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The Climate of Egypt.

When we speak of the Climate of any Country, we are generally understood to refer to all those modifications of the atmosphere by which our organs are sensibly affected, such as temperature, humidity, variations of barometric pressure, the intensity of electric pressure, the purity or impurity of the air, and many other circumstances which it is unnecessary to mention. Two grand causes regulate the Climate of any place. 1. Its distance from the Equator and 2. its height above the level of the sea. But besides these special and predominating influences, there are various circumstances which partially modify the climate. Among these may be enumerated, the configuration and extent of a country, the nature of the soil, the action of the winds, and even the changes produced by cultivation.

From the wide range of external circumstances on which climate may be viewed as depending we may regard the subject in its most extended
sense as including all the natural and physical effects to which we are exposed in any particular place. Malta—Benin also comprehends under physical climate the degree of heat and cold, the drought, the humidity and the salubrity of any given region of the earth. These elements of climate, however, far from being fixed and permanent, must necessarily vary according to the changes which are effected by the progress of agricultural improvements. Hence, the climate of a country has been formed in process of time, and as the soil becomes cultivated, to undergo a great change for the better; and even in different parts of the same country a great diversity of climate may frequently be observed.

But, not to dwell on climate in general, we proceed to the more immediate subject of the present treatise, the climate of Egypt.
Egypt occupies the north-eastern portion of Africa, being bounded on the north by the Mediterranean, on the East by the Red Sea, on the South by Nubia, and on the West by the Libyan desert. It consists first of a long and narrow valley extending along the course of the Nile from African to Cairo and secondly, along the course of an extensive plain reaching from the most northern part of the Valley to the Mediterranean Sea. Including the valley & the plain the country extends from the parallel of 24° N. to 31° 35'.

Egypt is divided into Upper, Middle, and Lower. Upper Egypt, which stretches from Nubia to the province of Cairo, is a long narrow valley, confined between two chains of mountains running from North to South. Lower Egypt, called the Delta from its triangular form, includes all the country from Cairo to the sea. The soil of this part of Egypt has been chiefly formed by the deposition of mud or earth by the Nile.

From its peculiar position, configuration
and other circumstances, Egypt is characterized by a remarkably dry and warm climate. The temperature, of course, varies according to the latitude and the season at which our observations are made. The summer continues throughout a great part of the year, from March to November or even longer. During the whole of this season, the heat is almost intolerable to a European. Exposed to a burning sky, with a nearly vertical sun, the perspiration profusely, even though covered with the lightest dress. This heat however is not a little moderated by the inundation of the Nile, the fall of the night dew, and the subsequent evaporation. From November to February the climate of Upper Egypt is remarkably fine. The air is dry and elastic, and not a cloud is to be seen in the sky, rain seldom falls and even dew is formed in small quantities. The greatest defect in the climate of this part of the Country
is the great difference between the temperature of the night and that of the day, the former being so excessively asthenic that the utmost caution necessary on the part of invalids. Exposure to the night cold, indeed, renders dysentery and ophthalmia prevailing diseases of the country. Dr. Bumming who paused a winter in Upper Egypt speaks in the most enthusiastic language of the climate. "It is impossible," he says, "to imagine anything more divine than the climate of Egypt; the sky is bright and cloudless, and the atmosphere pure and transparent as crystal; here are no subduing fogs, no vapors giving rains, no green frosts, nor ghostly snows. The sun rules supreme, yet without despotic sway; he who I have braved with impunity even his direct rays I feel convinced that the climate of Egypt has only to be known in order to be appreciated and resorted to by the pectoral invalid."
And in the same spirit we find it remarked in a recent number of the Edinburgh Medical and Surgical Journal, in a paper on the Climate of Egypt by the Rev. Dr. Barclay of Errieh. The result of my own observation and experience during five months spent in that country, is a thorough conviction that there is no accessible part of the world so well adapted for the relief of most of that formidable class of diseases to which the respiratory organs are subject.

One grand peculiarity of the Egyptian climate is the excessive dryness of the atmosphere, probably owing to the long continuance of the north winds. Indeed, in all cases where the mucous membranes of the respiratory and other organs are chronically affected, with diseases of the congestive kind, a winter passed in Egypt is likely to prove highly beneficial.

It is gratifying to observe, that this fact is becoming more readily recognized by physicians than formerly; and accordingly
patients labouring under bronchitis and other diseases of the chest are now sent in greater numbers to the land of the Nile. During one part of the year, that, namely, which corresponds to the summer and autumn of great Britain, the climate of Egypt is altogether unfitted from its excessive heat for the residence of invalids who have come from tropical countries. Before and after the equinoxes more especially the winds which blow from the hot lands of the South are most injurious. They dry and shrivel up the skin, absorbing the moisture of the human body and sometimes suffocation and death have been the consequence of exposure to this "hot breath of the desert," as it has been called. When the Charnicaria prevails the natives in some parts of the country shut themselves up in their houses until the time during which it usually lasts has passed.

The Botany of Egypt is, of course, affected by the peculiarity of its climate. We are informed by Forskål that the plants
of that region are fitted to exist by a peculiar vegetative economy. Their texture is loose, and as it were plerotic, so that their proper aliment is prepared in continually drenched veins. The widely opened mouths of the vessels receive the current, and the leaves perform the functions of so many roots. Hence, great transpiration is exerted, and the moist roots enable them to endure the summer heat, and to pass from the extreme drought of summer to the humidity of a three months flood. Besides the inverted order of things that prevails here, covers the Euphytaceae fields in winter with verdure and blossoms, while the plants of Europe are undergoing a state of repose. The entomology of Egypt is very limited. The eggs and chrysalids of insects are smothered by the stagnant waters; some few families of insects retire to the trees and lofty shrubs; but they are not enough of these sheltering spots to protect them from the searching atmosphere.
The plants of Egypt may be divided into two classes, of which the principal feature is the presence or absence of water. The entire absence of Tiugi in the moist soil of Egypt is remarkable. The most Nuphar and Lilies are extremely rare and chiefly exotic. The most flourishing of the fruit trees are the Date and the Sycomore; the former being the principal object of cultivation. The most remarkable Egyptian plant is the Papyrus which was first employed in making paper. Most of the ancient manuscripts were written on this kind of paper, especially those which have been discovered by the excavations at Herculaneum and Pompeii. The Sacred Lotus of Egypt or Water Lily has given rise to much controversy but there is no doubt that frequent representations of it are found on the ancient monuments. From time immemorial the Cerealia have abounded in Egypt; and in the tombs of the Egyptian kings vessels have been found by the famous French expedition.
The good is not unmixed.
filled with wheat, perfect in form and
colour, though buried for many thousand
years.
The Zoology of Egypt is, as might be
anticipated from what we have said
of the nature of the climate, for
beauty both in the number and va-
niety of its objects. The most remar-
hable of the animals which are
found in that country is the Schin-
mon, which was worshipped among
the ancient Egyptians. Though small
and feeble in itself, it continues to
destroy the eggs of crocodiles, serpents
and lizards of every description, thus
preventing the increase of the dangerous
reptiles which are the pests of hot
and humid climates. The domestic-
ated animals are of a superior
kind in Egypt. The vicinity of
Arabia supplies the Egyptians with
the finest and most beautiful
horses, while the ass is stronger and
more useful than the same animal
in European countries. The sheep are of
Blessing

Nothing life is meant for chance
or remembrance.
the broad-tailed race in Upper Egypt while thin and long in Lower Egypt. In its Ornithology Egypt does not materially differ from the countries of Europe. Not to speak of the Sacred Ibis, a bird which is so often represented on the monuments, no part of the feathered creation is held in greater estimation in modern times than Cattle and Storks, chiefly from their usefulness in devouring offal and all dead animals.

To human beings, the climate of Egypt is generally speaking by no means unhealthy, and yet there are some diseases which are peculiar to the country, whether arising from the climate or the habits of the people. One of the diseases which are said to prevail at very distant intervals is the plague, an epidemic disease of the most appalling character. The symptoms which this fearful malady exhibits are of two classes—constitutional and local. The constitutional comprehends
those symptoms which are of a malignant, febrile character, the fever being of a typhoid type; the local, again, consist chiefly of glandular swellings or buboes as they are termed and of malignant or gangrenous boils or carbuncles. The constitutional symptoms of plague however sometimes appears without the local and the local also appears in some cases to occur with very slight febrile affection or constitutional disturbance of any kind. In Egypt this disease prevails most during winter, and generally disappears about the period of the summer solstice, and breaks out again in November or more usually in December. Mr. Forster maintains that the plague is a production of the soil of Lower Egypt alone; that is the result of the combination of the waters of the Nile and of the materials brought down by that river, with the vegetable earth of the Delta, when after the inundation the heat causes these waters to be volatilized and
gives rise to the creation of an immense multitude of insects and of reptiles. This author accordingly holds that in Lower Egypt the plague is both an endemic and contagious disease, whilst when it occurs in Upper Egypt it is simply a contagious disease. Others again, are of opinion that in Egypt as elsewhere, the plague always requires a human effluvium for its production and communication, but that the propagation of this contagious effluvium is dependent to some extent on the state of the atmosphere. The temperature is supposed by some medical authors to be the main source of the prevalence of this disease. Thus it has been observed, that the season at which the plague abates, is that in which the heat is most excessive. No sooner do the hot winds begin to blow from the deserts, than the epidemic ceases to prevail in Egypt. It is a remarkable fact
that extremes of whether of heat or cold are alike effectual in putting stop to the progress of the plague. Besides the temperature, an attempt has been also made by some authors, to trace a connection between the moisture of the atmosphere and the prevalence of this fatal malady; while others argue that it is simply the consequence of the putrefaction of stagnant waters during the inundation of the Nile. The character of the winds has also been alleged to be a cause of the prevalence or cessation of the Plague. Mr. Lane in his interesting and generally accurate work on the "Manners and Customs of the Modern Egyptians" says, "The plague seldom ascends far above Cairo, the metropolis. It is most common in the marshy parts of the country near the Mediterranean." From the peculiar nature of the climate of Egypt, diseases of the chest, such as pneumonia, pleurisy
and pulmonary phthisis are of very rare occurrence in that country. On the contrary, many in other countries who have been affected with diseases of this description have been effectually cured by a residence in Egypt. Patients, therefore, who are labouring under phthisis pulmonalis, or who are evidently predisposed to that fatal disease, may with great propriety be recommended to pass the winter, under the warm, dry, steady climate of the land of the Pyramids. Cases apparently of confirmed chronic bronchitis have been frequently cured by a transference of the patient to Egypt. A case of this kind, strong and well marked, has been recently published in the Edinburgh Medical and Surgical Journal.

Nervous affections including insanity are by no means common in that country. Rheumatic affections are also very not-withstanding
the moist state of the country when
inundated by the Nile. One cause
of this may perhaps be traced,
altogether independently of the climate,
to the limited quantity of animal
food used by the natives and
their abstinence from stimulating
drinks. Hydrophobia is altogether un-
known in Egypt. Euncredes and also
syphilitic diseases are seldom to be
found.

Two of the most frequent diseases,
particularly in Lower Egypt are,
Ophthalmia and Dysentery. The
former occurs in great severity
so as in many cases to give rise
to partial and even total blindness.
The number of blind persons in Lower
Egypt is quite remarkable. In
Cairo alone great numbers of these
helpless individuals are to be seen
on the streets and more especially
at the entrance of the mosques where
they receive alms both in money
and food. The utmost attention is
paid to the blind who are regarded not only with pity but almost with veneration. Blindness has generally been caused by purulent ophthalmia. The causes of this prevalent disorder have been traced to different sources. Some attribute it to the south winds blowing at a certain season from the deserts and carrying with them particles of sand which irritate and inflame the eyes. But one grand objection to this theory is that the Bedouins, who are more exposed to the influence of the hot sand, are less subject to ophthalmia than the natives of Egypt. Some explain the frequency of this disease by referring to the custom which the natives have, of sleeping upon terraces in the open air, for nine months in the year. That this may possibly be one at least, if not the principal cause of the prevalence of blindness is plain from different considerations. Lower Egypt.
where blind persons more especially abound, is an extensive level plain, on which the rays of the sun beat with unmodified intensity. The soil is dry, stony and burning, particularly in summer; it is argillaceous and chalky, containing the nitrate of Potash, Sodas, Muriate of Soda. Besides, excessive heat prevails through the day while the night are fresh, mordant and cloudy. These circumstances combined, cannot fail to operate injuriously upon the organ of vision. However plausible this explanation of the matter may be, it can scarcely be accepted, as entirely well founded, when we consider that the ancient Egyptians do not seem to have been equally subject to opthalmia with the modern. It is probable, therefore, that the cause is to be sought, rather in the poor nutrientous food of the natives of the lowest
class; or in the custom of shaving
the head once a week and cover-
ing it with very hot wrappings.
It is a curious fact, that the Arabs
of the desert who cover their heads
slightly, are almost strangers to
this disease. Ophthalmia, we remark
is more common in summer
than in winter, and the lower
animal are subject to it as
well as men.
The prevalence of Dysentery in
Egypt is which the natives have
more easily accounted for than
that of ophthalmia. The difference
between the temperature of the night
and day; the custom which the
natives have, of exposing themselves
to the night air, by sleeping on
the terraces for a great part of the
year; the excessive heat and moist-
ure of the season when the Nile
overflows its banks; these comb-
ined with want of nourishing
food, among the poorer classes
of barrenness and the preponderance in their ordinary diet of vegetable over animal food, cannot fail to give rise to numberless cases of dysentery, which, as in all tropical climates, cut off large numbers of the population.

In addition to Ophthalmia and Dysentery, which are the great diseases prevalent in Egypt, we may admit to two other morbid affections of a less serious description, which are obviously indigenous to the country.

The first is a cutaneous eruption which comes on, every year, towards the end of June or the beginning of July. It appears in the form of red spots with scarcely any elevation but accompanied with a very troublesome and disagreeable pruritus. From the period of the year at which this disease takes place, it is generally supposed to originate from the stagnant waters of the Nile, causing a putrid effluvium or miasma.
to arise, which may possibly give origin to this peculiar cutaneous affection. The second minor disease which attacks the natives of Egypt is a swelling of the testicles which often terminates in a large hydrocele. It is a curious circumstance that the Greeks and Copts are more liable to this disease than the other inhabitants of the country. The cause therefore must be sought obviously not in the climate but in some peculiarity of diet or regimen attacking to these two classes of people. Accordingly some have attributed this disease to the habit of frequent bath not bathing and also to the large quantity of oil which they use in their food.

From what has been said in reference to the climate of Egypt, both as to its nature and to its effects, we might easily argue the decided superiority of that country as a residence for invalids, who
may require a warm, dry, exhilarating atmosphere. Patients labouring under Bronchitic and Pulmonary affections and even under certain forms of dyspeptic disease of long standing, would be almost certain of deriving benefit from a winter on the Nile. If such a change is deemed necessary, the invalid should reach Alexandria not later than the middle of October, and strive to push southward without delay that he may reach a drier and milder climate. In travelling he should avoid as far as possible exposure to the rays of a powerful scorching sun, and provide himself with a sufficient covering to protect him from the cold of the nights. If his arrangements have been such as to allow of his spending an entire winter in Egypt he may have the privilege of seeing all Middle and Upper Egypt.
from October till April, a climate unsurpassed, for the warmth and equality of its temperature, its perfect purity and entire freedom from all excess of moisture.