

the sunshine on the surface of the sea, and having gradually sunk into the abysses after death. Dr. Wallich, the naturalist to the *Bull-dog* Sounding Expedition under Sir Leopold M'Clintock, reported that star-fishes, with their stomachs full of the deep-sea foraminifera, had come up from a depth of 1200 fathoms on a sounding-line, and doubts began to be entertained whether the bottom of the sea was in truth the desert which we had hitherto supposed it to be, or whether it might not prove a new zoological region open to investigation and discovery, and peopled by peculiar faunæ suited to its most peculiar conditions.

This new view, however, progressed but slowly, for it was almost as difficult to believe that creatures comparable with those of which we have experience in the upper world could live at the bottom of the sea, as that they could live in a vacuum or in the fire. Of many of the conditions at great depths we as yet knew nothing, but some of them were as easily determined by calculation as by direct experiment, and we knew that an animal at a depth of 1000 fathoms must bear a weight of a ton on the square inch, and one at a depth of 3000 the almost inconceivable weight of three tons; and we had every reason to believe that the sun's light is almost entirely cut off at a depth of 50 fathoms, and that therefore the existence of plants upon which animals primarily depend for their food is impossible at great depths. These considerations alone seemed almost sufficient to place this question beyond the region of reasonable inquiry, and it was not until a considerable amount of evidence had been brought forward that what was called the "antibiotic" prejudice was in any degree overcome.

About this time another class of facts which gave the whole subject a singular interest were forcing themselves upon the attention of naturalists. Some dredgers, particularly our indefatigable brother-naturalists of Scandinavia, pushed their dredging operations to the utmost limit practicable in the northern