directly continuous, layer for layer, with the water of the Ant- arctic basin, it must be looked upon, not as being in connection with that basin only, but as being a portion of the great ocean of the water hemisphere; and over the central part of the wa- ter hemisphere precipitation is certainly greatly in excess of evaporation, while the reverse is the case in its extensions to the northward.   The water is, therefore, carried off by evapora- tion from the northern portions of the Atlantic and of the Pa- cific, and the vapor is hurried down toward the great zone of low barometric pressure in the southern hemisphere, the heavy, cold water welling up from the southward into the deepest parts of the northward-extending troughs to which it has free access to replace it.   It is unfortunate that we have as yet scarcely sufficient data to estimate the relative amount of rain and snow in the northern and southern hemispheres; but the broad fact that there is very much more in the southern is so patent as scarcely to require proof.   This excess becomes still more apparent when we include, as we must do, in this source of supply of water to the north, the tropical region of the South Pacific, which forms part of the great ocean.

To recapitulate briefly the general facts and conclusions with regard to the distribution of ocean temperature in the Atlantic, it seems to me:

1. That the Atlantic must be regarded in the light of an inlet or gulf of the general ocean of the water hemisphere, opening directly from the Southern Sea.

2. That the water of the Southern Sea simply wells up into the Atlantic, and that all the temperature bands of the Atlantic are essentially continuous with like temperature bands in the Southern Sea, with these modifications: That (a) above a certain line, which may be roughly represented by the isothermobathic lines of 5° and 4° C., the temperature of the water is manifestly affected by direct radiation and by the very complicated effects, direct and indirect, of wind-currents; and (b) that the whole