smaller types only the hare, the ichneumon, the rat, and two or three different varieties of the lizard—the bigger specimens of which are often palmed off on travellers as young crocodiles—are the only examples that need be noted.

If the native mammalia of Egypt, however, are not numerous, its ornithology is abundantly rich. A recent writer catalogues more than a hundred species which fell under his personal observation during a Nile voyage,* and in the works previously referred to in a foot-note, nearly two hundred more will be found scientifically described. Such a wealth of feathered life cannot be even sampled in so cursory a notice as the present. It may, however, be said that the chief profusion is to be met with in Lower Egypt; although in the Saïd, the district between Beni-hassan and Esneh, and the great plain of Edfou, also teem with bird-life in swarming variety. Of tame fowl, the hen, the duck, the pigeon, the goose, and especially the turkey, abound everywhere; but of the whole of these it may be remarked, as indeed also of almost all the mammalia common to Egypt and Europe, that they are smaller in the former country than with us. Thus an ordinary Egyptian hen is not much larger than a French or English pullet, and her eggs little more than half the size of those of our own barn-door cacklers. The once sacred ibis still abounds, and in the marshes of the Delta pelicans and flamingoes are nearly as plentiful as plovers on the Nile shallows, and wherever creeks have been left inland by the subsiding inundation. Snipe, sand-grouse, and especially quails, are also abundant—these last on their annual flight north in winter and early spring, when they are netted and shipped alive by

* Smith's *Attractions of the Nile*, ii., 197—208.

thousands to Europe—while of aquatic birds the sports man will find a very *embarras des richesses*.

Few or none of the larger ophidia are met with in Egypt, but the asp, the common and horned snakes, and the small spotted viper—all more or less venomous—are in plenty. They abound on the borders of the desert, but seldom approach the towns or villages, into which, however, the hardly less venomous scorpion and a species of black tarantula penetrate freely, hiding in fissures of the walls or under the floor-matting. The performances of serpent-charmers, though less common than formerly, are still not obsolete; but the fangs of the snakes played with are in every case extracted. This is done generally by pinning the reptile to the earth when caught with a forked stick, and teasing it with a piece of strong woollen cloth, at which it bites, and which is then jerked sharply back, breaking the teeth and destroying the poison-ducts.

Fish abound in the Nile, the Birket-el-Korn, Lake Menzaleh—with the salted produce of which a considerable export trade is carried on with Greece and the Levant—and one or two of the larger canals, but, as compared with those of the sea, they are generally insipid, and, in the case of the numerous unscaled varieties, unwholesome. A few however, such as the *bultee*, the *shall*, the *kishr*, the *binee*, and the *karmoot*, are more delicate. Alexandria and the neighbouring coast consequently supply the greater part of the fish sold there and in Cairo.

Lastly, though not least in practical interest to foreign residents or travellers in the country, during three-fourths of the year, flies, mosquitoes, fleas, and other insects of prey—though these last less profusely in the better class houses—swarm everywhere, from the mud-huts of the fellahs to the *salons* of Abdeen. Whether Moses introduced these special plagues or not, they have survived all

the "dynasties," and are as irritantly active now as when Pharaoh Menephtah hardened his heart and would not let the Israelites go. Use, however, seems to have rendered the natives indifferent to all three, but to foreigners they are a very sensible drawback on the pleasure of residence in or travel through the country, from Alexandria up to Nubia, where, strangely, fleas are as rare as snakes in Ireland, and hardly trouble you at all out of your own dahabeeyah.

The native plant-life of Egypt is much less rich in variety than its animals. The purely indigenous trees, indeed, hardly exceed half a score. Among these the *date-palm* holds the first place for number, usefulness, and beauty. Like the camel, it is seen everywhere—singly, in clumps, or in great groves large enough to be called forests.* There are no fewer than twenty-four varieties of this tree, which are, however, grouped into three categories distinguished by the size, shape, and especially the colour of their fruit; and by the Arabs it is also further distinguished as being of two genders, the male called *dakar* and the female *entayeh*, the generic name of the tree itself being *nakhleh*. It needs no culture, but the best fruit is obtained by those that are watered at the base and pruned once a year of the lowest of the five or six rings of long feathery leaves that spread out, fan-like, from its top. In Upper Egypt, where the best dates are grown, the rich clusters of fruit—in shape not unlike huge bunches of grapes—begin to ripen towards the end of June, a month earlier than in the Delta. They are gathered while still not quite mature, and

* Chiefly in eastern Lower Egypt; one also grows over buried Memphis, and another at Birket-el-Haggi, below Heliopolis, where took place the battle between the Turkish Grand Vizier and General Kleber, which ended in the great French victory known by the latter name.

allowed to fully ripen afterwards off the tree. The average yield per tree is about four cantars a year. Besides forming, while fresh, a chief article of peasant diet, especially in the Saïd, the dates are also dried and kneaded into a sort of bread, for consumption during the other months of the year. Nor is it the fruit alone of the tree that is valuable: its leaves are worked into mats and baskets; the fibrous sheaths which attach them to the tree into brooms, and various sorts of cordage; its branches, stripped of the leaves, into roof-coverings, bed-frames, fowl-crates, and chairs; the trunk itself, which is only cut down when it ceases to produce, serves for house-building and many other purposes; and, finally, the very date-stones are used to feed the camels and for fuel. The *doum-palm*, which grows only in Upper Egypt, differs materially from the other tree, in that its bark is smooth, and that a few feet above the ground its trunk divides into two main branches, which again bifurcate; and this is repeated till the whole becomes, in fact, a cluster of trees on one stock. Its fruit also, of which there are two growths a year, is enclosed in a reddish husk, and is much larger but less delicate than that of *nakhleh*.

The *sycamore* (Arab. *gimmis*) is in girth the largest of Egyptian trees, specimens of it from twenty-five to thirty feet in circumference being sufficiently common. Its trunk, on the other hand, is short, and its branches spread out almost horizontally, forming with their thick evergreen foliage an impervious shade from even a Cairene sun. The beautiful avenue on the Shoubra road is composed of these trees and acacias, which, arching and interlapping overhead, form a splendid natural gallery nearly four miles long, that even in midsummer affords the cool gloom of a cathedral cloister. Sycamore-wood

is rot-proof, and in old times was therefore much used for mummy-cases. It is now chiefly employed in the construction of gun-carriages and water-wheels. A coarse kind of fig grows upon the trunk of the tree, but does not ripen unless cut.

As the sycamore is the largest, so is the broad-podded *acacia* (Arab. *lebbek*) the prettiest native tree of Egypt. It is also an evergreen, and, as it grows rapidly if well watered, it has been largely planted round the new villas and along the boulevards which within recent years have so modernised Alexandria and Cairo. What the sycamore, too, has done for the Shoubra road, this tree is fast effecting for the long causeway from the Nile bridge to the Pyramids, which is already nearly as completely shaded for more than half its length by a double row of fine thriving *lebbeks*.

The *Acacia nilotica*, or thorny small-leaved acacia (Arab. *sant*), a congener of the last, is found almost everywhere, but attains its finest development in Lower Egypt. It gives but little shade, but its wood is in great request for boat-building, and its fruit, called *carat*—which does not however grow abundantly below Thebes—is valuable for tanning. In the desert between Cairo and Suez it also exudes a fragrant gum, which is much esteemed by the Arabs. There is another species of the acacia, called in Arabic *fetneh*, which flowers from December to March. It attains the height of about twenty feet, but is seldom met with out of gardens.

The *tamarisk* (Arab. *tarfeh*) is a hardier tree than any of the preceding, requiring but little moisture, and producing a thick foliage, nearly equal in shade-value to that of the *lebbek*. It is commonly grown round water-wheels, and its wood is mostly converted into charcoal, its fruit being utilised for dyeing and tanning.

White and black *poplars* are also grown in Lower Egypt, but as they afford no shade, and their wood is of little value, they are not much propagated.

Cypresses (Arab. *saroû*) are more numerous, and not being in Egypt, as in Europe, symbols of sadness, they are much grown as garden ornaments, singly or in avenues.

Black and white *mulberry-trees* (Arab. *toud*) abound in eastern Lower Egypt, where the leaves of the latter are gathered for silkworms, and the fruit of the former for sale as a favourite article of fellah diet in the season. And finally,

The *olive-tree* (Arab. *zeytoum*), which chiefly flourishes in the Fayoum. Mehemet Ali gave a great impulsion to the culture of this tree, but except in the province named, it is not now very largely grown. Its fruit here is coarse, and though good for oil is not much eaten.

These are the native trees most commonly seen in Egypt. Of alien, but now perfectly naturalised species, the number is legion, especially since Mehemet Ali cultivated the splendid gardens of Shoubra, and Ibrahim Pasha similarly converted the island of Rhoda into a nursery of the finest native and foreign trees and plants. The efforts thus made to extend and improve the flora of the country have been continued by the Khedive, with the result that the gardens of his Highness's palaces, and those of many private proprietors, both at Alexandria and Cairo, are now rich in nearly every variety of tropical and sub-tropical shrubs, which in this bright winterless climate thrive as luxuriantly as in their native soil. Of fruit-trees may be mentioned—the banana, which flourishes best in Lower Egypt, flowering in October and November, and producing the long luscious fruit so dear to vegetable *gourmets*; the fig-tree, in three varieties, whose

fruit, if not equal to its Smyrna congener, is still good; the Indian fig, a species of cactus, valued also for its fruit, and which forms pretty and effective hedges; the pistachio, abundant and very productive; the orange and lemon, also very plentiful, and the former, especially in the Delta, producing excellent fruit; two varieties of the pomegranate, the fruit of one of which is deliciously sweet, and that of the other slightly bitter; the guava, as productive here as in its natural tropics; the vine, not a great success, and chiefly cultivated for its raisins, of which one variety equals the best Turkish *sultanas;* the walnut, excellent for the quality of its wood, but not producing much or good fruit, a remark that applies also to the cherry-tree; and finally, the almond, the pear, the peach, and the apple, which, if not equal to the best varieties of their European namesakes, contribute their fairly good quotas to the abundant fruit-crops of the country.

CHAPTER XVII.

CLIMATE.

Generally, Dry and Hot—Considerable Difference between Coast and Interior—No Real Winter in Egypt—The *Khamsin*—Mean Summer Temperature at Cairo—Scarcity of Rain—Climate of the Isthmus—Mean Annual Rates of Temperature—Regularity of the Wind—Egyptian and European Death-rates—The Nile Valley anciently Famous as a Sanitarium—Testimony of Rev. A. C. Smith—Corroborated by Drs. Dalrymple, Patterson, Walker, Zagiel, and Pruner—Endemic Diseases—Improving Sanitary Administration—Consensus of Medical Opinion in Favour of Egypt as a Health-resort.

THE acknowledged value of Egypt as a health-resort suggests some notice of its climatic peculiarities, which, although less markedly, have still in common with many other features of the country undergone some sensible changes within recent years.

Subject to considerable local qualifications, the climate of Egypt may be generally described as hot and dry. The description applies least perfectly to the lower Delta, the situation of which, along the sea, greatly tempers the elsewhere general heat, and at the same time gives to its atmosphere a degree of moisture which is unknown in the Middle and Upper provinces.* Thus in Alexandria, where there is an abundant rainfall between October and February, the thermometer seldom ranges above the average of Southern Europe, and even in the dog-days keeps fairly down to "temperate." In Cairo and throughout Middle Egypt, the rain diminishes to slight showers on eight or ten days a year, and the mean temperature of the twelvemonth is nearly 3° higher than along the coast; while in Upper Egypt rain is an almost unknown phe-

* According to Dr. Pruner, the moisture of Alexandria is *one hundred and fifty-two* times that of Cairo.