inches long, by 21 inches wide. Every available wall space is occupied by shelves; and when standing at the working-bench one has the glass apparatus in ordinary use, such as beakers, flasks, test-tubes, etc., conveniently arranged on shelves to the right hand and behind him. As in the natural history work-room, deep shelves are run along the beams, and these serve for the stowage of glass tubing, note-books, port-folios, and miscellaneous articles. On wall-spaces not adapted for shelves small articles are fixed by hooks or nails, or in whatever way is most suitable, to be ready at hand. A convenient way of stowing glass tubes, small pipettes, parts of larger apparatus, etc., as well as pens and pencils, is to slit up a piece of india-rubber tubing, an inch or so long, of suitable bore, and fix it to the bulkhead by a tack. A light india-rubber clamp is thus formed sufficiently strong to grasp and retain any thing light. If the tube be long, each end may be supported in this way.

An ingenious modification of Bunsen's apparatus, by Dr. Jacobsen, of Kiel, is used for boiling the atmospheric gases out of the sea-water. It consists of three principal parts—the flask, the bulbed tube, and the receiver for the gases. The flask is spherical, with a strong lip; the one at present in use contains 940 cc. The peculiarity of the apparatus consists in the arrangement of the bulbed tube. The bulb *a* (Fig. 3), in which the water is boiled to expel the air from the apparatus, is of the pear-shape represented in the figure, in order to have the exit-tube as nearly as possible at its highest point, so as to prevent the accumulation of any air in the upper part of the bulb. Its capacity is about 60 cc. The lower end of the tube is closed, but about half an inch from the end it has a very small hole, *c*, in the side. The perforated india-rubber cork *d* fits the neck of the flask accurately, and through the perforation the tube passes air-tight, and with some friction. The receiver *b* holds from 50 to 60 cc., and has the entry and exit tubes contracted in the way shown in the figure. It is joined to the