

GENERAL SCIENCE

20th Science Talent Search

399 students have been selected as the honors group of the 20th Science Talent Search. Out of these the 40 top winners for the Science Talent Institute have been named.

► **THE MOST TALENTED** young scientists in the 1961 high school graduating classes have been selected.

The 40 winners of the 20th national Science Talent Search have been selected from among 3,991 high school seniors who submitted entries.

In addition, 399 have been given honors in this nation-wide selection of those young scientists who are judged to have potential scientific creative ability for the future.

The 399 students receiving honors are 15 to 19 years old and go to school in 220 communities in 41 states and the District of Columbia. Their principals rank them very high in their graduating classes, with 68% of the boys and 78% of the girls in the top five percent and with the rank of first, second or third being given to at least 27% of the boys and 41% of the girls.

The outstanding student-scientists include 93 girls and 306 boys, with the ratio of girls among the members of the Honors Group determined each year by the number

of girls who complete entries. All of the group will be recommended for admission and scholarship awards to the nation's colleges and universities.

The forty top winners, nine girls and 31 boys from 18 states and the District of Columbia, have been invited to come to Washington for the five-day Science Talent Institute, to be held here March 2 through March 6, during which they will be judged for \$34,250 in Westinghouse Science Scholarships and Awards.

These scholarships and the operation of the Search are supported by the Westinghouse Educational Foundation of the Westinghouse Electric Corporation.

Will Receive Further Recognition

Many of the Honors Group will receive further recognition in state Science Talent Searches conducted on a local level as part of the national Search. It is conducted annually by Science Clubs of America, an activity of SCIENCE SERVICE.

Already at work on a great assortment of new ideas, these novice scientists may be very accurate prophets of the world of the future. The project papers they submitted as part of the stiff entrance requirements of the Science Talent Search are dramatic evidence of the scope and depth of their interest and ability.

As would be expected, current advances in computer science have stimulated many of these young people to try their own hands and ingenuity in this field. One 17-year-old, Bruce M. Sieben of Chicago, has proposed an adaptation of the digital computer that would make pattern recognition possible. A 16-year-old aspiring mathematician, Ray S. Jackendoff of Glenside, Pa., investigated the production of music by computer. Still another young innovator, Robert M. Axelrod, 17, of Skokie, Ill., has devised a way to study life forms and environmental factors by simulating them on a computer.

The cleaning ability of ultrasonics caught the interest of a Hickory, N. C., boy, Samuel D. Harmon, 17, while another North Carolinian, Charles L. Kling, also 17, Washington, N. C., looked into the lubricating qualities of graphite at various altitudes.

One of the girls, Patricia A. Bytnar, 16, of Pittsburgh, Pa., has been experimenting with the effects of sodium fluoride on plants and animals. The lung structure and water conservation of the desert iguana appealed to Robert E. Fine, 16, Van Nuys, Calif., as an important subject to explore.

Other projects carried out with great competence by this group of high school seniors run the gamut from abstruse mathematics to the study of a hormone that controls the molting of a crayfish.

Anyone may have a copy of a booklet containing the names of the Honors Group by sending a long, self-addressed envelope bearing an 8¢ stamp to Science Clubs of America, 1719 N Street, N.W., Washington 6, D. C.

• Science News Letter, 79:71 February 4, 1961

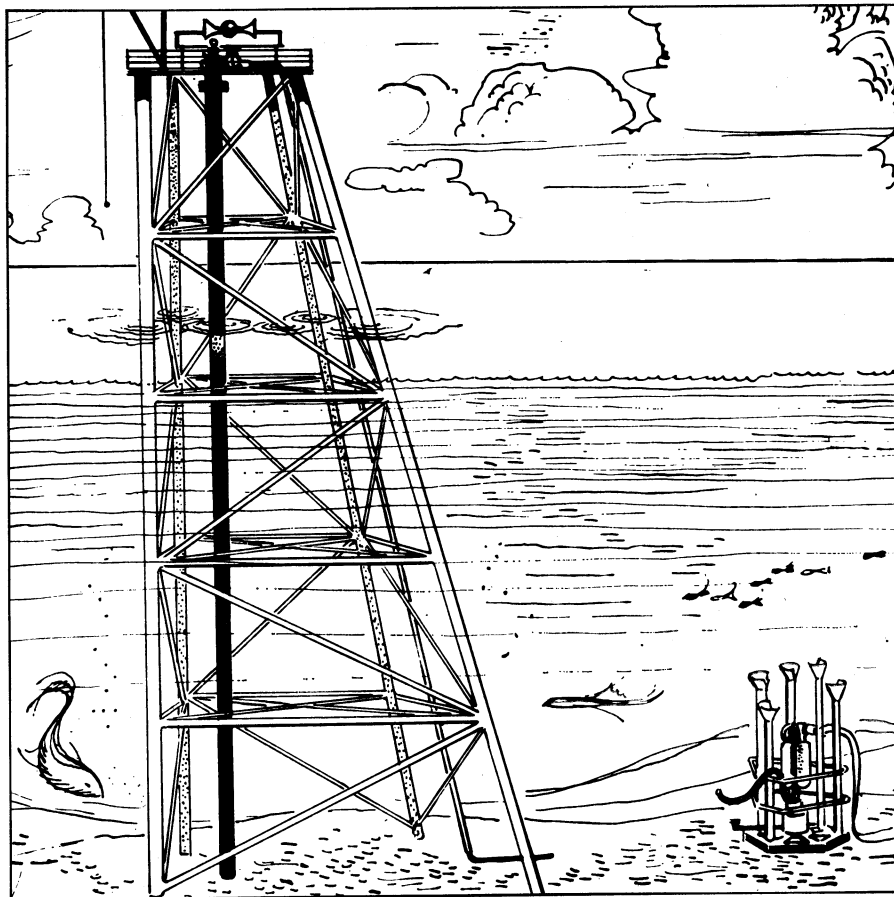
ENGINEERING

Offshore Oil Well Equipment on Sea Bottom

► **THE FIRST OFFSHORE** oil well to have flow equipment resting on the sea bottom has been completed. Prior to this development, the equipment for controlling the flow of oil, called the "Christmas Tree," was placed on a platform above the water. The Christmas Tree is guided to the ocean floor by remote control from a surface drilling platform.

Once the well is completed, the drilling platform is moved to a new site. The new technique, used by Shell Oil Company, will help obtain more oil and gas from the outer continental shelf of the United States.

• Science News Letter, 79:71 February 4, 1961



OIL CHRISTMAS TREE—Is now placed on the ocean floor.