

yellow-hammer, stork, crane, plover, swan, and wild goose. These chose a bright moonlight season in which to set out on their journey.

The flight of birds has been estimated from fifty to a hundred and fifty miles an hour, though some heavy birds scarcely exceed thirty miles an hour. Bishop Stanley mentions, in his "Familiar History of Birds," an easy way by which the flight of birds may be determined with tolerable accuracy:—Supposing any bird—a partridge, for instance—should rise from the middle of the stubble, and fly in a straight line over a hedge, all the observer has to do is, to note by the seconds' hand of a watch the number of seconds between the bird's rising, and that of its topping the hedge; and then ascertain the distance between the point from whence it rose and the hedge, by stepping and counting the number of paces; when, supposing each pace to be a yard, we have a common rule of three sum. Thus, if a partridge in three seconds flies one hundred yards, how many yards will it fly in 3000 seconds, or one hour?

Another method of ascertaining the flight of birds is by carrier-pigeons. The same author tells us of a recent instance, in which fifty-six of these birds were brought over from Holland, and set at liberty in London. They were turned out at half past four o'clock in the morning, and all reached their dovecots at home by noon, but one favorite pigeon, called "Napoleon," arrived about a quarter before ten o'clock, having performed the distance of three hundred miles at the rate of above fifty miles an hour, supposing he lost not a moment and proceeded in a straight line; but, as they usually wheel about in the air for some time before they start, the first bird must have flown most likely at a still quicker rate.

It is probable that most birds perform their journey to distant countries by stages of a few hours flight, resting and recruiting their strength in convenient situations. We need not suppose them often to cross the wide expanse of the ocean, but take it at its narrowest portions, as the channel between France and England, the Mediterranean, &c., and so pursuing their way across the continent. Their power of remaining on the wing does not excite so much surprise as do the motives which lead them to undertake such distant flights, and the instinct which guides them so unerringly in their aerial course; for, though we have named the deficiency of food as one of the probable causes of migration, this does not apply in many cases; and we are more and more at a loss to account for the facts relating to several species of the feathered race.

Of all migrating birds the crane may, perhaps, be considered the most remarkable. They seem to be most endowed with foresight, and have every appearance of consultation and regular preparation for the time of their departure. They utter peculiar cries several days before, and assemble with much noise and bustle. They then form themselves into two lines, making an angle, at the vertex of which one of their number, who is looked upon as the general director of their proceedings, takes his place. The office of the leader seems to be, to exercise authority and issue orders to the whole party, to guide them in inclement weather in their circling flight, to give the signal for their descent, feeding, &c. Piercing cries are heard, as if commanding and answering to the command. If the leader grows tired, his place is taken by the bird next him, while he retires to the end of the line; and thus their orderly flight is accomplished.

In order that birds may fly with ease and continue long on the wing, they must fly against the wind; and patiently do they wait for a favorable time in this respect. The sudden change of the wind will sometimes cause numbers of quails, which are heavy in their flight, to be drowned in crossing the Mediterranean Sea. Yet there are certain seafaring birds so wonderfully endowed as to remain almost continually on the wing, and which are often found at the distance of more than a thousand miles from land. The gigantic albatross is one of these, with its enormous expanse of wing, measuring fourteen feet, or even more, from tip to tip. But the bird which surpasses all others in its power of flight, is the frigate-bird, which seldom visits the land except at the breeding season, and is never seen to swim or rest upon the waters. With such an instance of adaptation to the regions of the air, we need no longer wonder at the power by which our birds are enabled to

remain so long on the wing as to perform their periodical migration to other lands.

It has been observed that the least willow-wren and the stone-curlew generally appear amongst us during the last week in March; while the following birds are not often with us till from about the 14th to the 20th of April:—The nightingale, blackcap, chimney-swallow, redstart, yellow willow-wren, grasshopper-lark, martlet, and pied fly-catcher. At the end of April and the beginning of May are seen the lesser reed-sparrow, cuckoo, sandmartin, great willow-wren, spotted fly-catcher, black marten, and landrail; while, about the middle of May, the swift and the goat-sucker, or fern-fowl, usually join the throng.

The subject of migration is one of so much interest that we would gladly engage some of our readers, as far as practicable, to notice the time of arrival, the rapidity of flight, and other circumstances connected with our migratory birds, so that, from continued observation in various quarters, we may gain as much knowledge as possible of this beautiful and wonderful part of the economy of nature.—*Chronicles of the Seasons.*

#### LORD EXMOUTH'S BOMBARDMENT OF ALGIERS.

During the struggle between Napoleon and the allied powers, Algiers was but little heeded. In vain did the expectant pirates,

"Gaze where some distant sail a speck supplies,  
With all the thirsting eye of enterprise."

For under the policy of Buonaparte commerce languished almost to inanition—and at a crisis when the liberties of Europe hung suspended in the balance, few vessels cared to cross the seas unless guarded by the all-sufficient protection of an English frigate. But when the fall of Napoleon gave tranquility once more to the world, and men began again to busy themselves with trade, and in the pursuit of riches, the piracies committed by the states of Barbary became once more the subject of remark and indignation.

England, which had just chastised, at such a fearful cost to herself, the great arch-robber of Europe, was not likely to permit the petty depredations of a few insignificant states to remain any longer unreprieved. To her, as the constituted protectress of the civilized world, seemed naturally to belong the office of exterminating this nest of robbers. Accordingly, in the year 1816, a discussion arose in parliament, on the motion of Mr. Brougham, as to the propriety of our compelling the piratical governments of Algiers, Tripoli and Tunis, to observe the conventionalities of the law of nations in their intercourse with other states. Up to this period our own relations with them had been on the whole amicable. In the time of Elizabeth, indeed, Sir E. Mansel had conducted thither an expedition, which he mismanaged so much as to weaken in some degree the influence of our flag; and Admiral Blake still later had stormed the Goletta, at Tunis, in revenge for some insults offered to vessels under our protection, and had presented himself before Algiers, and demanded satisfaction from that city also. The Algerines bid him do his worst; and Blake, after having 'curled his whiskers,' (his constant custom, it is said, when irritated,) captured two of their vessels, and compelled them to sue for peace. These misunderstandings, however, had been only temporary; and in the reign of Charles I. a treaty had been concluded with them, which was then still subsisting, and had been adhered to on their part with tolerable fidelity. Some, therefore, urged, that, under these circumstances, it was inconsistent with good faith on our part to commence hostilities; and it was, moreover, suggested that, waiving the question of right or wrong, success itself would be doubtful; for it was by no means an easy exploit to bombard a city in which all the houses were flat-roofed, and built of stone, after the fashion of Rosetta and Buenos Ayres.

To these arguments, however, it was replied with irresistible force by the promoters of the Algerine expedition, that the pirates, by indiscriminately attacking all nations they fancied weaker than themselves, had become *hostes humani generis*, and out of the pale of ordinary treaties; that we merely owed our own exemption from insult to the salutary dread they entertained of British guns; that as to the difficulty of the enterprise, it did not become those who had sustained the hostility of Europe, to flinch from punishing half-disciplined barbarians; and, finally, that it was not in-