spirit, closed with stoppers smeared with a mixture of tallow and wax, covered over with bladder, and the tops painted with a black varnish. The animals of different groups were in many cases roughly selected at each dredging, and put into different jars; but frequently, in order to save jars and spirit, it was necessary to put the whole result of one dredging into one or two jars, the animals of all groups mixed. Each jar was marked outside with the locality and the number of the station; and the station number written with a black pencil on a slip of parchment, was placed *within* each jar. The collection on its arrival in this country was thus arranged geographically. It came home in excellent order.

To ensure accuracy so far as possible, the observing stations have been numbered from 1 to 354, and a number corresponding to the station is on every sample of every description, and on every record of the result of observations for every station; and the same number is carried through the whole series of journals and other books kept by the members of the Civilian Scientific Staff.

It is now our object, in preparing a scientific account of the voyage, to describe these investigations, and to give their results in detail; and to develop, as far as possible, the bearings of these results upon one another, and upon the broad problems of Physical Geography and Hydrography.

For this purpose it is necessary that the various numerical results should be reduced and tabulated; that the samples of soundings should be examined chemically and microscopically; that the samples of water and of air should be analysed; and that the animals procured by the dredge should be most carefully catalogued as to localities, and the forms new to science described.

The data for the physical and chemical work are in few hands, and these chiefly at headquarters. It is especially for the assistance of the naturalists dealing with the deep-sea fauna that these notes are drawn up.

Professor Agassiz, Mr Murray, and I, have now gone over the whole of the collection of marine invertebrate animals in spirit; and we have separated the zoological groups from one another for each station, and re-arranged the collection in zoological order. Each jar, therefore, now contains animals of one group only (*e.g.*, *Ophiurids* or *Alcyonarians*), to be described by one person. Each jar has within it a station number, which refers to the specimens which are loose in the jar; but in many cases to save space, and to lessen the number of large jars, there are in the same jar several packets done up in muslin, each packet containing animals of the same zoological group from another station, and each packet having within it its own station number.

The jars will be placed in the hands of the naturalists who undertake the description of the different groups, in their present condition; and in order to secure uniformity and the safety of the collection, they are requested—

1. To go carefully over the whole collection intrusted to them, and to select a first series, including all unique specimens; and a sufficient number of specimens of those of which there are several duplicates, to illustrate their geographical distribution; and to associate with each species a particular number, by which number that species may be always referred to afterwards—at all events, until it has been described and named. This is the collection which is to be described and figured, and it is ultimately to be placed as a collection of types in the British Museum. It will usually be desirable, for the purposes of description and illustration, to put the specimens of this first series into rectified spirit in clear glass bottles; and I will arrange in each case how the bottles are to be provided and the expense defrayed. This collection must be retained by the describer until the description of the whole is finished.

2. To select at the same time a second set, consisting of a complete series of duplicates, numbered to correspond with the numbers attached to the first series, species for species, and to pack them either in separate bottles or in packets in muslin, a number of packets together in one store bottle. This set to be returned to me for reference.

3. To pack up all the duplicates from the different stations, each species from each locality either in a separate bottle or in a muslin packet, with the station number and the number corresponding with the type specimen of the species along with it. It will greatly facilitate matters if this general duplicate collection is