

those in a proper situation never fail to witness the same series of beautiful and well-defined rainbows.

We were again affected by currents on the 5th; and they showed themselves in the formation of the short rough sea which we encountered. The deep-sea soundings on that day gave remarkable results; for, while the temperature of the water at the surface was 73.5° , that at a depth of one hundred fathoms was 78° ; although this may seem somewhat singular, it may be accounted for by the circumstance that we were within the influence of the tropical currents setting to the southward along the eastern coast of Africa.

On the 6th, experiments on the temperature of the water gave similar results, although the difference between the surface temperature and that at one hundred fathoms depth was not so great as on the previous day, the former being 75.5° , and the latter 78.5° . The ascertained set of the ship by current this day was south half west, forty miles. At noon the current was found, on trial, to flow in the same direction, but with a velocity of not more than half a mile per hour.

The ship continued to be tossed about most uncomfortably during the 7th, and the current set us fifty-three miles in a west-southwest direction. We passed close to the edge of the Aguillas Bank, where the temperature of the surface water rose to 78° , and continued so until 5 P. M., when the water became discoloured, and it fell to 73° ; we then obtained soundings with sixty fathoms of line on dead coral. During this time the temperature of the air had not been higher than 70° . In order to examine the temperature of the warm stream that we were passing through, I shaped a course nearly at right angles to the direction of its flow, and while sailing sixty miles made the following observations:

At noon, the temperature of the surface was	78°
" 1 P. M.	"	"	"	"	78
" 2 "	"	"	"	"	78
" 3 "	"	"	"	"	77
" 4 "	"	"	"	"	75
" 5 "	"	"	"	"	73
" 6 "	"	"	"	"	69
" 7 "	"	"	"	"	68
" 8 "	"	"	"	"	66

At the time of the last observation the temperature of the air was 68° .

On the morning of the 8th we had soundings in sixty-nine fathoms water; the direction and velocity of the current was tried by anchoring a boat. The direction was found to be S. 56° W. (true), and the velocity to amount to three quarters of a mile per hour. During the last twenty-four hours the current had set us thirty-three miles, and in