

steel alloy nozzle. A schlieren optical system is used to photograph the fast moving air as it speeds past the models in the test section.

The new tunnel is installed in the Guggenheim Laboratory of Aeronautics on the campus of the Institute in a building espe-

cially designed for it. A total of 15 compressors supply the air for the tunnel. The tunnel was designed by Dr. Allen E. Puckett, and will be operated under Army Ordnance contract by Dr. Henry T. Nagamatsu of the laboratory staff.

Science News Letter, November 5, 1949

ARCHAEOLOGY

Indians' Increase Traced

► THE ancient inhabitants of the Flagstaff, Ariz., area, who disappeared about 600 years ago, were once almost as numerous as the population today, thanks partly to a volcano which erupted beneficial water-retaining ash over a wide farming area.

Today there are about 10,000 people living in the area. In the year 1160 A.D. the vanished Indians reached an estimated peak of 8,416. Ninety years later the population had dropped to a mere 612, and a hundred years after that, in 1350, the pueblo dwellers had completely disappeared.

The rise and decline of the Flagstaff area prehistoric residents have been traced in their pottery remains by Harold S. Colton, president of the Northern Arizona Society of Science and Art. The ceramic record goes back to the year 500 A.D. when the population was 300. The rise was more or less slow until the year 1167 when volcanic ash falling from Sunset Crater suddenly increased the agricultural capacity of the area. The ash formed a black sand mulch which held the moisture in the soil.

The cause of this rapid decline from the high point of population, Dr. Colton believes, was poor sanitation and faulty agricultural methods which ruined the arable land.

To arrive at such precise figures and dates, Dr. Colton believes that "the archaeologist must have courage enough to take his feet off the concrete and soar into the

sky of speculation." His method, which is similar to the one he employed in an earlier study in 1936, is first to assign dates to the pottery which has been recovered from some 1,500 sites in the area. These dates are fixed with considerable accuracy by the tree ring method.

Then by estimating the number of inhabitants per pueblo or pit house for each time sequence, he draws up a population census which shows the slow climb to peak population and then the sudden drop into extinction.

Science News Letter, November 5, 1949

GENERAL SCIENCE

Scientists in U.S. and Europe on Equal Terms

► AMERICAN scientists are on about equal terms with their European counterparts as far as fundamental work is concerned, Dr. Robert H. Kriebel of the General Electric Research Laboratory declared.

Returning from a European trip during which he inspected technical and scientific activities, Dr. Kriebel declared that "European scientists are unusually original and imaginative, but are hampered by lack of suitable facilities." Scientists here lead the world in the application of technical knowledge, he noted.

Science News Letter, November 5, 1949

On This Week's Cover

► COSMIC ray particles which smash deep into the earth from outer space will be studied in this worked-out cavern 2,250 feet underground in the Cayuga Rock Salt Company's mine near Ithaca, N. Y. Lowell M. Bollinger of Cornell University is shown checking a cylinder of 48 Geiger counters and other cosmic ray recording apparatus in preparation for the experiment.

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PHYSICS

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