

The monitor is a large reptile which is fairly common in many parts of Africa, its range extending throughout the continent wherever proper conditions exist. Although it is one of the largest lizards within its range and is not rare even in the more settled districts, comparatively little is known concerning its more intimate activities. The few accounts dealing with the habits of the Nile monitor come from observers who have worked in the tropics rather than in the more temperate regions of South Africa, which probably explains the great difference between the following observations and those previously made by other observers. (For one account of the egg laying, see Roosevelt: "African Game Trails," pp. 411.)

Throughout the section of Natal, South Africa, where these observations were made, there are large numbers of hard clay nests made by one of the most common termites, *Eutermes trinervius*. These nests are cellular in structure, being perforated in all directions by numerous small intersecting passages. The outside of the nest is composed of the same material as that used within, clay, but becomes much harder and offers a good deal of resistance to penetration with a hoe or even a spade.

During the rains the outer covering of the nest becomes soaked with moisture and can be broken into very easily. At this season of the year the monitor digs its way to the center of the nest and lays from a dozen to thirty eggs, about the size of hens' eggs, covered with a tough, leathery integument. As soon as the parent is through laying she returns to her regular habitat, in some cases at least without having made any attempt to cover the eggs. The termites, which are always exceedingly active in a healthy colony, repair the break and in a few hours at most only the presence of a slightly damper area on the surface of the nest remains as evidence of what has occurred.

At the end of ten months, which brings the date to the spring of the year, the eggs hatch out, and through their own efforts aided by the softening effect of the excess liquid contained in the old egg "shell," the young make a vertical tunnel and finally emerge from the top of the termite nest. As soon as they have left the nest they make for the nearest stream where they will be found hunting for food and basking on the banks or swimming and diving as readily as do the adults.

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TRINITASIA—A NEW MOLLUSCAN GENUS FROM SOUTH AMERICA

IN 1925, I described and figured from the Miocene of Manzanilla, Trinidad, W. I., a shell of very strik-

ing form, as *Thyasira sancti-andreae* (*Bulletin of American Paleontology*, No. 42, p. 166, pl. 30, figs. 2, 3, 1925). The hinge of all the Trinidad specimens was concealed, and they were only provisionally referred to the genus *Thyasira*, on the advice of Dr. W. H. Dall, our greatest conchologist, to whom they were submitted because of their puzzling generic position.

Subsequently I studied a series of shells and molds from northern South America, which graded in size from small individuals to those equalling the Trinidad type and exactly like it in form. Several of the smaller molds showed in reverse traces of strong cardinal hinge teeth. These were certainly not *Thyasira*, which is practically edentulous; and Dr. Dall pronounced them unlike anything he knew. Clearly they represented a new genus, but the larger members of the series did not show their hinge characters, and although they had the same form, one could not be certain that they possessed hinge teeth like the smaller specimens.

Lately, however, I had in hand a full-sized shell, equaling the Trinidad type, and by a happy accident, its very thin and delicate substance was abraded at the beak and marks of about three strong, rather long, cardinal teeth were clearly shown in reverse upon the internal filling. I hope later to figure the hinge structure.

For this interesting Miocene genus of Trinidad and northern South America, I propose the name *Trinitasia*, the genotype being the form described, in the citation above given, as *Thyasira sancti-andreae* Maury, from the Miocene of Manzanilla, Department of St. Andrews, in southeastern Trinidad.

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THE BEHAVIOR OF MALLARD DUCKS

DURING the recent cold period a very interesting experience was afforded by a flock of about twenty-five Mallard ducks who make their home in a small stream known as Muddy River, in the Fenway section of Boston. With the fall in temperature, and the consequent freezing of the water, it seemed inevitable that the ducks would be driven from their swimming pool. Yet, from watching them, it became apparent that they were not to be driven from their home without a struggle. The ducks began to circle round and round in a radius of about 15 feet with a speed and determination that was amazing. Throughout the entire night, they plied about in their little pool, and though the bitter cold and fast-forming ice, which tried to hem them in, were sufficient to discourage the

most courageous, the ducks were not to be denied, and daybreak found them still in possession. Yet, it was not until the sun was high in the sky that they felt it safe to leave their pool and rest on the edge of the ice.

These ducks serve as the center of attraction for the thousands that daily pass through the Fenway; and as one studies them there seems to be an air of triumph about them as if conscious of having successfully combated the first and most severe thrust of King Winter.

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WANTED—A WORD TO REPLACE "BELIEVE"

For some years the writer has avoided the use of the expression "I believe" feeling that it did not adequately express the scientific attitude of mind. Belief is a religious attitude of mind and implies something which the person considers precious and immutable, which he is ready to defend, and for which he is willing to sacrifice even his life. There is nothing in the scientific attitude of mind corresponding to this. Our hypotheses and assumptions and so-called facts are subject to change over night and no one sheds a tear.

Not only does the word "believe" fail to express the scientific attitude of mind, but it is particularly unfortunate to use it because of the effect produced on the non-scientific persons. One reason why the rabid fundamentalists fail to understand the scientist is that they have no adequate conception of our mental attitude in such matters. Their whole attitude of mind is one of belief and they naturally assume that our attitude is similar. They assume that we hold to the theory of evolution as they hold to the (theory of) atonement. Under these circumstances, for us to continue to use the word "believe" simply confirms them in their error.

However, when one attempts to eliminate the word from his vocabulary he finds that it is a very convenient word and one for which it is hard to find a substitute. It is widely used and well understood by the people in a rather loose sense. It is widely used because the corresponding attitude of mind is so universal; it is used in a loose sense because religion has so largely lost its meaning. We who have found the better way still continue to use the old words though we have been warned about putting new wine in old wine skins.

It certainly would be a great improvement if we could find an adequate substitute and even if we can not, it is desirable to eliminate the word from our

vocabularies even at the cost of some circumlocutions. If any one can suggest a substitute please speak up.

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THE PRONUNCIATION OF RESEARCH

As pointed out by R. H. Smith, in the issue of January 20, 1928, the average scientist is likely to have certain foibles in pronunciation. Even more annoying to me than the mispronunciation of "data" is the mispronunciation of "research." There was a time when I used to pronounce this word correctly, with the accent on the last syllable, but overwhelming usage seems to place the accent on the first syllable.

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SCIENTIFIC BOOKS

Handbuch der Paläobotanik by MAX HIRMER, with Chapters by Julius Pia and Wilhelm Troll. vol. 1: *Thallophyta, Bryophyta, Pteridophyta*. 624 pp., 817 figs., R. Oldenbourg, Munich and Berlin, 1927.

THIS pretentious work has the usual merits and defects of such an undertaking. It starts off with a rather good 30 page discussion by Pia on methods of preservation. The Thallophyta are also treated by Pia, who probably knows more about the fossil forms than any other living student. This is gotten into 106 pages and is on the whole very well done, although some sections such as that on the Diatoms are too brief to be of much service.

The part on Bryophyta is by Troll and occupies but 9 pages. It is not at all notable and the author does not seem to be familiar with the literature, as many fossil forms are missing. For example no fossil mosses are recorded from North America.

The bulk of the volume, nearly 550 pages, is devoted to the Pteridophyta. As conceived by the author, the term Pteridophyta is quite as broad and comprehensive, and consequently as meaningless as the term Thallophyta. One might forgive the author for not having heard of several more or less valid proposals for segregating the diverse assemblage included under the term Pteridophyta if only his ears were not so keenly attuned to such, to the reviewer, ill advised proposals as the group Protoarticulatales, suggested recently by a fellow countryman.

The Pteridophyta are segregated in 6 main stocks which unfortunately are given with the *ales* endings universally applied to groups of ordinal rank by botanists. These 6 stocks are Psilophytales, Lycopodiales, Psilotales, Articulatales, Cladoxylales and Filicales, the first four microphyllous and the last