

to the universal system of oceanic circulation, the water at any one point forms necessarily part of an indraught or current moving from a warmer or a colder source; and unless this movement be inappreciably slow, the temperature observed is not simply that of the station of observation, but is greatly affected by that of the region from which the water is moving. When the current is warm—and this is usually the case in dealing with surface movements, since the cold return indraughts move, unless in exceptional cases, on the bottom—the blue line rises high above the mean of the red one; and where the phenomenon is extreme, as in the case of the Gulf-stream and the Guinea current, this divergence is most striking.

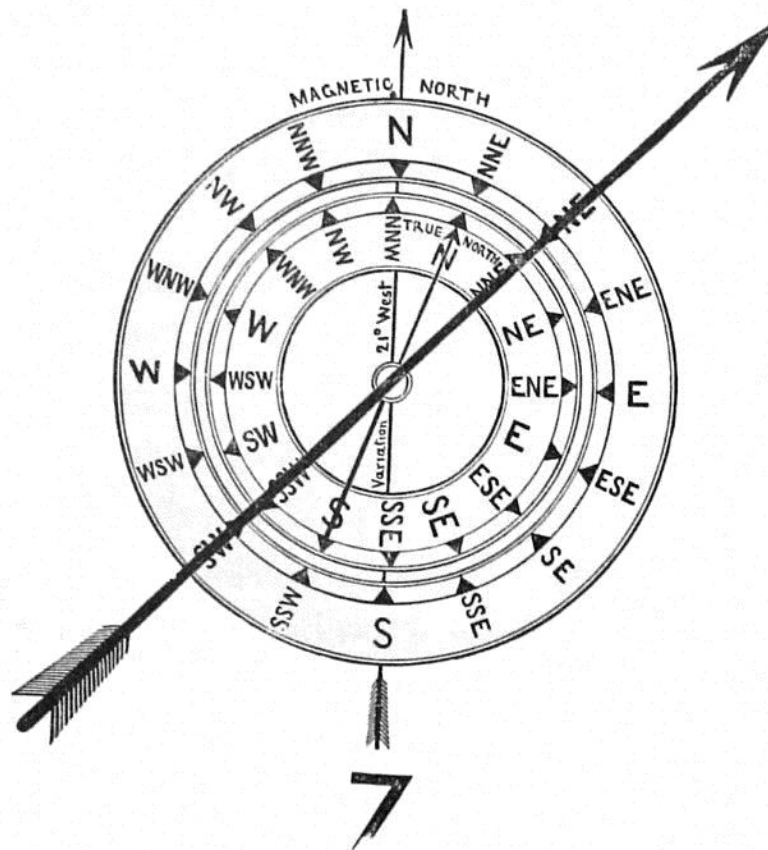


FIG. 37.—Diagram showing the direction and force of the wind (direction south-west by Compass; force = 7 by Beaufort's scale) at midnight, January 1st, 1873.

The direction of the wind is given by a line of arrows flying with the wind. In the Atlantic, where the deviation of the compass is comparatively small, the direction is referred to the magnetic north.

The force of the wind is indicated by numbers according to