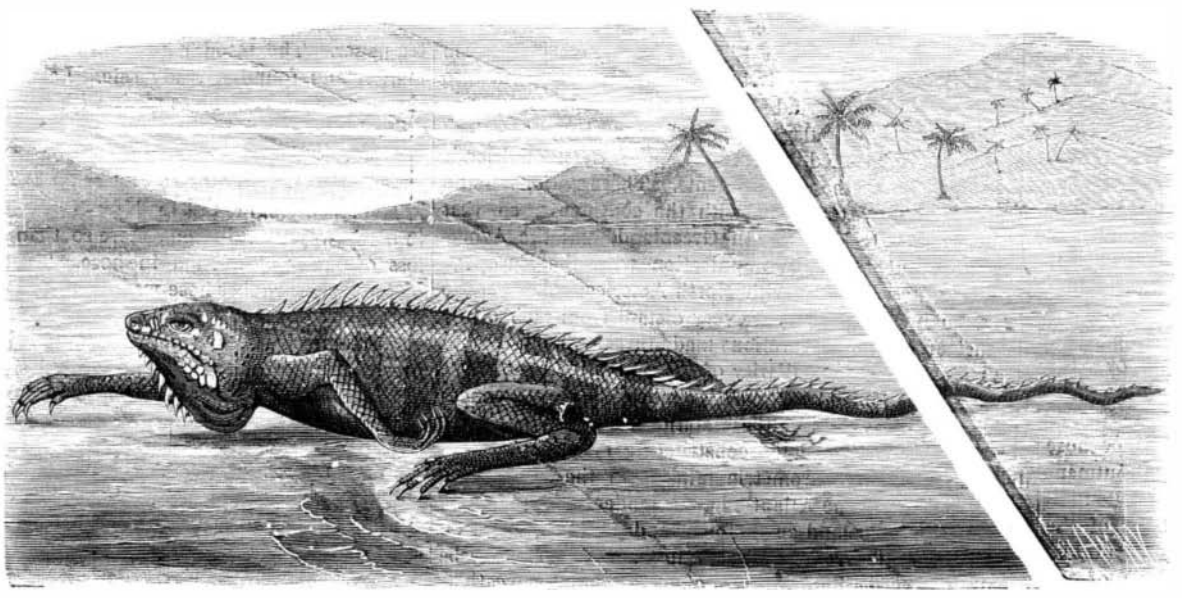
ments so that they may be easily caught in the field, been patented by Mr. Charles J. Gustaveson, of Salt City, Utah Territory. The improvement consists in k bands connected to the ends of a chain by simple durable connection.

CURIOUS FACT IN NATURAL HISTORY.

BY C. F. HOLDER.

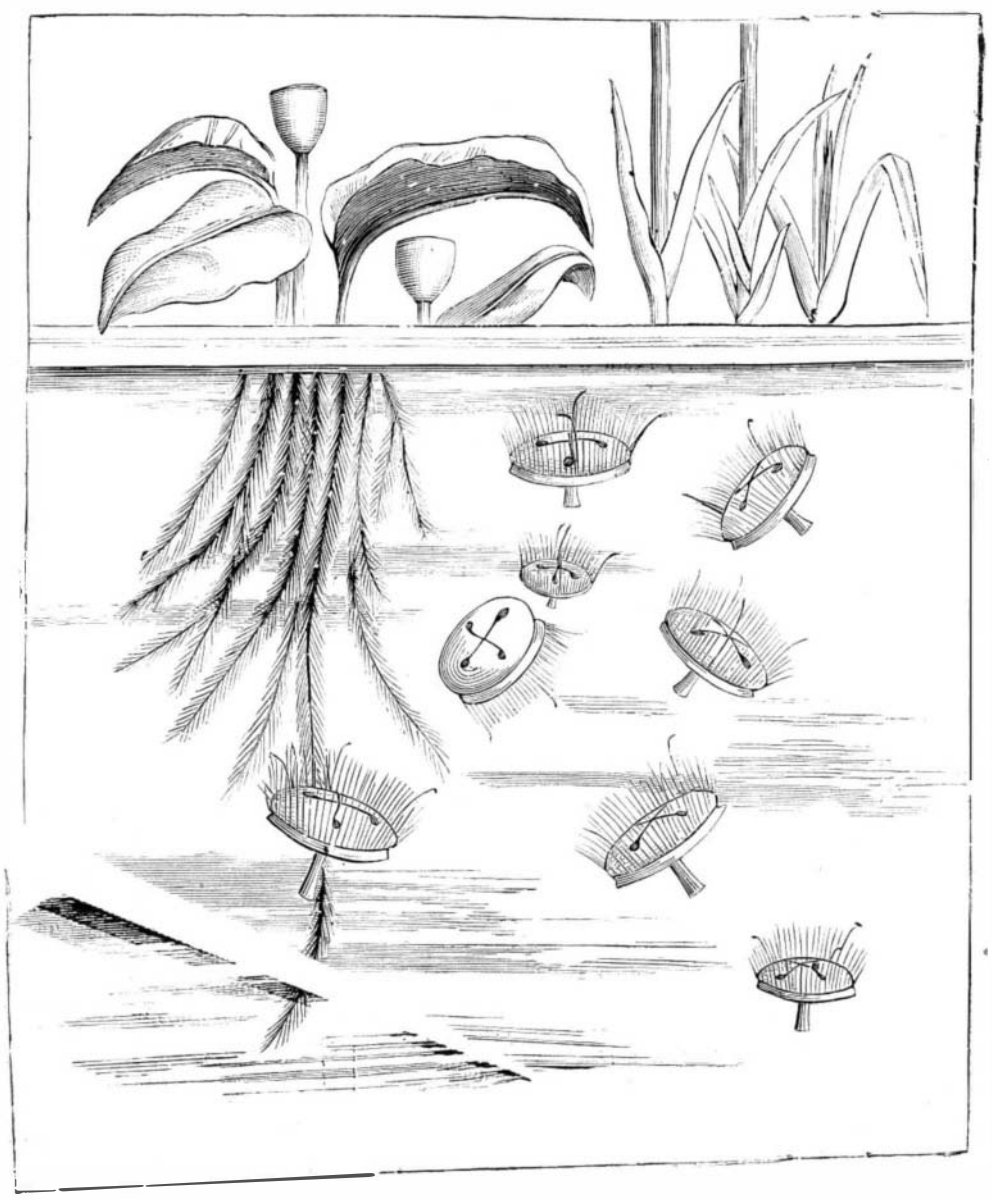
r illustration represents the American iguana crossing r, the Chagres, as wide as the Harlem at High Bridge, the surface of the water, without sinking below it. wonderful performance was witnessed by Mr. John G. the well known natural- d former companion of ibon. Mr. Bell states as he was approaching iver he came suddenly the reptile, and alarmed that it sprang into the , but instead of sinking, is surprise, it rushed g over the water, making aws go like lightning, so he could not see them, thus keeping the whole above the water. It quite a foam behind, in about two minutes was the river, up the bank, out of sight. When it membered that this ani- weighs from five to ten ds, and has slender claws l for tree-climbing, the derful character of the rmance will be appre- d. It is from four to feet long, and its general is green shaded with brown. It has a strong and distinct running along the whole length of the back and tail, and ge dewlap or pouch under the throat, the edge of which tached to a cartilaginous appendage of the bone of the at. The tail is very long, slender, compressed, and red with small, imbricated, keeled scales. It has a very idable look at first sight, and when irritated it puts on ry menacing appearance, swelling out its throat pouch, ting the crest on its back, and lashing its tail about with t violence. It is, nevertheless, a harmless creature, unlaid hold of, when it bites with considerable force. Alther the occurrence is a most remarkable one and entirely antagonistic to the supposed habits of the animal.



IGUANA CROSSING CHAGRES RIVER ON THE SURFACE.

FRESH-WATER MEDUSÆ.

ur engraving represents the *Limnocodium sowerbii*, the h-water medusa, recently discovered in the Victoria ia tank at Regent's Park, by Mr. Sowerby, the Secretary he Botanical Society. Our scien- readers will observe in the struc- of this unique jellyfish the excep- al characteristics which distinguish om other medusæ, as pointed out Dr. E. Ray Lankester in his report ie Royal Society, at a recent meet- of the Society; where also Mr. erby showed a number of living imens which he had kept in con- ment, and mentioned some of their liar habits. If the water is not t up to a temperature of about 85° ., the animal falls to the bottom of water and remains torpid until the perature is raised, when it again omes active. He has also observed medusæ feeding on the daphnia, ch abounds in the same water. he diameter of the disk of the me- a does not exceed one-third of an h. Dr. Ray Lankester, to whom we indebted for the sketch from which illustration is engraved, states that s the only medusa which inhabits sh water, and must have been intro- ced with tropical weeds from the Indies.—*Graphic.*



FRESH-WATER MEDUSÆ AT THE BOTANICAL GARDENS LONDON.

on the Trans- ...s. uence of Ligh... ...nch piration of Plan...

e *Comptes Rendus* of the Fre... temy gives the following *resume* paper, by M. H. Comes, on the spiration of plants, being the re- reached after numerous experi- tal researches:

) The emission of aqueous vapor ch takes place in plants is submit- ...ly to the action of the physi- not on... ...influence the ordinary agents whic... ...free surface of poration from ... light. Con- er, but also to that on ...itions, a ently, under equal con... ...ction t transpi... ...more under the ac... ...in darkness. ight than it does ... by light on) The action exerted on the transpiration of plants augments in proportion to its intensity. Consequently, under equal conditions, transpiration reaches its maximum shortly after midday.

(3.) Light favors transpiration only in the portion which absorbs it through the coloring matter of the organ. Consequently, under equal conditions, the organ which has the deepest color transpires most, and transpiration is most active in that part of the spectrum in which the light is most absorbed.

(4.) The luminous rays which are absorbed by the coloring matter of an organ alone favor the transpiration of such organ. Then, conditions being equal, the transpiration of a colored organ will reach its minimum under the influence of a light of the same color as the organ, and its maximum under the influence of a light of complementary color.

NATURAL HISTORY NOTES.

Digestion in Plants.—Dr. Lawson Tait has recently been investigating anew the structure and digestive principles of plants. While he has obtained complete proof of the existence of a digestive process in *Cephalotus, Nepenthes, Dionæa,* and the *Droseraceæ*, he entirely failed with *Sarracenia* and *Darlingtonia.* The fluid separated from one of the sundews (*Drosera binata*) he found to contain two substances, to which he gives the names "droserin" and "azerin." Dr. Tait confirms Dr. Hooker's statement that the fluid removed from the living pitcher of *Nepenthes* into a glass vessel does not digest. A series of experiments led him to the conclusion that the acid must resemble lactic acid, at least in its properties. The glands in the pitchers of *Nepenthes* he states to be quite analogous to the peptic follicles of the human stomach; and when the process of digestion is conducted with albumen, the products are exactly the same as when pepsine is engaged. The results give the same reactions with reagents, especially the characteristic violet with oxide of copper and potash, and there can be no doubt that they are peptones.

How Flying-fish Fly.—*Apropos* of an article on this subject in the *American Naturalist*, Prof. D. S. Jordan, the well known ichthyologist, gives the following statement in regard to the behavior of the large flying-fish *Exocœtus californicus:* This fish flies for a distance sometimes of nearly a quarter of a mile, usually not rising more than three or four feet. Its motions in the water are extremely rapid, and its motive power is certainly the movement of its powerful tail in the water. On rising from the water the movements of the tail are continued for some seconds until the whole body is out of the water. While the tail is in motion the pectorals are in a state of very rapid vibration, and the ventrals are folded. When the action of the tail ceases, the pectorals and ventrals are spread, and, as far as can be seen, held at rest. When the fish begins to fall, the tail touches the water and the motion of the pectorals recommences, and it is enabled to resume its flight, which it finally finishes by falling in the water with a splash. When on the wing it resembles a large dragon-fly. The motion is very swift; at first it is in a straight line, but this becomes deflected to a curve, the pectoral on the inner side of the arc being bent downward. It is able to some extent to turn its course to shy off from a vessel. The motion seems to have no reference to the direction of the wind.

The Use of Chlorophyl in Vegetable Growth.—This question appears to be as yet by no means definitely settled. Pringsheim, it will be remembered, recently suggested that chlorophyl was chiefly of use as a screen to protect the subjacent cells and their contents from those rays of light which would be adverse to the secondary processes that have been distinguished as growth. But Dr. Gilbert, in his recent address to the Chemical Section of the British Association, points out that the plant may receive abundance of nitrogen, may produce abundance of chlorophyl, and be subject to the influence of sufficient light, and may yet not assimilate a due amount of carbon. He shows that the presence of a due supply of potassium salt and of sufficient available nitrogen is necessary for the proper assimilation of carbon by plants. The amount of carbon assimilated evidently does not depend on the protective power of the chlorophyl alone, nor on its chemical action. In connection with the coloring matter of leaves it has been observed that the leaves of the Virginia creeper change to the well known beautiful red hue sooner on walls exposed to the north and east, and that if the weather be wet during the time when they usually change color the red tint is only sparingly developed.

Influence of Colored Lights on Animal Development.—M. Yung, in a note to the French Academy (*Comptes Rendus*, p. 440), gives some of the results obtained by him in his experiments on the action of colored lights on the development of animals. Eggs of the squid and cuttlefish, laid at the same time, were put into vessels in which the water was regularly renewed. These vessels were placed in glass bowls of the same form, but larger, and the intervening space was filled with different colored liquids. The upper surfaces were covered with thick cardboard, so that the eggs received light that was nearly monochromatic. Under such conditions the eggs developed unequally, as had previously been found the case with the eggs of the frog, trout, etc. The development was stimulated by violet and blue lights, but retarded by red and green. Yellow light, in its action, came nearest to white. In experimenting with the beautiful ascidian *Ciona intestinalis*, M. Yung found that those larvæ which were reared in vessels submitted