

Stream until we had crossed the equator and reached the latitude of 3° S., and longitude 25° W. It was then pursuing its course towards the coast of Brazil, whence passing between the Windward Islands, it finally enters the Gulf of Mexico.

This part of our passage afforded many interesting observations, exhibiting extended rips and the boilings above spoken of, alternating with smooth spaces, and variable currents, setting for a short time in one direction and immediately afterwards in the opposite. All spoke of a conflict of currents, and a forcible mingling of the waters beneath the surface. From Porto Praya to Rio we were influenced by currents, two hundred and eighty miles N. 41° W.

To prove the prolongation of the Equatorial Current to the westward, I shall refer again to other authority, although, as has been seen, we experienced it ourselves on our voyage homewards. In the continuation of the voyage of the Pheasant, Colonel Sabine says:

“On the Brazilian side, from Pernambuco to Cape St. Roque, the northerly current rapidly accelerated, until, in passing the Cape, it may be considered that the Pheasant had entered the full stream of that branch of the Equatorial Current which pursues its way along the northern coast of Brazil and Guiana to the West Indies. Between the noons of the 16th and 17th of July, she was set forty-four and a half miles to the north, and forty-two and a half to the west; making a general effect, in the twenty-four hours, of N. 44° W., sixty-two miles: probably more northerly in the first part of the interval and more westerly in the latter, than the general effect.

“On the day after the Pheasant sailed from Maranham, she entered the current, the full strength of which she had quitted to go to that place, and it was then found to be running with the astonishing rapidity of ninety-nine miles in twenty-four hours. On the 10th of September, at 10 A. M., while proceeding in the full strength of the current, exceeding four knots an hour, a sudden and very great discoloration of the water ahead was announced from the masthead: the ship being in $5^{\circ} 8'$ N., and $50^{\circ} 28'$ W., (both by observation,) it was evident that the discoloured water could be no other than the stream of the Maranon, pursuing its original impulse at no less than three hundred miles from the mouth of the river, its waters not being yet mingled with the blue waters of the ocean, of greater specific gravity, on the surface of which it had pursued its course. It was running about sixty-eight miles in twenty-four hours.”

No current of the velocity here mentioned has ever been experienced to the eastward. To what is this sudden increase and rapid flow to be imputed? or to what other cause it can be imputed but to a submarine