

with greyish white; tail-feathers irregularly crossed with blackish brown; thighs light buff.

Total length, 23 inches; bill, 7; wing, $12\frac{1}{2}$; tail, $3\frac{3}{4}$; tarsi, 5.

This is a very fine species, about the size of *Numenius arcuatus* and *N. australis*, from the former of which it differs in the absence of the white rump, and from the latter in its rufous colouring.

MISCELLANEOUS.

“Do Diatoms live on the Sea-Bottom at Great Depths?”*

By G. C. WALLICH, M.D.

THE following are some of my reasons for believing this question may with certainty be answered in the negative.

Although the soft parts are retained in specimens obtained from extreme depths, they differ materially both in aspect and qualities from those of Diatoms known to be living. Broken frustules are met with, which retain the whole or a portion of the soft parts, in a condition identical with that of unbroken specimens. Diatoms, when obtained from extreme depths, never present a trace of motion—a very important fact, inasmuch as it is difficult to conceive that the mere transit from the bottom should destroy the power of locomotion, which is so tenaciously retained by Diatoms under all other circumstances. The *Coscinodisci* (which, as Dr. Stimpson very justly observes) constitute the largest proportion of the Diatoms found in the deep-sea deposits, are essentially inhabitants of shoal water—that is to say, from one to fifty fathoms—being either independent free-floating organisms, epiphytes on floating Algæ, or epiphytes on the immediate surface layer of the sea-bed down to that depth. They do not live imbedded in mud. On the other hand, the upper waters of the ocean actually teem with their frustules, both in our own and in tropical latitudes, although only visible at the surface during calms. In the mud brought up from great depths, the Diatoms are distributed equally throughout the mass of the soundings—a fact which, with all deference to Dr. Stimpson’s views, I am inclined to regard as directly contraindicative of their vitality. And, lastly, there appears to me to be no satisfactory evidence that Diatoms, whether living or merely preserved from decay, constitute the food of the deep-sea Rhizopods.

On the questions of light, aëration, &c., I have already written in detail elsewhere, the above facts being merely offered for the guidance of those who are pursuing this line of research.

Description of a New Coral (Lithoprimnoa arctica), and Remarks upon its Systematic Position. By E. GRUBE.

The new Coral (*Lithoprimnoa arctica*) described by Grube was obtained on the Norwegian coast, in 70° N. lat. It presents several

* See a short paper on this subject, extracted from ‘Silliman’s Journal’ for May 1863, and published at p. 79 of the ‘Annals and Magazine of Natural History’ for July 1863.



Wallich, George Charles. 1863. ""Do Diatoms live on the sea-bottom at great depths?"". *The Annals and magazine of natural history; zoology, botany, and geology* 12, 166–166.

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