

ed from the Andrew Marvel, that she had only parted from a cluster of them two days previous to our meeting.

On the 27th, being in latitude $57^{\circ} 44' 21''$ N., longitude $47^{\circ} 31' 14''$ W., and the weather calm, we tried for soundings, but did not reach the bottom. The register thermometer was attached to the line just above the lead, and is supposed to have descended six hundred and fifty fathoms. A well-corked bottle was also fastened to the line, two hundred fathoms above the lead, and went down four hundred and fifty fathoms. The change in temperature, shown by the register thermometer during the descent, was from 52° to 40.5° ; and it stood at the latter point, when taken out of the tin case. The temperature of the water brought up in the bottle was 41° , being half a degree higher at four hundred and fifty than at six hundred and fifty fathoms, and four degrees colder than the water at the surface, which was then at 45° , whilst that of the air was 46° . This experiment, in shewing the water to be colder at a great depth than at the surface, and in proportion to the increase of the descent, coincides with the observations of Captain Ross and Lieutenant Parry, on their late voyage to these seas, but is contrary to the results obtained by Captain Buchan and myself, on our recent voyage to the north, between Spitzbergen and Greenland, in which sea we invariably found the water brought from any great depth to be warmer than that at the surface.

On the 28th we tacked to avoid an extensive stream of sailing ice. The temperature of the water fell to 39.5° , when we were near it, but was at 41° , when at the distance of half a mile. The thermometer in the air remained steadily at 40° . Thus the proximity of this ice was not so decidedly indicated by the decrease of the temperature of either the air or water, as I have before witnessed, which was probably owing to the recent arrival of the stream at this point, and its passing at too quick a rate for the effectual diffusion of its chilling influence beyond a short distance. Still the decrease in both cases was sufficient to have given timely warning for a ship's performing any evolution that would have prevented the coming in contact with it, had the thickness of the weather precluded a distant view of the danger.