

more accurately speaking, towards the *south-west* in the northern hemisphere, and towards the *north-west* in the southern. The currents thus created on the surface of the water unite under the Equator to form the *great equinoctial current*, which moves from east to west. The motion, or rate of speed, is greater on the edges than in the middle of the current, because its creative force there displays an excess of energy; it results that the current easily bifurcates when it meets with any obstacle to its advance.

In the Atlantic, the bifurcation takes place a little to the south of the Equator; the southern branch descends along the Brazilian coast, and probably returns along the western coast of Africa.

The northern branch follows the coasts of Brazil and Guiana, enters the Caribbean Sea, and, reinforced by the current which comes up from the north-east, in the Bay of Honduras, traverses the Yucatan channel, and pours into the Gulf of Mexico; whence it debouches by the Florida channel, under the well-known name of the *Gulf Stream*.

It is thus eloquently described by Maury:—*

“There is a river in the ocean.

“In the severest droughts it never fails, and in the mightiest floods it never overflows. Its banks and its bottoms are of cold water, while its current is of warm. The Gulf of Mexico is its fountain, and its mouth is in the Arctic seas.

“It is the *Gulf Stream*.

“There is in the world no other such majestic flow of waters. Its current is more rapid than the Mississippi or the Amazon, and its volume more than a thousand times greater.

“Its waters as far out from the Gulf as the Carolina coasts, are of an indigo blue. They are so distinctly marked that their line of junction with the common sea water may be traced by the eye. Often one half of the vessel may be perceived floating in Gulf Stream water, while the other half is in common water of the sea; so sharp is the line, and such the want of affinity between those waters, and such, too, the reluctance, so to speak, on the part of those of the Gulf Stream to mingle with the common water of the sea.”

The *Gulf Stream*, on its emergence from the Florida Channel, is about 14 leagues in breadth, 2200 feet in depth, and flows at the

* [Maury, “Physical Geography of the Sea,” sec. 1, 2, 3.]