

as we neared the coast, by the equatorial stream that sets down the Mozambique Channel. This stream is usually confined to narrow limits, but at some seasons becomes strong enough to throw its waters in a southwest direction beyond the Aguillas Bank. There is little doubt that this equatorial stream is superficial, overlying the Southern Polar Stream, a portion of which latter, touching the Aguillas Bank, is forced up by that obstruction to the surface. This is evident by its reducing the temperature of the waters on soundings at the Cape to 62° . This Polar Stream is divided by the Cape: the eastern part sets along the east coast of Africa as a submarine stream, and on reaching the island of Madagascar is found to flow north, along its west shores. The other and larger portion is deflected, and flows to the northward, along the west coast, and finally forms the Great Equatorial Stream of the South Atlantic.

We have seen that a great equatorial stream, flowing westward, is found both in the Atlantic and Pacific. One also, according to Horsburgh, exists in the Indian Ocean, in the latitude of 3° N., which may be traced to that polar stream which we have seen to flow along the western coast of New Holland, and which must of necessity sweep the coast of Java and Sumatra. This stream has in the Indian Ocean been observed to flow at the rate of fifty-six miles in twenty-four hours. Upon the same authority, it appears that on the Malabar coast a current sets constantly to the southward.

About the Chagos Archipelago, the currents are periodic, setting west and northwest during the prevalence of the southeast monsoon, and southeast in the months of December and January, when the wind blows from the northwest. About the Comorro Islands, on the contrary, the prevailing current is from the westward; and off the north end of Madagascar, likewise, a westerly current prevails throughout the year. On this account the ports of that island are difficult to make, and ought to be approached from the windward, as it would be difficult to beat up to them against the current.

In the Mozambique Channel, a current sets northward, along the western shore of Madagascar; while on the coast of Africa opposite, the water sets almost continually to the south. But on the same coast to the north of the line, a weak current is found setting towards the Persian Gulf, and thus causing the current we have stated to run southwards on the Malabar coast.

The Equatorial Stream of the South Atlantic may be cited as furnishing a good instance of the effect that currents may produce on climate. It always includes the island of Anno Bon within its influence, while St. Thomas, in longitude $6\frac{1}{2}^{\circ}$ E., and immediately under