caused, as was afterwards found, by the number of Diatoms, Foraminifera, and other surface animals in it.

The pack was precisely similar to that described by Ross when he entered it on 5th January 1841. It consisted chiefly of small floes of last winter's formation, with a quantity of hummocky ice of much older date, forced by great pressure into heavy masses. The floe pieces were usually some 30 to 50 feet in diameter, and from 3 to 7 or 8 feet in thickness, much honeycombed, and with their surfaces covered by a thin layer of snow about a foot in thickness. It appeared to be decaying rapidly, but would still evidently give a ship a dangerous squeeze if massed against a berg by a strong wind, and a ship sailing through it should be prepared for an occasional hard knock. To avoid collision with these lumps the ship entered and left the pack under very easy sail. It was hoped that a suitable piece of ice would be found on which to

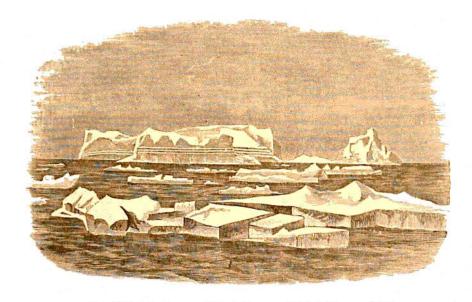


Fig. 155.—Iceberg and Pack Ice, seen 25th February 1874.

obtain magnetic observations, free from the influence of the ship's iron, but no opportunity of doing this presented itself. The westerly swell caused too much motion amongst the floe pieces, even had they been large enough to bear the weight of the instruments and observers, and the swell broke too heavily against the sides of the bergs; besides which a fit place for landing was never found, even on their leeward sides. In the middle of a pack Ross found the floes he landed on had motion, although not sufficient to prevent his observing, and Moore, like the Officers of the Challenger, did not succeed in meeting a suitable platform amongst the ice for taking observations. The southern pack is certainly much more dangerous to a ship during bad weather than the northern, as there the floes are usually sufficiently large to permit a dock to be cut. In the Antarctic no shelter can be obtained. Again, the northern ice is easier of navigation, for a breeze off the land will often open a