

pulse of sound and direct themselves by echoes, robot "Bats" are guided by radar echoes. In the official U. S. Navy photograph on the front cover of this SCIENCE NEWS LETTER, a pulley device lifts the robot "Bat" to its launching position under the wing of the plane.

"Bats" were "briefed" on the target selected by the mother plane before being released. After their release, they were piloted by their own radar installation alone to hit the target—following the object despite the most extensive maneuvers.

Science News Letter, December 29, 1945

GEOLOGY

Productive Oil Field

Oklahoma pool is most important discovered since Pearl Harbor. By September of this year, it had produced nearly 25,000,000 barrels.

➤ DEFINITE faith on the part of the owner that there was oil in the area in spite of the lack of geological or geophysical evidence is responsible for the recent discovery of the West Edmond, Oklahoma, oil field, probably the most important oil pool found in the United States since Pearl Harbor. By September, 1945, the field had produced nearly 25,000,000 barrels.

The story of the opening of this field, Oklahoma's largest single oil field, is told in *Mining and Metallurgy*, (Dec.) journal of the American Institute of Mining and Metallurgical Engineers. It is told by E. G. Dahlgren of the Interstate Oil Compact Commission and Dan O. Howard, petroleum geologist of the Oklahoma Corporation Commission.

The area of the field is 26,800 acres, or over 41 square miles, and it is now equipped with 670 producing wells. One company estimates that there are some 600,000,000 barrels of oil in the ground, about one-third of which can be recovered by primary methods, leaving 400,000,000 barrels to be recovered by the various secondary methods of pressure maintenance, water-flooding, and re-pressuring.

The first well was started on Jan. 2, 1943, and on April 28 that year was flowing 522 barrels of light oil in 24 hours. Now, according to the report, the average initial production of the wells in the area is 1,200 barrels a day, with individual wells ranging in initial production from a minimum of 25 barrels to a maximum of 4,800 barrels each 24 hours.

When drilling of the first well was begun, it was planned to drill down to the Wilcox sand, estimated at about 7,350 feet but found at 7,670 feet. No oil was found in the Wilcox sand, however, but there had been a slight indication of oil

when the well passed through the Hunton lime formation at a depth of 6,866 feet. It is in the Hunton lime that the oil exists.

"Seven-inch outside diameter casing was set at 7,301 feet through the Hunton lime," the authors state. "A cable-tool unit was moved on the location on March 31, 1943; the well bailed dry and perforated on April 5, 1943. Eleven holes were shot in the casing at from 6,951 to 6,856 feet, and the well started to head through the open casing. On April 28, after additional perforating, and after 2½-inch tubing had been run, the well flowed 522 barrels of oil in 24 hours."

Science News Letter, December 29, 1945

MEDICINE

Spotted Fever Remedy May Exist in B Vitamin

➤ A CHEMICAL remedy for dangerous, sometimes fatal Rocky Mountain spotted fever may exist in one of the B vitamins, para-aminobenzoic acid, it appears from a case reported by Drs. Harry M. Rose, Richard B. Duane and Edward E. Fischel of Columbia University College of Physicians and Surgeons and Presbyterian Hospital, New York (*Journal, American Medical Association*, Dec. 22).

Although a serum for treating the disease was developed a few years ago, no specific chemical remedy has heretofore been found. Results in one case do not prove that this B vitamin chemical is a remedy for the disease, the New York doctors point out, but they are suggestive.

A "precipitous" drop in the patient's temperature occurred when she was given this chemical, and her condition

improved after the first 24 hours of treatment. She was entirely free of symptoms within 10 days.

Para-aminobenzoic acid had previously been found very effective in treating Rocky Mountain spotted fever in guinea pigs and it has been used with good results in typhus fever, which is also caused by germs of the rickettsia class.

Science News Letter, December 29, 1945

Rain water that falls in districts near the sea coasts usually contains appreciable quantities of chlorides.

SCIENCE NEWS LETTER

Vol. 48 DECEMBER 29, 1945 No. 26

The weekly summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St. N. W., Washington 6, D. C. North 2255. Edited by WATSON DAVIS.

Subscriptions—\$5.00 a year; two years, \$8.00; 15 cents a copy. Back numbers more than six months old, if still available, 25 cents. Monthly Overseas Edition: By first class mail to members of the U. S. Armed forces, \$1.25 a year. To others outside continental U. S. and Canada by first class mail where letter postage is 3 cents, \$1.25; where letter postage is 5 cents \$1.50; by airmail, \$1.00 plus 12 times the half-ounce airmail rates from U. S. to destination.

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Entered as second class matter at the post office at Washington, D. C., under the Act of March 3, 1879. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

The New York Museum of Science and Industry has elected SCIENCE NEWS LETTER as its official publication to be received by its members.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566 and 360 N. Michigan Ave., Chicago, STAt 4439.

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