important physical conditions of the ocean is taken into account. Indeed, however difficult it may be to make out those subtle traits of physiological processes which account for their efficiency, their adaptability, and their exactness, I feel sure that no one who is thoroughly conversant with the general characteristics of the life process can fail to see a rough counterpart in the means by which conditions in the ocean are regulated.

It is certainly a salient, and hardly a meaningless fact that the processes of inorganic and organic evolution have a similar outcome in complex, exact, and almost ideally efficient activities. Is it not possible that in the case of the organic processes some have now and then been regarded as adaptations which in reality arose automatically and quite inevitably ?

The existence of efficient regulation of the ocean, establishing its most important physico-chemical characteristics as constants, is of far greater importance in the sciences of nature, especially for living organisms, than could formerly have been guessed. Such natural processes were perhaps even necessary to make life possible in the birthplace of life. I cannot undertake to explain the very great importance which to-day the physical chemist