

ward. One island which is about the size of Jamaica, has a fringe on one side and an extensive barrier on the other. Shells and coral have been found at great heights, and there are many evidences of upheaval. One small island, called Vatu Leile, appears to be raised on one side and depressed on the other; the raised coast is lined with a fringe-reef, the submerged by a barrier.

In the Lau group, there are two fine barrier reefs—those of the Exploring Isles and the Bukatatanoa. Inside the lagoons of these and other reefs, there are an infinity of coral banks with various depths of water over them, many being mushroom-headed.

The prevailing wind throughout the Fiji group is east-south-east. Unquestionably the coral is in most vigorous growth where there is the most violent surf; and no matter what the current, it is in least vigorous growth on the lee or north-west side.

I believe that it is not inconsistent with the theory put forward by Mr. Darwin that, in the same group, some islands should be rising and some falling at the same time; nor that an island should have fallen to a certain level and have then undergone a movement of upheaval. If this be so, there is nothing, as far as one can see, in the Fiji group which disproves subsidence as the origin of barrier reefs. The questions which I desire to ask are these:—

How does Dr. Guppy account for the remarkable similarity in many instances in this group, between the shape of the barrier reef and that of the coast of the island within it? As examples, I would point to the islands of Nairai and Ngau, and to the correspondence in form between the north-east horn of the barrier of the Exploring Isles and the nearest cape of Vanua Mbalavu with its off-lying islets.

In the case of the Bukatatanoa reefs, how does he account for this great rim being all much on the same level, except by the supposition that it commenced its growth on the same contour? or for the cleanly-cut ship channels which occur on the *weather* side of some of the barriers, except by the supposition that the growth was originally checked by the streams from the land?

It is, I believe, universally admitted that there are large areas of elevation—such, for instance, as the New Hebrides—and corresponding areas of depression. What form, does Dr. Guppy suppose, is assumed by the growing coral on the coasts of the descending islands?

Let me draw attention to Kandavu. To the north of this island there is a barrier reef inclosing a chain of islands of volcanic origin, and gradually decreasing height. The most northerly islet, which is a mere rock (now surmounted by a lighthouse), stands in the centre of a circular barrier of great symmetry. The highest part of Kandavu is over the western end, and here there is comparatively little coral. Has not this group every appearance of a range of mountains, the northern half of which is sinking beneath the ocean? There are many strings of islands in Fiji and elsewhere the position and coral surroundings of which seem to be accounted for only by the theory of subsidence.

Mr. Darwin did not visit Fiji; but it is worthy of note that Mr. Dana spent five months there, and enjoyed peculiar advantages of examination, and that he left it convinced of the general truth of Mr. Darwin's theory.

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Hydrophobia.

I THINK it cannot fail to interest some of the readers of NATURE to know what is written "in the Talmud of old—in the legends the Rabbins have told" about this baneful malady. I have therefore translated a fragment preserved in this ancient work, which, read through the mist of ages and wrapped in the garb of expressions and ideas of a long-ago past, may be of value to the antiquarian, and perhaps not wholly uninteresting to the man of science.

A. D.

June 11.

"It is not permissible to give to a person bitten by a mad dog from the lobe of the mad dog's liver, but Rabbi Matya, the son of Hheresh, considers it permissible" ("Mishna," "Tractate Yoma," p. 83).

The subject of hydrophobia is introduced quite incidentally, the question in dispute between the "Mishna" and R. Matya being whether the patient might eat of the mad dog's liver upon the fast of the Day of Atonement, and the difference of opinion is in consequence of the prescribed remedy being held to be only imaginary on the one side, and a real one on the part of R. Matya.

"He who is bitten by a mad dog, &c." The Rabannan have learnt that there are five indications of rabies, viz. open mouth, dripping saliva, elongation of ears, tail resting on buttocks, and wandering along the sides of the streets. There are some who add barking without sound. How does this come about? Rav says that witches have practised their sorceries upon them, and Samuel says an evil spirit has rested upon them.

What deduction may be made from this difference of opinion? That the mad dog should be killed by means of a weapon hurled from a distance, for in accordance with the view held by Samuel we learn that the dog, when killed, should be despatched from a distance. He who has come into contact with a mad dog by the animal brushing against him is in danger, and he who has been bitten by a mad dog is in peril of his life.

"He who has come into contact, &c." What precaution should he take? He should divest himself of his robes and *run*. Rav Huna, the son of Rav Joshua, came into collision with a mad dog in the street. He threw off his robes and ran, exclaiming, "I illustrate in my own person the Scriptural verse, 'And wisdom is a source of life to those who possess her.'"

"He who is bitten, &c." What precaution should he adopt? Abaya says he should obtain the skin of a male ape and write thereon, "I, so and so, the son of so and so, write upon thee, 'Kanti, Kanti, Kiloroth,'" and those present should respond "Kandi, Kandi, Kiloroth," the Lord, the Lord, the Lord of Hosts, Amen, Amen, Selah." He should then throw off his clothes and bury them in the burial-place for twelve months, after which he should recover them and burn them in a furnace, scattering the ashes across the roads.

During these twelve months, if he should drink water he should do so only through a copper tube, otherwise he might see the reflection of the demon in the water held in the vessel, and suffer dangerous consequences.

It is said of Aba, the son of Matya (he is Aba, the son of Menimah), that his mother made for him a tube of gold ("Gemara," "Tractate Yoma," p. 84).

SIR LYON PLAYFAIR ON UNIVERSITIES.

WE congratulate Sir Lyon Playfair on the admirable speech he delivered last week in the House of Commons on the Scottish University Bill. It was a powerful and luminous exposition of the true functions of Universities, and of the duty of the State with regard to the highest departments of education.

Speaking of the fact that the adaptation of degrees in Scotland had not followed the steady improvement in the education of the people, Sir Lyon Playfair said:—

"Degrees remained much as they were two or three centuries ago. The University was not a technical school, but a school to introduce culture into the professions. Unless that culture were introduced there was no justification for professional schools in the Universities. The *via antiqua* ought to be replaced by a *via moderna*. The Commission of 1878 proposed to open five gateways of knowledge—the gateways of literature and philology, of philosophy, of law and history, of mathematical sciences, and of the natural sciences. Now there was a great difference between the Universities of rich and of poor countries. The Universities of poor countries must rest on the professions. The rich men of Scotland went to Oxford and Cambridge, whereas those who attended the Scotch Universities had to earn their bread by a profession. Unhappily those professions were now being taught without culture; that was, with the exception of theology, the men went through the technical part of their education without taking a degree in arts, though there was a sort of matriculation examination, which did not represent a very high degree of culture. In that way the great medical schools were technical schools which gave length but not breadth of education. One of the greatest reforms to be attained was to carry out the recommendations of 1878 so that, by proper courses in arts, culture might be restored to the professions."

Sir Lyon Playfair spoke as follows about the provision

¹ The meaning of these words is lost.