

study secured by these combined methods, it is to be hoped that we soon shall be as well acquainted with the surface-fauna off our coast as we now are with the bottom-fauna.

JAMES E. BENEDICT,
Resident naturalist of the Albatross.

EARTHQUAKE OBSERVATIONS.

THE occurrence of an earthquake, although not such an uncommon event in this country as most people suppose, rarely finds observers alert enough to make observations which, when sifted of hearsay and ambiguity, contain facts of much value to science either as to quantity or quality. As a guide to the information desired, it would be well to bear in mind the list of questions adopted in the circular to be issued by the U. S. geological survey, as follows:—

1. Was an earthquake shock felt at your place on the day of _____, 18 ____? (A negative answer is as important as an affirmative one.)

2. At what hour, minute, and second of standard time was it felt?

3. How long did its perceptible motion continue?

4. Was it accompanied by any unusual noise? If so, describe it.

5. Was more than one shock felt? If so, how many?

6. Which of the following measures of intensity would best describe what happened in your vicinity? No. 1. Very light, noticed by a few persons, not generally felt; No. 2. Light, felt by the majority of persons, rattling windows and crockery; No. 3. Moderate, sufficient to set suspended objects, chandeliers, etc., swinging or to overthrow light objects; No. 4. Strong, sufficient to crack the plaster in houses or to throw down some bricks from chimneys; No. 5. Severe, overthrowing chimneys, and injuring the walls of houses.

7. Do you know of any other cause for what happened than an earthquake?

This list was proposed by Capt. C. E. Dutton, in charge of the division of volcanic geology, with the advice of Profs. C. G. Rockwood, T. C. Mendenhall, W. M. Davis, and H. M. Paul. A negative answer to the first question, from an observer near the disturbed region, is of course valuable as showing the limits of the disturbance. The second question, as to the time, is the most important of all; and an immediate comparison of the time-piece used, with standard time at the nearest railway-station or elsewhere, is particularly desirable.

Experiments are now being made as to the best form of seismoscope for the use of selected observers, while more refined observations with seismograph and chronograph can of course only be undertaken where there are special facilities, as at regular observatories, etc.

GEOGRAPHICAL NOTES.

Uape Indians of the Amazon.—We derive from Henri Coudreau some interesting notes on the ancient race of Amazonian Indians known as the Uapè. These people are generally below the average height of Europeans, and their complexion varies from light brown to something like a chocolate tint. Their hair is black and smooth; with rare exceptions, reddish or even blond. They possess a personal odor almost as strong and disagreeable as in some Africans, but which is not due to want of cleanliness, as they bathe several times a day. Though quiet in their manners, they are very independent in their habits, and when intoxicated, which often occurs, are insolent, violent, and cruel. They have religious and secular festivals called respectively 'cachiri' and 'dabucuri.' These consist chiefly of dancing and indulgence in intoxicating preparations of coca, wild hemp, and other herbs, and ceremonial tobacco-smoking. The cachiri-drink is made in a canoe-shaped wooden vessel, around which both sexes dance in a sort of procession, each individual putting his right hand on the shoulder of the person preceding him. The line is led by the chief singing, while the rest join in a refrain. They are deceitful and perfidious, and do not hesitate to use poison against enemies. The drug is extracted from a species of arum, and, in small doses, produces death by anaemia and innutrition after a month or two: strong doses produce immediate insanity. Their food comprises game, fish, fruits, and manioc-farina; they are very fond of several sorts of large ants. Their houses are built of wood, long, with a door at each end, thatched, and accommodating as many as fifteen families under one roof. They are generally dirty and ill-smelling. The furniture consists of hammocks, pottery, trunks of Brazilian manufacture, and a variety of odds and ends, beside their weapons, nets, and baskets. At one side is a small shed, where the farina is cooked on a hearth. There is often a small flotilla of canoes belonging to the inhabitants. These people make excellent canoes, some of which are large enough to seat thirty people, and sell readily for a handsome price at the Brazilian towns. The most singular of their industries is that by which they obtain salt. A plant grows in the district of Carurù, a stout herb