



An American Leopard

IT WOULD STARTLE the average sportsman to run into an animal that looks like a leopard running loose on American soil, and he might well be justified in thinking he had encountered an escape from some circus menagerie. But there is a leopard-spotted cat that occasionally gets into United States territory, though its real home is much farther south, and its incursions into Texas must be regarded as the extreme northern fringe of its distribution. Nevertheless it is seen there often enough to claim inclusion in standard lists of the fauna of the United States.

The ocelot is not a leopard, of course. True leopards are Old World animals. But it is a big cat with leopard-like spots, and that is enough for all practical purposes. It does not run so large as the jaguar, though a total length of 50 inches, head to tail, and a weight of 35 pounds entitle it to plenty of respect. The jaguar, by the way, also comes up into this country from Mexico, and is occasionally seen by ranchers and hunters in Texas, New Mexico and Arizona.

Like most of the cat tribe, the ocelot sleeps all day and prowls all night, seeking what it may devour. It climbs trees as easily as its domestic counterpart, and is as fond of birds—including domestic poultry. Rabbits and other wild rodents, snakes and other reptiles, all go to make up its diet. Except for its occasional raids on the chicken-pen it should be counted an inoffensive animal, and possibly, in view of the over-grazing of range lands by rabbits, even a beneficial one.

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Some African natives believe that the souls of dead chieftains may visit their relatives in the form of snakes.

PUBLIC HEALTH

## Disappearance of Diphtheria In Few Years Predicted

### Latest Preventives Are so Efficient that Death Now Declared Result of Ignorance or Neglect

"A DEATH from diphtheria must be considered as a result of ignorance or neglect," Dr. W. T. Harrison, of the National Institute of Health, declared at the symposium on toxoid immunization, latest method of diphtheria prevention, during the recent meeting of the American Public Health Association, in Montreal.

Two methods of preventing diphtheria deaths now exist—one is early treatment of the disease with antitoxin; the other is prevention by immunization with toxoid, successor to toxin-antitoxin, Dr. Harrison explained.

The prevention of diphtheria by active immunization is the greatest thing in public health since Jenner's development of vaccination against smallpox," Dr. Harrison said.

He predicted that diphtheria, once the dreaded scourge of childhood, will disappear in a few more years.

Credit for the development of immunization against diphtheria goes to Dr. William H. Park, director of laboratories of the New York City Health Department, although toxoid was first introduced by Prof. G. Ramon of the Pasteur Institute in Paris.

"Dr. Park has done more than any living man to wipe out diphtheria," Dr. Harrison said. He developed toxin-antitoxin, and it is his influence on health departments, parents and physicians that has enormously reduced the diphtheria death rates in many American cities.

The diphtheria bacillus produces a poison or toxin which, in massive amounts, causes illness and death. Antitoxin is an antidote to the diphtheria poison and is used to treat cases of the disease. Toxin-antitoxin, on the other hand, is toxin largely neutralized by antitoxin. When it is introduced into the body, the antitoxin gradually splits off, leaving more and more of the toxin. These very small doses of toxin have the effect of raising the body's resistance to the disease.

Toxin-antitoxin has the disadvantage that when it has been frozen for a time

it may become inert, or, on the other hand, may become toxic. This uncertainty is entirely absent in toxoid. Toxoid is toxin to which a small amount of the common disinfectant formalin has been added, and which is then kept at a temperature of 100 to 102 degrees Fahrenheit for from three to six weeks. During this time it loses all its toxicity, but retains its immunizing properties.

Toxoid is entirely non-poisonous and absolutely harmless, Dr. Harrison emphasized. No case of injury has been known to follow its use. Neither is there any danger of serum sickness, as it contains no horse or other serum. It is given in courses of two or three treatments. After the first course, nine-tenths of the children become completely immune. Toxoid is twenty to thirty per cent. more efficient, even when only two doses are given, than is toxin-antitoxin, experiments have shown.

Toxoid plus alum gives the best results, Dr. Park and his associate, Dr. May C. Schroeder, reported. Toxoid should be used for pre-school children. In a few older children and adults, toxoid causes a marked local reaction.

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### Science Leaves Nothing Solid

(Continued from page 199)

"Our microscopic concepts may not fit this ultra-microscopic world of the quantum. And our best hopes for the future are founded on the working out of a new system of concepts and laws suited to this new world that has swum into the ken of science. The rapid development of wave mechanics in the last four years seems to have brought us within sight of this ideal, and we are beginning to discern a new kind of order in the microscopic elements of the world, very different from any type of law hitherto imagined in science, but none the less a rational order capable of mathematical formulation . . . The complete recasting of many of our categories of experience and thought may ultimately be involved."

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