. Furlong, curator, and Wm. Otto, sculptor, complete the mounting of *Morenosaurus stocki*, marine reptile 30 feet long whose skeleton is one of the very few which are complete enough for an open mount.

## NEWLY DISCOVERED PLESIOSAUR

By CHESTER STOCK\*

**F**ULFILLING the cartoonist's dream of what paleontologists can reconstruct from fossil bones is this huge extinct sea serpent, discovered by members of the Division of the Geological Sciences. The specimen was uncovered by California Institute field parties in the organic shales of the Moreno formation, exposed along the flanks of the middle Coast Ranges in western Fresno County, California. Coming from the Cretaceous or the last period in the great Age of Reptiles, it is about 100 million years old.

This animal, whose scientific name is *Morenosaurus stocki*, is a marine reptile 30 feet long, with heavy body, extremely long neck, very short tail, small skull, minute brain, and four large paddles. The latter were powerful propelling organs in water, the animal using them as oars. The skull has a vicious battery of long, slender, sharp teeth for catching slippery prey like fish. Found with the skeleton was a nest of highly polished pebbles that are unquestionably gastroliths or gizzard stones. These aided the digestion of hard foods like fish skeletons.

More than a year was required in the preparation and mounting of the specimen by curator E. L. Furlong and sculptor Wm. Otto of the Division staff. The skeleton was assembled on the roof of the Mudd Geology Building for photographing, and our readers may recall that an illustration of the specimen was the picture of the week in a recent issue of Life Magazine.

Plesiosaurs are known the world over. However, those with very long necks have been discovered in California and Colorado. The Institute specimen is one of very few that are complete enough to prepare as an open mount.

Occurring in the same geological formation with the plesiosaur are other great extinct reptiles, like duckbill

\*For biographical note see September, 1943, issue of ENGINEERING AND SCIENCE.

dinosaurs and sea lizards or mosasaurs. Never before have these been found west of the Rocky Mountains. In the popular mind the plesiosaurs are perhaps remembered best by Disney's animated restorations shown in his film Fantasia. The extinction of the plesiosaurs came at the close of the reptilian age, when the dinosaurs became extinct on the land. Probably their disappearance in the seas of that day was hastened by the coming of more intelligent animals like the ancient whales.

## NEW YORK CHAPTER DINNER

**A**N INFORMAL alumni dinner was arranged for September 7, 1943, upon short notice at the Hotel Holley, on Washington Square, New York City. Arrangements were made by Harry P. St. Clair and Clifford C. Burton, President and Secretary-Treasurer, respectively, of the New York Chapter.

The immediate occasion for the gathering was the presence in New York of three members of the faculty: L. Winchester Jones, associate dean of upper classmen and registrar, R. E. Untereiner, associate professor of economics, on leave during the current year to serve as economic adviser for the National Association of Manufacturers, and Franklin Thomas, professor of civil engineering. Professors Jones and Thomas were attending a conference at Columbia University called by the Navy and attended by representatives of colleges in which Naval V-12 training programs are in operation.

The following alumni were in attendance:

W. G. Abraham .....	'41	C. R. Keith .....	'22
Paul R. Ames .....	'22	George S. Lufkin .....	'29
C. C. Burton .....	'40	J. R. Pierce .....	'33
C. F. Carlson .....	'30	R. K. Pond .....	'39
N. O. Cox .....	'40	Harry P. St. Clair .....	'20
W. G. Cox .....	'35	R. M. Watson .....	'27
Sydney K. Gold .....	'42	W. H. Wise .....	'26



Rear Adm. Ralston S. Holmes, USN, (ret.), is shown being presented with the Medal of Group America by General de Division Juan Felipe Rico, commander of Mexico's Second Military Zone. Admiral Holmes now serves as the Navy Department Liaison Officer with the National Defense Research Committee at California Institute of Technology. On the extreme right is Capitan Manuel Fontes, aide to General Rico.

### GIVEN GROUP AMERICA MEDAL

**R**EAR Admiral Ralston S. Holmes, U.S.N. (ret.), former commandant of the 11th Naval District, and now serving as Navy Department liaison officer with the National Research Committee at the California Institute of Technology, has been awarded the Medal of Group America. This medal was awarded for "devotion to this country and the benefits of the Americas" by General de Division Juan Felipe Rico, commander of Mexico's second military zone.

In accepting the medal, Admiral Holmes described Group America as an organization "which stands for the unity, friendship, and comradeship which are so vital in these times." The organization was originally formed in South America and now has members in every country of this continent.

The presentation was made at military headquarters in Ensenada with Mexican troops and representatives of the U. S. Army and Navy attending.

### PITZER RECEIVES AWARD

Dr. Kenneth S. Pitzer, graduate of the California Institute of Technology and now professor in chemistry at the University of California, received the \$1000 American Chemical Society Award in Pure Chemistry at the Society's 106th meeting in Pittsburgh in September. Dr. Pitzer, picked as one of the most brilliant young chemists in North America, was cited for his work in chemical thermodynamics.

"The importance and high quality of the many contributions to our science already made by this young man justify the confident prediction that he will be one of the leaders in American chemistry during the coming decades," said a Society statement summarizing Dr. Pitzer's achievements.

Dr. Pitzer received his B.S. degree from Caltech in 1935 and his Ph.D. degree from the University of California in 1937. His researches, published in more than 40 papers, include studies of some of the fundamental facts of the structure of chemical molecules and their reactions, and basic facts of chemical reactions in solutions. Like most chemists, Dr. Pitzer is now busy with problems connected with the war.

The American Chemical Society Prize, provided by Alpha Chi Sigma, national scientific fraternity, was founded in 1931 by the late A. G. Langmuir to encourage fundamental research by young chemists working in North America.

### ON SIGNAL ROUND TABLE

**E**VERY Sunday afternoon at 4:30 p.m., Columbia arranges time for a trio of news experts to gather at the "Signal Round Table" and discuss the three most pertinent topics of the day. The three gentlemen are Harry W. Flannery, John B. Hughes, and Dr. Wallace Sterling, professor of modern history at the California Institute of Technology.

Dr. Sterling, who had gained a large listening audience before joining the Round Table show by virtue of his own ten o'clock news analysis program, has expanded that same audience with his continued crisp and generally correct comments on news of the day. When the talk gets round to Russia, Sterling's words



DR. WALLACE STERLING

carry even more weight, for he has been a student of that country and its people for several years. He has written scores of magazine articles on Russia and her policies, and has been co-editor of a number of books on the same subject.

The show is completely unrehearsed, and Sterling's authoritative and easy flow of conversation on almost any subject relative to the war today has made him an exceedingly valued member. He has lived in this country since 1930, but he is a native of Canada.

### Petroleum

(Continued from Page 2)

tinued his education at California Institute of Technology. He became an American citizen in 1928. Since 1931 he has been a member of the staff of the Research and Development Division of General Laboratories of Socony-Vacuum Oil Company in Paulsboro, where he is general supervisor of the Development Section. He is the inventor of processes in petroleum refining and has written several books on petroleum technology.