

barometer 29·871, at 1 A.M., falling to 29·449 inches at midnight; mean temperature of air 51°·2, of sea surface 51°·2.

On the 11th, the barometer reached its lowest point at 6 A.M. (29·316 inches). At 8 A.M. the wind shifted to northwest, and the mercury began to rise and continued its upward movement for the remainder of the day, but the change of wind and rising barometer brought no corresponding change in the weather, which continued gloomy and misty with drizzling rain. The sun broke through the clouds for a minute or two at 9 A.M. and 11 A.M., so that the position could be ascertained astronomically, which was at noon, lat. 46° 37' S., long. 129° 56' E.; the mean temperature of the air 52°·7, of the sea surface 51°·7.

On the 12th, at 7 A.M., the wind shifted to the southwestward, the mist gradually lifted, and it was, comparatively speaking, a fine day with a steady breeze, force 4; the barometer rose slowly and steadily to 29·700 inches, the mean temperature of the air 51°·3, of the sea surface 53°·1.

On the 13th a sounding, trawling, and temperatures were obtained in lat. 42° 42' S., long. 134° 10' E., the depth being 2600 fathoms, red clay, bottom temperature 33°·9, Station 160 (see Sheet 24). The trawl caught at the bottom occasionally, and had to be hove up carefully; it was much torn when it arrived at the surface, but fortunately the cod was whole, and contained a number of manganese nodules. At 6 P.M. sail was made and the ship stood on for Melbourne. The weather during the day was fairly fine, with occasional passing showers of drizzle, the wind southwest; the barometer steady at 29·741 inches; the mean temperature of the air 51°·6, of the sea surface 55°; the atmosphere drier than any experienced since leaving Kerguelen with one exception.

On the 14th the weather was fine, with the wind steady in force, though not in direction, veering between south and southwest; the barometer rising slowly, mean temperature of air 52°·9, of sea surface 57°·8.

On the 15th the weather was fine with a light southwest wind and rising barometer; and the air thoroughly dried the decks, the first time for six weeks. At 4 P.M. a vessel was seen to the northward, which, with the exception of the schooners at Kerguelen, was the only ship seen since leaving the Cape of Good Hope.

On the 16th, the wind falling light, and the barometer having risen slowly and steadily to 30·205 inches, which, combined with the fine settled look of the weather, indicated a continuance of the calm, steam was got up and the vessel proceeded towards Cape Otway. At noon the high land to the northward of that Cape was observed, and at 5 P.M. the Cape itself. At 8 P.M. Cape Otway was passed and the course altered for Melbourne. The weather was fine, and the atmosphere remarkably clear, Mount Sabine having been seen at 60 miles distance; the mean temperature of the air 58°·6, of the sea surface 61°·2.