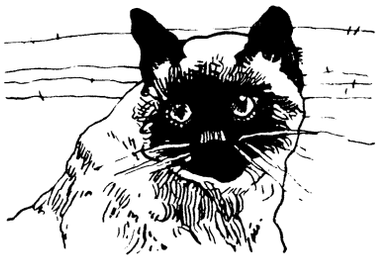
ZOOLOGY

NATURE RAMBLINGS

by Frank Thone



Cats and Dogs

WHOEVER first called the cat *Felis domestica* and the dog *Canis familiaris* either didn't know or chose to ignore their respective characters. For it is the dog that is really the domesticated animal, and the cat that is at most a "familiar."

A really domesticated animal might properly be defined as one that is always the property of a human owner, practically never being found in the wild state. Such an animal, moreover, is obedient to its owner, rendering services on command, provided of course, that it is intelligent enough. A domesticated animal reaches its highest level if it also shows loyalty to its master.

The dog fits this definition admirably; he is *par excellence* the domestic animal, surpassing even the horse.

The cat, on the contrary, renders no services (except to catch mice for her own eating) and certainly yields no obedience. She is proverbially independent-minded, indifferent to the humans who fancy themselves her owners. Some students of cat-ways declare her attachment is not to persons in a family but to the place where they live. She merely consents to share her domicile with them, and to accept food from them if they choose to give it.

Zoologists have a special name for wild animals, if by patience and forbearance and gifts of food a human being succeeds in gaining their confidence. It can be done, with varying degrees of difficulty, with such wild things as squirrels, rabbits, beavers, even skunks. The zoological name for such a half-tamed creature is a "familiar."

It may fairly be asked, is the cat really anything more than a rather common "familiar" animal? And shouldn't zoologists be asked to swap Latin names between dog and cat?

In partial excuse for Pussy, it might be urged that Fido has been domesticated a great deal longer than she has. Dogs came into man's household while he was still living in the caves of the Old Stone Age, cats at a considerably later period, probably rather late in the New Stone Age, after civilization had made really substantial beginnings. There are plenty of primitive peoples who have no tame cats, but no tribe of mankind anywhere on earth, is without its domestic dogs.

So maybe after another ten or twenty thousand years Pussy will have earned her name of *Felis domestica*. But in the meantime, though you may send Fido to the meat market to bring home the chops, better not trust Puss to guard the goldfish.

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MEDICINE

Chemicals Produce Reaction In Non-Tuberculous Animals

New Step Toward Better Understanding of White Plague Described Before Meeting of Anatomists' Association

THE FEAT of using two chemicals obtained from tuberculosis germs to make animals give a positive tuberculin test, even though they are not tuberculous, was reported by Drs. Florence R. Sabin and Austin L. Joyner, of the Rockefeller Institute for Medical Research, New York, to the meeting of the American Association of Anatomists in Pittsburgh.

The research, which is part of the mass attack on tuberculosis launched by the National Tuberculosis Association and leading research institutions, brings scientists one step further in understanding how the tuberculosis germ causes disease. They hope this means also that they are one step closer to final conquest of the white plague.

The tuberculin test, familiar to thousands of parents and school children as a routine measure for detecting early tuberculosis in the children, is accepted as giving indication of the presence of living tuberculosis germs. It has been possible to make animals such as guinea pigs susceptible to tuberculin, even though they have no tubercle bacilli in their bodies, by injecting the protein fraction of the tubercle bacilli. Enormous quantities of this protein material, however, and much time are needed to produce this result.

Drs. Sabin and Joyner reported that they have found they can produce the same response in non-tuberculous guinea pigs very much faster if they inject a mixture of the protein from the bacillus with a fat-containing phosphorus substance also obtained by chemical breaking down of the tubercle bacillus.

The chemicals used in this work were obtained from living tubercle bacilli in the Yale University laboratories of Dr. R. J. Anderson. Dr. Anderson has obtained many other chemicals from the TB germs. Dr. Sabin, by injecting each of them alone and in combination into guinea pigs, hopes eventually to learn which chemicals are responsible for the different symptoms of tuberculosis, such as the fever, the cheesy masses in the body tissues, called tubercles, and other symptoms. She even hopes to be able to produce germ-free, chemical tuberculosis in the animals.

The great hope is that when all this has been learned, it will be possible to find ways of negatizing each of these symptom-producing chemicals—in other words, to have one or more specific chemical remedies for curing tuberculosis.

A single step toward realization of this hope is what Dr. Sabin reported at the meeting.

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