



Turtles

➤ ALONG THE streamsidés and in ponds in the country now, one can find turtles basking, for the turtle sleeps all winter, and loafs, with a little fishing, all summer.

One of the commonest of these reptilian armored "tanks" is the snapper, the most violent-tempered of the turtle tribe and the dread of the small boy or girl "in swimmin'." And it is true that once a snapper takes hold of anything, he will hang on a most desperately long time, so if it happens to be one's big toe he has gripped—

Turtles in general are about the strangest animal anomalies that have been evolved in the course of nature. They are the only

surviving reptiles with anything like a complete bony external armor, although the horny plates in the alligator's skin recall the days when an animal knighthood was in flower in the Mesozoic, or middle ages of geology.

Turtles have no teeth, but a horny-edged beak, like a bird. When they are still in the egg shell, just about to break out into the world, young turtles have an even closer resemblance to birds, for the beak ends in a pronounced knob, useful in breaking through the shell; this knob, however, disappears soon after hatching.

The turtle is about as alien to our own way of living as anything could well be and still remain a vertebrate. We trust to physical speed and mental alertness for our safety and success in life; the turtle, having neither, has put his trust in armor — and thereby becomes even slower and duller.

He started down a blind evolutionary alley long ages ago; and it is one of the inexorable laws of evolution that once you get started in a certain specialized direction, there's no chance to repent. The moving finger writes, and having writ, moves on. So the turtle, having got himself in a box, must needs stay there.

Various species of snapping turtles are distributed throughout North America, from Canada to the Isthmus. Though never reaching anything near the size of the huge tortoises of the sea, some of the snappers become formidable enough, attaining a length of three feet and a weight of 40 pounds. These larger turtles are enemies of both fish and water fowl.

Science News Letter, July 25, 1953

## VETERINARY MEDICINE

**Stainless Steel Joints For Pet Cats and Dogs**

➤ PET CATS and dogs can now be given spare parts to replace worn out or damaged ones in their bodies, much as their masters and mistresses can.

Instead of being doomed to the life of a cripple or a mercy death because of a broken hip joint or bone disease, household pets can be operated on and walk normally again on "stainless steel joints."

The method, first used on humans about 10 years ago, was adapted to cats and dogs by Dr. Roger E. Brown, veterinary graduate student at Michigan State College, East Lansing, Mich.

Dogs regained full use of their legs and a normal gait within a week after the operation, Dr. Brown reported to the American Veterinary Medical Association in Chicago.

Five months after the operation one dog with two such steel joints jumped and played without sign of pain.

Before the operation X-ray pictures are taken to determine the size for the spare part. After the ball and shaft are shaped to fit into the bone and hip socket, the animal is put to sleep under an anesthetic, the diseased or broken bone is removed, and the steel replacement is installed.

Science News Letter, July 25, 1953

## INVENTION

**Secret Radio Sending Method Now Revealed**

➤ A WAY of sending military messages by radio without fear of enemy interception, which has been kept secret since early in World War II, was revealed when its inventor was granted a patent.

In use, the system fooled the enemy by making it believe the transmission was for the purpose of jamming the enemy's radio signals.

The patent was applied for by Norman H. Young Jr., Jackson Heights, N. Y., almost 13 years ago. He assigned it to the Federal Telephone and Radio Corp., Clifton, N. J., which recently became a subsidiary of the International Telephone and Telegraph Co., New York.

The system consists of two transmitters and two receivers. One transmitter sends out a jamming pulse at regular intervals. In the instant between two of these intervals, the other transmitter sends out part of the message. A high speed facsimile method of transmission is used.

One of the receivers hears the jamming pulses and utilizes them to trigger the other receiver into operation for receiving the facsimile messages. The patent is numbered 2,645,677.

A spokesman for I.T. and T. would not reveal the exact uses to which this system was put during the war or whether it is still in use.

Science News Letter, July 25, 1953

## PEDIATRICS

**Hot Weather Baby Care**

➤ BABIES NEED special care in hot weather. They cannot adapt themselves to heat as readily as grown-ups can. They should wear very light clothing or none at all, although they must be protected from drafts and from chilling at night.

The daily sunbath should be given at an earlier hour in the day in the summer than in the winter. An extra sponge bath at bedtime will be worth the trouble it gives mother in the comfort it gives baby. When he is made comfortable he is more likely to drop off to sleep without fretting and crying.

Mothers of young babies no longer dread the summer because of its threat to baby's life. The reason is because they have learned to guard against the germs which killed so many babies of an earlier generation in summer, the deaths being ascribed to "summer complaint" or summer diarrhea."

They know the baby's food and drinking water must be kept cold and clean and protected from flies or other insects that can carry disease germs.

Development of pure water and milk

supplies have been an enormous aid for mothers and babies living in the cities. In the country, mothers themselves may have to take measures to insure the purity of water and milk for baby. The state or other health department can give advice as to the safety of a particular well or other water supply.

If there is any doubt about it, however, for example, when traveling with a baby, the water should be boiled. For very small babies, many doctors recommend boiling the drinking water anyway.

The mother who nurses her baby can be sure that she is giving him germ-free milk. For babies who do not get breast milk, canned milk is advised by many doctors because, among other advantages, it also is germ-free.

The question of whether baby is to be fed canned milk or pasteurized milk from the dairy should be settled on the advice of the doctor. Once the can of milk is open, however, it should be kept covered and cold, just as fresh milk should be.

Science News Letter, July 25, 1953