

VOLCANOLOGY

Scientist Braves Desert to Study 200 Extinct Volcanoes

EXPLORING one of the most extensive volcanic areas in North America, Dr. Nicolai Kerensky, Russian scientist, is now charting more than 200 extinct craters along the Gulf of California. The region is 300 miles southwest of Tucson, Ariz., and lies partly in the United States and partly in Mexico.

"Besides mapping this virtually unknown country, I am going to study these eruptions as an example of the cooling of the earth's crust," he reported before he left Tucson. "I hope also through excavations and the study of the Hiatic Ootam, a vanishing tribe of Root Eaters, to trace the history of man, both past and present, in this sun-seared land."

The region is exceedingly dry. It is uninhabited except for about twenty of the Hiatic Ootam, who live on the roots of the bistak, a parasite of the *Coldenia* shrub, which will grow in the sand with only two or three inches of water a year. The trip is therefore a dangerous one. Six persons have become lost and died there of thirst during the last five years. The tinajas, the water holes, are far apart and often dry. The heat is also excessive, the temperature averaging 110 degrees Fahrenheit.

On a previous expedition three years ago Dr. Kerensky mapped the Amphitheater, a huge crater which measures a mile across and a fourth of a mile deep, and some eighteen other smaller cones. He also charted several lakes of lava and a "frozen" river which is a half mile wide and eight miles long.

He estimates that when this land was in eruption, the earth tremors shook California, Utah, Arizona, New Mexico, Western Texas and the West Coast of Mexico. The area extends for 200 square miles.

The craters have been the Mecca of the Papago Indian religion for many centuries, the Indians believing that Itoi, their principal god, lives on one of the peaks. They have made pilgrimages to the region since time immemorial and carried salt back from the nearby deposits to exchange with other tribes.

The only other scientific expedition to enter the country was when Dr. William T. Hornaday led a party in 1911 which mapped Pinacate crater, the largest of the 200. It is more than two miles in diameter and 1,000 feet deep.

Science News Letter, October 19, 1935

"dry ice" out of by-products of the industrial fermentation of corn.

Even now, more than ten per cent. of the corn crop has as its market the factory, Mr. Livingston said, and "uses for corn are being urged that, if adopted, would consume the entire present crop without leaving one ear for one Iowa hog."

Research the Key

Scientific research, the speaker indicated, is the key to the chemical hook-up between industry and the farm of the future. The great industrial firms are bringing their research resources to bear on farm problems, joining forces with the research work of Federal and State governments, which have long been in the field. The industrialists are doing this because they realize that the farmer is not only a prime source of raw materials for their plants but also because it has become inescapably evident that the great farm market is indispensable to a stable industrial prosperity.

"We are in the early dawn of a new golden era in agriculture. The first signs of that dawn are already streaking the sky."

Science News Letter, October 19, 1935

PHYSICS

Radium Given to Bohr to Honor his 50th Birthday

AS A GIFT upon his fiftieth birthday, Prof. Niels Bohr, leading Danish scientist, one of the creators of the new physics and Nobelist, was presented one hundred thousand kroner (\$22,500) for the purchase of half a gram of radium. The precious element will be used by Prof. Bohr in his private scientific research upon the constitution of matter.

Eight industrial firms and ten scientific foundations of Denmark joined in making the gift to Prof. Bohr.

Radium constantly disintegrates and shoots off powerful atomic projectiles and rays. Prof. Bohr will use these in bombarding the atoms of various elements to discover how they are put together.

Colleagues in science from all over the world sent messages of congratulation to Prof. Bohr.

"Original researches like those of Bohr are a bulwark against the destruction of our culture by fanaticism," Prof. Albert Einstein wrote from America.

"Bohr's achievements are epochmaking and have had an outstanding effect on the advance of physics," Lord Ruth-

AGRICULTURE

Crop Control Of the Future Will Strive For Increase

WHILE potato growers have been making known their wishes for smaller crops and larger profits, despite an apparent reluctance on the part of the AAA, chemical industry is looking forward to a time when a controlled agriculture will be adjusting its production in the opposite direction, in order to feed factories that will be even hungrier for corn and cotton than pigs and people are.

A glimpse of this coming alliance between industry and agriculture was given at Cornell University by L. F. Livingston, president of the American Society of Agricultural Engineers.

Speaking of the AAA program, Mr. Livingston said, "It was a situation with-

out precedent, yet such was the emergency that something of the sort was mandatory to check the economic collapse of one-half of the people."

But the emergency phase of crop reduction to prevent ruinously low prices for farm products is already passing, he continued. The tide is setting the other way, thanks largely to the need of industrial plants for raw materials from the land, to be worked up into manufactured goods through the processes of organic chemistry. And new chemical inventions now in the experimental stage will increase this demand many fold, doing all sorts of things, from building roads out of cotton to making