

INTRODUCTION.

The materials which form the subject of this Report consisted of 794 specimens, of which 610 were obtained during the voyage of the Challenger, 88 on the cruises of the "Knight Errant" and "Triton," and 96 from various other sources. These specimens are referred to 266 species, 177 falling to the share of the Challenger, and 14 being due to the exploration of the Færøe Channel. The number of new forms discovered by the Challenger amounts to 144, whilst by the deep-sea exploration of the Færøe Channel ten species were added to the fauna of the British Seas.

The latter possess, perhaps, the greatest interest to the student of the British marine fauna; they verified the supposition which had been entertained for some time, viz., that fishes distinct from those of the littoral fauna inhabit the depths of the ocean surrounding the British Islands. At a time when so much attention is paid to the investigation of the marine products of the British Seas, it may be hoped that the hitherto intermittent efforts of exploring the deeper parts of this ocean may be prosecuted in as systematic a manner as the explorations carried on on the American side of the Atlantic, where the United States Government has spared no expense to secure the rich harvest that was to be expected not only for the advancement of knowledge, but also for the direct benefit to the country.

The majority of the Challenger specimens were at least externally in a very good state of preservation; those fishes only which possess bones, integuments, or fin-rays of a soft or delicate texture, and thin deciduous scales, naturally suffered more or less through being dragged to the surface from a depth of 1000 and more fathoms. Such specimens can reach the surface in perfect condition only under exceptional circumstances. However, with few exceptions, even the specimens of delicate structure were sufficiently well preserved to enable us to recognise their original shape and the arrangement of their scales, and to reproduce them in what are believed to be tolerably accurate figures. Unfortunately the abdominal organs were only too frequently found to be destroyed, or had suffered too much by laceration and decomposition to admit of examination. This was especially the case in those provided with an air-bladder, which was almost invariably torn into mere shreds. The stomach was nearly always empty. This condition of the specimens, combined with the circumstance that many of the new types were represented