

and rheumatism, and the health of Europeans is less affected than at other seasons, because the climate is then less dissimilar than usual to their own.

"The comparative unhealthiness of Prince's Island to that of St. Thomas's, and of both to Anno Bon, as the residence of Europeans, has been frequently and particularly noticed by Portuguese authorities, and is universally recognised at Prince's Island and at St. Thomas's. It may be a sufficient explanation to remark, that Anno Bon is always surrounded by the Equatorial Current; Prince's always by the Guinea Current; and that the position of St. Thomas's is intermediate, and its climate is occasionally influenced by both. In tropical climates, a very few degrees of temperature constitute an essential difference in the feelings of the natives, and in the health of Europeans."

In taking a general view of the facts which have been stated, it will appear that, towards the western sides of the North and South Atlantic, of the North and South Pacific, and of the Indian Oceans, streams of heated water, making their way from low to high latitudes, prevail. These in the two northern oceans become easterly, setting towards the opposite continents, causing, beyond all question, the comparatively equable and elevated temperature that is found on their western coasts, and which so peculiarly distinguishes the climate of the British Islands. To keep up the equilibrium of the ocean, the body of water thus thrown from the equator towards the poles, must, after being cooled and rendered more dense in the higher latitudes, return towards the equator; and the mode in which at first sight it might be expected to do this is by currents wholly submarine. But the influence of the returning water is felt at the surface also, forming the surface polar streams, of which we have spoken. Those which come from the great body of ocean in the southern hemisphere are directed upon the projecting points of the continents and great islands. Cape Horn, the Cape of Good Hope, Cape Leeuwin, &c., where as a general rule, they are divided into two branches. The easternmost of these meet the equatorial streams, of which I have spoken, whose direction they change, modifying or checking their progress towards the poles, and forming what I have termed the nuclei. In the North Atlantic, we have seen that a part at least of the North Polar Stream divides upon Cape Finisterre, passes into the Bay of Biscay, assuming the form of a surface current allied to an eddy, called the Rennell Current, while its main branch pursues its southern course along the coast of Portugal, and finally again becomes wholly submarine.

On the western side of the North Atlantic, in the higher latitudes,