

## ELEMENTARY SCIENCE SECTION

### THE DRAGONS OF MODERN TIMES

IF YOU had in a cage a specimen of each of the 1,700 different kinds of lizards that have been found in the world, it would be hard to believe that animals of such widely different shapes, sizes, colors, and habits could possibly belong to the same big group of reptiles.

You would see tiny creatures two or three inches long lying beside giants measuring seven or eight feet. Bright greens, blues, and reds would stand out among dull grays, browns, and blacks. Most of them would show four sturdy legs, with long toes, and even claws. But there would be some with only front legs, some with only back legs, and some with no legs at all. Tree-lizards, ground-lizards; under-ground lizards, and water-lizards would be mingled together, some darting about with the speed of lightning, others

lying sluggish and still.

ly degree of intelligence in captivity, learning simple tricks and answering to calls.

The writer once had a "pet" lizard which lived behind a picture hung above the piano. When any one played the piano, the lizard came out from his home and scampered about. He seemed to enjoy the music.

While lizards are found in nearly all parts of the earth, except the polar regions, they reach their greatest num-

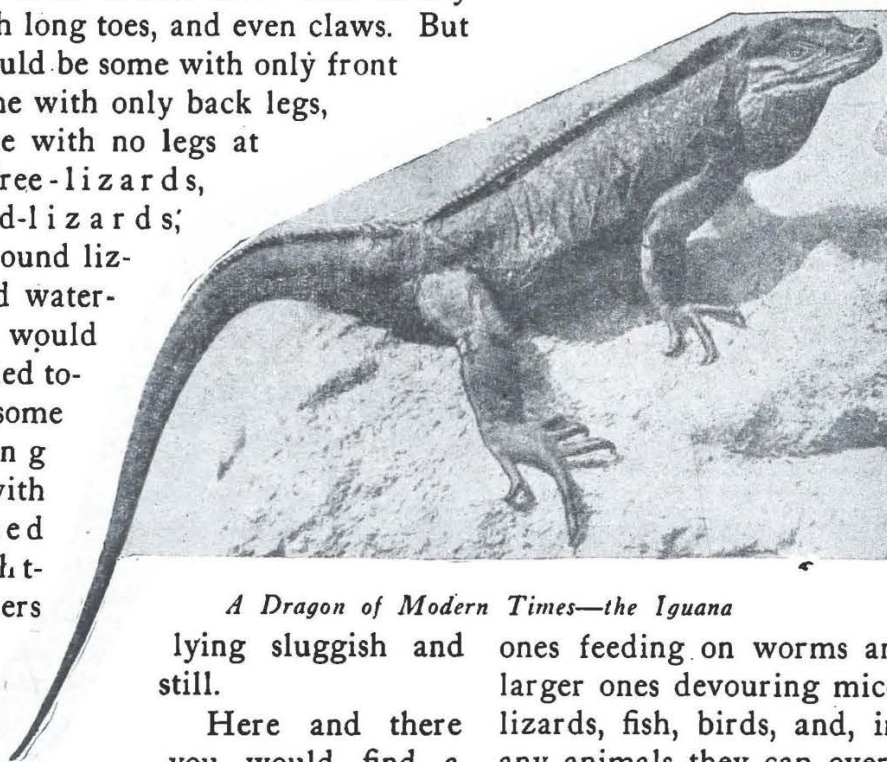
bers and varieties in tropical lands. Lizards abound in the Philippines and neighboring islands. There are many varieties.

Most lizards catch living prey, the smaller

ones feeding on worms and insects, the larger ones devouring mice, frogs, other lizards, fish, birds, and, in fact, almost any animals they can overpower.

There are some important varieties, however, that prefer a vegetable diet, notably most of the larger members of the "iguana" family, some of which reach a length of six feet.

Perhaps the most amazing peculiarity found in the lizard family is the ability which many of its members possess of

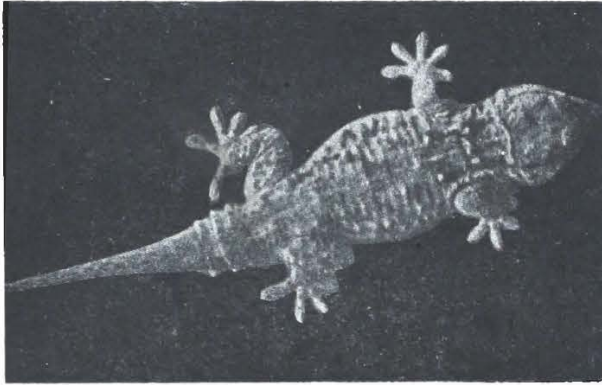


*A Dragon of Modern Times—the Iguana*

lying sluggish and still.

Here and there you would find a sleek, slender, graceful creature, but most of them would probably impress you as misshapen, horny, repulsive monsters, the dragons of modern times. But in spite of their forbidding appearance, only two of 1,700 species are poisonous. Many members of the tribe are not only harmless, but easily tamed and exhibit a good-





*The little Gecko can walk on a ceiling because he has disks on his feet.*

casting off their tails. When seized by a foe from behind, the tail breaks off at one of the joints of the back-bone. This does not seem to cause any inconvenience, for a new tail soon begins to grow.

Another strange practice among certain large lizards, such as the frilled lizard of Australia and a species in South America, is that of running swiftly and for great distances on their hind legs. When doing this their front legs swing back and forth. The tail is used as a balance.

The nearest thing to flying found among the lizards are the long sailing leaps from tree to tree by the small "flying-dragons" of the Malay countries. The "wings" of these creatures are unlike any other animal organs, for they are formed by the outward extension of the ribs, which are connected by thin membranes of skin. When at rest, they lie close to the creature's sides, but when a leap is made, they spread out like fans.

The frilled lizard gets its name from the broad collar of loose skin it wears around its neck, which spreads out when the animal is frightened or angered. At the same time it opens its mouth and hisses terribly—all of which is pure

bluff.

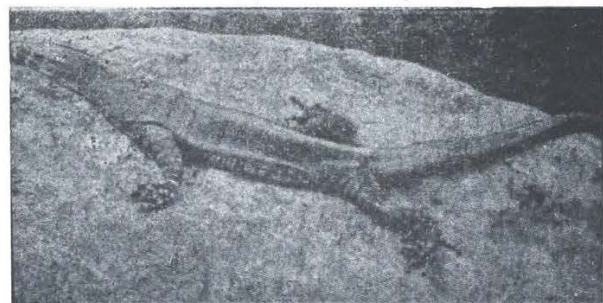
Though most lizards are not poisonous and usually mind their own business, some of them are fierce fighters and biters when annoyed.

Most lizards have no voice beyond an angry hissing; the gecko family is able to make a variety of cries. The geckos, which are found in the Philippines, are small creatures, very useful for the number of insects they destroy. Some have feet equipped with tiny pads or disks and hairs which enable them to climb up a pane of glass or walk on a smooth ceiling.

A close relative of the lizard tribe, the *tuatera* of New Zealand, is of immense interest to scientists, because this curious creature is the sole survivor of a group of reptiles otherwise extinct millions of years ago. The bodily structure of this "living fossil" has given science a key to the evolution of the whole reptile group. The group which it represents is thought to have been the parent stock of all lizards.

Lizards are "cold-blooded" creatures, like all reptiles. Some lay from one to 20 eggs, but others produce living young. Their skin is normally covered with scales, and from time to time they shed the thin, horny outside coating.

*(Please turn to page 116.)*



*The Monitor Lizard  
One of the Largest Lizards*

## VERDI

*(Continued from page 101)*

How was it first produced?

15. How many operas did Verdi write?

16. Have you ever heard a grand opera?

17. Have you heard songs from any of Verdi's operas?

18. Tell of Verdi's character.

19. Read this article again, and then answer these questions.

## WHERE THERE'S A WILL

*(Continued from page 94)*

tested it and found that it is true. WHERE THERE'S A WILL, THERE'S A WAY.

## SOMETHING TO THINK ABOUT

1. Do you think Juanito was right when he said, "An education in the elementary school is good as far as it goes, but it's not enough"? Why do you think so?

2. Why do you think Juanito was determined to have an education?

3. Why was Juanito willing to shine shoes and be a houseboy? Would you be willing to do that if necessary to get an education?

## DRAGONS

*(Continued from page 104)*

The family history of the lizard is interesting because of its many relationships with birds and mammals. At about the same time the lizards were appearing, nature was also producing from the much the same type of primitive reptiles, the first birds and the early mammals.

## REVIEW

1. How many species of lizards are there?

2. What can you say of the sizes of lizards?

3. Describe some species.

4. Where are lizards found?

5. What is the food of lizards?

6. What can you say of the tail of some species of lizards?

7. How do some lizards run?

8. Tell of the "flying" lizard.

9. The frilled lizard.

10. How are some lizards useful?

11. Why is the family history of the lizard interesting to scientists?

12. How many different kinds of lizards have you seen in the Philippines?

## MORO MARRIAGES

*(Continue from page 98)*

charges a fee—usually five pesos or more. If the groom is rich, he may have some ten *panditas* to solemnize his marriage.

If either of the contracting parties lives near a river, gaily decorated launches with flags and streamers of many colors may be hired for the occasion. On top of the launches grotesque animal heads sway in the air. Bands of musicians are always aboard the launches to furnish the music.

During the marriage celebration fire-crackers are lighted, guns are fired, and men and women shout at the top of their voices.

A Moro *datu* or *kagui* can have as many wives as he wishes, provided he can pay the dowries asked. An ordinary Moro is limited to four wives. A Moro who has many wives is considered rich. A Moro who has many daughters will become rich, because of the dowries that are sure to come for his daughters.

Such are some of the Moro marriage customs—commonplace to Moros, but strange to Filipinos who are not accustomed to them.