

soon as the watch has been mustered, the bustle and activity begin, lasting throughout the day and even to the hour when night reminds one of sleep. Pumps are manned, and water is splashed over decks in all directions; and, although apparently unnecessary at times, yet it is absolutely essential to the preservation of the health and comfort of those on board. By six o'clock the washing is nearly finished, when all hammocks are piped up and stowed; it is now time for breakfast, consisting of cocoa and biscuit. The hands dress in the rig of the day, and all preparations are made for sounding and dredging. Sails are furled, and steam is ready, for it is essential to keep the vessel's head on to the sea during these operations. Before commencing, however, an account of how the soundings and dredgings are obtained, it might be as well to specify the sort of information that is required from us. Formerly the actual depth of the ocean only was required, and in extreme depths it was considered a great feat to be able to bring up a specimen of the bottom. Our requirements and means of obtaining information have so rapidly advanced that we not only obtain the sounding and bring up specimens, but we also ascertain the temperature of the sea at every 100 fathoms, from the surface to the bottom, and at the same time bring up samples of the deep water.

It has been found that in all deep soundings it is absolutely necessary to use steam power. No trust-