



DISCOVERER

Judge William J. Graham of the United States Court of Customs and Patent Appeals is shown at the Algonkian Indian village site where he found the world's largest skull. He is holding an average skull, showing that the big-headed Indian of the record skull was extraordinary among his people. Judge Graham, long interested in archaeology, has made many notable discoveries.

MEDICINE

Improved Scarlet Fever Vaccine Protects Children

AN IMPROVED scarlet fever toxin for protecting children against the disease has been developed by Dr. M. V. Veldee of the U. S. Public Health Service's National Institute of Health.

The new protective toxin, Dr. Veldee reports in the current Public Health Reports, gave immunity or resistance to the disease in more than four-fifths of the children vaccinated, as shown by change in the Dick test from positive to negative. The Dick test indicates susceptibility to the disease.

The new toxin was prepared by a method which eliminates certain objectionable features of the original material used to protect against the disease. Reactions, such as pain, muscle soreness and temporary illness, were less severe following the use of the new toxin as compared with the old. The new toxin is also absorbed more slowly, a feature which scientists believe increases the degree of resistance to the disease.

Science News Letter, July 17, 1937

One person in a hundred suffers from hay fever, according to one estimate.

ASTRONOMY

Peruvian Amateur Astronomer Takes Good Eclipse Pictures

SOME of the finest photographs of the sun's corona ever obtained have just been given to Harvard Observatory by an amateur Peruvian astronomer, the result of his first eclipse work.

Made during the solar eclipse of June 8 by Fernando De Romana of Arequipa, Peru, they are expected to be of considerable scientific importance in unraveling some of the mysteries of the bright solar halo, Dr. Donald H. Menzel, Harvard University astronomer, announced.

Using his own hand-operated telescope camera, with special polaroid screens sent by the University, Romana, unofficial and volunteer Harvard observer, obtained four photographs which

clearly illustrate the effects of polarization in the light of the corona. They are so accurately standardized they will enable delicate quantitative studies of coronal polarization. Romana also made four fine pictures of the sun as it appears to the human eye, unaffected by polaroid.

Harvard had decided to make no pictures of the June eclipse but Romana's request for advice resulted in the Observatory's entrusting valuable equipment to him. The negatives are especially welcome, Dr. Menzel declared, since they supplement those taken during the Harvard-Massachusetts Institute of Technology expedition to Russia last year.

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ASTRONOMY

Eclipse Astronomers Return; Find Evidence of Coronium

PRELIMINARY scientific evidence of the South Seas eclipse expedition reveals further indication of the presence in the sun of a mysterious element "coronium." This is the announcement of Dr. Irvine C. Gardner of the National Bureau of Standards and John E. Willis of the U. S. Naval Observatory, first members of the party to return.

Whether coronium is really an element unknown on earth or merely some known element existing on the sun in a form not present in the earth is one of the puzzles which the eclipse pictures of the National Geographic Society-U. S. Navy expedition may help to decide. There is some evidence already at hand that coronium is a highly-ionized form of a common earth gas which has been stripped of almost all its outer electrons.

Captain J. F. Hellweg, U. S. N., who was co-leader of the expedition with Dr. S. A. Mitchell of the University of Virginia, timed accurately the eclipse and found that Naval Observatory calculations of the first contact were within a few seconds of their actual occurrence. This newest check and correction of the

time will be extremely valuable to the Naval Observatory in its future calculations on the motions of the sun, moon and earth, which are used in determining accurate time for everyday use.

Science News Letter, July 17, 1937

SEISMOLOGY

July Starts Off With Two Oceanic Earthquakes

JULY started off with two oceanic earthquakes, reports the U. S. Coast and Geodetic Survey, which has computed the epicenters of the shocks from code data forwarded by Science Service.

At 6:45 a. m., EST, on July 1 seismological stations at Honolulu, Manila and Hongkong reported earth tremors on their instruments. The quake's epicenter was off the west coast of Sumatra.

Also on July 1, but at 9:37 p. m., EST, observing stations at Victoria, B. C. and Honolulu reported another earthquake whose center was in the South Pacific. Lack of further data prevents the exact fixing of the epicenter.

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