

## Questions

CHEMISTRY—Which of the body's waste products is reused by the body? p. 91.
Why do people suffering from phenylketonuria have white hair? p. 89.

GENERAL SCIENCE—At what age is the human embryo most sensitive to radiation? p. 83.

GEOLOGY — What new geological fault has been found near Los Angeles? p. 92.

MEDICINE — What tranquilizing drug slows the growth of cancer? p. 89.

METEOROLOGY—Predictions of what stream may become a regular part of routine weather service? p. 87.

PHYSICS—Which of his inventions was Edison's favorite? p. 90.

SURGERY—From what part of the leg has use-less tissue been removed in order to straighten deformed legs and feet? p. 88.

Photographs: Cover, U. S. Air Force; General Electric, p. 83; North American Aviation, p. 85; Fremont Davis, p. 87; Thomas Alva Edi-son Foundation, Inc., p. 90; Bakelite Company,

## **Neutrinos Now Detected Nearly One Per Minute**

➤ NEUTRINOS, an uncharged atomic ghost particle with a vanishingly small mass, are now being detected at the rate of nearly one per minute using a counter installed deep underground near the Atomic Energy Commission's Savannah River Plant in South Carolina.

Dr. Frederick Reines of the Los Alamos Scientific Laboratory, Los Alamos, N. Mex., reported that this relatively high rate means that more neutrinos were falling on the detector each second than the number of seconds since the beginning of the universe.

He explained to the American Physical Society meeting in New York that, although the giant scintillation counter used was very sensitive, it still detected only one neutrino for every ten million million million (10 to the 19th power) neutrinos hitting it.

Dr. Reines said Dr. Clyde Cowan, Jr., also of Los Alamos, assisted by Drs. H. W. Kruse, R. Jones and M. P. Warren, cooperated in measuring the energy distribution of neutrinos.

More than 20 years ago two Nobel laureates, Wolfgang Pauli and the late Enrico Fermi, suggested the existence of a neutrino in order to account for the mysterious disappearance of energy from a radioactive process known as beta decay.

The energy distribution measurements reported at the meeting give a further check to this 20-year-old theory.

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