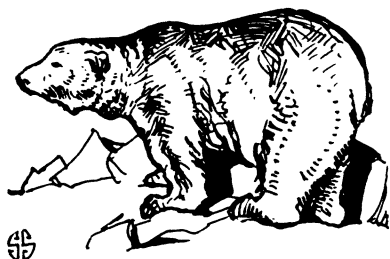

NATURE RAMBLINGS

By Frank Thone

*Some Like It Hot*

THE next time you stop in front of the bear-pit in your favorite zoo, do not waste any pity on the polar bears, as sufferers from unaccustomed heat in the far southern land of their captivity. Polar bears really like hot weather, declares George Jennison, a well-known and widely experienced English zoologist. He writes:

"The public err profoundly with regard to Polar Bears. They are pitied in hot weather, while a severe spell of frost always calls forth the remark that the Polar Bears will enjoy themselves; actually they do not like the cold. They rarely enter the water between October and February, and, on the other hand, nothing pleases them so much as hot weather, when they will lie flat with all four feet extended, enjoying the blazing sunshine. In the Arctic, radiation from the white snow is extreme and the heat terrific. Carl Hagenbeck has seen Polar Bears stretched out to enjoy sunshine that gave Leopards heat apoplexy."

Right now, therefore, rather than in winter, the big white bears are getting the most out of their lives. Above the Arctic Circle the sun is shining all day and all night, and the only way you can avoid its glare, even at midnight, is to get around on the north side of a big rock. Add to this fact that during the summer the Arctic teems with animal life, for migratory birds have swarmed northward to breed, and there are plenty of seals in the water. So the polar bear has nothing to do but stuff himself and bask in the sun. An he can do either at any hour of the twenty-four.

Science News-Letter, August 2, 1930

Italian Earthquake One Of Many

Seismology

THE SEVERE twisting by earthquake of Italy's ankle with loss of life and property is not a new experience for that country of seismic disturbances and volcanic eruptions. For sunny Italy is in the same class with Japan and America's own west coast when earthquakes are considered.

The shock that centered in the Naples region with its area of greatest disturbances probably located inland in about the middle of the Italian boot was recorded on seismographs throughout this continent and Europe. With the aid of seismic data telegraphed to Science Service from Canadian observatories at Ottawa and Victoria; Fordham University, New York City; St. Louis University; Georgetown University, Washington, D. C.; and J. W. Shaw's private seismograph at West Bromwich, England, experts of the U. S. Coast and Geodetic Survey and the Jesuit Seismological Association were able to locate accurately the center of the earth disturbance without use of reports that later filtered through interrupted communication lines in Italy to the outside world.

The scientific computations show

that the shock centered at between 14 and 15 degrees east longitude and 41 degrees north latitude which is slightly east of Naples. This area is considered by seismologists on the basis of past records to be one where earthquakes are frequent and strong.

Some 450 earth shocks occur annually in Italy, although major disasters come at intervals of years. Naples in 1857 experienced a quake that took 12,300 lives. The Messina shock of 1908, that killed more than 100,000, set a European record for earthquake losses. The earthquake of central Italy in 1915 cost 30,000 lives and the region of Calabria in Italy's toe lost 30,000 in the shock of 1783, 100 in 1894 and 175 in 1907.

Five hours earlier than the Italian earthquake another seismic shock, also felt round the world, shook the ocean bottom of the North Pacific, north of Japan and east of the Siberian coast. This shock probably caused no loss of life in spite of its severity, but it was located promptly and definitely by instrumental data from seismological observatories wired to Science Service.

Science News-Letter, August 2, 1930

Phenol Now Blamed For Gin Paralysis

Physiology

A SUBSTANCE related to carbonic acid is probably the adulterant which caused thousands of cases of paralysis from drinking Jamaica ginger last February and March.

A phenol compound, probably the phosphoric acid ester of tricresol, is the substance which Dr. M. I. Smith of the U. S. Hygienic Laboratory, working with the Prohibition Bureau, found in samples of the ginger from shipments that had caused cases of the paralysis. Samples from shipments thought but not definitely known to have caused paralysis, also contained this substance. Samples from lots that did not cause paralysis did not contain any of the phenol compound.

Samples from the first two classes of shipments were fed to rabbits, monkeys and dogs. The monkeys and dogs were not affected, but the rabbits became paralyzed in the limbs and died of respiratory failure.

An adulterated fluid extract of ginger was made in the laboratory to resemble the ginger that had caused the paralysis outbreaks in human beings. This extract contained tricresyl phosphate, the suspected compound. It had the same effect on the animals as the samples of the ginger which were known or thought to have caused the human disease.

The government scientists were at a loss to explain why the monkeys and dogs were not affected by the ginger samples, but they found that paralytic symptoms could be produced when the suspected phenol compound was broken down chemically before being given to the dogs and monkeys. This suggested that the compound passed through the stomachs of these animals unchanged, while in the stomachs of rabbits and of man it was broken down into a poisonous substance.

Science News-Letter, August 2, 1930