

placed in the hammock netting on the upper deck was filled as required, and the spirit was drawn off from the tank by means of a pipe with a tap placed in the laboratory, and secured under lock and key. The key was placed under special charge, especially at night, as a precaution against danger from fire.

In the case of any similar expedition in the future, it would be a great gain to have a drying chamber of some kind provided. In damp weather in the tropics, and also in the Southern Ocean and elsewhere, it was found extremely difficult to dry plants and other objects satisfactorily. The plants had usually to be dried in the ship's oven when vacant and cooling at night, or by being placed in the funnel casings, or in the stokehold. It would have been easy to have partitioned off, by means of perforated sheet-iron, a small drying chamber in the stokehold or elsewhere, where the hot air from the fires passing through would have produced the required effect. It would, however, be better if such a chamber could be provided with a separate source of heat of its own, to be used when the boiler fires were not lighted. A drying apparatus thus arranged would be of the greatest service for drying deposits, corals, sponges, and many animal specimens as well as plants. The specimens put to dry, for lack of a better place, in the ovens, or in the stokehold, were often, of necessity, inadvertently destroyed.

A press with weights intended for use in drying plants was taken on board the ship, but not used. It was found far better to use wire frames between the drying papers as ventilators, and to employ straps or ropes placed round the bundles to produce the requisite pressure. If plants be placed between single sheets of botanical drying paper, and packed in bundles with a ventilator between each two sheets, they may be successfully dried by means of artificial heat, without any change of the papers.

A list of the instruments and apparatus taken on board the ship for natural history purposes, which experience proved to be serviceable, is given in Appendix C to this chapter. It may be well here to point out some of those items which were found especially useful, and also to give a few words of warning as to those found useless.

By far the most economical wide-mouthed bottles, and the most convenient and handy in every way for use on a large scale, are known in the trade as "rock bottles," manufactured for holding sweetmeats. They are made in three sizes, and sold packed in wooden cases, with handles at each end and compartments for each bottle, padded with cork. The bottles are all about the same height, 9 inches, made of pale green, but very transparent, glass, and closed by glass stoppers with cork rims. The diameters of the three sizes of bottles are 6, $4\frac{1}{2}$, and $3\frac{3}{4}$ inches, with mouths $3\frac{3}{4}$, $2\frac{3}{4}$, and $2\frac{3}{4}$ inches respectively. They are very cheap; 200 cases complete, containing 2300 jars, were supplied to the Expedition by Messrs. E. Breffit & Co., Upper Thames Street, London, at a cost of £70.

Worth mentioning also, as especially useful and cheap, were roughly made bottles of white glass, with ground glass stoppers, measuring $3\frac{1}{2}$ inches in height, 2 inches in