

reaching to the zenith, and passing over the moon's disk, encircling her with a faint halo of twenty degrees in diameter. It continued an hour, and although it was bright moonlight, the phenomenon was very distinct and beautiful.

On the 5th, the winds drew to the south-southeast, and we crossed the line, as we had intended, in longitude 17° W., which enabled us to pass over and examine the supposed locality of the Triton Bank, in longitude $17^{\circ} 46'$ W., latitude $00^{\circ} 32' 00''$ S. The current was found this day to be setting to the northeast, fifteen miles in the last twenty-four hours. This night the sea was extremely brilliant, showing in large luminous patches. The light proved to be occasioned by a large species of *Pyrosoma*, some of which were ten inches in length, and two inches in diameter. Many phosphorescent animalculæ were taken, and some rips that were seen, exhibited long lines of brilliant light. Temperature of water 76.5° . Our dipping-needle on the equator gave $23^{\circ} 30'$. Hourly observations were made for forty-eight hours, to ascertain the oscillations of the barometer under the equator (for which see Appendix XVI.) The periods of oscillation were found to be as follows: the maxima at nine A. M. and nine P. M., and the minima at three A. M. and three P. M. The variation was $\cdot 1$ of an inch, and was found to be very regular, from latitude $3^{\circ} 30'$ N., to 4° S.

We had now heavy deposits of dew, on several fine and cloudless evenings. Indeed the sun had scarcely set before the ship was quite wet with it. One of the essential requisites supposed necessary by Dr. Wells for a deposit of dew, was certainly wanting in this case, viz., that "the temperature of the body on which it was deposited, should be considerably lower than the surrounding air;"—the temperature of the air and ship having remained the same for several days at about 78° : all objects, hammock-cloths, spars, sails, and rigging, so far as could be ascertained, showed the same. And at the time when the dew was observed to be most copious, we had a fine breeze. It has generally been supposed that dew never falls off soundings. This at least is an old saying among seamen: but our observations are at variance with this notion; for, as far as every indication went, both by sounding and blue water, we certainly had no bottom.

The supposed position of the Triton Shoal was now passed over, and examined carefully in the same manner as heretofore described, sounding at the same time with two and three hundred fathoms of line. Nothing of the kind was perceived, nor was there any indication of soundings in the discoloration of the water, or any change in its temperature.