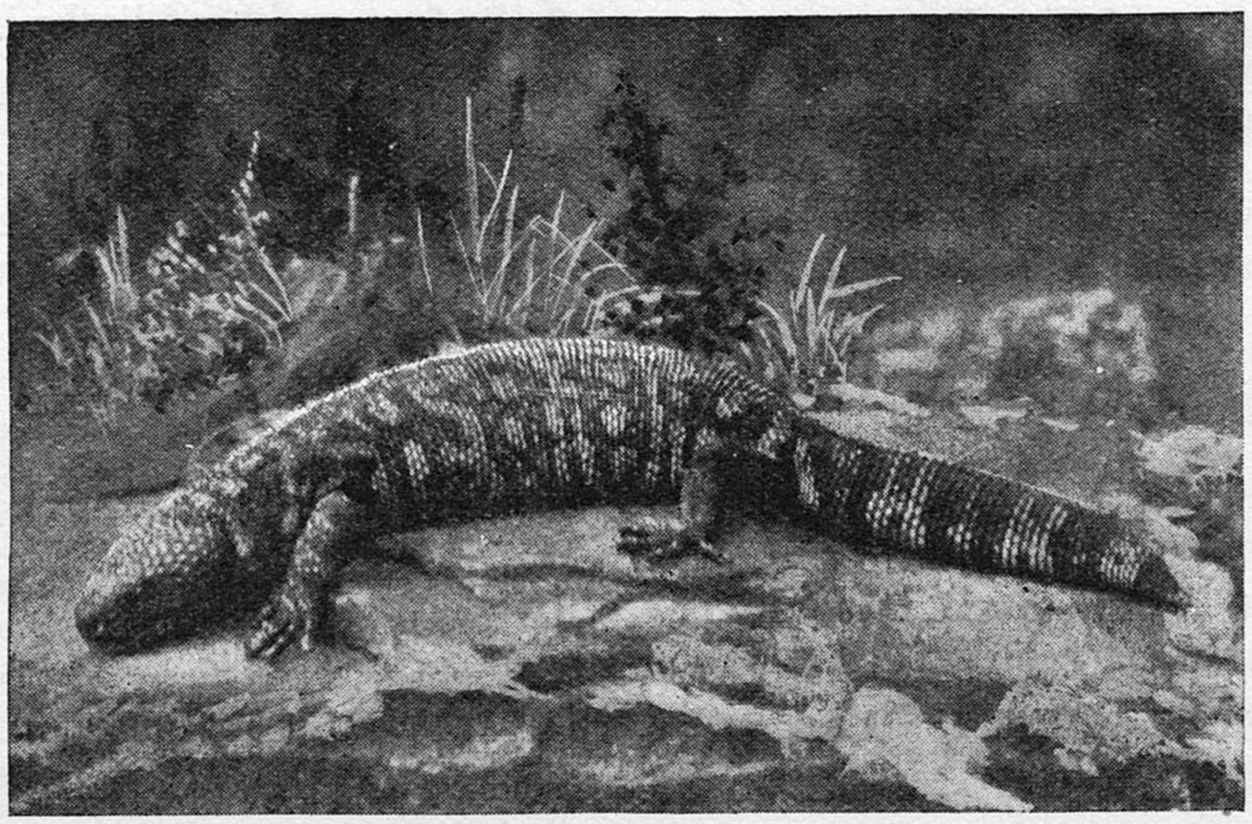
FORMS *of* LIFE *that are* DYING OUT

How the Reptiles, whose Mighty Ancestors Ruled the Earth before the Dawn of History, have Fallen from their High Estate and are Gradually Disappearing

REPTILES. We are so accustomed nowadays to seeing animals which have been improved by their association with man, admiring their "fine points," and their refinements of shape and colour, that the sight of some of the surviving types of prehistoric reptiles is repulsive to us.

Such animals as the crocodile appear too ugly to occupy a place on this earth alongside the higher types of living things, such as man with his intelligence, the birds with their beauty, and the finer animals with their grace and swiftness.

A POISONOUS LIZARD OF THE UNITED STATES



The Gila Monster, a poisonous lizard of New Mexico and Arizona, U.S.A. It is about 20 inches long and is yellowish with dark markings.

But the reptiles are worthy of our interest, and even our respect, at least in a scientific sense. Their mighty ancestors ruled supreme on this earth millions of years ago, long before man appeared. The great land monsters of ancient times (*see* Prehistoric Animals), such as the dinosaurs, were the forbears of the reptile of to-day, and the very hideousness of the modern crocodile seems to furnish us with a very good idea of the formidable character of those ancient beasts.

The dinosaurs are long since extinct, but the larger of the four-footed reptiles which still survive are admittedly their modern representatives, and retain enough of the character of their ancestors to endow them with a special interest. We have to remember, also, that from the reptiles emerged the earliest forms of birds and mammals.

The Position Reptiles Occupy

At the other end of the chain, the reptiles are believed to have developed from the "amphibians," of which frogs, toads, newts, and salamanders are the modern representatives; and these, in turn, probably developed from the fishes. In this way the reptiles occupy an important central position in the evolution of vertebrate or "back-boned" animals. (*See* Animal Kingdom.)

To-day the reptile class has fallen from its high estate. With the exception of certain groups of snakes, the reptiles as a whole appear to be degenerating and dying off. They have been greatly reduced in numbers as well as in size, the crocodile being the largest living representative of the class. Science describes a reptile as a cold-blooded lung-breathing creature, with a scaly skin, whose skull articulates with first vertebra by a single bone-end or condyle. More than 10 orders flourished during the "Age of Reptiles," but six of these have long since become extinct.

The four surviving groups are the turtles and tortoises; serpents; lizards; crocodiles and alligators. Of these groups the serpents and lizards have the most numerous varieties. (*See* Lizards; Snakes.)

Reptiles display many differences in structure. Generally they are long and scaly, but the turtles are peculiar amongst reptiles because they are round rather than long, while their scaly structure furnishes an extraordinary contrast with the scales of a snake, for example.

Some reptiles have no limbs, although traces of them can be discovered in certain of these species; there are lizards with only one pair of limbs; but the turtles, tortoises, alligators, crocodiles, and most of the lizards, have four limbs in active use.

The Scales of Reptiles

The scales of the lizards and serpents are not developed to the extent of furnishing protection to the animal within them, but in the case of the turtles and crocodiles the protective scales or shell are like armour-plate.

The teeth of the reptiles also furnish an interesting study, and vary widely. The turtles have no teeth at all, their mouths resembling somewhat the bills of the birds; some reptiles have teeth growing from their palate; snakes have teeth, not for chewing but rather to act like fish-hooks to prevent the escape of their prey, which they swallow whole; while