this ice greatly resembled that on the coasts of Spitzbergen and East Greenland, but much more solid: on the Spitzbergen ice the snow was said to be much deeper than with us.

From every thing we could observe, the sea at the W. end of Melville Island seemed to have something particular in its nature; for this year in August, and last year in September, we found it to be equally obstructed by ice, and wholly inaccessible for shipping. The winds off the land, which farther eastward used to drive off the ice for several miles from the shore, in this western part had no effect on it. The easterly winds had blown fresh for the best part of two days, and yet the ice, now of prodigious thickness and compactness, had not moved a foot. Hence it appeared that, still farther to the westward, in the sea beyond Melville Island, no open clear spaces existed, into which the ice, where we lay, could be driven. Here, therefore, all navigation westward became impracticable.

Friday 11*th*, some officers of the Hecla ascended a hill over the beach, where the ships were made fast to the grounded ice: but they could descry no opening of any kind in the ice, or between it and the shore. The height of this hill was about 800 feet, and the nearest hills behind it may be 200 feet more; making the highest land in the western portion of Melville Island, about 1000 feet in perpendicular height.

Monday 14*th*, Mr. Fisher, one of the surgeons of the Hecla, made an experiment to ascertain the specific gravity of the ice round the ship. Forming a cube out of a solid piece of floe, of 14·7 inches a side, and placing it in a vessel of salt-water, at the temperature of 34°, and of the gravity of 1·0105, 1·8 inch remained above the water, and 12·9 inches below it; that is, very nearly one-eighth part of the whole mass. Experiments on the ice to the eastward showed, that in general one-seventh of the whole remained above the surface; the ice there was, of course, less solid than that to the westward.

For these several days past the masses of ice had been close upon the ships, in consequence of very fresh gales from the eastward; and, as the ships were wholly exposed to the floes, preparations were made for both taking the beach in the most advantageous manner, that, if possible, the largest vessel might be preserved. Our principal defence was from the loose pieces of thick ice, which drew so much water as to ground before they touched us, and so served as excellent fenders to keep off the otherwise irresistible shock of the external floes.

At 11 P. M. of *Saturday* the 12*th*, the ice closed in so much on our ship, as to force her against a tongue of ice projecting from the land under the surface, and to raise her stern two feet out of the water. By this force she cracked a good deal, and must have