of M. Lamouroux, that if the fucus adhere to the rocks with the greatest firmness before its fructification, it separates with great facility after that period, or during the season which suspends its vegetation like that of the terrestrial plants. The fish and mollusca which gnaw the stems of the seaweeds no doubt contribute also to detach them from their roots.

From the twenty-second degree of latitude, we found the surface of the sea covered with flying-fish,* which threw themselves up into the air, twelve, fifteen, or eighteen feet, and fell down on the deck. I do not hesitate to speak on a subject of which voyagers discourse as frequently as of dolphins, sharks, sea-sickness, and the phosphorescence of the ocean. None of these topics can fail to afford interesting observations to naturalists, provided they make them their particular study. Nature is an inexhaustible source of investigation, and in proportion as the domain of science is extended, she presents herself to those who know how to interrogate her, under forms which they have never yet examined.

I have named the flying-fish, in order to direct the attention of naturalists to the enormous size of their natatory bladder, which, in an animal of 6·4 inches, is 3·6 inches long, 0·9 of an inch broad, and contains three cubic inches and a half of air. As this bladder occupies more than half the size of the fish, it is probable that it contributes to its lightness. We may assert that this reservoir of air is more fitted for flying than swimming; for the experiments made by M. Provenzal and myself have proved, that, even in the species which are provided with this organ, it is not indispensably necessary for the ascending movement to the surface of the water. In a young flying-fish, 5·8 inches long, each of the pectoral fins, which serve as wings, presented a surface to the air of $3\frac{7}{16}$ square inches. We observed, that the nine branches of nerves, which go to the twelve rays of these fins, are almost three times the size of the nerves that belong to the ventral fins. When the former of these nerves are excited by galvanic electricity, the rays which support the membrane of the pectoral fin extend with five times the force with which the other fins move when

* Exocœtus volitans.