

GENERAL SCIENCE

Finalists in Citizen Role

The thirty finalists in the first National Science Fair possess a basic requirement of good citizenship, that of scientific knowledge, according to Dr. Compton of M. I. T.

➤ THIRTY teen-age scientists have demonstrated their skill as experimenters and student technicians in exhibits brought to Philadelphia May, 19, 20 and 21, for the first National Science Fair ever to be held in the U. S.

They have already taken a long step toward an increasingly important requirement of citizenship—that of scientific knowledge and understanding—as noted by Dr. Karl T. Compton, president emeritus of the Massachusetts Institute of Technology.

Dr. Compton, speaking at the closing ceremonies of the Massachusetts Science Fair on April 30, outlined four fields of work open to the high-school boys and girls who competed in local and regional fairs across the country in April and May to try out for the National Science Fair.

"You have a creative interest in science," he said. "Now what lies ahead."

"First, you can teach science. There are never enough good science teachers. Or you can go into the field of pure research—the field for those who study scientific phenomena for sheer interest.

"Perhaps you will go into applied research. That is a big field now. I remember when there were no more than 100 such laboratories in the country. Now there are 25,000, employing 150,000 workers.

"Or you may enter the field of education of the general public in science. It is most important," he emphasized, "that the public have an understanding of science, what it is, how it may be used, for today the frontiers of science are being pushed farther and farther back.

"Not every one is a scientist. Perhaps some of you who have exhibits here today will not find a future in science.

"But every one will be a citizen—and good citizens should have a knowledge of science."

The fair was held in Philadelphia's famed Franklin Institute. Complicated exhibits, working models and demonstrations in scientific fields from nuclear physics to plant pathology—all built by youngsters in their last three years in high schools across the country—were exhibited to the public.

Finalists at the fair were the top winners in local and regional science fairs held in the past six weeks from Boston to Oklahoma City. They were sent to Philadelphia as guests of their local newspapers, which are sponsoring the fair in cooperation with Science Clubs of America, administered by Science Service.

A panel of scientists, educators and in-

dustrialists in the Philadelphia area judged the exhibits. To the top 12 contestants were awarded \$1,000 in scientific equipment of their own choice.

Science News Letter, May 20, 1950

MEDICINE

Peak of Veteran TB Cases Expected in 1955

➤ A PEAK of 20,000 veterans suffering from tuberculosis and in need of hospitalization will be reached in 1955, Dr. Paul B. Magnuson, chief medical director of the Veterans Administration, predicts.

As of Feb. 28 this year there were 13,065 veterans with TB in VA hospitals, 2,109 in non-VA hospitals and 2,379 on the waiting list.

After 1955 Dr. Magnuson expects the number to decline gradually until 1960 and then to level off with a fairly steady load of between 15,000 and 18,000 patients constantly in hospitals. The figures are estimates, he pointed out, and may need to be revised later.

A report from the VA Claims Service shows that the percentage of World War I veterans on the compensation rolls for service-connected tuberculosis is seven times greater than the percentage of World War II veterans.

Science News Letter, May 20, 1950

AGRICULTURE

Deep Freeze Keeps Pollen For Next Year's Apples

➤ LAST year's apple pollen, kept in deep freeze all winter, was used to "father" California apples this spring as the apple trees blossomed.

Specialists of the U.S. Department of Agriculture believe the tests may show long-term storage of apple pollen by freezing to be possible. Unlike some plant pollens, that of the apple tree loses its power to germinate when dried and kept in ordinary cold storage.

To collect the pollen, Federal entomologists robbed bees working in apple orchards. They set traps of coarse mesh screen at the entrance to the hives. Bees returning with a load of pollen brushed through the screen, and part of their cargo dropped off into cups beneath the traps. It was promptly packed in dry ice by the scientists.

Preliminary tests through the winter showed the pollen would still germinate when thawed out. The real test was its application to 1950 blossoms in the orchard.

Storage by freezing, if it works, could be very valuable to apple growers. It would help in crossing late season apple varieties with types which bloom early the following spring.

Science News Letter, May 20, 1950

METALLURGY

Cesium Is Most Compressible Substance

➤ THE world's most compressible substance at very high pressures is the rare metal, cesium. Dr. P. W. Bridgman, Harvard physicist, told the Royal Society in a lecture in London that he has been able to compress this metal to only three-eighths of its original volume at the immense pressure of 100,000 kilograms per square centimeter (34,000 pounds per square inch). The experiments were made at Harvard University in Cambridge, Mass.

Science News Letter, May 20, 1950

NUTRITION

New Diet Ordered For WACs and WAFs

➤ THE standard 3,600-calorie-per-day ration of the Army and Air Force is too fattening for the WACs and WAFs. They gain weight so fast on this ration they often have to have larger uniforms issued shortly after enlistment. And the weight gain cuts down on their physical fitness. So a 2,400-calorie ration has been ordered for them with plenty of vitamins and protein.

Science News Letter, May 20, 1950



GOING UP—The pilot ejection tower was one of the highlights in the visit of the National Science Fair finalists on a tour of the Naval Air Material Center, Friday, May 19. The pilots are ejected during indoctrination to simulate emergency escape from high speed aircraft.