and perhaps one or two other officers besides the one on duty, awaited the arrival of the net on the dredging bridge; and as the same tedious animals kept appearing from the depths in all parts of the world, the ardour of the scientific staff even abated somewhat, and on some occasions the members were not all present at the critical moment, especially when this occurred in the middle of dinner-time, as it had an unfortunate propensity of doing. It is possible even for a naturalist to get weary of deep-sea dredging. Sir Wyville Thomson's enthusiasm never flagged, and I do not think he ever missed the arrival of the net at the surface.

Often when the dredge or trawl appeared there was nothing in it at all, and then frequently a somewhat warm debate ensued between the members of the scientific staff and the naval officers as to whether the instrument had ever been on the bottom or no, the scientific view being that it had not.

Sometimes there would be only a bright red Shrimp in the net; and this fact, on the one side, would be held as proof that the bottom had been reached, whilst, on the other, it was maintained that the Shrimp probably inhabited a region lying at some distance above the bottom. The sledge irons of the trawl-net were carefully examined as evidence in the matter, to test whether they had been polished by friction on the bottom or no, or whether they had any mud adhering to them. In future dredging operations, it would be well to have a small cup with a valve to it attached to the dredge or trawl, so that it shall always retain a little of the bottom, and prevent the possibility of the occurrence of such doubts.

The conditions under which life exists in the deep sea are very remarkable. The pressure exerted by the water at great depths is enormous, and almost beyond comprehension. It amounts roughly to a ton weight on the square inch for every 1,000 fathoms of depth, so that at the depth of 2,500 fathoms there is a pressure of two tons and a half per square inch of surface, which may be contrasted with the 15 pounds per square inch pressure to which we are accustomed at the level of the sea surface.

An experiment made by Mr. Buchanan enabled us to realise the vastness of the deep-sea pressure more fully than any other facts. Mr. Buchanan hermetically sealed up at both ends a thick glass tube full of air, several inches in length. He wrapped this sealed tube in flannel, and placed it, so wrapped up, in a wide copper tube, which was one of those used to protect the deep-sea thermometers when sent down with the sounding apparatus.

This copper tube was closed by a lid fitting loosely, and with