PUBLIC HEALTH

Parrot Fever Increasing

➤ PSITTACOSIS, a pneumonia-like disease transmitted from some birds to humans, has hit about 15 times as many persons during 1954 as in the years prior to 1951.

Doctors at the U. S. Public Health Service in Washington blame the increase on parakeets' popularity as pets.

From 1945 to 1951, the number of cases in the United States annually ranged from 25 to 35. In 1952, the figure jumped to 135 and, at the end of 1954, 563 cases had been reported for the year. Two hundred of these resulted from an epidemic among Texas turkeys, leaving 363 to be blamed on other domestic fowl and pets.

The disease, commonly called parrot fever, occurs most frequently in parrots and related tropical birds. Public Health Service regulations prohibit importing such birds from ouside the United States for sale or trade.

Travelers can bring in two birds a year as pets only if the birds have been with their owners four months or longer.

Restrictions on interstate transportation of parakeets were relaxed in November, 1951, because the law was difficult to enforce and, according to Public Health officials, many states lost interest in it. Since then, there has been a surge of interest in raising and breeding parakeets.

No sure-fire vaccine has been developed to protect parakeet owners against psittacosis. Reports of new cases reach public officials every week. Last March four persons in one North Carolina family caught the disease from two parakeets. A customs agent caught parrot fever when he impounded birds smuggled into this country.

A slight drop in the number of cases in 1955 has been offset by a gain in the number so far this year.

Some non-tropical North American birds carry psittacosis, including turkeys, pigeons and ducks. The disease is not so common among these birds, however, and wild birds are less likely to pass it on to people because they seldom come in contact with humans.

The virus appears in diseased birds' waste. Anyone cleaning the cage of a sick parakeet or parrot is exposed to psittacosis. A bird may have the disease if it seems sluggish, has ruffled feathers and frequent diarrhea.

Bird feed is sometimes treated with aureomycin to keep psittacosis from developing, but scientists are not sure just how effective this is.

In humans, parrot fever seems much like pneumonia, and is curable with antibiotics.

Science News Letter, June 16, 1956

PUBLIC HEALTH

Piggery Workers Get Dog Disease

➤ PIGGERY WORKERS and apparently the pigs can get a dog disease known as canicola fever, Drs. H. E. Seiler and J. Norval of the Edinburgh Public Health Department in Scotland and Miss Joyce D. Coghlan of the University of Edinburgh have discovered.

Canicola fever is caused by a spiral germ called leptospira. Some members of this germ family cause the serious and sometimes fatal Weil's disease.

The fact that humans can get the dog form, canicola fever, has been known for some time. The surprising thing about the Edinburgh piggery workers, however, was that, although they had the dog forms of the germs, they had not had contact with any but healthy farm dogs.

The germs must have gone from infected dogs to the pigs and then to the piggery workers, the Edinburgh scientists suggest in *Nature* (June 2).

Science News Letter, June 16, 1956

INVENTION

Scientists Find Way To Purify Metals

➤ TWO SCIENTISTS have invented an apparatus for producing purified metals by thermal reduction or decomposition of metal compounds.

The device and process means the production of purified metals such as zirconium in massive bodies and elongated rods. Purified metals are becoming increasingly important in the manufacture of fuel rods and other parts of atomic reactors.

The metal purifier can be used to produce those metals whose halide vapors are susceptible to thermal decomposition, such as zirconium, hafnium, titanium, silicon and vanadium.

It is the invention of Dr. Zalman M. Shapiro and Jack McDonald of the Atomic Power Division of Westinghouse Electric Corporation, Pittsburgh, Pa. Awarded patent No. 2,739,566, the scientists assigned the patent rights to the United States of America as represented by the Atomic Energy Commission.

Science News Letter, June 16, 1956

BIOLOGY

NATURE RAMBLINGS
by Horace Loftin

"Flying Lizards"

➤ MILLIONS OF YEARS AGO when the giant dinosaurs still dominated the earth, some of the smaller reptiles began to take to the air on membranous, bat-like wings. These were the first of the animals with backbones to develop true flight, as opposed to mere gliding.

Such a "flying lizard" was the pterodactyl shown here.

Although true birds with feathers and warm blood did not originate from the pterodactyls themselves, others of the "flying lizards" were probably ancestral to both. In any event, the modern birds did descend very directly from the reptiles in the course of evolution.

In a sense, the color of bird eggs might be taken as a kind of yardstick of how far removed a bird's living conditions are from ancestral reptiles. The reptiles usually lay their eggs in dark holes or under rotting vegetation or sand. Thus there is little need for protective coloration of the eggs, and it is not surprising most reptile eggs are white or parchment-colored.

Unlike reptiles, birds are warm-blooded, and the eggs must be incubated by the parent bird. The eggs, then, could not be buried and forgotten, but had to be laid more or less in the open where the parents could find them. The earliest birds to emerge from reptile stock probably laid their eggs on the earth without much thought to nests, such as with many gulls and terns.

The development of color spots in the eggs, acting to camouflage the eggs by blending them with the color of the ground, became important to survival. Gulls and terns today have such eggs.

Later, as birds began to build more and more complicated nests, hiding the nest became more important than hiding the eggs. As a result, egg color lost much of its "survival value," while the tendency for eggs to have pigment persisted.

Today most of the feathered songsters have brightly colored eggs of solid and speckled hues, marking the "advance" of birds from the reptiles.

Science News Letter, June 16, 1956