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## NATURAL HISTORY

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## NATURAL HISTORY

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## ALEPPO.

CONTAINING

A DESCRIPTION OF THE CITY, AND THE PRINCIPAL NATURAL PRODUCTIONS IN ITS NEIGHBOURHOOD.

TOGETHER WITH

AN ACCOUNT OF THE CLIMATE, INHABITANTS AND DISEASES;
PARTICULARLY OF THE PLAGUE.

By ALEX. RUSSELL, M.D.

THE SECOND EDITION.

REVISED, ENLARGED, AND ILLUSTRATED WITH NOTES.

By PAT. RUSSELL, M.D. & F.R.S.

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## NATURAL HISTORY OF ALEPPO.

## BOOK III.

OF THE EUROPEANS RESIDING IN THE CITY; OF THE NATIVE CHRISTIAN, AND JEWISH, INHA-BITANTS: AND THE PRESENT STATE OF LI-TERATURE.

### CHAP. I.

OF THE EUROPEANS, RESIDING AT ALEPPO.

THE ITALIAN LANGUAGE GENERALLY SPOKEN.—ENGLISH, AND FRENCH FACTORIES.—CONVENTS.—THE DUTCH.—THE VENETIANS, AND TUSCANS. —HOUSES OF THE EUROPEANS.—THEIR TABLE.—FEMALE SOCIETY.—AMUSEMENTS, AND EXERCISES, OF THE ENGLISH.—EMEER, OR KING OF THE ARABS.—CAPITULATIONS WITH THE PORTE.—PUBLIC AUDIENCE OF THE BASHAW, THE CADY, AND THE MOHASSIL, DESCRIBED.—PUBLIC ENTRY OF CONSULS.—THE EUROPEANS LIVE UNDISTURBED IN THE CITY, AND TRAVEL WITH SECURITY.—THEY ARE SELDOM ATTACKED BY THE USUAL EPIDEMIC DISTEMPERS.

THE Europeans, or Franks ', refiding at Aleppo, CHAP. are English, French, Venetian, Dutch, and Tuscan, or Imperial, subjects. The language commonly used by all

' Ifrange اذرنج and in Turkish Frenk اذرنج. This is now used as a general name for all Europeans, and Europe is called Belad al Frange . When they talk with more precision, they distinguish par-Vol. II.

B ticular

BOOK all, is the Italian, which is also spoken by the warehousemen, writers, and other natives, in the service of the Franks. The French merchants usually converse among themselves, and with their warehousemen, in the dialect of Provence, but in mixed company, they either fpeak French or Italian. Of the Europeans, even those who live long in the country, very few acquire more knowledge of the Arabic, than is barely fufficient for familiar conversation, and it is very rare that any of them take the trouble of either learning to read or write it. The Confuls and feveral of the private gentlemen, retain the European dress; but many, especially of the French and Italians, dress in the Eastern habit, retaining only the hat and wig when in town, and wearing the Turban when travelling. was formerly the cuftom of all, or of most of the Franks, to wear the Turkish dress, retaining the hat by way of distinction; but of late2, the far greater part of the English dressed in the European fashion; while other Foreigners, the Conful excepted, or strangers who made but a short stay, adopted the old custom. About the year 1770, the few remaining of the English Factory, complied with the general custom, and, together with some of the French gentlemen, only appeared occasionly in their proper drefs.

ticular countries, as England, France, Italy, &c. Belad al Ingles, Belad al Fransouy, Belad Italia; but Ifrange is never used exclusively to signify a Frenchman in particular. See Note. I.

<sup>&</sup>lt;sup>2</sup> 1751.

The English Factory<sup>3</sup>, consists of a Consul, and ten CHAP. Merchants; a chaplain, chancellor, physician, and an officer named a Chause †, who walks before the Consul carrying a staff tipped with silver. In the year 1753, the number of English houses was eight, exclusive of that belonging to the Consul. In 1772, the number was reduced to sour. It appears from P. Teixeira, who was at Aleppo in 1605, that there were then three English samilies in the Factory, including the Consul who at that time was a Merchant. The annual amount of the trade was estimated at 300000 Ducats, and two or three ships were employed annually in the trade.

It is remarked also, as a proof of the great trade then carried on by the Europeans at Aleppo, that the hire only of the camels, to fetch and carry goods to and from Scanderoon, though generally very reasonable, "rises at least to 80000 Chequins a year, which is near 90000 Ducats. A sum I should have doubted, "had I not computed it very particularly with some of those gentlemen, for my own satisfaction."

As a matter that might possibly interest the curiosity of some readers, an abstract sketch of the first establishment of the English in the Levant, is inserted in the appendix. See Note. II.

<sup>+</sup> Chaoush جاوش. The Turkish Grandees have a similar officer of ceremony. See vol. i. page 157. The English chaush takes care of all letters, and despatches.

<sup>\*</sup> Travels of Peter Teixeira.

4

BOOK There are two Druggomans, or Interpeters, Greek natives of Aleppo, who fpeak the Italian, but can feldom read or write any other languages than the Arabic and Turkish. They have falaries from the Levant company. Two Janizaries are kept also in constant pay, and attend at the Confular house. They walk before the Conful when he goes abroad, and carry long staffs, with which, by striking the pavement as they march along, they warn people in the streets to give place. They wear no diftinguishing dress in ordinary, but on public occasions, the number of Janizaries is increased, and all wear the ceremonial felt Cap. In going to audience, or in fimilar processions of form, the honorary Druggomans walk two and two, immediately behind the Janizaries, who are preceded by the Chause. The officiating Druggomans walk next; and after them, comes the Conful, followed by all the gentlemen under British protection. In this last circumstance the ceremonial differs from that of the Turks, among whom it is the invariable cuftom, in all processions, for the principal person to come last<sup>6</sup>.

The French Factory is more numerous than the English, each Merchant having a clerk or writer, or a

person

ترجيان Turgeman

<sup>&</sup>lt;sup>6</sup> The procession to an Audience is described by Paul Lucas, Voyage fait en 1714, v. i. p. 282.

person under that title, who afterwards becomes a CHAP. partner in the house. The residence of the French in the Levant, is limited to a certain term of years after they take the name of Factors, or Merchants, for which reason they usually are sent early in life from Marseilles, under the denomination of Scrivans, and evade taking the name of Factor even after they have a share in the business of the house, in order to have it in their power to protract their stay in the country.

The number of French houses of trade at Aleppo, in 1753, was nine: in 1772, they were reduced to six or seven. "In 1605" fays Teixeira "there were sive French families established at Aleppo, but the number of those who come and go is much greater than that of the Venetians. About twenty ships were employed in the trade, which was computed to amount annually to 800,000 Ducats. The French Consul at that time was appointed for life, but acted by a Deputy who paid him annually near 3000 Ducats. He had a particular privilege from the Turk, of protecting any foreign Christian, that is not of those nations allowed to trade there, and several Flemish and Lucquese Merchants trade under that protection."

The Consul has his chancellor, chause, and Janizaries, and maintains the same state as the English Consul; but he has precedence at all public audiences, on account of the prior establishment of the French Factory at Aleppo. Under the protection of the Consul, are two or three

French

French furgeons, who practice physic, one of which is commonly reckoned the national doctor. The Druggomans are French subjects of the Levant, or else native Frenchmen. They are partly educated at Paris, partly at Constantinople, and while students are called Giovani di Lingua. They are afterwards sent from Constantinople to the different scales, where they rise successively from the station of third, to that of first Interpreter.

Besides the merchants, a number of French subjects of inferior rank, find their way into the Levant, and by intermarriage with the native christians, produce a half French race, or Mezza Razza. A variety of inconveniences, found to refult from the Conful being obliged to afford protection to people who were often involved in low transactions and disputes with the Turks, produced, not many years ago, a royal edict, by which all married subjects of his most Christian Majesty were recalled from the Levant, and power was vested in the Confuls, to remand inftantly to France subjects of whatever rank, who should marry in future, without special license obtained through the Embassador at the Porte. In consequence of this regulation the number of those who claim protection is diminished; but several families still remain at Aleppo, of which some are visited by the Europeans, and the ladies are an agreeable accession to the public affemblies.

The

The Terra Santa convent, as also those of the Ca-CHAP.

puchins and the Jesuits, are under the protection of the French Consul. The first contains about sourteen Franciscan friars, and their church is frequented by all the European catholics, as likewise by many natives of both sexes, from the Iideida. Each of the other convents contain three brothers, and have their chapels within the convents. In the great Khane, there is a fourth convent, consisting of two or three Carmelite friars, which is usually under the protection of the Imperial Consul. All those missionaries wear the proper habit of their order, except the Jesuits, who dress in the same manner as the Maronite priests.

An account of the Aleppo church, and the diffentions between the Jesuits and the other convents about the catholic chapel, may be seen in D'Arvieux's Memoires. According to Pere Nacchi, the Jesuits were first established at Aleppo in the year 1625; and a kind of historical account of the jesuitical missions into Syria, is given by that learned father. But besides a strange mixture of superstitious absurdity, his account is greatly desective in a historical view in point of dates.

The Dutch Conful, being the fole person of that nation at Aleppo, exercises also the profession of a merchant:

<sup>&</sup>lt;sup>7</sup> V. 6. p. 72 and 174.

Memoires des Missions, v. 4. p. 19.

gaging directly or indirectly in commerce. Since the year 1772, the Dutch confulate has been put on a different footing, the Conful has regular appointments, without benefit of trade.

In Teixeira's time, it appears that there were two families of Dutch, trading to the value of one hundred and fifty thousand Ducats, "which is always taken from the common amount, for sometimes it may be more, fometimes less."

The Venetians were established at Aleppo prior to any of the other European nations. In 1605, there were at Aleppo no less than sourteen Venetian samilies, besides the Consul's. They employed five or six ships yearly, and their trade amounted from a million to a million and half in gold. At present, they have no Consul of their own nation, neither have the Tuscans: both, (in 1751) were under the protection of the English Consul, who acted by virtue of commissions from the respective Embassadors at the Porte. For several years preceding that period, the Venetians had been under the protection either of the French or the English; but, soon after 1754, a Consul of their own nation came to reside at Aleppo.

The Venetian subjects, (two merchants excepted) were either Tuscan, or Venetian Jews, who have houses

<sup>&</sup>lt;sup>9</sup> Teixeira. See Note III.

and warehouses in the public Khanes, but generally dwell CHAP. with their families in large, handsome houses, situated in Bahsita; and in their manner of living, conform more than the other Europeans, to the custom of the natives.

The houses of the Franks are as commodious as their fituation in the Khanes will admit. The ground-floor is employed for magazines; the lodging apartments above, communicate with a long gallery, which ferves for a place of exercise in the day time, as the terrace does in the evening. From the month of June, till the first autumnal rains, most of the Franks sleep on the terrace, but use bedsteads with curtains, not lying exposed in the manner of the natives. The houses of the English are more elegantly furnished at prefent than in former times, when the manner in which the trade was conducted leaving them more at liberty to make excursions, they used regularly to pass several months of the year from home, and bestowed more attention on their horses, tents and camp equipage, than on the embellishment of their town houses. Though tolerably cool in the summer, the walls being very thick, the Frank houses are not so agreeably adapted to the climate as the great houses of the natives; they are more confined, and have neither the fountains, the Divan, the Kaah, nor the court yard.

The Tables of the Europeans are well supplied with provisions of all kinds, except sea sish, which can only Vol. II.

воок procured fresh in the winter. The cooks, as well as most of the other menial fervants, are Armenians, but have been taught French or English cookery, and only now and then, by way of variety, ferve up fome of the country dishes. Formal invitations are oftener given for fupper than dinner, especially in the summer, and the fervice of the table being nearly the fame at both, animal food is more eaten at night, than is customary at genteel tables in England. The wines in common use are a dry white wine of the country, and a light red Provencal wine. The French prefent Liqueurs at the Defert. The English drink a draught of very weak punch, before dinner and supper; a cuftom found fo deliciously refreshing, that most of the other Europeans, many of the native Christians, and some even of the Turks have adopted it.

The punch is fometimes iced, but ice otherwise is feldom used, though always abundant in the Bazar; the wine from the Cellars, and the water from the Sahreege\*, being sufficiently cool. The luxury of iced creams is hardly known. The French, after they rise from the desert, present pipes, and cossee. The English remain longer at table, they have the wine set down after the cloth is removed, and pipes or Kalians†, are brought in for such as choose. They commonly sit

<sup>\*</sup> Vol. i. p. 43.

<sup>†</sup> Ib. p. 122.

about an hour and a half at dinner, and then retire to CHAP. take a Siefte. They fit longer at supper; but observe fuch moderation in drinking, and regularity in hours, that the least accidental debauch, disqualifies most of the company for business on the following day.

The Europeans have little or no focial intercourse with the Turks. They seldom see them but in the way of business, which is usually transacted through an interpreter, though the Frank himself happens to understand the language.

The female fociety is very confined of the native Christian ladies know no other language than Arabic, and only a few of the Mezza Razza speak French. Some of the English gentlemen never visit the natives of their acquaintance but at the new year; and even those who can speak the Arabic, seldom visit in the Jideida. None of the English are married; nor any of the French Factory, the Consul and one of the Druggoman excepted. The distance of the Porte of Scanderoon is an obstacle to many of the sea faring people undertaking the journey to Aleppo; and unless it be a few gentlemen who cross the Desert, in their way from

<sup>&</sup>quot;Circumstances are much altered in this respect since the year 1752, the semale society at Aleppo having had an agreeable accession of several married Ladies from Europe.

BOOK India, the English seldom have the pleasure of being visited either by their countrymen, or by other European travellers.

In fuch a recluse situation, the manner of life, in some respects, resembles the monastic. The hours of business and refreshment, return in regular succession, being seldom interrupted by accidental intrusion; and the circle of active amusements is so contracted, that the man who happens not to posses the inestimable art of employing his leisure, must submit to suffer many solitary hours of insipid languor. But as time lessens by degrees the fondness for diversions too distant to be attained, necessity insensibly leads to the improvement of such as lie within reach: and the pleasures of social life, though confined within narrow bounds, are enjoyed with keener relish, and, perhaps, are less liable to the allay of disappointment, than they are found to be in wider circles.

The Franks, in general, live together in harmony. They entertain reciprocally; they have card parties, weekly concerts, and fometimes, in the Carnaval, masquerades<sup>11</sup>. Neither competition in trade nor the

intervention

In the year 1681. The French consul, M. d'Arvieux, found it expedient to forbid masking in the Carnaval, on account of the young gentlemen going about the streets, at night, dressed in semale habits. Memoires, v. vi. p. 49.

intervention of national ruptures in Europe, broke off c H A P. this fociable intercourse in Syria. In times of peace, advice of messengers sent to Constantinople, or other scales, as well as of the despatch of ships for Europe, was communicated to all the Franks, by the respective Chauses. The English had frequent occasion to fend messengers to Constantinople, which gave the French an opportunity of writing overland; they in return had frequent opportunity of obliging the English, by the ship conveyances to Marseilles. In war time, advices of this kind, as well as public ceremonies between the Confuls, were suspended. But the private relation of men brought together by accident in a distant country, whom choice had led to form friendly connections, still remained facred. Individuals continued to vifit and amuse themselves as usual; politics were banished from conversation, by mutual confent, and without forgetting what they owed to the public cause, both parties, while they wished for peace, continued to remember what in the mean time might be conceded to civility, and private friendship.

A Missionary, describing the ceremonial visits made by the Europeans at the annual feasts, justly remarks to his correspondent, that he need not be surprized at those mutual civilities among people of different countries, for that French, English, Italians and Dutch, in respect to the people among whom they dwelt, considered them-

felves

BOOK felves as perfons of the fame country, and, in that light, were viewed by the natives, who, without distinction, reckoned them all Franks<sup>12</sup>.

A friendly intercourse among the Europeans, depends naturally on the disposition of individuals, and must therefore vary at different times. In the period of our residence at Aleppo, much was owing to the amiable disposition of M. Thomas, who continued above twenty years Conful of France. He had formerly been fecretary to the embaffy at Conftantinople, and had ferved also as Consul of Algiers and Salonika. A gentleman of a benevolent heart, a pleafing cheerful temper, and possest of talents improved by a liberal education. His house was open to Europeans of all nations, where they were received in the most hospitable manner by him and his lady; who on account of her humane attentions, was not less beloved by the females under French protection, than her husband was respected by the men. The happiness of a family in which every one took an interest, was increased by the unexpected birth of a daughter, whom fome of the Europeans lived to fee grow up to a fine woman, and whose sprightly temper, and sweetness of manners, gave spirit to much gayer amusements than Aleppo had known for many years. The editor trusts for indulgence to this digression; having often, together with his brother, and in common with the other

<sup>&</sup>lt;sup>22</sup> Memoires de Missons. v. viii. p. 309.

Europeans of that time, shared in the hospitality his CHAP. gratitude wishes to commemorate.

The English gentlemen keep excellent horses, and usually take an airing every day. From the beginning of November to the end of March, they make excursions twice a week, and dine in the country. A large tent is pitched for this purpose, in some pleasant situation four or sive miles from town. The cook with his kitchen utensils, sire wood, and provisions, sets out in the morning, at the same time with the tent-men, who carry, besides the tent, a folding table, chairs, and carpets. The cook setting to work in the open field, with little or no desence against the wind or rain, boils, roasts, or even bakes; and with sewer conveniences about him than an European cook could well conceive, he prepares sive or six dishes, besides the victuals for perhaps twenty servants.

The tent is pitched either on the banks of the river, or on some verdant spot near a sountain which may supply fresh water. On this account, Rigib Bashaw's sountain to the south of the town, is a savorite situation for the tent. The place is known to the natives by the name Ain al Embaraky, the blessed sountain, and is frequently mentioned by the Arabian historians. When Saif al Deen came as an auxiliary to Aleppo against Saladin, he stopped on his way at this sountain;

<sup>+</sup> See vol. i. page. 5.

ment of Aleppo, by his father Saladin, chose the same delightful spot for his encampment, before making his public entry into the city 13.

But in order to vary the scene, as well as to accommodate the gentlemen, who set out early in the morning, on hunting or shooting parties, the situation of the tent is frequently shifted.

The company begin to affemble about noon. The horses, with two legs chained together, and fastened to a short stake driven into the ground, stand at a little diftance on the green. The hawks and greyhounds are placed nearer the tent; and various kinds of game are hung up in trophy at the entrance. The weather for the most part is delightfully fine; a vivid verdure succeeds the autumnal rains, and the ploughed fields are covered with the Persian Lilly, of a resplendent yellow colour. In the depth even of winter the fields are not wholly divested of beauty: but the verdure of the spring, with the variegated tints of fruit trees in bloffom, and wild plants in flower, towards the middle of March, are delightful beyond description. In all seasons, the prospect from the tent is enlivened by the herds and flocks grazing on the banks of the Kowick; and by the caravans which often pass within view on the heights.

It is on these occasions, that the Franks are sometimes

<sup>&</sup>lt;sup>43</sup> Vita Saladin, p. 44. and 65.

visited by the Emeer, or king of the Arabs, in his way CHAP. to, or from the city. He is always received with great civility, and together with his retinue, (which feldom exceeds five or fix persons) is treated with wine, or spirits, either being more agreeable to the Emeer than coffee.

In the month of April, the English gentlemen retire to the gardens in the neighbourhood of Babulla, where they refide till towards the end of May; only coming occasionally to town in the morning, and returning either to dinner, or at night. Their country lodgings are tolerably commodious, and might eafily be made more fo; but the Franks, confidering themselves as travellers at a Caravanfary, think it needless to bestow expense on the superfluous decoration of houses not their own property. The garden feafon, on many accounts is fo delightful, that it is with reluctance the gentlemen remove to town; but towards the end of May, though the mornings and nights still continue cool, the noontide heats begin to be excessive, and the swarms of flies, unless the chamber be darkened, become intolerably vexatious: befides this, the harvest being now over, and the country on all hands parched up, the ride to town becomes hot and unpleafant.

In the course of the summer, they sometimes dine at one of the gardens nearer town, in the same manner as under the tent; but such excursions are less agreeable,

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flies, and there is no proper accommodation for the customary Sieste. In the Autumn, some choose to pass a month at one of these less distant gardens: a custom not general, because dews fall in the night, the mornings and evenings soon become chilly, and the season, which is never so salubrious as the spring, is rendered still less so, by the vicinity of the river, the surrounding plantations, and lowness of the situation.

Hunting and hawking will be mentioned hereafter 15. The sportsmen go out twice a week, during the tent season; and earlier in the Autumn, as well as later in the spring, those who are fond of shooting find abundance of game.

It may be thought from what has been faid, that the English take a good deal of exercise. Their life, nevertheless, is rather sedentary. Mercantile business seldom calls them from home, many hours are spent in the counting-house, or in indolent lounging on the sopha; their exercise, besides what has been described, consists only of a few turns upon the terrace in the evening, and their usual pace in riding out an airing seldom exceeds a walk.

The other Europeans use in general less exercise

<sup>&</sup>lt;sup>15</sup> See on the subject of the English hunt at Alleppo, Le Brun, Voyage, p. 334.

than the English. Some keep horses, but they do not CHAP. fo regularly make tent, or garden excursions, and few-er of them are sportsmen.

The capitulations subsisting between the different Christian Powers and the Porte, being nearly of the same tenor, the several Frank nations at Aleppo are equally protected by government; and the privileges they enjoy are very considerable. The consular houses are respected as sanctuaries; the officers of justice cannot enter even the houses of private Merchants, without permission; the custom on goods is very savorably rated; and in all suits at the Mahkamy, exceeding the amount of an inconsiderable sum, they have a right to decline the competency of the court, and to carry the cause to Constantinople.

The Bashaw, the Cady, and the Mohassil, give separate audiences to the respective Consuls; but the Mohassil alone returns the visit. On these occasions, the Consul appears in state attended by the Merchants under his protection, as well as all the honorary Druggomans. He is received at the Seraglio with much ceremony. The Bashaw's retinue are in gala; his foldiery are drawn up after their manner, and his best horses, richly dressed, are ranged in the court yard. Soon after the Consul enters the audience chamber, the Bashaw makes his appearance, supported by two officers, and proceeds

D 2

immediately

BOOK immediately to his place on the Divan, without taking notice of the company as he passes. The Conful sits down at the same time with the Bashaw, a chair of state having been previously brought from his own house 16. Two of the principal officers stand near the Bashaw; the gentlemen of the Factory stand behind the Conful's chair: they fometimes, but not always, are invited to fit down on the Divan. As foon as the Bashaw is feated, he begins by welcoming the Conful in very polite terms, and then enters into a routine of queftions, and professions of regard for the English, which, with the compliments made by the Conful in return, and his recommendation of the nation to the protection of His Excellency, fill up the quarter of an hour usually devoted to an audience. During this conversation, the Conful is entertained successively with sweetmeats, coffee, tobacco, sherbet, and perfume: all which are, by other pages, prefented at the fame instant, to the Bashaw. Towards the end of the audience, he orders the Conful to be invested with an ermine fur. The gentlemen in his fuite, are entertained with the fame refreshments, tobacco excepted; and

A fingular instance of a dispute between a Bashaw and the French nation, about the Consular chair, is given by Mr. Drummond. Travels p. 185. Let ix. I never know the matter contested; but the instance given by Mr. Drummond was not the first of the kind, as appears from Paul Lucas, who gives a tolerably exact account of an audience of a French Consul, in 1714, Voyage v. i. p. 283.

at the time the Conful is invested, each of them re- CHAP. ceives a gauze handkerchief, which the page delivers in a manner that furprizes a stranger; for in the oriental habit, the handkerchief being carried in the breaft, not in the pocket, the pages, without regard to the difference of drefs, in delivering the handkerchief, thrust it rather awkwardly under the breaft of the coat. All the Druggomans pay homage to the Bashaw, by kneeling down, and kiffing the fleeve of his veft. The two acting Druggomans stand close to the Conful's chair, but usually the first only officiates, and each time a favorable answer is returned to any request, or when the Bashaw repeats any hyperbolical compliment to the Conful, the Druggoman kneels, and kiffes the hem of the Bashaw's vest. The first Druggoman, as a mark of approbation, is invested with an Abai 17; the others receive handkerchiefs.

When the Cady gives audience, he is placed on a high throne, formed of Cushions piled one upon another, so as to be considerably higher than the Consular chair: a haughty affectation of state, peculiar to this occasion; for at other times, the Cady sits on the Divan, in the

Abai also. The outer gament worn by the Arabs. But the same name is given also to a wide long robe of silk, resembling an academical gown, worn by the great men in the summer; it is the latter which is meant above. See vol. i. page 105.

be naintains a demeanour much more diftant and formal than the Bashaw, while coffee and other refreshments are presented to the Conful only.

The Mohassil's audience is the longest and most familiar. All are seated on the Divan, and politely entertained with the usual refreshments. Upon going away, the Consul receives a present of a horse, and his suite are presented with handkerchiefs.

After each of these audiences, a Bukhgee is sent to the Consul, containing a shawl for a summer Kurtak, and Shahkshoors, a silk gauze shirt and drawers; a hand-kerchief, and a string for the drawers, sinely embroidered. These articles, wrapt up neatly in a square piece of green silk, form the Bukhgee<sup>18</sup>.

The Mohassil, in return, pays a visit to the Consul, and is received with much pomp at the Consular house. He is presented on going away, among other things, with several vests of cloth, and an English clock, sent out annually by the Levant Company.

Though these audiences are attended with a considerable expense, yet, passing under the public eye, they place the Franks in a respectable light to the populace. The public entry of a Consul on his first arrival, which

<sup>18</sup> It appears from D'Arvieux that the presents made by the grandees in his time were nearly the same as at present. Memoires, v. vi. p. 225.

is usually made by the English and French, has also it's CHAP. use in this respect, and entertains the people with a fplendid spectacle.

Of late years, the public entries have been laid aside, and no doubt were expensive: but parsimony on certain occasions, while the popular notion of grandeur and confequence remain unchanged, cannot fail to diminish that exterior respect so generally paid to the Europeans, and which other causes, as well as the parsimonious occonomy of certain late erected Consulates, had before conspired to lessen 19:

The Conful is publicly vifited once a year by the Sardar, and occasionally by the other grandees; but he returns the visits of all by his Druggoman. On the two Byrams, he sends complimentary messages to the members of the Divan of the city, and the other Agas of distinction, accompanied with presents of sherbet, and sweetmeats: to which are joined more valuable presents for particular officers.

In consequence of the regard paid publicly by the government to the Europeans, they are not only treated with civility by those, who, being unconcerned in trasfick, could have no interested views in their attentions, but they meet generally with a certain degree of respect, which even the populace seldom forget, except when pro-

The description of a Consul's public entry may be found in D'Arvieux's Memoires, v. v. p. 510. The ceremonies have altered little or nothing fince that time.

BOOK voked by some impropriety of behaviour, or some offence against the manners of the country. In certain remote parts of the town, where Franks feldom appearing are regarded as a strange fight, they are apt to be infulted with abusive language by the lower people, and the boys will fometimes throw stones: the shopkeepers, however, or other decent Turks, who happen to be in the way, always interpole in favour of strangers; and the offenders, where complaint is made, are feverely pu-But in all the streets, except those near the principal Khanes, the Franks are perfecuted by a ridiculous custom, common to several other towns in Syria. The women and children, particularly of the lower class, the moment they espy a Frank, begin to exclaim in a loud voice, Frangi Cuku! and clapping their hands, continue to repeat the same words as long as he remains in fight: adding, if there be time, fome other lines to the stanza; for it is intended to be rhyme. Whatever may have been the origin of this custom, it is not likely to cease; the children being carefully taught to lifp the words, before they are capable of diffinct articulation 20.

The Europeans, when they travel, though escorted by an inferior force, are less subject to be pillaged by the Arabs, and Kurds, than the natives. This, near the city, is partly owing to a small present made annu-

<sup>20</sup> See Note V.

ally to the Emeer of the Arabs; and at a greater CHAP. distance, to an agreement made with the Kurds, in the vicinity of Byland, by which, in confideration of certain presents, they promise to protect the roads through the mountains. But other causes may be affigned, why the banditti are less disposed to attack the Franks. The booty to be expected from perfons travelling merely for amusement, is less an object of temptation, than the riches to be found in a caravan; and the robbery inevitably makes more noise where Franks are concerned, than where natives are the only fufferers. The former always make a stir to procure redress, whereas the latter often choose to fit down filently under the first loss, rather than venture a complaint, which they know must involve them in certain expense, and perhaps procure no subsequent reparation of the first injury.

Although the fituation of the Franks, while things proceed in their ordinary course, be such as is now described, there are conjunctures when the caprice of a Bashaw occasions a good deal of trouble; either by a petulant evasion of some article of the capitulations, or by the violation of privileges, sounded on long custom at Aleppo<sup>20</sup>. It may be remarked however, that attempts of this kind are oftner made on the protected,

An instance of the Franks being prohibited by the Bashaw from riding out as usual, may be seen in D'Arvieux's Memoires, v. vi. p. 227.

BOOK or honorary Druggomans, than on the Franks them-felves. The Conful nevertheless is equally under the necessity of defending them, and when matters cannot be amicably adjusted, he has no other remedy than a reference to Constantinople. If the business happens to be of general concern, it becomes a common cause, and the feveral Confuls make application at once to their respective Embassadors. While dissentions of this nature continue, they are not more difagreeably vexatious to the Franks, than they are for the most part, in the event, detrimental to the Governor; for though it may not always be in the power of the Embassador, by the most vigorous exertions, to obtain immediate redress, the matter of his complaint, is kept in remembrance at the Porte, and sooner or later, in the course of political changes, the Governor finds it made use of by his enemies, to promote the fecret purpofes of rival interest. For this reason, most Governors prefer living on friendly terms with the Confuls, who, in return, avoid interfering in public affairs, which do not strictly concern them.

The Franks are rarely attacked by the annual epidemic distempers, or by those of a more fatal kind, which visit the city at uncertain periods. Various reasons may be assigned for this exemption. They have little familiar intercourse with the natives, and consequently are less exposed to the annual diseases, most of which possess

possess fomewhat of a contagious property. They use chap. a more generous diet, feldom indulging in crude, indigeftible fruits; and, as they live chiefly above flairs, their apartments are better ventilated than the enclosed court yards of the ordinary houses; where the air is rendered damp by the evaporation from the stone pavements, which are frequently wetted. The influence of these combined causes may be inferred from this observation, that the Miffionaries, who go much among the natives, and the married Franks, who live nearly in the fashion of the country, are almost equally subject to the reigning epidemics, as the native inhabitants. In respect to the security of the Europeans in the time of the plague, it may feem to be chiefly owing to the precautions they employ; of which a particular account will be given hereafter, in it's proper place.

## CHAP. II.

## OF THE NATIVE CHRISTIANS, AT ALEPPO.

NUMBER OF CHRISTIAN INHABITANTS—CHURCHES—GREEKS—GREEK NATION GREATLY DECLINED,—GREEK LANGUAGE, OBSOLETE.—ARMENIANS RIGIDLY STRICT IN THEIR LENTS.—FEASTS.—SYRIANS.—MARONITES.—LENTS OF THE GREEKS, SYRIANS, AND MARONITES.—MONASTERIES.—NUNS.—HABIT OF THE PRIESTS.—BISHOPS.—LATIN MISSIONARIES.—WAKEELS, OR PUBLIC AGENTS FOR THE CHRISTIAN NATIONS.—OPPRESSION OF THE CHRISTIANS.—MANNER OF LIVING—CHRISTIAN WOMEN.—CHARACTER OF THE MEN.—DRUGGOMANS, OR INTERPRETERS.—MARONITE WEDDING DESCRIBED.—MANAGEMENT OF CHILDREN.—FUNERAL CEREMONIES.—&c.

THE Christian inhabitants at Aleppo, are said to amount to thirty thousand; of which number, the Greeks compose thirteen thousand sive hundred; the Armenians six thousand seven hundred and sifty; the Syrians three thousand seven hundred and sifty; and the Maronites three thousand and thirty: the strangers occasionally resident in the city, are supposed to make up the remainder.

Note VI.

Each of the four Christian nations have a church in C H A P. the sideida, and enjoy perfect toleration under the Mohammedan government. The hardships they sometimes complain of suffering on account of religion, are always the consequence of intestine seuds among themselves; for the Turks never interfere, till incited or solicited by one or other of the parties,

The Greek nation was once reckoned opulent and flourishing; but it has long been on the decline, and at present is reduced to a very low condition. This may, no doubt, be in some measure ascribed to the general decline of commerce in that country; but much also is to be imputed to the unhappy contests, which have so frequently arisen between those who, adhering to the old Greek church, acknowledge only their own Patriarch, and those who, being latinized, admit the supremacy of the Pope.

These religious contests have, as usual, been conducted with all the characteristic bitterness of superstitious zeal, and carried on at enormous expense. Each party, in order to obtain possession of the Aleppo church for its own bishop, have endeavoured to purchase the interposition of the Porte, in the Patriarch's nomination at Constantinople; and the disappointed party have seldom failed to harass its rival, by vexatious applications to the Seraglio at Aleppo, which met always with encouragement: the Bashaw, always persectly indifferent to

paid best. The success of those ruinous dissentions has been various, the parties alternately triumphing; but for some time past, the old, or orthodox Greeks, though inferior in number, have found means, through interest at the Porte, to hold possession of the Aleppo church. The Jesuit missionaries, in their memoirs, have given some account of those spiritual dissentions, and of the trouble they met with, on their first establishment at Aleppo, from what they term Schismaticks.

The Greek Bishop of Aleppo leads at best but a solitary life. He is deemed a schissmatick, by a great majority of his nation; and, though they are obliged to preserve outward respect, and to pay his established dues, they visit him only on unavoidable occasions, and rarely entertain him at their houses. They even do not attend his church, having divine service performed at home by one of their own priests, or going to the church of the Maronites<sup>3</sup>.

The Greek language is in a manner obfolete at Aleppo, hardly any of the natives, who have not travelled,

The reader if defirous to know more on the subject may consult those memoirs, and in D'Arvieux, Mem: Tom vi. p. 55. 165, &c. he will find some information relative to differnions among the missionaries themselves.

<sup>&</sup>lt;sup>3</sup> A fuccinct account of the Greek church, and the various herefies of which they are accused by the Latins, may be found in De Moni Histoire Crit: de le Creance &c. des Nations du Levant.

being able to speak it, and only a very sew pretend to charal read it. The priests are for the most part able to read the service in greek, in the same manner as the illiterate among the Roman Catholics read the latin. But this is to be understood of the Aleppeen ecclesiastics; for the orthodox bishops, as well as their suite of priests and deacons, who are sent from Constantinople, are usually natives of those countries where greek is the vulgar language, and some of them are tolerably conversant in the ancient greek. There is commonly a School at the Bishop's house for teaching it, kept by one of the inserior clergy: but the school is attended by sew, besides such as have a view to an ecclesiastic life, and of them, some are sent for education to places, where the vulgar greek continues to be spoken.

The Armenians, in like manner with the Greeks, are divided into old and new, or orthodox and schismatick. The former are superior in number, but not in wealth; and their Bishop lives more frugally than the other Bishops. The Armenians of the old church, are in appearance more inveterate enemies to the Pope's supremacy, than the most zealous even of the Greeks.

The Armenians are among the early sectaries from the Greek church, comprehended under the title of Monophysites, on account of their denying two natures in the person of Christ. An abstract of other heretical articles ascribed to them by the Latins, may be seen in BOOK De Moni, 4 and a pretty full account of their churches and ceremonies is contained in the Memoirs of the Miffionaries 5.

> The Armenians of Aleppo, besides their own language, speak the Arabic; and most of them speak the Turkish also. Their church service is performed in learned Armenian, which is different from the language vulgarly spoken, and their books being written in it likewife, the more learned of the clergy only, can read, or understand them.

> The Armenians are most rigidly strict in their Lents, and often reject all proposals of procuring dispensation, however requifite it may be to their health; choofing rather to perish than taste any thing prohibited. Agreeably to the custom of the Eastern church, they do not fast on faturdays; but, except in the great Lent, they differ from all the other fectaries of that church, in the regulation of their anniversary fasts 6. Their fasts are ufually

4 Hist. Crit. p. 142.

<sup>5</sup> Tom. iii. p. 157 and 62.—De Moni, p. 145.

is kept seven weeks. موم لكبير is kept seven weeks. the others that follow are of one week.

Soom Mar Elias or Soom Yereena Soom al Rasheeshy or Nigely سوم كركور سأوريك صوم غريغور وس Soom Sinak or Rhutas Soom al Seidy Soom al Saleeb Soom Adgiab al Saleeb or Sinashan

صومهارالياس وصومهاريغينا صوم الرشيشة صوم على صوم السيده صوم الطيب صوم عجبة الصليب صوم سناشان

Soom

usually followed by a feast; but, as a matter less con-CHAP. nected with the general health of the people, a particular account of the feasts observed by the several Christian nations at Aleppo, has been omitted.

The Syrians, in matters of faith, are mostly reconciled to the Romish Church; that is those of Aleppo. The learned Assemani, who could not well be mistaken, thinks the Syrian nation, since the end of the last century, have rather relapsed into their former errors. They preferve in general their ancient rites, and, in their church, divine service is performed partly in Syriac, partly in Arabic. None of them speak the Syriac language, and sew understand it, but they often, in the same manner as the Maronites, write the Arabic in Syriac characters. Some sew of their youth, who are destined for the ecclesiastic life, are sent to Rome for their education.

Before the rife of those differtions which destroyed the peace of the Greek church, the name of Syrian served only to distinguish the Christian inhabitants of that

Soom Sarkees or Khader al Akhder موم صركيس صوم الخدرالاخضر وصوم ماريعقوب عقوب Soom Mar Johanna al Chinkaly ماريوحنا الجنكلي

This last is a voluntary fast of seven weeks, not obligatory like the others.

More on the subject of the Armenian feasts and fasts may be seen in the iii vol. of the Memoirs of the Missionaries, p. 190.

<sup>7</sup> Bib. Palat. Med. p. 76.

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BOOK extensive region, bounded by Cilicia, the Euphrates, Arabia, Egypt, and the Mediterranean sea; but after that period, each fect came to be diftinguished by a particular name, taken either from its founder, or expressive of the heretical tenets it had adopted. About the middle of the fixth century, those numerous fects, all agreeing before in rejecting the notion of two diftinct natures in Christ, were brought into stricter union by Jacob Baradeus Bishop of Orfa (Edessa) in Mesopotamia, and from him took the name of Jacobites. Under this title were comprehended Armenians, Cophts, and Abyffinians, and though all of them joined in the reception of fome leading articles, they fo far differed in discipline and matters of practice, as to leave room for subdivision; in confequence of which, the name of Syrian came to be restricted to the Jacobite Christians of Syria and Mesopotamia 8.

The Maronites are more connected with the Franks than the other fects are. Their children are fent to the schools kept at the convents, where they acquire the Italian language, with other accomplishments which qualify them for employment in the European warehouses.

The zeal of the Maronites to vindicate their ancestors from all imputation of herefy, has involved the early history of that people in obscurity, and raised doubts concerning the authenticity of records produced in their

<sup>•</sup> See Asseman. Bib. Med. Orient. p. 15 and 75.

defence. But after all the pains bestowed by Faustus CHAP.

Neroni to invalidate the testimony of Eutychius and William of Tyre, it is still the opinion of many learned catholicks, that the name of Maronite, like those of Jacobite, and Nestorian, was given to distinguish a particular sect, dissenting in certain articles of faith from the Greek church?

They acknowledge the supremacy of the Pope, and have added to their own rites, several borrowed from the church of Rome. Some of their books are in Syriac, and others, though in the Arabic language, are written in the Syriac character; but very sew of them understand that language, and divine service is celebrated in Arabic 10.

The Eastern Christians, though reading the Holy Scriptures is not prohibited, are in general not deeply versed in them; but they are superstitiously addicted to the observance of fasts, and sessions. Wednesdays and fridays, are meagre days, throughout the year; and all, except the Armenians, observe nearly the same terms in the principal Lents."

F 2 The

Note VII.

<sup>10</sup> Note VIII.

<sup>&</sup>quot; The Lents of the three nations are as follow,

The Great Lent before Easter, Soom al kebeer صوم الكبير days 48. 48. 48. The Lent of the Apostles, Soom al Rasle موم الرسك — 12. 12. 4.

The Lent of the holy Virgin, Soom al Seidy موم السيده — 15. 15. 15. 15. The Lent preceding Christmas, Soom al Milad

The Lents are kept strictly by the laity as well as clergy. They do not breakfast before noon; and their diet confifts chiefly of herbs, olives, dried fruits, and river crabs. Fish is scarce, except in the winter; and fome of the churches do not permit the use of it in the great Lents. The monks of all the fects are rigid in their fasts, to an extreme. With what rigour the Lents are kept by the Eastern Christians, appears from the accounts of the Romish Missionaries, whose testimony (at least in this point) may be safely admitted. The native Christians reconciled to the church of Rome, admit in some cases of a dispensation from fasting, and, having procured a certificate from the Physician, may obtain a license from their priest. But they are in this respect much more scrupulous than the Roman Catholics; and the others, as before remarked of the Armenians, will rather perish than taste slesh on a meagre day 12.

Befides Sundays, and the Festivals succeeding the great Lents, several Holydays are superadded, on which the people, ceasing from useful labour, are exposed to the temptation of drinking, and other intemperance.

The native Christians have no Monasteries at Aleppo, but contribute towards the support of several in Mount Lebanon 13, and its vicinity. At one of those,

Mar

Mem. des Missions, v. viii. p. 30 and 296.—De Moni Hist. Crit. p. 143.

<sup>3</sup> A picturesque description of M. Lebanon, of the hermitages, and of

Mar Hannah, the Greeks have a printing press, and CHAP. publish now and then a few missals, or other religious books; but their printed books come chiefly from Europe<sup>14</sup>. The Aleppeens are not much inclined to the Monastic life; and such as take a religious turn, usually enter into orders, and dedicate themselves to the actual fervice of the church 15.

There are however certain private focieties, or confraternities, composed chiefly of those who have been educated at the conventual schools, which assemble occasionally, for the purpose of religious exercise. They
affect a life of stricter fanctity, and most of them remain in a state of voluntary celibacy.

The number of Nuns 16, especially in the Maronite nation, is considerable. They profess perpetual chastity, are strict in their devotional exercises, and are distinguished by a particular habit; but, as they do not renounce the world entirely, they continue to be useful members of society in the paternal house. Some of the more devout of these females, in the decline of life, retire to Nunneries in the mountains, but the number is proportionally small that go thither from Aleppo.

the Maronite Convent, Canobin, the usual residence of the Patriarch, may be seen in la Rocque Voyage de Syrie, &c. Tom. i. p. 31.

<sup>14</sup> Note IX:

<sup>15</sup> Note X.

<sup>16</sup> Rahby audi)

Many of the men, but very few of the women, perform the pilgrimage to Jerusalem; the women (more especially the Armenian) from the northern Provinces, are more addicted to that superstition than the Aleppeens. A Christian who has visited the holy land obtains the title of Muksi, and it is usual from that time to let his beard grow. The Clergy do not shave the beard; but the general custom of the Christians is to wear whiskers only.

The Priests 17 of the several nations, dress nearly in the same fashion. Their outer vest is black; the other garments are of a dark, or purple colour. Their Turban is a dark blue; and their Mest, and Babooge are black.

The Revenue of the Priests is so small, that such as have families are under the necessity of exercising some trade, or of engaging in commerce.

When the Bishops appear abroad, they are accompanied by several ecclesiastics, and are preceded by a Janizary; they are dressed in pontificals, and carry a crosser. At their houses, they are approached by the Laity with humility more abject than that paid to the Turkish Grandees. Those who go to kis hands at the Festivals, on entering the chamber take off their Turban, and as they advance towards the prelate, who is placed at the upper end of the Divan, make several

<sup>17</sup> Kasees تسيس

proftrations, each time touching the carpet with their C H A P.

lips 18.

In temporal affairs, the Bishop exercises a certain degree of jurisdiction, but has no power to inflict any other punishment than ecclesiastic censure, or excommunication. In contested matters of property, when the parties are not content with his decision, the affair is carried to the Turkish tribunal.

The houses of the Maronites, and of the other Christians in union with the Romish church, are open to the Latin Missionaries, who regularly make their daily rounds in the Jideida. They are well received by the natives, and, as most of them by practice acquire enough of the language to converse in it, they become in time confidential friends of the family. The church at the Terra Santa convent, is frequented daily by many, (especially women) from the Jideida, and crowds of both Sexes refort to it from that quarter, at all the great Festivals.

The conversion of the Turks and Jews being an enterprize too feriously hazardous to be ever attempted, the pious labours of the Missionaries are confined solely to the Christian natives; and they certainly are entitled to what ever merit may be allowed to an endeavour to

See on this subject Memoires de M. D'Arvieux, Tom. vi. p. 41. and Memoires des missions, Tom. viii. p. 310.

منزانThe Bishop in Arabic is called Mitran

nion of the Romish church. The unwearied pains taken for this purpose, may be collected from the accounts of the Missionaries themselves; and from the same accounts it will appear wonderful to a reflecting reader, how points of such trivial difference, should, as if of momentous consequence, so much excite the zeal of a Body deemed learned, and sent on purpose to instruct the unenlightened East.

The Memoirs of the Missionaries furnish numberless examples of what is here intimated. The Popes have sometimes been under the necessity of writing to the Latin Bishops, in favour of the Greeks in their diocese. For some of those prelates obliged them to rebabtize their infants in the Romish fashion; to perform mass with unleavened bread; and many other things contrary to the national customs. They even cavilled with them about their beards, and prohibited their wearing them of the usual length 19.

In the mean while, to judge from confequences, the labours of the good fathers, however well intended, have by the revival of theological controversies, where they had long been happily forgotten, contributed more to disseminate a narrow, contentious, and intolerant spirit, than to unite men, professing the same faith, in the bonds of mutual good will: an opinion in the country

<sup>&</sup>quot; Voyage du Dandini, p. 203.

where the effects are every day visible, not uncom- CHAP. mon among the more sensible natives 20.

For the regulation of national expenses, and tranfacting business at the Seraglio, each of the Christian nations has a public agent, or Wakeel 21, who being elected in an affembly of the principal persons, of the respective nations, is confirmed in his office by the Bashaw, and by him invested with a Pellice as a mark of honour. The Wakeel is always a man of fome abilities and address, but he is more especially versed in the arts of intrigue, fo requifite in negotiation with the Turkish Grandees; it is of importance also to be able to fpeak the Turkish language. He receives a falary for his trouble, and enjoys feveral other opportunities of getting money; befides which, he is courted as a man of consequence. But, with all these advantages, it is an invidious office: for however uprightly he may act, in adjusting the proportion of national taxes, or Avanias, he is conftantly accused of partiality, or peculation; his conflituents are never contented, and, in all vexatious attacks made upon the nation, he has the honour to be among the first victims thrown into prison.

The Christians are subject to oppression, in common with the other inhabitants; but they often complain of

Vol. II.

Note XI.

وكيك 11

BOOK being the partial objects of petty tyranny, when in reality the Turks of similar rank are equal sufferers. They, no doubt however, lye under feveral difadvantages, and in the common walk of life, are liable to fuffer from the infolent petulancy of their Turkish neighbours: but hardships from the part of government, against which they so often inveigh, are in many instances chiefly owing to their own imprudence. About the time that the capitation tax22 is due, numbers of the inferior artizans are daily met with in the streets, in their way to jail; and the gate of the Mohaffil's prison is crowded by women bringing victuals to their relations, who are there confined on account of the tax. The spectacle carries an appearance of excessive oppression, yet, in strictness, sew of the objects deserve commiseration; for, though they know the payment of the Kharage to be inevitable, instead of making provision when in their power to do fo, they fubmit to be dragged to jail, to lofe the profit of feveral days labour, and expend as much in bribing their guards at different times, to procure a momentary liberty, as would nearly discharge a debt, which they know, after all evasions, must ultimately be paid.

> The Turban usually worn by the Christians, is of a form fomewhat different from that of the Turks, and the

Shafh

This is termed the Kharage 71.5. The tribute raised annually on the Christians and Jews in the Turkish dominions. Note XII.

Shash is blue and white striped. Their slippers are red. CHAP. Their dress, when they appear abroad, is upon the whole, especially in respect to surs, more plain; though many of them dress richly within doors, and affect wearing the white Turban in imitation of the Turks. Luxury in dress, as well as in other articles, daily increases.

In general, the Christians imitate the Turkish mode of eating. But the Shorba and Pilaw are less constant dishes; they eat more Burgle and less rice; and oil is often employed in their cookery, where the Turks use butter. Instead of Hushaf,\* wine and fermented spirits are substituted, of which many drink liberally. To drink a small glass of brandy, immediately before sitting down to meals, is an universal practice.

They do not commonly remain long at table; for as foon as they have finished eating, they drink coffee, and return to business. On holydays, however, they are apt to indulge, and continue drinking and smoking for several hours. When the first glass is presented after dinner, a slice of apple, or other fruit, is stuck upon the edge of the glass; a custom observed also on ceremonial visits at the Festivals, when wine is served before the coffee, and is then termed the feast cup.

The Christian women do not sit at table with the husband, but minister to him in the manner before

<sup>\*</sup> See Vol. I. page 175.

described, when treating of the Harem. Some (particularly of the Maronites) have of late deviated from this custom, and, adopting the use of tables, chairs, and service in the European style, not only make the semale part of the family sit down with them at meals, but permit them occasionally to appear before the Europeans, whom they sometimes entertain at their houses. Most of the interpreters and warehousemen follow this mode.

The women always appear, in the street, in a veil, which is made of white linen, but different in shape from the Turkish Furragi. They keep more at home than the Turkish ladies; not being under the same obligation of going to the Bagnio, and seldom making excursions to the gardens<sup>23</sup>. It is not however to be understood that they rarely appear abroad. They go to church three or four times a week, to the Bagnio once in ten days; and interchange visits with their kindred. From the nature of their houses, (sew of which have a separate quarter for the Harem) the wo-

The following passage is found in page 130 of the former edition. Their confinement (Christian women) does not proceed from jealousy in respect to their conduct, so much as from the fear of bad consequences. Should a Turk see and take a liking to any of them."

This is certainly a reason sometimes assigned by the Christians themselves, and may possibly in former times have been sounded on experience; but I never heard an instance of violence offered to Christian women; and to me they appeared to be in all respects as secure in their persons, as the Turkish ladies.

men are under a necessity of showing themselves, more CHAP. than the Turkish ladies, to the familiar guests of the husband: and they make no scruple to appear without a veil before their priests, physicians, and male domestics.

The Christian ladies are extravagant in the article of dress, which varies only in a few circumstances from the Turkish sashion. They are not allowed to attire the head in the mode of the Turkish ladies, nor to wear stuffs of certain colours (particularly green) in public, but the prohibition serves only to render them more eager to indulge their fancy within doors. Few of them speak any other language than Arabic; and, though most of the better fort are taught to read and write, they seldom make books an amusement. The Armenian women, besides the Arabic, generally speak both the Armenian and Turkish.

They are more formal in their address, than the Turkish ladies; they affect a more submissive tone of voice; and their courtesy too much partakes of servility. It is the custom to kiss the hand of their priest, of their husband, and even of the guest to whom they present a dish of cosse; and this ceremony is usually performed with an air so affectedly humble, as at first to appear contemptible in the eye of an European. But this is only on ceremonial occasions; in familiar intercourse, they throw off such awkward reserve, converse sensibly, and display the pleasing, lively talents of the fex. In their

Turkish ladies; they do not hazard such bold allusions, and, in common discourse, do not so wantonly introduce the name of God. For among the Turkish ladies, it is customary, on the most frivolous occasions, to exclaim Wullah! by God! or to conjure one another in sport B'illah al rachman! In the name of the merciful God! The Christian women have a set of peculiar phrases, and complimentary expressions, which is employed by a man, exposes him to the reproach of being effeminate.

The men, in general, are rather fawning than affable. Those in easy circumstances are hospitably focial, but find it prudent to avoid the oftentation of wealth, from fear of attracting the attention of their rapacious governors. They are under the necessity of contributing largely to the support of the poor of their respective nations, as likewise to the payment of Avanias or unjust exactions, from time to time imposed on the nation. This last circumstance has led many to seek European protection, under the fanction of commissions as honorary Druggomans, which are obtained from the Porte, at a considerable expense, through the European Embasfadors. By these commissions they are exempted from paying Kharage, they are brought immediately under the jurisdiction of the respective Consuls, and, at their death, the Conful, not the Cady, puts his feal upon their effects.

effects. They are distinguished by a peculiar furred CHAP. cap, and have the privilege of wearing yellow slippers.

These commissions of honorary interpreters are royal firmans, or mandates granted by favour to Embassadors, who dispose of them to persons recommended by the Consuls; and, a certain number being allowed at each Scale,<sup>24</sup> the emolument to the Embassador is sometimes considerable; depending on the vacancies which happen during his residence. Formerly when this indulgence was more limited, it proved of real service to the Christian nations; the privileges enjoyed by a few substantial individuals, giving them a certain consequence, put it in their power to be more extensively useful, and thus contributed to the national good. But the impolitic extension of it, of late years, has been productive of much disorder at Aleppo, and greatly diminished the respect formerly paid to the protection itself.

The Christians sometimes betroth their children while very young, but do not permit the marriage to be confummated at so early an age, as is usual among the Turks: though exceptions to this are sometimes met with among the Armenians. The parties do not see one another before marriage, and enjoy little more liberty of choice, in respect to beauty, or other semale attractions, than the Mohammedans; but if the girl happens to be averse to the intended match, and cannot other-

<sup>&</sup>lt;sup>24</sup> From the French Echele, and used for the sea ports where Europeans are established in the Levant.

FOOK wife avoid it, she threatens to turn Nun; while the men fometimes elude the engagements contracted by their parents, by travelling into distant countries: instances however of either kind are not common.

The priefts, from their eafy access to families, have a principal share in matrimonial negotiations; and, having opportunities of being acquainted with the tempers of the children, they are supposed to be sincere in their report. The female relations of the youth also, (as among the Turks) are employed in the fearch for a When the choice is determined, flowers, and other small presents, are from time to time, sent from the family of the bridegroom to that of the bride, and the relations interchange visits; but the girl, before company, will not fo much as touch a flower that has come from the other house, and if the bridegroom happen to be named in her presence, she suddenly assumes a referved air, becomes filent, or retires. The women know this fo well, that when the young lady happens to be over-pert, they threaten to make her foon change her tone, and the hint is fufficient to filence her.

The description of a Maronite wedding may serve as a general specimen of the Christian nuptial ceremonies; for though each sect has its respective mode of church service, the difference in that point is not material, and the manner of conducting the feast is nearly the same.

After the bride has been demanded in form, and other matters have been adjusted, a certain number of the male relations are invited to an entertainment, by

to

her father, in order to fettle the wedding day, which is CHAP. usually fixed at the distance of a fortnight.

In the afternoon of the day preceding that of the nuptials, the fame company again repair to the bride's house, and proceeding thence, after supper, to the house of the bridegroom, they find most of the persons assembled who have been invited to the wedding. The bridegroom, and Shebeen, or brideman, do not at first make their appearance, but, after a short fearch, are discovered lurking, as it were on purpose, in a dishabille not fuited to the approaching ceremony. From this refuge they are led in triumph round the court yard, amid the loud shouts of the assembly, and then conducted into a chamber to dress, where the wedding garments lye ready displayed; but before these are put on, a priest pronounces a long benediction over them. When the bridegroom is dreffed, he is again obliged to make feveral turns in procession, in the same manner as before. The women all this time remain in a feparate apartment.

About midnight, all the men, and most of the women, each carrying a wax taper, set out in a procession, preceded by a band of music, in order to setch the bride. Upon their arrival at her house, they are resused admission, a party of the bride's kindred standing ready to dispute the entrance, and in consequence of this, a mock skirmish usually ensues, in which the bridegroom's party is always victorious. The women, now advancing

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bride, who is entirely covered with a large veil, and attended only by her Shebeeny or bridemaid, and one or two female relations; for the mother and nearest kindred are not by custom allowed to accompany her. The paternal house is in deep affliction at her departure; but she is received by the expecting crowd, with repeated shouts of joy, and in that manner conducted to the bridegroom's house.

On her passing the threshold, she is faluted with a general Zilareet, and, after the long veil has been changed for one of red gauze, she is led into a large apartment, and feated in flate, at the upper end, upon a Divan cushion. In this situation, it would be an offence to decency to utter a fyllable, or to fmile, she being by etiquette obliged to remain all the time with her eyelids fhut; but is prepared to rife up, and kifs the hand of every female who enters the room to congratulate her, each being announced by a person placed near her on purpose. The women pass the remainder of the night in loud rejoicings; while the men, on their part, are not less noify. There is abundance of arrack, wine, coffee and other refreshments, and only a few of the elderly guests retire to rest. When it happens that the house is not sufficiently large to afford separate apartments for the men and women, an adjoining house is borrowed for the reception of the men.

About nine in the morning, the Bishop or, in the lower

lower ranks, a prieft, comes to perform the nuptial CHAP. ceremony. The music ceases the moment he enters, and a respectful silence reigns through the house. The women all veil for his reception, and as foon as he is robed in his canonicals, he enters the Harem, followed by the bridegroom and the men, in a filent procession. The bride appears standing in the front of the Divan, fupported by two women, befides the Shebeeny; the rest of the women fill up the space behind. The bridegroom dreffed in a kind of splendid robe, and attended by the Shebeen, is placed on the bride's left hand. The Bishop then proceeds, and, in the course of the nuptial fervice, puts a crown first on the head of the bridegroom, and next upon the bride: he afterwards crowns both the Shebeen and Shebeeny. The man answers audibly to the usual matrimonial question, but the confent of the woman is denoted by a gentle inclination of the head. The Bishop immediately joins their hands, and after feveral prayers and benedictions, puts a ring upon the bridegroom's finger, delivering another to the Shebeeny, to be put on the finger of the bride. Towards the conclusion of the service, the Bishop ties a piece of ribband round the bridegroom's neck, which remains till a prieft, in the afternoon, comes in form to take it off.

The ceremony thus finished, the men return to the outer apartments, where it being too early for the whole company to dine, a dinner is served up to the Bishop,

H 2

with

BOOK with his fuite, and a few select persons. The pause occasioned by the Bishop's presence, is at an end the moment he quits the house, the music then strikes up in full chorus, and, as if to make up for the time loft, the noise on all hands is redoubled. The Christians on these occasions are more noisy than the Turks, for, besides the mufical band which performs almost incessantly, many of the men join with the professed singers, in the chorus. Some of them also show their skill in dancing, which they feldom do on any other occasion. Interludes of buffoons, and jugglers, are from time to time introduced by way of variety. The company, in this manner, pass the whole day; arrack and wine circulate briskly; the table at dinner and supper is covered with profusion; and fruits, sweetmeats, coffee, and tobacco, are ferved at intervals.

Between eleven and twelve at night, the bridegroom, accompanied only by a few of the near male relations, is introduced into the woman's apartment, where a collation of fruit and wine is prepared. It is then, for the first time, he sees the bride unveiled. She receives him standing up, and is with difficulty prevailed on, at his entreaty, to resume her place. This interview is soon over, for the young couple having reciprocally drank a glass to each other, the bridegroom drinks a bumper to the semale guests, and then returns to the company who are waiting without, to receive him with loud acclamation.

The remainder of the night is spent in the same man- C H A P. ner as the preceding. Next morning, the bridegroom presents jewels, and other ornaments, to his wise; her kindred, at the same time, making her presents in money. It is not till after some days, that others who have been invited to the wedding send presents of various kinds, and that she receives congratulary messages and slowers, from her acquaintance.

The nuptial feast concludes with a collation, on the afternoon of the third day; after which the whole company take leave, except a few intimate friends, who stay to sup with the bridegroom, and consign him at midnight, in a condition most heartily fatigued, to take possession of his bride <sup>24</sup>.

The fucceeding week is filled up in receiving complimentary messages; and on the seventh day, the bride entertains her mother and near relations, who come then to pay their first visit.

However the other women may be amused, the bride herself enjoys but a small share in the pleasures of the nuptial feast. The ceremonies she is obliged to go through for three days, are fatiguing to the last degree, and the incessant din, joined to the natural timidity of the sex, keeps her in a state of perpetual anxiety. As she knows herself exposed to the captious observations of

The marriage feast now described, and at which my brother and my-felf were present, was that of a Maronite of one of the principal families. The company was numerous and every thing splendidly conducted.

BOOK her own fex, she dreads to move a limb lest it should be cenfured as an offence against the decorum of her fituation; and if those whose office it is, to take care of her refreshments, should happen to neglect their duty, she dares hardly venture to open her lips to ask for a glass of water. I have heard several married ladies defcribe the diffress of their situation with much pleasantry. Some have affured me that they were not only half frightened out of their wits, by the incessant bustle, and fudden shouts, but in risk also of perishing from thirst, being neglected by the fervants, in the hurry of their attention to the company. Besides these restrictions which terminate with the three ceremonial days, she is enjoined strict silence for the space of a month, and must confider it as an indulgence, if allowed to utter a few Among the Armenians, this words to her husband. term is faid to be protracted to a twelvemonth. It is fometimes jocofely remarked by the husbands, that when their wives are particularly observant of the precepts they receive on this head from the old women, they feldom fail to make up for it, by their loquacity after the expiration of the term. The Maronite women of all others appear to be the least rigid in the observance of those severe restraints.

The management of their children, in infancy, is much the fame with that of the Turks. The mother in general nurses her child. Two years is the usual period,

period, it not interrupted by pregnancy, and then, ra- c H A P. ther than give it out to nurse, they continue to suckle it to the end of the year: but in case of earlier pregnancy, they seldom choose to give their own breast after the sourth month, and therefore employ a nurse.

The boys pay great outward respect to the father, always standing in his presence, and, in ceremony, waiting upon him and his guests at table: but they are seldom so well bred as the Turkish children; the paternal authority is not so firmly exerted, and many are spoiled by early indulgence. They are apt to be surly and obstinate, and to behave with shameful disrespect to the mother. The parents see, but injudiciously pass over their petulance, from a pretended dread that chastisement might provoke some rash resolution satal to their faith. This notion prevails among all the Christians, especially with those of inferior rank, though instances of apostacy are very rare.

The crime of incontinence is more frequent among the Christian youth (those of the upper rank excepted) than among the Turkish. The sexes, in common life, are not so strictly separated, and caution is lulled by the use of strong liquors, while the passions are inslamed. The dread of ecclesiastic censure has little weight in this matter, but it is not the parties alone who are interested in the concealment of an illicit amour. A bastard child is an affair of Turkish cognizance, and a whole neighbourhood is liable to be laid under contribu-

the offence, or have given earlier information to the magistrate. It is on this account not improbable, that the crime of procuring abortion is more frequent, than among the Turks; and that breach of chastity is not heard of among the Christians so often as it really exists. In respect to common Christian prostitutes, they are, in the same manner as the Turkish, sufficiently known to the police.

The fons of Christians in any tolerable circumstances, are taught to read and write the Arabic, and usually follow the profession of the father, in some branch of trade; or they serve in quality of Scrivans, or agents to the Turkish merchants. They are more accustomed to travel with the caravans, than the Aleppeen Turks, but sew in proportion leave their native town.

The Christians do not bury their dead so speedily, by several hours as the Turks. The corpse sometimes is deposited in the church, and thence carried in procession to the place of interment, preceded by priests, and accompanied by the relations of both sexes. The women are not so clamorous in the street as the Turkish women, but they practise the Wulwaly\* at the instant of death, and employ likewise professed mourning women to affist in the conclamation. The corpse is carried to the grave upon an open bier.

<sup>\*</sup> Vol. i. p. 306.

The Christian burial ground covers a large extent to C H A P. the Westward, between the Jideida and the gardens. The graves of the Greeks are lined like those of the Turks, and a flat stone with an inscription is laid over them. Some families have more costly monuments of hewn stone, or one large oblong square stone (excavated for the convenience of carriage) which is turned down over the grave.

The men upon the death of relations, make little or no alteration in their dress; the women lay aside their jewels, and mourn in the manner already described. Both sexes visit the sepulchres on stated days; the women go out to the graves of very near relations, almost every morning, during the first year, and, after that period, upon all great holydays.

The death of a bride, or bridegroom, of a young mother, or of an heir of a family, produces now and then an occasional Dirge, consisting of several stanzas, which is sung to a dismal tune, by certain old mendicants, who, presenting themselves at the door of the house of mourning, are admitted into the passage. They are encouraged by the women, who take a melancholy pleasure in listening to them; and, though the poetry of these miserable bards, has as little claim to excellence as their music, they touch the passions, and draw tears in abundance from the sine eyes of their audience.

Vol. II. I CHAP.

## C H A P. III.

## OF THE NATIVE JEWS, AT ALEPPO.

COMPUTED NUMBER OF JEWS.—SYNAGOGUE.—ANCIENT MANUSCRIPT OF THE BIBLE.—DRESS OF THE JEWS.—THE HEBREW CHARACTERS EMPLOYED IN WRITING ARABIC.—JEWS SELDOM APPLY
TO MANUAL TRADES.—ARE CHIEFLY BANKERS, MERCHANTS, &c—SOBER IN THEIR DIET.—LOWER CLASS SLOVENLY AND DIRTY.—
WOMEN.—THE HIGH PRIEST OR KHAKHAN.—SABBATH.—FEASTS.—
FASTS.—REMARKABLE FAST OF SIX DAYS.—VOLUNTARY FASTS.—
INFLUENCE OF THE JEWS IN TURKEY.— JEWISH MARRIAGES.—
INTRIGUES.—BELIEF IN THE OPERATION OF EVIL SPIRITS, AND
EXORCISM.—JEWS REMARKABLY ATTENTIVE TO THEIR SICK—FUNERAL CEREMONIES, &c.

THE computed number of Jews at Aleppo, is about five thousand. They dwell within the walls, in those parts of the city contiguous to the ramparts, between the Dark Gate and St. George's; in the quarter bounded by Bahfyta, and the street leading Westward

The number of Jews at Aleppo in the time of Nouraldin, in the 12th century, was a ccording to Benjamin de Toleda) fifteen hundred. Benj. de Toleda, c. xi. p. 127.

from the Mahkamy. Their houses, which have been CHAP. already described, lie near each other, but some Turkish houses are interspersed. They have one Synagogue, situated in what is called the Jew's street, where a manuscript of the Old Testament is preserved, which, as they pretend, is of very high antiquity. The Synagogue has been very well described by Pietro della Valle<sup>3</sup>.

The Jews are eafily diftinguished by their violet coloured Babooge, and their Turban: not to mention the peculiar cast of countenance so universally remarkable in that nation. Their Turban is somewhat lower than that of the Christians, though the striped shash be much the same: They wear also shashes of other colours, and tye them in a most slovenly manner. Before the year 1600 (according to Biddulph) the Jews wore red hats without brims, but about that time a Grand Vizer, offended at the red colour, obliged them to wear blue hats "." By hats he means Turbans; and the shashes of some of their Turbans are still red. They all wear the beard; and even the Frank Jews are obliged by the Khakhan to comply with the custom.

It is observed of them that they speak a more corrupt Arabic than the Christians. In their morning salutation

<sup>&</sup>lt;sup>2</sup> Note XIII.

<sup>&</sup>lt;sup>3</sup> Parte terza, p. 424.

<sup>+</sup> Biddulph in Purchas, p. 1342.

<sup>5</sup> Levit. xix. 27.

but it goes no further than a few words in one of them fpeaking that language familiarly, though many read it. In writing the Arabic, they very often make use of Hebrew characters, in which their letters are usually composed, thus a stranger may be led into the mistake of supposing them to correspond in the ancient language. It is remarked by Leon Modena that the Jews of the Morea correspond in Hebrew, but in other places they employ the language of the country, sometimes only writing it in the Hebrew character. Their children are universally sent to the reading school, but their learning seldom extends beyond the Psalms of David. Most of their printed books and almanacks are brought from Venice.

Few of the Jews apply either to manufactures, or to manual trades. The principal perfons are bankers, or merchants; the others are brokers, grocers, or pedlars. The established banker of the Seraglio is a Jew, and the private bankers of most of the Grandees are likewise Jews; whence it probably happens, that their nation possesses such extensive influence among a haughty people, by whom, in a religious light, they are held in still greater contempt than the Christians.

<sup>&</sup>quot; The Hebrew words are Shabath Shalom שבת שלום to which is anfwered Shabath Shalom Meborak שבת שלום מבורך See Leon Modena Degli Riti Hebraici.

<sup>&</sup>lt;sup>7</sup> Page 37.

In general, the Jews are a more fober people than CHAP. the Christians. Many of them are secured from intemperance by poverty, befides which, their attendance twice a day at the fynagogue on all festivals, and their living fo much under the eye of their Khakhans, render it more difficult to conceal debauchery, than it would be among a more numerous nation. The lower people live chiefly on bread, pulse, herbs, and roots, dreffed with the expressed oil of Sesamum, which is seldom eaten by the other inhabitants. They confume more poultry than any other animal food, their market being often ill supplied with mutton; and, as their meat must be killed in a particular manner, by a Jewish butcher, they cannot provide themselves from the Turkish markets. Their meat is fold to their poor at an under price, the difference being made up to the feller out of the national cheft. But the avarice of the managers of this well intended charity, often starves the market, fo that even the opulent Jews are obliged, like the others, to have recourse to poultry, which can be easily killed at home.

The lower class of Jews are of all people the most slovenly and dirty. No positive institution could have been more wisely devised, than one by which they are laid under an obligation of cleansing their houses, as well as their persons, at least once a week; and, in this respect, their Sabbath is strictly observed. It commences

time next day; but the preparation begins on the Friday forenoon, and the women, after cleanfing their house, and cooking the victuals intended for the Sabbath, go themselves to the Bagnio, and dress there.

Of the women, fome may be reckoned extremely handsome, but the proportion is less than in the other Their head dress differs considerably in its fashion from that of the Turkish and Christian ladies, and is for the most part richly decked with pearls. In the other parts of their drefs, and in their jewels after the Eastern mode\*, there is nothing remarkable: only that their thin boots and flippers are of a violet colour. Their veil is white, but they wear it in fuch a manner as to leave one arm at liberty. They have a fingular mode of falutation, which is imitated by the children, but not commonly practifed by the men, except in their Inftead of laying the hand upon the left own houses. breaft, the person saluting presents both hands joined at the point of the fingers, which the other touches gently, fliding her fingers over them, and then each, by an eafy motion, carries her hands, joined at the finger points, to her own lips. They have also a peculiar way of expressing an absolute negative, by biting the thumb nail of the right hand, and then quickly thrusting the hand forward.

<sup>\*</sup> Vol. i. p. 107.

The Jewesses, in common discourse, employ several C H A P. phrases and terms not in use among the other natives, and they speak the Arabic with a remarkable and peculiar accent.

The women, in the presence of strangers, are always veiled; and, in common, they do not eat at the same table with the men: though on holydays, when there are no strangers, they often dine together. On their Sabbaths, they remain a considerable time at table, drinking wine made according to their law; and, on those occasions, they may sometimes be heard singing in chorus: but their songs have nothing gay, or sestive, they are more like Psalms chanted in what is meant for a tune, but happens unfortunately to be the opposite to all melody. Sandys appears to have entertained a notion of their vocal music equally unfavorable. Speaking of their singing the liturgy in the synagogue, he observes "they sing in tunes that have no affinity with music."

The mode of chanting over the grace cup is explained by Leon Modena<sup>9</sup>, and he remarks further, that the Jews in Italy are not restricted to wine prepared by Jews only.

From the common circumstance of several families living in the same house, and of intermarriages among near kindred, it naturally happens that the Jews live rather more familiarly with the women, than either the Turks or Christians, and the women appear more negligent in veiling before persons of their own nation.

<sup>\*</sup> Travels, p. 114.

<sup>.</sup> Page 51. 49.

BOOK III.

The chief priest is by way of eminence called the Khakhan or great Khakhan, but the title is given also to all the priests in general. They are distinguished from the other Jews by the size and colour of the Turban, and by the long wide sleeves of their outer garment.

The Khakhan exercises temporal as well as spiritual authority, and his decisions are for the most part more respected, than those of the Bishop are by the Christians. His civil jurisdiction however is very limited, and the parties may always appeal to the Mahkamy. The priests possess a sufficient stock of erudition to gain the reputation of very learned men among a people little versed in literature: They read the scriptures in the original language, and explain them by traditions and commentaries, transmitted down by former Rabbies; but they seldom or never hazard any new opinions of their own. The schools are kept by some of the inferior priests, who, in the manner of the Turkish Sheihs, go about to the houses to conduct the schoolars to school.

Addicted tenaciously to their ancient rites, as well as to the more modern rabbinical precepts, the Eastern Jews are strict observers of the Sabbath ... It hath already been observed that the women, having begun

Note XIV.

<sup>&</sup>quot; Yom al febt بين or fimply al febt, The feventh day. Note XV.

their preparation on the Friday forenoon, go in the CHAP. afternoon to the Bagnio; but they return in time to light the lamps before the Sabbath commences. The men also retire earlier than usual from their business, in order to dress, and prepare themselves.

On Saturday, divine fervice is performed morning and afternoon, at the Synagogue, which is regularly attended by both fexes. The rest of the day is spent in visiting, feasting and private devotion. All are dressed in their best apparel, and, towards evening, numbers of the men may be seen fauntering about Garden gate, or sitting in the porch.

There is an absolute cessation from all labour and business 12: Their victuals are cooked the day before 13; and, taking the prohibition of kindling fires to be of perpetual obligation 14, they make none in their houses on the Sabbath; and only in case of sickness in the samily, permit fires to be made by others, for warming food or medicine, for which purpose they retain a Bidoween, or a Christian servant, in the house 15. The common people are assisted by certain Bidoween women, provided with small pans of lighted charcoal, who go along the Jewish streets, on a Saturday, crying fire! fire! to sell.

<sup>&</sup>quot;They will not themselves open a letter of business, but will read it if opened by another.

<sup>13</sup> Exod. xvi. 23.

Exod. xxxv. 3. Note XVI.

<sup>15</sup> See Leon Modena, p. 54.

But they do not include in the rest of the Sabbath, an indiscriminate cessation from all works of necessity, and mercy, and are most particularly assiduous in their care of the sick. It is a custom among the men, on their return from the Synagogue in the forenoon, to go in parties together, from house to house, to visit the sick; and as it is sufficient for a person to be considered as sick, if he does not make his appearance at public worship, people though really indisposed, often make an improper exertion to go to Synagogue, in order to avoid the satigue of ceremonious visits. The women, unless to very near relations, defer their visits to the sick till another day.

The Jewish ecclesiastical year commences about the vernal equinox; and Nisan, which answers to part of March and April, was reckoned the first month. On the sourteenth of that month is celebrated the feast of the passover 17, sollowed immediately by that of unleavened bread 18, and forming together in continuation, one of the principal sestivals of the Mosaic law 19. The preparation

<sup>16</sup> See Leon Modena, p. 208.

in Hebrew Pascha and Exod. xii. Levit. xxiii. 5.

<sup>&</sup>quot; Aid il Phtyre המצות בעט ולשל Levit. xxiii. 6. Numb. xxviii. 17.

These two sestivals though distinct, pass indiscriminately under the same name. They are sometimes called Beesih; but more commonly at Ale po,

ration for the feaft of unleavened bread, is a work of C H A P. much labour, and employs feveral days. The vengeance denounced in case of leaven being sound in the house, is matter of serious concern to the Eastern Jews. Every corner is rummaged, and washed with scrupulous care; and their kitchen utensils are new tinned. Was the most determined unbeliever in the divine legation, to see the ragged garments, with the miserable shreds of mats, carpets, and coverlets, which are scoured on that occasion, and hung out in the air, he would perhaps be apt to regret, that, in a country so subject to contagious distempers, the ordinance had not been politically extended to other seasons of the year.

This conjoined festival lasts eight days, of which the second and the eighth (except that they make fires, and cook victuals) are kept strictly like Sabbaths, and the men do not appear in the Bazars; but on the intermediate five days, though the merchants do little or no business, they come some times to the Bazars, to see their friends and amuse themselves. Their bread is made of fine flower in very thin cakes; and they prepare their own sweetmeats with sugar carefully clarified; such as are made by the common confectioners being

Aleppo, Aid il Phtyre. "It is remarked that the Evangelists Mathew "and Mark called the fourteenth of Nisan (that is the day of the pass-"over) the first of unleavened bread, and that the feast of unleavened bread is by St. Luke called the passover." Math. xxvi. 17. Mark xiv. 12. Luke xxii. 1. See Jennings, vol. ii. p. 210. Reland, p. 454.

ple use honey instead of sugar. They dress in their holyday clothes, the children are crowned with garlands of roses, and the women display their finery.

Fifty days after the third day of the passover, is celebrated the feast of Pentecost, which continues two days 20.

The festival at which the Jews chiefly entertain their friends, and which draws a concourse of spectators to their houses, is the feast of Tabernacles 21. It commences, agreeably to the primitive institution, on the sisteenth of Tesri, the seventh month of the sacred year, but continues nine days 22. The Turkish ladies at this season stroll in troops among the Jewish houses, to see the tabernacles, and are seldom resused admittance. Such as are acquainted with the samily, are entertained

<sup>&</sup>quot;This is commonly called Aid il Ansera וلعنصرة as also Shabooat השבועות شابوعت feast of weeks, Exod. xxiv. 22.

<sup>&</sup>quot;The Rabbies call this feast Gnatsereth עצרת the word which we render

<sup>&</sup>quot; folemn affembly (Levit. xxiiî. 36. Deuter. xvi. 6) which though it never

<sup>&</sup>quot; is applied to the Pentecost in Scripture, yet they in a manner appropriate

<sup>&</sup>quot; it to this feast." Jennings, vol. ii. p. 225. Reland Ant. p. 473.

The Christians likewise give this name to their feast; and the πευτηχοςη of the New Testament is in the Arabic translation

Aid al Mdulle Al Ass Hiscoth in Hebrew moon Reland Antiq. Levit. xxiii. 34. Exod. xxiii. 16. Numb. xxix. 12.

Note XVII.

with coffee, fweetmeats, and sherbets; the others, after C H A P. fatisfying their curiosity, retire without ceremony.

The tabernacles are variously constructed, and difposed in different fituations according to the fize, and other circumstances of the house. They are placed fometimes upon the fmall Terraces in front of the upper rooms; most commonly in the court yards; and where feveral families live in the fame house, after every other place is occupied below, they erect the tabernacles on the flat tops of the houses; for each family, however poor, must have its own tabernacle. The ordinary method of building them is by fastening to the corners of a wooden Divan, four flender, erect posts, which ferve to support on all fides, a reticulated work of green reeds, a space only in front being left for the entrance. This, on the outfide is covered with fresh myrtle, and is hung on the infide with chintz, or burdet hangings, the roof is thatched with reeds not stripped of their leaves, and their best cushions and carpets are employed to drefs the Divan. These wooden Divans have the advantage of being eafily moved, and two or more may be joined together. In some of the principal houses, a permanent wooden Kiosk, built upon a stone Mustaby in the middle of the court, is made to ferve the purpofe, which being already latticed, is eafily covered with reeds, and myrtle branches. The Divan and hangings are here richer, and the door and windows are decked with garlands, and other ornaments, made of tinfel and

order to avoid the litter of withered leaves. This is by erecting a temporary booth, confifting of flight pofts papered over, and wreathed from top to bottom with flakes of cotton. Hangings supply the place of walls, and the whole is roofed with mats.

The reeds employed for the tabernacles are supplied by the Aleppo gardens, but the myrtle is brought from Antioch, and other parts, and both, in large quantities, are exposed to sale in Bahseeta. They receive likewise from Latachea, or Tripoly, the fruit of the citron, and palm branches, which are required for certain rites performed within the Synagogue. These arrive some days before the feaft, and are diffributed by the Khakhan; but they are not, by the Aleppo Jews, confidered as materials for conftructing the tabernacles. The citron is carried in one hand, and the palm branch, with fome fprigs of myrtle tied up together, is carried in the other. The myrtle preferred for this purpose is such as has got the leaves growing in three upon the stalk, instead of growing in pairs as usual, and such sprigs, for they are rather rare, are with much pains felected from the heap. The willow is common at Aleppo, but neither the branches of that, nor the olive are employed in making the tabernacles, and reeds are not mentioned in Scrip-"When Nehemiah upon the revival of this feaft, " directed the people what branches to gather he called

" fome

"fome of them by different names, which we render C H A P. "olive branches, pine branches, &c 23."

The Jews in their tabernacles entertain visiters of all nations. They always eat there, and generally sleep also, unless the weather happens to be unusually cold. The mornings and nights in October, are always fresh, and the infirm are not under an obligation to expose themselves; but if it happens to rain in the night, which, in some years, it does in very hard showers, universal confusion ensues; for the construction of the tabernacles is too slight to resist the storm <sup>24</sup>.

This festival, in the eyes of strangers, appears more fplendid than any of the others kept by the Jews. They entertain hospitably at their houses, send presents of various forts of sweetmeats to their friends, and all business is suspended.

The joyous appearance of the feast of tabernacles, joined to other circumstances, gave rise to a mistake among the Heathens that it was celebrated in honour of Bacchus; as appears from a passage in Plutarch, which is often quoted 25. I have frequently observed the Jews, with the citrons and palm branches in their hands, walking to the Synagogue; but may say, as Plutarch

Nehem. viii. 15. Levit. xxiii. 40. See Jennings, vol. ii. p. 229.

<sup>24</sup> See Reland Antiq. p. 479.

<sup>25</sup> Plutarch Sympos. lib. iv. quest. v. tom. ii. p. 671.

B O O K did, that of the rites performed within doors, I am perfectly ignorant.

The feast of trumpets <sup>26</sup>, which is kept the first and second of Tisri, is the feast of the Jewish new year. The Jewish civil year begins with Tisri which is the seventh month of the sacred year.—" The civil year begun with the equinoctial new moon in Autumn; the sacred or ecclesiastical, with the equinoctial new moon in Spring. The civil, according to which all political matters were regulated, was the more ancient, and was perhaps the same with the patriarchal year which is supposed to have originally commenced at the creation <sup>27</sup>."

There is nothing remarkable in the exterior celebration of this festival, only that the boys may be heard, now and then in the houses, winding their ram-horns.

The two remaining feafts observed by the Jews are not of divine institution. The one is the feast of Dedication<sup>28</sup>, and is kept eight days from the twenty first of December,

יליט ווייג This is commonly by the Jews called Ras al Sinne ראש השנת Numb. xxix. ז. Levit. xxiii. 24.

<sup>&</sup>lt;sup>27</sup> Jennings vol. ii. p. 118.

בי Hanaka אונוכה שטלל 'εγκαίνια John x. 23.

<sup>&</sup>quot;This festival was instituted by Judas Maccabeus on his having purified the temple and the altar, from the pollution of Antiochus Epiphanes;

December, but not with the same solemnity as the CHAP. Mosaic feasts.

The other is the feast Purim<sup>29</sup>, which is celebrated on the fourteenth and fifteenth of the month Adar, (March) and is preceded by a fast to be hereafter mentioned. The two days of Purim are considered by the Jews as their Carnaval, and are spent in high jollity.

In reciting the annual fasts observed by the Jews of Aleppo, the first in order, from the commencement of the civil year, is the fast of Keidalia, kept in the third of Tisri, immediately after the feast of the new year 30.

The only fast of Mosaic institution is that kept on the tenth of Tisri, (Sep. 23) and is of all others observed with most rigour. It is a fast of twenty-four hours complete, and women with child, or sick persons, who are exempt on other occasions, will hardly accept of any

<sup>&</sup>quot;and was celebrated for eight days successively, in the month Chislan, about the Winter solftice." 1. Maccab, iv. 52. 59.

<sup>&</sup>quot;It is mentioned by Josephus as a festival much regarded in his time." Antiq. lib. xii. c. 7. Jennings p. 311.

<sup>&</sup>quot; Aid il Foor צום פור באַט וلغور Reland Antiq. p. 534. Jenn. p. 309. The feaft of Purim was inftituted by Mordecai, to commemorate the deliverance of the Jews from Haman's conspiracy Esth. ix. 20.

This is kept in memory of the murder of Gedoliah, on the third of Tifri (which in 1776 fell on the 26 of September.) See 2. Kings xxv. 25.

minent danger of life declared by the physician, can justify the breach of this fast. Some of the ignorant vulgar among the Christian natives, pretend that the Jews have sometimes, on this occasion facrificed a Christian child stolen from its parents; and to some such idle story the English Chaplain Biddulph probably alludes in 1600. "The Jews still observe all their old "ceremonies and feasts, sacrifices only excepted. Yet "some of them have confessed that their physicians kill "some Christian patient or other, whom they have under "their hands at that time, instead of a facrifice 32."

The next fast is one of those observed by the Jews, after their return from the captivity. It is kept on the tenth of Tibeth (which month answers to part of December and January) and is the day on which the Chaldean army commenced the siege of Jerusalem 33. The fourth fast is that kept on the day before the feast of Purim, on the thirteenth of Adar 34.

<sup>31</sup> Soom Chipur שנם כיפור expressed by the Jews צום כיפור In the Hebrew יום הכפרים Levit. xvi. and xxiii. 27. 32. Day of expiation. Ancient Universal History, vol. iii. p. 204.

"It was kept also as a Sabbath, and in the Talmud is called Joma καν "The day, by way of eminence, and by the Hellenistic Jews σαθθατον σαθθατων. Jennings, p. 265.

22 Purchas. lib. viii. chap. 9. p. 1342.

יצום עשרה בטבת by the Jews صوم عاسارا بطبيب العام yethe Jews צום עשרה בטבת

של Soom Efter צום אסתר by the Jews צום אסתר Efth. iv. 16.

This is kept on the thirteenth of Adar, (which in 1776 fell on the 4th of March) but in leap years it is postponed to the 13th of the intercalary month Viedar.

The

The fifth and fixth fasts are kept in commemoration CHAP. of the calamities which befell the holy city. The one, on account of the capture of the city, is kept on the feventeenth of Tamuz 35; and the other on the ninth of Ab, in memorial of the burning of the city and the temple 36.

The fasts mentioned hitherto, are of universal obligation, to be difpenfed with only in certain circumstances; there are others of a voluntary kind, not confrantly obferved. A fast restricted to the first born is kept on the Vigil of the paffover 37; another is kept on the Mondays and Thursdays, for fix weeks together, in the months of January and February 38; and a private fast is kept on the anniversary of the death of parents 39.

But the most remarkable of all the voluntary fasts, is one of fix complete days, during which time those who fast, religiously maintain an abstinence from all kinds of nourishment, not so much as suffering water to enter their lips, and, what they reckon almost an equal hard-

موم شبا عاسار بي تهوز (July) موم شبا عاسار بي צום שבעה עשר בתמוז

יום חשעה באב שפח דו Soom Tisha b Ab (August) צום חשעה באב שפח

These fasts with two others already mentioned are found in Zech. viii. 19. The names, as well as of those that follow, are exactly as written by the Aleppo Jews.

سرور وت Taanit bi hurut سيحوروت

יהענית שובבים דושונה הפין גד הענית שובבים דושונה הפין או See Leon Modena. p. 78.

days of this fast, make their appearance in the Bazar to transact business, but confine themselves afterwards closely to the house, and pass the time in reading the Scriptures, or in prayer. During the two first days, they suffer both from hunger and thirst; but afterwards, the sense of hunger being blunted, they suffer chiesly from thirst. After the third or sourth day, they appear for the most part dull and drousy, their breath becomes in a high degree offensive, and their pulse, sinking, is variably quick, and slow. On the evening of the sixth day, at the expiration of the fast, they moisten the throat with a few spoonfulls of oil of almonds, and afterwards sip chicken broth. They return by slow degrees to the use of folid food, and it is a long while before they recover their former appetite.

It was faid in the former edition, that all the Jews make the attempt to keep this fast once in their lives. But upon further inquiry this proved to be a mistake, the fast being only attempted by a few persons of extraordinary fanctity. In the life time of the father of the present Khakhan, when my brother was at Aleppo, about a hundred persons annually kept it; but, since that Khakhan's death, the number has gradually decreased. During my residence at Aleppo, seldom more than from sourteen to twenty, in the year, attempted to

הענית שכוע דופונגד شابواع Taanit Shabuah הענית

keep it; but few began who did not accomplish it. I C H A P. have been informed from Aleppo, that in the years 1775 and 1776 there were between twenty and twenty-five persons who kept the fast; and a man then living, asserted that he had kept it seven times. The number therefore who make the attempt is inconsiderable, and of those some are unable to complete it. A person who should die in the attempt would be considered not as a Martyr, but as one sinfully obstinate; nevertheless, they often persist so long, as to bring upon themselves a train of tedious disorders, and to some it has been known to prove satal.

The Greek Monks of M. Athos, in the beginning of their Lent, keep a fast of three days, that is, on Monday, Tuesday, and Wednesday, they fast till the third or fourth hour of the night; and in the holy week, after a repast on the Thursday, they maintain strict abstinence till the Saturday evening. The missionary who relates this was astonished at their austerity; and remarks it to his Superior, as far exceeding the practice of the most rigid French Monks. But the Jesuit would have had more cause for astonishment, had he been acquainted with the Jewish sast.

Besides the general annual fasts, the Jews on account of famine, plague, or other public calamities, observe occasional fasts, accompanied with solemn supplications

<sup>&</sup>quot; Mem. de Mission. vol. viii. p. 74.

BOOK in the Synagogue; and there are also private devotional fasts kept by individuals.

A Jesuit Missionary relates a singular religious procession at Aleppo, on account of the depredation made by the locusts, in the circumjacent country. In this the Turks obliged both Christians and Jews to join, and the priests accordingly marched in their respective canonicals. The procession however was without success, which the Missionary ascribes to the indecent association in such an address to heaven 42.

From the extensive connection of the Jews with the commercial world, their fasts and festivals occasion an almost universal stagnation of trade. They not only prove an impediment to the departure of the great caravans, but retard their march when actually upon the road; and even the Bashaws, and other Grandees, are sometimes obliged to postpone the dispatch of their own affairs, when it happens to interfere with the Jewish holydays.

In the Bassora caravans, it is usual for the Jews, when in the Desert, to procure an escort from the caravan-bashi, and make a forced march on the Friday, in order to rest on their Sabbath. The caravan marches as usual, and either takes them up on the road, or they overtake it on the Saturday night. When their holy-

<sup>4</sup>º Mem. de Mission. p. 116.

days happen about the time of a caravan's departure CHAP. from the city, they generally find means of prevailing on the caravan-bashi to delay setting out till after the feast.

That a people so despised should be able, amid so many obstacles, to maintain such a strict observance of ancient institutions, is at once a proof of the power of determined pertinacity, and of the tolerant spirit of the Turks.

In general, the Jews marry at an earlier age than the Turks. Some are betrothed when very young; others only a few months before marriage. As intermarriage is permitted among near kindred, the parties, in fuch cases, have an opportunity of previously seeing and knowing each other; otherwise the bride is secluded according to the manner of the East.

The Jewish marriages are celebrated with great pomp, the nuptial feast continuing seven days. The bride is accompanied by her mother and near relations, and the ceremony is performed in the presence of as many, besides those invited, as can find room in the house; so that there is always a number of Turkish and Christian women among the spectators. The Castle band of musicians is employed the first day, and, on the subsequent days, they have chamber music, dancers, and bussoons. Persons only of inferior rank, as before remarked,

book marked, either dance or profess music, and the Jews have performers of their own nation of both sexes.

The bride is feated in an arm-chair, in the middle of the open Divan, or Alcove, with three enormous painted wax tapers burning before her. She is covered with a red gauze veil, through which her face and drefs are plainly enough difcernable. Her eyelids are closed, and fometimes glued together; her complexion is usually heightened with rouge; and her hands are placed, one on each fide of the class of her cincture. She is richly dressed in Venetian filks, and, besides the usual jewels of gold, she is adorned with precious stones, and a profusion of pearls. Her mother and some near relations sit in chairs on each side, the rest of the women stand, all are veiled, and occupy the space behind the bride, and part of the court yard.

In this fituation, the bride remains exposed to view near an hour before the men make their appearance; fome religious ceremony requiring their attendance upon the bridegroom at the Synagogue. But as foon as that is concluded, they come thence in procession, preceded by the Khakhan and two or three other Rabbies. The music, which had before been playing, instantly ceases when they enter the house, and the procession advancing to the front of the Divan, the nuptial fervice commences. The bride and her two attendants rise from their chairs, and, a part of the service being read.

read, or recited, the bridegroom, conducted by his CHAP. father, ascending the Divan, is placed close to the bride upon the left hand. The father then covering the heads of both with the woollen veil, or taled 43 commonly used in prayer, returns to his place below. In the course of the fervice, (which is rather long) two bumpers of wine are presented to the officiating Khakhan, who, each time, after drinking the wine, throws down the glass upon the pavement. This part of the ceremony differs from the custom in Europe, according to Leon Modena, who fays that the Khakhan chants a benediction over the cup of wine, and then presents it to the bride and bridegroom; that he chants fix other benedictions over a fecond cup, which is likewise presented to the nuptial pair; that the wine remaining in the cup being poured out on the ground, the empty glass is returned to the Khakhan who breaks it on the pavement.

But it is observed by the author that this, as well as feveral other rites, varies in different countries.

I am informed from Aleppo that a ring is put upon the first joint of the bride's forefinger by the bridegroom, which the mother afterwards adjusts properly. Though

Vol. II. M I have

This is described by Leon Modena, p. 15. and 23. See Numb. xv. 38. and Deuter. xxii. 12.

The Jews always put this veil over their head when they pray in their houses, and wear also the Teffelin on their forehead, and on one hand, which are described by Leon p. 24. and 25. See Deuter. vi. 8. xi. 18.

BOOK I have been often present at marriages, this part of the ceremony had escaped my notice.

At the conclusion of the fervice, the veil is removed, and the bridegroom descending from the Divan, receives the congratulation of his friends. He is then attended in procession, by the male part of the company, to his own house, where a grand collation is prepared, consisting of fruits, and a variety of excellent sweetmeats. The bride, with her company, arrives soon after, and is received with the usual acclamation of the women, which joined to the castle music in the court yard, form together an intolerable din. The women feast in separate apartments from the men, and, at night, the bridegroom takes possession of his wife.

The mother and a few of the bride's near relations, remain with her till the end of the week, but the other women retire at night to their own houses, and return, as it suits their convenience, on the succeeding days. The marriage expenses, independant of clothes, are very considerable; for besides entertaining a number of guests for seven days, victuals are distributed to the poor.

It is afferted by Leon Modena, that the Jews ought to marry between the age of eighteen and twenty<sup>44</sup>. At Aleppo, they often marry at an earlier age, and all (however poor) marry at one time or other. Polygamy

<sup>44</sup> Page 83.

privilege, and then only in case of the woman's barrenness, or want of a male child: indeed it is rather held scandalous to have two wives under any other pretence.

While I was at Aleppo, there were not above twenty who had more than one wife. I met with two or three instances, where persons of low condition, on account of their wives barrenness, had taken a second wife, and who soon had the mortification of seeing both become pregnant. In one case particularly, both wives continued for several years to bring a child every sisteen months, which the pious Hebrew considered as a punishment for not trusting to God's providence.

The female married domestics, among the Jews at Aleppo, continue in service till they have children of their own, and are very often employed as nurses in the families of their former masters. The Jewish women more frequently call in the aid of a wet nurse, than the Christians of equal rank, and seldom continue to suckle their child, especially if a male, after they are assured of being pregnant; but, where no impediment intervenes, the child is kept at the breast eighteen or twenty months. They appeared to be more prolific than either the Turkish or the Christian women, but a larger proportion of their children, as far as I could judge, died in infancy.

Intrigues among the Jewish domestics are perhaps more common than among the Christian: not that the

M 2

women

favorable, they are more exposed to temptation, and poverty prevents the servants marrying early. The dread of a national Avania \* makes every one wish to keep matters private, and when a girl proves with child, she is either sent to another town to be delivered, or is provided by the samily with a husband, in time to save her credit. Their illicit amours would appear to be confined to their own nation; for the Veneral Disease, though common among the Turks and Christians, is very seldom met with among the Aleppo Jews.

The Jews more generally than the other natives, believe in the existence of Evil Spirits, and their agency in the production of certain maladies. Disorders of the hysterical kind, epilepsy, and madness, are commonly ascribed to the operation of spirits, and, in such cases, it is remarkable, that they do not trust solely to their own Rabbies, but call in the Mohammedan Sheihs to pray by the patients bed-side, and to exercise various means of exorcism. They are addicted, like the Turks, to judiciary astrology, but appear to be more credulous in respect to the African impostors who profess magic, and go about telling fortunes. Among a multitude of superstitious customs practised by the women, the following is very common. They tie a little piece of rock allum

<sup>\*</sup> See Vol. i. page 316.

upon the headdress of their children, as an unfailing pre- C H A P. fervative against the fascination of evil eyes. The allum, as they pretend, intercepting the baleful influence, is split into pieces, and the child escapes unhurt. It is impossible to persuade many, who are persons in other respects of good sense, that allum thus exposed is liable to crack from natural causes; they appeal to experience, and have always a number of instances ready to produce of the efficacy of the charm.

Some of the Jews pay a devotional vifit to Jerusalem, but the custom is not general. A shorter pilgrimage to the village of Tedis 45 (where they pretend Ezra was buried) is performed by numbers of both sexes, and a few Devotees, in the decline of life, retire to end their days in the holy land, either at Jerusalem, or Saphet.

The town of Saphet is mentioned by Biddulph in 1601, as fituated upon a mountain, where the Jews had an university, spoke the Hebrew, and enjoyed more liberty than in any part of the holy land 46. Maundrel from the top of Mount Tabor, saw Saphet to the Westward, which stands upon a very eminent and conficiency mountain, and is seen far and near. May we not presume that Christ alludes to this city in those words in his Sermon. (Mathew v. 14.47) In the year

<sup>&</sup>quot; Tedif al Bab.

<sup>46</sup> Biddulph in Purch. p. 1350.

<sup>&</sup>lt;sup>47</sup> Maundrel's Journey to Jerusalem.

DOOK 1759, Saphet suffered much from an earthquake. I had occasion some time after, to see a Jewish woman who had been dug out from the ruins of one of the houses.

None of the Eastern people are so attentive to the fick in acute difeafes, as the Jews. The female relations, who take upon themselves the office of nurses, are firictly ferupulous in the exercise of their duty. They are punctually obedient to directions, and are fo diffinct in their report of what happens in the interval of the physicians visits, that in drawing up an account of the epidemical diseases, the journals of the sick of that nation, were always found of particular fervice. The Rabbies administer spiritual consolation to the sick, and have fometimes been observed to accompany their prayers with the following rite, in appearance superstitiously The Rabbi, placed by the bedfide, is provided with a knife, upon the point of which is fluck a fmall piece of bread. This, after pronouncing certain words, is presented to the patient's breast, where it is held fome time, then pointed to the fide, and fucceffively to the stomach and the belly, the Rabbi all the while muttering his prayers.

The conclamation at death is practifed by the women, but hired mourners are feldom called in to affift at the Wulwaly. The corpfe is carried to the grave in a covered

wered bier, and is accompanied by the men only, the CHAP. women remaining affembled at the house of mourning.

The women visit the grave the morning after the funeral, and the morning of the seventh, and of the thirtieth day. Some go thither every morning of the first week. On these occasions, they are not less loud in their lamentation than the Turkish women, but they are more temperate in their gesture. They go out for the last visitation on the anniversary of the suneral. The men visit the grave on the seventh day, and again at the expiration of the year. These are the terms usually observed, though they are not absolutely fixed. The graves, of such of the Rabbies as are particularly respected, are visited by the relations every Friday morning, for a twelve month.

Both fexes make some alteration in their dress by way of mourning. The women lay aside their jewels: the men make a small rent in their outer vestment.

## CHAP. IV.

## OF THE PRESENT STATE OF LITERATURE AT ALEPPO

INTRODUCTION OF LITERATURE AMONG THE ARABS—NEGLECTED BY THE TURKS—SAID TO HAVE REVIVED IN SOME DEGREE, IN THE PRESENT CENTURY.—SCHOOLS.—COLLEGES.—LIBRARIES.—MANUSCRIPTS COLLECTED BY SOME MERCHANTS.—PHILOLOGY.—THEOLOGY.—JURISPRUDENCE.—ASTRONOMY.—JUDICIARY ASTROLOGY.—MAGIC, &c.—MATHEMATICS.—NATURAL HISTORY.—HISTORY AND GEOGRAPHY.—POETRY.

In the beginning of the Moslem Empire, the Arabs paid little regard to other studies than those of their language and their law. Physic indeed, is said to have been in some repute, but it made no considerable progress as a science, till long after, when the works of the ancient Greek physicians came to be translated into the Arabic language.

It was about the middle of the eighth century, when the Empire was transferred to the house of Abbas, that learning began to emerge from its infancy; the introduction of philosophy and other sciences being commonly monly ascribed to al Mansur, the second Khalis of that CHAP. line. The succeeding Khaliss continued to encourage men of learning, particularly the celebrated Haroon al Rasheed; but his son al Mamun, who ascended the throne in the year 813, is universally acknowledged to have been the most eminent patron of learning among the Arabs. He was at great pains and expense in collecting Greek books, and gave the most liberal encouragement to such persons as were qualified to translate them. From that period, Bagdad was resorted to by ingenious men from all quarters, and a taste for literature was rapidly diffused throughout the Moslem dominions.

Of the Emeers, or princes, who, in the decline of the Khalifât, erected States almost independent of Bagdad, there were many who continued to patronise science; and the Syrian Emeers are entitled to a share in this honorable distinction. Under the Atabek, Fatimite, and Ayubite Dynasties, learning still survived, not only amidst domestic seuds, but even amid the more cruel ravages of the Holy War: and, after the abolition of the Khalifat in 1258, it still met with encouragement under the Mamaluke princes, who reigned in Egypt (of which Syria was then a Province) for a space of two hundred and sifty years; or till the final reduction of Egypt by the Emperor Selim, early in the sixteenth century.

Note XVIII.

The Ottoman Turks, a fierce and warlike people, had little leifure, in the infancy of their Empire, for the cultivation of letters, and fince its establishment in Europe, have shown a national disposition so unpropitious to science, that perhaps hardly any thing has been added by their industry to the stock transmitted from the Arabs. It does not even appear that they were at much pains to collect the Arabic manuscripts, which must have been dispersed in the new conquered Provinces, but negligently left them either to perish, or to be transported into other countries, where the language in which they are written is very little understood, or cultivated.

The number of Oriental manuscripts preserved in the European libraries is very confiderable. Besides those in the Vatican, and in feveral private libraries on the Continent, the Leiden, Parifian, Escurial, Florentine, and Imperial catalogues, contain between feven and eight thousand. The Bodlean, at Oxford, possesses between two and three thousand; and the other libraries in Britain, (of which the printed catalogues have fallen in my way) upwards of three or four hundred: the whole together amounting to above eleven thousand volumes, of which much the greater part are Arabic. A rough comparative sketch of the volumes contained in the respective libraries has been inserted in the appendix, from which it will appear what a large proportion is claimed by philology, law, and divinity; and that

the

the whole of the medical books fcarcely amount to feven C H A P. hundred.

Considerable as the European collections may appear, they are not to be compared with the ancient Saracen libraries. Renaudot remarks that upon the extinction of the Fatimite Khalisat in Eygpt, in the year 1171, Saladin, when he took possession of the Royal Treasury, found a magnificent library, consisting of one hundred thousand volumes; and Casiri remarks that the royal library at Cordova, in the tenth century, (if credit may be given to the Arab Historians) consisted of six hundred thousand volumes. A certain Hadgi Calsa of Constantinople is mentioned by Renaudot, whose library in the last century consisted of above forty thousand books.

It is commonly faid, and may perhaps be true, that the Turkish Grandees have within this last half century, applied more to letters, than in former times; but instances are still not uncommon of Bashaws and other great officers, who can neither read nor write. The Mohassil of Aleppo, who held that office many years, was in this predicament. It was matter of surprise to an European, to see a man of that rank under the humiliating necessity of sending for a secretary to read a common letter, or of applying to some person in company to decipher the title of a memorial. Several of the elder Bashaws were almost equally illiterate. Some

<sup>&</sup>lt;sup>2</sup> Note XIX.

to be fond of letters, and appeared at their audiences furrounded with books, and papers. One in particular (Chittijee Bashaw) wrote a remarkably fine hand, and used to have specimens of his own writing hung up in frames, in the chamber where he gave audience.

The peculiar style of state papers, and of complimentary epistles, deviates so much from ordinary language, that the persons employed to write them, make it their particular study and profession; and thus it naturally happened that the Grandees neglected an accomplishment which ancient custom had consigned to the inferior office of a secretary: but though sew of them write, or are capable of writing their own letters, many of them, are at least able to read the language. A great number of the old merchants, are likewise very illiterate, but most of the rising generation in that line of life, are sufficiently instructed to carry on their private correspondence, though in other matters they have recourse occassionally to the Scribes.

Adjoining to some of the principal Mosques, are public day-schools for the education of boys. The teachers are Sheihs who have a fixed salary, besides a gratification from the scholars, according to their circumstances. The boys as they sit in the school, may be seen through large windows opening towards the street, and, as they read aloud altogether, the noise they make in getting

their

their lessons, may be heard at some distance. When CHAP. they read, their body is in continual motion backward and forward, which is not unusual even among the men, in reading the Koran. The scholars are not allowed to stroll in the streets by themselves, but are conducted to and from school, either by servants, or by the master himself, who goes round the houses to know how his pupils behave at home. He is highly reverenced, and the usual way among the women of keeping the boys in order, is by threatning to complain of them to the Sheih.

The colleges3, intended for students more advanced in life, are very few in number. The building commonly confifts of a reading room, a library, an apartment for the Sheih, and fome have a few bed-chambers for fludents, who are also allowed a small pension. The Sheih or Professor's falary is very inconsiderable. In ancient times, the number and condition of the colleges at Aleppo, were much more respectable; but the revenues have in process of time been fraudulently converted to private purposes. The foundation of many of thefe schools stands recorded in books still extant. Eben Shuhnah (a native of Aleppo) has written a history of the city, and, among other things gives a particular account of the Mosques, chapels, schools, and other charitable foundations. His book, on this account (as I was told) was confidered as making difagreeable dif-

<sup>3</sup> Middrase مدر سره

built by Ahmet Effendee, near the Mosque of his brother Omar Effendee. He had collected a number of books at a considerable expense, which he intended for the library.

The modern colleges are more properly seminaries of pedantry and superstition, than of science; and are chiefly frequented by the studious of the poorer class, who dedicate themselves to the service of the Mosque. The young Essendees sometimes attend them, but, after a certain age, they more usually have private tutors at home. Grammar and school divinity are the subjects chiefly taught at college.

Both colleges and schools, (like the Mosques) are for the most part erected by rich men, from motives of real piety, or by way of propitiation for offences against heaven. The Osmanli have another inducement to pious soundations, the right of nomination of trustees, putting it in their power to secure to their family a certain revenue, which is held sacred by the Porte.

It has always been the custom of the Essendees, to assume at least the appearance of respect for learning; but they have no liberal notion of science. Strangers to experiment, they indolently content themselves with what is found in books, and almost every fact, and every opinion for which they can produce written authority, is held to be true. Of the faculties given them by na-

ture, memory alone is exercised, the others either rust C H A P. from inaction, or are employed to purposes very foreign from literature.

Some of them possess, what is reckoned in that country, a considerable collection of books; but it should be remarked, that the number of volumes in an Aleppo library, might easily be contained in a small book case. The books titled on the edge of the leaves, are usually laid flat one upon another, in heaps. A mode of arrangement supposed to preserve them more effectually from dust, but very inconvenient when the book wanted, happens to lie at the bottom of the pile.

It has of late become a fashion among the opulent merchants to collect books, and as they are treasured up with great care, it is impossible to procure the loan of them, and difficult even for persons to obtain access to consult them. The sashion in the mean while (sounded on the mere pride of possession) has greatly raised the value of manuscripts; for the Sheihs, who used formerly to be almost the only bidders at auctions, and who are unable to contend with rich competitors, are now in a great measure excluded as purchasers.

The expense of copying manuscripts is very considerable, though the Scribes earn little more by that kind of labour, than a scanty maintenance. The paper in common use is imported from France and Italy, and is glazed at Aleppo. Their ink is almost as thick as print-

BOOK ing ink, and their ordinary pens are of reeds, of a dark reddish colour, somewhat thicker than the common reed.

When a manuscript of any consequence is finished, it is usual to invite a certain number of Sheihs and Effendees to be prefent at the reading of it. Each person comes provided with a copy of the book to be collated, together with a standish and a pipe, and, while one reads the new codex aloud, the others keep their eyes attentively fixed on their respective manuscripts. Slight mistakes, or omissions in punctuation, are quickly corrected in going along, without interrupting the reader; but when more important errors, or various readings happen to occur, they lay down their books, refresh their pipes, and deliberately proceed to consider the matter. On fuch occasions, the debates and digreffions are apt to run out to a great length, fo that the main business which brought the company together, very often advances flowly.

The learned bestow a great deal of time upon the Arabic language, and the more studious Essendees continue throughout the better half of life, to receive occasional lessons from their old masters. The pronunciation of the pure Arabic is widely different from that of the vulgar tongue, being always read with the vowels distinctly exprest; and, besides giving a full sound to the vowels, the pronunciation of the learned Arabic is remarkable,

markable, on account of what is termed nunnation, CHAP. which confifts in doubling the vowel points at the end of words, and reading as if they terminated with the letter N. Thus the word Ridgil a man, written and pronounced in the common way without the vowel points, is in the language of the learned, pointed, and read Rajulon, the vowel point, 'o, u, or oubeing doubled' (which is the nunnation) having the fame effect as if the word ended in N<sup>4</sup>.

They have a great number of books on philology, which feems to be their favorite study. Besides the two large dictionaries, the Sehah and Camus<sup>5</sup>, they have a variety of modern abridgements.

Theology<sup>6</sup> and jurifprudence<sup>7</sup>, comprehending scholastic divinity, and the voluminous commentaries on the

م المجل رجل معنا. See more on this subject and on that of the vowel points. Note XX.

'Al Sehah السحاح This work has been translated by Golius in his Arabic and Latin Dictionary. The author died about the year 1007, and was named Abu Nasr, Ismael, Ebn Hamad, Al Jauhari.

Al Camus الغاموس. The Thefaurus of the learned Giggeus was principally compiled from this Arabic Dictionary. The author's name was Mohammed Ebn Jacub, Ebn Mohammed, al Shirazi, al Phizuzbadi, and he died at the age of almost ninety in the year 1414. See Golius Præfat.

The author of the Camus speaks of a large dictionary named Lama confisting of fixty volumes, and written before the Sehah of which he also makes mention. See Herbelot.

In the Escurial catalogue, a much more ancient dictionary than either of those, is mentioned, Cod. 566, the author of which is supposed to have died about the year 693.

علم الكلام Alm al Calam

<sup>7</sup> Alm al Fekah على النقه See Herbelot, p. 343. and Note XXI.

Vol. II. O Koran,

BOOK Koran, and the Sonna, conflitute the principal objects of Mohammedan study. The ancient writers on those branches are numerous, and having in a manner exhausted the subject, the modern students are occupied in collecting promifcuoufly, the opinions of their anceftors, without venturing to correct errors, or to remove any thing from the heap of learned lumber. A curfory view of the authors referred to in the preceding note will show what an ample field is open for Mohammedan theology; and by looking into the catalogue of Oriental manuscripts preserved in several libraries in Europe, the reader will find that the student versed in the Mohammedan law, must acquire his knowledge by turning over a multitude of volumes. The books on divinity and law appeared to be preserved at Aleppo with more care, than those which treat of history, or other fubjects; but to what degree they are studied, I was incapable of judging.

Of the four great Mohammedan doctors or lawyers, the founders of fo many orthodox fects, which still bear their names, Abu Hanifa Ebn Thabet, is in most repute in Syria, though the others also are highly respected. He died at Bagdad in the year 767.

The Hanifites are termed the followers of reason, (Ishab al Raay) in distinction from the other three sects, who in their legal decisions pay more regard to the traditions of the Prophet and his companions 8.

<sup>&</sup>lt;sup>9</sup> Note XXII [‡].

Aftronomy, once fo favorite a study among the CHAP. Arabs, is at present wholly neglected. Many books on the subject are preserved in their libraries, and they have also some instruments; but so little is known of the science at Aleppo, that during my residence there, one person only was found capable of calculating eclipses, and on that account had the reputation of a most prosound Astronomer.

Before the introduction of Greek Learning at Bagdad, Aftronomy among the Arabs, hardly deferved the name of science; but after that period it became a fashionable study, and, under royal patronage, was cultivated with some success. The Khalif Al Mamun particularly distinguished himself in that branch, being the author of celebrated tables, which are mentioned by Al Fraganus in his elements of Astronomy 10. But notwithstanding the aid they borrowed from the Greeks, and the savorable serenity of the climate, they are said to have made sew improvements 11.

علم الهياة or علم الهياة or علم الهياة or علم الهياة Alm al Heya; but in the vulgar tongue it is not distinguished from Astrology, both being called علم النجوم Alm al Nidjoom, the science of the Stars, and a professor of either is indiscriminately called منج Minidjm.

<sup>&#</sup>x27;o Golius Alfragan. c. v. and viii. Pocock Specimen p. 6. Marigny Hist. des Arabes.

<sup>&</sup>quot; Note XXIII [‡].

воок

Judiciary Aftrology 12 still retains its credit in the East and pretenders are always found ready to take advantage of the popular credulity. Some of the Grandees retain an aftrologer among their dependants, and the Ullama do not appear to dispute the truth of the science; though the populace chiefly are the dupes of imposture. The aftrologers pretend to foretel future events from inspection of the Horoscope, and predict wars, pestilence, and other public calamities; but, for the most part, they are very fuperficially acquainted with the principles of the science they profess, and talk of Albumasar as well as other ancient writers, without having ever feen their works 13. Their almanacs are very neatly written, but feldom

12 Though Judiciary Astrology be commonly confounded under the same name with Astronomy, Alm al Nidjoom, it is sometimes distinguished with more precision, Alm al Ahkam al Nidjoom علم (صناعة) .الا حكام النجوم Alm (finaat) Al Ahkam al Nidjoom. Renaudot makes a very good remark on the fondness of the Orientals for judiciary astrology. Hist. Patriarch. Alexandr. p. 275.

13 The name of this celebrated aftrologer is Jiafar Eben Mohammed Ebn Omar Abu Maashar al Balkhi, and may serve as an instance of the confusion produced by naturalizing proper names from a foreign language. Albumasar, pronounced in the English manner, would be altogether unintelligible in the East; for no one could divine that Al Abu Maashar (the father of Maashar) was the person meant.

A List of the works of this author may be seen in the Escurial catalogue; as also an account of his life from an Arabic author.

feldom constructed at Aleppo, being brought either from C H A P. Conftantinople or Cairo. They are written on long narrow fcrolls, in ink of various colours, and are divided into feveral columns containing the Greek, as well as the Arabian, days of the month, the days of the week, and the figns of the Zodiac. Two other columns are allotted to aftronomical remarks; the fortunate and unfortunate days, and rules for preferving health, &c. and at the top of all, is traced a Horoscope for the year. For fetting out on a journey, beginning any work, and even letting blood, or taking physic, a preference is given to certain days of the week; and this superstitious distinction of black and white days, though not rigidly obferved by the Turks, is common in a certain degree to all the natives.

Magic, or forcery 14, with various modes of divination 15, are practifed in private; for these occult sciences are not approved of by the Ullama, and fortilege 16, which had been fo much in use among the Pagan Arabs, was expressly forbidden by the Prophet.

his death is not mentioned there, but he is faid to have lived to the age of a hundred, and if he died, as supposed, in the year 885, he must have been born 15 years earlier than the time mentioned by Herbelot.

علم سحر Alm Sihr علم سحر " Alm al Rumle علم الرمال

علم الغال Alm al Fal

The two last are often in conversation used synonymously, though al Rumle more properly fignifies geomancy, and the Fal Sortilege and Augury, the word Fal fignifying Omen. See Pocock Specimen p. 323.

BOOK The influence of evil eyes, is of all the species of fascination, that which meets with most general credit. Children and young animals, being supposed peculiarly liable to the malignant influence, are provided with various charms by way of defence, and it is owing to a fuperstitious apprehension of evil eyes, that the peasants confent with reluctance to let any person enter the rooms where their filk worms are feeding.

Nescio quis teneros oculus mihi fascinat Agnos.

The Greeks and Romans were not more addicted to this fuperstition, than the Orientals are at this day. Among a variety of inftances univerfally believed in Syria, I have heard it afferted that there was a Kurdeen, lately deceased, who had been known to crack a large chrystal vase, by merely looking at it from a distance. It would have been unpolite to have betrayed incredulity on this occasion. "The being ignorant of the cause "takes from the credit of history, but innumerable "things have evidently existence, although the causes " of them are hidden from us17." Yet it would have puzzled the fubtilty of a Greek fophist, to have faved so extraordinary a story from ridicule.

The universal belief in forcery and occult influence of various kinds, naturally maintains the credit of Talif-

<sup>&</sup>quot; Plutarch Sympos. lib. v. Q. 7.

mans, and Amulets; fome of which, being fanctified by CHAP. religious superstition, are employed in one form or other by the natives of all ranks. The Talisman 18 consists of certain caballistical characters engraved on stone, metal, or other substances, or else written on slips of paper. It is not requisite to their effect, that they should be constantly carried about, for they may be deposited with equal success in particular places; and in this respect feem to stand distinguished from the Amulets, which are always fixed to some part of the body.

Though the Turks frequently have recourse to charms they are less expensive in their Talismans, than some of the more Eastern people, and do not so much give way to that superstition. ' They have charms against scorpions, ferpents, bugs, and other vermin; but one employed to protect the houses from Musquetoes deserves particular notice. This charm confifts in certain unintelligible characters contained in a little flip of paper, which is pasted upon the lintel of the door, or over the windows. The charm, or rather divine gift, has descended hereditarily in one family, which diffributes the papers gratis, on a certain day of the year, and some of the gravest Effendees are employed in writing them previously to the anniversary. On the appointed day, the people repair to the gate of the house early in the morning, and to each in turn is delivered the papers required, together

<sup>&</sup>quot; Telsem dlung

BOOK with a quantity of paste sufficient to fix them up. Certain conditions are indispensably necessary to give efficacy to the charm. The person must be fasting, and must preserve inviolable silence, till after the paper has been fixed in its proper place. It may be eafily conceived that a multitude parched with thirst, and crowding close together in a May morning, some pushing for. ward, others endeavouring to return with the prize, amid a hundred obstacles, the mischievous petulance of such as mingle in the crowd merely to provoke others to a breach of the conditions, and the hard task exacted of the females to remain mute amid numberless temptations to fcold; fhould in the event prove favourable to the Musquetoes. The Effendees who distribute the papers, go through their part of the farce with admirable folemnity of countenance, and in most of the Turkish houses of lower rank, those and other papers of the like kind may be observed formally pasted up.

The Amulet 19 is composed chiefly of certain names

## حمایل Himail

The Amulets above mentioned (diftinguished from those of a medicinal kind which are composed of various drugs) are somewhat of the same kind with the frontals of the Jews, and the phylacteries adopted in the early times of christianity, which, though condemned by some of the fathers of the church, are still in use among some of the Eastern Christians. Whether such as are supposed to act by magical power be distinguished in the Arabic, from Talisman's, I do not exactly know: I believe Telsem and Himail are used indiscriminately for both.

Several manuscripts on the subject of Amulets and Talismans are preserved in the Escurial library. See Cassiri, Bibliot. Arabo-hispana. v. i. Assemani Bibliot. Medic. Pal. Cod. 486.

of the Deity, verses of the Koran, prayers, or the like, CHAP. comprehended in small bulk, in a form convenient to be worn. Little slips of paper of this kind rolled up are often concealed in the shash of the Turban.

There is commonly at Aleppo, one, or more, of the medical tribe, who have acquired a fufficient finattering in alchymy to beggar themselves by the expense of a laboratory, and the neglect of better business; but the alchymist is in general to be met with among the adepts in aftrology, and other occult arts 20. The poffibility of the transmutation of baser metals into gold, is believed in speculation by many of the Ullama; but the fraudulent practifes of pretended artists have so often been detected, that people are become more cautious, and instances are now rare of their falling into the snare. Giaber Ebn Heian is one of the most celebrated Arabian alchymists. Herbelot fays there is a book of his entitled Kitab Giaber, and a great number of works on the fubject of the philosopher's stone. He lived about the middle of the ninth century, which is two hundred years later than the Era affumed by some writers 21. He is

<sup>•</sup> Al Kimia الكيميا

The word Simia with Kimia. Inever observed it applied to alchymy, nor even to natural magic, in which last sense it is probably understood when joined with Kimia. Herbelot, p. 810. Note XXII.

Herbelot p. 387, Boerhave Element. Chem. tom. i. p. 15.

BOOK mentioned in the Arabic Literary History of philosophers, but it does not from thence appear when he lived 22.

Mathematical studies <sup>23</sup> do not enter into the general plan of Mohammedan learned education, and admitting a few exceptions, are so universally neglected, that the science, in respect to the modern Arabs, may be said to lye entombed in the voluminous writings of their ancestors. Euclid was among the Greek writers whose works were first translated into the Arabic. Hejiage Ebn Joseph made a translation for the Khalif Haroon, and afterwards another more complete, by command of Al Mamun. Cassiri has given an account of Euclid's writings extracted from the Arabic Literary History of philosophers. Renaudot, who was far from being partial to the literature of the Arabs, allows them some merit in mathematics and geometry <sup>24</sup>.

They are taught practical arithmetic <sup>25</sup> fufficient for the ordinary purposes of business, but it may be remarked that the native merchants usually making their calcu-

lations,

<sup>22</sup> Cassiri Bibliot. Arabo-hispana, tom. i. p. 423. M S. p. 251.

<sup>&</sup>lt;sup>23</sup> Hindesi or Alm al Hindesi عام الهندسة or عام is the term vulgarly used in a general sense for mathematics, but more particularly for geometry.

<sup>&</sup>lt;sup>24</sup> Bibliot. Arabo-hispana, tom. i. p. 139. Renaudot Epist. ad Dacer. Fabricus, Bibliot. Græc. lib. ii. c. 24.

<sup>25</sup> Arithmetic is termed Alm al Rukm علم الرقم, or Alm al Hisab

lations, however complex, without the affiftance of pen C H A P. and ink, the Europeans are often furprized at their adroitness, where merchandize of various forts and value are included in the same bargain. The Turk merely from his head, varies the proportions, adds, multiplies, and divides, and in his turn, wonders that the European unnecessarily fills up half a sheet of paper with cyphers.

In Algebra <sup>26</sup>, they are as superficially versed as in the other branches of mathematics. The Arabs however are generally allowed to have improved Algebra, and to have introduced the knowledge of it into Europe; while they themselves ascribe the invention to Diophantus <sup>27</sup>.

Natural history, and the experimental part of physics, have made no progress for many centuries. The errors in the first, which have been transmitted in succession

الجبر Al Gibr جبر الم

<sup>&</sup>quot; Algebra vox Arabica est, Analysin Mathematicam exprimens, latine in integrum Restitutio. Quum itaque partes unitatis Arithmetici Fractionis (kisura) vocitent: recte quoque earundem in unitatem integram Coitus انجيبار (Angibar) dicitur. (Cassiri Bibliot. Arabo-hispana, tom i. page 370. Golius not ad Affrag. p. 11.

The term Gibr, according to Herbelot, is never used by the Arabs for Algebra, without adding the word Mocabelah, thus al Gibrwa Mkabulah I have not remarked this to be the case at Aleppo, and in books, Al Gibr is certainly used sometimes alone, as well as in conjunction with Mkabulah.

<sup>&</sup>quot; Note XXIII.

experiments as are found in books, being supposed unquestionably correct, are never repeated. The literatiare in a manner wholly ignorant of the later improvements and discoveries made in Europe; they express little desire for information, and seldom seem interested in philosophical intelligence, unless where the facts related border on the marvelous.

It does not appear that experimental philosophy was at any period much cultivated by the Arabs. In natural history no doubt, especially in respect to subjects peculiar to their own country, they made some additions to what they received from Aristotle, Theophrastus, Dioscorides, and other Greek writers. Damiri, whose works are much esteemed in the East, will be mentioned in another place, and in a future note, the titles of some other manuscripts on the subject of natural history will be inserted.

History 28 is little studied by the literati of Aleppo. They give themselves no concern about other countries, and know little or nothing of distant states, or of the revolutions of the great Empires in the Western world. They are in general but superficially versed even in the Saracen history, notwithstanding the number of books which have been written on it, many of which are not

علم التاريم Alm al Tarikh علم التاريم

furprising. The learned men do not make it a regular fludy, in the manner they do law; they are inattentive to dates and chronology; history supplies little more to conversation than unconnected anecdotes, retailed without precision; and in their political discussions, they have recourse rather to recent examples than to the experience of ancient times.

As the Arabs have never been at much pains to learn the history of other nations, so their own history anterior to the appearance of their prophet, remains in great obfcurity. Their various compilations, under the title of universal history, contain very short, and often very inaccurate accounts of the ages before that period. As to the times after Mohammed, their historians form a numerous class; and it is the opinion of the learned and indefatigable Reiske, that the Europeans, under more favorable circumstances, particularly that of enjoying the art of printing, have not been more assiduous in writing history than the Arabs: comprehending under that denomination all of whatever country, who wrote in the Arabic language.

It may further be remarked, that the Greek historians were not among the authors translated into their language, and, though from them they must have derived what they retail of ancient history, the short extracts necessary for this purpose were not sufficient to correct

their

B O O K their taste, or give them a relish for elegance in composi-

Their geographical <sup>30</sup> writers are almost as much neglected as the historians, so that their practical knowledge in that branch, being derived chiefly from occasional observation, lies within narrow bounds. They have no good maps, except such as have been imported from Europe <sup>31</sup>. The names of a few geographical writers whom I recollect seeing in the East, are inserted in the appendix; besides which they had several anonymous tracts on the same subject, probably collections from larger works. The reader will find ample information concerning the Arabian geographers in Graves's translation of Abulseda's presace to his tables, and in Kochler's translation of the Syrian tables, published with notes by Reiske 1766 <sup>32</sup>.

Some of the Grandees who occasionally come from Constantinople to Aleppo, especially such as have held the place of Reis Essendee, are better instructed in the geography of the European countries connected with the Porte, and better acquainted with Western politics: but their information, acquired in office, through the chan-

<sup>29</sup> Note XXIV.

جيوغرا نيا 🕫

<sup>31</sup> Ragab Basha showed me, a set of maps neatly printed on white silk, with the European names inserted in French, but written in Arabic characters.

<sup>32</sup> Note XXV.

nels of intrigue, is feldom free from mifrepresentation or prejudice, and as they have not the historians of other countries translated into a language they can read, it is not possible, under such disadvantages, to form correct and liberal notions of foreign history. It is common however for the great men among the Osmanli, to pretend to some knowledge of European affairs; and it is owing to the ignorance and simplicity they betray through this affectation, that in their occasional conferences with Europeans, they often subject themselves to the rash contempt of travellers.

Of the fifter arts, one alone may be called reputable in Syria. Superfition has banished painting; and music, degraded by fashion to a mercenary profession, is rather tolerated than encouraged.

Poetry 33, which from the earliest times had been successfully cultivated by the Arabians, and which met with patronage from several of the Ommiyan Khaliss, at a period when the sciences languished in contempt, still maintains a certain degree of respect among men of letters. But though poetry continues to be admired, the muses may be said to have sled. The Essendees peruse their ancient poets with the unpropitious frigidity of mere grammarians, and the modern Aleppo bards, perhaps from despair of reaching the excellence which they

علم الشعر Alm al Shair علم

B O O K feem so enthusiastically to admire, never attempt any performance beyond a dirge, a ballad, or an epigram.

To poetry has been ascribed the preservation of the language, as well as of the early history of the Arabs, during that rude period when writing was hardly known in Yemman 34.

" At the beginning of the seventh century, the Arabic " language was brought to a high degree of perfection " by a fort of poetical academy, that used to assemble at " flated times in a place called Ocadh, where every " poet produced his best composition, and was sure to " meet with the applause it deserved: the most excel-" lent of these poems were transcribed in characters of " gold upon Egyptian paper, and hung up in the tem-" ple (at Mecca) whence they were named Modhahe-"bat, or golden, and Moallakat, or suspended: the " poems of this fort were called Casscidas or Eclogues, " feven of which are preferved in our libraries, and are " confidered as the finest that were written before the "time of Mahommed. The fourth of them composed " by Lebid is purely pastoral, and extremely like the " Alexis of Virgil, but far more beautiful, because it is " more agreable to nature. The feven poems which " compose the Moallakat, clearly transcribed with ex-" planatory notes, are among Pocock's manuscripts at Oxford No. 164, and in the same collection No. 174,

" there

Pocock Specimen, p. 160. Cassiri Bibliot. Arabo-hispana, tom. i. page 84. Note XXVI.

"there is a manuscript containing above forty other CHAP.

" poems, which had the honour of being suspended in \_\_\_\_\_\_

"the temple at Mecca: this volume is an inestimable

" treasure of ancient Arabic literature."

The English reader will peruse with pleasure the essay on the poetry of the Eastern nations 35, from which I have taken the liberty of transcribing the above passages; and the Arabic scholar, in a more elaborate work entitled Poeseos Asiaticæ Commentarii, will meet with instruction conveyed in a clear, and elegantly simple manner, which is far from common in Arabic criticism. Both are the productions of a gentleman eminent in the literary world, whom the happy conjunction of a genius for poetry, a ciassical taste, and masterly knowledge of the Oriental languages, qualified in a singular manner for the task he imposed upon himself.

I faw a number of poetical manuscripts in the East, but was not qualified to judge of them. The Moallakat are not uncommon <sup>36</sup>. I procured a copy without difficulty and sent it together with several other manuscripts from Aleppo to Holland, at the request of a friend of Mr. Schultens.

<sup>25</sup> By Mr. now Sir Wm. Jones.

Note XXVII.

## CHAP. V.

## OF THE STATE OF PHYSIC, AT ALEPPO.

INTRODUCTION OF THE GREEK PHYSIC AMONG THE ARABS.—MEDICAL PRACTITIONERS.—ARABIAN WRITERS ON MEDICINE.—MODERN PRACTICE OF PHYSIC.—CHRONIC DISEASES.—EMPIRICS.—SURGERY.—OPERATION OF COUCHING THE CATARACT.—LITHOTOMY.—BLEEDING, CUPPING, SCARIFICATION.—REDUCTION OF FRACTURES AND DISLOCATIONS.

IT remains to give fome account of Arabian physic: not as it lies buried in the neglected volumes of ancient writers, but as it survives in the practice of the present professors of the art, at Aleppo.

The fanatic zeal which difgraced the early conquests of the Saracens, would probably in its attempt to extirpate all profane learning, have admitted a distinction favorable to medical books, could they have been easily separated from those reckoned philosophical; but from the account transmitted of the destruction of the Alexandrian library, they seem to have perished indiscriminately in the slames.

Abu'l Furrage Hist. Dynast. p. 114. (Pocock Specim. p. 165.) Modern Universal Hist. i. p. 496 Eutych. Annal. ii. p. 316.

If fo much time, as the accounts referred to, re- CHAP. prefent, was taken up in confuming the manufcripts, it is not improbable that Johannes Grammaticus, whose intercession with the Arab general, had unfortunately brought on the barbarous decision of the Khalif, found means of faving something from the general conflagration. But the number of volumes contained in the royal library, cannot well be estimated from the multitude of Bagnios reported to have been in Alexandria; for paper alone could not have been the only suel used in the Bagnio stoves, for six months, and it does not follow from what Abu'l Furrage says, that each of the four thousand Bagnios had a share in the distribution.

M. Renaudot considers the whole story as rather fabulous; and, after observing that the ancient Ptolomean library had perished in the first Alexandrian War, he mentions both the library in the Serapæum, and the Ecclesiastical library, seeming to think it uncertain which was meant by Abu'l Furrage<sup>2</sup>.

It may however be remarked, that the only historian by whom the circumstance is mentioned, calls it expressly the royal treasury, or library; the one in the Serapæum is mentioned long after the destruction of the temple of Serapis, in the time of Theodosius; and it is the general opinion of the learned, that the library of

<sup>&</sup>lt;sup>2</sup> Hist. Patriarch. Alexand. p. 170. Gibbon's Decline and Fall of the Roman Empire, vol. v. p. 342.

BOOK the Serapæum was destroyed at this time by the Sara cens<sup>3</sup>.

The supposed decisive proscription pronounced by the Khalif Omar, may probably have operated also in the other Provinces; for it appears when learning afterwards grew into repute, that the Arabs were obliged to have recourse for books, to places still under the dominion of the Greeks; and one of the first Abbasside Khalifs was reproached by the Zealots of those times, for having injured the Moslem cause by the introduction of supersulvous erudition, and vain philosophy.

The Greek physic was introduced among the Sara. cens, at the same time with the Greek philosophy, and both generally were cultivated by the same persons; hence most of the celebrated Arabian writers are almost equally distinguished by their philosophical as by their medical works. Indeed the word Hakeem<sup>5</sup>, which at present is vulgarly used for a physician, was formerly in a more extensive sense employed to express a philosopher, or man of science.

Medicine still being regarded as a branch of philosophy, the literati always pretend to some speculative

<sup>&</sup>lt;sup>3</sup> Modern Universal Hist. v. i. p. 497.

<sup>&</sup>quot; Fieri non posse quin Deus certas de Al. Mamone (Chalifa) pœnas fumeret, quod Scientiis Philosophicis introductis, Mohammedanorum pietatem interpellaverit." Auctor Arab. apud. Pocock Specimen, p. 166.

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knowledge of it; yet however the art may be held in CHAP. efteem, it is very feldom practifed by the Turks themfelves: in consequence of which the field is left open to the native Christians and Jews.

The actual practitioners in physic are the only medical professors, and teach the art to their sons or pupils, more in the way of example than precept. The master rarely descending to a formal explanation, leaves it to the student to discover the rationale of the practice as well as he can: hence the pupil's progress depends chiefly on his own natural fagacity, and assiduous observation, unaffisted by the master, or any well conducted choice of books.

It is requifite, in order to exercife the profession of physic within the city, to have a license from the Hakeem Bashi, an office commonly bestowed on an Essendee of some eminence, who, being himself no competent judge of the merits of the candidate, is under the necessity of trusting to one of the faculty, whom he appoints to act as examiner, or (which is far from uncommon) he grants his license upon receipt of his see, without the ceremony of previous examination. It is not therefore to be wondered at, that the most ignorant pretenders should sometimes be qualified at the expense of a sew Zechins; and that, though the license may be recalled upon complaint of mal practice, the regulation serves less in reality to secure the publick health, than to surnish the Hakeem Bashi with plausible pretexts for extortion.

The works of the principal Greek physicians, were translated under the patronage of the Abbasside Khaliss, in that period so honorable to Arabic literature, between the middle of the eighth and middle of the ninth centuries: and were in the sequel commented upon, abridged, or, under various shapes, transsused into the voluminous compilations of a multitude of authors who wrote in Arabic. Among translations from the Greek, extant at Aleppo, were parts of the works of Hippocrates, Galen, Dioscorides, Oribasius, Ætius, and Paulus Ægineta. Detached tracts of the two first are very common; but of the others none are met with entire, extracts only from their works, being found in the Arab systematic writers.

Some of the philosophical and medical works of the Greeks, had been translated into Syriac by Sergius, and others, long before the eighth century. M. Renaudot adopts an opinion (in which he has been implicitly followed by Dr. Friend in his history of physic<sup>6</sup>) that most of the first versions of the Greek authors into Arabic, were made from the Syriac copies, not from the Greek originals, and consequently were translations of translations: from which, joined with other circumstances, he infers that the Arabic versions, imperfect as they are, and poorly executed, can be of no utility in elucidating obscure passages in the Greek writers. Other learned

<sup>\*</sup> Vol. ii. p. 8. and 19.

men differ from him in this point, and with great ap-CHAF. pearance of reason, vindicate the injured reputation of the Arabic translations 7.

The Hippocratic Physic, according to some of the Oriental writers, had been introduced into Persia, (or perhaps revived) in the time of the Emperor Aurelian, about the year 272, by certain physicians in the suite of the Emperor's daughter, who was married to Sapor king of Persia<sup>8</sup>.

Of their own medical writers, besides those generally known, they have many others whose works have never been translated, and of which some remain buried in the European libraries. Among the first may be reckoned Mesue, Haly Abbas, Avicenna, Albucasis, and Ebn Radwan, called by the Latins Haly Rodohan. Among the latter may be enumerated Honain, Ebn Beitar, Ebn Radwan, before mentioned, Ebn Al Naphis, and a numerous tribe of commentators upon Rhazis, and Avicenna.

Under the general title of Arabian authors, are comprehended all who wrote in the Arabic language, whatever their native country might be; for Rhazis, Avicenna, and many others, were only in this fense Arabs. Such of them as have been translated into Latin, are generally known in Europe, but I have nevertheless thought it

Note XXVIII.

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them together in one view, subjoining at the same time, a few miscellaneous remarks?

On the merit of their works I do not presume to offer any opinion, not being fufficiently conversant in them to fay much from my own knowledge. Dr. Friend was at confiderable pains to examine feveral of them, through the medium of barbarous translations; and where he delivers his own fentiments, fpeaks of them with candour and liberality 10. But perhaps the following paffage may be ascribed rather to Renaudot than to him, which I am inclined to think, from what the Doctor fays afterwards, founded upon his own inquiry. "I believe one may " venture to affirm, that the Arabian learning, however " magnified by their own nation, and by fome European " moderns, was entirely derived from the Greeks: and "this race of men was fo far from making great im-" provements in any science, that whatever they trans-" lated orimitated they made worse"." In another place however, he observes "though for the most part they " are little better than copiers of the Greek, yet we " must be so just to them as to say that we are indebted "to them for fome improvements in physic"." Could Friend have read the Arab authors in their own language, or if he had had more leifure to bestow on perusing

<sup>\*</sup> Note XXX.

<sup>\*</sup> History of Physic, vol. ii. p. 30.

<sup>&</sup>quot; Ibid p. 19.

<sup>&</sup>quot; Ibid p. 204.

them, he probably would have been less disposed to join CHAP. in Renaudot's harsh censure.

If the modern Aleppeen practitioners therefore are illiterate, it is not to be ascribed to the want of books. But as already observed, they pursue no regular course. of study; their reading at best is defultory, and few of them are tolerably versed in the canon of Avicenna, though manuscripts of that work are far from being scarce at Aleppo, and the printed Roman editions are very common. The books most read are modern abridgements of ancient authors, or collections made from various writers, either jumbled promiscuously together, or arranged in tables, or fubdivisions, agreeably to the fancy of the compiler. A book of this kind descends by inheritance in the family, and being fometimes enriched with choice recipies, or fecrets, it is carefully preferved till the failure of male heirs brings it into publick circulation.

It is not furprizing that fuch ill directed reading, should produce a superficial kind of knowledge, which in physic, as in other branches of learning, is usually attended by pedantic affectation, arrogance, and obstinacy. Tenacious of early prejudices, the students shut up the inlets of knowledge; their practife in the fequel, however extensive, tends little to the improvement of the art; because their ingenuity, instead of producing new or useful practical hints, is misemployed in reconciling their observations to the exploded theories they have hap-

Vol. II.  $\mathbf{R}$  on the study of history and chronology, they are very ill qualified to exercise critical skill in the selection of authorities, to which they pay implicit submission. This last circumstance, with the common Oriental practice of loading the margin with notes or remarks, renders the medical manuscripts in a peculiar degree liable to corruption; for, besides that less care is taken in comparing them, than in books of Divinity, it more frequently happens that the ignorance of the Scribe, by transferring foreign passages into the text, subjects the original author to the reproach of Anachronisms, repetitions, and contradictions, of which he never was guilty.

The practitioners of physic, at Aleppo, are numerous. The belief in predestination (as before remarked\*) not preventing the Mohammedans when sick from applying for medical assistance, their doctors are well received by the Grandees, and generally respected by the populace. Those of eminence in their profession do not practise surgery; but all prepare the medicines for their own patients, and keep shops at their house, or in some more convenient situation, to which the sick, or their attendants, repair at certain established hours. Numbers also resort thither not for medicines, but merely for advice, which is dispensed gratis to all comers; and as people

<sup>\*</sup> Vol. i. page 235.

of fashion, in slight indispositions, call in for the same CHAP. purpose, the well frequented shops are often filled by a crowd of various ranks. The men are received in one room, and the women in another adjoining, separated by a latticed partition.

Profound skill in the pulse being professed by all the doctors, the first thing in examining the fick, is to feel the pulse, with much affected attention, as if from that alone the diftemper could be detected. They afterwards proceed to ask questions, but so artfully as to obtain the information they want, and at the fame time leave the patient in the perfuaiion that they had divined all before asking. They pretend also from the pulse, to distinguish pregnancy, nay even the fex of the Fætus in the womb: a trick of empiricism of much more pernicious tendency than the former; as it often leads to the destruction of the child, by exhibiting rough deobstruent remedies, adapted to female obstructions, and at other times, by an opposite mistake, women labouring under real discase are confidently amused with hopes of pregnancy, till their neglected complaints become desperate.

Their practice may in general be faid to confift in specious trifling. They enforce a scrupulous observance of all the minutiæ of regimen, they harangue in technical terms, and temporize ingeniously with the prejudices of the patient, and the semale attendants. In acute distempers, they seldom venture to administer any medicine of powerful operation; they pursue no main curative in-

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BOOK tention with steadiness, but suffer the opportunity to pass, and confume the time in wavering, inconfiftent attempts, to palliate intervening fymptoms of little confequence. As long as matters carry a favourable appearance, the doctor gives close attendance, and is prodigal of his medicines: but the moment impending danger is perceived, he cautiously provides for his own reputation; he no longer administers internal medicines of his own preparing, but prefcribes some safe domestic remedy, or perhaps fends an ointment to be applied to the region of the liver; he flackens his attendance, and fometimes, abstains from visiting altogether. In this dilemma others are called in, who usually condemn all that had been done before, make fome frivolous alterations in the patient's regimen, give great hopes of recovery, and with a promife, (very confolatory to the women) to return early next morning, leave the patient to expire in the night.

As the death of the patient is often, by the women, afcribed to the remedy which happened to have been last administered, the extraordinary precaution of the doctors is easily accounted for; but the reason is not so obvious why they should not endeavour to get credit for their fagacity, by communicating to the relations, the apprehension of approaching danger, when clearly perceived. Established custom has however determined otherwise. Many curious reasons, derived from the influence of the mind over the vital functions, are given why

why the patient should never be informed of his danger: CHAP. but these do not hold with respect to the relations, who are in like manner deceived with assurances of recovery, at the very instant the doctor has determined in his own mind, to return no more. To these indeed, though people of sense do not always lend implicit saith, they indolently encourage the deceit, and are displeased with the doctor who ventures to alarm their sears by unwelcome truth.

An European, before he has established such a footing in the country, as leaves him at liberty to pursue his own mode, finds himself often embarassed by a custom so generally adopted by the faculty. I seldom dared to risk plain truth to the patient himself, in cases of danger, but never concealed it from some of the relations. My dismission was sometimes the consequence, the hint being construed into a decisive opinion of the case being desperate. Declining to give medicine admits of the same construction, so that it was often sound expedient for the peace of those concerned, to prescribe where no medicine was required, as well as where there were no hopes of its being of service.

In acute diseases, they bleed at the beginning, and fometimes, very imprudently, repeat the operation in the advanced stages of putrid severs. Emetics are little in use, but in case of Nausea, vomiting is excited by large doses of simple oxymel. Purgatives are rarely given till after

The rest of the treatment chiefly consists in abstinence from animal food, and in plentiful dilution. In the way of internal medicines they exhibit nitre in very small doses; absorbents; cordials composed of simple distilled waters, aloes wood, sandal wood, musk, and subacid sirups; and about the time of the crisis, a few grains of oriental Bezoar are administered with the utmost caution, it being considered as one of the most powerful medicines in nature.

The diet of the fick confifts of a variety of dishes prepared from barley, rice, and the pulse called mash, mixed with cooling herbs, or the juice of subacid fruits; some of the summer fruits, particularly water melon, and pomegranates, are also admitted. Ice is approved of by some, though highly condemned by others, but all agree in recommending the liberal use of barley water, and, by way of variety, plain water, or Raib, which is Leban diluted with water\*.

The chambers of the fick are kept well aired, but never darkened. In the hot feafon, it is a common practice to fet a broad shallow vessel, filled with cold water, close to the bed-side. Into which throwing a number of fresh-gathered cucumbers, the patient is invited to plunge his arms, or to grasp a cucumber in each hand, till the fruit becomes hot, when it is changed for a fresh one.

<sup>\*</sup> Vol. i. page 118.

By dabbling in the water, and frequently changing the CHAP. cucumbers, it is believed that the feverish heat is attracted from the liver and the other viscera. In certain cases, the bed is strewed with fresh leaves of the common willow, covered only with the under sheet; cooling embrocations are applied to the temples; cataplasms, or linaments of various kinds to the hypochondriac region; and the feet and hands are stained with Henna. In cases of coma, or delirium, the head is covered with a sheep's cawl warm from the carcase, and sinapisms are applied to the soles of the feet: but blisters, being regarded as too violent a remedy, are seldom or never used.

How far this method of treatment, which excludes all rougher medicines, may be supposed, in conjunction with other causes, to contribute to the remarkable regularity in the periods and crifis of diseases in that country, may deserve consideration: it is sufficient at present to remark, that in ordinary fevers of the continual kind, the medical practice feemed well adapted to the climate, to the manner of living, and natural conftitution of the natives. Where more active medicines were employed, the disease neither appeared to be shortned, nor in the event, was fuccess more constant. But the case was widely different, with respect to the vernal, as well as autumnal Tertians; to other epidemical fevers allied to the tribe of intermittents; and fevers of the bilious, putrid kind. The early and liberal use of the Peruvianbark, brifker evacuations at the beginning, and more acB O O K tive antiseptic medicines in the advanced stages of the disease, had manifestly the advantage over the ordinary method of the country, under which, intermittents being allowed to run out to a most tedious length, were very often succeeded by obstructions in the viscera; while the other severs more frequently proved satal.

Every fickly season at Aleppo, in an extensive practice, affords ample opportunity of making the comparison; for besides the European physicians own patients whom he attends throughout, and treats in his own method, he is often called occasionally to visit patients who are under the care of the native doctors, and has opportunities of remarking the effects of blood-letting, in late stages of the disease, when no European would advise the operation. It is often in vain that he opposes it; nor is it uncommon to find himself, amid inveterate prejudices, constrained to remain an inactive spectator of the conduct of nature, from the beginning till the termination of the sever.

But though comparatively a greater proportion of the fick recovered in putrid fevers, yet the disease, however treated at the beginning, pursued with little variation its assual progress, and terminated nearly at the same critical period. The method of cure preferred to that adopted by the natives, was safer, though not more expeditious; and the constancy of nature in her operations, was less affected by the officious interposition of art, well or ill conducted, than might have been expected.

What

What the ingenious Mr. Cleghorn fays of Tertian CHAP. fevers, in Minorca, we found to be extremely correct, and equally applicable to the fevers in Syria. "The "longer I was converfant among the fick, the more I " was furprifed at the constancy of nature in the pro-"duction and progress of Tertian fevers; their periods " being perfectly fimilar in the Spaniards and in the " English; and sometimes not very different in him who " lies upon the bare ground, destitute of assistance, and " those who are treated in the most judicious methods "under every advantage of fortune: and frequently " neither the patient's intemperance, nor unskilful ma-" nagement, can alter their stated course, and prevent " their terminating in recovery. So much are those mis-" taken, who imagine that the bent of nature in acute " difeases can be altered or controuled by every trisling " accident or infignificant prescription 13."

In chronic diseases, where consequences are more remote, the medical practitioners are less timorous; and when once they have given a name to the disease, turning to the correspondent title in their books, they proceed according to art, with tolerable steadiness: unless when interrupted by some adventitious symptom, which though unimportant, obliges them to suspend every other consideration till it be palliated or removed. Compliance

Observ. on the Epid. Dis. of Minorca. p. 149.

manner unavoidable; for they are much disposed to change doctors, and, in continued illness, to try secretly the skill of every new pretender. The doctors employ much artful address to prevent this; but in the meanwhile, the principal disease is neglected, and the time is permitted to elapse without doing any thing material. A concession of more trivial consequence is that of varying the form of the medicine, it being difficult to persuade the patient to persist for any length of time, in the use of the same remedy, unless he has experienced very sensible benefit from it.

Their fuccess in chronic diseases, as far as they admit of cure, (for all are indiscriminately attempted) depends on their not mistaking one for another; the method of treatment varying little in essentials, from what has been transmitted by the Greek physicians. Mistakes in this point seldom happen in simple diseases of that class, but are very common in those of a complicated nature. They decide considently, and having once declared an opinion, they pay very little attention to circumstances which might induce them to alter, or retract it.

It naturally furprifes an European, to observe in what a peremptory tone they decide on the seat of the disease, in Anomalous complaints, especially in visceral obstructions; notwithstanding that the practice of opening bodies after death, is not permitted, and none of them ever saw the parts of which they talk so familiarly.

It is not the heat of the climate, or the pollution in-c H A P. curred, by touching a corpfe, which are the only objections to diffection. Both Turks and Christians are deterred by considerations of another kind.

When Ragab Bashaw (whose manner of thinking in most matters were uncommonly liberal) resided at Aleppo, he offered to give me a written permission to open any subject who had died, of what I considered as an extraordinary disorder. I was discouraged however from accepting the offer; for though nothing was to be apprehended while the Bashaw remained in the government, the family of the deceased might, after his departure, have been involved in trouble: there not being wanting persons capable of bringing malicious accusations of murder, and of producing the mangled body in evidence against the near relations. It was easy to have found legal means of securing myself, though not of securing others from vexatious consequences: the affair therefore was dropped.

I remember an instance of an old Christian oculist, who happened to labour under a disorder which rendered it necessary, a short time before he died, to have part of the prepuce cut off. After the poor man's death, an Avanist found means of harassing the relations at the Mahkamy, under a pretence, notoriously false, that the deceased had renounced his faith, and been legally circumcised.

Their knowledge of anatomy is acquired by reading, not from diffection, and both anatomy and physiology remain precisely in the state in which they were transmitted by Galen. So far from improving either, few of the Doctors are tolerably acquainted with what is contained on these subjects in their own books: but a ready invention admirably fupplies the defect; they change the fite of the viscera, vary the distribution of nerves and blood vessels, at pleasure, and, when necessary to their demonstration, can even create new bones, unknown in the European skeleton. On all these topics they harangue plausibly, in a torrent of excellent terms, and with the happiest assurance, introduce the names of Hippocrates, Galen, or Avicenna, in support of the most ridiculous and abfurd opinions.

Their ignorance of the circulation of the blood, leaves them quietly in possession of the ancient doctrines, which were held facred, before that important discovery. Among others, is that of revulsion, which leads them in bleeding, to be scrupulously exact in the preference of particular veins. They remain equally unacquainted with other modern discoveries in physic, and, except the little they may have learnt from the Franks fettled in their country, know nothing of the use of mercury, ipecacuanha, the peruvian bark, or the preparations of antimony. But while this want of literary correspondence with other countries, has deprived them of information in many useful improvements, it has at the same time

time faved them the fruitlets labour of wading through CHAR the ingenious and exploded theories, which fince the refloration of learning, have arisen successively in Europe.

They have a copious Materia Medica, and their books contain a large collection of compound remedies; though their practice is in general confined to a few officinal preparations. Their Prescriptions always confift of a farrago of ingredients, the merit of a prescription, being usually rated from the number crouded into the paper. The precious Stones, Pearls, Bezoar, and leaf Gold, are in high efteem. The principal cordials are the confections of Alkermes, and Hyacinth. The Theriac prepared at Venice, maintains the chief place among the antidotes, of which they keep a variety in their shops. The few chymical preparations which are in use, are brought from Constantinople, or other places; the Aleppo pharmacy being chiefly confined to the diftillation of simple waters, and the preparation of sirops, conserves, and decoctions; for spirituous waters, tinctures, or elixirs, are profcribed by the law of Mohammed 14.

To Forskal's Description of Eastern animals, is joined the Cairo Materia Medica, which is much the same with

<sup>&</sup>lt;sup>14</sup> An account of the Arab materia medica and pharmacy, may be found in Mesue de Re Medica, and Avicenna Canon. Lib. v.

Arabic trivial names are in many inftances different from those in use in Syria. The chymical preparations, the bark, the woods, &c. have been introduced there by the Venetians; but the custom at Cairo is different from that of Aleppo. At Cairo, the physician writes, and his prescriptions are made up by apothecaries, some of whom being Franks, their shops are probably better furnished than those of the natives. The Attars at Aleppo are Grocers as well as Druggists, and deal in a great variety of articles. It is a proverbial saying, that every thing is to be found at the Attar's shop, save forced love.

The description now given of the practice and practitioners of physic at Aleppo, is not to be understood as without any exception. Individuals are always to be found not only more learned, but in their practice sagacious, active, and rational; and who, allowing for the disadvantages under which they labour, are entitled to merit in their possession.

There are others of an eccentric genius, who sometimes appear, and, striking out of the ordinary tract, distinguish themselves by a bolder mode of practice. Such commonly affect some singularity in their dress and manners, and, while they indulge the sick in certain

<sup>&</sup>quot; Kûl shé ànd al Attar illa Hubny bil rusb.

things univerfally profcribed by their colleagues, are CHAP. fantastically rigid in other points of regimen. They assume a confident air of authority in giving their directions, and upon the fmallest contradiction, or deviation from rules they abandon the Patient, without the least regard to his rank or fituation. It is furprifing to fee the implicit submission paid to a Genius of this fort, by persons accustomed to distant respect, compliance, and adulation. The doctor rarely endeavours, in the usual manner to prevail, by entering into a discussion of the nature of the disease, and showing the necessity of fubmission: his opinions are oracular, and his advice is delivered with an air fo frigidly indifferent whether it be followed or not, that the Patient aware of the confequences of difobedience, fubmits quietly to fuch conditions as the fofter eloquence of the faculty could never have obtained.

A doctor of this character, well known to my brother, died about the time of my arrival at Aleppo, and left behind him the reputation of having practifed with a fuccess almost miraculous. His sayings were quoted as indisputable aphorisms, and it was considered as a sufficient medical qualification, to have been even for a short time, a disciple of Eben Joseph al Kebeer.

The fon of Joseph, the Great.

Surgery is less cultivated than physic, and the operative part, in cases attended with risk of life, lies under so many discouragements that it is no wonder it should be so much neglected. The natives, from an idle notion, not discouraged by the faculty, that a steel instrument imparts something noxious to the sore, submit with great reluctance to the simple incision of a common abscess, so that tumors, being lest to open of themselves, are liable to all the consequences of small apertures, and the use of tents. Pestilential buboes are seldom opened by incision.

The application of the trepan, of the bubonscele amputations, and other capital operations, are never ventured, nor are the surgeons, had they resolution to operate, provided with proper instruments, In cases of gangrened limbs, the business is commonly committed to nature; the gangrened parts are left to separate of themselves, and drop off; and it is not till after the patience of all is worn out, that the surgeon at length perhaps ventures to saw the bare bone, which had long deformed the stump, and impeded the cure.

Such extreme caution in the use of the knise arises partly from the dread of a supervening hemorrhage, and partly from the chance of being involved in a prosecution at law; for it is not uncommon among the lower people, by way of evading payment, to carry a complaint to the Mahkamy of their having lost a limb, or suffered other irreparable injury, through the unskilful

management of the furgeon; and, notwithstanding the CHAP. defendant has no doubt of being acquitted of the charge, the suit is attended with so much expense, that he sometimes finds it to be more his interest to avoid it by a compromise with his patient in accepting half pay; or perhaps by renouncing all demands on account of his labour and attendance 17.

In order to obviate such vexatious consequences, it is customary for the more prudent practitioners, previously to undertaking any dangerous case, to have recourse to the Mahkamy for a legal testimonial, (Hugget) which ensures a certain sum for their attendance, proportionate to the success of the cure, and secures them from litigious persecution afterwards, whatever may be the event. Under this sanction, they venture the extirpation of wens, and schirrous tumors; and sometimes lithotomy, as well as couching the cataract.

It is not certain whether Surgery in ancient times lay under similar disadvantages, but the caution in undertaking difficult cases, recommended so strongly by Albucasis from prudential motives, is remarkable. "In omni loco sequentis libri, digito quasi monstravi operationem quæ timorem et periculum comites habeat. Oportet vos, vobis caventes, talem sugere et evitare. Evitate, inquam, ne occasionem habeant nebulones (الجاهل) vos culpandi et calumniandi. At morbos periculi plenos et sanatu difficiles omittite. Albucasis (de Chirurg. p. 7.) Vos ergo præmoneo et jubeo, ne suscipiatis earum aliquem, in quo quid sit vobis dubium et obscurum. Ibid.

The word irrendered nebulo by Mr. Channing, often means gnorant, and seems to stand in that sense in the above passage.

BOOK But few of the town Surgeons attempt these two last operations; leaving them, like the more hazardous of the others, to itinerant practitioners of more courage.

In regard to lithotomy, they cut on the gripe, and with tolerable fuccess in children; but very few adult fubjects furvive the operation. Indeed, few adults confent to run the hazard, till worn with pain, and reduced to an ill habit of body. Another circumstance appears likewife unfavorable to them, by bringing on an inflammable difposition in the bladder. For sometime previously to the operation, the patient is carried daily to the Bagnio, in order that the parts may be relaxed, and he is often obliged to fuffer excruciating pain from the pressure, and frictions on the pubes and perinæum, made with a view to bring the stone into a proper situation. Their apparatus confifts of a razor, a kind of scoop, and an ill fashioned forceps; but the forceps is only used when the stone cannot be extracted with the fingers. The modern catheter, and the gorget, are unknown.

The risk and inconveniences attending the practice of Surgery, have probably led the Christian and Jewish natives to give the preference to physic, consigning manual operations to the Mohammedans; who, though not absolutely exempt from Avanias, are less subject to the overbearing insolence of the Moslems, more especially of the soldiery, and of others most liable to such casualties as fall under the province of surgery.

Though

Though the physicians relinquish operations, with CHAP. the treatment of tumors and ulcers, to the professed furgeons, all of them occasionally condescend to bleed particular patients: the rest are bled by the surgeons and barbers, both of whom profess Venesection18, Cupping 19, and scarification 20. This last operation confifts in making a few fuperficial incisions on the lobe of the ear, or on the calves of the legs, and is univerfally practifed on children, who are feldom bled earlier than the age of feven or eight. The quantity of blood taken away in this manner being very inconfiderable the aid of leeches is fometimes called in, but the lancet is not admitted, and bleeding at the jugular vein is by the good women reckoned infallibly mortal. The Tishreet is also practifed in adults, but then the incisions in the calves are made deeper, and above an inch and a half in length; and cupping glasses are sometimes applied over them. The operation is performed with a razor.

Cupping with, and without, scarification, is a practice in high esteem. Glasses are commonly used which are fixed by means of a little slaming cotton, though sometimes the skin is raised by suction through a horn. The various parts to which cupping glasses are applied are mentioned by Albucasis (de Chirurg. p. 491) and the present practice remains nearly the same.

<sup>&</sup>quot; Ffadey فصاله.

مجامه م حجامه هوا حجامه عباسه Hidjamey مجامه هوا .

<sup>°</sup> Tishreet. تشریط

BOOK

The lancets commonly used in bleeding are European, of a very inferior fort; but the bleeders in general, who are unaware of danger, are tolerably dexterous, and bad accidents arifing from the operation, are providentially very rare. Unacquainted with the danger of the operation, they perform without the leaft apprehension of touching an artery, or a tendon; and will fometimes, though the other veins lie fair, open the basilic, when the pulsation of the subjacent artery is almost visible to the eye. Notwithstanding which, I had not occasion, in the course of twenty years, to see more than four or five inflances of aneurism produced by the lancet. But it may be remarked that the veins of the arm for the most part are conspicuous, and an artery, though contiguous to the vein, may often escape unhurt, from the bluntness of the instrument. Accidents from puncture of the aponeurofis, are much more common 21.

The reduction of diflocations and fractures, is less

Albucafis (de Chirurg. p. 473.) Avicenna. (Vol. i. p. 221. Edit. Araba. p. 155.)

practifed

This rashness in bleeding is owing entirely to the illiterateness of the common operators, for the Arab writers are very explicit in their directions for bleeding, and in pointing out the danger of wounding the artery, or the tendon of the arm. Albucasis is more full on the subject of venesection than even Oribasius, or Paulus Ægineta, from whom he has borrowed; and Avicenna, whose Canon is more common at Aleppo than Albucasis's furgery, fays, " Basilica quoque magni est timoris propterea quod arteria cadit sub eâ."

practifed by the surgeons, than by persons who make a c H A P. distinct profession of it, and who very often are self raduated old women. The various plasters and ointments applied in most of these cases, serve only to inslame the skin under the splints and bandages; while sad mistakes in other respects, are frequently committed from want of knowledge in anatomy.

The Europeans who profess physic at Aleppo, are for the most part natives of France, or Italy, and, as far as local prejudices will admit, purfue the national mode of practice of their respective countries: those who have been fome time established, and have acquired the language, find fufficient employment among the natives of all ranks, and, with proper address, are almost certain of being favorably received by the Grandees. But all, in some degree, lie under an imputation of employing medicines of violent operation, and are unjustly suspected of administering such remedies, in critical circumstances, as must inevitably, should they fail to cure, kill the patient. This vulgar prejudice, which probably was encouraged by fome who had an interest in its being propagated, though lefs prevalent now than in former times, has still influence, and added to the expense of an European's attendance, frequently prevents application being made till the patient, reduced to extremity, is given up by his former doctors.

The English Physicians in particular are supposed to use violent remedies; my late brother was perhaps the

Turks; his predecessors, at least for a long while before, having seldom been at the trouble of learning the languages, or taking much pains to conciliate popularity, by an affable compliance with the customs and manners of the country. He at first had many difficulties to encounter, many prejudices to overcome; but he luckily succeeded, and thus left a clearer path for those who might succeed him.

From any thing that remains, little is known of the medical gentlemen of other nations who may have refided at Aleppo, in the last century; but it is very probable that while the Venetian establishments flourished in Syria, and the works of the Arab medical writers were in more credit, in the European univerfities, fome ingenious men of the profession must have practifed in that country, whose observations might perhaps have thrown as much light upon its natural and medical history, as those of Prosper Alpinus have done on that of Egypt. Honorable mention is made by Alpinus, of Joannes Jacobus Mannus, who had practifed feven years at Cairo with great success, and was called to Aleppo, by the Venetian Conful, about the year 1581. How long he refided there does not appear; but on the road thence to Constantinople, he was murdered by the Janizary who efcorted him. His death, according to Alpinus, was a great loss to Arabic literature; as he was mafter of the language, and had written

written a learned commentary on the fecond Book of CHAP. Avicenna. It was his intention also to have corrected the whole of Avicenna's works, of which the translations are confessedly very erroneous.

Mannus succeeded Joannes Thomas Minadous, who had resided at Aleppo several years, and was afterwards a celebrated professor at Padua. He died in 1615 and lest several medical works 22. His signature is affixed to the honorary Diploma presented by the university of Padua to our celebrated Harvey.

From the foregoing sketch it will sufficiently appear, that physic (as well as other sciences) is at a very low ebb in Syria, and that in the present circumstances of that country, there is little prospect, of those who profess it being roused from indolence by due encouragement, or excited to attempt improvements by a liberal spirit of emulation.

<sup>&</sup>lt;sup>12</sup> Prosper Alpinus (Hist. Natural. Egypt.) Mangetus, (Bibliotheca Scriptorum Medicor.)



#### THE

# NATURAL HISTORY OF ALEPPO.

### BOOK IV.

OF QUADRUPEDS, BIRDS, FISHES, AND INSECTS: AND OF THE PLANTS GROWING IN THE EN-VIRONS OF THE CITY.

## CHAP. I.

### OF QUADRUPEDS.

THE OX—BUFFALO—SHEEP—GOAT—WILD BOAR—GAZELLE—HARE
— RABBIT — PORCUPINE — HEDGE HOG — JERBUA — CAMEL — ASS —
HORSE—DOG—CAT—RAT—MOUSE—FIELD MICE—HAMSTER—MOLE
—BAT—POLECAT—JACKAL—FOX—WOLF—SHEEB—HYÆNA—LYNX—
BLACK-EARED CAT—PANTHER—LION—BEAR, &c.

THE view with which this work was originally un- CHAP. dertaken, fuggests the propriety of beginning the account of animals, with such as in Syria are of most general service to man.

Vol. II.

There are two varieties of the Cow¹. One of a large fize, with a thin belly and long flender legs, like the figures of that animal often feen on antique Intaglios; the other is in bulk confiderably fmaller; the hams in both are short. There are but few black cattle to be feen near the city, and they serve chiefly for the plough and the water wheel; for the Turks and Jews seldom or ever eat beef, and it is only of late that it has been introduced among the native Christians: what is killed is principally for the tables of the Franks. The beef in quality is tolerably good at all seasons, but in highest persection at the end of harvest. Veal² is seldom brought to market, and is much inferior in quality

The few Buffaloes<sup>3</sup>, found in the vicinity of Aleppo, are kept chiefly on account of their milk; their flesh

to the beef.

though

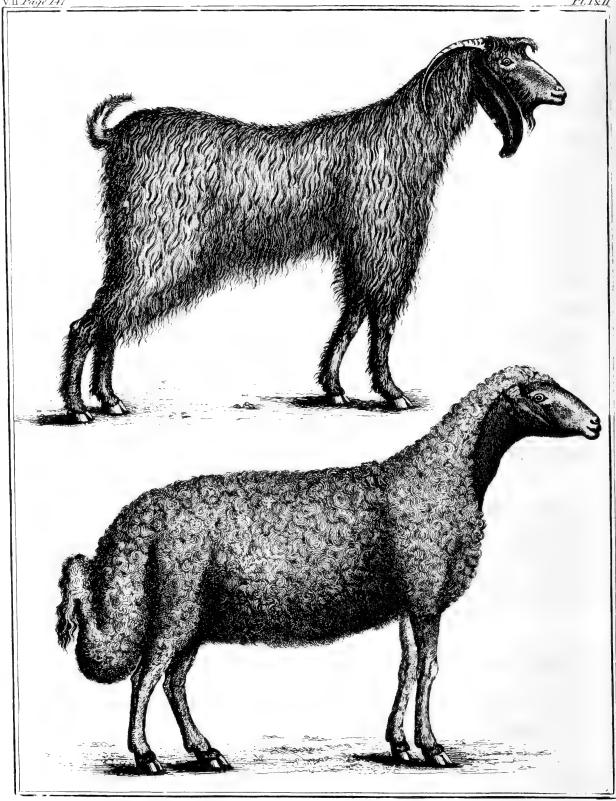
Bos Taurus Linn. Syst. Nat. p. 98. النور, al Thaur النور. Bos Taurus Linn. Syst. Nat. p. 98. Bukre in Arabic is the generical name; Thaur, is applied only to the bull. The etymology of the Arabic names may be found in Damiri, as cited by Bochart, in whose laborious work are also contained many curious circumstances, collected from ancient writers, relative to the Natural History of animals. See Note XXXI.

<sup>&</sup>lt;sup>2</sup> Adgel عجل

<sup>&</sup>lt;sup>3</sup> Jamoos جاموس. Bos Bubalus. Linn. S. N. p. 99. Buffon (Hift. Nat. iv. 437. Tab. xiv.)

Buffon is of opinion that this animal is improperly named Bubalus by modern writers, and that Aldrovandus was in the right in calling it Buffalus. See Note XXXII.





though not ill tasted being seldom eaten<sup>4</sup>. It is a very CHAP. common animal in many of the marshy parts of Syria: at Scanderoon there are large droves which are occasionally slaughtered for the use of the English ships, but the milk, which they yield in great abundance is the most material article to the Kurdeens.

Of sheep<sup>5</sup>, two varieties are found at Aleppo. The first called the Bidoween sheep, differs little in appearance from the large breed in Britain, except that the tail is somewhat longer and thicker. The second is much more common, and on account of the extraordinary bulk of it's tail has been remarked by all the Eastern travellers<sup>6</sup>. The Carcase of one of these sheep without including the head, seet, entrails, and skin, weighs from sifty to sixty pounds, of which the tail makes up sifteen pounds; but some of the largest breed, that have been fattened with care, will sometimes weigh one hundred and sifty pounds, the tail alone composing one third of the whole weight<sup>7</sup>. This broad slattish tail

<sup>&</sup>lt;sup>4</sup> Prosper Alpinus remarks that the slesh of the Bussaloes in Egypt, is pleasant to the taste and easy of digestion; and that the Tongues salted are sent to Venice. (Hist. Ægypti naturalis, Pars prima, p. 228)

<sup>5</sup> Runnam الغنم. Ovis Aries Linn. S. N. p. 97.

<sup>6</sup> Ovis Arabica platyura Linn. S. N. p. 97.

<sup>&</sup>lt;sup>7</sup> Leo Africanus afferts that he saw at Asiot in Egypt, a sheep's tail weighing eighty pounds. (Africæ Descript. p. 293.) Symon Simion in his Itinerary talks of the sheep's tails in Egypt weighing seventy pounds. (Iti-U 2

very small at the extremity, it turns up in the manner represented in the figure 8. It is entirely composed of a substance between marrow and fat, serving very often in the kitchen instead of butter, and cut into small pieces, makes an ingredient in various dishes: when the animal is young, it is little inserior to the best marrow.

The skin taken from the under part of the tail, is used by the natives as a remedy for sprains, and painful swellings of the joints. It is applied fresh to the part, and allowed to remain till it becomes abominably setid, which it commonly does in less than twenty-four hours. The same remedy is often also applied to the head and abdomen in severs, with a view to remove internal obstructions: but in such cases, growing putrid

neraria, Cantab. 1778. p. 39.) But these enormous tails were produced by pampering the animal with bran and barley; the tails of others, sed in the usual way, were from ten to twenty pound weight.

Buffon cites nine or ten travellers who had feen sheep of this kind in various parts of the world, and found the weight of the tail to be from twenty to thirty pounds. (Hist. Nat. ix. p. 357.) Villamont says he saw them in Syria, &c. of thirty three pounds and upwards. (Voyage, Liv. 3. p. 628.)

Plate I.

The tail when the animal walks, makes an odd wrigling motion. I have been told by the shepherds that on a certain occasion their assistance is requisite; but where the weight of the tail does not exceed the ordinary weight of sifteen or twenty pounds, the Ram himself finds means of removing the impediment.

more quickly, it is extremely offensive to the attendants, C H A P. and, in general, detrimental to the patient. I have feldom, if ever, observed much benefit from the application, except in old rheumatic pains.

The sheep of the extraordinary size above mentioned are very rare, and usually kept up in yards, so as to be in little danger of hurting their tail as they walk about; but in the fields, in order to prevent injury from the bushes, the shepherds, in several places of Syria, six a thin piece of board on the under part, which is not like the rest covered with wool, and to this board are sometimes added small wheels: whence, with a little exaggeration, we have the story of the Oriental sheep being under the necessity of having carts to carry their tails.

When this story is applied to the sheep near Aleppo, it may certainly be ascribed to exaggeration; for though increase of size might expose the tail to be injured by the thistles or bushes, and render the expedient of the board necessary, where wheels could be of little service, no increase of bulk could well bring it to trail on the ground. But the necessity of carriages for the tails of the African sheep, mentioned by Herodotus, Ludolphus, and other writers, is real. The tail of that animal when sat, actually trails, not being tucked up like that of the Syrian sheep. I have seen some at Aleppo, brought from Egypt and kept as curiosities, which agreed exactly with the sigure given by Ludolphus. In the sigure of the Barbary sheep in Busson's History,

but has the appearance of being in an emaciated state, in comparison with the Barbary sheep I have had occafion to see?

The mutton is fat and well flavoured throughout the year, except a few weeks in the fpring, and the want is then fupplied by excellent lamb. It conflitutes the most considerable part of the animal food of the natives, and the markets are always abundantly supplied.

There are two varieties of the goat 10, one differing very little from the British, the other not less remarkable for its ears, than the sheep for the enormous size of their tail 11. The Syrian goat is larger than the sort common in Britain, and has pendulous ears which are often one foot in length. The kid slesh is very well tasted, and is brought to market in the spring and autumn; but the goats are of most service on account of their milk, which is perfectly sweet and of agreeable slavor, the rising grounds in the neighbourhood of the town affording excellent pasture.

Wild hogs 12, are frequently found in the neighbour-

<sup>9</sup> Herodotus (Thalia.) Ludolfus (Hist. Æthiopica lib. i. cap. 10) Harris (Voyage's i. p. 390.) Busson (ix. p. 390.) Alpinus (Hist. Ægypt. Nat. p. 229.)

<sup>&</sup>quot;Capra Hircus. Linn. S. N. p. 94. تيس Tees تيس Capra Hircus. Linn. S. N. p. 94.

<sup>&</sup>quot; Capra Mambrica. ib. p. 95. Plate II.

<sup>&</sup>quot; Hanzeer. حنزير. Sus scrofa. Linn. S. N. p. 102.

ing hills, and in the country about Jibool and the Salt CHAP. Lake; and they sometimes approach much nearer the city. -I have known instances of their coming into the gardens within half a mile of the town. One in this fituation being purfued, ran directly towards the city, and entering Garden Gate, made his way through feveral streets to the court of the Great Mosque, where he took shelter. He met with no opposition in his way, the Turks shunning him, not only from fear, but likewife from the notion of his being an impure animal; and this last circumstance secured him in the quiet posfession of his refuge, till some persons less scrupulous could be found to expel him. So fingular an adventure happening in the beginning of the Russian war, in 1768, was confidered by fome of the superstitious, as a portent of future misfortunes.

They are usually shot by the peasants who lie in wait for them near the fountains and streams, whither they come to drink in the night, then loading them upon asses, they bring the carcases to town for sale. They used formerly to be brought to one of the Consular Houses, and were there divided; but of late, they have sometimes been publicly exposed to sale in the Jideida.

In former times boar-hunting was a favourite diverfion among the English gentlemen of the Factory, but has long been laid aside.

The wild Hog is faid to feed chiefly on liquorice root, which grows in abundance in the plains towards

and beginning of winter, the flesh is delicious, very fat, but remarkably digestible. Tame pork is a rarity at Aleppo; no hogs being bred there, except now and then by the Franks in their own stable yards, when they happen to receive a present of a breed from Cyprus, or from the English ships at Scanderoon.

It is remarked by Prosper Alpinus, that in Egypt, most of the Turks and Moors keep young swine in their stables, from a notion of their being of service to the horses, and that on this account (the sless prohibited) they willingly barter a hog of one year old for a young pig. The sless, he observes, is more delicious, and light than in Europe 13.

The country round Aleppo abounds in Gazelles or Antelopes 14, which are diftinguished by the natives into those of the mountain, and those of the plain. The former is the most beautifully formed, its back and neck are of a dark brown colour, and it bounds with surprizing agility; the latter is of a much lighter colour, its limbs are not so cleanly turned, and it is neither so strong nor active: both however are so fleet, that the greyhounds, though reckoned excellent, cannot, without the aid of the Falcon, come up with them, except

<sup>13</sup> Hist. Ægypt Natural: p. 230.

<sup>14</sup> Ghazal, اغزات Capra Dorcas Linn. S. N. p. 96.

in foft, deep ground. They are gregarious, and often CHAP. appear in large herds within a few miles of the town. They permit horsemen without dogs, if they advance gently, to approach near, and do not feem much to regard a Caravan that passes within a little distance, but the moment they take the alarm they bound away, casting from time to time a look behind, and if they find themselves purfued, they lay their horns backward almost close on the shoulders, and flee with incredible swiftness. When dogs appear they inftantly take alarm, for which reason the sportsmen endeavour to steal upon the Antelope unawares, to get as near as possible before slipping the dogs, and then pushing on full speed, they throw off the Falcon, which, being taught to strike or to fix upon the cheek of the game, retards its course by repeated attacks till the greyhounds have time to come up. diversion is noble; but the sportsman must ride hard who expects to be in at the death.

Haffelquist gives an account of hunting the Antelope with the Hawk alone, which he had an opportunity of feeing at Nazareth; but this is not practifed at Aleppo. He also remarks that the animal when taken, shows a fondness for the smoke of tobacco<sup>15</sup>.

The Gazelle when taken alive, becoming (except when old) foon familiar, is allowed to walk in the court yard, or the public Khane, and will approach the peo-

Voyage in the Levant, p. 190.

BOOK ple when at meals. I have frequently observed them fnuff up the tobacco smoke which was purposely blown in their faces; but it did not strike me as peculiar to the Antelope: having observed goats and sheep, which had been in the same manner domesticated, do the same thing.

The Antelope venison, during the winter or sporting season, is well flavoured, but very lean; in the spring it is rarely met with, but is then fat, and of a flavour which might vie even with English venison: some that has been sattened in the house, occasionally appears at the tables of the Franks, but in point of taste is reckoned by the epicures much inferior to the wild.

The Hare 16 is likewise distinguished into two sorts, differing considerably in point of size. The largest is the Turkman Hare, and chiefly haunts the plains; the other is the common Hare of the Desert: both are abundant, and afford excellent sport in the winter. The gentlemen of the Factory used in sormer times to hunt with English hounds, but were under the necessity of having an annual recruit from Britain; for sew of the hounds could resist the hot season, and the breed was sound soon to degenerate. I have been told that the English hounds lost half their scent in the first generation, and in time lost it entirely. At present the gen-

<sup>16</sup> Arneb ارنب Lepus timidu, Linn. S. N. p. 77. Pennant (Synops. p. 248. Br. Zool. p. 88.)

tlemen course with native greyhounds, assisted by a C H A P. hawk of the same kind with that employed for Antelopes. The company confifting of twenty or thirty horsemen, servants included, draw up in a line at the distance of fix or eight feet. Near each end of the line, which is termed the Barabar, two brace of greyhounds are led by footmen, and advanced a little before the centre, the Falconer rides. It should be remarked that the dog leaders are furprizingly adroit in finding a hare and are encouraged by a reward if they give proper notice, which is done by calling out deliberately, Yatoo! (She fleeps!) In this order the Barabar marches flowly, and as foon as the hare is put up, one, or a brace, of the nearest hounds are slipped, and the Falconer galloping after them, throws off his hawk. Such of the company as choose follow; the others remain standing in the Barabar, to which the sportsmen return when the chase is over. The Hare cannot run long where the hawk behaves properly, but fometimes getting the flart of the dogs, she gains the next hill and escapes. It now and then happens, when the hawk is fierce, and voracious in an unufual degree, that the hare is struck dead at the first stroke, but that is very uncommon; for the hawks preferred for hare hunting, are taught to pounce and buffet the game, not to feize it, and they rife a little between each attack, to descend again with fresh force. In this manner the game is confused and retarded, till the greyhounds come in.  $X_2$ When

BOOK When the Bashaw or other Grandees go a sporting, the Barabar consists of three or sour hundred horsemen, yet sometimes a hare, starting from the ground which they had just passed over, steals away in the rear. In small Barabars this happens frequently.

It is remarkable that the hares in Syria are extremely apt, when hard run, to take refuge in holes of the earth or the rocks, which (as I am informed) is very uncommon in England and France 17. Carmichael, in his Journal, remarks that travelling is rendered inconvenient in fome parts of the Defert by the burrows made by the hares 18. Plaisted says "These (hares) burrow in " holes like a rabbit, which holes were as numerous all "over the Defert as those of a warren in England," but he adds, "I could not help suspecting that there " were other animals concerned in making these subter-" ranean habitations, though I had not the good luck " to fee them 19. Carmichael does not mention having feen the Jerbua; and Plaisted, who had met with numbers of them in the Defert, does not appear to have fuspected them of making the burrows. But from both animals being common in the same places, and from what is faid by other writers, there can be little doubt that the burrows are not made by the hares, and only ferve them occasionally for refuge, as the holes in the

<sup>&</sup>lt;sup>17</sup> Buffon (Hist. Nat. vi. p. 256—305.)

<sup>18</sup> Grose (Voyage to the East Indies, Lond. 1772, vol. i. Appendix.)

<sup>&</sup>lt;sup>19</sup> Journal cross the Desert to Aleppo, Lond. 1758. p. 73.

rocks do for the hares near Aleppo 20. When hares CHAP. take to the earth they are usually suffered to escape, but fometimes endeavours are used with success to drag them out. One of the gentlemen of the Factory, in the last century, lost his life in an attempt of this kind21. Mr. Sherman who arrived at Aleppo in 1688, and refided there above fixty years, remembered to have heard that the hand immediately fwelled, gave much pain, and that the young man vomited. From what I could learn at Aleppo, where the accident was usually mentioned by way of caution to new comers, I imagine they had endeavoured in vain to find the fnake; but it appears by an account communicated to the Royal Society, by a gentleman present at the time, that several experiments were made with the fnake, which was afterwards killed by dropping oil of tobacco into his mouth.

It is remarkable that a dog died in eight hours, and two turkies in three hours after being bitten: the unfortunate gentleman, by Mr. Goodyear's account, furvived only five hours 22.

The

<sup>&</sup>lt;sup>20</sup> See (Philof. Trans. xix p. 131.) Teixeira's (Travels), Stevens (Collection, vol. ii. p. 21.)

The following Infcription is found on a grave-stone in the English burial ground, at Aleppo.

<sup>+</sup>Viator nvsqvam tvtvm esse Exemplo hoc docet Te+
Robertvs Bvrdet, Armigeri Londinensis Filivs,
Qvi Leporem inter venandvm dvm Latebræ admoverit
Manvm, a Serpente Ictvs infra 8 Horas mortalis esse desiit
An. Dom. mdclxxiii Oct. ix. Aetatis Svæ xxiii Disce.

"(Philof. Tranf. xx. p. 351.)

BOOK

The hares are so plentiful in the environs, that it was no uncommon thing to fee the gentlemen who went out a sporting twice a week, return with four or five brace hung in triumph at the girths of the fervant's horses. Neither the Turks nor other natives are fond of hare's flesh, the Arabs excepted, who have the following fingular mode of dreffing it. A hole dug in the ground is filled with fuch dried brush wood as the Defert affords, and upon this, when thoroughly kindled, the hare is laid without any preparation, or even removing the flue or entrails. When the fire has ceased blazing, the earth that had been dug out and laid round the edges, being now thoroughly heated, is raked over the hare, which is left thus covered up till fufficiently roafted. It's own gravy with a little falt composes the fauce, and the dish is faid by those who have eat it to be excellent. M. Buffon, after justly observing that hare's flesh is not in request among the Eastern people, adds that it is forbidden by the Mohammedan law, as it was in ancient times by the Mosaic. But in this I suspect he is mistaken. Pork is certainly prohibited by Mohammed, but not hare. The Armenian Christians abstain from hare, from a religious scruple. The Arabian writers, following the Greeks, formed fome physical objections to hare's flesh as food 23.

<sup>&</sup>lt;sup>23</sup> See Bochart (Hierozoicon, i. p. 998.)

The Rabbit<sup>24</sup>, is a rare animal in the vicinity of CHAP. Aleppo; some are bred in houses for the use of the Franks, but the Turks feldom or never eat them, and the Jews hold them like the hare, to be one of the animals forbidden by Moses 25. The fur of the white rabbit is much worn at Aleppo, but that of the black of which the best are imported from England, bears a double price, and is in great request among people of the law.

The Porcupine 26, is fometimes, though rarely brought to town by the Peasants but rather as a curiofity than for the kitchen, though it is fometimes ferved up at the tables of the Franks.

Arneb, ارنب Lepus Cuniculus. Linn. S. N. p. 77. Pennant (Br. Zool. p. 93.)

The hare and the rabbit are both at Aleppo named Arneb. word Khurnuk which in some Lexicons is put for Cuniculus, and by Golues rendered Lepusculus, I do not recollect to have heard used in Syria.

According to M. Buffon λαγως is the Greek name of the hare as, δασυπυς is of the rabbit; but Bochart endeavours to show that both names were by the earlier Greeks used indiscriminately for the hare, " falluntur omnes omni-" no Lexicographi Calepinus puta, Stephanus, Constantinus &c. qui diversa " esse statuunt...... quin apud Aristotelem & Græcos scriptores, quotquot

" funt semper pro eodem sumi assero." Hierizoicon, p. 997.

He produces also authorities to show that the rabbit was an animal peculiar to Spain. Concerning the distinction of the hare and the rabbit, see (Philof. Transact. lxii. p. 4.)

25 It is a question hitherto I believe undetermined among the learned, whether the rabbit be the Saphan mentioned in scripture. Note XXXIII.

<sup>26</sup> Kunfud تنفن Histrix Cristata. Linn. S. N. p. 76.

The notion of his darting his quills still prevails in Syria. I never met with any person who had seen it; but it stands recorded in books, and the fact is not doubted 27.

The Hedge-hog <sup>28</sup>, regarded by the natives as the fame species, is found in the fields in abundance, but serves only for medicinal purposes <sup>29</sup>.

Though the Porcupine and Hedge-hog are vulgarly known at Aleppo by the name Kunfud, the former, by the Arab writers is diffinguished by the name Duldal, reckoning it however no more than a larger kind of Hedge-hog. This appears by the authorities produced by Bochart from several Arab writers, particularly Damir, and Avicenna.

The Jerbua<sup>30</sup>, is not eaten at Aleppo, nor do the

as

The head of the Jerbua is roundish; the nose short and flat; the eyes large, black, and remarkably vivid; the tongue short, of a wedge form; the teeth are four in number, long, slender, and a little bent; the two in the upper jaw, which are the shortest, perforate the upper lip, and when the mouth is shut, lie over the two lower teeth. The ears are very thin, and covered with a fine down of an ash colour. The hair on the back is of a

dunnish

Note XXXIV.

<sup>&</sup>lt;sup>28</sup> Erinaceus Europeus Linn. S. N. p. 75. Pennant. (Synop. p. 316.)

When the Kunfud is prescribed medicinally, it is the hedge-hog that is meant; the slesh of it being particularly recommended in lingering disorders occasioned by sudden frights, or alarms, by the natives termed Raabi

<sup>30</sup> Jerbua بربوع Mus Jaculus Linn. S. N. p. 85.

Arabs in the vicinity take the trouble of hunting them CHAP. as food, but they are fometimes eaten in the Baffora caravans,

dunnish colour near the root, but grey with a reddish cast at the extremity, extremely soft, and about two thirds of an inch in length. The hair on the upper part of the head is of the same colour, but along the sides and round the eyes it is of a whitish cast, and on the neck and belly perfectly white. The sur of the back has a remarkable gloss, which in some attitudes makes the animal appear as if wet, but this gloss is impaired by captivity.

The fore legs are covered with white hairs of a stronger grain than those of the neck or belly. Each fore foot has four toes with slender claws somewhat bent at the extremity, and in the palm there are five unequal tuber-The hind legs are flender and disproportionally long; the foot is provided with three toes remarkably prominent at the extremities, and in the fole of the foot there is a large pyramidal tubercle. About an inch above the foot, two other toes or spurs, somewhat smaller than those of the feet, spring from each leg, the exterior spur being a little higher than the other. The hair of the hind legs is white, except about the ankle, and two streaks on the back of the leg, which are black: the intermediate space between these streaks is naked. The tail is above five inches in length, and till within two inches of the extremity is covered with short thick fet hair of a dirty yellow colour; the hair then growing longer, and being thickest on each side, forms a flattish tust resembling a feather, on the upper part of which there are always a few white hairs, the rest except the tip, which is also white, is perfectly black. A streak of white hairs runs for some way from the tuft along the under part of the tail.

The stomach when empty is much of the same shape and size as a kidney bean.

The measure of a Jerbua of the largest size.

		tenths
From the tip of the nose to the root of the tail	5	0
From the root to the point of the tail	8	0
Each ear	I	6
The longest hair of the whiskers	2	3
Circumference of the body	3	3
Vol. II.	Le	ngth

BOOK caravans, where the Arabs have frequent opportunities of catching them. The flesh is said to be well tasted.

They are found in abundance at the distance of a

			Inch.	tenths
Length of the forelegs, including the thigh	•	-	I	5
Length of the hindlegs	-		5	4
Length of the intestinal tube, without the coecum	-	2	9	0
Length of the coecum	-		0	4

For other anatomical remarks on the internal parts, fee Note XXXV.

The figure and description of the Jerbua in Edward's Gleanings of Natural History, differs from the Aleppo Jerbua in the want of spurs on the hind legs, which he expressly says he sought for, but could not find in either of the two subjects he examined (Gleanings vol. 1. p. 18.) Haselquist, in his description of the Egyptian Jerbua, says nothing of spurs, (Travels); and Mr. Bruce's excellent sigure is without spurs, (Appendix, p. 121.) In Sir Ashton Lever's Museum, I sound a good dried specimen, but much larger in size than the Aleppo Jerbua, and without spurs.

I have examined four specimens in the British Museum, three of which are without spurs; on the bottle containing the fourth, Arabia is inscribed, and the animal in all respects, resembles the common Jerbua of Aleppo.

The figure in Haym's Tesoro Britannico was drawn from an Aleppo Jerbua, and the spurs are clearly depicted. It is remarkable that they are also discernable in the figure of the animal on the Cyrenese medal, and Shaw, describing the Barbary Jerbua, mentions two spurs on each of the hinder legs, placed more than an inch above the toes, (Travels, p. 177.)

The figure given by Haym (Tesoro Britannico) is the only one I have met with of the Aleppo Jerbua; those of le Brun (Voyage au Levant, p. 406); of Haselquist, (in the Swedish Transactions;) of Pallas, (Nov. Spec. Quad. Tab. 20—21;) of Pennant, (Synop. p. 295;) and Bruce, (Travels, Append. p. 121); being all without spurs.

M. Buffon is inclined to think that the want of spurs, as well as variation in the number of the toes, is merely accidental. But in above an hundred subjects which I examined in Syria, I never sound any variation from the foregoing description. Note XXXVI.

few miles from the city, and were eafily procured in CHAP. the fummer, by means of the peafants from Jibool and Spheery. At first they used to catch them in a way which often broke their hind legs, but as I wished to have them sound, they afterwards caught them in snares, and sometimes dug the semale together with a whole brood, from the burrow. The animals (by the report of the Bidoweens) seldom appear in the day time, for which reason snares were laid at night, at which time they come abroad to feed. When pursued, they fled to the burrow, and often made their escape by a passage not visible from without. The gentlemen of the Aleppo sactory, who sirst discovered Palmyra in the Desert, remark that their horses and mules were incommoded by the rat holes like coney-burrows they met with on the road 3°.

I have kept the Jerbuas for many months, but never could get them to breed, and of feveral brought big with young, all died within a few days, except one which littered in the cage: but she very soon destroyed the young ones, devouring one after another. It was remarkable also, that where two were kept in the same cage, if one happened to die the other began immediately to feed on the carcase, though in no want of other provision. It was sound necessary to line their cage with tin plate; as they were incessantly nibbling when

<sup>&</sup>lt;sup>30</sup> (Philof. Tranf. xix. p. 131.) A fimilar remark has been made by later travellers.

nights time through a deal board half an inch thick. In order to prevent their fleeping on the bare tin, a piece of cloth, or Labett 31 was spread at the bottom of the cage, but they very soon reduced this into wool, and then forming a loose heap, concealed themselves in the middle of it.

Some were fed for fix months fucceffively with dry bifcuit; others with green Lucern, or ripe fruit. They throve very well on either food, but fuch as fed on the Lucern became much fatter than they ever were observed to be when first caught. Though water was sometimes, for the sake of experiment, placed in the cage during the extreme heats, they showed no inclination for it, and I never saw them drink.

They flept much in the day time, though not continually; for at times they were very lively. But from fun fet till morning, they were conftantly in action, either nibbling at the wires of the cage, feeding, or jumping from one end of their prison to the other. When fet at liberty in a large chamber, they skipped about as in sport with wonderful agility; but if frightened or pursued, they bounded much higher, and would spring forward at one leap above five feet. After long confinement they were by no means so active as when first brought from the Desert.

<sup>31</sup> Felt.

Towards the approach of the winter they begin to CHAP. Grow fleepy, and will fleep one, two, or more days together without eating; they then have a waking interval of two or three days, and in the night are lively as usual. In the depth of winter they would sometimes remain fleeping for eight days together, without tasting sood, and without apparent signs of life, their limbs being quite stiff and their bodies cold to the touch. If in this state brought near a fire, they some times revived, at other times showed some slight symptoms of sensibility; but if taken out at night, from the heap of wool where they lay concealed, and lest exposed at the bottom of the cage, they frequently had by morning regained their some retreat, and the biscuit which lay near them remained untouched.

Various remarks relating to the Jerbua, intermingled with many fabulous circumstances, are found in Bochart 32.

The Camel<sup>33</sup> makes no part of the food of the inhabitants of the city, but its flesh, when young, is much

<sup>&</sup>lt;sup>32</sup> Hierozoicon, (vol. i. p. 1010.) Note XXXVII.

<sup>&</sup>lt;sup>33</sup> Jimmel جمل Camelus Dromedarius Linn. S. N. p. 90.

The Arabic language affords a great variety of names for this animal, but Jimmel is the one commonly used. An Arabic eulogy on the Camel, may be seen in Bochart (Hierozoic. vol. i. p. 80.) M. Bussion has collected his account of the Camel, from a number of the best informed travellers, arranged his facts in that clear and pleasing manner which characterises his writings. (Hist. Nat. tom. xi. p. 211.)

in a Caravan is by any accident lamed, it is immediately flaughtered for the benefit of the company. As a beaft of burden, of all others the most easily maintained, and most patient of thirst, it is of infinite use in a country which in many parts is so ill provided with water and pasture; and where, except a clumsy kind of cart, sometimes employed for transporting large stones, wheel carriages are in a manner unknown.

Four varieties of the Camel are seen at Aleppo: the Turkman, the Arab, the Dromedary, and the Camel with two bunches.

The Turkman Camel is larger, stouter, more hairy and of a darker colour than the others. Its common load is one hundred and fixty rotoloes, or about four hundred pounds on each side; but there are some capable of carrying a much greater weight. Not being so able to resist excessive heat as the Arab Camel, the Turkman, during the months of June, July, and August, is seldom employed for long journeys: it is also less tractable, and requires to be more carefully sed.

The Arab Camel is confiderably fmaller in fize, of a more flender make, lefs hairy, and of a lighter dun colour: it feldom carries more than two hundred and fifty pounds on each fide, and does not fo much as the former require to be fed with barley meal and chopped straw, being content to browfe as it walks along, on dry thistles

or other wild herbs, and can bear the want of water to C H A P. a degree hardly credible.

I remember an inftance of the Camels in a Baffora Caravan remaining fifteen days without water; but it was reckoned very extraordinary, none of the natives recollecting a fimilar inftance. The Caravans which go between Aleppo and Baffora, feldom are more than three or four days without finding water; though fometimes, on account of intestine wars among the Arab Tribes, being obliged to strike out of the common tract, the Camels suffer an abstinence of six or seven days. Most travellers mention this extraordinary abstinence; and it is afferted by Leo Africanus that they are even capable of resisting for sisteen days without prejudice to their health 34.

The Arab Camels, after long abstinence, are apt on their first meeting with water, to drink so greedily that it proves suddenly satal to many of them. Among several instances of this kind, was that which happened when the Mecca Caravan, under the conduct of Asad Bashaw, having altered its course, on purpose to avoid certain hostile tribes of the Desert, was reduced to the utmost distress. A pilgrim who was present assured me, that at more than an hour's distance from the place where water was at length sound, and long before any person of the Caravan could perceive it, a number of the Ca-

<sup>34 (</sup>Descript. Africæ Lib. ix. p. 291.)

rushed furiously into the pool, and in spight of every effort of the drivers of the Camels to prevent them, many drank so immoderately as to expire on the spot.

It is remarkable that the Camels fometimes show a preference for falt water. I have several times observed them at Scanderoon, as soon as unloaded at the Factor-Marine's house, hasten towards the beach, and crossing a brook of fresh water in their way, rush into the sea knee deep, and drink of the salt water. They are not however urged by thirst on this occasion, for the stages from Karamoot, or Byland, are short, and water plentiful on the road; nor do they after their first arrival drink the sea water.

The Baffora Caravans, confifting of Arab Camels are reckoned to march little more than two miles in an hour 35.

The Arab Camels are brought in vast numbers from the East, over the Desert for sale: sour or sive thousand have been known to come in one Caravan, and most of them being without loads, the Mohassil receives a duty of so much a head. They are of great service in improving the breed of the Turkman Camel; the race produced by that cross being reckoned to partake of the good qualities of both: in strength and colour it most resembles the Turkman, but inherits the milder temper

<sup>&</sup>quot; Note XXXVIII.

of the Arab, is more docile, and less apt to throw off c H A P. its burden. This cross breed, is reckoned when laden to walk at the rate of two miles and a third in an hour; but when urged they can go faster. The constant mode of the Camel's walk is by raising the two legs of the same side, the one immediately after the other: not moving the legs diagonally, in the manner of most other Quadrupeds 36.

The Dromedary <sup>37</sup>, from all that I was able to learn, is only a high breed of the Arab Camel. It is of a flighter make, more cleanly limbed, its bunch smaller, and on the whole a less ugly animal. Instead of the solemn walk of the others, it ambles with more agility, and is capable, as it is said, of going as far in one day as the ordinary Camels usually go in three or sour.

The persons sent to Ecbatana by Alexander to put Parmenio to death, were said to have personmed in eleven days, a journey that usually took up thirty or forty, and they travelled on Dromedaries 38. Leo Africanus remarks that the Dromedary in Africa is sit only to be rode, and that the Arabs of condition in Numidia and Libya usually ride them. He adds that many of them will go a hun-

<sup>&</sup>lt;sup>36</sup> Buffon (Hist. Nat. iv. 189—194.) Aristotel. (de Hist. Animal, lib. ii. cap. i. p. 480. Isaac Casaubon. Lugdun. 1590) Plin. (Hist. Natur. xi. p. 640. Paris 1723.) Note XXXIX.

It may be remarked, that it is not uncommon among painters to commit a mistake in representing the movement of the Camel's legs.

<sup>37</sup> Rahileh alis Καμηλος Δρομας.

<sup>&</sup>lt;sup>28</sup> — επὶ δρομαδων Καμηλων. Strabo (lib. xv. p. 1054. Amftelæd. 1707.) Vol. II. Z dred

BOOK dred miles, and even more, in a day, for eight or ten days fuccessively, with very little provender 39.

I have never seen above two or three of what were reckoned the true Dromedaries, and then had no opportunity of being a witness to their speed. Bochart cites an Arab proverb, from whence it would seem that the breed was rare. "Homines sunt ut Cameli, quorum ne quidem centesimus quisque est Dromas. Ut doceant "rarum esse virum gratum et acceptum Deo4°."

The messengers employed by the Franks between Aleppo and Bassora, use the common Arab Camel. As they sleep on the Camel's back, they travel more hours in the four and twenty than the Caravans, but seldom, upon an average, exceed forty sive or sifty miles a day.

The Camel with two bunches 41 is of Persian breed. It is larger and more hairy than the Turkman Camel, but in colour nearer to the Arab; it is principally distinguished by the two bunches. This animal is occasionally found in the Bagdat Caravans, but is very seldom seen at Aleppo.

Few Camels are bred near the city, fo that their milk is fcarce; but the natives have no aversion to it, and when in abundance it is in common use among the

<sup>39</sup> Descriptio. Africæ lib. ix. p. 291.

<sup>4</sup>º Hierozoicon, vol. i. p. 94.

<sup>&</sup>quot; Jimmel al finamine. جمل السنامين Camelus Bactrianus. Linn. S. N. p. 90.

Bidoweens. The Camel's hair, which they fled annu- C H A P. ally, is employed for various purposes, particularly in the manufacture of a kind of felt, called Labett, which being almost impenetrable to wet, is used as a wrapper for the bales of merchandife, that in certain feafons are exposed to heavy rains, and when the caravan refts, are laid on the bare ground. Of Labett also the Cameldrivers and shepherds make great coats. The Camel's dung ferves for fuel, and is for that purpose carefully gathered by the Bidoween women and children who happen to be near an encampment. The Caravans coming from Baffora, usually encamp at the distance of five or fix hours from town, and the Franks fometimes make an excursion to visit the camp. I have observed on these occasions the Bidoweens so industrious, that within a few hours after the departure of the Caravan, no veftiges remained of the multitude fo lately encamped, except perhaps the marks on the ground where fires had been made.

The arrival of one of these Caravans in the great Khane of Aleppo, affords entertainment to a stranger. The dress and figure of the Arabs who conduct the Camels, the wildness of these animals in their new situation, and the uncouth noise made in commanding them, compose altogether a singular spectacle. The Bassora Camels, less accustomed to walls and houses than the Turkman, are with difficulty led through the streets, and it being impossible to prevail on some of the more

unload them without, and to transport the bales to the Custom house, on asses.

The Defert, for thirty miles on the Baffora road, is far from being the barren waste it is described to be in the interior parts, nor in the bustle of a caravan is there place for the idea of dreary solitude which naturally fills the mind of a traveller viewing, from the hills about the Salt Lake, the boundless extent of barren country which lies before him. It is hardly necessary to go so far as Hagla in order feelingly to admire the highly coloured picture of the Defert drawn by M. Buston 42.

After the Camel, the Ass 43 may be reckoned the next in importance among the Syrian beafts of burden. Large Caravans of them are daily employed in bringing provisions from the villages; they serve also for the plough; and within the city, as they affist in various kinds of labour, they are seen in every street. It is well that the animal is stout and hardy, for it goes through incredible labour, and is exposed to worse treatment than any other beaft in the service of man. He is beaten without mercy when refractory, and upon the smallest provocation, wantonly abused in a torrent of scurrilous language scarcely ever let loose on other occasions; but

<sup>42 (</sup>Hist: Nat: xi. 221) Note XIV. vol. i.

<sup>43</sup> Jihash جحش Hamar حمار Linn. S. N. p. 180.

his frolicfome spirit remains unconquered, and when CHAP. over laden, which too often is the case, he either lays himself despondently down, or in desiance throws off his load, and boldly attempts to escape.

The common breed is larger than that usually seen in Britain, and another still larger is preserved for the saddle; for the ordinary people and many of the middle class commonly ride Asses. The Osmanli indeed are feldom feen but upon horses; but Affes are often preferred by the Sheihs, or religious men; and though most of the opulent merchants keep horses, they are not ashamed, especially when old, to appear mounted on Asses. Those intended for the faddle, of the best fort, bear a high price; they are tall, delicately limbed, go fwiftly in an eafy pace, or gallop, and are very fure footed. They are fed and dreffed with the fame care as Their bridle is ornamented with fringe and Cowries 44, and the faddle, which is broad and eafy, is covered with a fine carpet. The stirrups are made in the European manner, not broad after the Turkish fashion.

There is a third variety of this animal known by the name of the Damascus Ass 45; being more common in that city than at Aleppo. It has an enormous long body, and ears of a remarkable length; it is taller than the common fort, it's skin smoother, and of a much darker

<sup>44</sup> Small shells, used in India and other countries instead of money.

<sup>43</sup> Jihash Shami. جعس شامي

porting flower, and brush wood. A rider on this animal, sitting almost close to the tail, when viewed from behind, resembles the figure of a Centaur.

There are various breeds of Mules 46. The better fort, which are capable of carrying heavy loads, are employed in the Caravans, the common fort are of great fervice for the mill, and water wheels; both are maintained at less expence than horses, and being surer sooted, are better fuited for travelling the rugged roads in mountainous countries. The domestic trade with the maritime towns and neighbouring mountains is not only carried on chiefly by Mule Caravans, but they are fent even to Conftantinople, Erzeroon, or other remote towns to the North; and the Mukari<sup>47</sup> by whom they are conducted are reckoned fellows of courage and fidelity. In these Caravans, the men travellers are mounted on the Mules lightly loaded; and the women either fit aftride in the fame manner, or ride in a kind of wooden cradle<sup>48</sup> hung on one fide of the Mule with an equipoife on the other; but persons of a certain rank travel in a litter carried by two Mules. Within the city, and in excur-

<sup>46</sup> Burhl بغل Asinus Mulus β Linn. S. N. p. 101.

مكاري Mukari, مكاري

<sup>48</sup> Muhaffi, i i s (See vol. i. p. 256.)

fions to the gardens, Affes generally have the preference, CHAP and the Mules are charged with the luggage.

No authentic inflances are found of propagation between Mules 49; nor is the Kumrah 50 which, according to Shaw, was deemed no rarity at Algiers, found at Aleppo: though they pretend that such a race exists in Cyprus, and is called the Cyprus Mule.

Aleppo, in former times, was more famous for Horses than it is at present; the breed as it is said, having degenerated through neglect. There are still however some sine Horses to be sound in the possession of Bashaws and other Grandees, and indeed a considerable part of the annual expenses of people of condition is appropriated to their stable. The Turkman Horses, being of a larger size, a stronger make, a more martial appearance, and, when dressed, displaying the Turkish trappings to more advantage, are preserved by the Osmanli to the Arab Horses. They are taught to walk

See Buffon (Hist: Nat: xiv. p. 336.) (Note XL) Beloe's Herodotus, vol. ii. p. 170.)

<sup>&</sup>quot;The Kumrah, as the Algerines call a little serviceable beast of burden begot betwixt an ass and a cow. That which I saw at Algiers, where
it was not looked upon as a rarity, was fingle hoosed like the ass, but distinguished from it in having a sleeker skin, with the tail and the head
(though without horns) in fashion of the Dam's." Shaw (Travels,
p. 166).

Furras حصان Hyfan خرس Equus Caballus, Linn. S. N. p. 100.

Furras in strict propriety is a mare, but in common discourse the word is used indiscriminately with Hysan for a Horse. Heil is vulgarly used in the plural.

BOOK gracefully in a crowd, to fet off at once full speed, to turn to either hand on the gentlest touch from the rider, and to stop short instantly when he pleases. But the Horses in Syria are not in general nearly so well broke in the manage, as those bred at Grand Cairo.

The Arab Horses are of a more slender make, and in appearance lefs showy; but they are beautifully limbed, more hardy, and reckoned much fleeter. The efteem they are held in by the Arabs themselves, the scrupulous care taken to preserve the purity of the breed, and the reluctance with which the Arabs confent to part with their mares, are circumftances often mentioned by travellers. This fingular attention to the breed of their Horses still subsists in some parts of Arabia; but on the confines of the Defert where the Europeans are fettled, the spirit of avarice predominates, and the native integrity of the Arab, unable to refift temptation, is transformed into the low cunning of a jockey. They not only forget the fair fame of their ancestors, and their own honour, but even the honour of their Horses; and imposing upon those employed by the Franks to make purchases, they often put off a base bastard, under the most folemn assurances of it's being the immaculate offfpring of some respectable family of the Kochlani race 52.

Herbelot under the word Faras gives an account of an Arab author, who treating prefeshedly on the subject of Horses, mentions the several Races.

M. Niebuhr 53 has given fome account of the different C H A P. families of the Kohlani race of Horses, and remarks that the Arabs, who on other occasions would not scruple to take a false oath, were never known to sign a false attestation of the genealogy of a Horse; conceiving that a breach of truth in that respect would draw down the vengeance of heaven upon their families. I am asraid that the Arab jockeys at Aleppo are less delicate on that point; for the Tescar, or attestation of the genealogy obtained at the Mahkamy, is often attested by persons who know no more of the matter than what they had been previously instructed to swear. In the interior parts of Arabia, it is probable that the people being less corrupt, may pay more regard to an oath 54.

The Turks in general ride stone Horses, but persons advanced in years, especially among the Essendees, give the preference to geldings 55, which, are not uncommon at Aleppo. The Syrian Horses, in common with the other domestic animals of that climate, partake of a certain gentleness of temper, and a disposition to become docile and familiar: it is rare to find one completely vicious. The true Arabs are remarkably distinguished by this quality, owing no doubt in some measure to the

<sup>53</sup> Descript. d'Arabie, p. 143.

<sup>54</sup> Buffon, (Hist. Nat. iv. 239.)

اغديش Jgdeesh

BOOK kind and humane manner in which they are reared, and for ever afterwards treated by their master 56.

The Horses universally live on barley mixed with chopped straw. They are regularly fed morning and evening, and for the most part eat nothing in the interval. In the stable, the provender is laid before them in troughs; in the fields, it is put into hair bags, which are fastened in such a manner on the Horse's head, that he can feed as he stands. In the spring season, they are fed for forty or fifty days with green barley, cut as foon as the corn begins to ear. This is termed tying down to grafs, during which time they remain conftantly exposed in the open air, and for the first eight or ten days are neither curried, mounted, nor even led about. After this, they are dreffed as usual, and rode out gently, but are never much worked in the grafs feafon. The Franks have their Horses tyed down in their stable yards, or at the gardens, and it is their amusement to fit beside their favourites, and fee them feed; but the Horses of the Grandees are frequently tyed down in the barley field, being confined to a certain circuit by a long tedder. Grazing is reckoned of great fervice to the health of the horses, and produces a beautiful gloss on the skin. They are at all times littered with the refuse of their proven-

For an account of the Arabian Horses, see d'Arvieux (Voyage dans la Palestine p. 194.) Busson (Hist. Nat. iv. 238.)

der, mixed with their own dung dried in the Sun; and CHAP. being clothed in the night with a vest of Labett, are dressed with great care in the morning.

Dogs, <sup>57</sup> (deemed by the Turks an unclean animal) are never kept in the houses; but they are treated with humanity, and suffered in great numbers to go about the streets, and to sleep in the Bazars at night. What is called the Bazar Dog is a very ugly animal; it's skin being foul and fordid, from living constantly in the dusty streets, and feeding on all kinds of offals. They bark and howl with intolerable loudness in the night. It may be regarded as a providential mercy, considering the thirst they must suffer in the hot months, that they are not subject to madness <sup>58</sup>.

The Greyhounds are of a very light flender make, with longer ears than the British Greyhounds. Their ears and tail are covered with long soft hair, which adds somewhat to the beauty of the animal. They are reckoned fleet, but the common sort can seldom come up with the hare, if not assisted by a hawk. The Pointers are sew in number, and chiefly of French breed.

The shepherd's Dog is a much stouter and better look-

<sup>&</sup>lt;sup>57</sup> Kilb Canis familiaris. Linn. S. N. p. 56. Buffon (Hist. Nat. v.)

<sup>&</sup>lt;sup>58</sup> Soon after my arrival in Aleppo, I saw a case which I at first suspected to be canine madness, but as my brother had never met with any of the kind, and as I never myself met with a second instance, it is most probable that I was mistaken. Note XLI.

BOOK ing animal, than the Bazar Dog 59. He is of fervice not only in keeping the flock together, but in defending them from the fox, or giving an alarm in the night when attacked by more formidable beafts of prey. He is kept under strict command, and, except when sent after straglers, usually keeps close to the shepherd, who, it may be remarked, always marches before his flock.

Besides the common Cat 60, they have a mixed breed between that and the Persian. The true Persian Cat 61, which is rather a rarity at Aleppo, is a very beautiful animal, and is found of various colours, but for the most part of a pure white. Their hair is very long and as soft as silk, the tail bushy; the eyes very often of different colours; and it is remarkable that many of the white Cats are deas. All, of whatever colour, are subject to costiveness, and from that cause, not attended to, they often die on shipboard in the passage to England. Neither laxative medicines nor even glysters will save them, it is necessary to extract the indurated seces. They are of less real use than the common fort, being kept chiefly as savorites, and mousing merely for diversion.

There is nothing remarkable in the Rat<sup>62</sup>, and the

<sup>&</sup>quot; He is about the fize of a Mastiff with long hair resembling the Pomeranian Dog.

<sup>60</sup> Kutt or Kutta قطّه القط Felis Catus. Linn. S. N. p. 62.

<sup>&</sup>quot; Kutta Ajemy قطّه عجمه Felis Catus. β

<sup>&</sup>lt;sup>62</sup> Jirdoon جردون Mus Rattus. Linn. S. N. p. 83.

Mouse 63. Most of the houses are infested with them, CHAP. and the Natives, who seldom take the trouble of using traps, sometimes lay arsenic for their destruction; but accidents having arisen from the water of which the poisoned animals had drank, this method is seldom used in samilies where there are children. Few of the houses are unprovided with a cat, and the house serpents destroy Mice.

The champaign affords a variety of Field Mice. In fuch years as are accompanied with little or no frost in the winter, these animals make dreadful havock in the cultivated fields 64. The Bidoweens and peasants are encouraged to destroy them by a premium of so much a head for every one they produce dead; but the Jerbua is seldom or ever sound in the number. The short tailed Field Mouse 65 is the animal most pernicious to the fields; the Dormouse 66, the greater Dormouse 67, and the

<sup>&</sup>lt;sup>63</sup> Far غار Mus Musculus. Linn. Syst. Nat. p. 83.

Bochart, from the Greek and other ancient writers, has collected a number of passages relative to the terrible devastation made by these animals. (Hierozoicon, i. p. 1018.)

The Egyptians according to Alpinus, fow arfenic with their corn. (Hist. Egyp. Nat. p. 27.) I have heard that the same custom prevails in the neighbourhood of Bagdad.

Mus terrestris. Linn. S. N. p. 82. Campagnol. Buffon (Hist. Nat. vii.—369.) Short tailed Mouse Pennant (Zool. p. 109.)

<sup>&</sup>lt;sup>60</sup> Mus Avellanarius. Linn. S. N. p. 83. Muscardin. Buffon (H. N. viii.—193. (Dormouse Pennant (Br. Zool. p. 98.)

<sup>&</sup>lt;sup>67</sup> Mus Quercinus. Linn. S. N. p. 84. Lerot. Buffon (H. N. viii—183.)

BOOK Hamster 68 are chiefly hurtful to gardens. The water Rat is common about the garden houses 69, near the river.

The Hamster is less common than the Field Mouse. I once found upon dissecting one of them, the pouch on each side stuffed with young French beans, arranged lengthways so exactly, and close to each other, that it appeared strange by what mechanism it had been effected; for the membrane which forms the pouch, though muscular is extremely thin, and the most expert singers could not have packed the beans in more regular order. When they were laid loosely on the table, they formed a heap three times the bulk of the animal's body 7°.

The Mole<sup>71</sup> joins in the depredations made on the commons, fields and gardens, and is therefore included in the profcription, but it is a less formidable enemy than the Field Mouse, and being disturbed only by excessive rains, it holds possession of large tracts of waste ground.

There are two varieties of Bats 72: one of which is

<sup>&</sup>lt;sup>68</sup> Mus Cricetus. Linn. S. N. p. 82. Hamster. Buffon (H. N. xiii.--117.)

<sup>69</sup> Mus Amphibius. Linn. S. N. p. 82. Buffon (H. N. vii. Water Rat. —348.) Pennant (Br. Zool. page 104.)

<sup>&</sup>quot;Khuld كلك Talpa Europæa. Linn. S. N. p. 73. Buffon (H. N. viii.—81.)

<sup>&</sup>lt;sup>72</sup> Vespertilio Murinus. Linn. S. N. p. 47. Buffon (H. N. viii.—113.)

very common in the city, flying about in the Bazars, CHAP. and court yards of the houses after sun set, when the Swallows, which fill the air towards evening, have retired. The other fort are rarely observed; they are white, and have ears longer than those of the former.

The Polecat <sup>73</sup> is found about villages, but is feldom feen in town. The skin retaining for ever it's disagreeable smell, the sur is of no value: which appears not to be the case in Europe, where they have superior methods of dressing skins <sup>74</sup>.

In a still summer's evening, the howling of the Jackals 75 is sometimes so audible from the terraces within the city, that a stranger might be apt to think they were about to break into the houses; and they actually do now and then commit depredations in the outskirts of the suburbs. Around the gardens they are in abundance, and pass in numbers together every evening like a pack of hounds in full cry, occasioning not only disturbance by their dismal yelling, but making free like-

<sup>&</sup>lt;sup>13</sup> Eben Aarse ابن عرس Mustela Putorius. Linn. S. N. p. 67. Buffon (H. N. vii.—199.)

<sup>&</sup>lt;sup>74</sup> Pennant (Synop. p. 214. Br. Zool. p. 74.)

<sup>&</sup>quot; Tchikal شغال Pers. Canis Aureus. Linn. S. N. p. 59. Pennant. (Synop. p. 158.)

Bochart gives a description of this animal from two Arabian writers Alkazuinus and Damiri, containing some curious circumstances; and cites also Belon whose account is very full. (Hierozoicon i. 842.)

houses: they have even been known to destroy infants. In the day time they are silent, and never appear in troops; though solitary ones are frequently met with in the gardens, and then always run away as if asraid. There are multitudes of them at Scanderoon, where they often approach so near the village, that the English sailors sometimes amuse themselves in catching them with hooks and lines. In the night their howling in the plain is heard so loud on board the ships in the bay, as to strike with surprize and horror. It may be remarked that the colour of the Jackals at Scanderoon, as well as at Aleppo, is far from a brilliant yellow; though some shades lighter than that of the fox.

Foxes<sup>76</sup> are common in the environs; but though their fur be in much request among the vulgar, they are seldom hunted on account of their skin. As they haunt the same grounds with the hare, they often come in the way, and are killed by the Franks when they go a coursing. They are rather less in size than the British Foxes.

The Wolf <sup>77</sup> feldom ventures fo near the city as the fox, but is fometimes feen at a distance by the sports-

Taaleb تعلب Canis Vulpes. Linn. S. N. p. 59.

<sup>&</sup>lt;sup>77</sup> Deeb ريب, but Zeeb بين by Damiri and other Arab writers. Canis Lupus. Linn. S. N. p. 58. Pennant (Synop. p. 149).

men, among the hilly grounds in the neighbourhood; CHAP. and the villages, as well as the herds, often fuffer from them. It is called Deeb in Arabic and is common all over Syria.

The Natives talk of another animal named Sheeb 78, which they confider as diffinct from the wolf, and reckon more ferocious. It's bite is faid to be mortal, and that it occasions raving madness before death. In shape, as they say, it is so like a wolf as hardly to be diffinguished from it, and is deemed a diffinct animal, chiefly on account of the effect of it's bite. It is perhaps only a mad wolf.

Long intervals elapse in which nothing is heard of the Sheeb; and neither my brother nor myself ever had an opportunity of seeing one, though we heard many stories of them. In the year 1772, the fore part and the tail of one of these animals were brought to Dr. Freer from Spheery, and I am obliged to him for a description of the parts he saw 79.

The

<sup>&</sup>lt;sup>28</sup> Sheeb شيب

<sup>&</sup>quot;The head was thick about the root of the jaws; the ears erect; the nose long, and turned up somewhat at the tip; the mouth large. Six fore

<sup>&#</sup>x27; teeth in each jaw, the upper being longer than the under. The two eye

<sup>&#</sup>x27; teeth in each jaw, are a full inch long and a little bent. The grinders are

<sup>&#</sup>x27; twenty in number, sharp pointed, and some of them with two points. The

<sup>&#</sup>x27; tongue is long and thick towards the root.

<sup>&#</sup>x27;The animal in fize appeared to be about that of a large Bazar dog;

<sup>&#</sup>x27; (larger than a fox) the back of a yellowish grey colour with some black
Vol. II Bb 'hairs

The Hyæna so is a more common and therefore better known animal than the Sheeb. They are sometimes caught a live in the hills at no great distance from town and are held in great horror, though perhaps much of the mischief ascribed to them, is perpetrated by the jackals, wolves, and soxes. They may be distinguished at a

' hairs interspersed; the breast and belly of a grey approaching to white; ' the fides of a dirty yellow. The hair rough and short. ' straight and bushy, of the same colour with the back, and had a tust of long black hairs at the point. The fore legs were long and flender, refembling those of a greyhound. As the animal had been cut through the middle, ' and the hinder part was not brought to town, the fex remained unknown. 'The circumference of the body, behind the fore legs measured 2 'The neck in circumference ΙI 'The neck in length 81 'The length of the ears 43 'The length of the head and nose  $IO^{\frac{1}{2}}$ 'The length of the nose from the eyes 101 ' The length of the fore leg and shoulder 5 'The length of the tail cut off from the rump 61/4

Dr. Freer adds that the animal, (which was shot near Spheery) was one of several that had followed the Bassora Caravan, over the Desert, from near Bassora to the neighbourhood of Aleppo. Many persons in the Caravan had been bitten, all of whom died in a short time raving mad. It was reported also that some persons in the vicinity of Aleppo were bitten and died in like manner; but the Doctor saw none of them himself.

In comparing the dimensions of this animal with those of the wolf as given by M. Buffon, it will be found to exceed the latter in the circumference of the body and the neck; when therefore it's size, was said to be about that of a large Bazar dog, it must either be inaccurate, or must have been meant of a larger dog of that kind than I remember to have ever seen.

ייס Dzuba ביי In Hebrew Tfeboa צבוע Canis Hyæna. Linn. S. N.

consider-

confiderable diftance by their walking as if lame; they CHAP. retreat when purfued, and do not attack the humanfpecies unless highly provoked, or perhaps urged by hunger. It is in the night that they chiefly prowl, or venture to approach the village burial grounds, though they are fometimes also seen in the day time by the sportsmen. The peafants affert that the Hyæna is fometimes taken alive by a person who creeps into the den, and covering him with an Abai\*, fecures him by fastening a rope about his legs. The animal permits himfelf, as they pretend, to be thus bound without the least refistance, if the man who attempts it knows how to go about his business with proper composure and dexterity. The Arabian writers go still farther, and affirm that certain words are pronounced at the same time, upon which the man's fafety depends, as if the animal understood the Arabic language.

Busbequius, when travelling towards Angora in Asia Minor, met with a story exactly of the same kind, only that the Hyænas in that country were supposed to understand the Turkish. In Barbary also the hunters use a certain jargon of words; but the real sact is, as related by Mr. Bruce, that they enter the cave where the animal is lodged, with a torch in their hand, and at once advancing, throw a blanket over him and haul him out.

<sup>\*</sup> Vol. i. page, 104.

Bochart. (Hierozoicon, i. p. 833.) Busbequius (Epist. i. p. 83.) Bruce's Travels (Appendix, p. 118.)

BOOK Numberless are the fables recounted of this animal, and most of them are still credited in Syria 82.

> From Mount Taurus, but particularly from about Marash, the Lynx 83 or Ounce, is sometimes brought alive to town for a show, and, in like manner as the Hyæna, has for the most part it's lips cruelly fowed toge her, by way of fecurity. The animal must either be rare in the fouthern parts of Taurus, or the people are not industrious, for the fur is of high value at Aleppo, and is chiefly brought from more northern countries. It is only part of the skin on the breast and belly, where the hair is very long and finely fpotted, that is employed for trimmings, fo that each animal affords but a fmall quantity of this superior kind of fur. Judging from the skins brought to Aleppo from Russia and other northern countries, the animal would appear to be larger than those of the hither parts of Taurus, but in respect to the length and foftness of the hair, and beauty of the spots, the Lynxes I have feen alive from Marash, seem not inferior. M. Buffon, feems to think that the skin of the

Felis Lynx. Linn. Syst. Nat. p. 62. Busson (H. N.

ix.-231.) Pennant (Synop. p. 18.)

Levant

<sup>12</sup> The fable of the Hyæna changing it's fex in alternate years, is adopted by some of the Arab writers, as it had been before by many of the Greeks, though expressly contradicted by Aristotle. (Hist. Animal. lib. vi.-32. p. 778. Scaliger. Tolof. 1619.) Note XLII.

Levant Lynx is not spotted. "Les Lynx du Levant, CHAP." de la Barbarie, de l'Arabie & des autres pays chauds, "font comme nous l'avons dit ci-dessus, d'une couleur uniforme & sans taches." What the animal may be, more to the southward, I cannot say; but such as I have seen brought from Mount Taurus within three days journey of Aleppo, were beautifully spotted.

The black eared Cat<sup>84</sup>, or, according to Pennant, the Persian Lynx, though it sometimes is seen at Aleppo, is brought from a considerable distance, and cannot properly be reckoned an animal of the environs.

The Panther<sup>85</sup> is an inhabitant of Mount Amanus, and is fometimes brought to Aleppo, but it is more common in the more fouthern, maritime mountains of Syria. It is vulgarly called the Tiger, and stories are current of it's depredations in the mountains, and of it's attacking travellers in the night on the sea shore, about the roots of Lebanon. I have heard of instances of perfons being attacked in the night between Latachea and Tripoly. Paul Lucas mentions a rencounter he had with a Tiger near the Castravan mountains<sup>86</sup> The Panther is by many writers consounded with the Tiger.

Karakoulak. Pennant (Synop. p. 189.) Philos. Trans. Vol. LI. p. ii. page 648.)

<sup>&</sup>lt;sup>15</sup> Nimer نه Felis Pardus. Linn. Syst. Nat. p. 61.

<sup>&</sup>lt;sup>86</sup> Voyage fait en 1714. i. p. 335.

The animals I have had occasion to see at Aleppo were rather larger than the Panther described by M. Busson; that is, nearer four feet in length.

The Lion 87 is mentioned as frequenting the Tigris in the neighbourhood of Bagdat, as likewise different parts of Mesopotamia 88; but is never found in the tract of the Baffora Caravans in the Defert, or to the South of the river Euphrates. This is only afferted of modern times, and grounded on information from the Arabs; for Lions are mentioned by fome of the early travellers, as found on the West of the Euphrates. Teixeira, describing the manner of watching in the Caravan, fays, "They keep "guard all night with fires as well for fear of robbers "there are about that place, (near Mischet Aly) as of " the Lions, and the more for that one had the day be-" fore attacked a man of our company, but it pleafed "God he was not hurt; and it was a wonder that, fo " many being in those parts, we saw very few and those "not near 89." Boulay (about the year 1650) in his journey between Bassora and Bagdat, saw a Lion pursu-

<sup>&</sup>quot; Sebaa .... Felis Leo. Linn. Syst. Nat. p. 60.

<sup>&</sup>quot;Pietro della Valle remarks "Costeggiamo un gran pezzo il Tigre nella "sua sponde occidentale, seconda del suo corso, come avevamo falto all altro sume; e quivi pur trovammo, comme intorno al Euphrate havevamo trovato, pedata di Leoni in diversi luoghi che per tutti quei Deserti ve n'è gran quantita." (Lett. 17. p. 685.) See also Ive's Journey.

<sup>\*9</sup> Teixeira. (Stevens. Collect. vol. ii. London 1711.)

ing a Gazelle on the banks of the river Tigris; and re- CHAP. marks, that notwithstanding the crowing of the cocks on board of the boat, a Lion on shore continued to roar all night 90.

The Bear<sup>91</sup>, Baboon<sup>92</sup>, and feveral varieties of Apes<sup>93</sup>, which are occasionally shown in town, being brought from Barbary and other distant parts, cannot strictly be reckoned among the animals of the environs of Aleppo.

<sup>5°</sup> Voyage de Boulay, p. 302. 303.

<sup>&</sup>quot; Dub Ursus Arctos. Linn. Syst. Nat. p. 69.

<sup>&</sup>quot; Saadan سعدان Simia Maimon. Linn. S. N. p. 35.

<sup>&</sup>quot; Kurd قرل Maimoon. ميمون Simia Linn. S. N. p. 34. Pennant (Synop. p. 94.)

# CHAP. II.

POULTRY.—GAME.—AL KATA, DESCRIBED.—VARIETIES OF HAWKS.—AL SULWA, OR LITTLE BITTERN, DESCRIBED.—CARRIER PIGEON, FORMERLY EMPLOYED AT ALEPPO.—MISSEL BIRD.—FIELDFARE.—RING-OUZEL.—SMURMUR, OR LOCUST BIRD, DESCRIBED. &c.

PREVIOUSLY to giving a methodical Catalogue of Birds, found in the environs, it may be proper to enumerate the domestic fowls, and various kinds of game, brought to market at Aleppo; subjoining at the sametime (as when treating of Esculent vegetables) the common names by which they are known in the country.

The markets are plentifully supplied with poultry. The Cock and Hen'; a remarkably large breed of the Rumkin called Bagdat fowls<sup>2</sup>. The Turkey<sup>3</sup>, Goose<sup>4</sup>, Duck<sup>5</sup>, and Pigeon<sup>6</sup>. The Turks seldom eat Geese or

- ' Deek, Dejage دیک , دجاجه Gallus & Gallina. Linn. Syft. Nat. Farooge فروج Pullus.
- ع Deek Bafraway دیک بصراوي Phafianus Gallus.
- <sup>الا</sup> Deek Hindy ديك فندي Gallopavo.
- · Wuzz j, Anfer.
- 5 Butt Ju Anas.
- Teir Humam طير حمام Columba.

Duck, but are fond of Pigeons. Dovecots may be feen CHAP. in most of the villages on the road from Scanderoon; and vast flocks of wild Doves appear about the time the corn begins to ripen, remaining till after the harvest. Peacocks are sometimes seen at Aleppo, but are brought from other places, and not kept for the kitchin.

There is also abundance of game in the different seafons. In the spring, Quails sin great plenty; in the summer, Partridge and Francoline sin the autumn, the Quails return, but not in such numbers as before; and in that season likewise the Beccasico sin is common. Through the winter Woodcocks sin are plentiful, as also a variety of water sowl; Teal sin, Wigeon sin, Wild Duck sin, Spoon-bill, &c. The Bustard sin and Wild Goose sin, the Snipe, Thrush, Lark, with a variety of other small Birds, will be found in the following Catalogue.

- Tawoos طاوس Pavo.
- Simmen Tetrao Coturnix. Linn. Syst. Nat.
- \* Hagel Z= Tetrao Rufus.
- " Dirrage كرّ Tetrao Francolinus.

The Francoline is not found nearer to Aleppo than Harem, that is, above a day and a half's journey distant, towards Antioch.

- " Asfoor il Teen عصغور النين Motacilla Ficedula.
- " Djage kurnabeet جاج قرنبيىط Scolopax Rusticola.
- Anas Crecca.
- Anas Penelope.
- Anas Boschas. بط برّي Anas Boschas.
- 16 Hebry Cris Tarda.
- " Wuzz burry وزيري Anas Anser.

The

The Turks, among whom the more delicate wild fowl is not in much request, are remarkably fond of a kind of grouse, which is never eaten by the Franks; it's flesh being black, hard, and dry. The bird is sound in all seasons, but in such numbers during the months of May, and June, that a quantity sufficient to load an ass has sometimes been taken in a class net at one shutting. As this bird (so far as I know) has not been described, I have annexed a figure, and subjoined a short description 18.

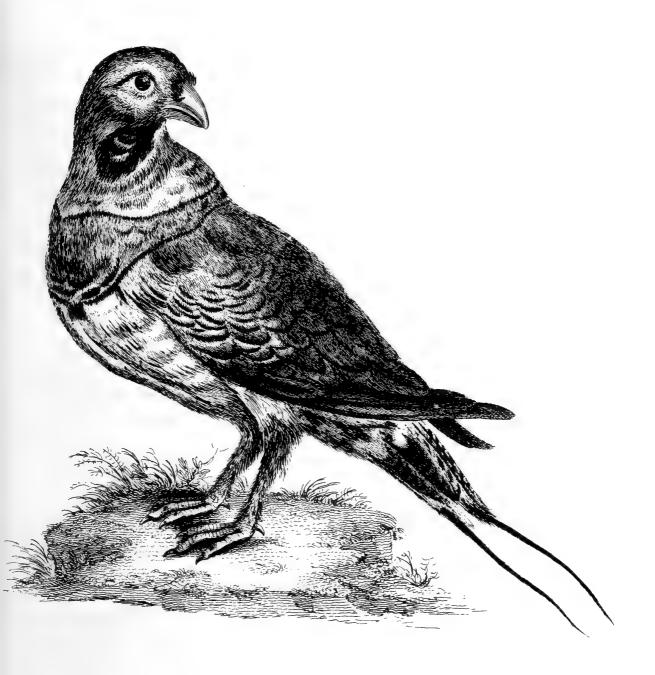
I shall

"This Bird named by the Natives Kata is about the fize of a Partridge, its bill thick, short and bent, (like that bird's) is of a light colour, but black at the point. The fore part of the legs is covered with short white feathers; and the toes are three as in the Partridge, with a short back spur. See Plate III.

The plumage varies confiderably in different subjects. The bird now to be described was one of the most beautiful. Immediately under the throat was a black fpot, but around the eyes, and on the fore part of the neck, the feathers were of a bright yellow colour, and the latter being tipped with black, formed a kind of ring, between which and a fecond black streak lower on the breast, the plumage was of a cinnamon colour. The feathers on the lower part of the breast and belly, were white; those on the back and upper part of the wing were of a mouse colour, and most of them tipt with a bright yellow. The upper part of the pinion was likewise of a mouse colour, but the short broad feathers beneath, were black, or of a coffee colour, edged towards the points with femilunar white spots. The long feathers of the wing were of a mouse colour with black quills. plumage about the rump variegated, black, white, and yellow. The tail remarkably distinguished by two narrow black feathers nearly three inches longer than the others, and terminating in a point.

The female bird is somewhat smaller in size, and the two feathers in the tail

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Tetrao Alchata



I shall now proceed to give a Catalogue of such birds c H A P. as fell under my observation, but, as many must no doubt have escaped my notice, I am far from considering it as a complete one: besides, in respect to several of the birds which were brought me, it was impossible, without the affistance of more books than were then within my reach, to determine them with precision 19. To avoid breaking in upon the order of the Catalogue, any remarks occuring on particular birds, shall be inserted by way of notes at the bottom of the page.

# AVES ACCIPITRES.

VULTUR.

V. Percnopterus. Linn. Syst. Nat. p. 123. Rekhmy رخوی Vulture 20.

FALCO.

F. Offifragus. Linn. S. N. p. 124. Sea Eagle. F. Milvus. Linn. S. N. p. 126. Kite or Glead.

tail are rather shorter. The plumage is nearly the same, only more marked with black streaks, and the yellow colour is in most parts less vivid.

This is the Tetrao Alchata, Linn. Syst. Nat. p. 276. It as been described and drawn by Edwards, from a stuffed bird brought to England by the Author. (Gleanings of Natural History, vol. i. p. 84.) There is likewise a framed drawing of this bird in the British Museum.

"The present Catalogue is more full than that in the former edition; feveral birds being inserted, descriptions of which were transmitted by me from Aleppo, but arrived too late for publication; and others are now added for which I am indebted to my successor Doctor Freer.

Much on the subject of this bird may be found in Bochart, who contends that it is undoubtedly the Racham of scripture; and produces many passages in support of his opinion, from the Arabian Naturalists.

BOOK FALCO.

#### ACCIPITRES. AVES

- F. Gentilis. Linn. Syst. Nat. page 126. Shaheen Falcon Gentle.
- F. Tinnunculus. Linn. S. N. page 127. Kestrel, Pennant (Br. Zool. p. 166.)

3 I

F.

AVES

<sup>21</sup> Seven different kinds or varieties of Hawks, according to the Natives, are employed by the sportsmen; but having never seen some of them, and being doubtful as to the specific names of others, I venture only to give the Arabic names in the following lift, and mark the game for which each bird is appropriated. was drawn up by one of the most skilful Falconers at Aleppo.

Al Huz or Baraban

Al Saphy (السافي

These two Hawks are employed for Antilope and Hare hunting; the first also takes Partridge, and the second Bustards, Herons and other large birds. They are fold at Aleppo at the rate of fifty or fixty dollars each, to be fent to Bagdat.

الشاهير، Al Shaheen

النفانز Al Zygranuz

The first of these is employed for birds of all kinds, especially of the larger fort; The fecond for Wild Geefe, Wild Duck, and other water game. There are two varieties of the Zygranuz, of which the one called the Indian is less fierce than the other.

الدوغان Al Dugran

Al Jipeer الاسيير

The first is used for Francolines and Partridge; the other for Partridge, and is brought from about Constantinople. It is rare at Aleppo, and costs between two and three hundred dollars.

الباشف Al Bashak

It's game Quails and fmall birds of all kinds.

There is a curious M. S. in the Escurial Catalogue de Re Accipitraria & Venatoria, the work of Isa Ebn Ali Hassan Al Asady. Cod. 898.

The Shaheen unless taken from the nest, cannot be well trained. It is so fierce that it will fly at any game. Were there not feveral gentlemen now in England to

bear

CHAP.

# AVES ACCIPITRES.

STRIX.

- S. Bubo. Linn. Syst. Nat. p. 131. Boomi. بوصد Eagle Owl.
- S. Flammea. Linn. S. N. p. 133. Common Barn Owl.
- S. Passerina. Linn. S. N. p. 133. Little Owl, Pennant (Br. Zool. p. 180.)

S.

### AVES PICÆ.

Corvus.

- C. Corax. Linn. S. N. p. 155. Raven.
- C. Corone. Linn. S. N. p. 155. Zagr 21; Crow.
- C. Cornix. Linn. S. N. p. 156. Royston Crow.
- C. Monedula. Linn. S. N. p. 156. Jack Daw.
- Ci Pica. Linn. S. N. p. 157. Magpie.

CORACIAS.

C. Garrula. Linn. S. N. p. 159. Roller, Pennant (Br. Zool. p. 530.) Quies Niges مويس نجس and Shikrak عويس الم

bear witness to the truth of what I am going to relate, I should hardly venture to affert that with this bird, which is about the fize of a Pigeon, they sometimes take large Eagles. The Hawk in former times was taught to seize the Eagle under the pinnion, and thus depriving him of the use of one wing, both birds sell to the ground together: but I am informed the present mode is to teach the Hawk to fix on the back between the wings, which has the same effect, only that the bird tumbling down more slowly, the Falconer has more time to come in to his Hawk's affistance; but in either case, if he be not very expeditious, the Falcon is inevitably destroyed: thus far my Brother.

I never faw the Shaheen fly at Eagles, that sport being disused in my time; but have often seen him take Herons and Storks. The Hawk when thrown off slies for sometime in a horizontal line not six seet from the ground, then mounting perpendicularly with astonishing swiftness, he seizes his prey under the wing, and both together come tumbling to the ground. If the Falconer is not expeditious, the game soon disengages itself.

In the open plains of Aleppo, bird hawking is a noble and fafe diversion. Water fowl also afford excellent sport. See on this subject Le Brun (Voyage, p. 333.)

The training of Eagles is mentioned by Ælian, lib. iv. c. 26.

The vulgar name of this bird Quies Nidjes—The beautiful impure—points out the light in which it is confidered by the Mohammedans. The reader will find fe-

veral

# VI. ORIOLUS.

#### AVES PICÆ.

O. Galbula. Linn. Syst. Nat. p. 160. Oriole, Pennant (Br. Zool. page 532.)

Cuculus.

C. Canorus. Linn. S. N. p. 168. Humam kowal حمام قوال Cuckoo, Pennant (Br. Zool. p. 199.)

Yunx.

Y. Torquilla. Linn. S. N. p. 172. Wry Neck.

Picus.

P. Major. Linn. S. N. p. 176. Nakooby ناتوبه Wood Pecker.

ALCEDO.

A. Ispida. Linn. S. N. p. 179. Balikgi King Fisher. Pennant (Br. Zool. p. 210.)

A. Alcyon var y Linn. S. N. p. 180.

A. Smyrnenfis. Linn. S. N. p. 181.

Merops.

M. Apiaster. Linn. S. N. p. 182. Wurwar ورور Bee Eater<sup>23</sup>. Smyrniote.

UPUPA.

U. Epops. Linn. S. N. p. 183. Shibubook شبوبك Hoopoe.

# AVES ANSERES.

ANAS.

A. Cygnus var β. Lynn. Syst. Nat. p. 194. Swan.

A. Tadorna. Linn. S. N. p. 195. Abu furway (Sheill Drake, Pennant (Br. Zool. p. 499.)

veral extracts from Damiri and other Arab writers relative to this bird in Bochart, (Hierozoic. vol. ii. p. 298.

Another bird under this name, and remarkable for two very long feathers in the tail, has been described by Mr. Bruce. (Travels, vol. v. p. 182.)

The Bee Eater appears in the Spring, and remains till Autumn. They are in abundance about Ramusa and Babullah. At their first appearance they are very lean, but soon becoming fat, they are reckoned delicate eating.

ANAS.

#### AVES ANSERES.

C H A P.

ANAS.

- A. Nigra. Linn. Syst. Nat. p. 196. Kara buttik قره بطف Scoter.
- A. Marila. Linn. S. N. p. 196. Scaup Duck, Pennant (Br. Zool. p. 496.)
- A. Anser, var a. Linn. S. N. p. 197. Wuz burry وز بتري
- A. Anser, var β. Linn. S. N. p. 197. Wuz j, Goose.
- A. Clypiata. Linn. S. N. p. 200. Aboo Malak. Shoveler.
- A. Penelope. Linn. S. N. p. 202. Wigeon.
- A. Crecca. Linn. S. N. p. 204. Teal.
- A. Boschas, var a. Linn. S. N. p. 205. Butt Burri بط بركي Mallard, Pennant (Br. Zool. p. 500.)
- A. Boschas, var β. Linn. S. N. p. 206. Butt Duck.
- A. Sirsæir. Forscal (Desc. Anim. ii. p. 3.)

MERGUS.

PELICANUS.

P. Onocrotalus. Linn. S. N. var. a. p. 215. Pelican.

COLYMBUS.

C. Auritus. Linn. S. N. p. 222. Didapper, or Dobchick. Little Grebe, Pennant (Br. Zool. p. 423.)

LARUS.

L. Canus. Linn. S. N. p. 224. Dinkely also Common Sea Mall, or Mew, Common Gull, Pennant (Br. Zool. p. 454.)

# AVES GRALLÆ.

PHÆNICOPTERUS.

P. Ruber. Linn. S. N. p. 230. Flammant.

PLATALEA.

P. Leucorodia. Linn. S. N. p. 231. Spoon-bill.

ARDEA.

BOOK
IV. ARDEA.

# AVES GRALLÆ.

- A. Virgo<sup>24</sup>. Linn. S. N. p. 234. Kurky S. Numidian Crane.
- A. Grus. Linn. S. N. p. 234. Crane.
- A. Ciconia<sup>25</sup>. Linn. S. N. p. 235. Liglek White Stork.
- A. Nigra. Linn. S. N. p. 235. Black Stork.
- A. Cinerea. Linn. S. N. p. 236. Baleckchil بالغيل Common Heron.
- A. Grisea. Linn. S. N. p. 239.
- A. Minuta<sup>26</sup>. Linn. S. N. p. 240. Sulwa Little Bittern, Pennant (Br. Zool. p. 587.)

#### SCOLOPAX.

- S. Arquata. Linn. S. N. p. 242. Curlew.
- S. Rusticola. Linn. S. N. p. 244. Djage karnabeet جاج Woodcock.
- These often pass in large flocks, so high in the air, that they can hardly be discerned, though heard distinctly.
- The Storks do not every year visit Aleppo in large flocks, (see vol. i. page 5.) According to Bochart this is the Hasida חַמִירָה of scripture. (Hierozoicon v. ii. page. 326.)
- A figure of this bird, drawn from a dried specimen, is given Plate IV. but is not represented in its proper attitude; for the bird, when alive, stands with his body perfectly erect, as well as his head and neck.

The length of the bird, in the posture above described, is fifteen inches, from the point of the bill to the end of the tail. The neck from the setting on of the shoulders five inches and a half; the bill two inches; from the tip of one wing to that of the other, when extended, twenty inches and a half. The body of the bird is about the size of a rail; and the colour of the seathers resembles also those of that bird. The top of the head and tips of the wings are black. The legs are long, of a whitish green colour; the toes, four in number. It is common on the banks of the Kowick, near Aleppo.

Edwards has given a figure and description of this bird, from a dried specimen brought from Aleppo by the Author. (Gleanings of Nat. Hist. p. 135.) Pennant mentions two of this species having been found in England.

SCOLOPAX.



Antea Minuta

Pl.V



Charadrius Spinosus

# AVES GRALLÆ.

C H A P.

SCOLOPAX.

- S. Gallinago. Linn. Syst. Nat. p. 244. Beikasoon ببيكاسون Snipe.
- S. Gallinula. Linn. S. N. p. 244. Jack Snipe.

TRINGA.

T. Squatarola. Linn. S. N. p. 252. Grey Sand-Piper, Pennant (Br. Zool. p. 383.)

T.

CHARADRIUS.

VOL. II.

C. Pluvialis. Linn. S. N, p. 254. Green Plover.

C. Oedicnemus. Linn. S. N. p. 255. Stone Curlew, Thick-kneed Bustard, Pennant (Br. Zool. p. 244.)

C. Spinosus<sup>27</sup>. Linn. S. N. p. 256. Lapwing (1st. Edit.) Spur-winged Plover. Edwards (vol. ii. page 148.)

FULICA.

The

This bird (Plate V.) measures eleven inches and a half, from the tip of the bill to the end of the tail; twenty three inches between the tips of the extended wings; and weighs four ounces. The bill is somewhat more than an inch in length, the upper mandible a little longer than the lower, and bent at the point.

The crown of the head black; the neck on each fide white; a black ftreak runs from the throat to the breaft, which, together with the greater part of the belly, are also black; the rest of the belly and the thighs are covered with white plumage. The back and most of the covert seathers of the wings, are of a mouse colour: the nine longest quill seathers are black; the others are white tipt with black, and seven of the outer covert seathers being of the same colour, the lower part of the wing when not extended appears entirely black; the tail is about four inches in length, of which the half nearest the root is white, and the other half black; but the two outer seathers are tipped with white. In the upper and anterior part of each wing, is placed a remarkable spur, a little bent, sharp at the point and of a blackish colour, below which the covert feathers are partly white.

From the upper part of the thigh to the extremity of the middle claw is feven inches; the legs are black and bare of feathers. It has three toes, the middle one being the longest and joined to the outer toe by a membrane. It has no back claw. The bird is found on the banks of the Aleppo river.

A description and figure of this bird has been given by Edwards from a dried specimen of my brother's. (Gleanings of Nat. Hist. v. ii. p. 148.)

BOOK IV. Fu

# AVES GRALLÆ.

Fulica.

F. Atra. Linn. Syst. Nat. p. 257. Coot.

RALLUS.

R. Crex. Linn. S. N. p. 261. Rail, Crake, Pennant (Br. Zool. p. 10.)

R. Aquaticus. Linn. S. N. p. 262. Water Rail.

OTIS.

O. Tarda. Linn. S. N. p. 264. Pennant (Br. Zool. p. 241.)
Hebry S. Buftard.

O. Arabs. Linn. S. N. p. 264. Arabian Bustard.

STRUTHIO.

S. Camelus 28. Linn. S. N. p. 265. Naamey and Oftrich.

# AVES GALLINÆ.

Pavo.

P. Cristatus. Linn. Syst. Nat. p. 267. Tawooz طاووز Peacock. Meleagris.

M. Gallopavo. Linn. S. N. p. 268. Djage hindy جاج هندي Turkey.

PHASIANUS.

P. Gallus. Linn. S. N. p. 270. Djage جاج Deek کیک Cock and Hen.

P. Gallus, var y. Linn. S. N. p. 271. Deek Bufrawy ريك Rumkin.

TETRAO.

T. Francolinus. Linn. S. N. p. 275. Dirrage ترج Francoline.

The figure in the former edition was represented with a small back claw; a mistake corrected in the present Plate.

The story of this bird, in Egypt, entering with impunity into the mouth of the Crocodile, is told, as a fact he was witness to, by Paul Lucas, who having shot some of the birds, brought the wings with him to France. (Voyage fait en 1714. Tomiii. p. 8. Rouen 1719.)

The Offrich, though frequently feen in Aleppo, is brought from the interior parts of the Defert.

TETRAO.

CHAP.

# AVES GALLINÆ.

TETRAO.

T. Al Chata\*. Linn. Syst. Nat. p. 276. Kata Little pintailed Grouse.

T. Rufus. Linn. S. N. p. 276. Hagel Red legged Partridge.

T. Coturnix. Linn. S. N. p. 278. Simmen Quail.

# AVES PASSERES.

COLUMBA.

C. Oenas 29. Linn. Syst. Nat. p. 279.

C. Oenas, var  $\beta$ . Linn. S. N. p. 279.

C. Gutturosa. Linn. S. N. p. 280.

C. Cucullata. Linn. S. N. p. 280.

C. Turbita. Linn. S. N. p. 280.

C. Laticauda. Linn. S. N. p. 280.

C. Gyratrix. Linn. S. N. p. 280.

C. Tabellaria. Linn. S. N. p. 281.

Wood Pigeon.

Common Dove.

Cropper Dove.

Jacobine Dove.

Turbit Dove.

Broad tailed Shæker.

Tumbler Pigeon.

Carrier Pigeon 30.

COLUMBA.

\* See page 194, where this bird is described.

The Pigeon in Arabic is vulgarly called Humam, to which is commonly prefixed Teir, which fignifies bird. They have names to distinguish several of the varieties, but as I could not procure them exactly they are omitted.

This Pigeon, in former times, was employed by the English factory, to convey intelligence from Scanderoon, of the arrival of the company's ships in that Port. The name of the ship, the hour of her arrival, and whatever else could be comprised in a small compass, being written on a slip of paper, was secured in such a manner under the Pigeon's wing as not to impede it's slight; and her seet were bathed in vinegar, with a view to keep them cool, and prevent her being tempted by the sight of water to alight, by which the journey might have been prolonged, or the billet lost. The practice has been in disuse many years, but I have heard it afferted by an English Gentleman, in whose time it still subsisted, that he had known the Pigeons perform the journey in two hours and a half. The messenger had a young brood at Aleppo, and was sent down in an uncovered cage to Scanderoon, from whence, as soon as set at liberty, she returned with all expedition to her nest. It was usual at the season of the arrival of the annual ships, to send Pigeons to be ready at the Port; and, by all

# BOOK COLUMBA.

#### AVES PASSERES.

- C. Palumbus. Linn. Syst. Nat. p. 282. Ring Dove.
- C. Turtur. Linn. S. N. p. 282. Turtle Dove.
- C. Riforia. Linn. S. N. p. 285. Sit il Room سنت الروم Indian Turtle<sup>31</sup>.
- C. Testaceo-incarnata. Forscal. (Descript. Animal. Aves p. 5. Hanniæ. 1775.)

#### ALAUDA.

- A. Arvensis. Linn. S. N. p. 287. Dullem كثر Common Lark.
- A. Pratenfis. Linn. S. N. p. 287. Tit'Lark.
- A. Cristata. Linn. S. N. p. 288. Kunbr قنبر Crested Lark.
- A. Calandra. Linn. S. N. p. 288. Calandra.

#### STURNUS.

S. Vulgaris. Linn. S. N. p. 290. Zurzoor Starling, Stare, Pennant (Br. Zool. p. 254.)

#### Turpus.

T. Viscivorus. Linn. S. N. p. 291. Missel Bird 22.

accounts, if the bird remained absent above a fortnight, she was apt to forget her young, and therefore not fit to be trusted. Upon enquiring into the manner of training the Pigeon for this service, I was told by some, that she was at once sent down to Scanderoon in a cage, but I am rather inclined to believe what was affirmed, by others, that she was taught by degrees to sly from shorter distances, on the Scanderoon road.

The Editor was informed that the Pigeons, when let fly from Scanderoon, instead of bending their course towards the high mountains surrounding the plain, mounted at once directly up, soaring still almost perpendicularly till out of sight; as if to surmount at once the obstacles intercepting their view of the place of their descination.

A passage from an Arab writer, cited by Bochart, agrees so exactly in this circumstance, that I should have suspected the notion to have been taken from thence, had not the fact of the bird's soaring been handed down by the Franks, and not taken merely on the credit of the Natives. Note XLIII.

- This bird not being indigenous at Aleppo, is feen only in cages; but is faid to be wild in the environs of Antioch.
- The Missel is of a brown colour on the head and back; the breast and belly white, with brown spots of a roundish sigure. The tail has twelve feathers; the margin of the wings white. The bill is black and the feet yellow.

Turbus.

### AVES PASSERES.

CHAP.

#### TURDUS.

- T. Pilaris. Linn. S. N. p. 291. Field fare 33.
- T. Musicus. Linn. S. N. p. 292. Dudge J Song Thrush. Throstle, Pennant (Br. Zool. p. 260.)
- T. Rufus. Linn. S. N. p. 293. Fox coloured Thrush.
- T. Merula. Linn. S. N. p. 295. Shahroor Blackbird.
- T. Torquatus. Linn. S. N. p. 296. Ring Ouzel 34.
- T. Rofeus. Linn. S. N. p. 294. Smurmur Locust Bird 35.

#### EMBERIZA.

- E. Hortulana. Linn. S. N. p. 309. Hortulane.
- E. Citrinella. Linn. S. N. p. 309. Yellow Hammer.
- E. Quelea. Linn. S. N. p. 310.

#### FRINGILLA.

- F. Cælebs. Linn. S. N. p. 318. Chaffinch.
- F. Carduelis. Linn. S. N. p. 318. Sukakia سفاقيه Goldfinch.
- F. Linaria. Linn. S. N. p. 322.. Red Linnet, Less redheaded Linnet, Pennant (Br. Zool. p. 292.)
- F. Domestica. Linn. S. N. p. 323. Asfoor عصغور Sparrow.
- <sup>33</sup> Is of an iron colour on the head and back; the breast white, spotted with brown; the belly white without spots. The tail has ten feathers, the exterior feather of each side white. The bill is yellowish, and the feet black.
- The Ouzel is of a black colour on the head and back. The breast, in some birds is white, in others spotted above, and red below. The belly is distinguished with white lines. The tail has twelve feathers. The covert feathers of the wings white on the margin. The bill and seet are black.
- 37 This bird is about the fize of a Starling. The bill and legs are black. The plumage on the body is of a flesh colour; that of the head, neck, wings, and tail black.

It is described by Forscal, who saw a dried specimen of a young bird at Smyrna. His description differs from the above in respect to the colours, which might be owing to the age or sex of the bird. Descript. Animal. Aves. p. 5—16.

The Locust bird appears at Aleppo in June, about the time the white mulberries are ripe, and it feeds upon that fruit, at a time when no Locusts are to be found. It may be remarked that the Smurmur does not alone eat Locusts; Starlings, Sparrows, and Swallows likewise devour them. See more concerning the Smurmur in chap. iv. of this Book.

# AVES PASSERES.

BOOK

1V., Muscicapa.

M. Atricapilla. Linn. Syst. Nat. p. 326. Goldfinch, Pied Fly Catcher, Pennant (Br. Zool. p. 297.)

#### MOTICILLA

M. Lufcinia. Linn. S. N. p. 328. Bilble بلبل Nightingale ..

M. Ficedula. Linn. S. N. p. 330. Asfoor il Teen عصغور التين Becca fico, Petty Chaps, Pennant (Br. Zool. p. 317.)

M. Alba Linn. S. N. p. 331. White Water Wagtail.

M. Rubetra. Linn. S. N. p. 332. Whin Chat.

M. Rubecula. Linn. S. N. p. 337. Alboo Hiny ابو حنه Robin Red breast.

M. Troglodytes. Linn. S. N. p. 337. Fisfees فسغيس Wren.

# HIRUNDO.

H. Urbica. Linn. S. N. p. 344. Hateef adda Martin.

H. Purpurea. Linn. S. N. p. 344. Purple Martin.

#### CAPRIMULGUS.

C. Europæus. Linn. S. N. p. 346. Goat Sucker.

C. Americanus. Linn. S. N. p. 34637?

The Nightingale affords much entertainment during most part of the garden feason; singing delightfully amid the Pomegranate groves in the day time, and from lostier trees in the night. They are also, by some in the city, kept in cages, and let out at a small rate, to nocturnal assemblies; so that most entertainments of ceremony in the spring, have a concert of Nightingales.

This bird was shot at a garden about an hour from Aleppo in the year 1778. Dr. Freer remarks that the wings were of a dark brown colour (the tips of the great feathers excepted, which were grey) and marked all over with spots of a dirty yellow; so that the Macula Alba Sphærica in utraque Ala, of Brown, was wanting in this subject. It had distinctly the Narium tubuli eminentes.

# CHAP. III.

#### OF FISHES.

FISHES FROM THE RIVER KOWICK. THE ALEPPO EEL, SO CALLED.—
TWO OF THE GENUS SILURUS DESCRIBED.—THE LOCHE.—BARBEL.—
BINNY OF FORSCAL.—VARIOUS CYPRINI, &c.—FISHES FROM THE
ORONTES AND EUPHRATES, AND THE LAKE OF ANTIOCH COMMON
EEL.—SHEAT FISH.—SILURUS ANGUILLARIS, &c.—SEA FISH FROM
SCANDEROON, COD.—RED MULLET.—STURGEON, &c.

FROM what I had curforily remarked in the markets, c H A F. or at the tables of the inhabitants, and from the appearance of the Kowick, I hardly expected to find fo great a variety of Fish in that river; but upon examination it was found to produce seventeen species, and amongst those, some hitherto undescribed.

To the affiduity of the fishermen, which is restrained to no particular season, and exercised with little discretion, may partly be ascribed the small size of the fish in general; for at Heylan, and the sountain of sishes, where they are suffered to remain unmolested, they grow considerably larger, though never so large as the same kind of fish in other parts of the world.

Of the fish which I conceive to be hitherto undefcribed, and for that reason shall subjoin descriptions and drawings, of the Aleppo Eel, which it has obtained from the refemblance

" Ingely انكليز or Simmak Ingleez انكله

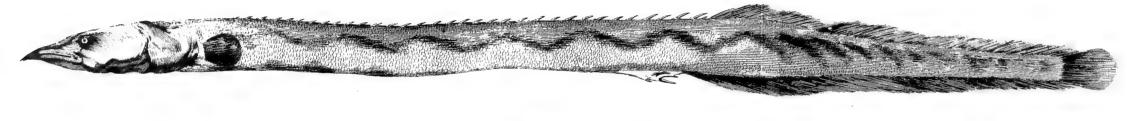
The fish described measured eleven inches, but they are sometimes considerably larger, as will appear from the drawing (Plate VI.) which is of the natural size of one of the largest.

The head is remarkably long, smaller than the body, compressed on the sides and in some places bare, in others covered with small scales hardly perceptible. The projecting snout, when the mouth is shut, resembles the beak of a bird, with two visible tubuli near the extremity, which, in the living subject, move as in the Muræna, but are situated differently from the tubuli in the common Eel. The eyes are small, situated on the sides near the crown, and a little behind the angles of the mouth. The nostrils are double, and about the fourth of an inch distant from the eyes. The lips broad and lax. The teeth numerous. The body is of an Eel form, though rather less round, and more compressed towards the tail. It is smooth and covered with small thin, semitransparent, cuticular scales, rounded upon their external edge. The lateral line, which is high till it approaches the membranous part of the dorsal sin, declining a little, is continued straight along the middle of the tail.

The dorsal fin is very long rising from the occiput and terminating in the caudal fin. It is composed of thirty-three small crooked spines, and eighty-one or eighty-two soft rays. The pectoral fins, consisting of twenty or twenty-one rays, are round. The anal fin rises about the middle of the body and joins the caudal. It consists of eighty-one rays, of which the first three are spinous, the middle one being the longest. The caudal fin is short and oval, and composed of nineteen distinct rays. The colour of the head and back is blackish, variegated with dark yellow spots; the belly is white, changing gradually into a yellowish cast; the anal fin near its commencement is yellow, the rest, like the dorsal and caudal, is spotted with black.

It has been described by Gronovius (Zoophylacium No. 402, p. 132. Lugd. Bat. 1781.) But he omits the tubuli at the extremity of the rostrum, and describes both the spines of the dorsal and anal sins as distinct, and not connected.

My





Ophidium Mastacembelus

S'Autrin delin.

W. Skulton souly

		•

femblance in its shape, to the common Eel: but it is of CHAP. a different genus, and, being less oily, is esteemed a lighter and more delicate food. They are found in great abundance, and oftner appear at the English tables than any of the other fish from the Kowick.

The other two nondefcripts are both of the Genus Silurus. They are common in the river, but not being

My brother having deposited two specimens of this fish in the British Museum, Sir Joseph Banks and Dr. Solander after examining them and another specimen in my own possession, determined it to be an ophidium under the following description.

Ophidium Mastacembelus. Maxillis imberbibus, superiore longiore acuminata: Cauda rotundata. B 6. D 114 P 29. A 20 C 19.

Pinna Caudalis licet dorsali & anali unita facile distinguitur radiis Longioribus.

Instead of the former figure, I have given a new drawing, from a specimen lately received from Aleppo. (1792.)

The structure of the rostrum of this Ophidium seeming to be singular, my ingenious friend Mr. Home obligingly examined it, and savoured me with the following remarks.

In the common Eel, the lips of both jaws are fleshy and narrow; in this ophidium they are thin, broad, and pendulous: those of the upper jaw being a continuation of the common skin of the head, which, besides forming the lips laterally, projects beyond the rostrum about twice the breadth of the lip, and terminates in three processes, one in the centre of the membrane, and one upon each edge. The middle one is prominent and conical with a small point, the other two are blunted and scarcely extend beyond the membrane. These, upon examination, prove to be the orisices of three ducts, which serve for the passage of the mucus, formed by glands which are situated on the anterior part of the head.

In the common Eel, there are two ducts which ferve the same purpose, but open laterally on each side of the rostrum; they are short, thick, and of a much larger size.

Vol. II.

Еe

esteemed,

BOOK esteemed, are seldom eaten. The first is known among the natives by the name of Zakzook<sup>2</sup>.

(Plate VII. Fig. 1.) زنزوف

The subject examined measured five inches from the tip of the snout to the tail. The predominant colour is a dark silver.

The head is large, and broader than the body; convex on the upper part but flattening on the fides and narrowing toward the mouth, which is proportionally small; the teeth numerous and irregular; the palate and tongue smooth. There are eight Cirri: the two longest rising laterally from the smout immediately above the angles of the mouth, cartilagenous and rather thick at their origin, but gradually lessening to the point; in length about two inches and a half. Two more spring from near the nostrils; and still nearer the obtuse smouth are two tubuli, one on each side. Of the four Cirri of the lower jaw, the two shorter rise from the under part of the chin, the other two, (about an inch in length) a little behind them. They are all white, the two longest excepted which are of the same darkish colour with the upper part of the head. The eyes, lateral, near the crown; large, and protuberant.

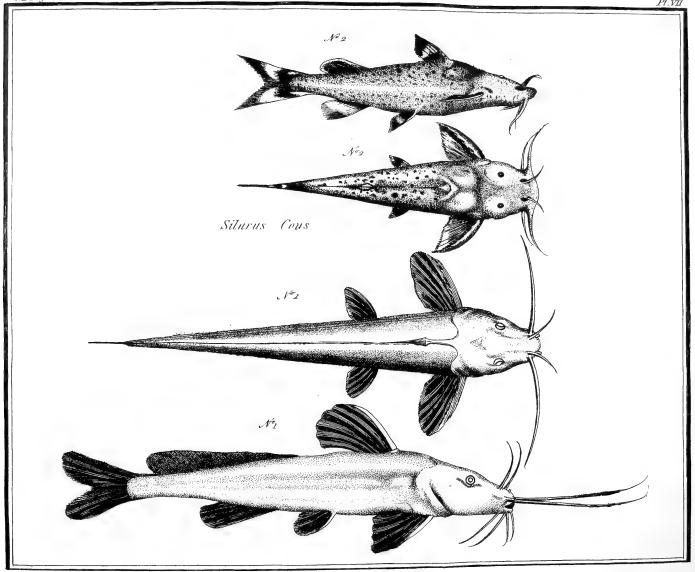
The body is oblong, thick at the shoulders, compressed, tapering at the tail, and without scales.

There are two dorsal fins; the anterior composed of eight rays, of which the first is strong and serrated; the posterior fin, reaching almost from the middle of the back to the caudal fin, is adipose, ascending, and rounded at the end. The first ray of the pectoral fin (like that of the dorsal) is strong and serrated behind. The fin has nine rays. The ventral fins are small and roundish. The anal is oblong, with eleven rays. The caudal, composed of twenty rays, is bisid, rounded at the ends.

This fish was described by Dr. Solander under the name of Silurus Pelusius. pinna dorsali postica adiposa, lanceolata elongata, ani radiis 11, cirris 2, cauda bisurca, naribus simplicibus. B 6. D 1/8 c. P 1/9 V A 11. C 20.

In the former edition the Zakzook was reckoned a Mystus, and under that name is described by Gronovius (Zoophylacium, No. 388. p. 126.)

The



Silurus Pelufius



The other Silurus from the river, is by the natives CHAP. named Babooge 3.

Two only of the fishes from the Kowick are brought to the tables of the Europeans; the Ophidium already mentioned, and the Loche: the others, which are mostly of the Genus Cyprinus, and very indifferent in quality, are eaten only by the Native Christians in their Lents.

The Loche + is excellent, and abundant.

بابوج الاج Silurus Cous. Linn. Syst. Nat. p.504.

This fish (Plate VII. Fig. 2.) in its general shape, resembles the Zakzook, agreeing also with it in the number of Cirri and fins, as well as in the structure of the tongue and palate, and disposition of the teeth; but, at the same time, it differs remarkably in other circumstances. The head is broader and flatter; the mouth much wider; the lower jaw considerably shorter than the upper; the snout sleshy, obtuse, and prominent. The eyes almost vertical, and very small. The nostrils double, and large. The Cirri are eight in number. The two longest rise laterally from the snout or upper lip, are flattish and strong at their origin, and little more than an inch in length. Another pair much shorter rise from the nostrils; and two pair from the lower jaw. The dorsal and pectoral fins are both (as in the former fish) surnished with a strong bony serrated ray. The adipose fin is much shorter, rising at a distance from the anterior dorsal.

The colour of the fish is a pale filver marbled with grey, but the fins, tail, and two larger cirri are more remarkably variegated.

Gronovius has fully described this fish under the name also of Mystus; (No. 387. p. 126.) but it may be remarked that his figures, drawn from preserved specimens, especially in respect to the cirri, differ from the drawings made at Aleppo from recent subjects.

The description by Dr. Solander.

Silurus pinna dorsali postica adiposa ovata oblonga, ani radiis 11, Cirris 8, Cauda bisurca, naribus duplicibus. B 5. D + 0. P + V 6. A 11. C 20.

\* Kibudy تبوضي Cobitis Barbatula. Linn. Syst. Nat. p. 499.

B. D 8. P. 12. V 7. A 6. C 22.

 $E_{e_2}$ 

The

The Barbel<sup>5</sup> and the Chub<sup>6</sup> differ little from the fame fish in Europe. But what in the former Edition, was named Roche comes nearer to the fish described by Forscal<sup>7</sup>.

What was termed Gudgeon<sup>8</sup>, is likewife a diffinct fish, and approaches nearest to the Cyprinus Capæta.

Another Cyprinus, with two Cirri, and in feveral cir-

<sup>5</sup> Kirseen کرسین Cyprinus Barbus. Linn. S. N. p. 525.

Burak براق Cyprinus Cephalus, Linn. S. N. p. 527.
 D 10. P 17. V 10. A 11. C 22.

<sup>7</sup> Binny بني Cyprinus Binny, pinna dorsali radiis 13, tertio crasso, corneo. Forscal (Descript. Animal, p. 71.)

The Aleppo Binny differs from that of Forscal in the number of rays of the anal sin: the difference in the caudal, may be owing to his not counting the small rays on each side.

B 3. D 3 P 18. V 9. A 9. C 22.

The first three rays of the anal fin are closely united.

تقل Tukle

B 3. D 3 P 17. V. 9. A 7. C 24. Cirris duobus minutis ad angulos Oris.

The specimen examined measured seven inches. The back from the vertex to the dorsal fin, arched, and remarkably sharp. The first of the three bony rays is extremely small and short, the second is about one third in length of the large, curved, bony ray, ferrated on each side on the hind part, ramous at the extremity, and in its groove partly receiving a ramous ray, which is the longest of the fin.

The back is of a dull filver colour, fprinkled, like the fins, with numerous small, round, darkish spots.

This fish agrees in the most material points with the Cyprinus Capæta. (Novi Commentar, Academ. Scientiar. Imper. Petropolitan, Tom XVI. page 508.)

cumstances agreeing, with the Capæta, is known to the CHAP.

Natives under the name Killore?

A third Cyprinus named Kurcyty<sup>10</sup>, refembles the two preceding fish in colour, but is less spotted, and instead of two it has four Cirri. In its form and characters it approaches so near to the Cyprinus Mursa of the Petersbourgh Transactions, that I shall refer for a description to that book<sup>11</sup>.

The three fish last mentioned were erroneously conceived to be varieties of the Gudgeon; a mistake by which Mr. Pennant has been misled in his British Zoology 12.

كلور "

B 3. D 3 P 18. V 11. A 7. C 22. Cirris duobus ad angulos Oris.

This fish measured ten inches and a half. In colour it resembled the Tukle, but was less spotted. It varied also in its form; the back though sharp, was much straighter. In both, the lateral line, from the occiput to near the ventral fins, bends gently towards the belly; it afterwards keeps a middle course to the tail, which, as in the Tukle, is also forked.

The Cirri at the mouth, the situation and shape of the fins, agree with the Tukle; and the structure of the three connected, long, bony rays of the dorsal fin, are nearly alike, only, that the third serrated bone in the present fish was shorter and more slender. In both, the scales are small and close.

This perhaps may be only a variety of the Cyprinus Capæta; but it may be remarked further, that the figure in the Petersbourgh Transactions, particularly in the form of the back, comes nearer this fish than the preceding.

B 3. D 3 P 16. V. 9. A 7. C 24. Cirris quatuor; duo ad rostri latera, duo ad angulos Oris.

" Petropolit. Commentar. xvii. p. 513.

" Vol. iii. page 316.

ent fish, approaches the nearest to the Cyprinus Leuciscus of Linnæus.

The Kasoor 4 appeared to be a variety of the Cyprinus Nasus.

The Zireiky 15, an Phoxinus squamosus major?

What in the former Edition was taken to be a Bleak, is found to be a distinct fish, as will appear from the defcription subjoined 16.

The

قربس تا

The subject measured seven inches. D 12. P 13. V 9. A 9. C 24. Cauda sub-integra.

In counting the rays of the ventral and anal fins, the first short bone in the former, and two in the latter, which in both are connected with the first ramous rays, are included; but in the caudal fin, two small conjoined bones on each side excepted, the ramous rays only are reckoned.

<sup>14</sup> قاصور D 9. P 13. V 9. A 9. C 24. Linea laterali recta, media.

Cyprinus Quadruncialis iride croceo, macula atra ad initium caudæ Arted. (Descript. Spec. Pisc. 22.) D 10. P 12. V A 8. C 20.

<sup>16</sup> Mirmeed مرجيك B 3. D 10. P 15. V 9. A 18. C 22.

This Cyprinus measured nearly seven inches. The colour on the back a dark grey, growing lighter on the sides and belly. Some of the fins have a faint reddish cast.

The head small, much compressed; the front declining; the snout somewhat sharp. The eyes large; the nostrils double on a line with the middle of the orbit. The head and opercula without scales. The jaws nearly equal, the under ascending. The mouth narrow. The trunk oval and much compressed, ascending and carinated from the head to the dorsal fin, then descending and convex. The lateral line declining a little from the superior part of the opercula, is afterwards straight, and nearer the belly than

the

The Arais <sup>17</sup>, (probably from the ferrated bone of the C H A P. dorfal fin) was taken for the Carassius simpliciter dictus of Gesner, but besides the want of a ferrated bone in the anal fin, it differs in other respects from the Cyprinus Carassius

the back. The scales of middle fize, sub-ovate, imbricated, and firm. The belly straight.

The dorsal fin consisting of ten ramous rays, is situated in the middle of the body, where the back begins to descend. The pectoral fins of sisteen or sixteen rays, are pointed, and placed under the bony triangular edge of the aperture. The ventral fins (of nine rays) less accute than the pectoral, are situated equally distant from them and the anal. The anal rises nearly opposite to the termination of the dorsal fin, and consists of eighteen or nineteen descending rays, the sourch being the longest. The caudal fin is sub-bisid, with twenty-two rays, and two or three short small spines on each side.

<sup>17</sup> Arais عرايس Cyprinus. B 3. D 18 P 16. V 9. A 10. C 22.

It measures six inches. The shape oblong-ovate, compressed. The scales imbricated, permanent, rather large, orbicular, and striated.

The head thick, convex above, compressed on the sides, without scales, the snout obtuse, projecting over the mouth; with a groove in the middle, and a small bony knob between the nostrils. The mouth large, transverse, situated low, and the under jaw much shorter than the upper. The eyes large, lateral, near the rostrum. The nostrils on a line with the centre of the orbit; large and double. The opercula of a pearl colour, splendent.

The bark arched and carinated. The belly prominent. The lateral line, a little oblique at first ascends near the ventral fins, and runs along the middle of the tail.

The dorsal fin rises opposite to the ventral, where the trunk begins to contract. It is composed of three bony and fifteen ramous rays. The first two bony rays are small, and lie closely connected on the third, which is about one inch in length, strong and doubly serrated on the hind part. The pectoral fins consist of sixteen or seventeen rays of which the first three

Graffius of Linnæus, as well as from every other deferibed species I have met with in books. In the form of the body it approaches the Crucian of Pennant 18, or the Gibelio of Bloch 19, but is unlike in the shape of the fins, and the dorsal fin has not two serrated bones.

There remains, belonging to the Kowick, two Pifciculi, the one named Tiftaf by the Natives, the other Silal 29. They are about two inches in length; but the specimens were so injured by the carriage that it was not possible to determine even the Genus.

Though the Turks feldom eat fish, the Kowick does not afford a sufficient quantity for the Aleppo market, and the Christians, in their great Lents, are therefore supplied from the rivers Orontes and Euphrates: as also from the lake of Antioch, and a Lake near Marash.

Amongst those which I have remarked are the fol-

are the longest, the others gradually diminishing. The ventral fins, situated at a distance from the anus, are nearly of the same form, (the first three rays being the longest) but consisting only of nine rays, they appear less falcated. The anal fin consists of nine rays, the first adhering closely to the second and the third and sourth being the longest. The tail is rather long subbified, and composed of twenty rays besides the small connected short bones at the root of the fin.

The colour dark, changeable green; the fins have a dull yellowish cast.

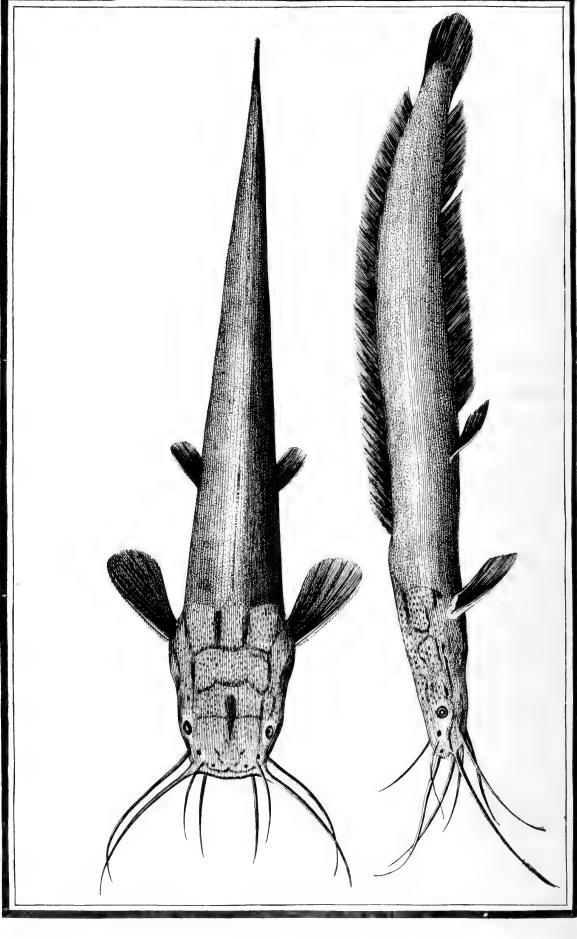
<sup>&</sup>lt;sup>11</sup> Brit. Zoolog. p. 359. No. 171.

<sup>19</sup> Bloch (Hist. Nat. des Poissons.)

تفتاف وو

<sup>21</sup> W/W





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lowing. The Eel<sup>22</sup>; the Sheat fish <sup>23</sup>; the Tænia <sup>24</sup>; the C H A P. Carp <sup>25</sup>; Barbel <sup>26</sup>, &c.

There is another species of the Silurus with which the market is plentifully supplied from the beginning of the winter till March; and of which, conceiving it hitherto not described, I have subjoined a description with a drawing. It is chiefly brought from the Orontes, and, I believe, from some stagnant waters near that river. Though it has a rank taste, resembles coarse beef in colour, and by the doctors is deemed unwholesome, it is much eaten by the Christians. It is vulgarly called the Black Fish, Simmak al Aswad<sup>27</sup>; but the Natives affirm the proper name to be Siloor.

The

Djirry Silurus Glanis. Linn. S. N. p. 501.

24 Cobitis Tænia. Linn. S. N. p. 499.

25 Cyprinus Carpio. Linn. S. N. p. 525.

Cyprinus Barbus. Linn. S. N. p. 525.
Cyprinus Niloticus. Linn. S. N. p. 527.
Cyprinus Nafus. Linn. S. N. p. 530.

27 الاسوان الاسوان Silurus Anguillaris. Linn. S. N. p. 502.

This Silurus (Plate VIII.) was twenty inches in length, and weighed twenty ounces. The colour of the back, and upper part of the head, black; the under part of the head, and the body below the lateral line, of a dark purple, changing on the belly into a dull white, or lead colour.

The head is broader than the body, depressed, obtuse, and in length five inches. It is covered with a granulated thin skin, through which the grooves and divisions of the bones are visible, particularly a deep groove in

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<sup>&</sup>lt;sup>22</sup> Simmak Heyat سمت حيات Muræna Anguilla. Linn. Syft. Nat.

The Sea Fish fent from Scanderoon to the English, are chiefly two kinds of Cod<sup>28</sup>. One equal in fize and quality to the best English Cod, the other named Leach, much inferior.

The French factory are much better supplied, by means of the captains of their ships, who are provided with better sishing-tackle than the Greeks at Scanderoon,

the middle. The upper jaw is longer than the under; the mouth rather narrower than in the Silurus Glanis; the teeth numerous, small, close set in both jaws; the tongue short, obtuse, immoveable. The eyes are small, situated laterally but low, near where the rostrum begins to contract. The nostrils double, distant from each other, the anterior near the extremity of the rostrum. The Cirri are eight in number. The two longest and strongest (measuring five inches and a half) rise from the angles of the upper lip; two not half so long from the posterior nostrils. Four from the lower jaw, of which the two exterior, from the side of the lower jaw, (measuring sour inches) are the longest: the other two, rise from the lower lip.

The body is without scales, roundish to near the end of the tail, where it is compressed; the lateral line, declining a little at its commencement, becomes straight.

The dorsal fin rising a little distant from the shoulder, is continued to within half an inch of the caudal: it is thick and slessly. The pectoral fins are oval and consist of ten rays, of which the first is strong and serrated on the anterior edge. The ventral fins are small, and near the anus. The anal fin rises near the middle of the body, and terminates opposite to the dorsal. The caudal is round.

This fish has been described at length by Gronovius, under the name of Clarias. Zoophylac, p. 100. No. 322.

Doctor Solander, upon examination of a specimen in the British Museum, described it.

Silurus Anguillaris, Pinna dorsali unica radiis 70, Cirris octo, Capite depresso, osse sincipitis trilobo. B 9. D 72. P 75 V 6. A 57. C 22.

28 Gadus. Linn. Syst. Nat.

and partly maintain the crews of their ships, in Port, CHAP. with the fish caught in their nets 29.

The bay of Scanderoon abounds in a variety of fish; but the Greeks are so indolent, that it is with difficulty they can be prevailed on to launch their boats, when the weather appears doubtful; and no encouragement can induce them to go a fishing on any of their numerous Feast days.

<sup>29</sup> Among the fish brought to the French from Scanderoon, the chief is the Red Mullet. Mullus Barbatus. Linn. S. N. p. 495.

I have once or twice seen Sturgeon brought to Aleppo from Scanderoon; but they are reckoned a rarity.

Accipenser Sturio. Linn. S. N. page 403.

# CHAP. IV.

# OF REPTILES, INSECTS, &c.

FROG.—RIVER CRAB.—TORTOISE.—SILK WORM.—BEE.—SCORPION.— SCOLOPENDRA. — SERPENTS. — MOSQUETOE. — LOCUST. — CHAME-LEON, &c.

TO collect, and examine with any degree of accuracy, the numerous subjects comprehended under the title of this chapter, required a much larger portion of time, than it was ever in my power to bestow on that branch of Natural History. I must therefore confine myself to a few only of such subjects, as are either of service, or hurtful, to the human race.

The river Kowick is faid to have derived its name from the croaking of the Frogs which refide on its banks 2. They are still found in vast abundance, are of

A fimilar cause to that assigned above by my Brother, prevented my doing so much as I wished towards supplying the desiderata of this part of his plan. The want of books, and other assistance, proved an unsurmountable obstacle to determining the varieties, in cases even where the species was known; and the more minute Insects were either totally neglected, or not attended to with that care required by the Naturalist.

<sup>2</sup> Akurrak عنرت Rana Esculenta. Linn. Syst. Nat. p. 357.

In certain seasons, Aristophanes's Chorus is performed in high perfection.

Βρεκεκεξ κοαξ κοαξ.

a large fize, and in quality so delicious, that some Eu-CHAP. ropean Epicures have been heard to declare it was almost worth while to make a journey into Syria, purposely to regale on them. They fall to the share of the French, and the Native Catholic Christians; for the Turks and other inhabitants never eat them.

But another article of food, produced by the Kowick in great plenty, and in much greater request than the Frogs, is a particular kind of Crab<sup>3</sup>, very different from any thing of the kind known in England, and esteemed by the Franks as one of the principal delicacies of their table. It is of great service also to the Christians in their Lent days, being procurable at all seasons of the year. But it is in highest perfection in the season of the white mulberries, when, straying from the river, it pampers itself with the ripe fruit, scattered on the ground under the trees.

Belon met with them in Mount Athos, and suspected at first that they must have got into the rivulet from the sea, but afterwards found that to be impossible on account of the inaccessible situation.

- 3 Ziratan راطان Cancer Fluviatilis. Belon (de Aquatilibus, p. 365.) Rondoletius (de Piscibus, sluviat. p. 208. Lugdun. 1558.) Gesner (de Aquatilib. lib. iv. 161. Tigur. 1558.)
- " A la parfin estant arrivez le Soir a un Ruisselet, trouuasmes tant de Cancrès, qui ne ressemblent pas aux Escrevisses, que l'on en eust peu
- " prendre mille presentement en un instant. Le Caloire les mangeoit cruds,
- " & nous affeuroit qu'ils estoyent meilleurs que cuicets. Nous en mangeas-
- "mes avec luy, & ne nous souvient avoir trouv goust en viande qui ait
- " semblé plus delicieux & savoureux, ou sust pour l'urgente necessité de
- " faim, ou pour la nouveauté de la Viande." Belon (Observ. lib. i. c. 47.)

The river likewife affords Tortoifes in abundance, BOOK which are fometimes, but rarely, eaten by the Christians in Lent; the Land Tortoise<sup>6</sup> being preferred as more wholefome: its eggs are also used medicinally.

> Snails 7 are feldom used for food, except when prefcribed by the physician; and Locusts, though an article of food in other parts of Syria, are not eaten by the Arabs near Aleppo.

> The Silk Worm9 is a most material object to Syria, being the chief fource of its commerce with Europe. It has already been remarked that only a small quantity of filk is made in the vicinity of the town\*.

> The great confumption of honey renders the Bee 10 also of great importance; but the Province not supplying a fufficient quantity, both honey and wax are brought from other parts, particularly from Caramania. Mosques are illuminated by lamps, and most of the ordinary people burn oil; tallow candles being apt to melt in the fummer. Wax is used in all the better houses, but being unbleached, and usually formed into very large

<sup>&</sup>lt;sup>5</sup> Silhefy Linn. Syst. Nat. p. 352.

<sup>•</sup> Silhefy Burry سلحفيري Testudo Græca. Linn. S. N. p. 352.

<sup>&</sup>lt;sup>7</sup> Bizak بزاف Limax Agrestis. Linn. S. N. p. 1082. • Iirad جراك Gryllus Migratorius. Linn. S. N. p. 708.

Dood Jo Phalæna Bombyx Mori. Linn. S. N. p. 817.

<sup>\*</sup> Vol. i. page 84.

<sup>&</sup>quot; Nihil نحل Apis Mellifica. Linn. S. N. p. 955.

tapers, though it burns clear, it makes an unhandsome CHAP. appearance, compared with the Italian wax candles.

Among the noxious animals, with which the houses are infested, the Scorpion " holds a principal place. They are met with in the fummer nights, crawling in the streets, or on the stairs, and fometimes even among the mattreffes spread on the Terraces. The Natives are fometimes flung by them, but it is rather wonderful that accidents are not more common. The wound in general, only occasions pain for feveral hours, unattended by any further bad consequence, though I have seen fome inflances in female patients, where the pain and fwelling was exceffive, accompanied with vomitings, and faintings. The Natives exhibit Theriac as in other cases of poison; and most houses are provided with a phial of oil, in which the bruifed animal has been fleeped: but, though plain oil was found an application of equal efficacy, it was in general expedient to indulge a popular prejudice.

The wound inflicted by the Scolopendra is reckoned little less venomous than the sting of the Scorpion, but the animal is not so often seen within doors.

Where food has been left exposed on the Terrace, which is frequently done before supper in the summer,

<sup>&</sup>quot; Akrab عقرب Scorpio Europæus. Linn. Syst. Nat. p. 1038.

<sup>&</sup>quot; Um Urba wa Urbain ام اربه و اربعين Scolopendra morsitans. Linn. S. N. p. 1063.

being unaccountably feized with vomiting and other fymptoms refembling those produced by poison. The Natives ascribe such accidents to venomous animals passing over the victuals, more especially a kind of Spider which emits a deleterious juice: but I never saw one of them.

Though few houses are free from Snakes 13; bad accidents are never known to be produced by them, and indeed they are of the harmless kind. They usually haunt the wood-house, or other offices, seldom appearing in the lodging apartments, though now and then they are heard ratling on the shelves among the ornamental china in the less frequented chambers, or detect themselves by diffusing a strong musky scent. They destroy mice; and small ones have sometimes been caught in mouse-traps, which after gorging the prisoner, were unable to make their escape. It is a Snake of a whitish grey colour, about two feet and a half in length, which is most commonly found in the houses.

Serpents of a more noxious kind inhabit the Champaign, in the hot months; but the ground, during that feason, being bare, and arid, they perceive objects at a distance, and flying at the approach of man, they are little subject to be trod upon, or otherwise undesignedly provoked, so that it is rare to hear of their doing mis-

<sup>&</sup>lt;sup>33</sup> Hai حيم Coluber. Linn. Syft. Nat

chief. An inftance of an English gentleman killed by a C H A P. Serpent, has been mentioned in another place 14; but I never had an opportunity of seeing a venomous Snake in Syria.

Vipers 15, are not common in the vicinity of Aleppo, and are brought dried, for medicinal purposes, from Egypt. Broth made of the common house Snake is sometimes eaten by the Christians, but it is never prescribed as a medicine.

Formidable as some of the animals already mentioned may appear to the imagination, there are diminutive domestic Pests infinitely more vexatious. These are Bugs 16, Fleas 17, and Musquetoes 18. Very sew houses are exempt from the first; and, where the Divan cushions and mattrasses happen to be stuffed with wool instead of cotton, they are always found in multitudes. The second can by no care whatever be excluded from the neatest houses; the long eastern habit, affording them shelter, is a favorable conveyance, and the streets and dusty Bazars, so swarm with them, that it is impossible to walk about without collecting a colony. Among people of condition, it is not unusual to shift on

<sup>14</sup> See page 157.

<sup>&</sup>quot; Apha ai Coluber Vipera? Linn. S. N. p. 375.

<sup>&</sup>lt;sup>16</sup> Fisfees فسغس Cimex lectularius. Linn. S. N. p. 715.

<sup>&</sup>quot; Buroot بغوت Pulex irritans. Linn. S. N. p. 1021.

<sup>&</sup>quot; Bukh عقد Culex pipiens. Linn. S. N. p. 1002.

precaution cannot fo conveniently be observed, the people are tormented beyond patience, and bear a constant fuccession of marks upon their skin.

Among the fick in the lower classes, in the season of Epidemical Distempers, it is not easy to distinguish a certain species of Petechiæ from old slea-bites. The frequent use of the Bagnio is in some measure a protection from another kind of vermine 19, not uncommon among the poor in other hot countries; but the Bagnio is no remedy against sleas 20. Hence it is that sleas make their appearance in the spring, and are triumphant till the setting in of the hot weather, when they lose their wonted agility, and gradually diminish. The Musquetoes reign the whole summer, and are particularly troublesome in the night; the majority of the Natives sleep without what are called sly-traps, or gauze curtains, using no other desence than a handkerchief thrown over the sace.

A fingular method of defence against Mosquetoes, in Egypt, is mentioned by Herodotus. "As the wind will "not suffer these insects to rise far from the ground, the "inhabitants of the higher part of the country usually "sleep in turrets. They who live in the marshy grounds

<sup>&</sup>quot; Kumle قمل Pediculus humanus. Linn. Syst. Nat. p. 1016.

An Arab Author, thus describes the fleas. A black, nimble, extenuated, hunch-backed animal, which being sensible when any one looks on it jumps incessantly, now on one side now on the other, till it gets out of sight. Al Kazuinus. Bochart. (Hierozoicon, vol. ii. p. 585.)

" use this substitute, each person has a net with which c HAP.

"they fish by day and which they render useful by night.

"They cover their beds with their nets, and steep fe-

" curely beneath them. If they flept in their common

"habits, or under linen, the Gnats would not fail to tor-

" ment them, which they do not even attempt through

" a net 21."

How far this last circumstance is correct, I do not know. A kind of reticulated covering for horses, is common in hot countries, but the curtains used by the people in Syria, are of a much closer texture, and I suppose, come near to the conopeum, which the Romans seem to have considered as a luxury imported from Egypt.

Inter figna turpe militaria Sol aspicit Conopeum.

The Common Fly <sup>22</sup> is also, at meal-times, very troublefome, but it is easy to elude them at other times by darkning the room. In the garden houses, towards the end of spring, they become intolerably vexatious, and, at dinner in the open Divans, assault in such swarms, that the servants are obliged to stand round with green branches in their hands to defend the table. In travelling likewise in the summer, the slies, as well as the Musquetoes, are extremely teazing; while the horses on their

<sup>21</sup> Herodotus (Euterpe. Beloe's Trans. vol. i. p. 327.)

<sup>22</sup> Dubane دبانه Musca Plebeia. Linn. Syst. Nat. p. 979.

Horse Fly 23; circumstances which render travelling, in the heat of the day, to the last degree fatiguing. Under the tent, the traveller is exempt from the plague of Fleas, which is one reason for preferring an encampment to resting in Khanes, or in villages, but the Musquetoes are never-failing companions, and, when the tent happens to be pitched in the vicinity of a marsh, the horses are often so harassed by Musquetoes and other Insects in the night, that they can neither rest, nor feed.

The Natives though inured to these hardships in travelling, do not suffer without murmuring, and the Franks, who travel for pleasure, find it impossible with all their ingenuity to avoid them. They indeed may in some degree be lessened, by setting out in the morning an hour or two before dawn, and by a proper choice of site for encampment; but this latter expedient is not always optional, water is an indispensable article, and the flat, neglected grounds through which the rivulets wander are often marshy.

But of the Infect tribes, the Locust<sup>24</sup> is the most dreadful in its depredation; it sets all the defensive arts of man at defiance, and destroys in a sew days the beau-

Culex Equinus. Linn. Syst. Nat. p. 1003.

<sup>24</sup> Jirad J - Gryllus migratorius. Linn. S. N. p. 708.

tiful verdure of vast tracts of cultivated country 25. Such c H A P. destructive swarms never appeared at Aleppo during my residence there, but straggling parties seldom failed to show themselves every year, in the spring and summer; and sew years pass that mischief is not done by them in one part or other of Syria.

I once had an opportunity to fee large fwarms, in the island of Cyprus, and, till that time, had no adequate idea of their numerous hosts, and rapacious depredations. In going in a chaise from Larnica to a garden at the distance of four or five miles, the Locusts lay swarming above a foot deep in several parts of the high road, and thousands were destroyed by the wheels of the carriage, crashing over them. Hardly a leaf remained on the mulberry trees, though large fires of green wood had been kindled to windward of the gardens 26. They are more or less dangerous, in respect to the corn, in proportion as they arrive sooner or later in the season; for, when the grain is nearly ripe, they do not touch it, contenting themselves with the shoots

<sup>&</sup>lt;sup>25</sup> Instances of astonishing mischief produced by Locusts, at different periods of time, collected from various Authors, may be found in Bochart; and in the Theatrum Minimorum Animalium Mouseti, p. 123. In the latter likewise are mentioned various methods that have been tried, or proposed for stopping their progress, p. 125. Bochart examines the several passages in scripture where they are spoken of, and bestows much labour on the etymology of their specific names. Hierozoicon, (vol. ii. p. 440.)

The progress of the Locusts in Barbary is very well described by Shaw. page 187.

providentially appears at the fame time, is of infinite fervice on these occasions, and on that account is much respected by the Turks. Other birds also devour the Locust, as Starlings, Sparrows and Swallows; and great numbers while yet young are destroyed by another species of Insect 29; but the Locust bird is the most formidable enemy of all.

Other remarks on particular Infects shall be subjoined at their respective place in the following imperfect List which commences with Amphibious Reptiles.

<sup>&</sup>lt;sup>27</sup> This was the case in the year 1776, as I was informed by Dr. Freer. 'They had done confiderable damage in Mesopotamia; about Adana, Aintab, and Antioch; at Acri and other maritime towns. On the 14th of ' May they appeared at Aleppo, and continued to show themselves at times during that and the two subsequent months. They did little damage near Aleppo, except to the herbage, but, in other places of Syria, they deftroyed the Cotton plants, the Mulberry and Fig leaves, and even the e leaves and bark of the Olive. The grain being too far advanced, escaped." The Doctor picked up young ones in the month of June. And it was believed by the Natives that there had been three different broods in the course of two months. The Smurmur, or Locust birds, appeared as usual and made great havock among them. With regard to that bird I have met in the Memoirs of the Miffionaries, a fable which I do not recollect hearing at Aleppo. In the great cities of the East, particularly Damascus and Aleppo, they take care to be provided with a certain water from the country whence the Locust birds come, and "On pretend ici avoir reconnu par " une experience constante que des qu'on remue cette Eau, ces Oiseaux "viennent en foule, comme s'ils la sentoient & etoient attires par son "Odeur." Memoires des Missions, v. 8. p. 113.

<sup>&</sup>lt;sup>28</sup> Turdus Roseus. Linn. see page 205.

<sup>29</sup> Gryllus Pupus? Linn. S. N.

### AMPHIBIA REPTILIA.

CHAP.

TESTUDO.

T. Lutaria. Linn. Syst. Nat. p. 352.

T. Græca. Linn. S. N. p. 352.

RANA.

R. Bufo. Linn. S. N. p. 354.

R. Esculenta. Linn. S. N. p. 35730.

R. Arborea. Linn. S. N. p. 357.

LACERTA.

L. Stellio. Linn. S. N. p. 361. حرفون Lizard.

L. Turcica. Linn. S. N. p. 362.

L. Chamæleon. Linn. S. N. p. 36431. Birbihty

<sup>10</sup> Akurrak is the trivial name, but Avicenna and others use Diphda, which according to Bochart is taken from the Hebrew. Hierozoicon, vol. ii. p. 652.

The Chameleon is common enough in the gardens, as well as in the neighbouring rocky hills. It is usually of a green colour when found on the grass; or of the colour of the earth where it happens to rest; and, if perched upon a branch, or trunk of a tree, its colour is nearly that of the bark.

When removed from its place, it does not immediately change colour, nor does it constantly in changing, assume that of the ground upon which it is laid. Thus, if put into a box lined with white, or with black, it will sometimes in the black become of a lighter colour than before, and vice versa; and sometimes will assume a brimstone colour. When the experiment was made upon a cloth of various colours, but where the animal had a larger field to move about, the event was the same.

It frequently goes through a fuccession of colours before taking on that of the body nearest it. When laid on the grass, it will perhaps, from a light earthy colour, first become darker, then black, yellow, again darkish, and last of all green. At other times, it becomes green at once; and so of other colours when laid on other grounds: whence it was hastily believed that the transition was always sudden. But, notwithstanding this irregularity in its change, especially when hurried or disturbed, its most permanent colour in a state of repose, was that of the ground on which it lay, providing the ground was not of one of the colours which it never does assume, as red, or blue. Little material difference was observable, whether the experiments were made in the shade, or in the sun; but the animal appears duller at sometimes than at others, and captivity seems to abate his alacrity in changing.

#### AMPHIBIA SERPENTES.

BOOK COLUBER.

C. Vipera? Linn. Syst. Nat. p. 375.

C. Catenatus. 230. 150. 80. Coluber nigricans, fasciis albis medio catenatis, abdomine albido. Solander.

C.

#### INSECTA.

LAMPYRIS.

L. Noctiluca. Linn. Syst. Nat. p. 643.

MELOE.

M. Vesicatorius. Linn. S. N. p. 679.

M. Syriacus. Linn. S. N. p. 680.

STAPHYLINUS.

S. Maxillofus. Linn. S. N. p. 683.

FORFICULA.

F. Auricularia. Linn. S. N. p. 686.

MANTIS.

M. Religiofa. Linn. S. N. p. 690.

Of numbers examined in the field, none were observed to dart out their tongues, however allured by flies; and of several kept for sometime in the house, none were ever seen catching their prey. Though this might probably be owing to negligence in watching them, or to their not being kept long enough, it may in some measure account for the popular prejudice of their living solely on air, which still is prevalent in the East. "The Cameleon, according to Leo Africanus. (Purch. Pilgrims, page \$40.) is nourished by the Element of Ayre and the sun beams, at the rising whereof it gapeth, and turneth itself up and down." This is believed in Syria; but the sable of its killing Serpents by dropping spittle upon them, I never heard there.

That the Chameleon can subsist a long while without food, is certain; having been kept for months under a glass bell where no slies could have access; but it was owing to want of proper watching that they were not in other circumstances observed to eatch their prey. They were not kept in cages, but permitted to crawl about a room, and being less tame than when confined, they were not disposed to feed when handled or disturbed: those kept under the glass were not tempted to eat by offering them slies.

GRYLLUS.

### INSECTA.

#### GRYLLUS.

C H A P. IV.

- G. Domesticus. Linn. Syst. Nat. p. 694.
- G. Nasutus. Linn. S. N. p. 692.
- G. Gryllo-Talpa. Linn. S. N. p. 693.
- G. Migratorius. Linn. S. N. p. 70032. Jirrad Jenes
- G. Falcatus. Thoracis trifegmentacei carina semiovata integra, Elytris fasciatis, Alis medio nigris. Solander.

### CICADA.

صرصر

NEPA.

N. Linearis. Linn. S. N. p. 714.

CIMEX.

C. Lectularius. Linn. S. N. p. 715.

PHALÆNA.

P. Bombyx Mori. Linn. S. N. p. 817. Phalæna. Linn<sup>33</sup>.

MYRMELEON.

M. Formica Leo. Linn. S. N. p. 9142.

VESPA.

V. Crabro. Linn. S. N. p. 948.

V. Vulgaris. Linn. S. N. p. 949 35. Zinboot زنبوت

<sup>32</sup> Damiri distinguishes the Locust by different names in its different States "cùm exit ex Ovo Locusta vocatur Daba 🕠 cùm alæ suboriuntur & crescunt, dicitur

"Gauga غوغا idque cum aliæ in aliis tumultuantur; Variis autem coloribus in-

" signiri cum occipiunt, ità ut flavescunt Mares, et seminæ nigrescant, tum demum

"appellatur Girad," (Hierozoicon, vol. ii. p. 447.) The latter is the vulgar name used indiscriminately at Aleppo. On the subject of the Locust's eggs see also Damiri ut sup. p. 485.

There are some beautiful varieties of this Tribe. At the gardens in the spring they afford amusement after supper, visiting in endless succession, and displaying their finery to advantage on the Venetian Finars, used for protecting the candles from the wind.

<sup>34</sup> For an account of this curious infect see Geofroy (Hist. Abregée des Insectes, Tom. ii. p. 256. Paris 1762.)

35 Damiri's account of this Infect may be feen in Bochart, (vol. ii. p. 534.)

Vol. II. Hh Apis.

BOOK APIS.

#### INSECTA.

A. Longicornis. Linn. Syst. Nat. p. 953.

A. Mellifica. Linn. S. N. p. 955.

FORMICA 36.

F. Rufa. Linn. S. N. p. 962.

Musca.

M. Plebeia. Linn. S. N. p. 979.

TABANUS.

T.

CULEX.

C. Pipiens. Linn. S. N. p. 1002 37.

C. Equinus. Linn. S. N. p. 1003.

PEDICULUS.

P. Humanus. Linn. S. N. p. 1016.

P. Pubis. Linn. S. N. p. 1017.

P. Ricinoides. Linn. S. N. p. 1017.

P.

Pulex.

P. Irritans. Linn. S. N. p. 1021. Flea.

ARANEA.

A. Domestica. Linn. S. N. p. Ankaboot عنكيبوت Spider.

Scorpio.

S. Europæus. Linn. S. N. p. 1038. Scorpion.

CANCER.

C. Fluviatilis Belon (de Aquatil. p. 36538.)

<sup>36</sup> Alkazuinus gives the following account of the Ant, which is thus translated by Bochart. "Cum Grana collegerunt in Apothecis suis, quia metuunt ne germinent," in duas partes singulas secant, ut sic iis eximatur Virtus Vegitativa. Sed Coriandri granum quadrisarium dividunt, quia etiam dimidiatum regerminat. Lentem autem hordeum, & fabam non frangunt sed excorticant, quia per excorticationem vegetandi facultate privantur." (Hierozoicon, vol. ii. p. 589.)

Though Bukk be the name applied folely to this Infect in the vulgar tongue, the word is used in a more extensive sense by the Arab writers. See Hierozoicon, vol. ii. p. 562. In the same Author also may be sound a curious description from Al Kazuin in which the Gnat is compared to the Elephant.

<sup>28</sup> This has been already mentioned. Page 221.

ONISCUS.

CHAP.

#### INSECTA.

ONISCUS.

O. Afellus. Linn. Syst. Nat. p. 1061.

SCOLOPENDRA.

S. Morsitans. Linn. S. N. p. 1063.

S. Coleoptrata. Linn. S. N.

#### VERMES.

ASCARIS.

A. Vermicularis. Linn. Syst. Nat. p. 1076.

A. Lumbricoides. Linn. S. N. p. 1076.

Lumbricus.

L. Terrestris. Linn. S. N. p. 1076. Doode 30,0

HIRUDO.

H. Medicinalis. Linn. S. N. p. 1079 39. Alak alla

from the brook, to take a Leech into the mouth, without perceiving it at the time, and which, fixing in the fauces, remains several days before they can find means to get it out. I have seen several instances where, a Leech not being suspected, the blood which from time to time came from the throat, was ascribed to some other cause. The animal sometimes fixes in such a situation, and contracts in such a manner when an instrument is introduced in order to examine the sauces, that it remains persectly conceased; at other times, when visible, it is not without difficulty extracted by the forceps. This was however the only effectual method; for the others mentioned by Medical writers, which were tried by way of experiment, did not succeed. See Galen (de Locis. lib. iv. & de Simp. Med. lib. ii.) (Paul Ægineta) lib. v. (Avicenna) vol. i. p. 611. Rhazis (ad Almans. lib. ix. c. 56.) et Senertus vol. ii. page 398.)

When a probe dipped in strong brine could be introduced, so as to touch the part to which the animal adhered, it sometimes would quit hold, but this seldom could be effected; and gargling was of no service. It often happened that the patient, (where the Leech was invisible) was able only in a very confused way to indicate where he felt it; in which case it was sound best to make him keep the mouth open, and to wait patiently till the animal, stretching out when unalarmed, detected itself from behind the palate; for every attempt with an instrument made it retract, and lurk more closely.

Hh2

HIRUDO.

OF REPTILES, INSECTS, &c.

VERMES.

BOOK

IV. HIRUDO.

H. Sanguisuga. Linn. S. N. p. 1079.

LIMAX.

L. Agrestis. Linn. S. N. p. 1081. Snail.

SEPIA.

S. Loligo. Linn. S. N. p. 1096.

<sup>40</sup> Avicenna uses also the word Hulzoon for Snail, and the animal is very well described under that name by Damiri; but Bizak is the trivial name at Aleppo.

# CHAP. V.

#### OF PLANTS.

OF THE PLANTS IN THE ENVIRONS OF ALEPPO: AND OF SOME COL-LECTED IN THE MOUNTAINS, ON THE ROAD TO SCANDEROON AND LATACHIA.

NEITHER my leifure, nor my knowledge in Botany, CHAP. with the affiftance of my Brother, (who was lately arrived from Europe, and had more time to collect specimens,) were equal to the task of forming a complete Catalogue of the plants growing near Aleppo; and, notwithstanding the labour employed in research, I have no doubt that many plants may have escaped our notice. In the meanwhile, care has been taken that none should be inserted in the subsequent Catalogue but such as have been ascertained with all the accuracy in my power.

It

- This, suspicion was well founded; for I met with several new plants after my Brother left the country, and my successor Doctor Freer discovered several more.
- <sup>2</sup> My Brother had been prevented by other avocations, from paying much attention to Botany, previously to my arrival in Syria, so that most of the plants were collected and prepared, in the two or three last years of his residence there: but in order more effectually to prevent mistakes, a considerable number of dried specimens, such more especially as were unknown to

BOOK It was remarked on a former occasion\*, that the Narcissus was in flower during most part of the winter,

me, or about which I was dubious, were transmitted to my Brother after his return to England. These were re-examined by some of his botanical friends in London, particularly by the late Mr. Millar of Chelsea, who, I have reason to think, approved of the arrangement adopted in the former Catalogue: but the impersect state of some of the specimens, together with other circumstances, produced a number of errors in determining the species; while in the application of Synonima of various Authors, conjecture was sometimes too freely indulged. At the same time, the arrangement itself rendered the Catalogue of less use to the botanical reader accustomed to the more accurate method of Linnæus.

For these reasons it was my wish to have the Catalogue revised, and put into methodical order: a work which I hardly should have had courage to have attempted, had it not been for the affistance so liberally offered me, and which I have before had the honor of acknowledging in my Presace.

To the original specimens belonging to my Brother, were joined a confiderable collection of my own, which I brought from Syria, and a large parcel in the possession of Sir Joseph Banks, given to him by the Professor of Botany at Edinburgh. Of these last specimens, some were fresher than mine, having been sent to Doctor Hope by my successor at Aleppo, to whom also I had been obliged for several plants discovered after I left the country.

From such materials it was reasonable to expect that a complete Catalogue might have easily been drawn up, by persons so conversant in Botany, as those who in so friendly a manner had undertaken the task: yet, from the state of many of the specimens, difficulties arose, which only the superior knowledge, practice, and indefatigable perseverance of those Gentlemen could have surmounted.

To them therefore is due the merit, whatever it may be, of the Catalogue now given of the Aleppo plants: errors or mistakes are to be imputed to me alone; though these, I trust, are few in number, as the plants of which I had no specimens, and which are inserted on my own authority, are mostly of the common kind.

<sup>\*</sup> Vol. i. p. 78.

and that Hyacinths and Violets became plentiful in CHAP. January. Of the Narcissus, a beautiful species, called by the Natives Modas, is cultivated in the open fields near the village of Hadar; and towards the end of winter, certain Arab women are seen in the streets, carrying baskets of these flowers for sale, and chanting as they walk along, Ya ma hullu zemanoo! Halku kareem! How delightful its season! its Maker is bountiful!

But these flowers do not properly announce the spring, which is then known to be at hand when a shriller cry is heard in the streets, Adjoor al Gible! or Mountain Cucumber! These are small edulous roots, which, made up into strings or bunches by means of their own leaves, are brought to town in quantities by the Bidoween women and children. The root when divested of its bark, is perfectly white, and tastes very like a fresh Nut<sup>3</sup>. To this, which may be reckoned the harbinger of spring, soon succeeds the fragrant blossom of the Ban, or Egyptian Willow, and then it is that the botanizing season may be said to commence.

Few

In the former Edition, this was said to be the root of the Sisyrinchium; an error into which I led my Brother, being myself missed by the net-like cover of the root, and by finding that plant common enough in the fields; but the root of the Sisyrinchium common at Aleppo, is bitter; and what is meant in the text is the root of a Crocus not in flower at that season. The Bidoweens bring them from some distance, for I have not observed the plant so plentiful near town. I never could prevail on the Bidoweens to bring the entire plant in flower.

воок

Few plants are found beyond the enclosure of the gardens and vineyards, earlier than the middle of March; from which time the Botanist may with pleasure extend his range: but, in the following month, he must exert himself with redoubled activity; the progress of vegetation being fo rapid, that every morning ushers in fresh fubjects, and in the quick transition from maturity to decay, many of the fmaller plants elude examination.

> To a lover of Botany, nothing can exceed the beauty of the country, about the end of April or the beginning of May. The rifings and wafte grounds on all hands invite his eye, and the corn fields, which are never weeded, feem as if fown purpofely for his entertainment. The Leontapetalon, which earlier in the feafon decorated the later ploughed lands, still, in some places, tours above the ripening barley, while its bright yellow is finely contrasted by the Gladiolus, the deep azure of a luxuriant Borago, and a beautiful plant with a pale blue flower 4.

> Numerous are the Pentandria, Tetradynamia, and Diadelphia plants, of humble growth, found among the wheat and barley, or in the wide extended fields of various Legumes: and it is there the corn poppies are feen of a hue fo vivid as to dazzle the eye.

The floping fides, and the rocky fummits of the low

<sup>&</sup>lt;sup>4</sup> Amaryllis Montana.

hills, as well as the uncultivated stony dales by which CHAP. the hills are intersected, are not, at this time, without their peculiar plants; but the botanical harvest of the former falls somewhat later in May, when the Gundelia is found in full beauty. After the month of June, scarcely any plants are to be met with in the open fields, except some of the more robust of the Syngenesia class.

Our botanical excursions were usually confined to within two or three miles of the city, and seldom or never exceeded six. It may perhaps be of some service to future travellers to know the tracts which were explored with most success. Early in the spring, the gardens near town, and those along the river as far as the first mill. When the season was a little more advanced, a fair extent of cultivated country presents itself, lying between the roots of Mount Zeilet and the stone quaries, on the West side of the river: the risings which overlook this tract should not be omitted. Towards the middle of April, the fields and risings in the vicinity of the second mill and Ramusa, on one side, and between the Babullah village and Heylan to the Northward, should be visited more than once; I have said nothing of the fields towards the village of Neereb, or the risings to the South of the town, because we seldom found any plants on that side, which were not to be met with in the tracts already mentioned.

In the following Catalogue of Aleppo plants, such as are distinguished by an Asterisk, are those of which no specimens were brought to England.

#### DIANDRIA.

VERONICA triphyllos. Linn. Sp. pl. 19.

VERBENA officinalis. L. f. p. 29.

fupina. L. s. p. 29.

Lycopus Europæus. L. f. p. 30.

ZIZIPHORA capitata. L. f. p. 31.

hispanica. L. s. p. 31.

tenuior. L. f. p. 31.

Acinoides. L. f. p. 31.

\*Rosmarinus officinalis. L. f. p. 33.

SALVIA officinalis. L. f. p. 34.

Horminum. L. s. p. 34.

Verbenaca. L. s. p. 35.

Syriaca. L. f. p. 36.

spinosa. Linn. Mant. 26.

ceratophylla. Linn. Sp. pl. 30.

bracteata; foliis pinnatis hirtis, calycis laciniis subulatis, bracteis foliaceis calyce longioribus, verticillis multifloris. Horminum Arabicum, alatis foliis, flore rubello. Pluk. Alm. 186. t. 194. f. 6.

# TRIANDRIA.

VALERIANA Cornucopiæ. Linn. Sp. pl. 44.

Locusta, a. olitoria. L. s. p. 47.

β. vesicaria. L. s. p. 47.

CROCUS sativus, a. officinalis. L. s. p. 50.

β. Vernus. L. f. p. 50.

If I am not mistaken, there is another Crocus at Aleppo, of which I had got no specimen.

GLADIOLUS

C H A P.

GLADIOLUS communis. Linn. sp. pl. 52.

IRIS sufiana. L. s. p. 55.

\*ilorentina. L. s. p. 55.

perfica. L. f. p. 59.

Sifyrinchium. L. f. p. 59.

CYPERUS squarrosus. L. f. p. 66.

longus. L. f. p. 67.

fuscus. L. s. p. 69.

NARDUS aristatus. L. s. p. 78.

PHALARIS canarienfis. L. S. p. 79.

phleoides. L. s. p. 80, varietas glumis ciliatis.

PANICUM viride. L. f. p. 83.

crus corvi. L. f. p. 84.

Dactylon. L. f. p. 85.

filiforme. L. f. p. 85.

lineare. L. f. p. 85.

PHLEUM arenarium. L. f. p. 88.

ALOPECURUS pratenfis. L. f. p. 88.

monspeliensis. L. s. p. 89.

utriculatus; panicula spiciformi oblonga, vagina supremi folii ventricosa spathiformi.

\*MILIUM effusum. L. s. p. 90.

AGROSTIS alba. L. f. p. 93.

AIRA aquatica. L. f. p. 95.

Melica capillaris; panicula capillari patentissima, corollis imberbibus cylindraceo-subulatis.

Poa pratenfis. L. f. p. 99.

annua. L. s. p. 99.

rigida. L. s. p. 101.

bulbosa, a. L. s. p. 102.

β. L. f. p. 102.

distans. Linn. Mant. 32.

DACTYLIS glomerata. L. s. p. 105.

FESTUCA myuros. L. f. p. 109.

glomerata; panicula spicata lobata, spiculis subquadistoris: valvis corollinis exterioribus omnibus hispidiusculis aristatis: aristis subdorsalibus.

compacta; panicula spicata lobata, spiculis subsexsionis: valvulis corollinis omnibus glabris aristatis: aristis subdorsalibus.

Ii2

BROMUS

BOOK BROMUS mollis. Linn. sp. pl. 112.

squarrosus. L. s. p. 112.

sterilis. L. s. p. 113.

tectorum. L. s. p. 114.

rubens. L. f. p. 114.

scoparius. L. s. p. 114. varietas hirsutio. y.

racemosus. L. f. p. 114.

PAPPOPHORUM squarrosum: calycibus multifloris.

(Pappophorum. Schreb. gen. pl. p. 787. n. 1715.)

STIPA juncea. Linn. sp. pl. 116.

AVENA fatua. L. f. p. 118.

sterilis. L. s. p. 118.

fragilis. L. f. p. 119.

LAGURUS ovatus. L. f. p. 119.

cylindricus. L. f. p. 120.

\*ARUNDO Donax. L. f. p. 120.

phragmitis. L. f. p. 120.

Lolium perenne. L. f. p. 122.

temulentum. L. f. p. 122.

ELYMUS crinitus. Schreb. gram. 2. p. 15. t. 24. f. 1.

pilifer; spica erecta: spiculis subquadrifloris, valvulis calycinis rugosiusculis pilosis, involucris diphyllis setaceis.

SECALE cereale. Linn. sp. pl. 124.

Hordeum vulgare. L. f. p. 125.

hexastichum. L. s. p. 125.

distichum. L. s. p. 125.

bulbosum. L. s. p. 125.

murinum. L. f. p. 126.

maritimum. Vahl fymb. 2. p. 25.

TRITICUM æstivum. Linn. Sp. pl. 126.

\* Spelta. L. f. p. 127.

fubulatum; calycibus unilateralibus fubulatis fubtrifloris, corollis calyce brevioribus aristatis.

Holosteum umbellatum. Linn. Sp. pl. 130.

TETRAN-

#### TETRANDRIA.

CHAP.

\*DIPSACUS fullonum. Linn. Sp. pl. 140.

Scabiosa fyriaca. L. s. p. 141.

ucranica. L. f. p. 144.

stellata. L. s. p. 144.

pappofa. L. f. p. 146.

SHERARDIA aivenfis. L. f. p. 149.

ASPERULA arvensis. L. s. p. 150.

GALIUM verum. L. f. p. 155.

Mollugo. L. f. p. 155.

Aparine. L. f. p. 157.

parifiense. L. s. p. 157.

CRUCIANELLA angustifolia. L. s. p. 157.

RUBIA tinctorum. L. f. p. 158.

PLANTAGO major. L. f. p. 163.

media. L. f. p. 163.

altissima. L. s. p. 164.

lagopus. L. f. p. 165.

lusitanica. L. s. p. 1667.

cretica. L. s. p. 165.

Pfyllium. L. f. p. 167.

\* Cornus mas. L. f. p. 171.

ELÆAGNUS angustifolia. L. s. p. 176.

Cuscuta europæa. L. S. p. 180.

HYPECOUM procumbens. L. f. p. 181.

pendulum. L. f. p. 181.

\*Potamogeton natans. L. f. p. 182.

### PENTANDRIA.

HELIOTROPIUM europæum. Linn. Sp. pl. 187.

undulatum. Vahl Symb. 1. p. 13.

myosotoides; foliis lanceolatis acutis piloso-strigosis, floribus sparsis subspicatisque.

Myosoris echinophora. Pallas it. 3. p. 717. tab. Ii. fig. 1.

LITHOSPERMUM arvense. Linn. Sp. pl. 190.

dispermum. L. s. p. 191.

Anchusa

BOOK ANCHUSA officinalis. Linn. sp. pl. 191.

strigosa; foliis lanceolatis hispidis, laciniis calycinis obtusis ciliatis, fornicibus faucis barbatis.

CYNOGLOSSUM officinale. Linn. Sp. pl. 192.

Onosma pilofa; foliis lanceolatis pilofis alternis, floribus subspicatis, laciniis corollinis obtusis.

echioides. Linn. Sp. pl. 196.

Borago officinalis. L. f. p. 197.

macranthera; calycibus ciliatis tubo corollæ brevioribus, foliis lanceolatis ciliatis, antheris inæqualibus.

Asperugo procumbens. Linn. Sp. pl. 198.

Lycopsis vesicaria. L. s. p. 198.

Echium vulgare. L. f. p. 200.

violaceum. Linn. Mant. 42.

Androsace maxima. Linn. Sp. pl. 203.

\* CYCLAMEN Europæum 7. L. f. p. 207.

LYSIMACHIA Linum stellatum. L. s. p. 211.

Anagallis arvenfis. L. f. p. 211.

PLUMBAGO europæa. L. f. p. 215.

Convolvulus arvensis. L. s. p. 218.

Scammonia . L. s. p. 218.

Nil. L. f. p. 219.

pubescens; foliis ovato-oblongis cordatis indivisis repandis pilosis obtusis, pedunculis subbissoris calycibusque villosis. Convolvulus betonicifolius. Mill. Dict.

althæoides. Linn. Sp. pl. 222.

lineatus. L. f. p. 224.

CAMPANULA strigosa; foliis sessilibus lanceolatis obtusis integerrimis pilosis, pedunculis elongatis terminalibus, calycibus strigosis.

Erinus. Linn. Sp. pl. 240.

Samolus valerandi. L. s. p. 243.

<sup>7</sup> This is a native of Scanderoon, but cultivated at Aleppo.

\* The Scammony is a native of the mountains between Aleppo and Latachea, but does not grow wild at Aleppo. I have frequently raised it there in pots, but seeds which I sowed in different parts of the hills, did not succeed. See Medical Observations and Inquires, Lond. 1758. vol. i.

LONICERA

CHAP.

\* Lonicera Periclymenum 9. Linn. s.p pl. 247.

\* MIRABILIS Jalapa. L. f. p. 252.

VERBASCUM Thapfus. L. f. p. 252.

Lychnitis. L. f. p. 253.

phlomoides. L. f. p. 253.

DATURA fastuosa. L. s. p. 256.

Hyoscyamus reticulatus. L. f. p. 257.

albus. L. f. p. 257.

aureus. L. f. p. 257.

\*NICOTIANA Tabacum. L. f. p. 258.

PHYSALIS Alkekengi. L. f. p. 262.

SOLANUM Pseudocapsicum. L. s. p. 263.

Dulcamara. L. f. p. 264.

\*Lycoperficum. L. f. p. 265.

nigrum  $\beta$ . patulum. L. f. p. 266.

Melongena. Linn. Syst. Veget. xiii. p. 188.

\*CAPSICUM annuum. Linn. Sp. pl. 270.

LYCIUM barbarum. L. f. p. 277.

RHAMNUS Paliurus. L. f. p. 281.

Zizyphus. L. f. p. 282.

HEDERA Helix. L. f. p. 292.

\*VITIS vinifera. L. f. p. 293.

LAGOECIA cuminoides. L. f. p. 294.

ILLECEBRUM Paronychia. L. f. p. 299.

capitatum. L. s. p. 299.

VINEA minor. L. f. p. 304.

NERIUM Oleander 10. L. f. p. 305.

CYNANCHUM monspeliacum. L. s. p. 311.

erectum. L. f. p. 311.

HERNIARIA hirsuta. L. s. p. 317.

I have seen the Lonicera in the mountains of Byland, and it is thence brought to Aleppo in boxes.

The Oleander is cultivated in the houses at Aleppo, being brought from the mountains, or the plains of Antioch or Scanderoon, where it grows in great abundance.

CHENOPODIUM

BOOK CHENOPODIUM murale. Linn. sp. pl. 318.

serotinum. L. s. p. 319.

album. L. f. p. 319.

Vulvaria. L. s. p. 321.

Scoparia. L. s. p. 321.

BETA maritima. L. f. p. 322.

vulgaris. L. s. p. 322.

SALSOLA sativa. L. s. p. 323.

hirfuta. L. f. p. 323.

altissima. L. s. p. 324.

Anabasis aphylla. L. f. p. 325.

ULMUS campestris. L. f. p. 327.

GENTIANA Centaurium. L. f. p. 332.

ERYNGIUM pufillum L. f. p. 337.

campestre. L. s. p. 337.

BUPLEURUM rotundifolium. L. f. p. 340.

longifolium. L. s. p. 341.

odontites. L. f. p. 342.

tenuissimum. L. s. p. 343.

TORDYLIUM fyriacum. L. f. p. 345.

Anthriscus. L. s. p. 346.

nodosum. L. s. p. 346.

CAUCALIS leptophylla. L. f. p. 347.

latifolia. Linn. Syst. Veget. xiii. p. 227.

strigosa; involucris involucellisque membranaceis, umbella universali multiradiata, seminibus glabratis: setis lanceolato-subulatis, soliis pinnatis incisis pilosis.

Daucus Carota. Linn. Sp. pl. 348.

Visnaga. L. s. p. 348.

Gingidium. L. f. p. 348.

muricatus. L. f. p. 349.

AMM1 majus. L. s. p. 349.

CONIUM maculatum. L. f. p. 349.

HASSELQUISTIA ægyptiaca. L. . p. 355.

SIUM Falcaria. L. f. p. 362.

\*CORIANDRUM sativum. L. s. p. 367. testiculatum. L. s. p. 367.

CHAP.

SCANDIX Pecten veneris. Linn. Sp. pl. 368.

australis. L. s. p. 369.

stellata; seminibus rostratis, involucellis pinnatis: laciniis sineari-

SESELI montanum. Linn. Sp. pl. 372.

PASTINACA Secacul ", foliis tripinnatis: laciniis incisis.

Tordylium Secacul. Mill. Dict. ic. 177. tab. 266.

Tordylium orientale, Secacul arabum dictum Rauwolfio.

Gronov. Orient. 31.

SMYRNIUM Olusatrum. Linn. Sp. pl. 376.

\*Anethum graveolens. L. f. p. 377.

Foeniculum. L. f. p. 377.

\*CARUM carvi. L. f. p. 378.

PIMPINELLA Eriocarpus, foliis radicalibus pinnatis cuneiformibus incisis glabris; superioribus filiformibus, seminibus hispidis.

\* Anisum. Linn. Sp. pl. 379.

APIUM Petroselinum. L. s. p. 379.

graveolens. L. f. p. 379.

Rhus Coriaria. L. s. p. 379.

SAMBUCUS nigra. L. f. p. 385.

TELEPHIUM imperati. L. f. p. 388.

Alsine media. L. f. p. 389.

mucronata. L. f. p. 389.

aristata, foliis setaceis, calycibus carinatis glabris aristatis, petalis integris brevissimis.

Alfine mucronata. Gouan. illustr. 22.

LINUM perenne. Linn. Sp. pl. 397.

flavum. L. f. p. 399.

strictum. L. f. p. 400.

campanulatum. L. f. p. 400.

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Kk

HEX-

<sup>&</sup>quot;This root prepared with sugar after the manner of Eringo roots, is regarded by the Arabs as an excellent restorative.

BOOK

#### HEXANDRIA.

LEUCOJUM vernum. Linn. Sp. pl. 414.

NARCISSUS Pseudonarcissus. L. s. p. 414.

Tazetta. L. f. p. 416.

odorus. L. f. p. 416.

\* Jonquilla. L. f. p. 417.

AMARYLLIS lutea. L. f. p. 420.

montana. La Billardiere plant. Syr. 2. p. 5. tab. 1.

\* Allium Porrum. Linn. Sp. pl. 423.

Victorialis. L. f. p. 424.

\* fativum. L. s. p. 425.

\*Cepa 12. L. f. p. 431.

TULIPA gesneriana. L. s. p. 438.

Hypoxis fascicularis. L. s. p. 439. TAB. ix.

ORNITHOGALUM minimum. L. f. p. 440.

narbonense. L. s. p. 440.

stachyodes. Ait. hort. kew. 1. p. 441.

umbellatum. Linn. Sp. pl. 441.

Asphoderus luteus. L. f. p. 443.

fistulosus. L. s. p. 444.

ramosus. L. s. p. 444.

LEONTICE Chryfogonum. L. f. p. 447.

Leontopetalum. L. f. p. 448.

ASPARAGUS officinalis. L. f. p. 448.

\* Polianthes tuberosa. L. s. p. 453.

HYACINTHUS orientalis. L. s. p. 454.

Muscari. L. s. p. 454.

comosus. L. s. p. 455.

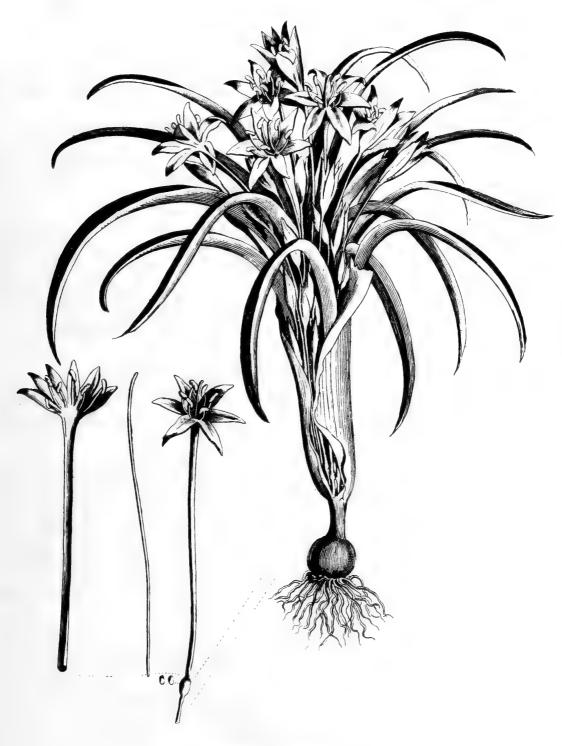
racemosus. L. s. p. 455.

HEMEROCALLIS fulva. L. f. p. 462.

There are several other Garlics sound at Aleppo, particularly a very large mountain plant, but the specimens were in such bad condition that it was impossible to determine them.

Tuncus

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Hypoxis Fascicularis

(i. D. Ehret delin



Juncus acutus. Linn. Sp. pl. 463.

C H A P.

tenax; culmo nudo Aricto striato, panicula laterati rara, squamis radicalibus nitidis.

bufonius. Linn. Sp. pl. 466.

FRANKENIA hirfuta. L. f. p. 473.

RUMEX crispus. L. s. p. 476.

pulcher. L. f. p. 477.

divaricatus. L. f. p. 478.

Acetofa. L. f. p. 481.

Colchicum montanum. L. f. p. 485.

#### OCTANDRIA.

\*LAWSONIA incermis 13. Linn. Sp. pl. 498.

STELLERA Passerina. L. s. p. 512. Varietas foliis villosiusculis.

Polygonum maritimum. L. f. p. 519.

aviculare. L. f. p. 519.

Convolvulus. L. f. p. 522.

#### ENNEANDRIA.

RHEUM Ribes 41. Linn. Sp. pl. 532.

BUTOMUS umbellatus. L. f. p. 532.

### DECANDRIA.

ANAGYRIS fœtida. Linn. Sp. pl. 534.

RUTA graveolens. L. f. p. 548.

patavina. L. f. p. 549.

MELIA Azedarach. L. f. p. 550.

ZYGOPHYLLUM Fabago. L. f. p. 551.

TRIBULUS terrestris. L. s. p. 554.

- This is cultivated in boxes at Aleppo, and in the winter most of these boxes are preserved in a large grotto, which is let out for that purpose. The plant is liable to perish in the houses.
- <sup>14</sup> I have raised this at Aleppo from seeds which I got from the neighbourhood of Balbeck. Some of the seeds were sent to England, and two plants, raised by Mr. Gordon at Mile-end are still alive, one in his garden, and another in the garden of Dr. Pitcairn at Islington. 1781.

BOOK SAXIFRAGA tridactylites. Linn. Sp. pl. 578.

GYPSOPHILA viscosa. Ait. hort. kew. 2. p. 85.

SAPONARIA officinalis. Linn. Sp. pl. 584.

Vaccaria. L. f. p. 585.

porrigens. Linn. Syst. Nat. xiii. p. 347.

DIANTHUS carthusianorum. Linn. Sp. pl. 586.

Caryophyllus. L. f. p. 587.

strictus; caule ramoso, foliis lineari-subulatis inermibus, vaginis brevissimis, squamis calycinis ovatis acutis, petalis oblongis integris.

CUCUBALUS Behen. Linn. Sp. pl. 591.

SILENE lufitanica. L. f. p. 594.

rigida; petalis integris, floribus subfastigiatis, foliis lanceolatis obtusiusculis subtrinerviis villosis.

trinervis; petalis bipartitis, foliis cuneiformibus trinerviis hifpidis, fpicis fecundis, bracteis membranaceis.

conoidea. Linn. Sp. pl. 598.

conica. L. f. p. 598.

cretica. L. f. p. 601.

orchidea. Linn. suppl. 241.

Arenaria rubra. Linn. Sp. pl. 606.

faxatilis. L. f. p. 607.

fasciculata. Linn. Syst. Nat. xiii. p. 354.

umbellata; foliis oblongis glabris, caulibus fimplicibus pilofis, pedunculis umbellatis.

Cotyledon umbilicus?, \( \beta \). tuberosa. Linn. Sp. pl. 615.

Oxalis corniculata. L. f. p. 623.

AGROSTEMMA Githago. L. f. p. 624.

CERASTIUM perfoliatum. L. f. p. 627.

vulgatum. L. s. p. 627.

dichotomum. L. f. p. 628.

PHYTOLACCA decandra. L. f. p. 631.

# DODECANDRIA.

STYRAX officinale. Linn. Sp. pl. 635. PEGANUM Harmala. L. f. p. 638.

LYTHRUM

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LYTHRUM Salicaria. Linn. Sp. pl. 640.

Hyssopifolia. L. s. p. 642.

junceum; foliis alternis linearibus, floribus hexapetalis dode-

candris: filamentis sex brevissimis; sex exfertis.

RESEDA undata. Linn. Sp. pl. 644. varietas foliis ciliatis.

EUPHORBIA thymifolia. L. f. p. 651.

Peplis. L. f. p. 652.

Peplus. L. f. p. 653.

falcata. L. s. p. 654.

Apios. L. f. p. 656.

Paralias. L. f. p. 657.

aleppica. L. f. p. 657.

segetalis. L. f. p. 657.

helioscopia. L. s. p. 658.

arguta, umbella quinquefida: fubbifida, invollucellis ovatis ferrulatis, foliis cuneiformibus fessilibus inciso-serratis.

verrucosa, Linn. Sp. pl. 658.

Cyparissias. L. s. p. 661.

amygdaloides. L. s. p. 662.

petiolata; villosa, foliis ovatis subcordatis serrulatis.

# ICOSANDRIA.

\* Myrtus communis. Linn. Sp. pl. 673.

Punica Granatum. L. f. p. 676. a.

CRATÆGUS Azarolus. Linn. Sp. pl. 683.

\* Pyrus communis. L. f. p. 686.

\*Malus. L. s. p. 686.

Cydonia. L. f. p. 687.

### POLYGYNIA.

\* Rosa rubiginosa. Linn. mant. 564.

\* centifolia. Linn. Sp. pl. 704.

\* sempervirens. L. s. p. 704.

\* canina. L. s. p. 704.

\* alba. L. f. p. 705.

BOOK RUBUS fanctus. Schreb. decas 1. p. 15. t. 8.

IV. POTENTILLA reptans. L. f. p. 714.

#### POLYANDRIA.

CAPPARIS spinosa. Linn. Sp. pl. 720.

CHELIDONIUM corniculatum. L. f. p. 724.

hybridum. L. f. p. 724.

PAPAVER hybridum. L. f. p. 725.

Rhœas. L. f. p. 726.

NYMPHÆA lutea. L. f. p. 729.

Cistus guttatus. L. f. p. 741.

salicifolius. L. s. p. 742.

ledifolius. L. f. p. 742.

hirtus. L. f. p. 744.

\* Corchorus olitorius. L. f. p. 746.

DELPHINIUM Consolida. L. s. p. 748.

Ajacis. L. f. p. 748.

AQUILEGIA vulgaris. L. f. p. 752.

NIGELLA sativa. L. s. p. 753.

Anemone coronaria. L. f. p. 760.

CLEMATIS cirrhofa. L. f. p. 766.

Adonis miniata. Jacqu. austr. 4. p. 28. t. 354.

RANUNCULUS Ficaria. Linn. Sp. pl. 774.

afiaticus. L. f. p. 777.

millefolius; calycibus pilofis, foliis supradecompositis: laciniis linearibus pilofis, caule ramoso calycibusque villosis.

Ranunculus minor rutæ folio, flore simplici, grumosa radice, italicus. Barr. ic. 1153.

pallidus; calycibus retroflexis, pedunculis fulcatis, caule erecto, foliis compositis: foliolis radicalibus obtusiusculis, radice fibrosa.

bulbosus. Linn. Sp. pl. 778.

fericeus, calycibus patulis lanuginofis, foliis pilofis fericeis: fuperioribus tripartitis incifis acuminatis; inferioribus ternatis.

lanuginosus. Linn. Sp. pl. 779. varietas seminibus squarrosis.

RANUNCULUS

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Stachys Pumila

ij D Chret Solin.

RANUNCULUS arvensis. Linn. Sp. pl. 780.
muricatus. L. s. p. 780.
orientalis. L. s. p. 781.
falcatus. L. s. p. 781.

С Н А Р. V.

#### DIDYNAMIA.

Ajuga chia. Schreb. unilab. p. 25. n. 5.

TEUCRIUM parviflorum. Schreb. unilab. p. 31. n. 18.

Pseudochamæpitys. Linn. Sp. pl. 787.

lævigatum; foliis trifidis quinquefidifque glabris: laciniis linearibus, floribus axillaribus fessilibus folio longioribus, caule lævi.

SATUREJA stricta; verticillis paucisloris pedunculatis subfastigiatis, laciniis calycinis lanceolatis, foliis lanceolato-oblongis nervosis pilosiusculis.

SIDERITIS montana. Linn. Sp. pl. 802.

romana. L. f. p. 802.

lanata. L. f. p. 804.

MENTHA sylvestris, L. s. p. 804.

sativa. L. s. p. 805.

LAMIUM amplexicaule. L. f. p. 809. α.

β.

STACHYS cretica. Linn. Sp. pl. 812.

pungens; verticillis multifloris pedunculatis, foliis lanceolatooblongis rugofis crenatis hirtis, calycibus spinosis.

pumila; verticillis multifloris, calycibus villosius fubpungentibus, foliis cordatis crenatis tomentosis subtus rugosis. TAB. x.

BALLOTA nigra. Linn. Sp. pl. 814.

MARRUBIUM vulgare. L. f. p. 816. α.

B.

rugosum, dentibus calycinis denis subæqualibus abbreviatis muticis, foliis ovato-subrotundis cordatis hirtis rugosissimis petiolatis.

cuneatum, dentibus calycinis denis subæqualibus inermibus, foliis subcuneiformibus rugosis villosis.

hifpanicum. Linn. Sp. pl. 816.

**Phlomis** 

BOOK PHLOMIS Nissolii. Linn. Sp. pl. 819.

MOLUCCELLA lævis. L. f. p. 821.

spinosa. L. s. p. 821.

ORIGANUM fipyleum. L. f. p. 823.

THYMUS hirtus; pedunculis axillaribus multifloris, foliis lanceolato-linearibus margine revolutis integerrimis pilofis.

Melissa officinalis. Linn. Sp. pl. 827.

cretica. L. s. p. 828.

Dracocephalum canescens. L. s. p. 831. varietas floribus vix calyce longioribus.

OCYMUM Bafilicum. L. f. p. 833.

Scutellaria orientalis. L. f. p. 834.

EUPHRASIA latifolia. L. s. p. 841.

ANTIRRHINUM pelisserianum. L. s. p. 855.

chalepense. L. s. p. 859.

calycinum; corollis ecaudatis, floribus axillaribus, calycibus fubæqualibus corolla longioribus, foliis ovali-oblongis alternis.

SCROPHULARIA auriculata. Linn. Sp. pl. 864.

lucida. L. f. p. 865.

OROBANCHE major. L. s. p. 882.

ramosa. L. s. p. 882.

SESAMUM indicum. L. f. p. 884.

VITEX Agnus Castus. L. s. p. 890.

ACANTHUS spinosus. L. s. p. 891.

### TETRADYNAMIA.

MYAGRUM pinnatum; filiculis biarticulatis striatis subtetraspermis, foliis pinnatis glabris: laciniis linearibus incisis.

fativum. y. Linn. Sp. pl. 894. paniculatum. L. f. p. 894.

DRABA verna. L. f. p. 896.

LEPIDIUM perfoliatum. L. f. p. 897.

sativum. L. s. p. 899.

latifolium. L. s. p. 899.

THALSPI



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THLASPI carneum; filiculis obcordatis, foliis cordatis amplexicaulibus C H A P. glabris integerrimis, caule superne ramoso. TAB. xi.

Thlaspi orientale saxatile flore rubente, foliis Polygalæ, pe-

talis florum æqualibus. Tourn. cor. 15.

perfoliatum. Linn. Sp. pl. 902.

Bursa pastoris. L. s. p. 903.

COCHLEARIA glastifolia. L. s. p. 904.

Draba. L. s. p. 904.

IBERIS odorata. L. f. p. 906.

ALYSSUM minimum. L. f. p. 908.

campestre. L. s. p. 909.

strigosum; herbaceum, pilis stellatis hispidum, foliis obovatis integerrimis, calycibus persistentibus, siliculis hispidis.

CLYPEOLA Jonthlaspi. Linn. Sp. pl. 910.

BICUTELLA apula. Linn. Mant. 254.

CARDAMINE erosa; foliis bipinnatifidis: laciniis acutis.

SISYMBRIUM Nasturtium. Linn. Sp. pl. 916.

pyrenaicum. L. f. p. 916.

polyceratum. L. f. p. 918.

Sophia. L. f. p. 920.

altissimum. L. s. p. 920.

Irio. L. s. p. 921.

ERYSIMUM officinale. L. s. p. 922.

repandum. L. f. p. 923. varietas foliis undulatis.

CHEIRANTHUS sulphureus; foliis superioribus lanceolatis subdentatis acutiusculis pubescentibus, filiquis tomentosis subtorulosis apice bisidis.

Cheiri. Linn. Sp. pl. 924.

chius. L. s. p. 924.

tricuspidatus. L. s. p. 926.

HESPERIS tristis. L. f. p. 927.

africana. L. s. p. 928.

Brassica orientalis. L. f. p. 931.

campestris. L. s. p. 931.

\* Napus. L. f. p. 931.

\* Rapa. L. f. p. 931.

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BRASSICA

BOOK BRASSICA oleracea. Linn. Sp. pl. 932.

- \* γ. rubra.
- \* 8. capitata.
- \* e. sabauda.
- \* .. botrytis.
- \* a. gongylodes.

Erucastrum. L. s. p. 932.

purpurascens; foliis lanceolatis pinnatifidis, caule piloso, siliquis articulatis glabris: rostro elongato subulato.

SINAPIS arvensis. Linn. Sp. pl. 933.

alba. L. f. p. 933.

hispanica. L. s. p. 934.

RAPHANUS fativus. L. f. p. 935.

Isatis lusitanica. L. s. p. 936.

CRAMBE amplexicaulis; foliis oblongis amplexicaulibus integerrimis cauleque glabro.

orientalis. Linn. Sp. pl. 937.

## MONADELPHIA.

GERANIUM romanum. Linn. Sp. pl. 951.

cicutarium. L. s. p. 951.

malacoides. L. f. p. 952.

ciconium. L. f. p. 952.

tuberosum. L. s. p. 953.

robertianum. L. s. p. 955.

molle. L. f. p. 955.

dissectum. L. s. p. 956.

rotundifolium. L. f. p. 957.

ALCEA rosea. L. s. p. 966.

ficifolia. L. f. p. 967.

MALVA rotundifolia. L. s. p. 969.

Sherardiana. L. s. p. 1675.

parviflora. L. s. p. 969.

Gossypium herbaceum. L. f. p. 975.

\* Hibiscus esculentus. L. s. p. 980.

CHAP.

## DIADELPHIA.

FUMARIA spicata. B. Linn. Syst. Veget. xiii. p. 530.

\* Spartium junceum. Linn. Sp. pl. 995.

Ononis antiquorum. L. f. p. 1006.

cherleri. L. f. p. 1007.

Natrix. L. f. p. 1008.

pubescens. Linn. Mant. 267.

ANTHYLLIS biflora; herbacea, foliis subternatis villosis: soliolo terminali maximo, pedunculis elongatis bifloris.

\* Phaseolus vulgaris. Linn. Sp. pl. 1016.

\* Max. L. f. p. 1018.

PISUM sativum. L. s. p. 1026.

arvense. L. s. p. 1027. varietas foliis serratis.

LATHYRUS Aphaca. L. f. p. 1029.

Cicera. L. f. p. 1030.

sativus. L. s. p. 1030.

inconspicuus. L. f. p. 1030.

sylvestris. L. s. p. 1033.

VICIA gracilis; pedunculis subbifloris folio dimidio brevioribus, foliolis lanceolatis oblusiusculis, stipulis hastatis.

sativa. Linn. Sp. pl. 1037.

lathyroides. L. s. p. 1037.

lutea. L. f. p. 1037.

peregrina. L. f. p. 1038.

narbonensis. L. s. p. 1038. varietas integrisolia.

Faba. L. f. p. 1039.

ERVUM Lens. L. f. p. 1039.

CICER arietinum. L. f. p. 1040.

GLYCYRRHIZA echinata. L. s. p. 1046.

glabra. L. f. p. 1046.

ORNITHOPUS scorpioides. L. s. p. 1049.

HIPPOCREPIS unifiliquosa. L. s. p. 1049.

HEDYSARUM Alhagi15. L. f. p. 1051.

humile. L. s. p. 1058.

It is upon this plant that manna (Trungebeen) is found in Mesopotamia; what grows in the vicinity of Aleppo, is of low growth, and produces no manna.

воок Недузаким Onobrychis. Linn. Sp. pl. 105 9. ТАВ. хі.

Crista galli. Linn. Syst. Veget. xiii. p. 563. TAB. xii.

\* AESCHYNOMENE Sesban 16. Linn. Sp. pl. 1061.

ASTRAGALUS alopecuroides. L. f. p. 1064.

capitatus. L. s. p. 1065.

guttatus; caulescens prostratus, foliolis oblongo-obovatis, racemis paucisloris, leguminibus oblongis bicarinatis glabris recurvis.

hamosus. Linn. Sp. pl. 1067.

Stella. Linn. Syst. Veget. xiii. p. 567. TAB. xv.

fuberosus; caulescens diffusus, foliolis obcordatis, leguminibus oblongis dilatatis obtuse bicarinatis hamatis rugosis lanatis. caprinus. Linn. Sp. pl. 1071.

emarginatus. La Billardiere plant. Syr. 1. p. 19. tab. 9.

Poterium. Vahl Symb. 1. p. 63.

Ruffelii; frutescens, floribus axillaribus solitariis solio longioribus, petiolis spinescentibus, soliolis oblongis glabris, calycibus fructiferis inflatis subpubescentibus. TAB. xiii.

cephalotes; frutescens, floribus conglobatis capitatis, petiolis longissimis spinescentibus, foliolis ovatis acutis glabris, calycibus lanatis pentaphyllis.

compactus. Lamarck encycl. 1. p. 322. Vahl fymb. 1. p. 64.

PSORALEA bituminofa. Linn. Sp. pl. 1075.

TRIFOLIUM Melilotus indica. L. s. p. 1077.

hybridum. L. s. p. 1079.

repens. L. f. p. 1080.

cherleri. L. s. p. 1081.

angustifolium. L. s. p. 1083.

stellatum. L. s. p. 1083.

alexandrinum. L. f. p. 1085.

resupinatum. L. s. p. 1086.

fragiferum. L. s. p. 1086.

argutum; spicis ovatis, vexillis oblongis persistentibus, calycibus turbinato-gibbosis glabris, foliolis obovatis glabris argute serratis.

<sup>16</sup> This is cultivated in the Court yards.

V.II. Page 260 P1, XII



G.D.Chret delin Hedysarum Crista Galli





Astragalus Rufselii

3D.F. hvet delin

V.II. Page 261 Pl.XIV



G. D. Ehnec. delin:

Lotus Arabicus

TRIFOLIUM spadiceum. Linn. Sp. pl. 1087.

Lotus arabicus. Linn. Mant. 104. TAB. xiv.

TRIGONELLA corniculata. Linn. Sp. pl. 1094.

hamofa. L. f. p. 1094.

monspeliaca. L. s. p. 1095.

Fænum græcum. L. s. p. 1095. varietas leguminibus erectis glabris.

uncinata; leguminibus folitariis erectis strictis apice uncinatis, foliolis obcordatis serratis.

MEDICAGO radiata. Linn. Sp. pl. 1096.

echinata; leguminibus reniformibus medio echinatis margine dentatis, foliis pinnatis: foliolis æqualibus.

sativa. Linn. Sp. pl. 1096.

polymorpha. α. orbicularis. L. s. p. 1097.

ζ. muricata. L. s. p. 1098.

n. arabica. L. s. p. 1098.

9. coronata. L. f. p. 1098.

. rigidula. L. s. p. 1098.

к. ciliaris. L. f. p. 1099.

# POLYADELPHIA.

CITRUS Medica. Linn. Sp. pl. 1100. a.

β. Limon \*.

Aurantium. L. s. p. 1100. α.

β. Sinensis \*.

HYPERICUM crispum. Linn. Mant. 106.

Coris. Linn. Sp. pl. 1107.

## SYNGENESIA.

Tragorogon nervosum; calycibus corollæ radium subæquantibus, foliis oblongis integerrimis nervosis basi attenuatis. +.

orientale. Linn. Sp. pl. 1109.

porrifolium. L. s. p. 1110.

picroides. L. s. p. 1111.

lanatum. L. f. p. 1111.

SCORZONERA

C H A P.

BOOK SCORZONERA hispanica. Linn. Sp. pl. 1112.

angustifolia. L. s. p. 1113.

laciniata. L. f. p. 1114.

tingitana. L. s. p. 1114.

Picris Echioides. L. s. p. 1114.

Sonchus oleraceus. L. f. p. 1116.

\* LACTUCA fativa. L. f. p. 1118.

Scariola. L. s. p. 1119.

PRENANTHES viminea. L. f. p. 1120.

LEONTODON Taraxacum. L. f. p. 1122.

aureum. L. f. p. 1122.

hirtum. L. s. p. 1123.

CREPIS vesicaria. L. s. p. 1132.

biennis. L. s. p. 1136.

LAPSANA communis. L. f. p. 1141.

stellata. L. s. p. 1141.

Kölpinia. Linn. fuppl. 348.

CICHORIUM Intybus, Linn. Sp. pl. 1142.

Endivia. L. f. p. 1142.

ARCTIUM Lappa. L. f. p. 1143.

CNICUS armatus; foliis amplexicaulibus pinnatifidis spinosis glabris, floribus axillaribus solitariis subsessilibus.

Carduus ferox. Dalech. Hift. 1489. cum fig.

Phænix. Leo. Carduus ferox. Lobel. ic. 2. p. 15.

Acarna. Linn. Sp. pl. 1158.

ONOPORDUM illyricum. L. f. p. 1158.

\* CYNARA Scolymus. L. f. p. 1159.

ATRACTYLIS cancellata. L. s. p. 1162.

CARTHAMUS tinctorius. L. f. p. 1162.

lanatus. L. s. p. 1163.

canescens; foliis lanceolatis pinnatifido-dentatis spinosis subdecurrentibus subtus tomentosis, caule ramosissimo superne lanuginoso.

ATHANASIA maritima. Linn. Sp. pl. 1182. (prope Latachia.)

ARTEMISIA

CHAP.

ARTEMISIA æthiopica. Linn. Sp. pl. 1184.

campestris. L. f. p. 1185.

vulgaris. L. f. p. 1188.

XERANTHEMUM orientale; herbaceum, foliis lanceolato-oblongis, calycibus inermibus, feminum paleis denis.

Xeranthemum annuum, y. orientale. Linn. Sp. pl. 1201.

Conyza faxatilis. L. f. p. 1206.

rupestris. Linn. Mant. 113.

SENECIO abrotanifolius. Linn. Sp. pl. 1219.

INULA arabica. Linn. Mant. 114.

Bellis perennis. Linn. Sp. pl. 1248.

TAGETES patula. L. f. p. 1249.

CHRYSANTHEMUM tenuissimum; foliis bipinnatis: laciniis filisormibus fubulatis, caulibus unissoris, squamis calycinis margine sphacelatis.

MATRICARIA Parthenium. Linn. Sp. pl. 1255.

COTULA aurea. L. f. p. 1257.

Anacyclus creticus. L. f. p. 1258.

Anthemis chia. L. f. p. 1260.

Cotula. L. s. p. 1261.

valentina. L. f. p. 1262.

scariosa; foliis bipinnatis: laciniis filiformibus acutis, pedunculis nudis longistimis, calycibus membranaceis nitidistimis.

ACHILLEA Santolina. Linn. Sp. pl. 1264.

BUPHTHALMUM spinosum. L. s. p. 1274-

CENTAUREA Crupina. L. f. p. 1285.

moschata. L. s. p. 1286.

Cyanus. L. f. p. 1289.

benedicta. L. f. p. 1296.

Calcitrapa. L. f. p. 1297.

calcitrapoides. L. s. p. 1297.

rigida; calycibus fimplicissimis spinosis: spinis erectis, soliis scabris: inferioribus pinnatisidis; superioribus lanceolatis integris, ramis paniculatis.

pumila. Linn. Sp. pl. 1300.

CALENDULA arventis. L. f. p. 1303.

FILAGO germanica. L. s. p. 1311.

Micropus

BOOK MICROPUS erectus. Linn. Sp. pl. 1313.

ECHINOPS Ritro. L. f. p. 1314.

GUNDELIA Tournefortii. L. f. p. 1315.

VIOLA odorata. L. f. p. 1324.

tricolor. L. f. p. 1326.

\* IMPATIENS Balfamina. L. f. p. 1328.

#### GYNANDRIA.

Orchis collina; bulbis indivisis, nectarii labio indiviso subrotundo emarginato; cornu germinibus breviore obtuso, soliis oblongis.

ARISTOLOCHIA maurorum. Linn. Sp. pl. 1363.

longa. L. f. p. 1364.

ARUM intortum; acaule, foliis pedatis: laciniis lateralibus involutis, fpatha nuda, fpadice glabro clavato.

Arum foliis hastatis, cuspidibus inferioribus lateralibus protensis. Gronov. Orient. 283.

fagittæfolium. Linn. Sp. pl. 1369.

maculatum. L. f. p. 1370.

gramineum, acaule, foliis lineari-lanceolatis, fpadice subclavato erecto.

Arum acaule, foliis lanceolatis, Gronov. Orient. 286, exclusis synonymis, præter Rauwolfii.

## MONOECIA.

ZANNICHELLIA palustris. Linn. Sp. pl. 1375.

CHARA flexilis. L. f. p. 1624.

\* ZEA Mays. L. f. p. 1378.

CAREX distans. L. s. p. 1387.

URTICA balearica. L. f. p. 1395.

urens. L. f. p. 1396.

\* Morus alba. L. f. p. 1398.

\* nigra. L. f. p. 1398.

AMARANTHUS caudatus. L. f. p. 1406.

THELIGONUM Cynocrambe. L. f. p. 1411.

Poterium Sanguisorba. L. s. p. 1411.

fpinosum. L. s. p. 1412.



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Astragalus Stella

Quercus coccifera. Linn. Sp. pl. 1413. TAB. xv. Robur. L. s. p. 1414.

CHAP.

\* Juglans regia. L. f. p. 1415.

CORYLUS Avellana. L. f. p. 1417.

PLATANUS orientalis. L. f. p. 1417.

Pinus Pinea. L. f. p. 1419.

\* CUPRESSUS sempervirens. L. s. p. 1422.

CROTON tinctorium. L. f. p. 1425.

RICINUS communis. L. f. p. 1430.

Momordica Elaterium. L. f. p. 1434.

\* Cucurbita lagenaria. L. s. p. 1434.

\* Pepo. L. s. p. 1435.

\* Melopepo. L. f. p. 1435.

\* Citrullus. L. f. p. 1435.

\* Cucumis Melo. L. f. p. 1436.

\* Chate. L. f. p. 1437.

\* sativus. L. s. p. 1437.

\* flexuosus. L. s. p. 1437.

BRYONIA alba. L. f. p. 1438.

Andrachne telephioides. L. f. p. 1439.

# DIOECIA.

SALIX babylonica. Linn. Sp. pl. 1443.

ægyptiaca. L. s. p. 1444.

PISTACIA trifolia. L. s. p. 1454.

SPINACEA oleracea. L. f. p. 1456.

CANNABIS fativa. L. f. p. 1457.

Populus nigra. L. f. p. 1464.

MERCURIALIS ambigua. L. f. p. 1465.

JUNIPERUS Oxycedrus. L. f. p. 1470.

Ruscus aculeatus. L. f. p. 1474.

## POLYGAMIA.

CENCHRUS capitatus. Linn. Sp. pl. 1488.

ÆGILOPS ovata. L. f. p. 1489.

Vol. II.

M m

VALANTIA

BOOK VALANTIA hispida. Linn. Sp. pl. 1490.

ciliata; capsulis subsessibus glabris echinatis, foliis linearicuneiformibus ciliatis.

PARIETARIA judaica. Linn. Sp. pl. 1492.

ATRIPLEX hortenfis. L. f. p. 1493.

hastata. L. s. p. 1494.

patula. L. f. p. 1494.

Mimos A farcta; aculeis sparsis, foliis bipinnatis subquinquejugis: foliolis lanceolatis hispidiusculis, spicis axillaribus folio longioribus, leguminibus oblongis.

Acatia incolis Schack, arabis Schamuth. Rauw. it. 114. Mimofa. Gronov. Orient. 159. qui plantam Rauwolfii falso Mimosæ niloticæ Linnei jungit.

FRAXINUS Ornus. Linn. Sp. pl. 1510.

CERATONIA Siliqua. L. f. p. 1513.

Ficus Carica. L. f. p. 1513.

# CRYPTOGAMIA,

ASPLENIUM Ceterach. Linn. Sp. pl. 1538.

ADIANTUM Capillus veneris. L. f. p. 1558.

BRYUM extinctorium. L. f. p. 1581.

murale. L. s. p. 1581.

viridulum. L. f. p. 1584.

HYPNUM fericeum. L. f. p. 1595.

LICHEN crifpus. Linn. Syst. Nat. xiii. 806.

TREMELLA Nostoc. Linn. Sp. pl. 1625.

AGARICUS campestris. L. s. p. 1641.

Having never travelled in Syria with a view to Botany, I can fay little of the mountain plants, except a few which accidentally prefented themselves on the road to Latachea and to Scanderoon, and of those having col-

lected

lected specimens, I shall subjoin a Catalogue 17. The CHAP. mountains between Shogre and Latachea, and those in the vicinity of Antioch and Bylan, are in many places well wooded, and the uncultivated spots present a fine verdure variegated with a profusion of flowers; but unless an excursion were to be made on purpose, it is inconvenient, and sometimes dangerous, to stray far from the Caravan.

To the list of mountain plants in the former Edition, are now added feveral which I collected myself in my way to Scanderoon in the month of June 1770, and others sent to me by Dr. Freer: but much is still wanting to complete the Catalogue.

### DIANDRIA.

JASMINUM fruticans. Linn. Sp. pl. 9. PHILLYREA latifolia. L. s. p. 10. SALVIA officinalis. L. s. p. 34. verticillata. L. s. p. 37.

## TRIANDRIA.

VALERIANA Phu. Linn. Sp. pl. 45. Cyperus glaber. Linn. Mant. 179.

## TETRANDRIA.

Asperula calabrica. Linn. Suppl. 120.

GALIUM Mollugo. Linn. Sp. pl. 155.

Rubia rotundifolia; foliis quaternis sessilibus subrotundo-ovatis acuminatis ciliatis utrinque lævibus, caule inermi.

Cissus pinnata; foliis pinnatis ternatisque: foliolis ovatis incisis glabris membranaceis.

M m 2

PEN-

BOOK IV.

## PENTANDRIA.

LITHOSPERNUM dispermum. Linn. Sp. pl. 191.

ECHIUM vulgare. L. f. p. 200.

Convolvulus Scammonia. L. f. p. 218.

LONICERA Periclymenum. L. f. p. 247.

RHAMNUS Alaternus. L. f. p. 281.

Paliurus. L. f. p. 281.

LAGOECIA cuminoides. L. f. p. 294.

NERIUM Oleander. L. f. p. 305.

GENTIANA Centaurium. L. f. p. 332.

BUPLEURUM odontites. L. f. p. 342.

SMYRNIUM perfoliatum. L. f. p. 376.

RHUS Cotinus. L. f. p. 383.

TAMARIX gallica. L. f. p. 386.

LINUM pubescens; foliis floriferis oppositis lanceolatis pilosis, floribus alternis subsessibus, calycibus longitudine foliorum pilosis ciliatis, caule tereti.

#### OCTANDRIA.

MICHAUXIA campanuloides. Ait. hort. kew. 2. p. 8.

DAPHNE fericea. Vahl. Symb. 1. p. 28.

Daphne collina. Smith. Spicil. tab. 18.

# DECANDRIA.

CERCIS Siliquastrum. Linn. Sp. pl. 534.

STYRAX officinale. L. f. p. 635.

DIANTHUS arboreus. L. s. p. 590.

## DODECANDRIA.

EUPHORBIA pungens; umbella suboctofida: bifida, involucris oblongis acutis, involucellis rhomboideis, foliis lanceolatis lævibus pungentibus.

Tithymalus Characias 111. Clus. Hist. 2. p. 188. Tithymalus myrsinites. Matthiol. Dioscor. 1251.

Myrtus



VII Page 209 Pl.XVI



### ICOSANDRIA.

Myrtus communis. Linn. Sp. pl. 673.

C H A P.

### POLYANDRIA.

CISTUS incanus. Linn. Sp. pl. 737.

falvifolius. L. f. p. 738.

NIGELLA orientalis. L. f. p. 753.

CLEMATIS orientalis. L. f. p. 765.

Vitalba. L. f. p. 766.

## DIDYNAMIA.

SATUREJA montana. Linn. Sp. pl. 794.

Thymbra. L. f. p. 794.

capitata. L. s. p. 795.

LAVANDULA Stoechas. L. f. p. 800.

SIDERITIS montana. L. f. p. 802.

STACHYS pungens.

pumila.

vide supra page 255.

MARRUBIUM rugofum.

Phlomis herbæ venti Linn. Sp. pl. 819. fortasse varietas, sloribus luteis. TAB. xvi.

SCUTELLARIA albida. Linn. Mant. 248.

VITEX Agnus Castus. Linn. Sp. pl. 890.

# TETRADYNAMIA.

ALYSSUM campestre. Linn. Sp. pl. 909. clypeatum. L. s. p. 909.

## DIADELPHIA.

Spartium lanigerum; foliis ternatis, ramis angulatis spinosis, calycibus leguminibusque lanatis.

GENISTA tinctoria. Linn. Sp. pl. 998. varietas angustifolia.

Ononis Natrix. Linn. Sp. pl. 1008.

ANTHYLLIS tetraphylla. L. f. p. 1011.

ONON1S

BOOK COLUTEA Pocockii. Ait. hort. kew. 3. p. 55.

CORONILLA Emerus. Linn. Sp. pl. 1046.

Securidaca. L. f. p. 1048.

HEDYSARUM Onobrychis. L. f. p. 1059.

ASTRAGALUS alopecuroides. L. f. p. 1064.

Psoralea bituminosa. L. s. p. 1075.

TRIFOLIUM angustifolium. L. f. p. 1083.

# POLYADELPHIA.

HYPERICUM pallens; floribus trigynis, calycibus acutis subglandulosis, foliis obovatis glabris petiolatis, caule tereti.

thymifolium; floribus trigynis, calycibus obtufis ferrato-glandulofis, foliis ovalibus petiolatis glabris, caule tereti.

#### SYNGENESIA.

ATHANASIA maritima. Linn. Sp. pl. 1182. prope Latachea.

GNAPHALIUM Stoechas. L. f. p. 1193.

fanguineum 18. L. f. p. 1196.

CENTAUREA lyrata; calycibus palmato-spinosis, foliis omnibus lyratis dentatis pilosis: impari maximo, caule strigoso tereti.

# GYNANDRIA.

ARISTOLOCHIA sempervirens. Linn. Sp. pl. 1363.

## MONOECIA.

QUERCUS Cerris. Linn. Sp. pl. 1415. BRYONIA cretica. L. f. p. 1439.

This I collected on the road to Scanderoon, in the mountains which we croffed on the second day's journey. It grew at no great distance from the road side, on the declivity of a hill which I walked leisurely down, in order to pick up plants by the way.

DIOECIA.

### DIOECIA.

C H A P.

CANNABIS sativa. Linn. Sp. pl. 1457.

TAMUS communis. L. f. p. 1458.

SMILAX rigida; caule inermi angulato, foliis inermibus cordatis, racemis compositis.

POLYGAMIA.

CERATONIA Siliqua. Linn. Sp. pl. 1513.

CRYPTOGAMIA.

POLYPODIUM vulgare. Linn. Sp. pl. 1544.



#### THE

# NATURAL HISTORY OF ALEPPO.

# BOOK V.

OF THE WEATHER, AND EPIDEMIC DISEASES.

## CHAP. I.

INSTRUMENTS DESCRIBED.—ABSTRACT ACCOUNT OF THE WEATHER IN THE RESPECTIVE MONTHS OF THE YEAR.—COMPARATIVE TABLES.—OBSERVATIONS, &c.

THE correspondent seasons in different years being CHAP. very much alike, I purpose, first to give an abstract general account of the weather of each month, drawn up from a comparative review of the Meteorological Register, for nine years; and afterwards in the account of the weather of particular years, previously to that of the epidemic diseases, to point out the most remarkable deviations of the seasons from their ordinary course.

The register, a sew interruptions excepted, was kept regularly for ten years; but as the situation of the in-Vol. II. N n struments time, and different Thermometers were employed, (feveral having been accidentally broken,) it may be proper to premife a few explanatory remarks on these circumstances.

All the Thermometers were mercurial; graduated according to Fahrenheits scale, and most of them made by the accurate Mr. Bird, in London. Those employed the first eight years were small portable Thermometers, but in the years 1752 and 1753, one of thirteen inches was used. The Barometer used the whole time was an excellent one of Birds. The instruments were inspected twice in the twenty-sour hours: at seven in the morning, and three in the afternoon, in the summer; but an hour later, in the winter.

During the years 1743<sup>1</sup>, 1744, 1745, and 1752 and 1753, the inftruments were suspended in a small wooden

Part of the year 1743, the instruments were placed in a room facing the West to which the sun had free access in the asternoon, the windows, (except in the winter), remaining constantly open. But the Thermometer that year being broken in the month of May, and it appearing that the Mercury during the winter months, remained nearly at the same height as when the Thermometer was placed in the wooden Kiosk, it was not thought necessary to distinguish the different positions. It appears however from the Journal, that though during the frost of January 1743, the Thermometer in the West room, was never lower than 34, and that even in the Kiosk, during the frost of 1746, it stood at 38; yet the West room, from its exposition to the afternoon sun, was always hotter than the Kiosk, in the spring and summer months.

Kiosk facing the East, which projected over a nar-char. row street running North and South, and bounded by high buildings. The Kiosk had four windows, two in front, and one on each side, which generally remained open from April to the end of October; but the Sun, on account of the height of the buildings, had access only for about an hour in the day by the small window. The room whence the Kiosk projected communicated with an antichamber looking to the West, the doors and windows of which stood open in the day time. As by this disposition a free circulation of air was constantly maintained, the Kiosk was considered as a preferable situation for the instruments, and to that the monthly abstract of the register principally refers.

The position of the instruments, was different in other years; for being prevented by business from regularly inspecting the instruments at fixed hours, I was obliged to a friend, residing at the Consular house, who took that task upon himself. The Thermometer was then removed to a vaulted room which had a single window facing the South, and communicated by doors with other chambers on each side. Opposite to the window a door opened upon a great Hall with a large cupola, from the lantern of which it received its only light. The window of the chamber in the summer, was seldom shut, and at that season an open latticed door was sub-

A description of a Kiosk may be seen, vol. i. p. 28.

the entrance to the Confular apartments, the door commonly stood open most of the forenoon. The rooms situated in the manner now described, are remarkably warm in winter and cool in summer; and in this position, it is to be understood that the Thermometer was kept from July 1746 to July 17503.

Both fituations of the Thermometer were some degrees warmer than the external air, in winter, as appears from the Mercury never falling so low as the freezing point, even at such times as the frost continued for several days 4; and that both, in summer, especially the one at the

3 From April 1750 till August 1751 there is a chasm in the Register.

<sup>4</sup> That the Thermometer in a feries of ten years, should have never fallen so low as the freezing point, is a circumstance differing so remarkably from subsequent observation, that it becomes of some consequence to discover the cause of it; and the inquiry, while it leads to other matters respecting the Syrian climate, may not only throw light on the Thermometrical observations from the year 1742 to the year 1754, but, in attempting to adjust the various instruments employed, it may serve to connect these observations with those made in continuation after that period.

The Kiosk above described, though a situation in several respects preserable to that at the Consular house, was no doubt, in the summer, considerably affected by the sun's reflection from the stone walls near it; hence the Mercury in this position rose higher in the afternoon, and at all times was more sensible of alterations in the temperature of the air: on the other hand, in the winter, it sunk several degrees lower in the morning, than at the Consular house; but when the sky was clear, being then subject to the influence of reslection, it rose higher in the afternoon, or in other words, the variation in the same day was several degrees greater.

the Confular house, were cooler, was a fact sufficiently CHAP. ascertained by repeated trials.

I now

Besides this difference arising from the position of the Thermometer, some allowance must be made for the discordance of different instruments employed in making the observations.

Various accidents, (the disadvantages of a distant residence) prevented for a long while the comparing different Thermometers suspended together in the same place, and marking their respective variations when placed afterwards in different positions. It was not till the year 1755 that an attempt of this kind was first made in the Kiosk, and then in order to adjust as nearly as could be, the difference of the Thermometers formerly employed, and which had been accidentally broken, a remaining very small Thermometers made by Bewe, that had been used at the same time with them, was employed as a comparative standard, and though less accurately graduated than Bird's instruments, answered the purpose very well.

The instruments now compared, consisted of one large, and two eight inch Thermometers of Bird's, and that of Bewe's, or the small one. The first and last were from that time constantly kept in the Kiosk; the others after being properly compared were removed to the Consular house, where one of them was placed in the South vaulted room, which had formerly contained the Thermometer from the year 1745 to 1750.

The three Thermometers which in the winter were suspended in the Kiosk, for the most part agreed together, or only differed one degree, and were always, three, four, or five degrees higher than the sinall Thermometer; but from the end of April to the end of October, the difference was found to be very inconsiderable, except when the Mercury in Bird's stood above ninety, and then the small Thermometer rose four or five degrees higher: but during the other six months of the year, Bewe's instrument, as observed before, was lower than Bird's, and, it may be added, in proportion to the increase of cold, so that in hard frost it was sometimes sound eight or nine degrees lower.

Bird's Thermometer in the Kiosk, during the months of January, February, November and December, was four, six, eight, ten, and sometimes twelve degrees lower than that in the Consular house; during the other

months

I now proceed, agreeably to the method proposed, to give an abstract account of the weather of each month separately,

months it was rather higher particularly in the afternoons, but the difference was inconfiderable. The difference between the morning and afternoon height of the Thermometer was constantly greatest in the Kiosk.

These facts being premised I have, in order to show in one view the discordance of the instruments, and the effect of different positions, drawn up the following Tables, but have selected for that purpose some days of the most extraordinary cold weather ever known at Aleppo. A is Bird's Thermometer kept in the South room in the Consular house. B Bird's great Thermometer in the Kiosk, and C Bewe's Thermometer in the same position. The hours of observation were eight in the morning and three in the afternoon.

1756.	Hours		A	В	C	
Decembe	r 8	-	<b>5</b> 5	<b>5</b> 3	49 7	. rainr
	3		55	53	49	rainy
2	3 8	Photograph .	54	50	46	gloomy
	3 8		54	50	46 ]	gloomy
3	8		53	46 48	3	clear
	3 8		54		44 \$	Cicui
4	8		52	44	40}	fmart frost
	3 8	Contract (and Alligo)	53		5	
5	8		50	43 46	38]	id
	3 8		51			clear
6	8		50	41	35]	hard-frost
	<i>3</i> 8		51		إ	
11			47	38	33 } 36 }	id
	3 8		48	32	36	
12	8		47	38	33 ] 36 ]	fnow
	3 8		48	42	36	
13	ð		46 <b>46</b>	38	31	id
	3 8		40		ز ا	
14	8		44	35	29	ferene
	3 8		44	35	29 J	
15	ð	Name of Street,	45	35 36		id
- (	3 8		45	30	29	
16	ð		43	32	24	id
	3		44			

feparately, together with the extreme heights of the CHAP.

Thermometer, and the usual morning height throughout

It appears from this table, that during the two first days, which were gloomy, and wet; A and B differed only two or three degrees, but the frost increasing through the four succeeding days, the difference between the two Thermometers increased likewise, so that in the morning of the 6th it came to be eleven degrees. From the 10th to the 17th, the Mercury still sinking, the three Thermometers maintained the same reciprocal differences in height as before, or varied only one or two degrees.

On the 17th, the small or Bewe's Thermometer C was removed from the Kiosk, and suspended in a shady place in the open air. A and B remained in their former positions. The remarkable sinking of the Thermometer will appear from the following table, to which I have added three more columns for three other Thermometers D, E, F. The two former were of the same size with A, and both kept at the Consular house by Mr. Drummond, from a fragment of whose diary I have been enabled to give his observations for a few days. D was suspended on the outside of a West window, and E on the outside of a South window; as to F it was a large spirit Thermometer which hung in the Kiosk, but being inaccurately graduated was not regularly observed, and is only produced here to show its proportional height to B which hung in the same place.

	0		0	1				
1756.	Hours			Weather				
December		Α	В		C	D	$\mathbf{E}$	F.
17	8	41	31	Serene, inten	se 4	20	25	16
	3	43	33	$\mathbf{F}$ rost	16	63	65	17
18	8	43 38	27		0	0	18	I 2
	3	4 I	30	id.	12	49	50	14
19	8	37	27		2	0	19	I 2
	3	38	30	id.	17	65	56	.14
20	8	37	26		5	0	25	11
	3	38	30	id.	17	65	60	14
21	8	37	26		3	0	22	10
	38	38	29	id.	14	50	60	8
22	8	35	24		0	0	16	8
	3	37		id.		<b>5</b> 9	60	69

BOOK out the month, distinguishing the first and second fortnight, in order to show the gradual transition of the seasons.

It may be remarked from these tables:

1st. That during the three first days of the frost, A stood at 52, and 50, B at 44, 41, and D which was so apt to sink lower than either, at 40, 38 and 35.

2nd. From the 10th to the 17th, the Thermometer at the Consular house falling gradually, got no lower than 43, while B in the Kiosk sunk only to the freezing point; at that time indeed C, in the same position with B, sell to 24.

3rd. As at this period, the cold may be confidered to have been extreme, relatively to the climate, by attending to the circumstances just remarked, it will readily be perceived why the old register should make no mention of the Mercury sinking so low as 32. That it should not when the Thermometer was kept at the Consular house, will not appear strange, after it has been found to have remained at 43 during very hard frost; and that it did not fall to the freezing point when the instrument hung in the Kiosk, till after the year 1753, was owing partly to the mildness of the winters, and partly to the want of a Thermometer for determining precisely the degree of cold, where the season happened to be more rigorous: circumstances which will be noted occasionally hereafter under the respective years.

4th. The degree of cold on the 18th of December was so extraordinary, that I should have been apt to have suspected some mistake, had not so many different Thermometers conjoined in ascertaining the sact. A from 41, sell to 38; B from 30 to 27; and F from 16 to 12. The Thermometers suspended without doors, indicated a much more surprizing degree of cold. C and D sell under 0; while E which though likewise exposed to the open air was more subject to the influence of the morning sun, sunk to 18. But the cold on the 22nd became more intense than ever. A sell to 35; B to 24; E to 16; and F to 8. The fragment of Mr. Drummond's diary breaking off at the 22nd the comparison could be carried on no surther; but it appears from my own diary, that on the 26th of December, B sell to 23, and F to 6, though both hung within doors.

5th. The

fons. With regard to the Barometer, the variations were CHAP. fo small that it was judged requisite only to mark the greatest and least heights of the Mercury. A more minute account may be found in the register at length, for the years 1752 and 1753.

5th. The difference between the morning and afternoon height of the Thermometers in the open air, is also deserving of notice. C rose from 0 to 12, D from 0 to 57 or 65, and E from 19 to 56; but in regard to the two latter, it must be remembered that they were exposed freely to the sun, whereas C remaining constantly in the shade, was sheltered from his rays.

The winter of 1762 was the most severe during my residence at Aleppo, after that of 1756; but it will appear from the table annexed that the cold was not near so intense. C except on the 22nd, was suspended without doors in the same position as in 1756; B and F remained as before within the Kiosk.

1762. December	Houre		В	C	F	
22	8	-	38	30	26	Serene Frost
0.0	<b>3</b> 8		07	7.4	25	id.
23			37 38	34	25 26	ıu.
24	8		37	14	<b>2</b> 4	id.
1763. January	3					
3	8	-	39	23 36	26 28	id.
4	.3		40 36	16	23	id.
7	3 8		39	32 14	27 21	id.
7	38		34	-4		
9			35 36	32	22	Snowing hard
15	8		36	29 20	23 23	Haiu
_	3					

It may be remarked that B never funk to the freezing point; and that C fell only to 14 in the open air, which, in 1756, was its common afternoon's height.

Vol. II.

B O O K V.

# JANUARY.

The weather in January is commonly either frosty or rainy. The snow that falls at Aleppo falls chiefly in this month; but is seldom in any considerable quantity, and in the streets does not remain long unmelted: the middle of the month is the most usual time of it's snowing; after which the weather often continues frosty to the end.

Rain generally descends in the night, and in very heavy showers. The winds blow moderately, and for the most part from the Northern or Eastern quarter.

Thermometer Barometer

Greatest height 57 Greatest 29, 3 Greatest variation of the Ther-Least 28, 6 mometer in one day 4 deg.

The morning station of the Mercury at eight or nine o'clock sluctuates between 40 and 46 when the weather is not frosty, in frost the Mercury sinks a good deal lower. At three in the afternoon, the Mercury is commonly found 3 or 4 degrees higher than in the morning, except in dark rainy weather, when the difference is either saarcely perceptible, or at most seldom exceeds 1 or 2 degrees.

#### FEBRUARY.

The weather in this month is more variable than in the former. It fometime snows a little, and there are commonly a few frosty days; but it is more usually a wet month, a good deal of rain falling in the first fortnight. The sky in fair weather, especially in the afternoons, is often loaded with large white clouds, at which times it is moderately warm without doors; at other times it lowers and threatens, without raining.

The winds are much the same as in the preceding month, till towards the end, and then it sometimes blows hard Westerly.

Thermometer
Greatest height 55
Least 40

Barometer
Greatest 29, 3 Greatest difference of the TherLeast 28, 4 mometer in one day 8 degrees.

The morning station of the Thermometer, in the first fortnight varies from 42 to 47; the difference in the afternoon is 1, 2, or 3 degrees. In the last fortnight, the Mercury, except in frost, rises gradually to about 50; and the difference in the afternoon is commonly 4 or 5 degrees.

MARCH.

#### MARCH.

CHAP.

A good deal of rain falls in March; but it is generally in short, hard showers, and often accompanied with thunder, at which times the weather is dark and gloomy: but, for the most part, the sky is clear, or only variegated with light white clouds. It begins in this month to be hot in the open air.

The winds blow fresher than in January and February, and are oftener Westerly.

Thermometer
Greatest height 67

Least

Greatest 29

Greatest difference of the TherLeast 28, 6 mometer in one day 9 deg.

The morning station of the Thermometer in the beginning of the month, is 49; about the middle of the month 52; and towards the end 58 or 59. In dark, wet weather, the difference of the morning and evening stations is very little.

#### APRIL.

The sky in April is generally clear, though sometimes in the afternoons, variegated with light, white clouds; it is seldom overcast or gloomy, except when it rains, which it does in hard thunder showers as in the last month, but not so often. There are commonly a few days of close, hazy weather; accompanied with light, Northerly or Easterly breezes; but the winds, in general are fresh Westerly. The mornings and evenings hitherto remain cool; but the weather in the day begins to grow hot.

Thermometer
Greatest height 82
Greatest 29 1 Greatest difference of the TherLeast 28 5 mometer in one day 10 degrees.

The morning station of the Mercury increases gradually from 60 to 66, as the month advances. The difference of height between the morning and afternoon is usually 8 or 10 degrees.

#### MAY.

The sky in May is sometimes variegated with transient white clouds, but generally is quite serene. There are commonly a sew hard showers of rain, often accompanied with thunder, and sometimes intermixed with hail. The

 $O \circ 2$ 

weather

weather becomes very hot in this month, especially in calms, or when the wind is either Northerly or Easterly, but the winds for the most part are Westerly.

It may be remarked here, that, during the whole of the summer, the Westerly winds have great influence on the weather. When they blow weakly the heat increases; when they cease it becomes extreme. These alterations however of the West wind, are more sensibly felt by the human body than they are indicated by the Thermometer; whereas during the North, and the East winds, the air is not only most oppressively hot to the senses, but the Mercury also is raised several degrees.

Thermometer
Greatest height 92
Greatest 29
Greatest difference of the TherLeast 28, 6 mometer in one day 10 deg.

The morning station of the Mercury, at the beginning of the month. is 70, and as the month advances it rises to 76 and 80. The difference in the afternoon increases gradually from 6 to 9.

## JUNE.

The sky in this month, a few white flying clouds excepted, is constantly serene, it is very uncommon to see so much as one short shower of rain. The heats which now become very troublesome, are somewhat mitigated by the Westerly winds predominant at this season, and which freshening regularly towards noon, often continue throughout the night.

Thermometer
Greatest height 96
Least 76

Barometer
Greatest difference of the TherLeast 28, 5 mometer in one day 12 degrees.

The morning station of the Mercury is 76 or 80, as in the preceding month. The difference of height in the afternoon, varies from 8 to 12 degrees.

# JULY.

The weather in July is rather hotter, the sky remaining almost invariably serene, but in other respects, it differs very little from that of June.

The Westerly winds blow fresh. When they fail, the weather becomes excessively hot.

Ther-

Thermometer

Greatest height 101'

Least 28, 9 Greatest variation of the TherLeast 28, 5 mometer in one day 18 degrees.

The morning station of the Mercury at the beginning of the month is 80 and towards the end 85, or 86. The difference in the afternoon varies from 8 to 10 deg.

#### AUGUST.

The weather for some time continues exactly like that of the two preceding months, but after the 20th a number of clouds usually pass, larger and more dense than those seen transient in the summer months, and are by the Europeans, called the Nile clouds. From that time, dews, which are hardly ever observed in the summer, begin to fall in the nights, but are not yet considerable.

Thermometer		Baromet	er	
Greatest height	<b>9</b> 7			Greatest variation of the Ther-
Least	74	Least	28,4	∫mometer in one day 10 degrees.

The morning station of the Mercury before the appearance of the white clouds, is pretty much the same as in the former month; but as soon as these appear, it salls 4 or 5 degrees. The difference in the asternoon observations throughout the month is about 8 or 10 degrees.

#### SEPTEMBER.

The weather in the first fortnight is much the same as in the latter part of August, or rather more sultry. When no rain falls, the whole month continues clear and sultry; but commonly between the 15th and 25th heavy, black clouds arise, and hard squalls, blowing like whirlwinds from the West, cover the whole city with dust. This phænomenon forebodes rain; for within a day or two, some heavy showers fall either in town, or in the neighbourhood, called the first rains, by which, though for the most part not considerable in quantity, the air being much refreshed, the remainder of the month is rendered very pleasant.

Lightning, without thunder, is seen almost every night flashing from the edge of heavy clouds, in the North West quarter; but when it appears in

<sup>&</sup>lt;sup>5</sup> It is very feldom that the Mercury rifes so high. No former instance of its rising to 100, is met with in the Register, except in July 1745.

BOOK the West, or South West it is a sure sign of the approaching rains, which with are often accompanied with loud thunder.

The Westerly wind in this month, seldom rises above a light breeze: and it is very often perfectly calm.

Thermometer		Baron	neter	
Greatest height	92			Greatest difference of the Ther-
Least	62	Least	28,6	mometer in one day 12 degrees.

The morning station of the Mercury, at the beginning of the month, is 78; the difference in the afternoon is rather greater than in August. Upon the fall of rain the Mercury immediately sinks 3 or 4 degrees, and usually continues descending till it gets to 65. After this the difference of the morning and afternoon height of the Thermometer, seldom exceeds 3 or 4, and during the rain is perhaps only 1 or 2 degrees.

#### OCTOBER.

Till the fall of the second rains, in this month, the weather is serene, cool, and rather more pleasant than at any other time of the year. These second rains are in some measure regulated by those of September, the usual interval between them being from twenty to thirty days; like those also the quantity varies considerably in different years: but the second rains are more copious than the first, and descend in heavy interrupted showers, for three or four days successively.

The winds are commonly variable, and feldom blow fresh.

Thermometer Barometer

Greatest height 84 Greatest 29 Greatest difference of the Ther-Least 28, 6 mometer in one day 10 degrees.

The morning station of the Thermomer till the sall of the second rains (being higher than in the end of September) is usually about 72; the common difference in the afternoon is 5 or 6; after the rains, the Mercury gradually sinks in the morning to 60; the difference in the afternoon is seldom more than 3 or 4, but still less when it rains.

# NOVEMBER.

November may be reckoned one of the rainy months, though with frequent intervals of very fine weather. The rain usually descends in heavy showers; and when one or more such showers fall in the day, it is in the Register denomi-

denominated rainy: it would appear that the number of rainy days in No- C H A P. vember rarely exceeds feven. It is very uncommon to fee fnow; but, \_\_\_\_\_\_ after the middle of the month, when the weather is ferene, the mornings are generally frosty.

The winds, which are variable and feldom strong, hang mostly about the

Northerly or Easterly quarters.

Thermometer
Greatest height 65
Least 29, 1 Greatest variation of the TherLeast 28, 4 mometer in one day 8 degrees.

The Mercury, throughout the month, falls gradually from 60 to 50. The difference in the same day varies from 5 to 2; in rainy weather 0.

#### DECE'MBER,

This is also a rainy month; but the weather in the intervals, being often cloudy or foggy, is not near so pleasant as in November. The greatest number of rainy days mentioned in the Register is 16; the smallest 6: but the ordinary number is 8 or 9. There is always more or less of frosty weather in December, and sometimes a little snow falls towards the middle of the month, which is the time that the cold weather generally commences.

The winds, as in the preceding month are for the most part Easterly or Northerly.

Thermometer		Baromet	er	
Greatest height Least	55 406			Greatest difference of the Ther- mometer in one day 5 degrees.

The usual morning station of the Mercury in December is 46: the difference in the afternoon, when it does not rain, is commonly 3 degrees.

<sup>•</sup> The Register furnished no example of the Thermometer sinking lower than 40 in the month of December, a circumstance which has been accounted for in another place.

### CHAP. II.

OF THE WEATHER, FROM THE YEAR 1741 TO THE YEAR 1751.

# A. D. 1742.

THE winter of this year was unusually severe and there was much less rain in March and April than commonly falls in those months. The weather becoming very warm towards the end of April, continued so till the 20th of May; from which time till the 22nd of June, the air being refreshed by strong Easterly breezes, was rather cool for the season: but these, on the 22nd of June, giving place to light breezes at North West, it became exceedingly hot, and continued so till the 11th of July. The weather during the remainder of the season afforded nothing remarkable. There were none of the hot Easterly winds this year.

Some hard showers fell on the 25th of September which were the first rains. The weather, in the interval between these and the second rains, which fell on several days successively towards the end of October, was extremely pleasant. From that time it was fair, serene weather, till the 14th of December, when a hard frost set in, and continued all that month. A slight shock of an earthquake was felt the same day that the frost commenced.

The changes of heat and cold, this year, are represented merely as they appeared to the senses; owing to the want of a Thermometer.

It is probable that this year would have furnished an example of the Mercury falling below 40, in December, had there been a Thermometer to measure it; for the frost continued a fortnight, and in the following month, when a Thermometer was procured, the Mercury was found to sink to 34.

# A. D. 1743.

CHAP.

In the first fortnight of January, a great deal of snow fell<sup>2</sup>; the frost which had begun last month continued, and the air was exceeding cold. The morning station of the Mercury being usually 36, (once 34) and that of the afternoon only once higher than 40. To the frost succeeded a few days of fair pleasant weather; after which violent rains set in that continued almost constantly till the 20th of the following month: the latter part of February was fair and pleasant.

March set in with variable spring weather somewhat cooler than usual, which continued till the 23rd, and between the 23rd and the end of the month there was much rain, hail and thunder. After this it was constantly fair (one thunder shower excepted) till the 19th of April, the weather being rather warm, accompanied with a certain haziness in the air. On the 20th and 21st hard gales from the South West, with much rain, upon which the weather became remarkably cool; the Mercury, which had before commonly rose to 74 in the afternoon, seldom rising so high as 66. In the remainder of the month, there was a good deal of rain and thunder, and some hail; the wind in general blowing fresh Westerly.

Some hard thunder showers fell on the 13th and 23rd of May, but these excepted, the weather was constantly fair, pleasant, and much cooler than usual<sup>3</sup>.

The weather remained cool till the 10th of June, but the rest of that month was hot, notwithstanding strong Westerly winds, and the frequent interposition of transient clouds. Two slight shocks of an earthquake were felt on the 12th about eight in the evening: the sky at the time being serene, and the wind blowing fresh.

In the night of the first of July some severe thunder showers fell: an extraordinary phænomenon at that season of the year. The weather was

<sup>&</sup>lt;sup>2</sup> It fnowed a great deal the first day of the year, and again on the 8th. These two are the only snowy days mentioned in the Register: the expression above is therefore to be understood as relative to the climate.

The Thermometer being unfortunately broken at this time, it was the May following before another was procured from England. In that interval recourse was had to a large spirit Thermometer which showed distinctly the changes of heat and cold, but was graduated in a manner different from both Fahrenheit and Reaumur's scales.

BOOK remarkably cool all the month; a fresh Westerly wind blowing constantly both day and night: but early in August, that wind diminishing in the day and ceasing altogether foon after funfet, the rest of the month appeared uncommonly warm, a circumstance owing perhaps in some measure to the coolness of the preceding month; for the Thermometer did not indicate an increase of heat remarkably different from that of other years. On the 19th half an hour after eleven o'clock at night, a flight shock of an earthquake; the fky being ferene, and little or no wind stirring.

The weather continued hot till the 10th of September, after which till the 18th it was uncommonly fultry, particularly in the night. rains began to fall in the night of the 18th, and though moderate in quantity, rendered the month quite cool. It rained again a little on the 8th of October, but the second rains did not begin properly till the 23rd, when they fell plentifully for three fucceffive days. The weather in the remainder of the year afforded nothing remarkable.

# A. D. 1744.

An unufual quantity of fnow fell in January +, and in places shaded from the fun, remainded unmelted feveral days, which is rather uncommon in that country. The weather in February and March was as usual in other years, but April was remarkably rainy. Two pretty fmart shocks of an earthquake were felt, at half after one in the morning, and a third at fix in the evening of the 28th of April.

The weather in May and July was like that of moderate fummers in Syria; but in June, Northerly winds being frequent, it was hotter than ufual, the afternoon's height of the Thermometer being commonly 95.

After the first week of August, the air was rendered remarkably hot by Easterly winds which reigned for several days. On the 30th a shower of rain fell, which is very extraordinary in that month, and, though inconfiderable in quantity, produced a fudden coolness; the Mercury in the Thermometer falling from 92 to 83.

In the night of the 4th of September, the first rains were ushered in by the usual squall of wind, and were violent for a few hours; but little alter-

4 Four snowy days are marked in the Register, and on the 5th, particularly it snowed remarkably. There was no proper Thermometer to determine the degree of cold. ation

ation was produced in the temperature of the air till the fall of some more C H A P. rain after the 20th. On the 23rd and 24th a great deal more rain fell, \_\_\_\_\_\_\_ after which the weather grew cool.

The fecond rains fell in the night of the 16th of October accompanied with much thunder; and it rained again on the 19th. The rest of the year afforded nothing remarkable.

# A. D. 1745.

There was nothing uncommon in the weather of this year till the 12th of March, when a few days of frost attended with a North East wind, nipped most of the blossoms on the trees. The Thermometer which before had stood at 62 in the afternoon, seldom during the frost, rising higher than 54.

April was remarkably dry; one shower on the 6th, being all the rain which fell in that month. The weather in May and June was as usual.

July, a few days towards the latter end excepted, and the whole of August, were extremely hot, both from the want of refreshing Westerly breezes, and the frequent return of Easterly winds. About the middle of August the heat became excessive: the Thermometer in the afternoon often rising to 100, and twice to 101.

The first rains, which were very moderate, fell the 10th of September, being preceded, as usual, by a squall of wind. The second rains fell heavy and seasonably about the middle of October. Nothing surther remarkable in the weather this year.

# A. D. 1746.

It snowed almost continually from the 3rd to the 7th of January, and the snow lay above a foot deep in the streets; which is very uncommon at Aleppo. It was not all thawed within the city till after several days, and in the fields abroad, in such places as the sun beams did not reach, it remained unmelted on the 13th. The weather during the rest of the winter and in the spring was as usual.

It blew very hard Westerly on the 13th of June, the wind bringing along with it many clouds, which on the 14th let fall two small showers of rain, and sunk the Thermometer from 84, its usual station PM, to 77.

P p 2 There

BOOK There was nothing else remarkable in the summer, only that the Nile clouds did not as usual make their appearance in the month of August.

Though it was cloudy for several days from the 4th of September, and sometimes even thundered, yet, no rain sell till the afternoon of the 11th, when it rained gently for about an hour, and the Thermometer from 82½ P M, sell to 77. The Mercury however soon rose again, and from the 20th to the end of the month, the wind being Easterly or Northerly, the weather was unusually warm; the afternoon station of the Thermometer being 85, or 86. In the month of October, only one shower of rain sell (25th P M) so that the Thermometer kept high all that month, and the weather was extremely pleasant.

On the 2nd and 3rd of November, the rains fell plentifully, and from that time to the end of the year, it was remarkably wet and cloudy, a short interval of fair, frosty weather, from the 9th to the 13th of December, excepted.

# A. D. 1747.

There was no frost this winter, except a few days in December; and the rainy weather, in an uncommon degree, continued throughout January and February; the winds also were unusually high to the end of March, so that the season was very bleak and unpleasant. The remainder of the spring, as well as the summer, were as usual in temperate years.

Some large clouds passed about the 4th of September; and about the 26th, some dark heavy clouds with slashes of lightning, threatned rain: but none fell at Aleppo, and as light airs Northerly or Easterly were predominant, the weather throughout the month was hot, the Mercury to the end keeping up at 82°.

There was a thunder shower on the 13th of October, a small shower on the 22nd, and a gentle rain the whole day of the 24th; those excepted, the weather was constantly clear and settled.

From

<sup>&</sup>lt;sup>5</sup> The Thermometer at this time was kept in the South room at the Consular house, where the Mercury never rose so high as in its former position in the wooden Kiosk.

It may be remarked that this was not so high as in the preceding year.

From the 7th to the 11th of November, a good deal of rain fell; after C H A P which, the weather was as usual in open winters without frost; only that December was uncommonly foggy.

# · A. D. 17487.

The weather in January and February was remarkably wet and cloudy. On the 16th of January, and the 2nd of February, it snowed, but in a very inconsiderable quantity, and mixed with rain.

From the 17th to the 28th of January continual frost, with a serene sky.

The first ten days of March were wet and bleak, the Easterly winds blowing sercely. The rest of that month was temperate, and, except two thunder storms about the 26th, without rain. April was uncommonly dry; the Register only containing two showery days. May was hot throughout, although several thunder showers fell in the evenings of the 12th, 13th and 14th.

The heats in June, July and greater part of August were moderated by strong Westerly winds. On the 23rd of June there was a heavy shower of rain, and what is still more extraordinary another shower on the 26th of July. In the interval between the 9th and 13th of August. several heavy clouds passed.

September was ferene, calm, and as usual hot, till the middle of the month; after which the Sky was often cloudy. The first rain that fell

The description of the weather in the years 1748, 1749, 1750, and 1751, was omitted in the former Edition, the Author judging it unnecessary, as he had been prevented from keeping a journal of the Epidemical Diseases of those years, in the same regular manner he had done before. In order, however, to render the history of the weather at Aleppo as complete as possible, I have endeavoured to fill up the chasm, by inserting the best account I was able to extract from the Register of the weather, which my Brother's Friend beforementioned, continued to keep at the Consular house, till I took the Instruments under my own care in the year 1751. This Register I found in some parts impersect; and it takes no notice of the Barometer. The table of the Thermometer at the end of Mr. Drummond's Travels, seems to be a copy of the same Register.

<sup>\*</sup> Some hail stones that fell in the storm on the 14th, measured above half an inch in Diameter.

of the month.

was a small shower on the 29th, but from that time till the 11th of October the weather was uncommonly wet and cloudy. The rain came down in very heavy showers often attended with thunder. The first rains did not however produce an immediate alteration in the temperature of the air; it being the 7th of October before the Mercury sunk considerably: a circumstance owing probably at first to strong East winds, and afterwards to light breezes Southerly. The rest of October from the 11th, was fair and clear, except thunder showers on the 20th, and on the two last days

The fecond rains, which had begun the 30th of October, were completed the 2nd of November. It was afterwards fair for feveral days, and, in the mornings, frosty. On the 8th it begun to rain again, and from that time to the end of the year there was much cloudy wet weather, with some short intervals of frost. It snowed on the 21th of December.

# A. D. 1749.

To the 20th of February, this year, much cloudy, rainy weather, but with a few short fair intervals, which in January, were commonly frosty: the 8th, 9th, 17th, and 18th of that month are marked in the Register hard frost. Towards the end of January, the weather became vernal and some Almond trees were in blossom. On the 20th of February it rained hard, with loud claps of thunder. The day sollowing was tempestuous, and in the night, snow fell, and lay about two inches thick. This was immediately sollowed by a hard frost which continued to the 5th of March.

Little or no rain fell in March, but the Easterly winds being less frequent than in the preceding year, the weather was cool and the Mercury in general stood lower. April was refreshed by several showers 'o.

• The Thermometer, during these frosts, sunk no lower than 51: but its position in the South room must be recollected.

" On the 30th of April, about eight in the evening, a very large ball of fire was observed in the North, streaming to the Westward, which as it passed, dropped lumps like burning metal, till it sunk below the horizon. Its size was twenty times bigger than any Meteor I ever saw before, and caused a gleam of light, much stronger and longer than is produced by any lightning. The sky was very clear, and the wind blew fresh from the North East." (Register.)

May

May was cooler than usual. A good deal of rain accompanied with C H A P. thunder, fell on the 6th and 7th; it rained also the 8th, and again in thunder showers, on the 17th and 18th. There were three or four slight shocks of an earthquake about three o'clock in the afternoon of the 23rd.

June, except a few close days towards the end, was fresh; as likewise July, after the first week: the West winds being generally constant in both months.

August was calm and hot. On the 14th some heavy clouds arose in the West and North West and remained hovering over the city all night, darting from their edges frequent flashes of lightning, unattended by thunder.

The weather, in the first ten days of September, was extremely close and hot. On the 13th, it rained very hard for an hour about noon, and again in the evening, both times accompanied with thunder: next day also there were several showers. The Mercury sunk immediately from 80 to 75, and after some more rain on the 21st and 22nd, to 71. From that time to the 10th of October, except a heavy shower on the 6th, the Weather was constantly fair. The rest of October was often cloudy, and from the 17th to the 23rd the second rains fell plentifully; after which to the 4th of November, a clear, cloudless sky.

From the 4th to the 17th of November, much cloudy weather with fome rain; from that to the 20th hard frost: it then rained for two or three days, after which the frost returning, continued without interruption to the 16th of the following month. The last fortnight of the year was very wet.

# A. D. 1750.

This year was remarkable for the long continuance of frost in January and February, and the small quantity of rain; so little falling in those two months, that in the former there were only four rainy days, and in the latter one. It snowed from morning to night of the 29th of January.

The frost setting in the beginning of January, continued to the 21st, when it rained for several days; on the 26th it cleared up, and the frost returning more intense than ever, continued to the 19th of February: the sky (one snowy day excepted) being constantly clear, and the Northerly, or Easterly winds rather fresh. From the 19th to the 23rd the weather

B O O K was cloudy, and on the 21st it rained: but the frost returning on the 23rd, v. continued to the end of the month".

March was moderately wet, and rather cold, which continued with the preceding frost to render the spring extremely backward, in so much that the Apricot trees were not in bud till the 8th of March. It is remarked that on the 20th of the Month, upon opening the window of the chamber where the Thermometer was placed, the Mercury immediately rose five degrees.

It would appear that the first rains fell the 11th of September. But there is a chasm in the Register at this place, that is, from March 1750 till August in the following year.

# A. D. 1751.

The Register which had been interrupted since April 1750, began again to be kept regularly in August this year.

The heats of August, during a few days at the beginning, were moderated by frosh Westerly winds; but calms, or light breezes at West or North West becoming frequent after the 5th, the weather was very hot. Dews fell sometimes in the night. Upon the winds freshening about the 23rd, the weather grew cooler, and continued so for some days in September, when the winds again lulled. On the night of the 8th of that month many heavy dark clouds were observed hovering about, and for several succeeding days, light white clouds frequently passed in the day time. In the third week of September it was often cloudy, and from that time though no rain fell, the weather became remarkably fresh, in so much that between the first and latter fortnight, there was a difference of 8 or 10 degrees in the morning station of the Thermometer.

This winter feems to have been the most remarkable for frost, of any mentioned in the Register; not only on account of its early commencement in November, but also of its intenseness, and long continuance in January and February. But from the position of the instrument, the Mercury never indicated the real temperature of the external air. In December it sunk no lower than 52. In January, it was commonly (to the 21st) 50 in the morning, but during the rainy weather it sunk to 48. Upon the return of the frost it fell from 47 to 44, at which, or at 45, it remained till the 8th of February. From that time rising gradually, it on the 14th resumed its old station 50, and retained it the remainder of the month.

October was ferene and pleasant to the 6th, it then became cloudy, and C H A P. from the 8th to the 12th, several showers fell, which though not heavy, might be reckoned the first rains. From this to the 20th it was for the most part fair and clear, except some inconsiderable showers on the 16th and 17th. Between the 20th and 25th, a good deal of rain fell, after which to the 8th of November, fair, fresh weather, the Mercury falling 8 or 10 degrees. To this succeeded three or four cloudy, wet days, and the air growing sensibly cooler, the Mercury descended from 56 to 50. From the 17th to the 21st, frosty, and on the 18th it snowed. The Mercury fell to 43. The frost was followed by three rainy days, but the sky clearing up on the 25th, the weather continued fair and temperate to the 15th of the next month. The latter fortnight of December was rainy at its beginning and towards the end, but from the 18th to the 26th, the weather was fine and fair. In the night of the 11th of December, a slight earthquake was felt.

As the alteration in the style, that took place in the British Dominions in the year 1752, might produce some confusion respecting the account of the weather, which was drawn up according to the Julian Calendar, I have, in order to facilitate a comparison of these observations with those made in other parts of the world, inserted in the Appendix, an abstract of the Meteorological Register for the years 1752 and 1753, together with a comparative table of the seasons from the year 1742, to 1753, inclusive.

### CHAP. III.

OF EPIDEMIC DISEASES, AT ALEPPO, IN GENERAL.

THE Epidemical Diseases most prevalent in Aleppo are the following; Continual Fevers, Intermittent, and Remittent Fevers, regular and anomalous; Erratic Fevers, to which children are peculiarly subject, and which commonly are attended with a diarrhœa; the Dysentery, Quinfy, Pleurify, Peripneumony, Rheumatism, and Inslamations of the eyes. All these return annually, as regularly almost as the seasons; but in different years vary in their degree of frequency, as well as in the serverity of their symptoms.

The Continual, and the Intermittent Fevers of the fpring, fometimes appear as early as the beginning of the year, but more frequently towards the vernal equinox; and they disappear in June. The autumnal Fevers, and the Dysentery, fometimes succeed immediately, but more commonly not till July, and arriving at their height of frequency about the equinox, generally disappear about the beginning of December.

The

The Erratic Fevers peculiar to children, commence in c H A P. the spring, but rage with most violence during the summer heats. The Opthalmia, to which children are likewise subject, is met with in all seasons, but constantly becomes so rise in the months of August and September, that there are sew years in which at least one sixth of the inhabitants are not more or less afflicted with it.

The Essere is common all the summer.

General Inflammatory fevers, and those termed Catarrhal; Rheumatism, Quinsy, Pleurisy, and Peripneumony are most prevalent from December to March, or even April; but they are rarely of a bad kind, and as they seldom spread much, can hardly be called Epidemics.

The diseases hitherto mentioned, do not in their symptoms differ materially from the same diseases in Britain; in their course they are not more rapid, nor can I say they are more frequent than in the Northern climates. But in this general remark the Opthalmia must be ex-

The Ophthalmia is by the Natives termed Rummed . All are subject to it, but more especially children and young persons. In some years it rages with destructive malignancy.

Q q 2

cepted;

This is usually ascribed to the nocturnal dews which in small quantity fometimes fall at that season, and from which the Natives, who sleep in the open air, have no canopy to shelter them. As the Europeans, who sleep in field beds, protected by a thick covering at top, besides curtains, are exempt from this malady, but have been seized with it upon lying exposed in the manner of the Natives, the vulgar opinion seems to have some foundation in experience.

ing fevers included, which being peculiar to particular years or fituations, do not properly belong to the annual Epidemics, and will be mentioned hereafter.

In the great Lent preceding Easter, the Christian Natives are peculiarly subject to a severish disorder, accompanied with a wheezing in breathing, and a hard dry cough; and in which the skin universally seels hot and parched, more especially the palms of the hand, and soles of the seet. It is chiefly to be ascribed to their constant use of oil at that season, and as frying is a savorite mode of cooking Lent victuals, the oil is rendered by the fire more pernicious than it is found to be in its pure crude state. The disorder is soon removed by bleeding, purging gently, and by the plentiful use of pectoral diluents, prohibiting at the same time dressed oil: but it is often necessary in tender constitutions, to forbid the use of oil all together, and to procure a dispensation for breaking Lent.

Besides the diseases which from their recurrence with the seasons have been termed annual, there are other Epidemics which make their appearance at more distant and irregular periods, and being all, more or less, contagious, sometimes rage with most fatal violence. Amongst these may be reckoned the Small Pox, Measles, Chincough, Putrid Fevers, Petechial, and Scarlet Fevers, and Malignant Remittents, and Intermittents. Eminent above above all in this class, stands the Plague, which is re- C H A P. ferved as the subject of a subsequent Book.

The continual fevers, and indeed almost all other acute diseases in that country, are subject to exacerbations once or twice in the twenty-sour hours, which are usually accompanied by a slushing in one or both cheeks: but the continual severs of the spring, though often attended with symptoms seemingly worse than those of the autumnal severs, are in general not so dangerous.

The fymptoms and progress of the disease are indiscriminately the same in all the sick, whether Turk, Jew, Native Christian, or European; and it deserves to be remarked that the course and critical periods in all acute diseases, agrees much more exactly with the descriptions of the Greek physicians, and their doctrine of critical days and evacuations, than according to modern observation, they are sound to do in Britain<sup>2</sup>.

But

Such circumstances might have been peculiar perhaps to some prevailing Epidemic at the time; but I am certain that during my residence there, both symptoms were not less dangerous than in other countries. It is probable that the mistake might have arose from the common mode of expression

<sup>&</sup>lt;sup>2</sup> It may be proper at this place to take notice of an anonymous remark in the Philosophical Transactions (Vol. viii. p. 6018.) "that feavers at "and about Aleppo, though they have the same type as in England, yet "there are two things peculiar to them; one is that in acute seavers cold "sweat commonly signifies recovery, but hot sweat portends death. The "other, that in such acute seavers, even an intermittent pulse denounces "no danger.

But though the course of diseases varies immaterially in the different classes of inhabitants, some regard intreating the sick, must be had to their different modes of living; for those who are accustomed to drink nothing stronger than water or coffee, will not bear so warm a regimen as those who daily use fermented and Spirituous Liquors.

Tertian fevers, in the spring and winter months, for the most part either assume a regular form, or have such remissions as admit of the bark, and thus are easily cured; but in the autumn they are more treacherous and obstinate; they are apt to change their type, and if the bark be not speedily administered, they become extremely dangerous. Intermittent or remittent severs of the more malignant kind are indeed seldom seen at Aleppo, unless when imported by persons who have contracted them in other places: they are the produce of Scanderoon, or other situations naturally marshy; or of villages where the adjoining grounds are occasionally laid under water, for the purposes of agriculture; and such severs, in certain years, rage with dreadful violence.

expression among the Natives, who term a cold sweat (Arak bared) such a critical sweat as, after having carried off the sever, leaves the body cool, whereas a hot sweat (Arak Suhan) according to them, is such as often happens in severs without any abatement of the symptoms, so that both the body and the sweat remain hot, and such in reality is a bad symptom as often in other places as at Aleppo.

European

European strangers who have made any stay at Scan-chap. deroon, as well as the Native inhabitants of that and of other maritime, marshy situations, though they may have fet out on their journey in good health, and though intermittents at the time are not common at Aleppo, are liable to Tertian agues foon after their arrival in that city; in like manner Convalescents from the same places, often have a return of their fever. In respect to intermittents it may further be remarked, that the ingenious Mr. Cleghorn's description of the Tertian fevers of Minorca, answers, in their more anomalous forms, to those that prevail in certain years at Aleppo; but exactly and more extensively to the fevers endemial in marshy situations on the coast of Syria, as well as in the island of Cyprus: and I may add at the fame time, that a long course of experience has convinced me, that the method of cure recommended in his excellent treatife, is the fafest as well as the most successful.

The Sporadic and Chronic diseases, a sew exceptions admitted, are nearly the same as in Britain: I shall mention such as are most common at Aleppo. Pulmonary complaints, Spitting of blood, and Consumptions; to all which the Aleppo air is reckoned peculiarly prejudicial. Obstructions of the abdominal Viscera, Cahexy, Jaundice, Dropsy, Inguinal Ruptures, and the Hemorrhoids. To these may be added Worms, to which all ranks and ages are subject; and most of the diseases incident to the

Opthalmia formerly mentioned, or of the Small Pox.

Scorbutic eruptions attended with putrid gums, are fometimes met with, but the confirmed Scurvy is almost unknown. The Tinea is extremely common, the children of all ranks being subject to it; and as it is with the utmost reluctance the Natives confent to shave the heads of their girls, they suffer in this respect more than the boys: indeed when the disease is not removed before puberty, it often harasses them for life. This is still more prevalent among the children of the lower class, who suffer moreover very frequently from the Itch; a disease universally in abhorrence, and of which the contagion is more dreaded than that of the plague.

Besides these, there are various other Cutaneous Discases: among which, certain eruptions of a leprous nature are often met with; but the true or confirmed Leprosy is now become a rare, though not obsolete disease in Syria, and the real leprous cases which offer at Aleppo consist chiefly of peasants, or others from some distance, who repair to the city for the benefit of advice.

Of the Sporadic diseases now enumerated, some are obviously produced by, or consequences of, preceding distempers, more especially of long protracted Tertians; while others may in part be ascribed to the diet of the

Natives,

Natives, the neglect of exercise, their mode of sitting, CHAP. and to the broad belts, or Cinctures, worn by the men. As to the Tinea and the Itch, both may in some measure be owing to neglect in point of cleanlines; for many go only once a week, or fortnight, to the Bagnio, and it is there chiefly that the body and hair are cleansed: the Jews of all others suffer remarkably from both eruptions, and in respect to nastiness, they hold unrivalled pre-eminence.

The Gravel, and the Stone, are difeases not unfrequent among the Turks; but the Gout is very rare, and for the most part is found to be hereditary<sup>3</sup>.

The Venereal Difease is very common in Syria. As the Turks have no other idea of a Gonorrhæa than what is derived from the writings of the Arab Physicians, they neither apprehend its being contagious, nor conceive it liable to degenerate into a worse disease: the consequence of which is that it spreads unsuspected, and is often negligently permitted to terminate in a Pox. In this state it acquires the name of the Frank Disease<sup>4</sup>, (probably from its being first imported from Europe) and is then universally regarded as formidable, and highly contagious: but they are more inclined to believe that the contagion is propagated by smoking the pipe, eating out of the spoon, or wearing the clothes of an infected

<sup>&</sup>lt;sup>3</sup> The Gout is also a rare distemper among the Jews and Christians, though less so than among the Mohammedans. So far as my observation went, it appeared with them also to be hereditary.

<sup>•</sup> Frank Zahmety. فرنك زحهتي Vol. II. R r

pular error unhappily contributes to multiply the difease; and the use of Mercury being but impersectly known to the modern practitioners of medicine at Aleppo, many are left for the remainder of life to struggle with the distemper, with little or no affistance from medicinal art. But it is remarkable, how inconsiderably many under such circumstances suffer from the distemper; which is perhaps checked in its progress, and its symptoms mitigated, by the warmth of the climate, the frequent use of the Bagnio, and by temperance.

It was remarked on another occasion that the European inhabitants, those excepted who have adopted the national mode of living, are feldom affected by the Epidemic Diseases at Aleppo; and some probable causes were at the same time assigned for this exemption\*. But soon after their arrival, (more especially the English) they are subject to a sever which is regarded as a kind of seasoning to the climate; and at a later but more uncertain period they are liable, in common with the Natives and all strangers whatever, to a singular kind of blotch called the Mal of Aleppo: of both which some account will be given in the following Chapter.

<sup>&</sup>lt;sup>5</sup> Something perhaps may be allowed for idiofyncracy; for inftances are often met with, wherein the diftemper advances rapidly.

<sup>\*</sup> See page 26.

### CHAP. IV.

OF THE EPHEMERA,—TERMED THE OCA; AND OF THE MALD'ALEPPO.

THE Europeans foon after their arrival at Aleppo, CHAP. are subject to a fever, which, I know not for what reason, they have by common consent distinguished by the name of L'Oca or Goose. The disease attacks but once; and the English are rather more liable to it than the Provenceâls and Italians'.

The disease, at its invasion, is attended with the usual fymptoms of an Inflammatory Fever. The pulse soon rises, the head-ach, heat, and thirst, become excessive, and the patient continues restless in this state, till relieved by a sweat. This Fever though very violent while it lasts, seldom continues more than twenty-sour hours, and is not reckoned dangerous.

Though fome escape without any other remedy than rest and dilution, yet it is in general necessary to bleed largely at the beginning, and afterwards when the Fever is gone, to give one or two doses of lenient physic.

Rr2

The

The Dutch, and other Europeans from the Northern climates, are not less subject to this fever than the English.

The Natives of Aleppo, as well as the European and other strangers who have resided any time in that city, are all, or with very few exceptions, subject to a singular kind of Eruption, which from the supposed time of it's duration, is named by the Natives Hebt al Sinne\*, or Botch of a year; but by the Europeans and Turks, as if it were peculiar to that place, Il Mal d'Aleppo, the Aleppo Evil, and Haleb Chiban<sup>3</sup>, the Aleppo Ulcer. It is not however confined to that city; being common almost in the same degree at Aintab, and the villages situated on the banks of the rivers Sejour and Kowick: whence the vulgar opinion of its being produced by the water.

> No part whatever of the body or limbs is exempt from this Eruption; but the time of its appearance, is various and uncertain. The Natives commonly have it whilst children, and very often on the face. It commonly attacks flrangers foon after their arrival, though fometimes not till after many months: and there have been inflances of fome, who having refided only a fhort while at Aleppo, have been attacked with the Mal, in their own country, at the diftance of feveral years. Strangers have the Eruption on the face more feldom than the Natives; but very few escape having it on one place or other.

<sup>&</sup>lt;sup>2</sup> Heb al Sinne. aiml as

<sup>&</sup>lt;sup>3</sup> Haleb Chibani. حلب چباني

The number of Eruptions in the same subject is vari- C H A P. ous; sometimes two, three, or more: a single Eruption is rather extraordinary, and the number has rarely been known to exceed ten. It is seldom, or never, that the same person is attacked more than once.

Dogs and Cats are subject to this Eruption, as well as the human species, and in those animals it commonly breaks out on the nose.

The Natives diftinguish two species of the Eruption, the male and the semale: but there is a third kind of Eruption which though commonly said to be occasioned by the bite of the Wood-louse, seems likewise to belong to the Mal.

What is called the Male Eruption, makes its appearance in the shape of a small, red, hard Tubercle, which as it gives little or no uneasiness for some weeks, commonly passes unregarded. It then begins to be prurient, and by degrees increasing to the size of a sixpence, becomes a little scurfy on the top. After two or three months, it discharges a little moisture, which drying as it oozes from the surface, forms a thick crusty scab. This if left undisturbed, remains till the parts beneath are healed, and then salls off, leaving a very inconsiderable, but indelible mark. Its duration is various, but seldom exceeds eight months.

The female species begins nearly in the manner above described, but sooner grows troublesome, giving more or less pain according to its situation. In two

male, discharging a good deal of ichorous matter from under the scab, and by degrees casting off the scab, it assumes the appearance of an undigested scorbutic ulcer, surrounded with a narrow, reddish, or lived circle. In this state it is often less painful than might be expected from its appearance, and continues running freely, though without spreading, for several months.

Though in general, twelve months elapse from the first appearance of the Eruption to the perfect healing of the ulcer, yet its duration is subject to variation in different patients, some getting free several months sooner than others, owing perhaps in a great measure to difference in constitutions. When the Ulcers are situated on the joints of the singers, or toes, on the elbow, or other parts exposed to external injury, they create a great deal of uneasiness in spight of all precautions; the same may be said, when they are irritated by improper applications: but in situations less exposed, and lest undisturbed by officious surgery, the pain they occasion is not considerable. The circumstance most distressing of all others to the fair sex, is the ugly scar the Ulcer leaves behind, and which remains for ever.

The third kind of Mal begins in the same manner as the others, but seldom grows larger than a pepper corn; in which state it remains invariably for many months, without giving pain, or yielding any visible moisture. It usually usually casts off a few scurfy scales before it disappears; C H A P. but it sometimes remains for several years.

In respect to the method of treating the Mal of Aleppo, almost every old woman in the country pretends to know some infallible remedy, not only to cure it speedily, but, (what to many is of much greater consequence,) to prevent the deformity of a scar; yet the number of sine saces dissigured by it, which are so often met with among the semale children, are too evident proofs, of the inefficacy of the so much boasted Nostrums. In truth, from what I have observed, it is insinitely better simply to keep the Ulcer clean, and trust the rest to nature, than to apply any of the numberless remedies which are employed, and with such considence recommended by the Natives.

Of feveral external remedies which I tried upon myfelf and fome others, I found a Mercurial Plaster the most efficacious<sup>5</sup>; but in the preparation of the plaster a little deviation

The unfeemly fcar left by the Mal of Aleppo, and the frequent application from the ladies for a remedy to remove it from the face, induced me to try whether it might not be possible by inoculation, to excite the eruption on some part less exposed than the face. The few trials I made did not succeed. The incisions were made on the legs or arms, in the same places where the Natives usually open issues; but the application of fresh matter, was attended with no consequence, the wound, hardly inflaming, immediately healed up. The operation should, perhaps have been repeated more than once.

<sup>&</sup>lt;sup>5</sup> The Natives are so prejudiced in favour of their own topical remedies in this case, and so addicted to try a variety of them in the course of

Dispensatory: the proportion of Mercury, was diminished,

two or three months, that the cases wherein I had an opportunity of giving the Mercurial Plaster a fair trial, were proportionally sew; and then though it sometimes seemed to be of use, it as often failed.

Some of the more adventurous practitioners among the Natives, on the first appearance of the eruption, or soon after, apply the actual cautery, and as they pretend with success: but I can say nothing of this remedy from my own experience.

I fometimes have tried Red Precipitate, and mild caustic applications, but always without success: and indeed all irritating remedies seemed only to give unnecessary pain, without producing any benefit. Accident afforded an opportunity when least expected, of observing the effects of the most powerful remedies, internal as well as external, upon the Aleppo Mal.

The flave of a Bashaw of Aleppo, soon after her arrival in the Harem, was alarmed by a hard, roundish Tubercle, on the under lip. The Bashaw, who occasionally read books of Medicine, conceiving this tumor to be a Skirrhus which might in time turn into a Cancer, proposed to his Hakeem Bashi (a Greek) to have it either cut out, or extirpated by Caustic: but desired I might be consulted before the operation was performed. On examining the lip I found no reason for thinking the tumor Scirrhous, and therefore proposed some more lenient methods should be attempted, previously to any manual operation; but I must consess at the same time, that having never before met with the Mal of Aleppo in the same situation, I had not the least suspicion of the present tumor being of that kind.

After proper evacuations, the young lady was put into a course of alterative medicines and a strict regimen; the part after somentation twice or thrice a day, being rubbed with Mercurial Ointment. Under this treatment matters grew worse, the tumor increased, began to give pain, but had less and less the appearance of a Skirrhus.

The Bashaw who all along superintended our proceedings, insisted upon our administering Mercury internally, on a supposition that she might have contracted the Venereal Disease by eating out of some impure utensil.

Though

minished, and that of the balfam of Sulphur somewhat C H A P. increased.

When

Though this did not to us appear at all probable, we gave our confent to the Mercury, which was given in small doses, with a decoction of the woods, gentle purges being ordered at intervals. In two or three weeks, the tumor, which had increased in size, discharged an ichorous matter, and grew much more painful; the surface was excoriated, and discovered a crude undigested ulcer. I then mentioned my suspicion of the case, and proposed laying aside all medecines, only washing the part simply with milk and water, till we should see what effect the Mercury she had taken might have in eight or ten days. But in this, though my colleague inclined to the same opinion, we were both over-ruled, and the unfortunate girl was obliged to suffer the excruciating pain occasioned by the successive application of different Caustic remedies, made with a view of deterging the sordes, or of extirpating the roots of the tumor.

During these operations, of which I was obliged to be from time to time a spectator for more than a fortnight, an Alleppeen attendant on the Harem took upon her to pronounce the ulcer to be no other that the Hebt al Sinne, and to declare that the Doctors deserved condign punishment, either for their ignorance, or their inhumanity in putting the poor girl to such torture, when every body knew the sore might have been cured in three months.

Supported by the respectable authority of this old lady, I obtained a refpite to all proceedings, and indeed such a pause was become highly necessary, for the surrounding parts were not only considerably swelled by the rough treatment of the ulcer, but the mouth and gums were likewise affected by the Mercury.

At the end of a fortnight the acceffory swellings were gone, the bottom of the ulcer looked fordid as usual, but the lips were less inflamed, and the patient suffered not the fourth of the pain she had done for many weeks before.

But notwithstanding the nature of the tumor was now acknowledged, and consequently the expediency visible of letting matters remain as they were; yet an idea of accelerating the cure, by destroying the roots of the

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When the plaster was applied at the beginning, it frequently prevented the Tubercle's making any further progress. If, before the application, it had already begun to run, the plaster hindered the Ulcer's spreading so much as it probably might have done, and generally shortened the cure. This is to be understood of the Female Mal; for the other two kinds seldom required any medicinal application whatever.

tumor, remained powerful enough to introduce once more the application of Caustics: but the experiment was repeated only twice or thrice, for the lips and cheeks swelling immediately, and all appearances growing worse than before, external applications (fomentation and washing excepted) were laid aside.

This happened in the 7th or 8th month; from which time the Mal run its course in the usual manner. Towards the end of the year, the ulcer was nearly healed, but had the appearance of leaving a much worse scar, than it probably would have left under more lenient treatment.

I have given this case at greater length, as it affords an example of more powerful remedies being employed than I ever before knew used in the Aleppo Mal, and showed strongly the inefficacy of such rough treatment in shortning the ordinary course of this eruption.

#### CHAP. V.

OF THE EPIDEMICS, AT ALEPPO, FROM THE YEAR 1741 TO THE YEAR 1754.

# A. D. 1742.

THE feafon was healthy till about the beginning of March, when an CHAP. acute Fever attended with a pain in the right Hypochondre, became very frequent, but feldom attacked children under ten years of age.

Copious bleeding, Antiphlogistic Medicines given internally, Clysters, lenient purges, and emollient fomentations to the part affected, in general mitigated the symptoms, and brought on a favorable crisis by a plentiful sweat on the seventh or ninth day in adults, but the crisis in children was commonly by a Diarrhæa.

Sometimes this treatment, though it removed the pain, and relieved the other fymptoms, did not remove the fever, which, changing from a continual form, assumed that of a regular intermittent, and was soon and safely cured by the Bark: but such patients were under the necessity of observing a strict regimen for some time, being very subject to relapses if guilty of any irregularity.

Where evacuations were not used in due time, the disease often proved fatal; at best the Fever run out to thirty, or even forty days; and some few of the sick died hectic.

This Fever though it did not disappear till Autumn, attacked so few after the middle of June that it could scarcely after that period be called epidemical.

Inflammatory Quinfies were also frequent in the Spring and part of the Summer; but they were not violent, and quickly yielded to the common method of cure.

Ss 2. The

BOOK

The city, in this and the two following years, was vifited by the V. plague; but as a particular account of its rife, progress and decline, will be given in another place, it may be sufficient here to remark, in connection with the other Epidemics, that it continued without spreading much, from the month of May to the end of July, when it ceased for several months.

> About the middle of July, Diarrhæas and Dysenteries became very frequent, and were Epidemic all the Autumn. The stools at first were bilious; the gripes fevere; and a very high Fever, often accompanied with Petechiæ and other bad fymptoms, was a confrant concomitant.

> Copious bleeding, and an Ipecacuanha vomit, were always necessary at the beginning; after which a few doses of Rhubarb, found most effectual when fome grains of Calomel were added, prepared the way for Anodynes and gentle Aftringents; and these with a soft mucilaginous diet in most inflances completed the cure. But it fometimes happened that the diftemper, changing unexpectedly its promifing appearance, terminated fuddenly in death: a circumstance not peculiar to this distemper, but observed also in some of the intermitting Fevers which were Epidemic at the fame time: and indeed this unexpected mortality happened now and then in all acute diseases during the time of the plague, where the sick, not being thut up, had been exposed to infection: but in such cases buboes, or other characteristic marks of that distemper, were seen but seldom.

> About the beginning of September the Small Pox made their appearance, and being of a mild diffinct kind, required very little affiftance from medicine; but in the following month they fpread rapidly, and became more formidable. Most of the infected now had a confluent pock, accompained with Hemorrhages, Petechiæ, Phlyclænæ, and other symptoms of the worst kind. When convulsions happened on the first seizure, they were always violent, and predicted that the pock would be confluent and prove fatal.

> The Pustules were often discovered on the extremities, as soon as the child was visibly disordered, and the Eruption never was later than the end of the fecond day. In the ordinary course of the disease, left as usual in that country to the fole conduct of nature, the fatal day was in general the 11th from seizure; and if the sick survived that period, few of them escaped corrosive ulcers with carious bones; or hard swellings in the glandular parts, which with difficulty could be brought either to discussion

or fuppuration: to these sometimes were joined coughs, and fluxes, which C H A P. helped to put a speedier end to the complicated misery of the young sufferers. This malignant Small Pox, prevailed in a remarkable degree among the Jews.

When bleeding was practifed at the beginning; Antiphlogistic medicines, with diluent drinks administered through the course of the disease; and the extremities, previously to the Eruption, bathed frequently in warm water, fatal consequences were often prevented. The Native practitioners neither give purges in the secondary Fever, nor in the decline of the disease, to which neglect the frequency of Ulcers and other disorders consequent to the Small Pox might in some degree be owing: but such disorders often happened also in cases wherein all possible means had been used to prevent them.

Inoculation in that country is practifed only by the Christians, and has, not hitherto, even amongst them, been universally received; but it seems daily to gain ground, while their injudicious mode of practice seems to deprive it of several advantages. They pay no regard to the condition of the subject to be inoculated, nor to the quality of the variolous matter, or the constitution of the patient from whom it is taken: and they use no preparation. The child is at once carried into the chamber of the insected, where an old woman opens one of the pustules with a needle, and then immediately with the envenomed point of that needle, she pricks the sleshy part between the thumb and fore singer of the child's hand, taking

That inoculation was only practifed at Aleppo, by the Christians, is a circumstance in which the Author happened to be mistaken, and I remained in the same error for several years after he left the country. It was not till the year 1757, and then by mere accident, that I discovered the practice was not only common among the Arabs who dwell in the city, but also among the Bidoweens in the neighbourhood.

At the time of this discovery, considering it as a matter of which my Brother could not be ignorant, I took no notice of it to him till several years after, when some pamphlets freshly received from England, revived in my mind the subject of Inoculation. I then transmitted a circumstantial account of it to my Brother who thought proper to present the paper to the Royal Society, and it was published in the fistieth Volume of the Transactions. In my Brother's Letter to the President, inclosing my paper, he mentions having heard, about the time of his leaving Aleppo, that the Bidoween Arabs had a practice of buying the Small Pox.

BOOK up a little fresh matter after every two or three punctures. A bit of cotton is then applied to the wound, and secured by a bandage.

Pleurisies and Rheumatisins began to be sporadic in December.

# A. D. 1743.

The Small Pox, now of the distinct kind, decreased considerably in January, and disappeared entirely towards the end of the following month.

Pleurifies and Rheumatisms, which had grown more frequent in January, continued through the greatest part of February. The Fever in both was attended with head ach, thirst, and other usual symptoms, but the pulse was low, quick, and hard, and the urine was not so high coloured as usual in those inflammatory Fevers, nor did it deposite any sediment. The Rheumatic pains were not in general, very intense, but they were very apt to fix in the knees, where they occasioned a considerable swelling, and often left a weakness in the joint, which remained long after the pain and the Fever were removed.

The method of treatment was in both diseases the same; though in general, the sick could not bear such large bleeding, as usual in other seasons: and yet the blood when drawn was always sizy. Two, or at most, three moderate bleedings, cooling purges, emollient somentations to the parts in pain, together with a free use of Antiphlogistic, Saponaceous Diluents, to which towards the decline of the disease were added Volatiles, for the most part effected a cure in a short while.

In the Winter months, a continual Fever was sporadic. It resembled in many circumstances the Fever of the preceding March, but was not so commonly attended with the pain in the right Hypochondre.

The Spring Intermittents were common, but afforded nothing remarkable in their fymptoms.

The plague, this year, raged with great violence. It began to increase fast, early in April, so that the Europeans shut up the 11th (O.S.) of that month. They were released from consinement about the 18th of July; but the distemper did not disappear till the middle of August.

The Autumnal Intermittents became frequent about the beginning of August. They were at their height in September; but from that time,

they

they continued gradually decreasing till their total disappearance towards C H A P. the close of the year.

These Fevers at the beginning, often assumed, for a few days, a continual form, under which they were accompanied with violent and irregular symptoms, not unlike those of the plague. But after the evacuations of bleeding and purging (emetics being in less common use) and a free use of Nitrous medicines, they reassumed their genuine form of Tertians, double Tertians, or Quotidians, and were speedily cured by the Bark. It was remarkable this year that the Europeans were more subject to the autumnal Intermittents, than they usually are to the Epidemical Distempers of the country.

Diarrhæas, which were frequent also in the Autumn, but with no extraordinary symptoms, continued to the end of the year.

# A. D. 1744.

In the months of January and February, a few Pleurisies and Peripnenmonies were met with, which readily yielded to the common method of treatment.

About the middle of February, the Chincough became Epidemic among children, but few were attacked after the beginning of April. The Cough was frequently attended with a pain in the fide, and a fmart Fever, which required copious bleedings; the rest of the treatment consisted of cooling purges, and Pectoral, Antiphlogistic remedies in various forms. Blisters were sometimes applied in the decline of the Fever, and were found of most service when applied to the part where the pain was fixed: but a popular prejudice proved often an insurmountable obstacle to the application of blisters, the parents resusing absolutely to admit a painful remedy which on several accounts is held in aversion.

<sup>\*</sup> The Chincough feems to visit at longer intervals than the Small Pox, no mention is made of them again till the year 1752.

The aversion of the Natives to blisters, does not proceed merely from the dread of the pain occasioned by them; but they regard them as one of the violent remedies used by the Franks in desperate cases only, and which if it does not cure must infallibly kill the patient.

B O O K V. By the above treatment the fymptoms were mitigated, but the difease was not soon removed; the Fever, and often the pain also, continued fourteen days; and the Cough, though the fits were less severe, and their return at longer intervals, ran out two or three weeks more.

An inflammatory Fever, not attended with any topical pain, was also frequent among children, at the same time with the Chincough, and was commonly removed in a sew days, by bleeding, purging, and Nitrous Medicines combined with the Testacea. But from the neglect of proper bleeding, this, as well as the Chincough, proved fatal to many. Children are hardly ever bled with the lancet in that country, the Native practitioners instead of Phlebotomy substituting a few slight Scarifications on the lob of the ears, or the calves of the legs, from which they seldom procure more than a few drops of blood.

The plague, this year, began to increase in March, as in the preceding year, and pursued nearly the same course; but was all along in so slight a degree, that some only of the Europeans judged it necessary to shut up about the middle of May, and their confinement was of short duration. It disapeared in August, and since that period ten years have clapsed in which the city has been free from the contagion.

Intermittents made their appearance about the middle of March, and continued till the beginning of May. It was remarked that those who had laboured under Intermitting Fevers in the preceding Autumn, were now peculiarly liable to be attacked by them a second time. These Fevers appearing for the most part under the form of regular Tertians, were removed by the Bark, which was usually given after a vomit, or a purge; but by way of security against a relapse, the Bark, and warm Bitters conjoined with Elixir of Vitriol, were continued for some time.

In June, July, August and part of September, a malignant Fever prevailed, attended with much the same symptoms as the plague, Buboes and Carbuncles excepted. The vomiting, which commonly came on at the beginning, continued for several days. The Fever terminated at soonest about, the sourteenth day, but often run out longer: sometimes; after the 14th, it came to have regular intermissions.

<sup>1755.</sup> The plague did not again revisit Aleppo till the year 1760.

The method of cure was much the same with that pursued in the CHAP. plague; only that the sick bore a second bleeding and nitrous medicines better than I usually sound them do in that distemper. When the Fever intermitted, the Bark was given with success.

From the month of June, till December, Autumnal Intermittents were very frequent. These did not at first, as in the year before, take on the appearance of continual Fevers; but if not speedily stopped by the Bark, they were apt, after the fourth paroxysm (the 7th day) to intermit no more, but to run out under a continual form to the 14th day, or, more frequently to the 21st: that is where they did not prove fatal at an earlier period, which was often the case during the warm weather.

Between August and January, Diarrhoas, Pleurisies, and Quinsies were sporadie, as usual in those seasons.

#### A. D. 1745.

The Spring Intermittents were uncommonly frequent this year, and indeed the only Epidemic till June. They began in January, which was earlier than usual, and continued till the beginning of May.

The Summer Fevers of children began in June, and in general were accompanied with a Diarrocha.

Autumnal Intermittents made also their appearance in June, and prevailed till December. They were not of a bad or dangerous kind; but relapses were very common.

The Dysentery was sporadic in the Autumn.

The Small Pox, of a mild, diffinct kind, appeared in September, and the children who were attacked recovered favorably; but about the middle of the following month, the difease spreading, changed to a bad confluent kind which proved fatal to many on the 11th day. Of such as were treated after Sydenham's method, sew in proportion died; but in whatever method the sick were treated, most of those who recovered were subject to inflammatory Tumors on the elbows, which always suppurated, and proved tedious in the cure: though where they had been opened in proper time, the bone was seldom found injured.

#### A. D. 1746.

The Small Pox, which had raged fatally fince October, grew milder in January, and declining rapidly, difappeared about the beginning of February. Vol. II.

T t

January

BOOK V.

January and February afforded some Inflammatory Fevers, which were commonly cured in a few days by bleeding, lenient purges, and the free use of nitrous medecines.

A Putrid Fever attended with Petehiæ, which appeared in June, continued throughout the two following months; but the number of fick was not great. This Fever feldom proving fatal, terminated happily by a critical fweat, on the eleventh, or at furthest, the fourteenth day.

The Autumn and beginning of Winter were remarkably healthy. Very few Intermittents occurred, and none were met with earlier than September, or later than November.

## A. D. 1747.

The feason continued remarkably healthy till May; the Intermittents which appeared in that interval being few: while the Diarrhœas sometimes met with in January and February, and the Peripneumony which attacked some in April, did not deserve the name of Epidemics.

In the month of May, a Fever of the putrid kind made its appearance, and prevailed till the end of October; after which it declined apace, but did not entirely cease till the end of January 1748.

It began with a shivering and vomiting, which were soon succeeded by violent head ach, pains over the whole body, and, (though the pulse continued full and hard for the first sour days) a remarkable loss of strength. The tongue which was at first white, became afterwards brown, hard, and dry. The heat, both internal and external, was intense, but had regular evening exacerbations, preceded by a slusshing in the cheeks. Most of the sick grew delirious on the sisth day, and at that period, purple Petechiæ of the size of a slea bite, broke out over the body and limbs: towards the end of the disease the sick commonly became comatous. Signs from the urine were very fallacious.

At the beginning of this Epidemic in May, the Fever usually terminated in a copious sweat on the sourteenth day; but afterwards the 7th and 9th commonly proved critical, and sometimes the 11th. Few of the sick died, in proportion to their number, and the alarming violence of the symptoms.

The method found most effectual in treating the sick, was to bleed freely early in the disease, and to clear the first passages by means of a gentle gentle laxative. This last became the more requisite, as many worms C H A P. were commonly voided in the stools. These evacuations premised, small doses of nitrous medicines were administered at short intervals; the drinks were acidulated with Spirit of vitriol, and the body was kept open by cooling Clysters. Towards the end of the disease, warmer medicines were joined with the Nitre, in such proportion as the state of the pulse seemed to require, and blisters, (when permission could be obtained to apply them) were of great service.

In the months of September and October, several were seized with a Fever different from the one last described, and much more malignant and satal; carrying off more than one half of the sick.

The patients were at first taken with a slight shivering and Nausea, fometimes a vomiting; which were not fucceeded by any violent heat, but by an exceffive languor, and exquisite pains over all the body. They had little or no permanent head ach, but, feveral times in the twenty-four hours, complained of a lancinating pain, which, as they expressed it, run through their head of a fudden, and in a moment went off again. They complained also of giddiness, and of a constant noise, like the rushing of water, in their ears. From the first, they laboured under great dejection of spirits; the eyes appeared muddy; and their countenance had a particular ghaftly look, much like that of a person in the plague. In the course of the disease, they would for several hours together remain free from any visible uneasiness, the tongue moist as in health, and with little or no defire for drink; then all of a fudden, they would complain of violent internal heat, and drink greedily large quantities at a time: while neither the pulse nor the tongue suffered any alteration, nor was any remarkable heat to be perceived externally.

The pulse throughout was very little quicker than in health, but about the fifth day, it sunk, and for twelve hours before death, was so low as not to be perceptible. The urine was of a straw colour without cloud or sediment, till the sixth day, when a small cloud appeared suspended about half-way in the glass; but no prognostic could be formed from this, as it was equally observed in the urine of those who died, and of those who recovered.

Through the whole course of the disease, the sick slept very little, or not all; they very sellom were delirious, and never comatous, in general, retaining, their senses perfect to the last moment. The satal day was

BOOK commonly the 7th. Such as recovered had a criss by a plentiful sweat, on the ninth day.

The blood drawn on the first day, was like that of a person in health; but when drawn after the third day, it was of the colour of Cosse grounds, and appeared quite thin as it run from the vein: when cold it was blewish on the surface, and very loosely coagulated.

None of the fick had Petechiæ, nor did the distemper appear to be contagious. I met with no instance of two persons ill in the same family, nor where the disease could be supposed to have been caught by insection. Indeed the whole of the fick who came within my knowledged did not exceed thirty, twelve only of which were under my own care, and out of that number I lost sour: the other eight who recovered, were treated as follows.

They were bled once rather largely at the beginning, after which they took an Ipecacuanha vomit. Small doses, of a medicine composed of stibiated Nitre and the compound powder of Contrayerva, were frequently repeated; gentle Anodynes, with temperate acidulated cordials were given occasionally; and an emollient, cooling Clyster was injected every evening. A warmer regimen became necessary about the fifth day; and blisters, were applied to the back, legs, and arms, according as the sinking of the pulse seemed to require.

The fick were encouraged to drink barley water acidulated, and were nourished with Rice gruel, Panada, and roasted Apples. It is customary with the Natives to add butter to their Rice or Barley gruel; but where they could not be persuaded to omit the butter, I chose in preference to allow weak chicken broth, with crum of bread, or a little Rice boiled in it.

The Autumnal Intermittents were few this year, so that the months of November and December, (the Summer Putrid Fever being then on the decline) were in other respects healthy.

From the year 1748 to 1751, the incessant calls of an extensive practice, joined to an attendance upon the Governor of the Province', which employed

fome

<sup>&</sup>lt;sup>5</sup> My attendance on the Bashaw, which at first was merely professional, came afterwards to engross a large share of my time; being often led to accompany him in excursions of pleasure, and obliged almost constantly to sup at the Seraglio. This facrifice of leisure which might have been otherwise employed, was however in

ployed my evening hours when free from business, prevented my taking C H A P. notes regularly as before, in a manner requisite for a full account of the Epidemical Diseases: I shall therefore, (writing chiefly from memory) attempt only to give a few of the most remarkable circumstances relative to them, in the course of those four years.

The Measles made their appearance in the Spring of 1749, and continued to be Epidemic till the Spring following. As they had not visited the city for several years, many adults were attacked as well as children, so that it was no uncommon thing to see the parents, children, and domestic servants in the same family all sick at the same time.

The disease in its symptoms and progress agreed exactly with Sydenham's description of the Measles of the year 1670; and of those who were treated in the manner he recommends, none died; so that no method of cure could have been more successful. On the contrary many perished who were treated in the mode of the Native practitioners, which consists in keeping the sick extremely warm, and in transporting them on the 9th day from their hot chamber to the Bagnio, with a view of preventing an incureable Diarræha, which they think there is danger of upon the going off of the Eruptions. It appears the more extraordinary that convalescents in the Measles should be carried thus early to the Bagnio, while in the Small Pox, the Bagnio, (supposed to be highly dangerous) is strictly prohibited before the expiration of forty days.

In 1750, the Small Pox broke out about the middle of August; they were of a bad confluent kind, in which state they continued till about the middle of November: they then became more favorable, continued so throughout the Winter, and disappeared early in the Spring of 1751.

The year 1751 was memorable for a dreadful Dysentery that raged with fatal violence from the beginning of June, till the middle of November; and was commonly considered as a consequence of the dearth with which the city had been afflicted for many months.

From

fome measure compensated, by the opportunity it gave me of seeing more familiarly the manners of the Turks of high rank, than was to be expected in the ordinary course of my profession: not to mention the large presents, and other public marks of distinction, which the Bashaw was pleased to confer on me.

6 This was the first Epidemical distemper I saw in Syria, having arrived at Aleppo towards the close of the year 1750. I several times examined the bread

В О О К V. From a failure of the crop in the preceding year, complaints of a scarcity of corn were made early in the Winter, and in a short time, the lower class of people were reduced to great distress from want of bread. Saad-al-deen Bashaw was about that time appointed to the Bashawlick of Aleppo. He was the son of a family possest of large territories in the districts of Hamah and Damascus, and happened (unluckily for the city) to have himself a considerable stock of old grain, which had lain for several years hoarded in his granaries. The distressed condition of the inhabitants, appearing to him a favorable opportunity of getting rid of his own corn, he, under pretence of relieving their distress, caused large quantities to be brought from Hamah; but took care at the same time to prohibit importation from other quarters till that should be all disposed of. The Wheat they were thus supplied with, was much damaged by long keeping, and consequently the bread made of it was extremely black, musty, and ill tasted.

Bad however as it was in quality, and dear in price, it was all that the bulk of the people could procure, for some considerable time after the new Corn was gathered in.

The prevailing Dysentry was in general ascribed to this cause, and indeed the lower people were chiefly sufferers; but as many who by their situation in life were not under the necessity of subsisting on the corrupted grain, were attacked likewise by the same distemper, the Epidemic constitution of the air may be allowed to have had some share in its production.

# A. D. 1752.

The feafon was healthy till about the Vernal equinox, when a continual Fever made its appearance, which, spreading rapidly among all ranks, continued highly Epidemic till near the end of July: from that time it declined, and by the middle of September disappeared.

The fick were at first taken with a slight shivering, and often with a Nausea; which were followed by heat, thirst, head ach, and pain in the

fold in the Bazar, which was always very black in colour, and often had a very offensive smell. The grain, in itself extremely bad, was adulterated with trash of various kinds, by the Bakers.

loins.

loins. The head, besides aching, was from the beginning much consused, C H A P. and a remarkable stupidity appeared in the patient's look. The tongue became immediately white, soon after brown, and towards the end of the disease, was often covered with a black crust. The pulse was quick though seldom hard or full; and it continued throughout in a more equal state than I ever observed in any other Fever, in that country: sew or none had either exacerbations or remissions, the heat and other sebrile symptoms, as well as the pulse, continuing almost invariably the same, from the beginning to the end: unless where the patient's strength had been exhausted by unseasonable evacuations, or improper management.

Most of the sick had an Hemorrhage from the nose on the ninth, or the eleventh day. This, in some seemed to mitigate the symptoms, but many grew worse after it, while in others it had no manifest effect either good or bad. The crisis was almost constantly by a copious sweat, which in most cases (during April and part of May) happened on the seventeenth day, and in none earlier than the sourteenth.

Towards the end of May, there was an alteration both in regard to the Hemorrhage and the critical day. The bleeding at the nose happened now most commonly on the 7th day; the sweat, instead of the 17th or 14th, usually broke out on the 11th: but thought it greatly relieved the sick, it did not prove perfectly critical, the Fever never leaving them entirely sooner than the 14th.

About the time this alteration happened in respect to the criss, many of the sick began to have Petechiæ, and these Eruptions were common in the subsequent months.

As the hot season advanced, the critical evacuations came on earlier in the disease, so that by the latter end of June, almost all the sick had the Hemorrhage on the sifth, and the criss on the seventh day: though sometimes the Hemorrhage retarding, happened on the same day with the critical sweat.

Several had the Fever in so slight a degree as not to be disabled from walking abroad; but it was remarkable that the disease, however mild the symptoms, went regularly through its usual course, and continued the same number of days as in the more severe attacks.

It deserves also to be remarked, that after the beginning of July, none of the Convalescents escaped a relapse, notwithstanding they had been duely purged after the Fever, and had continued to observe the strictest regimen.

but the heat was more intense. On the second day came on violent pains in the Hypochondres, bilious vomiting, and very often a Diarrhœa; all which going off on the third day, a smart Fever, with many exacerbations and remissions, continued to the sisth, and then terminated by a critical sweat. This is to be understood of such as had had the criss of the original Fever on the seventh day; for those in whom the primary disease had been protracted to the sourceenth, did not recover from the relapse before the eleventh.

This Epidemic, though in its felf not very dangerous, proved fatal to many in April and May, when the Fever was of longer duration than in the subsequent months; and the number of sick was very great. The increased mortality might probably be owing to the evacuations made in the advanced stages of the Fever; for the Native practitioners were often induced, by the spontaneous Hemorrhages from the nose, to let blood so late as the eleventh day; and they afterwards gave purges, with a view of carrying off the peccant matter (supposed now to be concocted) by the bowels, and thereby to shorten the duration of the Fever. But it seldom happened that any evacuations were made later than the eighth day, without manifest detriment to the sick: either by retarding their recovery, or sinking them irretrievably.

Of feveral hundred patients treated after the following method two only, died; from which it appears that the Distemper was not naturally attended with much danger.

The patient was bled rather largely, as early as possible in the disease, and next day took a dose of Senna and Manna; a gentle Anodyne being ordered after the operation of the purge. In plethoric constitutions the bleeding was repeated on the third day, but seldom or never later than that period. Nitre combined with the compound powder of Contrayerva, in various proportions, suited to the condition of the pulse, was administrated every six hours; and towards the end of the disease, or when the pulse sunk, the Edinburgh Contrayerva powder was substituted for that of the London dispensatory. In eases where the head was much confused, attended with costiveness, (and at the beginning most of the sick were costive) a Clyster of milk, Cassa, or sugar, and a little sweet oil, was injected every evening till the eleventh; but after the month of May, when the disease was more acute, this became unnecessary, as most of the

fick had several stools daily. Upon the appearance of Petechiæ, or where C H A P. the heat was intense, accompanied with great languor; temperate cordials accidulated with spirit of Vitriol, were given occasionally in the intervals between the other medicines.

On the fecond day after the critical fweat, a purge was given, and repeated once or twice at the distance of a few days. But when relapses became so frequent, a decoction of Bark with Elixir of Vitriol was ordered by way of prevention, and often with success.

As to regimen, the ordinary drink was the common Ptisan of that country, composed of Barley, Grass Roots, and Jujubes, sometimes accidulated with Lemon juice. The diet was chiefly chicken broth with a little Rice or crumb of bread, and the cravings of the sick were properly indulged with roasted Apple, Water Melons, or Pomegranate.

In relapses, though the inflammatory symptoms seemed violent, the sick were seldom or never bled. When the vomiting came on, they were ordered to wash the stomach by drinking freely of warm water; Clysters were occasionally injected; and the same medicines given internally as in the first attack.

From the beginning of Summer till the end of September, the Chincough was Epidemic among children, but though the young patients suffered much from the violence of the Cough, it much sooner gave way to medicine than I ever knew it. Bleeding once, and that usually with Leeches; a few purges; and a mixture composed of a weak solution of Gum Ammoniac, a little Vinegar of Squills, and Tincture of Castor, either soon removed the disease entirely, or mitigated the fits of coughing, and rendered their return less frequent; after which, in about a fortnight, the distemper commonly ceased.

The Summer Fevers being unusually frequent this year, the children suffered much also from them.

Intermittents were so scarce, that hardly one was met with in the course of the Autumn, and the city continued exceedingly healthy till the middle of November. From that time to the middle of January, a Fever prevailed among children, more particularly among those not under three years of age. It was attended with a Tumor of one, or both Parotids, or of the Maxillary Glands, and sometimes the swelling extended over the whole face.

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B O O K

Such as had the diforder flightly, recovered without medicine, in five or fix days; others required bleeding, gentle purging, and low diet; but did not get well fooner than the usual period of five or fix days. I heard of no instance of this disorder proving fatal.

## A. D. 1753.

In the month of January, some Apoplexies were met with among elderly people, which for the most part terminated in Hemiplegies; and notwithstanding the advanced age of the patients, several cases occurred wherein the disease gave way to medicine.

A continual Fever made its appearance about the beginning of the year, which for some time was chiefly confined to the Northern suburbs; but it spread afterwards in other parts, till its progress seemed to be suddenly checked by a frost about the beginning of February: in so much that from that time to the 20th of the month, I saw only two persons newly attacked.

The disease began with a shivering and Nausea, but the patient seldom vomited. The pulse during the two or three first days, was strong and quick, and the heat intense; the sick complained less of pain, than of great confusion of the head, and noise in the ears; their aspect was dull and stupid; they suffered sharp pains in the back and limbs, and could hardly bear to move their arms. The tongue was at first white, afterwards yellow, and towards the height of the disease, it generally became black.

About the fixth day, the fick grew delirious. Between the feventh and ninth, the body was covered with Petechiæ, not round, as usual, but of various irregular forms; and when the Petechiæ appeared, the pulse began to fink, and the comatous disposition came on. Between the ninth and eleventh, the fick either sweated moderately, or had a few loose stools; but though both seemed to produce a temporary abatement of the symptoms, the Fever always continued to the seventeenth: after which period, diminishing by degrees, it went off without any other sensible critical discharge.

In cases where the head was much affected, the urine was pale as water, and without sediment; in some it was of a blackish cast, resembling a weak

weak tincture of steel. It was remarkable, that where the fick re- C H A P. covered, the urine usually let fall a white sediment on the eleventh day.

The treatment of this Fever, was precifely the same with that of the Fever of last year, only that Sinapisms to the feet were oftner employed as a substitute for blisters: it was attended likewise with the like success, as all so treated recovered. Such as were bled to any considerable quantity after the seventh day, generally died on the ninth or the eleventh.

In the two cases met with in February, there was joined to the other symptoms, an acute pain in the right Hypochondre which affected the patient's breathing. They bore larger bleeding than could have been safely ventured in the preceding month, and the blood was sizy. In both the crisis happened by a large Hemorrhage from the right nostril, on the seventh day, nearly about the same hour on which the patients had been first taken ill. In one of them the Hemorrhage was accompanied with a Diarrhæa, but after remaining well about a fortnight, that patient was attacked with a regular Tertian.

After the 20th of February, the distemper reviving, spread with increased vigour, and seemed to be propagated by contagion; but it was remarkable, though it seldom entered a house without attacking two thirds of the family, that in general they were taken successively at some distance of time; it was rare to find two of a family sick together, the one being a few days recovered before the other was taken ill.

From the time the disease revived in Feburary, almost all the sick had small, round, purple Petechiæ, which vanished about the twelsth or thirteenth day, without any manifest alteration in the Fever.

The urine for three or four days at the beginning, was of an Orange colour, after which till the eleventh or twelfth, it was pale and clear as water; but from that time, though, when fresh made, it still was colourless and pellucid, yet, after standing till it grew cool, it dropped a sediment resembling sine slower; and retained this appearance till the termination of the Fever, which constantly happened on the seventeenth.

In May, several of the sick had a critical sweat on the seventh day, sometimes preceded by an Hemorrhage from the nose; but all who had the Uu 2 Hemorrhage,

BOOK Hemorrhage, suffered a return of the Fever within five or fix days, more violent than the first, and which continued five days: fometimes these relapses were accompanied with Peripneumonic symptoms which required bleeding.

> About the middle of April, the disease spreading fast within the walls of the city, the Jews began to fuffer remarkably; and in the following month, children, who hitherto had been exempt, began likewise to suffer: a confiderable number from the age of nine years and upwards being feized with it.

> The symptoms and progress of the Fever in Children, were much the fame as in adults; though in them the predominant complaint was pains in the belly, and most of them voided round worms either by the mouth or by stool.

> Worms were not however confined to children, many adults likewise voided them as well in this Fever, as in that of the preceding year; but being an usual concomitant of Fevers in that country, the mention of them was neglected. Another symptom common to both Epidemics, was deafness about the height of the disease. This also, as well as worms, is very common in the Epidemical Fevers at Aleppo.

> The method of cure purfued in the Fever of last year, was attended with the fame fuccess in this; and evacuations later than the seventh day, were in like manner found to be always prejudicial, and often fatal.

> The number of fick in this Epidemic was much diminished by the beginning of June, and it disappeared entirely before July.

> Among other Epidemics of this year may be reckoned a kind of Influenza, which raged for a few days about the middle of April, and attacked one fourth of the inhabitants. The chief symptom was a violent cough; but the disorder was of short duration.

> In July, a few flight Dysenteries occurred; as also some Intermittents, which for the most part were Quartans: neither could be called Epidemic. The Ophthalmia was very common in the Autumn; but it was remarkable that the inflammation was chiefly external in the eye lids.

> Small Biles on different parts of the body were remarkably frequent both in this and the preceding year; and in November and December of this

> > year

year they often appeared in the arm pits; but were not attended with CHAP. a Fever, or any other fuspicious symptoms.

December produced some Pleurisies and several instances of mortal Apoplexies.

<sup>6</sup> When the city has been for some considerable time free from the plague, predictions of its approach, drawn from infallible signs celestial and terrestrial, are circulated annually among the populace, for several years before the distemper actually returns; and when Tumors of the kind above mentioned are frequent, they join with superstitious circumstances in raising groundless alarm.

СНАР.



# NATURAL HISTORY OF ALEPPO.

BOOK VI.

OF THE PLAGUE.

#### CHAP. I.

OF THE PLAGUE AT ALEPPO, IN GENERAL.

IT is the common opinion of the inhabitants of Aleppo, CHAP. that they are visited with the Plague about once in ten years; and that it is not bred amongst themselves, but brought thither from some other insected place, as from Khillis, Aintab, Marash, or Urfa, on one hand; or from Damascus on the other. It is alledged by some, that the most severe Plagues have generally been imported from Damascus; but by others it is afferted that those which have been brought from the Northward, have always raged at Aleppo with most violence.

As to the supposed periods of the Plague's return, though the years 1733 and 1742 furnish exceptions to the general rule, the popular opinion would feem in some measure to be founded on experience; and it would feem also to be a fact pretty well established, that it never invades Aleppo without having first raged in one or other of the towns above mentioned. But from what I have been able to learn, its first appearance is always in one of the maritime towns of Syria2; if in Sidon, Byroot, or Tripoly, Damascus is commonly the Channel through which it comes to Aleppo; but if it shows itself

> In a letter written at Aleppo in the year 1719 by an English gentleman who had resided about thirty years in that country, the writer says "that " fince he had been there, the Plague had never visited them oftner than " once in ten or twelve years."

> The Plagues of which I have been able to procure the dates, are those. of the years 1719, 1729, and 1733. The late Plague began in 1742, and terminated in 1744; fince which time ten years are now elapsed, (1755) without any appearance of it, either at Aleppo or on the coast of Syria.

> <sup>2</sup> I have been told that the Plague in 1719 came from the Northward; but none of the letters or journals I have perused, make mention of that circumstance, though all of them confirm its raging at Tripoly, Sidon, and other places in that neighbourhood, fome months before it appeared at Aleppo.

> In the years 1728, the Plague made great havock in Egypt, and in the Summer of the same year, it raged at Byass and the parts adjacent; but it did not break out at Aleppo till 1729.

> In the year 1732, the Plague raged at Tripoly, Sidon, and Damascus: it was not till the year following that it raged at Aleppo.

first

first at Scanderoon, or Byass, its approach is then by way C H A P. of Khillis, Aintab, or Marash.

The distemper never spreads much during the Winter. It advances with the Spring, arrives at its height in June; declines fast in July, and certainly disappears in August. This seems to be the constant course of the Plague at Aleppo: so that none are ever seized with it in the months of September and October, not even where the distemper returned three years successively, as in the last Plague of 17423.

A remark-

That none are ever seized with the Plague in the months of September and October, is a fact by no means confirmed so absolutely by the experience in the last Plague of 1760; it is certain however that it declines remarkably at that period, and that great pains are taken by the Natives to propagate the notion of its being entirely extinct. In consequence of this, pestilential accidents are concealed from the Europeans with the utmost care, least fresh alarms should be raised detrimental to commerce.

The dates of the Plagues at Aleppo from 1719 and 1742, and the annexed account of the time when the Europeans, in the respective years, shut themselves up by way of security against infection, were extracted by the author from old journals and letters written at the time. But it may be remarked, and should be remembered, that the conduct of the Europeans, however it may show the increase and decrease of the Plague, does by no means strictly indicate its commencement and termination, the distemper has always spread considerably before they shut up their doors, and they come out from consinement long before its extinction.

In the year 1719, the Plague made terrible havock at Aleppo. It advanced with such rapidity in the Spring, that the Europeans shut up about the middle of March, and remained in confinement till the middle of July.

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BOOK A remarkable difference is observed in different years, both in respect to the mortality of the disease, and the number of the insected; but it does not appear to have ever at Aleppo, been accompanied with such scenes of

In 1729 the number of fick being small, it was the middle of May before any of the Europeans shut up, and they were not confined above a month.

In 1733, the Plague was not quite so violent as in 1719; but the Europeans were confined from about the middle of March, till the middle of July.

In 1742, the Europeans were confined much about the same time as in 1729.

In 1743, they shut up the 11th of April, and opened their doors about the middle of July. The Plague raged with violence, though not to the same degree as in the year 1733.

In 1744, the progress of the distemper was nearly the same as in the preceding year; but the number of sick being inconsiderable, and the dread of infection lessened from being accustomed to alarm, sew of the Europeans shut up.

In order to render this sketch more complete I shall subjoin the periods of shutting up in the late Plague of 1760.

In the year 1760, the English shut up the 30th of June, and were confined nearly one month.

In 1761, they shut up the 28th of May; they rode out the 1st of August; but did not open completely, till the 10th of that month.

In 1762, they were confined from the last week in May, to the first week in August. P. Russell, (Treatise of the Plague, with remarks on Quarantines, &c. London, 1791.)

From 1762, till 1787, Aleppo enjoyed an interval free from the Plague, much longer than usual. From the short account I hitherto have received of the Plague in 1787, it appears to have broke out among the Jews in the month of April, increased in May, and raged violently in June; it terminated about the end of July.

anarchy

anarchy and horror, as have fometimes been known in CHAP.

Europe 4.

Extreme heat feems to check the progress of the distemper: for though the contagion, and the mortality increased during the first heats in the beginning of the Summer, a few days continuance of the hot weather diminished the number of new infections. July is a hotter month than June, and the season wherein the Plague always ceases at Aleppo, is that in which the heats are most excessive.

Though the Natives in Syria, as well as many medical writers, entertain a belief of the Moon's planetary influence on the Plague; experience, at Aleppo, did not in any respect favour such an opinion.

The having had the distemper once, does not prevent the contracting it again: numbers of people being alive when I lest Aleppo, who had had it twice, or ostener; and I have seen instances of the same person being insected three several times in the same season.

A concurrence of feveral circumstances renders the horror of the Plague less terrible in Turkish than in European cities. The markets are constantly supplied with provisions; the dread of contagion is much less prevalent; the sick are less liable to be deserted by their attendants; and the regular, speedy interment of the dead, prevents a spectacle far from uncommon in the European Plagues, and which of all others is the most shocking to humanity.

<sup>&</sup>lt;sup>5</sup> P. Russell, (Treatise of the Plague, &c. p. 180.)

# CHAP. II.

OF THE PROGRESS OF THE PLAGUE IN THE YEARS 1742, 1743, AND

at Byass. From that place, according to our best information, it was transported to Khillis, Aintab, Azaz, and to most of the villages in the adjacent mountains, where it continued all the Winter.

It was brought to Aleppo about the middle of April 1742, by the Chinganas and Kurdeens who annually come from those parts to be employed as reapers, and take up their temporary residence in certain districts of the suburbs. To those people, and a few others in the suburbs, the distemper remained confined for sometime; nor till the 18th of May did the Europeans hear any thing of it; when strict enquiry being made, it was discovered to have attacked some persons within the city. In a few days, it increased somewhat among the Jews; and soon

A town in the gulf of Scanderoon, the chief port in that part of Syria for landing goods from Egypt. The Inhabitants of Byass have a good deal of commerce with the Kurdeens who possess the neighbouring mountains.

fpread both in the city and suburbs, though not to any C H A P. great degree. In this state it continued till the beginning of July, when it was checked by the extreme heat of the weather: some however, were daily carried off by it, till near the end of the month, when it entirely ceased. The Jews in proportion to their number suffered much this season. The Europeans shut up the beginning of June, and were confined one month.

About the middle of November, the Plague began to show itself again in Bankusa, and the other suburbs on that side<sup>2</sup>, and before Christmas, it was discovered in some parts within the walls: but it remained there without spreading<sup>3</sup>.

Among the Author's M. S. papers, I found the Diary he had kept in the Plague years, in which were regularly entered an account of the pestilential accidents and burials, together with various memoranda relative to those times. Some circumstances extracted from that Diary, have been judged deserving a place here, by way of explanatory Notes on the progress of the Plague.

"The Plague (fays the Diary) had been strong at Khillis, and the neighbouring villages. Many of the Christians, Natives of Aleppo, as well as others who occasionally reside in those villages on account of trade, sled when too late to Aleppo, and some of those fugitives were among the persons who died in the suburbs, having brought the distemper along with them."

Again "About Christmas, it was discovered that eleven persons had been buried from one house in the Akabe (one of the hilly districts.) "About this time an Armenian servant of Solyman Aga, (in that neighbourhood) was also attacked. He had a bubo, and recovered; but his fon died soon after; and from the same house where they dwelt, sisteen persons were buried in the course of the two following months." (M. S. Diary.)

BOOK

The diftemper, which all the month of January 1743, had remained in the Suburbs, without making any confiderable progress, began in February to spread among the Jews in the city, and attacked also many of the Christian Inhabitants in the Suburb Jideida; but as it had at that time visibly declined in Bankusa, it might more properly be faid to have changed its quarters, than to have augmented its force.

About the beginning of March, the Europeans were alarmed by the fudden death of certain Jews and Turks, of their acquaintance+; but the alarm was only transient; for whether owing to a real ceffation of the diftemper, or to the industry used in concealing it5, no other accidents were heard of for fometime: a circumstance, which joined to the natural credulity of mankind in what

4 It may be remarked here, that some of those who were attacked with the distemper in March died very suddenly. The Diary mentions "A "daughter of one of the Jews employed in the Custom house, a plump "girl of fifteen, who was taken with a vomiting, complained of chilliness " and of pain at her heart, and expired in less than five hours. The corpse " was covered with black spots, and the arms became quite black. A Jew "boy, and two Turks perished much in the same manner. A near rela-"tion of the English Consul's Cook (an Armenian) was about this time " feized in the Jideida." (M. S. Diary.)

5 The Diary contains the following passages. "The burials (May "25th 1742) by all accounts, increase very little, and we find it very "difficult to get any information of the infected: every one denying the "truth of particular inflances, though it is in general allowed that the " Plague really exists. The brother of a servant of one of the English " gentlemen, was seized on the 6th of April (1743) in the Khane, and died " on the 9th." The people of the country endeavoured to conceal this as much as possible.

they wish to be true, led most people to flatter them- CHAP. felves with hopes of the Plague being extinct. But on the 20th of March, information being received of the death of two Jews in one house, and that several Turks, and Christians had lately died, while others lay actually ill of the insection, a fresh and more serious alarm took place; and in truth the increase of the distemper soon became too visible, especially among the Armenians, who suffered remarkably this season.

Though the distemper had at intervals in March, appeared within the city, its chief field hitherto had been in the suburbs, and the greater part of the infected was composed of women and children: but about the beginning of April, there was a manifest increase of the sunerals in the city; and several persons being attacked with the distemper in some of the Khanes where the Europeans have their houses, most of them shut up, on the 11th of that month.

Through-

The Turkish funerals seldom exceeded fifty in the day, at the time the Europeans shut up; but what probably hastened their confinement, was the number of Arabgeer Armenians who were insected in the European quarter, and even in the Khanes under their windows. The intercourse of the domestic servants, (who are all Arabgeers) with their countrymen scattered in various parts of the town, cannot by any precaution whatever be prevented while the doors remain open; at such times therefore, the only security against most dangerous communication is to shut up. It appears from the Diary "That several of the porters as well as other per"sons belonging to the Khanes, continued to suffer in April; and that by the 20th of the month, numbers of Arabgeers had sled from the city."

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Throughout the remaining part of April, the distemper continued to increase in all parts of the town, and among all ranks; but raged with much more violence in May, and according to the reports we received, it arrived at its height about the end of that month. At this period, indeed, the daily mortality was apparently great; but as we had no account of the Turkish burials which could absolutely be relied on, it was impossible to ascertain the number?: of the Christians our accounts were more

The Diary contains many instances of the difficulty of attaining any certainty in this matter. "Every body agrees (speaking of the Janizaries "employed to procure information) that they have not brought an account of half the number of burials. The people of the country (June 8th 1742) seem more and more alarmed, and we hear of more being insected than formerly; yet we do not find the burials increase: which gives just cause to suspect the veracity of the reports made by the Janizaries, and indeed they have almost as good as owned that they dare not bring us a "true account.

"I have all along mentioned the accounts of the Janizaries, merely to flow how little they are to be depended upon. Our information reflecting the Christians and Jews, was somewhat more exact; and the disproportion of the burials was often such as to leave no room for doubt that in general, scarcely half the real number of Turkish burials was reported." (M. S. Diary.)

As it appears, from the foregoing passages, what little considence my Brother placed in the reports received by the Turkish burials, I thought it would be to no purpose to attempt forming a Bill of Mortality from his Diary: but another account of the burials accidentally falling into my hands at Aleppo, which on the whole seemed more consonant to my Brother's conjectural computation; agreeing, at the same time, in many points with the progress of the distemper as described in the text, and

varying

the city, and the rest who had the means were shut up, the daily sunerals amounted from twenty to thirty, sometimes thirty-four. Hence it is evident that those of the

varying inconsiderably in respect to the Christian burials; I shall subjoin a table extracted from that Diary, of the general amount of the burials in the respective months. The Author of it, as I was told, was a Maronite Priest, and the number is regularly entered each day in columns, but I am too well acquainted, from my own experience, with the obstacles to procuring exact information, to take upon me to warrant the accuracy of his account. I transmitted a copy of this Arabic paper to my brother, but do not know whether it reached him before the publication of his Book. The Diary comprehends the Turkish, Christian, and Jewish burials, from the first of February to the first of August 1743.

1743	Turkish	Christian	Jewish
February	800	84	23
March	1140	124	43
April	1520	260	40
May	3640	380	43
June	6000	630	174
July	3000	209	60
			****
	16100	1687	383

In the passage cited above from my Brother's Diary, it was observed that the disproportion of the Turkish and Christian burials rendered it probable that not more than half the former were reported by the Janizary. In order to set this in a clearer light, the daily burials as they stand in both Diaries, for a few days of June, are represented in the table annexed, in which the first rank of numbers in the column expresses the burials according to my Brother's Diary, and the second, the burials according to the Arab Diary; but it should be remarked that the variation was not always so considerable as it appears to be, during the sew days contained in the table, and that my Brother's Diary expressly afferts the number set down to be far from the real number of burials. On the 19th of June, for example, my Brother's Diary has 150, the Arab 210; but the next day the one has 60, the other 210.

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Turks must have been very considerable; and yet it was afferted by persons who remembered former Plagues at Aleppo, that the mortality was in comparison moderate.

About the beginning of June, the diftemper, according to the account brought to us, decreafed pretty much among the Turks; though the number of Christian burials (of which we were more exactly informed) diminished but little. Between the 13th and 17th, it again increased, particularly among the Turks, but not to so high a degree as it had been about the end of May. On the 18th it began once more to decline, and, fome fmall interruptions excepted, continued to decrease with furprizing rapidity till the end of the month; when the burials univerfally were reduced to a very few: in which state they continued the greatest part of July; but the city could not be pronounced free from the Plague till about the middle of August. In July however, it was fo much abated that the Europeans ventured to come out from confinement about the 18th of that month.

From the middle of November till the end of the year, we now and then heard of a person dying of the

1743	Turkish Burials			Chrif	tian	Jewish		
June		60	210	2 I	28	3	8	
	2 I st	50	210	15	22	6	8	
	22nd	45	220	11	25	6		
	2 3rd	54	250	20	15		6	
	24th	30	240	12	20	2	6	
	25th	25	200	ΙI	22		4	
						-		
		264	1330	90	132	20	32	

Plague; but fuch accidents were very rare, and most of C H A P. them doubtful, hardly more than two being clearly peftilential 8.

In the months of January and February 1744, the Plague still remained in the city, but without making any sensible progress. In March it began to show itself a little more; and, though all along inconsiderable in degree, compared with the ravage of the preceding year, it pursued exactly the same course in respect to the periods of its increase and decline, and disappeared entirely about the middle of August. The number of infected being small, none of the English gentlemen judged confinement necessary; and some only of the French factory shut up towards the middle of May?

In the two preceding years, I had prescribed for the fick, chiefly from the accounts brought me by a person

It appears evidently from the Diary, that till the Europeans actually flut up, great pains were taken to conceal from them the increase of the contagion; and that the like pains were exerted to disguise matters, when the usual period approached of their coming out from confinement. All which was exactly similar to what happened in the years 1760, 1761, and 1762, during that Plague; and may no doubt be considered as the constant practice at Aleppo. See on this subject (Treatise of the Plague, &c. page 61.)

This year, two Europeans died of the Plague. The first was a Jesuit Father, who died in three days, in the month of April; the other was M. Roland, a young French merchant, who finding himself indisposed on the 6th of May, was at first rallied by his acquaintance for alarming the Franks by his imaginary illness; but next day, matters became more serious, and he died on the 12th. It was this accident that induced the French Consul and some of the merchants to shut up immediately. (M. S. Diary.)

Yy2 whom

whom I employed to visit them; for though before shuting up, I was often, in spight of all my precautions, deceived by false representations of the case, and led to visit some of the infected; yet I avoided it to the utmost of my power: but this year, the dread of contagion, (like that of other dangers to which one has been long exposed) being much worn off, I attended the sick in the Plague, in the same manner as those labouring under ordinary Fevers.

CHAP.

### CHAP. III.

A MEDICAL DESCRIPTION OF THE PLAGUE, AS IT APPEARED AT ALEPPO IN 1742, 1743, AND 1744.

T is no wonder that the very name of Plague should C H A P. ftrike those with terror who have read, or who have unhappily been spectators, of the complicate diffress of all ranks of people during the rage of a pestilence. Scenes of death in its most dreadful forms, and of human fufferings beyond the power of the most active benevolence to relieve, prefent themselves incessantly on all hands. The diftemper in itself is the most lamentable to which mankind are liable. The torments of heat, thirst, and pain, frequently unite in fome patients; an unspeakable languor and dejection in others; and even those who escape with life, do not cease to suffer from painful and putrid Ulcers, the loathfome remains of the difeafe. The defertion of relations, of friends, and of domestic fervants; the want often of the common necessaries of life, and the difficulty of procuring medical affiftance; are circumstances likewise which aggravate the miseries of the fick, and contribute greatly to augment the general horror.

But as no difease incident to mankind is in its nature more terrible and destructive, so none is more difficult to describe. Its symptoms are scarcely in all respects alike in any two persons, and even vary extremely in the course of an hour in the same subject. The disease attended at the beginning with symptoms not highly alarming, often ends fatally within a sew hours; while the most formidable attacks, by a sudden and unex-

pected alteration, fometimes terminate happily.

The first complaints of those seized with this distemper, were in general a coldness or shivering; sickness; a vomiting of large quantities of porraceous bile, which often had a very offensive smell; anxiety, or an inexpressible uneasiness about the pit of the stomach; pain in the back, or loins; an intense head ach; uncommon giddiness, and a sudden loss of strength. Some were sensible of a sharp, shooting pain, darting at intervals into the parotid, axillary, or inguinal glands.

To these symptoms succeeded a violent Fever, in which, while the sick complained of extreme inward heat, their skin externally to the touch selt little hotter than natural. Sometimes this heat became general and intense; at other times, particular parts only were asserted; but it seldom continued long in the same degree, having several unequal remissions and exacerbations in a day. In these exacerbations, the sace became florid, but would often from a deep scarlet, change to a livid colour

colour like that of a person almost strangled, and again, c H A P. suddenly changing, it would assume a cadaverous paleness.

The eyes foon losing their natural lustre, acquired a kind of muddiness, and the countenance of most of the fick was ghastly and confused beyond description.

The pulse, at the beginning, was somewhat quicker and lower, but in other respects varied little from its natural state. Within a sew hours it commonly increased in quickness and strength; but seldom remained the same for an hour, nay scarcely many minutes together; incessantly varying both as to strength and quickness, and without any manifest correspondence with theo ther sebrile symptoms.

In fuch as complained of pains darting either into the parotids, the armpits, or the groins, a fmall painful, hard, deep-feated Tumor, without external discoloration of the skin, was discovered by the touch in the part; and these were the incipient pestilential buboes: of which more particularly hereafter.

The appearances now described, were those of the distemper on the first day, till evening, when the sick always suffered a severe exacerbation, in which the heat both internal and external became excessive, and as they generally were by that time delirious, it was often with dissiculty they could be kept within doors; they were greatly disposed to talk, but saltered so in their speech that what they said was hardly intelligible; the tongue having shared with the other organs in the universal debility.

The exacerbation lasted most part of the night; but the heat, inquietude, and delirium abating towards morning, a manifest remission took place. Some recovered their senses entirely, some partially, and then complained of intense head ach, or of pain from the buboes: it was usually in this interval also that those who had carbuncles began to complain of the burning pain of those fiery Eruptions.

The morning remission was commonly of very short duration: the rigors, anxiety, and delirium, foon returning more violent than before, attended with a strong and frequent Subfultus Tendinum. These febrile symptoms did not increase regularly as the day advanced, but went away, and returned at intervals, leaving short, but alarming Intermissions; for each exacerbation surpassed that which preceded it, either in violence or duration. In the evening, the pulse could hardly be counted, by reafon of its depression and quickness; the patient became comatous, and his respiration was quick, laborious, and interrupted. The buboes, which some hours before feemed manifestly to advance, often subfided, and sometimes almost disappeared; the carbuncles, mortifying at the top, refembled a large eschar made by a caustic: and about this period also livid or black spots of various dimensions, often were found scattered universally on the body.

Under these circumstances, dreadful as they seemed, some hope of recovery still remained; for, though many

of the fick died on the third day, several had a favorable CHAP. crifis on that day, by a profuse sweat: some struggled to the fifth day, a few to the seventh, and here and there one even to the eleventh, before any critical alteration took place.

Where a copious fweat happened on the third day, if it did not prove perfectly critical, it, at leaft, always confiderably abated the Fever, which in that case, was in general totally removed by a second, though less profuse sweat, on the sifth: so that besides weakness, the chief remains of the disease was the pain occasioned by the Eruptions.

It has already been remarked that nothing could with confidence be predicted respecting the event of the disease from the manner of its invasion; those who had the most favorable escape having often been attacked at the beginning with as alarming symptoms, as others were who died in a few hours. Sometimes the febrile paroxysm which had set in with such formidable violence, dissolved in a few hours, and left the patient languid indeed and weak in an extreme degree, but free from other complaints, except the pain arising from the Bubo, which from that period increasing in size, and advancing favorably to maturation, was in many cases ready to open in twelve or sisteen days; the patient all the while, except the first day, walking about as usual.

Great numbers happily escaped, not only in the manner just described, but likewise where the Buboes Vol. II. Z z never

always to maturation in fuch as recovered, very often discussed without any bad consequence. In regard to the Carbuncles, they often began to digest, before the termination of the Fever in a critical sweat.

All the infected had Buboes, except fuch as expired fuddenly, or furvived the first attack a few hours only. Instances of this dreadful kind were more particularly met with in March 1743. The sick were seized in the usual manner, but the head ach, vomiting, and pain about the Præcordia increasing every moment, proved suddenly mortal; or terminated within a few hours in satal convulsions. Of those who perished in this manner, sew had any appearance of Buboes; but in general, the armpits and groins, or the inside of the arms and thighs became livid or black, and the rest of the body was covered with confluent Petechiæ, livid pustules being here and there interspersed: but all these appearances were remarked more especially after death<sup>2</sup>.

<sup>&#</sup>x27; Instances of sudden death in the Plague, as described above, were very seldom met with in the late Plague years at Aleppo, and then only in the Winter, or early in the Spring. (Treatise of the Plague, &c. p. 97.)

Livid or black spots, and Vibices, were often found on the infected corpse, but not constantly. They were always suspicious in conjunction with other circumstances, but their absence was no proof, though often urged as such, that the distemper of the deceased had not been the Plague. The Vibices sometimes appeared several hours before the patient expired; but the Livid spots seldom or never till after death. (Treatise of the Plague, &c. p. 97, 112, 135.)

The tongue, in some of the insceted, was quite moist, C H A P. and continued throughout, in all respects like that of a person in health; in others, it was white at first, but soon became yellow, then black, and was covered with a dry, rough scurf, or fur.

Some had no thirst, and scarcely could be prevailed upon to drink sufficiently; but in general the sick suffered extreme thirst, and drank eagerly whatever was offered them; yet this thirst never was constant, it returned at irregular intervals, and seldom appeared to correspond with the degree of sever.

The urine, in general was of a deeper yellow than usual in health, and without sediment; but in the prognostic it was as little to be depended upon, as any other symptom of the Plague; it being scarcely alike in the same stage of the disease in any two persons, and varying no less in the same patient every day.

The vomiting commonly ceased after the few first hours, except where the sick were led by their extreme thirst to overcharge the stomach, and then it always returned.

A Diarrhoea attended the Fever, in some patients; in others, perpetual costiveness; but for the most part the discharges were natural. The distemper seemed never to admit of a critical solution by either stool or urine.

Hemorrhages from the nose, as also from the uterus, were met with in a sew cases; and if they happened after the second day, were soon followed by a plentiful

BOOK sweat which commonly proved critical: a circumstance different from what has usually been remarked in the Plague at other places.

From the preceding account of the Plague, it will readily be conceived that nothing can be more difficult than to form any judgment or prognostic of the event of the disease; in which as it is justly remarked by Morellus, "our senses and our reason deceive us; the Aphorisms of Hippocrates are erroneous; and even Hippocrates, "(as I am inclined to think) might himself have erred "in his judgment3."

<sup>&</sup>lt;sup>3</sup> Unde fit ut in Peste, fallat nos sensus, fallat ratio, fallant Hippocratis-Aphorismi, et ipse, ut puto, in his falleretur Hippocrates. De Febra-Pestilent. cap. v.

# CHAP. IV.

## OF THE PESTILENTIAL ERUPTIONS.

THE characteristic Eruptions of the Plague are CHAP. Buboes and Carbuncles. A very small proportion of the infected were exempt from the former; for during the whole time the distemper raged at Aleppo, all the sick had Buboes, except such as died suddenly: but about one half only had Carbuncles.

In the years 1742 and 1743, the Buboes often appeared as foon as the patient was taken ill; fometimes not till twelve hours after; and in a few inftances not till after two or three days; but in 1744, fome perceived the Buboes a day or two before any other fymptom of the difeafe.

The fick in general, had but one Bubo; and the inguinal and axillary glands were oftener affected than the parotids. The inguinal Bubo for the most part

In the late Plague years at Aleppo 1760 &c. the Carbuncles were feldom observed earlier in the season than the months of April and May; but after that period were found commonly, though in a much smaller proportion than what is mentioned in the text. (Treatise of the Plague &c. p. 120.)

was double, that is, two diffinct glands swelled in the fame groin. The superior, which in shape somewhat resembled a small Cucumber, lay obliquely near the great vessels of the thigh, lower than the Venereal Buboes are usually found, and it was that which commonly came to suppuration; the inferior was round, and in size much smaller. I once met with a case where an axillary Bubo divided in like manner, into two parts, one of which get under the pectoral muscle, the other sunk deeper into the armpit: both grew painful and inslamed, but that in the armpit only suppurated.

It was mentioned before, that the Bubo at first appeared like a small, hard Tumor, painful, but not inflamed externally. These indurated glands were deeply seated; sometimes they were moveable under the skin, at other times less loose, or fixed; but always painful to the touch, unless where the patient was in a state of infensibility.

They often would increase considerably in size in a few hours, with intense pain, then suddenly subside; and these changes would frequently take place several times in the course of twenty-four hours. An exacerbation of the pestilential symptoms immediately upon the decrease of the Bubo, sometimes prompted me to imagine it owing to the retrocession of the Tumor; but this did not happen so constantly as to induce me to think it was so in reality.

The Buboes, fo far as I could learn, never advanced regularly

regularly to maturation till fuch time as a critical fweat C H A P. had carried off the Fever. In ten, twelve, or fifteen days from the first attack, they commonly suppurated; having been all along attended with the usual symptoms of inflammatory Tumors.

But I have known them fometimes, nay frequently, disappear soon after the critical sweat, and discuss completely, without any detriment to the patient. At other times, though grown to a pretty large size, the Tumor, about the height of the disease, would sink, and mortify, without any satal consequences; for as soon as the crisis was complete, the mortification stopped, and the gangrened parts separating gradually, left a deep ulcer, which healed without difficulty.

I met with no instance of a Bubo, in which a Fever did not either precede, or follow the eruption.

The Carbuncles were commonly protruded the fecond day of the disease; and, though the muscular and tendinous parts were more especially affected, no part whatever could be said to be exempt from them.

The Carbuncle<sup>2</sup>, at first resembled an angry confluent pock in its inflammatory stage; but was attended with intense, burning pain, and surrounded by a circle

There are certainly varieties of the pestilential Carbuncle; but perhaps these varieties have been unnecessarily multiplied, from the same eruption having been accidentally viewed in the different stages of its progress; for all of them, sooner or later are covered with the black eschar. (Treatise of the Plague, &c. p. 121.)

BOOK of a deep scarlet hue, which soon became livid. By a progress very rapid, it then spread circularly, from the fize of a filver penny to an inch and a half, two inches, nay even three inches, diameter; and the fupervening gangrene often penetrated deep into the fubflance of the parts affected. In fuch of the fick as recovered, the gangrene usually ceased spreading on the third day, and in a day or two after, figns of suppuration were perceived at the edge of the black cruft, the feparation of which advancing gradually, was completed rather in lefs time than that of the Eschar in issues made by caustic. In cases where the patient died, I was informed (for I saw none of those cases myself) that a quantity of ichorous matter oozed from beneath the eschar, which remained itself hard and shriveled, without any favorable figns of digeftion or feparation.

A Pustule of another kind was observed in a small number of the sick; and, as all in whom it appeared happened to recover, it was regarded as a favorable symptom. This eruption was not surrounded with any livid or discoloured circle, but was filled with well concocted matter, and drying up after a certain time, the crust fell off, as in the distinct small pox<sup>3</sup>.

The livid, or black discoloration of the skin on various parts of the body, as well as the confluent Petechiæ

<sup>&</sup>lt;sup>3</sup> I had no opportunity in the last Plague of 1760, &c. of observing the pustule described above. See. (Treatise of the Plague, &c. p. 128.)

tioned before in the general description, are symptoms C H A P. common in other malignant distempers, and by no means peculiar to the Plague: but in all dubious cases, during a pestilential season, their presence always leaves just room for suspicion.

The little I have to fay on the chirurgical treatment of the Buboes and Carbuncles, is referved for the next Chapter.

### CHAP. V.

## OF THE TREATMENT OF THE PLAGUE.

IT would have been tedious, and perhaps little instructive, to have entered into a minute detail of all the phænomena remarked in the Plague, together with the irregular and sudden changes so frequently observed in its progress. I have therefore, attempted only to give a general outline of the disease, which should, however, comprehend the most usual and constant symptoms: and though this description is not sufficient to supply the requisite helps for forming a consident prognostic, it may still surnish some hints that may be useful in practice.

When the various shapes assumed by this fatal distemper are duly considered; its sudden transitions from a state apparently of extreme danger, to one of perfect safety; its precipitate advances to its height; and the danger the physician incurs in visiting the sick; the wonder will cease that we meet in authors, with such various, nay contradictory accounts, both of the disease itself, and the propriety and success of the medical management of it. Of these differences amongst writers on the

Plague,

Plague, many might in some measure be reconciled, were CHAP. allowance to be made for the effects of climate, temporary constitutions of the air in the same climate, and even perhaps for some real variation in the disease itself: but the task becomes more difficult to account for the contradictions so frequently met with among those who had practised at the same time, in the same city, and who have treated of the same Plague.

The discordant opinions of medical writers concerning the method of treating the Plague, are innumerable. In regard to bleeding, and other evacuations, they maintain opinions diametrically opposite: some recommending them as indispensably requisite, others decrying them as invariably pernicious; while both parties, with equal confidence make their appeal to experience. But in a disease wherein reason is often perplexed, and experience itself fallacious, it is greatly to be lamented that nature has not been more, and opinion less consulted.

In a country so often visited by the Plague, one might reasonably have expected some vestiges of unbiassed observation, or at least some attempts towards a proper method of cure; but so far as I have hitherto been able to discover, no traces of any thing satisfactory are to be met with among the Natives. The Mohammedans, holding the Plague to be a penal curse inslicted by Almighty God on a sinful people, have less faith in the efficacy of medicine in that disease than in any other: and as the chief of those who practise physic are either

A a a 2 Christians

Christians or Jews, not armed with the doctrine of predestination, and consequently apprehensive of contracting the infection, they endeavour to confirm the vulgar notion of the inutility of their art in the Plague, with a prudential view of evading the danger of being forced to visit the sick. Hence the greatest part of the infected are either left to struggle with the distemper, without any assistance from medicine, or are under the necessity of submitting to the direction of the meanest and most ignorant of mankind.

The method most generally prevalent among the Native practitioners, is to bleed all who apply to them, in whatever stage of the disease; and then with a view of promoting sweat, to administer a sew grains of Bezoar mixed with the distilled water of Scorzonera. The Bezoar, in the East, still retains the reputation of being an excellent Alexipharmic, and though never given in a dose exceeding three or four grains, wonderful virtues are ascribed to it in the Plague: their reliance on this medicine, is a proof of the unimproved state of their Materia Medica.

In regard to evacuations in the Plague, it feemed to me, from the most impartial and attentive observation I was capable of, that very plentiful bleeding in the beginning of the disease was of great service; but was always prejudicial after the first day.

To promote vomiting was also of the utmost consequence at the beginning; and for that purpose, as the

fick in general had a propenfity to vomit, warm water C H A P. was commonly sufficient; but in cases where a stimulus was required, a small dose of Ipecacuanha, or of Salt of Vitriol, answered for the most part perfectly well.

Violent Cathartics are generally, and with justice, condemned in the Plague; but in cases where the patient was costive and the head much affected, an emoliient Clyster, or even a gentle laxative composed of Manna and Cream of Tartar, was not only safe, but often of great service. On the second day of the disease, where the remission of the symptoms was tolerably distinct, I have frequently and successfully given an insusion of Senna with Manna and Cream of Tartar; and it is a sact confirmed to me by repeated experience, that a purgative of this lenient kind given after the critical sweat, was the most effectual means of promoting the suppuration of the Buboes.

The natural crifis of the difease was always by the skin. When a copious sweat could be procured by art, it was likewise of service; but the attempt if made the first day was attended with two material inconveniencies. The first, that the common Diaphoretic medicines given in the usual dose, if they failed in their operation, threw the patient into a slame, and greatly augmented all the symptoms; the second, that though they produced the desired effect, it was necessary to keep up the sweat a much longer time than most of the people of that country could be persuaded to endure, and if the sweat was

fymptoms were either exasperated, or (what was often the case,) a Diarrhæa was induced, which though at first it might seem to relieve, yet generally proved fatal in the end.

The cordial and diaphoretic remedies found most effectual, were the roots of Contrayerva and Valerian; Saffron; or the compound Contrayerva powder of the Edinburgh Dispensatory. These remedies were given to most advantage in small doses repeated every four hours, with diluent drinks acidulated, which not only affished in promoting a sweat, but were of the utmost consequence in moderating the Fever, that the warm medicines were otherwise apt to increase. Anodynes were occasionally joined, and greatly affished the operation of the other remedies; but the milder kind, as syrup of Popies, seemed to agree better with the sick than pure Opium. In cases where a Diarrhæa attended, Venice Treacle, or Diascordium, was joined with the Diaphoretics.

I attempted to try the effects of the Bark; but on account of a clamour raised against that medicine, I found it prudent to desist: being convinced that my youth, and the short time of my residence in the country, were obstacles not to be surmounted by any efforts in my power to make against a popular prejudice. For another reason, no fair trial was made of the Virginian Snake root. Its bitterness was an objection with most of the Natives;

and it may be remarked in general, that the Physician C H A P. who would obtain a ready compliance with his directions in that country, must as seldom as possible offend the palates of his patients with nauseous remedies: for whatever may be the consequence, they will often rather choose to incur distant, though great risks, than avoid them by submitting to present inconveniencies.

Nitrous medicines neither had their usual success in allaying heat, nor in general could the sick bear them in the common doses, without a sensible increase of languor and dejection; and there was danger moreover of their bringing on a Diarrhæa.

Upon repeated trials, I found the following the most fuccessful method of treating the sick.

As foon as possible after the patient was taken ill, from ten to twenty ounces of blood, according to the circumstances of the case, were ordered to be drawn from the arm; but seldom more than sixteen ounces were taken away; that quantity greatly exceeding what is usually drawn at once in any disease in that country.

After the bleeding, where the nausea was considerable, the patient was encouraged to drink freely of warm water, which usually being soon returned mixed with bile, the operation was repeated till the stomach appeared to be cleansed. Where the nausea was so inconsiderable that the water of itself was not sufficient to excite vomiting, a small dose of Ipecacuanha, or of salt of vitriol was given to promote it. It indeed appeared from

cuations should be made early in the disease, that most of my acquaintance were provided with directions how to proceed, in case of any person being insected in the family.

After the operation of the vomit, a gentle Anodyne was given; and where that did not prove sufficient to quiet the stomach, an ounce of Diacodium, or sisteen drops of Laudanum, was added to Riverius's saline draught.

After the evacuations, small doses of the cordial and Diaphoretic medicines, to which was joined a very small proportion of Antimoniated Nitre, were administered every four hours; and the sick were encouraged to drink freely of a decoction of Scorzonera roots and Barley; or spring water moderately acidulated with Spirit of Vitriol. A mixture of Syrup of Violets and this Spirit was kept ready to be occasionally added to plain water, which being thus rendered more grateful both to the eye and the palate, the sick were induced to drink more willingly. The drinks were always given tepid, when the sick could be prevailed on to take them in that state.

In the Winter months, the fick were removed into a room larger and more airy than that in which they usually slept at that season; and the air of the chamber was warmed or corrected, by a moderate fire. In the Summer, permission was given to keep the doors and

windows

windows open, except fuch as were directly opposite to CHAP. the patient's bed, but even this restriction was opposed by many, who, in the day time, insisted on setting all open, and in the night often lay on the house top. Their coverlets were the same as they had been accustomed to in health.

A temperate cordial, composed of some of the simple distilled waters, Tinctures of Saffron and Valerian, Confection of Alkermes, and Spirit of Vitriol, was allowed where the sick were faint, or uneasy, and they expressed great satisfaction upon taking it. A mixture of this kind, together with plenty of acidulated drinks, was what I chiefly used for infected children, and with good success.

Under the treatment now described, a sweat often broke out on the second or the beginning of the third day; when the sick were covered up, and the sweat was encouraged as long as they could be persuaded to bear it.

But whether it proceeded from the carelesses of attendants, or their obsequiously giving way to the impatience of the sick, and consequently not keeping up the sweat so long as it ought to have been; or whether it was to be ascribed to the nature of the disease itself, I shall not presume to determine; but it is certain that this first sweat, especially if it happened on the second day, though it greatly relieved the patient, did not entirely remove the Fever. It was therefore requisite to con-

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which nature was generally enabled to throw off every fubsequent exacerbation by a plentiful sweat, till a complete crisis was obtained.

Where the fweat was judged fufficiently copious, and had greatly mitigated the fymptoms, notwithstanding some degree of sever still remained, a mild purge was given next morning, during the operation of which the other medecines were not intermitted; and an Anodyne was ordered to be taken early in the evening.

Where an exacerbation of the other fymptoms appeared to be the confequence of a fudden finking of the Buboes, which was fometimes the case on the second or third day, a blister applied just below the Tumor was of service.

Upon the first appearance of Coma, or of debility in the tongue, a blister was applied to the head, and, according to circumstances, in succession to the other parts to which blisters are usually applied. Some of the sick who had been deemed past recovery, having struggled through the disease, owing in all appearance to the use of blisters, they were at length brought into some degree of credit, and the Natives were induced to submit with less reluctance to a remedy, to which at other times they are obstinately averse.

Stimulating Cataplasms, commonly composed of Garlic, Bread, and Vinegar, were likewise applied with advantage to the soles of the seet. But in cases of Coma where

where the patient was costive, whether Blisters or Cata- CHAP. plasms were, or were not applied, emollient laxative Clysters were injected; the dose of the Alexipharmics was increased, and accidulated drinks, in small quantities at a time, were given frequently.

As to the external treatment of the Eruptions, suppurative Cataplasms were sometimes applied to the Buboes, but as it was with difficulty they were retained on the part, in cases where the patient was capable of walking about, a Diachylon Gum Plaster was generally substituted for the Cataplasm: and if a still stronger stimulus was requisite, a few Cantharides, or a little Euphorbium, were added.

In most cases, the Buboes were lest to open of themfelves; as well on account of the dread the Natives entertain of the lancet and caustic, as of the want sometimes of proper persons to make use of either; and so far as I had occasion to observe, though they often proved tedious, no other consequences attended their delay in opening, than such as are common to all inflammatory Tumors lest to themselves; nor was any thing peculiar in the topical remedies, required for healing them.

Where the Buboes mortified, they were treated in the fame manner as the Carbuncles, and though upon feparation of the gangrened parts, the Ulcer often remained both wide and deep, yet they healed kindly in a short time. The Carbuncles fometimes were scarified, but oftner were not. The dressings which in general agreed best with them, were soft pledgets armed with yellow Basilicon with a small proportion of Oil of Turpentine, or, sometimes, Tincture of Myrrh; over which was laid an emollient Cataplasm. After the mortisted crusts cast off, the Ulcer soon healed in the usual manner.

CHAP.

# CHAP. VI.

OF THE METHOD OF SHUTTING UP, PRACTISED BY THE EURO-PEANS IN SYRIA, FOR THEIR PRESERVATION IN TIMES OF PESTI-LENCE.

NEXT to the protection of Divine Providence, the CHAP. means that the Europeans depend upon for their prefervation during the time of the Plague, confift either in a retreat from the city, or in shutting up in their Town houses, in such a manner as effectually to prevent all intercourse or communication by which the infection might be received from without.

In former times, when the trade was carried on regularly in annual ships chartered by the Levant Company, which arrived at Scanderoon, and lest that Port at certain fixed seasons, the merchants, without prejudice to their affairs, had it in their power to retire from the city, in the Summer months; and the number of the English Factory being at that time so considerable as to render an encampment in the mountains secure from

was the common practice of the English gentlemen to retire from town, early in the Pestilential season.

The place chosen for refuge was a plain of no great extent, pleasantly situated in the mountains, at a little distance from Bylan. The wild scenes on all hands, were delightfully picturesque; an opening of the steep mountains afforded a prospect of the sea, at the same time giving admission to the Western wind; and a limpid rivulet remarkably cool, while it nourished a constant verdure, served to water the encampment. Bylan surnished the camp with provisions, and by a strict observance of the necessary precautions in receiving them, little or no risk was incurred, even though the distemper happened to be actually in that village.

They lived in their tents; and there being little chance, in their excursions distant from the high road, of falling in with travellers suspected of infection, they were at liberty to ride out without apprehension; to go a shooting; or to pursue other country recreations. The pleasures of this sequestered situation, which at other times, the English used voluntarily to prefer to all others, in the

fultry

<sup>\*</sup> Kurds, or as the English commonly call them Gourdeens, are a race of hardy, robust people, who inhabit a great part of Amanus, and the neighbouring mountains, and subsist chiefly by plunder; making incursions for that purpose, into the plains, and retreating into their mountains when any force is sent against them. (See vol i. p. 165.)

fultry months, fuffered now however fome allay from C H A P. reflexion on the melancholy occasion of their forced retreat, and their anxious apprehensions for the friends whom they had left behind in the city.

In the present state of the Levant trade 2, carried on by a number of small private vessels which come into the Port irregularly and at all feafons, it is highly inconvenient for the merchants to leave the city; befides, the Factory is greatly decreased in number, and the plundering Kurdeens are become more than ever hoftile to the Franks. Thus an early retreat, to the mountains is rendered next to impossible; while a retreat to any of the neighbouring villages later in the feafon, after the Plague has made fome progrefs, not only promifes little fecurity, but on many accounts is attended with confiderable danger. The Europeans however circumfpect in their own conduct, and that of their immediate domestic fervants, cannot effectually watch the rest of a numerous retinue, employed in transporting the tents and baggage, who may either have unknowingly contracted the infection, or perhaps have concealed its existing in their own family: whence arises a risk of setting out with the Plague lurking in the Caravan. It moreover, I believe, feldom happens that the distemper rages at Aleppo without likewife affecting most of the furrounding villages; and though the danger of infection on the journey may in

not entering houses, yet the very village chosen for a refuge, notwithstanding repeated assuring under the contrary, may probably be found labouring under the common calamity: for the Natives universally combine in concealing the distemper, as long as any advantage to themselves can be derived from the deceit.

The shutting up at home is attended with few of the risks or inconveniencies just mentioned, and when properly conducted, it affords such certain security against infection, that persons remain safe in the midst of a city where the Plague rages with the greatest violence.

The advantages of shutting up, are in that country fully confirmed by experience, so that all the Christians and Jews who have it in their power, sollow the example of the Franks; and even of the Turks, (who on account of an avowed principle of religion, cannot openly adopt the custom) many of those particularly conversant with Europeans, devise various pretexts for keeping much at home; sometimes they retire to one of their gardenhouses, as if merely on a party of pleasure; at other times, where their affairs will permit, they make a commercial excursion to some distant city: a journey to Mecca, under pretence of devotion, is no unusual expedient for avoiding the impending danger.

Though the Europeans, as before remarked, are not fo subject to the Epidemic Diseases of that country as the Natives, experience sufficiently confirms their being lia-

ble to the Plague; for some of them have generally been charled infected, when that distemper raged in the place, either before the shutting up, or after the coming out of confinement<sup>3</sup>. It may be proper also to add, that the domestic servants (who are not Natives, and in number exceed the Europeans) are not less liable when exposed, though while properly shut up, they enjoy equal security with their masters.

As long as the number of infected continues inconfiderable, (which is commonly the case in the Winter, and the beginning of Spring,) the Europeans content themselves with observing the following precautions. To have no more intercourse with the Natives, than business indispensably requires; to keep their domestic servants as much as possible within doors; to give no longer admittance to the common Turkish barber; and to secure a laundress on whom they can depend for avoiding improper communication with the Bazars, and who is not employed by the Natives. With those precautions the

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<sup>3</sup> Sir James Porter, in his observations on Turkey, (p. 443. and 450.) has hazarded a singular affertion, "that there is not upon record, nor has "a single living witness related an instance of an English Factor or ser- vant's dying of the Plague, at any of the Sea Port towns, or in any other "part of Syria or Asia Minor, and but one only in Constantinople, in "almost a century; and that from the first origin of the charter, not one English seaman had ever died of the Plague."

Others had afferted that Frenchmen in Turkey, are not susceptible of infection. A fact contradicted by experience every Plague year in most parts of the Levant, where the French are established. See (Treatise of the Plague, &c. p. 339.)

BOOK Franks remain at liberty to visit one another, and to purfue their usual recreations abroad in the country.

In this state of affairs, it is usual for the Natives to employ all their art in difuading the Europeans from entertaining any thoughts of shutting up, either affuring them that all the reports by which they may have been alarmed are abfolutely false, or else, (allowing that some of them were true) by affirming roundly that all is now over, and the city, through the mercy of God, perfectly free from suspicion. By this last bold affertion, however inconfistent with truth, and indeed with all rational hope derived from former experience, many are fondly deluded, till one of the Europeans themselves, or one of their immediate dependants, or perhaps fome person generally known in the city, happens to be infected. Then it is that dread and consternation prevail in the Frank Quarter, and the most adventurous think it advifable to shut up with all expedition.

But those who act with most prudence, besides attention to the precautions already mentioned, consider the increase of the distemper, which had remained lurking in the Winter, as unavoidable in the Spring, and therefore without regard to contradictory reports and reasonings, make dispositions for shutting up, upon its first visible increase, and lay their account with being confined till July. By this means they escape the trepidation, and disagreeable hurry occasioned by a sudden alarm; for it may be remarked, that after the Plague once be-

gins to fpread, its progress is so rapid, that the difference C H A P. of cautiously shutting up early, and of braving it out to the last is seldom more than a few days.

As it would be uncomfortable for a fingle person to be so long confined by himself, it is usual for the Factory to divide into small parties, and to shut up in such houses as are most spacious, or in other respects most convenient for the purpose. It is an advantage that it should be one which has no communication over the Terrace with any other; for though while the distemper is not much advanced, an intercourse between houses regularly shut up is sometimes permitted; yet when the disease rages with more violence, it is reckoned safest not to run the risk of the irregularities of others, and to put a stop to all intercourse of that kind: indeed, it is in vain to expect that irregularities among the servants can be prevented, as long as the Terrace doors stand open, and tempt to a breach of regulations.

So few of the Europeans in that country are accustomed to shave themselves, that it becomes highly expedient to have one among the domestics capable of the office of barber; for though the circumstance at first may seem trivial, the neglect will be found of vexatious consequence in a hot climate.

When the moment of shutting up arrives, the street door is locked, and by way of greater security, the master of the house affixes his seal, and secures the key. From that time nothing is permitted to be received from

ters; and in the reception of these the precautions hereafter enumerated are rigorously observed.

At the same time that the street door is sealed, all windows or passages below stairs, by which the servants might privately carry on illicit communication, are in like manner secured. A small square hole is then cut in the street door, and to that a wooden spout is sixed, for receiving the water which is brought daily in skins by the water-carriers; and this aperture being provided with a sliding door with a lock, is never opened but in the presence of one of the Europeans who attends on purpose: a precaution the more necessary, as the water-carriers are compatriots of the servants, and the most likely to smuggle for their friends within.

A window above stairs is next allotted for the reception of provisions and letters, and for conversing with persons who stand below. The more this window is exposed by its situation to the eyes of the samily within, the better it is adapted for preventing the careless irregularities of servants; but it is a desirable circumstance, if it can be effected, that the window should look into the most unfrequented part of the Khane, or the street, in order to avoid a concourse of idle passengers, which the novelty of the sight would naturally draw together, at the times of taking in the provisions.

The apparatus placed at this window, consists of a rope, which with the addition of a few yards of iron chain,

chain, and a hook fixed to the lower end, reaches to c H A P. within two or three feet of the ground; an iron, or copper pail, which is hung on the hook, and ferves for receiving the provisions; a pair of tongs for taking them out of the pail; a bottle of vinegar; and a pail of water. Besides these, a long reed, split at one end, stands ready for the reception of letters, with a box of pounded brimstone for sumigation.

A Purveyor without doors, is retained in conflant pay; who is employed also in carrying messages, and collecting the news of the day.

Butchers meat, and all other provisions which admit of it without injury, are dipped in water mixed with a little vinegar, and then hung up for some time before the cook is permitted to handle them. Poultry is treated in the same way having been carefully picked before it was put into the receiving pail. Bread, and other things which might be injured by immersion in vinegar, are exposed for some time to the open air, before they are touched.

In regard to letters and papers, they are first sprinkled with vinegar while yet on the reed, and then smoked well with sulphur. Some instead of sulphur employ a composition commonly used in the Lazaretto at Malta<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> Sulphur fix pounds, Orpiment, crude Antimony, Lytharge, Cumin feeds, Euphorbium, Black Pepper, Ginger, of each four pounds, Affa fœtida, Cinnaber, Sal Armoniac of each three pounds, Arfenic one pound.

To these ingredients, first reduced to powder are added raspings of Pine wood six pounds, and bran sifty pounds.

But

BOOK But whatever be used for sumigation, it were better if it was a more general practice, to make use of a smoaking box, so contrived as by confining the sumes, to impregnate the papers more thoroughly than can be done in the open air.

The last preparatory caution generally observed, concerns Cats, which on account of their rambling from house to house, being considered as very dangerous visitors, are proscribed by common consent among the Franks, and when found straying, are immediately shot and thrown into the street with a pair of tongs, to avoid touching them. The Europeans usually confine their favorites to a room, or fend them to be taken care of by one of their dependants in the Jideida, till the persecution be over.

Besides the impatience naturally arising from unusual restraint, other circumstances combine to render the first week's confinement extremely unpleasant. There are certain moments when it is not easy to exclude apprehension that one or other of the party may have uncautiously contracted the insection, and that the period in which it may show itself is not yet elapsed; nor are such uneasy reslections discouraged by the hum from Sun rise to Sun set, of the Sheihs chanting in the suneral processions, and the dismal conclamation of the women, especially in the dead of the night. But these last circumstances in time become familiar and less alarming; fears of lurking insection vanish, and the prisoners falling into various

various modes of employment or amusement, come by CHAP. degrees to suffer little on their own account, more than the mere languor of confinement: yet they cannot avoid sympathizing with those who are exposed, or feeling for the death of their acquaintance among the Natives. The want of their usual exercise of riding, they endeavour to supply by an evening's walk upon the house top; and as all the Franks make their appearance on the Terraces about Sun set, they have an opportunity of seeing each other, and of conversing with such as happen to be at no great distance.

As foon as the Europeans, and principal Christian and Jew Natives, enter into confinement, an almost total stagnation of trade immediately follows. Many of the Mohammedan Merchants, as remarked before, keep much at home, and if the distemper rages violently, very few caravans arrive from other towns. But the common markets remain open, and being plentifully fupplied, there is never any dearth of provisions; the streets, though not fo much crouded as usual, are in some degree frequented; and the Turks in general, visit the fick and attend the funerals, in the same manner as at other times. The Christians and Jews, who are not shut up, seldom visit their sick friends, unless on very urgent occasions: and very few accompany the corpse to the grave, besides the bearers, and one of the Priefts, appointed to attend funerals: but there is no want of fervants or of relations to undertake the necesBOOK fary offices about the fick, the fame as if it were any common distemper 6.

Upon the first appearance of the Plague declining, the Natives, who feel severely the interruption of trade, resume their attempts to mislead the Franks, by assuring them that the number of sick is far less considerable than common report represents it; and as impatience of confinement disposes to credulity in whatever promises the restoration of liberty, it commonly happens that some of the gentlemen are induced to venture abroad, sooner than prudence justifies. But it should always be remembered, that though the difference between venturing thus rashly, and proceeding with caution, be seldom more than a few days, yet, as before remarked, the real difference in the risk incurred is very considerable; the decrease as well as increase of the diftemper being always rapid.

The first step commonly, after unsealing the door, is to ride out an airing, attended by one or two servants only, the rest being left at home, and care taken to prevent improper communication in the absence of the

This was far from being the case in the late Plague in 1760, it often being very difficult to procure mercenary attendants. I met with several instances, even in Turkish houses, where the mistress of the family was not only ill attended, but even abandoned through the timidity of her daughters, and slaves. I apprehend the dread of contagion gains ground among the Mohammedans in all parts of Syria where the Europeans have much commerce. (Treatise of the Plague &c. p. 34.)

mafters. The view of the open country, after fuch long C H A P. confinement, renders these first excursions inexpressibly delightful, though the fields at that season are extremely arid, and little verdure is to be seen except in the gardens.

For a week or two after these first excursions, the same precautions which were observed before shutting up, are strictly continued, and indeed, with regard to the domestics, are more necessary than ever; no injunctions however strict being able to prevent their wanton abuse of liberty. It should also be considered, that not only persons belonging to insected houses, but even many convalescents from the Plague, help to make up the promiscuous crowd in the narrow Bazars.

Such are the established regulations commonly adopted by the Europeans at Aleppo, and which have the sanction of long experience. Certain additional precautions were observed by myself, and recommended to others, who being obliged to go among the insected, applied to me for advice.

The precautions recommended were,

I. In the general regimen of life, to guard against excesses of all kinds; violent passions of the mind; and immoderate evacuations.

II. In refpect to diet, not to live more sparingly than at other times, nor to lessen the usual quantity of wine: perhaps one or two glasses extraordinary might rather be beneficial; and the free use of acid liquors, (such as very weak, sour Punch,) was in the Summer, sound not only grateful to the palate, but salutary.

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BOOK VI.

- III. Never to venture abroad in the morning, fasting.
- IV. When in the chamber of the fick; or in passing near a corpse, or any thing suspected of infection; carefully to avoid swallowing the Saliva: and, at the same time to breathe through the double folds of a handker-chief, moistened with plain vinegar, or vinegar impregnated with Rue.
- V. To restrain inspiration as much as possible while employed in examining the pulse, or such other circumstances of the sick as require drawing close to the bed; and upon coming out of the chamber, to wash the mouth, face, and hands, with vinegar.
- VI. On the return home, after vifiting the infected, or paffing through the Bazars, to undress, and expose the clothes in the open air<sup>7</sup>; and before dressing in fresh clothes, to wash once more with vinegar.
- VII. The only prefervative used internally, was a large dose, twice a day, of extract of Bark; drinking after it a draught of wine and water, acidulated with Elixir of Vitriol. For those who prefer the Bark in a liquid form, a strong decoction might answer the purpose equally well.

Though the foregoing precautions, contain nothing but what has been repeatedly mentioned by medical writers, I thought it might not be improper to prefent

<sup>&</sup>lt;sup>7</sup> It might perhaps be of fervice to fumigate the wearing apparel with fulphur: but this was not practifed.

them here in one view. Some of them may in future c HAP. be of fervice to the gentlemen of the Factory, when necessary business obliges them to expose themselves, either before, or after shutting up. So far as my observation went, they were attended with success: but it ought at the same time to be remarked, that my experience was not extensive; and that some who were exposed to equal risk with myself and others, escaped without the observance of any preservative means whatever.

Ddd<sub>2</sub> NOTES



# NOTES

AND

# ILLUSTRATIONS.



# NOTES

### AND

# ILLUSTRATIONS.

#### Note I. page 2.

FRANK and Frenk, that is to fay a Frenchman, or in a more extenif the fense a Latin: because the French Nation distinguished itself in a
if particular manner, among the other Europeans, who bore arms in the
if Holy Wars." Herbelot.

Afrange, according to Golius, comprehends all Europeans, the Greeks excepted. Meninski says, that by the term Afrange is understood the European Nations who joined in the Crusades. But it is justly observed by Schultens, in his Geographical Index, that the term Romans, Al Room in the Oriental Books, is used in a very vague sense. It sometimes imports the Romans strictly so called; very often the Greeks under the dominion of Constantiople; and sometimes even the Turks who had possess themselves of the Greek Provinces: in like manner as the term Frank has been extended to all the European Nations.

# Note II. p. 3.

The charter of privileges granted to the English Nation by the Ottoman Porte, was dated in the year 1580, fifteen months anterior to the incorporation of the Levant Company. See Appendix to vol. i.

## Note III. p. 8.

The first commercial treaty with the Ottoman Porte, made by any of the European Monarchs, was (according to Anderson) in the year 1535, between Francis I. and Solyman the Magnificent; the Venetian State next obtained a commercial treaty in 1580. (Historical and Chronological Deduction of the Origin of Commerce. Lond. 1764. vol. i. p. 365.)

But it may be remarked that the Venetians had an establishment at Aleppo long before the year 1580, and probably before the French. Belon of Mans, who visited Aleppo about the year 1548, without mentioning any thing of a French establishment there, expressly mentions the Venetian Consul; and that he himself was lodged at the house of a Venetian merchant. (Observations, liv. ii. ch. 102. Brux. 1555.)

Teixeira, in 1605, found fourteen Venetian families at Aleppo, besides that of the Consul. 'Every family had two principals, one to serve in the 'absence of the other; and if the first dies or goes away, the second succeeds him.'

- 'The Venetian trade was worth between a million and a half yearly, fent from Venice in five or fix thousand pieces of woollen cloth, about as many of filk and brocade, abundance of Cocheneal, and the rest in plate. The returns were raw Silk, Indigo, Galls, Spices, Pistachios, &c. &c. From all this stock they deduct so much per Cent for a Bank they call Cotimo, which is to pay a Physician, and a Surgeon Apothecary; (Boticario Barbero) as also Chaplains, who are Franciscan Friers, and have a Chapel in a Khane, where the merchants meet to hear Mass and Sermons. It also serve to defray the presents made to the Bashaw, and other officers, the Druggoman's salary, and the expence of three expresses sent together every month by the way of Constantinople, that in case two fail, the third may go through. In short the Consul's expenses in three years, (for so long they hold commonly their place) amount from 70 to 80,000 Ducats, or Chequins, which are not disbursed without the consent of the merchants, who ballot after the Venetian manner.'
- 'The Conful is always a gentleman, and the Guardian of the Friers is a man of confideration, who has power from the Pope to absolve, &c.'
  "This is the form and method observed by the Venetians residing there, who live great and splendid, behaving themselves nobly; from several of "whom

"whom I received many favours during my stay, and it is usual with them to do the same by all strangers they have a good account of." Stevens (Collection of Voyages, vol. ii. p. 71. Travels of Peter Teixeira,) Viage de Pedro Teixeira, (chap. xi. p. 181. en Amberes, 1610.)

#### Note IV. p. 22.

M. D'Arvieux gives a circumstantial description of a public audience of the Cady; from which it appears that the Consuls were treated at that time more familiarly by the great officers, than they are at present. When "the audience was finished, (says he) we rose up. The Cady rose "at the same time, and embracing me, gave me assurances of his friend"ship." (Memoires, Tom. v. p. 524.) At the visit also of the Mutsillem, that officer embraced him on parting. This last visit indeed, though made with much pomp, was supposed to be a private one. The Consul supped with the Mutsillem; and it may be remarked that wine made part of the entertainment.

## Note V. p. 24.

The Rhymes alluded to, as repeated by the women and children in contempt of the Franks, are as follow

Frangi Cukoo, Frangi Cukoo Cuckold Frank, Cuckold Frank.

Tarees abookoo Your Father was a Pimp;

Sekeeny hadde A sharp knife

Taht al Mhudde Under your pillow, Frangi Cukoo, &c. Cuckold Frank, &c.

The wit and poetry here were at least equally good as of a Stanza bawled about the streets of Aleppo, after the retreat of Nader Shah from Musel, in the year 1743.

Tahmas, feinoo! Tahmas, where is he! where is he!

Daboos bein kitfeinoo An Iron Mace between his shoulders;

Mooz yehluk Dukenoo May a razor shave his beard!
Seif yukta rasoo! And a sword cut off his head!

Tahmas, feinoo! Where is he! &c.

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## Note VI. p. 28.

The computation of the number of Christian inhabitants was made by a Maronite Priest, employed in the year 1740, to number that nation, when it was found to contain three thousand and thirty three souls, of which one thousand sive hundred were males, and one thousand sive hundred and thirty-two were semales. The cause of the survey was, a contest between the Greeks and Maronites, concerning an Avania made upon the Christian nations, in which the latter conceived that they were over rated. The matter being referred to the Governor, Ahmed Bashaw Durekly, and the Cady, they, in order to an equitable adjustment, commanded the books of the Poll tax to be carefully examined; when the following estimate was in consequence reported to them.

The whole of the Aleppeen Christians being subdivided into twentyfour parts, or Kirats, a certain number of Kharach Tescars was allotted to each Kirat, and the proportions stood thus,

The Greeks composed	I 2	Kirats and	were allotted	4600	Tescars
The Armenians	6			2030	
The Syrians	3	T 3		1130	
The Maronites	2	2 3		900	

Upon this ground, the Priest, supposing that the number of persons in the respective nations, bore the same proportion to the Kirats, that had been ascertained by survey in respect to the Maronite nation, computed the number in each as mentioned above.

This calculation appeared to be more accurate than any I had before been able to procure at Aleppo. But it may be remarked that the adjustment of the Kirats though juridically confirmed, might not be strictly just, it being the interest of the respective parties to bribe the judges.

#### Noté VII. p. 35.

The Differtation of Fausto Neroni was published at Rome in 1679; in which he endeavours to show that the Maronites have ever since the days of the Apostles, invariably adhered to the holy Catholic Church. Assemani (Biblioth. Med. Laurent. & Palat. Cod. MSS. Orient Catalogue, p. 14. Florent. 1742.)

The

The fubstance of Neroni's Vindication (though rather incorrectly) is given by La Rocque, (Voyage de Syrie, Tom. ii. p. 9. 128. Paris, 1722.) More on the same subject is found in (Biblioth. Orient. Clement. Vatican. p. 498.) But a succinct state of the dispute may be found in De Moni's Histoire Critique, and in the remarks annexed to the French translation of Dandini, which will probably be thought fully sufficient in a matter in itself of little consequence, but as it is connected with the history of the times.

Whatever might have been the case formerly, the Maronites at present are in union with Rome, and, if they keep their resolution, may be considered as the most determined subjects of the Roman See. For according to Dandini, after the Patriarch of the Maronites in 1596, had in Synod anathematized all the Heresies imputed to them, and professed inviolable attachment to the true Church; one of the Deacons rising up in the assembly, made the following declaration. "Ouy, nous la voulons suivre, "& ne nous on separer jamais en quelque part qu'elle aille, quand bien mesme elle iroit en Enfer." On which the pious Legate remarks. "En verité j'eus bien de la joye devoir, que le commencement su accompagné d'une resolution si forte, & d'une si grande fermeté d'esprit." (Voyage du Mont. Liban. p. 123. Paris, 1685.)

About the year 677, the Maronites took possession of Mount Lebanon, and by their predatory incursions into the Champaign, soon rendered themselves formidable to the Saracens. The Khalif Moawiyah (the Imperial residence being then at Damascus) in order to have more leisure to repell those incursions, concluded a peace with the Greek Emperor, with whom he had for some years been carrying on an unsuccessful war in Cilicia. About eight years afterwards upon the accession of Justinian the III., when the sormer peace with the Saracens was confirmed, a new article, by which Justinian engaged to suppress the Maronites, was inserted in the treaty; in consequence of which a Lieutenant with a considerable army was sent into Syria, and making a successful irruption into the mountains, brought away twelve thousand of the inhabitants. This according to Cedrenus was very impolitic, and proved greatly prejudicial to the Greek affairs in Syria. Cedrenus (Hist. Com. Tom. i. p. 437. and 440.)

The Maronites have continued to possess some part of Mount Lebanon ever since that period. William of Tyre bears honorable testimony to the services rendered by them in the Holy War. He represents them as

amounting to forty thousand. That they were strong and brave in arms, and, in the sharpest and frequent rencounters with the enemy, were very useful Allies. (Gesta Dei per Francos. p. 1022. Hanov. 1611.)

Dandini, towards the close of the 16th Century, and La Rocque near a Century later, have given an account of the state of the Maronite nation in Lebanon; but a more recent and very exact account has been given by M. Niebuhr in the second Volume of his Voyage en Arabie. The reader will find there also an entertaining account of the Mendicants from Mount Lebanon, who from time to time visit Europe under the usurped title of Princes of Palestine.

In the year 1772, foon after my arrival in England, I was furprized with a complimentary Card dal Principe di Palestino, dated from a Lodging-house in Spring Garden, and brought by his Secretary. I found His Royal Highness strangely ignorant of the state of his Dominions; which joined to his conversing tolerably in several of the European languages, led me to suspect he had been longer absent from his country than he chose to acknowledge:

M. Volney has given a distinct and concise account of the Maronites, in the second Volume of his Travels; and particularly of their state in Lebanon in 1783.

## Note VIII. p. 35.

In an account of a general Council of the Maronites held in the year 1736, given by P. Fromage, a Jesuit Missionary who assisted at it, the deviation from the ancient custom of performing Divine Service in the Syriac language, is enumerated among the abuses which had lately crept into the Maronite Church. The same Father asserts that in consequence of the Synod's decision, the abuse had been remedied. "Nous sçavons encore que depuis le synode les Maronites d'Alep ont cessé de chanter dans leurs Eglises en Arabe, & qu'ils ont repris l'ancienne coutume de faire l'office, & de dire toutes les prieres en Syriaque." (Memoires des Missions dans Le Levant. Tom. viii. p. 432. Paris, 1745.)

This Father died about the year 1740, and the custom of the Church must have altered since his time.

Dandini remarks that the Maronites, besides the Arabic, have some knowledge of the Chaldaic language, which is to them what the Latin is to the Italians. (Voyage du Mont Liban. p. 86.) By the Chaldaic, according to the Editor, is meant what is commonly understood by Syriac, which is distinguished by Grammarians from the Chaldaic, though often confounded in common discourse by the Maronites. After the Saracen conquest of Syria, both Greek and Syriac by degrees gave place to the language of the conquerors; but were retained in the facred offices. "La "Langue Caldaique a toûjours esté conservée dans l'Eglise, & les "Savans ecrivoient encore en cette Langue long temps aprés Omar." Dandini (p. 86. and p. 264.) where some account is given of the Bibles, and other books of the Maronites.

#### Note IX. p. 37.

An account of the Printing Press at Mar Hanna may be seen in M. Volney's Travels, (vol. ii. p. 188.) He has given a list of the books printed there. (Tom. ii. p. 180. Paris, 1787.)

## Note X. p. 37.

La vie monastique n'est pas moin en recommandation parmi les Maronites que dans tout le reste du Levant. Leurs Moines sont de l'ordre de St. Antoine: & il y a de l'apparence qu'ils sont un reste des ces anciens Ermites qui habitoient les deserts de la Syrie & de la Palestine; car ils sont retirés dans les lieux les plus cachés des Montagnes, & éloignés de tout commerce. Leur Vestement est pauvre et grossier, ils ne mangent jamais de chair, mesme dans les plus grandes maladies, & ils ne boivent du vin que tres rarement. De Moni (Hist. Critique, p. 149. Francsort, 1684.) Dandini (Voyage, p. 95. and 282.)

Dandini notices several irregularities subsisting in the Monasteries in M. Lebanon. "Les semmes entrent dans leurs Monasteres, et s'y promenment ent par tout librement. Elles y mangent, & couchent mesme quelque"fois." (p. 114.)

The Nuncio did not find it expedient at that time to infift upon a reformation in that point; and it would appear that the same irregularity still subsisted in the year 1736. "C'étoit un ancienne coutume des Evê"ques Maronites d'avoir auprès d'eux plussieurs Religieus, dont l'ap"partement n'étoit d'ordinaire separé de celui de l'Evêque que par une
"porte

"porte de communication. Les Religieux en avoient aussi dans l'enceinte de leur Monastere." (Memoires des Missions, Tom. viii. p. 369.)
The custom here condemned by the Missionary was not peculiar to the Maronites. "A cinque lieües de Damas il y a deux célebres Monasteres, "l'une de Religieux, & l'autre de Religieus; l'un & l'autre sont Grecs. Le Monastere de Religieuses est, quant à présent, d'environ quarant filles. Elle obéissent à une superieure qui prend la qualité d'Abesse. On ne fera point surpris en France d'apprendre que cette Abesse est également supérieure des deux Monastres, d'hommes & de filles. Les Religieux chantent au Chœur l'office divin, & administrent aux Religieuses les sacramens. Leurs Freres servans ont soin du temporal des deux Monasteres." (Memoires des Missions, Tom. vi. p. 134.) See also De Moni, (p. 31.)

#### Note XI. p. 41.

The following fensible remarks on the Latin Missions, will hardly be suspected of prejudice or partiality.

"L'on ne fauroit trop louer le zele que plusieurs Papes ont eu pour ramener à leur Communion toutes les sectes du Levant, & la dépense
qu'ils sont encore pour cela. Mais par malheur, ceux dont ils se sont
fervis pour ces negotiations n'ont pas asses bien secondé les intentions
du Saint Siege, ny travaillé comme il faloit pour fair reüssir ses desseins.
Car au lieu qu'ils devoient s'appliquer à concilier les sentimens des ces
sectaires avec ceux de l'Eglise Romaine, il semble qu'il ayant pris à
tâche d'exaggerer leurs Erreurs, & de leur en imposer mesme ausquelles
ces peuples n'ont jamais pensé.—L'on doit conclure que Notre Jesuit

" & les Missionaires qui l'ont precedé dans le meme employ, ont reformé

46 les Maronites sur le pié de ce qui se pratiquoit dans l'Eglise Romaine.

46 Pout oftre ouroit il esté mieux de les laisser dans la plus part de leur anci-

" Peut-estre auroit il esté mieux de les laisser dans la plus-part de leur anci-

" ennes coûtumes, & de ne corriger, que ce qui avoit absolument besoin de

" reformation." Dandini (Remarq. p. 202. 352.)

More on the subject of the Missionaries, particularly at Aleppo, may be met with in the sixth volume of D'Arvieux' Memoires; and of their successes in Egypt, some account has been given by Maillet. (Tom. ii. p. 170.)

Note

#### Note XII. p. 42.

The Jews and Christians, such excepted as are under the protection of some European Prince in alliance with the Porte, are subject every where in the Ottoman Dominions, to a tribute, or capitation tax, according to the law of Mohammed. The women, however, children, and infirm persons are exempt. From the rich, are levied annually ten crowns; from the middling ranks, six; and from the lower, three. Assemani, (Biblioth. Med. Laur. p. 203.)

The capitation tax in the Island of Scio is divided into three classes; the highest is ten Crowns three Paras, the middlemost five Crowns, and the lowest two Crowns and a half. Three Paras are given for the Collector. Tournefort (Voyage into the Levant, vol. i. p. 288. Lond. 1718.)

## Note XIII. p. 59-

The Jews affign two reasons for ascribing such high antiquity to the M. S. Bible preserved in the Synagogue at Aleppo. The one, the concurrent tradition of their Rabbies, and their submission to its authority in the various readings of disputed passages: they produce instances of deputations sent from Europe on purpose to consult it.

The other, that at the end of the M. S. there is a prayer for the prefervation of the Temple; whence they conclude it must have been written before the expedition of Titus; because after that period, their prayers were offered up for the restoration, not preservation, of the Temple of Jerusalem. A specimen of this M. S. was transmitted to Dr. Kennicot, who did not find reason to ascribe such high antiquity to it as the Jews do.

# Note XIV. p. 64.

The Chief Priest of the Jews at Aleppo, is usually called the Khakhan or Khakhan al kebeer Cohen The word Khakhan is always used in the Arabic by the Native Jews, but the Frank Jews commonly use the word Rabbino, and in this they are followed by many of the others, who have a smattering of the Portuguese language. In common discourse they say Khakhan Shimuel, not Rabbi Shimuel, and they never say Eben il Rabbi, but Eben il Khakhan.

"The title of Rabbi, with feveral others from the same root Rabhabh, magnus est, vel multiplicatus-est, began first to be assumed (according to Godwyn) as a distinguishing title of honour, by men of learning, about the time of the birth of Christ. We find it anciently given
indeed to several magistrates and officers of state." Esth. i. 8. Jer. lxi. 9.

Job. xxxii. 9.

Jennings (Jewish Antiquities, vol. i. p. 407. Lond. 1766.) T. Godwyn (Rites of the Ancient Hebrews, p. 28. Lond. 1672.)

#### Note XV. p. 64.

The feventh day. The Hebrew Shabath was a very different derivation, though used in Scripture in a limited sense for the seventh day, which God had set apart for his own service. "The word Shabath from whence our English word Sabbath is derived, signifieth rest, and is applied to all solemn festivals but it most frequently is used for the seventh day." Godwyn (p. 97.) Jennings (vol ii. p. 138.)

The first account of the Jewish Sabbath is in the Book of Exodus xvi. 23. 26. and though the observation of a Sabbath was probably not wholly new to the Jews, nevertheless the manner of keeping it by a total cessation from labour, and the particular day on which it was to be kept, seems to have been a new institution. Jennings (vol. ii. p. 146.)

"It hath been controverted both among Jews and Christians, whether the Sabbath was first instituted immediately after the creation and given to Adam and Eve in Paradise? or whether the account of God's blessing the seventh day and sanctifying it, which Moses mentions in connection with God's resting on the seventh day when the work of creation was finished, is to be understood proleptically of his appointing that day to be observed as a Sabbath not at that time, but by the Israelites many ages afterwards." Jennings (vol. ii. p. 140. 141.)

# Note XVI. p. 65.

The Jews confidering the commands not to dress victuals on the Sabbath, and not to kindle fires in their habitations on that day, (Exod. xvi. 23. xxxv. 3.) as extending to all ages, dressed no meat on the Sabbath, which haply was one reason why the Heathen people thought they sasted.

Godwyn

Godwyn (p. 69.) Augustus in a Letter to Tiberius, speaking of his having kept fast for one day, says even a Jew, on his Sabbath did not fast so strictly. "Ne Judæus quidem mi Tiberi tam diligenter Sabbatis jejunium servat, quam ego hodie servavi." Suetonius, (Octav. August. c. lxxvi. Ed. Græv. Amstelod. 1697.) But this error of the Heathens is ascribed also to their consounding the day of expiation, on which the Jews certainly sasted, with the ordinary Sabbath. Jennings, (vol. ii. p. 262.)

#### Note XVII. p. 68.

The Feast of Tabernacles, at Aleppo, continues nine days. But "The eighth day was not so properly a part of the Feast of Tabernacles, as another distinct Feast which followed immediately upon it. The seven days are expressly said in Leviticus to have been kept in commemoration of their dwelling in tents in the Wilderness for forty years; the eight day therefore was properly the Feast of Ingathering, on which they were to give thanks for their whole harvest." Jennings, (vol. ii. p. 228.)

If the eighth day be reckoned a diffinct Feast, the ninth must have been superadded by the Rabbies, for there is no mention of it in Scripture; but the whole nine days passes vulgarly, at Aleppo, under the same name, and the Tabernacles are not removed till the conclusion of the whole: though this last circumstance seemed merely owing to the servants being otherwise employed; for they do not as before, receive visits and eat in the Tabernacles, after the eighth day.

## Note XVIII. p. 89.

The state of the Arabian learning before the time of Mohammed is thus described by Abu'l Furrage. "Eruditio autem Arabum cujus gloriæ" præcipuè studiosi erant, hæc erat: Linguæ suæ peritia, sermonis pro"prietas, Carminum textura & orationum compositio." He adds that they had acquired from observation such a practical knowledge of Astronomy as served more immediately the purposes of life: but were totally ignorant of Philosophy. His account of their learning after the time of Mohammed, is taken from an Arab Historian, a native of Cordova in Spain, who died in the year 855. (Hist. Dynast. p. 101. 160.)

Vol. II. Fff Pocock's

Pocock's Notes on these passages are replete with much curious information. "Foventibus apud Arabes Al Mamone, & qui ipsi in Imperio "fuccederent bonas literas, eousque tandem (verba sunt magni Savilii) "studio & ingenio proficerunt ut vix ipsis Græcis cedere videantur. "Homines scilicet acumine & diligentia prestantes nihil in ullo literarum genere intactum reliquerunt. Nihil habuit Græcia eximium, quod non suum secerunt, de suo quæ non acceperant, multa non minùs eximia protulerunt. Languescere sub barbaris Turcarum armis cæpere demum apud eos hæc studia, & cum honore pristino, pristinum etiam vigorem amisere." Pocock (Specimen, p. 167. 150.)

"The age of Arabian learning (fays the elegant Gibbon) continued about five hundred years, till the great eruption of the Moguls, and was coæval with the darkest and most slothful period of European Annals; but since the Sun of science has arisen in the West, it should seem that the Oriental studies have languished and declined." (Decline and Fall of the Roman Empire. vol. v. p. 425. Lond. 1788.)

## Note XIX. p. 91.

The account given of the Egyptian Library which fell into the hands of Saladin, when he took possession of that country in the year 1171, is in the following words. "Tandem (after mentioning some articles of the "Khalifs Treasury) quod non minoris æstimebatur, Bibliotheca Volumi"num centum mille, elegantissime Scriptorum & compactorum, quæ
"Doctoris Literatisque distribuenda curavit." Renaudot remarks surther that so large a number of volumes will not surprize those who know what a numerous tribe the Arabic writers formed, and adds "Sola Hadgi Calsæ, "qui ante paucos annos Constantinopoli vivebat, Bibliotheca 40 & amplius "millia Titulorum comprehenduntur, quorum librorum plerique non uno "Volumine comprehenduntur. Tamen Antiquos multos non habet, quorum in aliis libris memoria est: de Afranis Scriptoribus quorum ingenia feracissima fuerunt, nihil ferme scribit: de Christianis plane silet: "Philosophorum, Mathematicorum & Astronomicorum paucos omnino "recenset." Renaudot, (Histor. Patriarch Alexand. p. 536.)

The Royal Library at Cordova, in the tenth Century is faid by Casiri, to have contained six hundred thousand volumes, the Catalogue of which

took

took up no less than forty-four volumes of a prodigious size. (Bibliot. Hispano-Arabica, Tom. ii. p. 37.)

This fact however feems hardly probable; and the number of volumes appears so disproportionate to the number in the Egyptian Library, that, considering letters had been longer cultivated in Egypt than in Spain, there is ground for suspecting exaggeration.

The subjoined table of the Oriental M. S. S. preserved in some of the European Libraries, is not to be considered either as complete or as perfectly correct; the arrangement of the classes in different Catalogues varying considerably, and the Medical and Historical Books being chiefly attended to. But the sketch, such as it is, will be sufficient to convey a general notion; and they who desire more accurate information, may find it in the Books mentioned below.

Oriental M. S. S. in feveral European Libraries.

	Escurial	Paris	Leiden	Florence Dublin Bodleian
Historici & Geographici	186	305	212	38
Medici	120	107	120	60
Poetici	22I	193	173	22
Philofophici	97	104	214	34
Mathemateci	79	130	243	58
Grammatici, Lexicograph Philolog. Rhetor. & Misce	${}_{1}^{625}$	208	317	113
Al Koran, Interpretes, Theology, Law, &c.	}716	405	718	91
	-			

1738 1040 1665 318 511 1392

Bibliotheca Arabico-Hispana Escurialensis Matriti 1760.

Catalogus Codicum Biblioth. Regia Parisiis. 1739. Tom. i.

Catalogus Bib. Publicæ Universit. Lugd. Batav. 1716.

Biblioth. Medicæ Laurentianæ & Palatinæ Cod. M. S. S. Orient. Catalog. Flor. 1742.

Catalogus Librorum M. S. S. Angliæ & Hiberniæ in unum collect.

Oxon, 1697.

Petri Lambecii Hamburg. Commentariorum de Augustissima Bibliotheca Cæsaria. Vindabon 1766.

The only Catalogue I had feen of Marsh's M. S. S. was that of the Dublin Library; but the Books were given to Oxford, and now make part of the Bodleian.

Biblioth. Bodleian. Cod. M. S. S. Orient. Catalogus, Par. i. Oxon 1787.

F f f 2

Note

## Note XX. p. 97.

The Arabs have three characters for vowels, two of which are exactly fimilar (') their different powers depending solely on their position above or under the letter. B' (Ba) B, (Bi). But in common writing, these points are omitted, and while certain Consonants 1, E, , which answer to A, W, and Y, are used in place of long vowels, the short vowels are supplied by custom.

Though the Natives in reading letters of business, or books on common subjects, can readily supply the vowel points, they are often at a loss where the sense is less obvious; for words of very different meaning being written exactly alike, the sense, and consequently the pronunciation, can only be determined by the connection of the sentence. This, I have observed, frequently occasions them to hesitate in reading passages which they had not before practised; and yet the introduction of vowel points would seem to be of modern date. (Richardson's Grammar, p. 7.)

#### Note XXI. p. 97.

"Al Calam الكلام, est Scientia quâ disquiritur de Essentia Dei & At"tributis ejus, & conditionibus rerum possibilium circa Creationem & restitutionem, juxta Canones Islamismi. Al Phekho الغقد, Scientia de Re"bus Controversis, ac litibus quæ in exteriori hominum conversatione
"oriuntur, juxta Canones Religionis Mahommedicæ dijudicandi." Pocock
(Specimen. p. 198. and p. 204.)

While the companions of Mohammed furvived, the Arabs, engaged in civil diffentions, had no time to spare for scholastic speculations; but after the establishment of the Khalifat in the House of Ommiyah, new doctrines of an abstract nature began to be broached by studious men, and in progress of time a great variety of sects were formed, professing tenets reckoned heterodox by the Sonnites. In the beginning of the second century of the Hegira lived Wasel Ebn Ata who sounded the sect termed Motazelites, and to it is ascribed the introduction of scholastic divinity.

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An epitome of the orthodox Mohammedan doctrines and belief, comprehended in fifty-eight Articles, and drawn up by Nidgiam al Deen Omar al Nasafy, who died at Bagdad in the year 1142, has been translated by M. D'Ohsson, and elucidated by many interesting remarks. (Tableau General, Tom. i. p. 58.) It is this abridgement of Omar al Nasafy, which, as a fundamental book, is taught in the Colleges and Schools of the Ullama.

The reader desirous of information respecting the Mohammedan Sectaries, may consult Pocock (Specimen, p. 204.) or Sale (Preliminary Disc. p. 151.) But he will find a more complete account of them given by Assemani, (Bibliot. Medic. Laurent. p. 251.) who makes the number amount to 117, besides 16 other sects, of modern date, among the Turks.

## Note XXII. p. 98.

The four ancient Moslem doctors, revered as the Fathers of the Mohammedan Law, and the Founders of sects still existing in the Ottoman Dominions, though they differ in the practice of certain external rites of religion, and in their opinions of some points respecting morals, and the administration of government, and Civil Law, are all esteemed orthodox and nearly of equal authority.

Abu Hanifa, the first in point of time, and dignity, was born in the year 699 (Heg. 80.) and died in 767. (Heg. 150.) He was among the first who wrote fully on the doctrine and external rites of the religion of Mohammed, and on the laws founded on Mohammedan principles. He had the advantage of learning the traditions, and Oral Laws of the Prophet from some of his immediate surviving disciples.

It may be remarked that his ritual is in use over the whole Empire, in Public Worship; variation from it, in compliance with the opinions of the other three Imams, being permitted only in private devotion.

The fecond Malec Ebn Anas, the founder of the Malechite fect, died at Medina in advanced age, about the year 795 (Heg. 179.) He wrote on the Oral Laws of the Prophet.

Abu Abdullah Mohammed Ebn Edris Al Shafie, the founder of the Shafiete sect, a native of Palestine, was born in the year 767, and died at Cairo

Cairo about the 819 (Heg. 204.) He is faid to be the first who wrote professedly on Jurisprudence. "Obiit autem Cairi (says Assemani) editis "tribus de Jurisprudentia opusculis, quibus titulus est i. Ossul Al Aslam, "id est, Liber de Fundamentis Moslemanicæ Religionis: quo integrum ferme Mahometanorum Jus Civile & Canonicum complexus est. "ii. Sonam, sive Collectio amplissima Traditionum ad Casus Juris so- lutionum spectantium. iii. Misnad, id est subsidium: ubi Discipulo- rum, seu Sociorum Prophetæ, ac priorum Mahometicæ gentis Antistitum, in variis utriusque Juris quæstionibus consensus, & unanime sus- fragium exprimitur Hujus Sectæ propugnatores, quorum sedes est Egyptus; Malechitarum Sententiis in rebus legalibus, ut plurimum accedunt: "Argumentatio scilicet, seu Rationibus minime utuntur; sed omnia sua "Judicia ex Nasus, id est Anctoritate Doctorum pronunciant." (Biblioth. Med. Laurent. p. 41. and 283.)

The Shafeite Sect was in such high repute, that Saladin permitted no other doctrine to be taught in the magnificent College he founded at Cairo; and the same doctrine (though not exclusively) continues still to be taught at Cairo, as I have been informed by persons educated there.

The fourth great Moslem doctor (and founder of the Hanbalite Sect) Ahmed Ebn Hanbal, was contemporary with Al Shasie, but younger by several years, and lived to a great age. He died at Bagdat, Anno 855, (Heg. 241.) and with so extraordinary a reputation of sanctity, that incredible multitudes are said to have attended his funeral. Pocock (Specimen, p. 26 and 293.) Herbelot (Bibliot. Orientale.) Sale (Prel. Discourse) Assemblies (Bibliot. Med. Laur.) D'Ohsson (Tableau General de L'Empire Othoman, Tom. i. Introduct. p. 4. Paris, 1787.)

The multitude of commentaries, on the Koran and the Sonna; on the decisions of the early Khalifs and Imams; increasing in a course of ages, formed an enormous mass sufficient to deter and embarrass the most determined students in Law. But from this chaos, a celebrated Mulla, in the year 1470, composed a general Code to which he gave the title of Durer, or Pearl; and in the following century, a more complete Code, under the title of Miltika al Abhar (The confluence of Seas) was composed by Sheih Ibrahim of Aleppo, who was educated at Cairo, and died in 1549 at Constantinople, where he held a distinguished rank among the

Ullama.

the

Ullama. It is this Code, now univerfally received in Turkey, of which M. D'Ohsson, with some variation in arrangement, has given a translation, accompanied with many instructive remarks of his own.

In dubious or difficult cases, recourse is had first to the Koran as of primary authority; next to the Sonna; then to decisions of the immediate successors of the Prophet, or sounded on the unaminous consent of the ancient Imams; and lastly, to analogical reasoning, where authorities are not clear. Abu'l Furrage, (vers. Pocock. Specim. p. 26.) Assembliot. Med. Laur. p. 282.)

But in the administration of Law, affistance is also derived from the Fitwas or opinions of eminent Musties, which have been collected by various Authors at different times, since the beginning of the last century, and comprehend such intricate cases as in a more simple state of society, never occurred in the early stages of the Saracen Empire. D'Ohsson, (vol. i. p. 17. Introduct, Sec. viii.)

To conclude this Note, it may be remarked that the distinction between the written Civil Law as administered in the Ecclesiastical Courts, and the Law of Nature, or common Law (if it may be so called) which takes place in the Secular Courts, and has the executive power on its fide, does not exist in Turkey to the extent as described by Chardin in Persia. The Mahkamy at Aleppo, is both a Civil and Ecclefiastic Court, and in its decisions exercises private judgement, where the Law has made no express provision. In ordinary cases it executes its own sentences; but in criminal cases, or where resistance is suspected, the sentence is carried into execution under the Bashaw's direction. The Bashaw, and officers under him take cognizance of certain crimes, and too often usurp more power than belongs to them; but their decisions are, or ought to be regulated, upon the same principles as at the Mahkamy; where they act otherwise, they are liable to reprehension; and ought never to proceed to capital punishment, without the fanction of the Cadi or Musti, in situations where fuch fanction can be procured. In other circumstances the ordinary course of Law being as it were suspended, the Bashaw, as a Military Officer, acts in a fummary manner: but fuch inftances do not conftitute a difference between Ecclesiastic and Civil Courts, nor is the usurpation, or tyranny of a Bashaw (though actually practised) to be reckoned a part of

the Constitution of the Government. (See Chardin (vol. iii. p. 404.) Sale (Prelim. Disc. p. 141.) and (vol. i. p. 317.)

By a mistake of the Printer, Note XXII. has been again inserted, instead of XXIII. in page 105.

# Note XXIII. p. 99.

Doctor Friend afferts that, the Arabs made very little improvement in Astronomy. "It is true (says he) Ptolomey's Almagist was translated, though few or no new observations were added by them; whose boasted knowledge seems to resemble that of the ancient Chaldeans, very famous indeed in the Oriental Histories for their exact observations of Eclypses, and the course of the Planets; but yet it does not appear that they made any such progress in that science, as the Greek Astronomers did after."

"Only the tables of the famous Chaliph Ulugh Begh are prefervede which exhibit a lift of 1017 fixed Stars: but how far fhort does this come of our modern observations, especially those of the late Mr. Flamstead where we find he reckons up near 3000." (History of Physic, vol. ii. p. 21. Lond. 1750.)

Ulugh Begh is here, inadvertently termed one of the Khalifs; but he was the grandfon of Tamerlane, and was put to death in the year 1449. The Khalifat had been abolished by Huluka in the year 1258. The obfervations were made at Samarkand. Assemmani (Bibliot. Medic. Laurent. & Palat. p. 390.)

By a fimilar mistake to that in the XXII. Note, XXIII. has been inferted a second time in page 107.

# Note XXII.\*\* p. 105.

The following explanation of the word Simia is given by Casiri; and he justly observes that the practitioners of the art are chiefly Barbariscans, or Egyptians.

"Simia vox est Arabica a verbis سامة سها وسم سهة اسم سه quæ quidem vocabula latinè sonant nomen, conjecturam, signum, notam, "Auri vel Argenti venas, Cœlestia, descriptionem Physiognomicam, vari-

" um

" um hujus nugacissimæ Artis usum indicantia: unde liquet Simiæ voca" bulum artem Chymicam aliquando innuere; licet frequentius sutilem
divinandi Artem quæ Chiromantia vocatur." (Bibliot. Arabico-hisp.

Tom. i. p. 378.)

# Note XXIII.\*\* p. 107.

That the Arabs afcribe the invention of Algebra to Diophantus, appears from the following extract from the Arab Literary History of Philosophers.

"Diophantus Alexandrinus, egregius ac celebris ætate sua scriptor Græcus, laudatissimum librum de Arte Algebrica edidit, qui & Arabice conversus est: adeo ut quotquot de Algebra scripsere, illius sundamen-

"tis inftiterint." (Bib. Arabo-hisp. Tom. i. p. 370.)

"Illud tamen certissimum est (says Casiri) Algebræ Specimen quod "Diophantus posteris adumbratum reliquit, Arabas deinde non parum

" illustrasse, multa nova ac ingeniosa de suo addidisse, primum denique in

" ceteras nationes illius usum importasse. Itaque omnium princeps, teste

"Cazuinæo, Algebræ Artem Mahometanis tradidit Mohamad Ben Musa

"Khuarezmita, Mathematicus vel apud Latinos celeberrimus, cujus me-

"minit Cardanus De Subtilitate Lib. xiv. eum Algebræ Instauratorem

"appellans." (Biblioth. Arabo-hisp. Tom. i. p. 371.)

Eben Musa flourished under Al Mamûn, and among the works ascribed to him in the History of Philosophers, is one on Algebra مناب الجبال Kitab al Gibr wa Almkablah. (M. S. Hist. Philos. p. 431. 433. 83.) Casiri (Bibliot. Arabo-hispana. Tom. i. p. 433. 393.)

## Note XXIV. p. 110.

The following citations confirm what has been faid in the text.

" Nullum itaque fæculum, ex quo literis uti didicerunt Arabes, nullus

" paulo cultior populus Muhammedanus, caret fuis historicis, non funt

" quidem cum veterum Græcorum & Latinorum immortalibus monumen-

"tis, aut cum nostratium elegantia comparandi, neque suos Annales ad eas leges accommodarunt, quas nos condendis perfectis historiis scribi-

"mus: sunt tamen, quum sidas rerum gestarum narrationes præstent,

"haud minore in pretio habendi, quam Latini nostri medii ævi Chronistæ, Vol. II. Ggg "dictionis

dictionis quidem asperitate horridi, omnique ingenii cultu destituti, re-

4 rum tamen auctores scitu dignissimarum utillissimarumque.

"Falluntur qui Abulfedam historiarum Arabicarum summum aucto-"rem, & fontem uberrimum existimant. Non est nisi Breviator, quales

" ad Livium & Tacitum, Florus atque Eutropius funt; laudemque mere-

" tur quod opus suum tam vero, quam modesto, titulo Mochtasar ol Ach-

" bari fi Ahwali 'l Baschari, seu Compendiosa Expositio rerum, quæ homi-

" bus contigere, inscripfit.

"Est Abulseda similis ævo suo, quo nemo erat qui quidem aliquo lite-"rarum colore sibi videretur imbutus, quin Chronicon conderet. Quo-

" rum librorum illa est indoles ut res inter homines gestas ab exordio re-

" rum ad Auctoris cujusque ætatem narrando deducant. Quo exiliores

" circa initia, eo pleniores in postremis sunt, ubi Auctores, ad suas patrum-

" que memorias devenere.

"Non apud folum Abulfedam, fed apud omnes Arabicos scriptores res "Arabum Muhammede vetustiores profunda nocte sepultæ jacent, turba-

" tis aut nullis, temporum notis." Reiske (Pref. ad Ann. Moslem, p. 13.

· 8. &c.)

These passages contain the sentiments of a person every way qualified to judge of the subject, and, in portraying the character of one writer, he has introduced just strictures, and instructive observations on that of the Arabian Historical writers in general. The reader will find much useful information respecting Oriental History, in the above Presace, as also in the same Author's Prodidagmata ad historiam & geographiam orientalem, annexed to the Tabula Syriæ by Koehler.

## Note XXV. p. 110.

Of the Geographical Authors I recollect feeing in the East, are the following.

Abulfeda, Kitab Takweem Al Beldan كتاب تغويم البلدان Ebn Al Wardy, Kitab Al ajaib wa Al Riraib كتاب العجايب والغرايب Al Cazuini, Kitab Ajiaib Al Beldan كتاب عجايب البلدان

I do not remember to have feen the Nubian Geography at Aleppo, but as I did not enquire particularly for books on that subject, it, as well as many others, may possibly be found there. With respect to this work.

Nizha

Nizhat Al Mishtak زهة الهناق (Cod. 110. Bib. Med. Laur. &c.) published at Paris under the title of Geographia Nubiensis, there seems no doubt of its being a compend of a larger work, ascribed to Sherif al Edrisi, though the Maronite Translators, with Assembly and others, were of a different opinion. See what is urged by Casiri, (Bibliot. hispan-Arabica, Tom. ii. p. 10. (Geograph. Nubiensis, Par. 1619. Prefat.)

#### Note XXVI. p. 112.

The art of writing, if not invented, was brought to a certain degree of perfection among the Arabs, a little before the time of Mohammed.

Illud de cujus veritate minime ambigitur apud eruditos (fays Ebn Chalican) "est primum Scripturæ Arabicæ repertorem suisse Moramerum "filium Morræ Anbariensem; ab Anbariensibus in reliquam Arabiam "manasse hanc Artem."—hoc autem (says Pocock) "non multis ante "Mohammedanismi ortum annis contigisse." Pocock (Specim. p. 153. 158.)

In a M. S. in the Escurial Catalogue, (Cod 501.) two other persons are joined with Moramer as inventors of the Cuphic character. Aslm Ebn Sadra, and Aamer Ebn Gidra.

"Hæc ergo lingua, quemadmodum plures Dialectos, ita et diversam "Literarum formam, temporis progressu sortita est. Omnium autem prima & antiquissima Homairitana censetur, a memorato Rege Ho- mairo reperta, quæ sane ab ea qua Arabes ante Mahometi tempora & nunc utuntur, longe diversa est. Id Scripturæ genus Homairitanus Ca- lamus appellatur, litteris constans mutilis, impersectis ac inter se implexis, litterarum Samaritanarum formam quodammodo præ se ferentibus: quod quidem vel ipso Mahometi ævo jam pene exo- letum, ita successu temporis ex hominum memoria excidit, ut inscripti- onem quandam ejusmodi litteris exaratam, Samarcandæ primis Egiræ "Annis repertam, qui legere posset inventus sit nemo." Casiri (Bibliot. Arabo-hispan. Tom. ii. p. 25.)

It is justly remarked by Pocock that the art of writing as improved by Moramer must have long remained confined within very narrow bounds. "Quam arctis apud Arabes conclusum limitibus diu manserit nobile hoc "Morameri inventum patet ex eo quod refert Ebn Chalican, scilicet, "cum jam evulgari cæpissit Alcoranus, non repertum suisse in universa G g g 2 "regione

" regione Yaman, qui Arabicè scribendi vel legendi peritus esset." Pocock (Specimen, p. 155. 158.)

# Note XXVII. p. 113.

There are several copies of the Moallakat together with commentaries upon them, mentioned in the Escurial Catalogue, particularly Cod. 299. where Casiri takes an opportunity of correcting a mistake of Pocock, who had been led to assert that the ancient Arabs had no Poems containing more than a few verses. He likewise charges the elder Assemani with an error in asserting, (in the Biblioth. Orient.) "neque enim ulla possent "proferre Literarum monumentis consignata tabularia ante Mahometi "atatim, præter septem Poetarum Arabum Carmina, quæ ipsi Moallacat vocant. Et hæc quidem Carmina etsi magni siant apud Arabes, nihil "tamen continent, quod ejus gentis historiam vel genialogiam illustrare queat." Casiri (Bibliot. Arabo-hispan. Tom. i. p. 71.)

But the claffical reader will find a more pleafing and concife account of those celebrated Poems, in the Commentarii Poeseos Asiaticæ, than is to be expected among the Grammarians; as also select specimens of the various kinds of Arabic Poems, &c. compared with analogous passages from the Poets of Greece, and other countries. (Poes. Asiat. Comment. p. 83.)

The Escurial Catalogue alone contains above two hundred and twenty volumes of poetical M. S. S., amongst which Cod. 309, 311, and 335, seem to promise curious matter on the Art of Poetry. Casiri subjoins a short essay on the subject, of the merit of which I am no judge. (Tom. i. p. 85.)

M. Renaudot on this head is equally fevere, as on other subjects of Arabian Literature. After remarking that Poets were received with distinguished favour at the Court of Saif al Doula, a Prince of the Hamadan family, he adds, "Poetarum autem nomine Arabas Persasque intelligimus, nihil sane minus quam Poetas, sed versuum artifices: neque enim Poeticæ Artis proprie dictæ, gustus ullus unquam suit." (Histor. Patriarch Alexand. p. 345.)

# Note XXVIII. p. 119.

M. Renaudot in a Letter to M. Dacier, published by Fabricius (Bibliot. Græc. Tom. i. p. 861.) gives an account of the Arabic translations of the Greek

Greek Authors, and offers it as his decided opinion that they can be of no material fervice in correcting the Greek text. He confiders the notion of those versions being made immediately from the original Greek, as a vulgar error; and contends that the Syriac being the common language at Bagdad as well as in some Greek towns, the first translators who were Christians, and better acquainted with the Syriac than the Arabic, would naturally translate into the language the most familiar to them. (Epist. p. 863. Hist. Patriarch. Alexandrin. p. 271.)

It is generally allowed that Hippocrates as well as some other Greek Authors had been translated into Syriac, by Sergius, as early as the time of Justinian; and other Syriac translations from the Greek, are mentioned by Abu'l Furrage, in the Chronicum Syriacum. (Bibliot. Orient. Assemantom. ii. p. 315.) M. Renaudot not only conceives that those versions were the first known to the Arabs, but that most part of the Arabic versions made in the interval between the Khalisats of Al Mansur and Al Motawakkel, that is from the year 754 to 847, were made from Syriac translations, not from the original Greek: whence (he says) the translations of Honain, (who died in 881,) who was equally skilled in Greek and Arabic, justly claim a preference to those of all his predecessors.

But much of M. Renaudot's reasoning is purely hypothetical, while the fact he assumes is inconsistent with the Arabic History.

This has properly been remarked by the learned Casiri, who supports a contrary opinion by the authorities of Graves and Pocock, and, after referring to Abu'l Furrage, he draws the following conclusion. "Unde plane

- "Iquet Scriptorum Græcorum Versiones Arabicas non ex Syriacis, ut
- " comminiscitur Renaudotus, sed ex ipsis Græcis fontibus opera quidem
- " virorum utriusque Linguæ peritorum profluxisse. Ad Arabicas autem
- "Hippocratis translationes quod attinet, nihil equidem videre me in illis
- " fateor, quod reprehendi possit; sive interpretis sidem ac religionem, sive
- " peritiam atque eruditionem spectis. Siquidem negari hujusmodi ver-
- " fiones iis temporibus factus, quibus Lingua græca in Oriente adhuc eru-
- " ditorum erat quasi vernacula, quibus vetutissima & archetypis propiora
- " fcriptorum examplaria adhuc extabunt."

He adds, respecting the merit of Honain's translations. "De sua vero

- "interpretandi ratione ipse in Prologo quem Septem Aphorismorum
- "Libris & Galeni Commentariis præfixit, ea religione in vertendis Græ-
- " corum scriptis se gessisse ait, ut nihil temere in textu Mutare, nihil ad-

" dere

"dere ausus sit. Subjungit præterea se in obscuris ambiguisque lectioni"bus plura græca exemplaria, nec non eruditos viros consuluisse." (Bib. Arabo-hisp. Tom. i. p. 238.)

The Arab medical writers are not alone the objects of Renaudot's reprehension, he treats their historians with equal severity; in that, as in many other respects, differing materially from other learned Orientalists, as remarked by Coehler, in his preface to the Tabula Syriæ.

But however the learned in Oriental literature may differ from Renaudot in his opinion concerning the Arabic translations from the Greek, they all agree that most of the early Latin translations from the Arabic are extremely inaccurate and barbarous. Casiri, speaking of the translations of Rhazis, makes the following remark. " Ceterùm Latinæ, quæ vulgò "circunferuntur Rasis operum interpretationes, adeo barbaræ ac insulsæ " funt, ut nec Rasis dictionum nec stylum sapiant, nec sententiam quidem " exprimere aliquando videantur. Illas enim ego, quoties cum Arabicis " Architypis conferre libuit, non ex Rasi, sed ex alio prorsus auctore factas " omnino censui. Idem de Antiquis Latinis Translationibus ex Arabum " Philosophorum ac Medicorum Scriptis confectis eodem jure pronuncian-" dum: quas Perversiones potius, quam versiones merito dixeris." (Bibliot. Arabo-hispan. Tom. i. p. 266.) A just account of the Latin translations from the Arabic, is given by Renaudot, (Fabricius Bibliot. Græc. Tom. i. p. 861. & Hist. Patriarch. Alexand. p. 274.) "Such (says he) " was the ignorance or careleffness of those translators, that one who takes " the trouble of comparing the Latin version of Avicenna with the Ori-" ginal would hardly know it to be a translation of the Arabic text."

The learned Reiske, talking of the judgment passed by Friend on Oseibah's History of Physicians, regrets that the Doctor had not by an acquaintance with the Arabic, been enabled to form a more just opinion of the merit of the book, than could be done from the translation of Solamon Negri; who, though versed in vulgar Arabic, was in other respects poorly qualified for a translator.

"Mirum itaque non est, si frigida nonnunquam & obscura evasit versio "illa Vitæ Gabrielis silii Bachtischuæ (seu servi Jesu) & palato Freindii "se non approbavit, quin potius eum irritavit adeo, ut auctorem, nescio quo jure aut quid sibi volens, enthusiasticum appellarit. Ego vero licet sciam Arabes, etiam sapientissimas, longe plurimos esse enthusiastas & tumultuarios, & rhapsodos, & plagiarios, dico quod res est, hunc tamen "Aba

" Aba Oseibah non deprehendi, παραπληγα (in illis certe locis quos Frein-

"dius inspexit) licet plus quam duos libri trientes perlegerim, & partem

" sane non exiguam exscripserim. Et spero sore ut Eruditus orbis eum

" enthusiasmi crimine absolvat, quando, volente deo, mea opera latine

" olim leget quæ inde mihi comparavi excerpta."

I have transcribed the above passage which I met with accidentally in Reiske's Inaugurale Thesis published at Leiden in 1746, but I have not learned whether the work alluded to by him was ever published. He gives a Prospectus of the History of Physicians which contains sisteen chapters, and his favorable account of the work may perhaps contribute to rescue Abu Oseibah from oblivion.

## Note XXIX. p. 119.

The marriage of the Emperor Aurelian's daughter to Sapor King of Persia, is not mentioned by the Roman or Greek Historins but stands thus recorded by Abu'l Furrage. "Aurelianus, pacem iniit cum Sapore "Persarum Rege, eique siliam suam nuptum dedit, cui extruxit Sapores "in Perside Urbem Byzantio similem, quam Jondisabur (جندي سابور) "appellavit. Misit autem Aurelianus qui inservirent siliæ suæ, Medicos 'Græcos quosdam (جماعة من الاطبا) atque illi Medicinam Hippocraticam in Oriente docuerunt." (وهم بتوالطب) (Hist. Dynast. p. 82.) and M. S. Hist. Philosoph. p. 304.)

Persia from that period till it's introduction among the Saracens, "and "hence (says he) perhaps it is, that most of the celebrated Professors in "Physic among the Arabians, as Rhazes, Haly Abbas, and Avicenna, "were educated, in these more Eastern parts of Asia." (History of Physic. vol. ii. p. 10.) There is a geographical mistake, in making Jondisabur the Capital of Chorasan. The Capital of that Province was Nisabor; but Jondisabur was situated in a different Province, about six parasangs distant from the ancient Susa, in the Province named Chozistan. The words are written so much alike, in the Province named Chozistan. The words are written so much alike, in the Province named Chozistan. Golius (Notæ in Alfergan, p. 165. 188. 115. 118.)

Note

## Note XXX. p. 120.

Finding that the proposed abstract account of the Arabian Medical writers, would greatly exceed the limits of a Note, it is reserved for the Appendix to this Volume.

## Note XXXI. p. 146.

It is remarked by Assemani that Bochart always cites Damiri not under his proper name, but under that of his country: Herbelot however is guilty of the same impropriety.

According to one of the Bodleian M. S. (Pocock. Cod. 71.) this writer's title at length is Kemal al Deen Abu'l baka, Mohammed ebn Mousa ebn Aisa al Demiry al Shaphy.

The title of his work is Heywat al Heywan حيوة الحيوان

Assemani gives the following account of the Florentine Codex. Historia Animalium, Arabica, Ordine Alphabetico disposita, ubi multa de eorum nominibus, natura, proprietatibus, qualitate, virtute, natale loco, & educatione referuntur; nec non Proverbia Arabum ab illis desumpta, susuas explicantur. Summam huic operi manum imposuit Anno Hegiræ 773. (Ch. 1371.) Obiit vero Anno Heg. 808. (Ch. 1405.)

Codex in 4 Maximo Bombycinus, luce dignus, constant paginis 369. Arabicis literis, & Sermone nitidissime exaratus.

Assemani further remarks, "Non tamen est Historia proprie dicta "Naturalis Animalium, quam Florilegium ex diversis Auctoribus, qui de "Animalibus etiam in locis peregrinis, & aliud agentes, & Stylum exerc-" entes locuti sunt." Herbelot, agreeing likewise in this remark, observes with respect to the work, that several errors sound in it, have been corrected by Ahmed al Ascasbi. Assemani (Bib. Medic. Laur. & Palat. Catalog. Cod. 182.) Herbelot (p. 290.)

Another Arab writer often cited by Bochart, but about a century anterior to Damiri, is Alkazuinius, whose proper name is Zacharia Eben Mohammed eben Mahmud al Kaswiny. He died at Casbin, Ann. Heg. 674. (Ch. 1275.)

The

The title of his work is Ajaib al Makhlukat. (Herbelot, p. 69.)

Bochart mentions a third writer whom he had occasion to consult, but whom I do not find either in Herbelot, Assemani, or the Escurial Catalogue. "Abu'l Sapha De Animalibus. Liber ingeniosissimus, a me etiam "Holmiæ lectus, sed ex Arabica lingua in Hebraicam a Calonymo transla-"tus Anno Ch. 1316." (Hierozoicon Pres. prope sinem, Lond. 1663.) Several Authors are mentioned in the Escurial Catalogue, (vol. i. p. 318.) who have written on Natural History.

# Note XXXII. p. 146.

The Buffalo, according to M. Buffon, was unknown to the Greeks and Romans, and was not brought into Italy till towards the feventeeth century.

In treating of the Buffalo, he takes an opportunity of clearing the History of the Ox in it's savage state, of many difficulties arising from the names given by ancient writers to the varieties of this species, which they described as so many different animals. The Bubalus of the Greeks, which has sometimes been consounded with the Buffalo, he shows to be a very different animal. (Tom. xii. p. 294.) referring to an excellent figure given in the Memoires pour servir a l'Histoire des Animaux, (Part ii. p. 24.)

For several curious circumstances relative to the Buffalo vide Tom. xi. p. 330. The figure however given by M. Buffon, is less like the Syrian Buffalo than those of Jonston and Kolbe, although he thought it necessary to add in a Note. "Je ne cite ici Jonston & Kolbe qu'a cause de figures "q'ils ont données du Buffle, qui sont moins mauvaise que celles des autres "Auteurs."

A circumstance relative to milking the Buffalo, is remarked by Niebuhr, which I have not had occasion to observe either at Aleppo or Scanderoon. (Descrip. d'Arab. p. 146.) The seeming aversion to the colour red, is observed likewise in some Bulls. Near Aleppo, where the Buffalo is hard worked, it is unobservant and placid enough; but in the plains of Scanderoon, where they are kept chiefly on account of their milk and are very numerous, they are more rampant and mischievous, often running after persons who approach too near. The Kurdeens are sometimes clothed in red; but I have been told by them that the Buffaloes, though not always, are at certain seasons offended more particularly at that colour. Shaw has observed the same circumstance. (Travels, p. 417.)

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The last named Author thinks the Thau, none of the clean beasts of Moses, and translated Oque, Bubalus, &c. (Deut. xiv. 5.) to have been the Buffalo. (Shaw, p. 417.) Bochart agrees in the first notion, but does not think the Oryx was the Buffalo. The curious reader may consult these Authors, as likewise Schulten's commentary on Job. Bochart cites Damiri as afferting that the Buffalo slesh, when eaten, breeds Lice. But neither on that nor on any other account, is it held unclean by the Arabs; the slesh (like beef) is seldom eaten, but it has nothing disagreeable either in the look or taste, and the Buffalo milk is in high esteem in Syria. See Michaelis, (Recueil de Questions.)

## Note XXXIII. p. 159.

The learned Michaelis, though inclined to adopt the opinion of Bochart that the Rabbit is not the Saphan of the Scripture, yet does not think the question hitherto determined. To the opinion that the Saphan is the Jerbua of the Arabs he thinks the principal objection is that made by Shaw, namely, that the Jerbua is found to burrow in a stiff loamy earth, or else, where their haunts usually are, in the loose sand of the Sahara; but never among the rocks, which are the places indicated, (Psalm civ. 18. Prov. xxx. 26.) and for which reason Shaw conceived the Saphan to be another animal, viz. the Daman Israel that he saw in Mount Lebanon, where it is common as well as in other places of Syria. This animal, he says has the hinder legs nearly as long in proportion as the Jerbua, referring at the same time to the sigure of the Cuniculus Americanus in Seba's Thesaurus, as being very like the Daman. But it may be remarked that the Cuniculus Americanus is represented with hinder legs not remarkably long, and with short ears.

(Recueil de Quest. p. 92.) Hierozoicon, vol. i. p. 1002. (Shaw Trav. p. 348.) Seba. (Tab. xli. f. 2.)

#### Note XXXIV. p. 160.

M. Buffon, on the subject of the Porcupine darting his quills, makes the following remark. "Le merveilleux qui n'est que le faux qui fait "plaisir à croire, augment & croît à mesure qu'il passe par un plus grand "nombre des têtes; la verite perd au contraire en faisant la même route "& mal-

- \* & malgre la negation positive que je vien de graver au bas de ces deux
- " faits, Je suis persuadé qu'on ecrira encore mille sois apres moi comme
- " l'on l'a fait mille fois auparavant, que Le Porc-épic darde ses piquans
- " & que ces piquans séparés de l'animal, entre d'eûx mêmes dans les corps
- " oû leur pointe est engagée." (Hist. Nat. xii. p. 406.)

But positive as he is in this matter, other Naturalists differ in opinion, and think a fact so often afferted to be not altogether without foundation.

- "Ceux de picquans qui estoient les plus forts, & les plus courts estoient
- " aisez a arracher de la peau n'y estant pas attacher firmement comme les
- autres: aussi sont ceux que ces Animaux ont accustomé de lancer
- " contre les Chasseurs, en secouant leur peau comme font les Chiens quand
- " ils fortent de l'eau." (Memoir. pour Servir a l'Hist. Nat. p. 114.)

In the sixth volume of Memoires of the Missions into the Levant, a Jesuit speaking of certain Grottoes which he visited at some distance from their settlement of Antaura, says, "au reste, il ne saut pas s'approcher de "trop prés de ces Grottes, si on ne veut pas être assailli tout à coup d'une multitude de petits dards, que des Porc-épics vous lancent de toutes

'46 parts." (Tom. vi. p. 130.)

M. Buffon doubts also of two circumstances reported of the Hedge-hog.

- Je ne crois pas qu'ils montent sur les arbres, comme les disent les Na-
- " turalistes, ni qu'ils se servent de leur Epines pour emporter de fruits ou
- " de grain de raisin." (Hist. Nat. vol. viii. p. 30.)

I have never feen them on trees, but I have certainly feen them tranfporting Grapes on their prickles, as likewife Mulberries. (Vide Ælian, 1. iii. c. 10.)

#### Note XXXV. p. 162.

Having met with nothing more on the internal structure of the Jerbua, than what is given from Gmelin by M. Buffon, (Hist. Nat. Tom. xiii.) I applied to my worthy friend Mr. John Hunter, who very obligingly favoured me with the following circumstances from his Adversaria, by way of suppliment. He was not certain whether the animal he diffected was from Asia or Africa.

"The Meatus Auditorius was large like that of a bird. The Tympanum was also large. There are two Venæ Cavæ superiores. The Cæcum was four inches in length; it makes a close turn upon itself, and gradu-

Hhh2

ally diminishing in size, terminates in an obtuse point. The Colon which is large at it's beginning, passes sirst upwards upon the right side, and before crossing the Abdomen on the left, makes a little fold upon itself; it then crosses the spine, and making another fold shorter than the former, it passes the left side and commences Rectum.

The lower part of the Abdomen lies upon the anterior part of the Pubes, and the bend of the Penis is seen within the cavity of the Abdomen, making a little projection, as it were, between the origin of the two Musculi Recti. The Penis in a flaccid state lies reverted upon itself, but when in erection has a bone on each side of the part projecting, in the same manner as a Guinea Pig. The Prepuce is furnished with a number of glands which secrete a thick Mucus. The Testicles are situated on each side of the Symphysis, and can occasionally lye in the rings of the Abdominal Muscles (which are very large) but can never descend much surther, there being no Scrotum for their reception. The Vesiculæ Seminales are two long bags which make a turn upon themselves. The Anus is bent downwards towards the parts of generation."

# Note XXXVI. p. 162.

The Alagtaga which M. Buffon describes from Gmelin, and of which there is a figure (Nov. Comm. Acad. Petrop. v. Tab. xi. Fig. 1.) is larger in its dimensions, but otherwise resembles the Jerbua. M. Buffon describes it as having but one spur, and one only is visible in the figure.

Authors differ remarkably respecting the number of toes of the Jerbua. Shaw says it has four on each hinder foot; Bruce gives it four also, besides a fifth small one behind the heel. Pennant gives it three, the number I always found. Shaw and Bruce give three toes only to the fore leg; Pennant gives sive; and I never found more than four.

" Je suis tres porté à croire (says M. Bufson) que cette différence n'est pas constant....ainsi ce caractère qûi paroitroit distinguer spécifiquement le Gerbo & l'Alagtago n'estant pas constant, devient nul & marque plûtot l'identeté que le diversité d'espece." (Hist. Nat. xiii. p. 145.)

Being however persuaded that the spurs are constantly sound in the Aleppo Jerbua, I am inclined to think they constitute a marked variety, distinct from the African Jerbua.

In

In regard to the variation in the number of toes, judging from Mr. Bruce's Figure, which I conceive to be accurate, I suspect a transposition in the text, from an error in transcribing.

#### Note XXXVII. p. 165.

Bochart has collected a number of passages from the Greek and Arab writers in order to show that the Jerbua is the same animal with the διπες, χοιρογρυλλιυς, and αρκίομῦς of the Greeks. "Murem illum qui "Arabice vocatur Al Jerbua eundem esse cum Herodoti, Aristotelis, Theo-"phrasti, Plinii, Æliani & Photii mure, qui pedum posteriorum longitu-"dine et saltu insignis est.... denique Al Jerbuo idem est Animal cum He-"bræorum Saphan." (Hierozoicon. vol. i. p. 1017.)

M. Michaelis in the note above referred to, mentions some doubts of this being the Saphan of the Scripture. The following circumstances are in answer to some of the queries of that learned man. The Jerbua often makes that motion of it's mouth which is observed in Hares and Rabbits; but the teeth in both jaws show that it does not ruminate.—It never, so far as I could observe, makes use of it's tail to suspend itself like the Squirrel, but the tail is of great service in supporting it as it sits, as well as in other respects.—I make no doubt that it's teeth are sufficiently sharp to make an impression on the soft chalky stone, or even the common stone of Aleppo; but I never saw it attempt it.—The story of it's placing sentinels, and punishing them for neglect of duty, is told and believed by the Bidoweens.—I had no opportunity of learning any thing with certainty relative to their laying up stock for the Winter. The Corn fields near Aleppo are much insested by another kind of Rat very different from the Jerbua.

But it may be remarked in answer to Michaelis (Quest. xcii. 13.) that there is no contradiction between Pliny and Hasselquist; for when the former speaks of the rough, harsh skins of the Egyptian Rats, the Jerbua is certainly not included: as will appear by consulting the original passage in Aristotle, which Pliny has only translated, and the account given by Herodotus of the three species of African Mice. Aristotle (Hist. Animal. lib. vi. 39. Ed. Is. Casaubon. Lugd. 1590.) (Scaliger. Comment. p. 788.) Herodotus, (Melpomene, Beloe's Trans. vol. ii. p. 352. Lond. 1791.)

The manner of catching the Jerbua is described by Paul Lucas, in his first

first voyage (Voyage dans la Grece, Asie mineure, la Macedone et l'Afrique. (Tom. ii. p. 73. Paris, 1712.)

## Note XXXVIII. p. 168.

In the year 1751, a gentleman of the name of Carmichael passed through Aleppo in his way to Bassora, and in gratitude for the civilities he had received from Mr. Consul Drummond and the gentlemen of the sactory, transmitted to them, in a letter dated the 5th of September 1753, from the city of Budge, a copy of the Diary of his journey over the Defert. Mr. Carmichael was unluckily destitute of books, and, except a compass, unprovided with instruments; but necessity sharpening invention, his ingenuity enabled him, under every disadvantage, to produce a Geographical Journal, in some respects perhaps more curious and accurate than had ever been attempted before.

Introductory to the journal, he fully explains his mode of operation in regard to difference of Latitude and Longitude, course and reckoning. But the only part that concerns the present Note, is the following extract relative to the rate of the Camel's march.

#### Hrs. Paces

2212 1st. Having no instruments to take the Meridian altitude of 2086 the Sun thereby to fix the Latitude, and correct the course and 2174 distance daily by observation, I was forced to devise other means of computing the rate of our march, and in order thereunto, I 2382 counted how often my Camel lifted his right foot in the space of 2194 one full hour, and found by my watch that he made exactly two 2178 thousand two hundred and twelve paces or steps. "But confidering that the Camels fed as they went along, 2186 which by retarding the march, might occasion a variation in the 2134 equality of space traversed in equal time; I therefore numbered 2134 the paces of my Camel for twenty full hours in the course of the voyage, at times when I thought there was the greatest irregu-2170 larity in his march, and found them as specified in the margin. 2266 The fum total 44,004 paces, being divided by 20, the number of hours, gives 2200 paces for his mean march: and feeing the 20 44004 greater part of the road is quite level, and that the Camels advance in a straight course, seldom turning to either side, I think I may admit 2200 paces to be nearly the true number that my beast made one hour with another during the journey.

2nd. When I could plainly perceive the impression of the Camel's feet upon the sand, I measured some hundred of his steps with pack-thread and found they were usually about five feet and a half in length; but if ten or a hundred of them were measured on a straight line together, I found the medium length to be only five feet, four inches. No doubt some of the larger fort of Camels have a longer step, but as I make my calculation by my own beast, which is small, I do not much regard the march of the others.

The result of his calculation was, that the distance between Aleppo and Bassora by the road the Caravan took was about 720 miles, and they were exactly 324 hours, 5 minutes on the march.

Mr. Carmichael's journal was published some years ago in an Appendix to a second Edition of Mr. Grose's voyage to the East Indies. But the introductory part, and the calculations are totally omitted, and upon a slight collation with the copy from whence I have given the above extract, I find several passages either omitted or abridged, besides some errors in names of places, &c. which might possibly have arisen from blunders in the copy the printed journal was taken from.

Respecting the rate of the Camel's travelling, I can with great satisfaction refer to a Memoir of my most ingenious friend Major Rennel, communicated to the Royal Society. (Transact. vol. lxxx. Part. ii.)

## Note XXXIX. p. 169.

The peculiar mode of the Camel's walk, though described by Aristotle, has been remarked by few of the early, or of the modern travellers: of those I have perused, I only recollect Cantacuzene who has taken notice of it.

Finding Aristotle's description variously understood by several gentlemen whom I consulted on the occasion, I have transcribed the original passage; with a translation, for which I have been obliged to a friend.

Αι δε κινήσεις, των ζώων, των μεν τετραπόδων και πολυπόδων, κατα διαμέτρον εισι, κὶ ες ασιν έτως. Κατα σκέλος δε Βαδίζεσιν ό τε λέων, κὶ αι καμηλοι αμφότεραι αι τε Βακτριαναι κὶ αι αράδιαι. το δε κατα ςκέλος εςίν, δτε ε προδάινει τω αριςερω το δεξιον, 'αλλ' επακολεθεί. (Hist. de Animalib. lib. ii. p. 156. Jul. Cæs. Scaliger.

Scaliger. Interpret. Tolos. 1619.) (Isaac Casaubon. Edit. p. 480. Lugdun. 1590.)

- "The motions, (or steps) of animals in general, both Quadrupeds and Polypeds, are made in the line of their diagonal; (that is, in the direc-
- "tion of their two opposite quarters) and in this position they stand.
- "The Lion, and the two Camels, the Bactrian and Arabian, in contradif-
- "tinction to other Quadrupeds, do not perform their steps in the line of
- "the diagonal, but in the line of the legs, or fides, (that is, in the direc-
- "tion of the two contiguous quarters of the right and left.) I call
- moving in the line of the fides, when the legs on the right fide do not
- " advance together with those of the left, but follow them."

The translator's remarks or Scholium.

- "Aristotle does not say the motion of animals, but their motions; be-
- "cause their movement is not continuous but by steps. We are therefore
- " to consider what he says respecting their successive steps."
  - "(The motions of animals in general.) By the words "in general" I
- "have expressed the force of the particle  $\mu \in \nu$ , which indicates that what
- " is here faid of Quadrupeds and Polypeds, stands in opposition to some-
- " thing which follows. We foon find that fomething, κατά ςκέλος δε, &c.
- " where the steps of the Lion and Camels are contrasted with those of other
- " Quadrupeds."
- " In the line of the diagonal, or diameter) The Greek mathematicians
- 46 and mechanicians apply the word diameter to rectilinear as well as cur-
- " vilinear figures. See Aristotle (Problem. xv. and Mechanical Questions
- **"** paffim.")
  - "(In the line of the diameter, and in the line of the fides) This is
- " the proper sense of the preposition κατα, coming after a verb of motion,
- 4 and governing the accusative. In this sense it is continually used by the
- "Greek Geometers, and by Aristotle in his physical works: where the
- " primary and specific meanings of all the Greek particles will be found."

In fact, the Camel in his ordinary walk, moves his legs exactly as described by Aristotle; and when he accelerates his pace, it is in the same manner as a horse ambles: though, to the rider, ten times more jolting than the hardest trot of a horse. I do not recollect having ever seen the Camels gallop: but, by Olearius they are represented (at least one species) both as galloping and trotting. (Ambassador's Travels into Muscovy Tartary, and Persia, p. 307. London, 1662.)

Another.

Another circumstance respecting the Camel, mentioned in the text, (p. 167.) is his remaining so long without drinking; and which has usually been ascribed to some peculiarity in the structure of the stomach different from other ruminating animals.

"Il y a dans le Chameau, indépendamment des quatre Estomacs qui se trouvent d'ordinaire dans les Animaux ruminans, un cinquième poche qui lui sert de réservoir pour conserver de l'eau... elle y séjourne sans se se corrompre, & sans que les autres alimens puissent s'y mêler." Busson (Hist. Nat. xi. p. 227.)

I shall refer to M. Daubenton for the anatomical description of the parts on which M. Buffon's opinion is founded, without entering into a discussion of the propriety of reckoning what he terms the reservoir a distinct stomach from the Bonnet, (honey-comb) in other Ruminants, and thus increasing the number of stomachs to five, contrary to the universal opinion of forme rnaturalists. It will be sufficient to remark here, that he describes a peculiarity in the internal structure of the cells, and actually found a considerable quantity of water contained in them; though the animal had been dead ten days, and was brought from a distance of sifty leagues. The water, which was clear, almost insipid, and drinkable, issued from the cells upon compression, but re-entering on change of position of the Viscus it disappeared again. From all which Daubenton infers that, what had been afferted by travellers of killing Camels for the water preserved in their stomachs, is very probable. (ut supra. p. 252.)

M. Perault who diffected a Camel in 1676 was of the same opinion (Memoire pour servir a Hist. Nat. Paris, 1676.) (Memoir. de L'Academ. des Sciences, Tom. iii. Part i. and Part ii. p. 286.)

That water, in cases of emergency, is taken from the stomach of Camels, is a fact neither doubted in Syria nor thought strange. I never was myself in a Caravan reduced to such an expedient; but I had the less reason to distrust the report of others, particularly of the Arabs, seeing that even the love of the marvellous could in such a case be no inducement to invention. It may perhaps be superfluous to produce the authority of an Arab Historian (Beidawi) who in his account of the Prophet's expedition to Tabuc against the Greeks, relates, among other distresses of the army, that they were reduced to the necessity of killing their Camels for the sake of the water contained in their stomachs. Sale (Koran, p. 164.) Gibbon (Decline of the Roman Empire, vol. v. p. 245.)

oTVol. II. Iii Oa

On my return from the East Indies in 1789, hearing accidentally that my friend Mr. John Hunter had dissected a Camel, and was supposed to have expressed an opinion that the animal's power of preserving water in its stomach was rather improbable; I took an opportunity of conversing with him on the subject, when (to the best of my recollection) he told me "that he by no means drew any such absolute inference from his dissection; that he saw no reason for assigning more than sour stomachs to the Camel; though he could conceive that water might be sound in the paunch little impregnated by the dry provender of the Desert, and "readily separating, or draining from it."

In hopes that other particulars might be found among the papers of my lately deceased friend, I applied to his Brother-in-law Mr. Home, who informed me that he had examined them, but without discovering any observations on the subject. That gentleman however, who had affisted at the dissection of the Camel, has obligingly favoured me with the following remarks. "No experiments were made upon the stomach, at the time of dissecting the Camel; the chief object being to prepare the different fromachs in such a way as to dry them in their relative situations in order to show their internal structure, and communication with one another, which could not have been done had they been opened in the recent state."

"From this preparation, (which is in Mr. Hunter's Collection) the unmber of stomachs is found to be four, as in other ruminating animals; therefore cannot be said that there is a distinct reservoir for water; but the second stomach has a very peculiar structure, being made up of numerous cells several inches deep, with their mouths uppermost, and orisices apparently capable of muscular contraction."

"When the animal drinks, it probably has a power of directing the water into these cells, instead of letting it pass into the first stomach, and when these are filled, the rest of the water will go into the first fromach. In this manner a quantity of water may be kept separate from the food, serving occasionally to moisten it in the passage to the fourth or true stomach."

"The testimony of travellers to water being found in the stomach; and Daubenton, upon dissection, meeting with it in the second stomach, when compared with the structure of the parts, seem to confirm the above conjecture." Thus far Mr. Home.

To the testimony of travellers may be added that of Mr. Bruce. "Finding, therefore, the Camels would not rise, we killed two of them, "and took so much sless might serve for the desiciency of bread, and from the stomach of each of the Camels, got about four gallons of water. It was indeed vapid, and of a bluish cast, but had neither taste "nor smell." (Travels to discover the Source of the Nile, vol. iv. p. 596.)

Mr. Bruce did not pretend to be an Anatomist, and on the present occasion, may be wrong in his physiological reasoning; but to what he afferts respecting the water taken from the stomachs of the Camels, I without hesitation yield my full affent.

It was the misfortune of that traveller (who is now no more) to have known that his veracity had too often captiously, and sometimes capriciously, been called in question; owing (besides the nature of his adventures) partly, I believe, to a certain manner in conversing as well as in writing, which alienated many who were less than himself disposed to take offence. He is now beyond the reach of flattery or humiliation! and I trust it will not be imputed merely to the partiality of friendship, if, as a small (but just) tribute to his memory, I repeat here what I have often before afferted in occasional conversation, that, however I might regret a constitutional irritability of temper, so injurious to its owner; or however I might wish to have seen him at times condescend to explanations which I have reason to think would have removed prejudices; I never, either in the course of our acquaintance, or in the perusal of his Book, found myself disposed to suspect him of any intentional deviation from the truth.

# Note XL. p. 175.

M. Buffon, treating of the procreation of Mules, says "On sait que le "Mulets ont souvent produit dans les pays chauds; l'on a même quelques examples dans nos climats tempérés; mais on ignore si cette generation est jamais provenue de la simple union du Mulet & de la Mule, ou plutôt se le produit n'en est pas dû à l'union du Mulet avec la jument, ou encore à celle de l'âne avec la Mule." (Hist. Nat. xiv. p. 336.)

# Note XLI. p. 179.

The case of the boy bitten by a dog, was as follows. In the year 1751, a boy about eight or nine years old was brought to my Brother for his ad-

vice, but he happening to be otherwise engaged at the time, desired I would examine him. The boy's pulse was full and severish; his face flushed, the eyes dull, and he complained of head-ach. The mother said that his Penis had remained in a state of erection almost constantly for the two last days; that his mind appeared, at times, disordered; and that he had been slightly bit by a dog a few days before. Not being then able to speak the Arabic, I received this account through an Interpreter, and not knowing that canine madness was uncommon in the Country, mentioned my suspicion to my Brother, who examined the woman more particularly, and we found the Penis in the state she had described. The boy had no great thirst, but showed no reluctance to water.

We never faw the patient more, and the house was in a remote part of the town. My Brother learned some time after, that the boy died within a few days after we saw him; that he had been delirious; that his mother said his disease was a fever, but that the neighbours suspected his death was occasioned by the bite. This indistinct information coming from second or third hands, and nothing more being heard of the dog, or of other accidents, matters remained doubtful.

It is an observation of Prosper Alpinus that most of the dogs in Egypt are leprous, and to that cause he ascribes their not being subject to madness. "Mirum est, quod inibi Cœlo maximè calido nunquam rabie canes tententur; Indigenæque hoc non abs re in leprosum essectum reserunt, quo omnes vexantur, iis exceptis, qui quotidie, & pluries in Nilo slumine se lavantes, qui tamen pauci sunt." (Prosp. Alpin. Hist. Egypt. Nat. p. 231.)

## Note XLII. p. 188.

The notion of the Hyæna changing its fex, arose no doubt from the appearance of the impervious sac situated near the tail, but which is found equally in both sexes.

We diffected a male Hyæna which had been shot at a few hours distance from the city. It was a little bigger than a large Mastiss Dog, to which in many respects it bore a resemblance. Its colour was grey streaked transversly with black; the hair harsh and somewhat longer than that of a dog; and it had the long mane. The Penis differed from that of the dog, in having no bone. Above the Anus there was an Aperture.—

The rest of the description mentioned in the former Edition, has been omitted; a much more complete anatomical account of the Hyæna having been since published, together with two drawings of the Sac. Buffor (Hist. Nat. ix. p. 280.)

# Note XLIII. p. 204.

The circumstance of the Pigeon's soaring is mentioned thus by Bochart.

"Cum mittitur e loco (Columba) valde dissito, ascendit in summum

aerem. Et ascensus ejus sit in orbem. Neque ascendere & circumspi
cere desinit, donec regionis suæ signum aliquod animadvertat. Tum
vero ad illud descendat brevi tempore." Alkazuinius apud Bochart

(Hierozoicon, vol. ii. p. 16.) The following passage is cited also from

Damiri. "Et natura ejus est (Columbæ) ut nidum suum repetat, etiam

si mittatur è mille Parasangis, et nuntia è locis remotissimis brevissimo

tempore ferat: ita ut unica die quædam confecisse dicatur tria parasan
garum millia." (Hieroz. loco Citato.) Bochart however considers 3000

Parasangs (about 450 miles) to be mere exaggeration.

The custom of corresponding with Scanderoon by means of Pigeons was common in M. D'Arvieux's time. "Il y a long tems que l'on se service de pigeons pour envoyer de Lettres d'Alep à Alexandrette, & d'Alexandrette à Alep, pour cette effet on porte d'une de ces Villes à l'autre des Pigeons qu' l'on retire de dessus leur petits... & après les avoir fait boire & manger, on leur attache le Lettres sous les aisses.... "Ils prennent leur vol, & en trois ou quatre heures, ils sont les quarante lieuës qu'il y a d'un Ville à l'autre." (Memoires, Tom. v. p. 496.)

But the most circumstantial account of this mode of conveying intelligence, that I have met with, is given by Maillet, who at the same time relates a story of a Pigeon despatched from Aleppo to Scanderoon, which mistaking its way, was absent for three days, and "had in that time made an excursion to the Island of Ceylon: a circumstance then deduced from finding green Cloves in the bird's stomach." I have frequently heard this story at Aleppo, where it was certainly credited by the gentlemen of the Factory, half a century ago. See Maillet (Description de L'Egypt, vol. ii. p. 271.)

Baumgarten mentions the flying of Pigeons in his time (1504) in Egypt (Perigrinat. p. 33.) Symon Simion in his Itinerary, describes the method

of corresponding in Egypt by Pigeons, and says the billet was secured under the tail. (Itiner. p. 19.) It is mentioned also by Sir John Mandeville. (Travels, p. 143.) In the time of the Holy War, certain Saracen Embassadors who came to Godfrey of Antioch from a neighbouring Prince, sent intelligence to their master of the success of their Embassy, by means of Pigeons, fixing the billet to the bird's tail. "Dux & Universi qui cum eo aderant, de hac avium emissione mirantur." (Gesta Dei per Francosp. 262.) The method of managing the Pigeons as described by Prosper Alpinus differs in some circumstances, from the common account. (Hist. Egypt. Natur. p. 44. Lugd. Bat. 1735.)

Bochart has collected numerous authorities for the antiquity of this custom, both in Syria and Greece, (vol. ii. p. 15.) and more, respecting antiquity, may be found in Pennant, (Br. Zool. p. 248.)

# APPENDIX.

### OF THE PRINCIPAL ARABIAN MEDICAL WRITERS.

#### SECT. I.

OF THE MEDICAL WRITERS, UNDER THE EASTERN EMPIRE OF THE SARACENS.

BEFORE engaging in the proposed short account of the principal medical writers among the Arabs, it may be proper to take notice of a Manuscript which I shall frequently have occasion to cite, and from which it appears, that Abu'l Furrage has borrowed a great part of what is found on the subject of Literature, in his History of the Dynasties.

The manuscript is entitled the History of Philosophers, and as it usually subjoins to the respective lives, a list of the author's works, it often throws light on the translations made at Bagdat, of the Greek writers on medecine and philosophy.

The following account of the Codex in the Escurial library (No 1773) is given by Casiri, who places great confidence in its authority and has translated numerous extracts from it.

- "Codex nitide exaratus horis vespertinis Feriæ 5 die 25 mensis "Dilhagiat, Anno Egiræ 926, continens solia 501, quo habetur Biblioth"eca Arabica philosophorum, inscripta Historia litteraria Sapientum
  "Livi Ubi Judæorum, Christianorum, Mahometanorum
  "atque Græcorum doctrinâ insignium Vita destribuntur, nec non eorum
  "Scripta sive Græca sive Chaldaica Arabice versa uberius recensentur.
- "Illius Auctorem, cujus nomen latet, floruisse Anno Egiræ 595. Patria" que Egyptium suisse liquet ex ejusdem Codicis pag. 74 and 316. Hic,
- " Mahometano Orbe perlustrato inspectisque Bibliothecis celebrioribus, id
- " opus, cujus quasi summam unà cum textu Arabico, Tom. i. nostræ
  "Bibliothecæ

"Bibliothecæ publicavimus, non indiligenti labore aggressus est. Ex hac "Bibliotheca Abulpharagius Historia Dynastiarum conditor multa de-"promsit, quibus Historiam suam adornavit"." (Bibliot Arabo-Hispan-Escur. Tom. ii. p. 332.)

Having accidentally heard, at Aleppo, of a Manuscript of this work, I, with some difficulty obtained permission to have a copy taken; but I was not aware of its value till two years after, when the French Conful, in consequence of letters from Paris, requested the favour that I would allow a copy to be made from my manuscript, for the King's Library.

A History of Physicians, by Eben Abi Oseibah, is better known in Europe. He lived about the year 1273, (a century later than the Historian of philosophers. He is mentioned rather slightly by doctor Freind, who to the second volume of his History of Physic, has subjoined the life of Gibrael Bahtishwa, translated by Salomon Negri, from Abi Oseibah; of the demerit of which translation, the opinion of the learned Reiske, has already been given. (Note xxviii.)

Freind was greatly dissapointed in the assistance he had expected from Abi Oseibah; "he found him stuffed with a strange rapsody of trisling "stories, it helps us very little in the real History of Physic, and only ferves to let us see what extravagant honours and pensions the Physicians had then from the Chaliss." (Hist. of Physic, vol. ii, p. 35.) In answer to this it is properly remarked by Reiske, "Ut iniquum foret a Friendio vitas & res gestas Medicorum deposcere, qui a Galeno inde storuerunt, ut qui noluit nisi medicinæ sata per istæc tempora exponere. Sic vicissim iniquum est ab Abi Oseibah sata medicinæ postulare, qui nolebat nisi Medicorum vitas dare, & eorum quoque qui universæ naturæ prudentes, "Medecinam cum studio Sapientiæ conjunxerunt." J. J. Reiske (Dissertatio Jnauguralis, p. 24. Lugd. Bat. 1746.)

Yet even judging from the specimen exhibited in the life of Gabriel, many of the anecdotes, miserably as they are told by the translator, are far from trifling relatively to the Costume and History of those times. They may indeed appear impertinent to one in quest of other matter; but surely the circumstances of the death of the famous minister Giafer; the learned assemblies at the house of Giafar's mother; and the practical hints occasionally introduced, are far from uninteresting.

او تد عز مته Initium، و تد عز مته Finis مو کتب علي بن رضوان بن جعغر لنغسه

But a fuller and more fatisfactory account of Oseibah's History, may be found in Reiske's Differtation, which being (I believe) a scarce Tract, I have transcribed his prospectus of the work given from the Leyden M. S. which, on a cursory inspection of the Bodleian M. S. (Hunt. No 171.) seemed to me to be very exact.

The name of the author is, EBN ABI OSEIBAH. ابن ابی اصبعه
The title of his work. Aioon Al Inba fi Tubkat al Attuba.

عيون الانباءِ في طبعات الاطباء

There are three M. S. S. of this work in the Bodleian, Hunt. (Cod. 171.) Marsh (Cod. 419.) Pocock (Cod. 356.)

His History is divided into fifteen Chapters.

- "Cap. i. De Origine medicinæ.—Cap. ii. De primis illis Medicis qui
- " hanc vel illam medicinæ partem repererunt.—Cap. iii. De Gente Græca
- "Medica Asclepiadarum.—Cap. iv. De Medicis Hippocraticis.—Cap. v.
- "De Galeno œqualibus aut supparibus.—Cap. vi. De Alexandrinis."
- " Priora sex hæc Capita neque perlegi, neque excerpsi, melius ea nos
- " scire quam Arabes, arbitratus, & simul Specilegium operæ facturus, si
- " quem forte antiquitates illas Græcas ex Arabum fundo eruendi cupido
- " incesset. Incepi itaque excerpere a Cap. viimo quod agit de Medicis
- ້ Arabum, fic ຂອງໄພς dictorum, ut qui fuerunt Makkæ, al Madinæ, tempore
- Muhammedis, & deinceps Sub Omajjadarum Chalifatu Damasci.—Cap.
- " viii. exhibet Medicos Al Jrakenses, Seu qui Bagdadi curarunt Chalifas
- " de Gente Abbasi, partim Syri genere & religione & lingua (Christiani
- « enim erant illi) partim genuini Arabes, sed qui claruerunt in Al
- "Irak sub Abbasidarum Chalifatu, dum is plena adhuc potestate flore-
- " bat."
- "Cap. ix. De Medicis qui libros Hippocratis, Galeni, Aristotelis,
- "Porphyrii, Themistii, Alexandri Afrodiensis, Aliorum in Arabicum
- "Sermonem transtulerunt, & de iis quoque quorum id factum est
- " Auspiciis."
  - "Cap. x. De Medicis per Al Jrakam, Mesopotamiam, Dejar Bakri . . . &
- " Medicis qui Bujidis, & Hamdanidis potissimum, ut & Chalifis Bagdadicis,
- "Sed iis omni auctoritate spoliatis, inservierunt."
  - "Cap. xi. Exhibet Medicos qui per Adzerbergân, Chorasan, Fares,
- "Mawara an Nahram &c. clari exstiterunt.—Cap. xii. Medicos Indos.—
- "Cap. xiii. Lybyas & Hispanos, qui nempe sub Aglabitarum, Omajjada-
- " rum, al Mollatschamine & al Mowahhadine dynastiis sloruerunt."
  - Vol. II. Kkk "Cap.

"Cap. xiv. Medicos Ægypti qui primum Thulunidis, dein Fathemitis, "Alitis operam suam collocarunt."

"Cap. xv. & Ultimum, Medicos qui Damasci potissimum & Halebi "vixerunt in aulis Ejubidarum, & sub initia dynastiæ Mamlukorum, seu mancipiorum. En Operis conspectum." Jo. Jac. Reiske (Dissertatio Jnaugural. p. 24. Lugd. Bat. 1746.)

There is another work of the same author, which Reiske had not seen, but which he imagines would have been of more service to Dr. Freind's purpose than the History of Physicians. "Forte plura suam in rem in"venisset Freindius in altero Abi Oseibah libro, quo colligit, ut ipse ait,
"venisset Freindius in altero Abi Oseibah libro, quo colligit, ut ipse ait,
"venisset Freindius in altero Abi Oseibah libro, quo colligit, ut ipse ait,
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"descriptions" in altero Abi Oseibah libro,

Having mentioned these two Historians, of the latter of which a further account may be found in Pocock (Præf. ad Eutychii Annales) and Herbelot, I proceed in chronological order to the Medical writers.

Ahroon at Kuss at Jscanderani العرون الغس الاسكنات الكناش. The title of his Book. Al Kinash الكناش

Aaron the Priest, is said to have written his Pandects in the Syriac language; but Abu'l Furrage, in the Chronicon Syriacum, says expressly that he wrote in Greek. "Aaron autem Presbyter Syrus non suit, sed "Gosius quidem Alexandrinus librum ejus e Græco Syriacum secit." (Biblioth. Oriental. Vatic. Tom. ii. p. 315.) The same writer (Hist. Dynast. p. 99). says indeed "that he was in possession of Aaron's "work in Syriac, consisting of 30 Tracts, to which two more had been added by Sergius"—and he remarks in another place (p. 127.) "that the Pandects of Aaron had been translated into Arabic under the Khalif" Merwan (about the year 683) by Maserjawaius."

The words of Abu'l Furrage in the passage referred to by Dr. Freind (vol. ii. p. 8.) are "hoc tempore inclaruit Ahron Sacerdos Alexandrinus." Syntagma ipsius in arte Medica, apud nos Syriace reperitur." موجول عندنا بالسريانية. From which it was concluded that the author wrote in Syriac, having collected chiefly from the Greeks; but the above passage from the Syriac Chronicle shows this to be a mistake.

The M. S. History of Philosophers (p. 117.) ascribes the Arabic translation and the addition of the two Tracts to the same author, who is named Masergis, obtt this is probably a blunder in the Copist; for there is no doubt that the two additional books were by Sergius, but

it is very unlikely, that he who always translated into Syriac from the Greek, should translate a Syriac book into Arabic.

Aaron lived at Alexandria about the year 622. being contemporary with Paulus Ægineta.

The Kinash of Aaron appears to have been lost, at least no M. S. S. of that author are to be found in the European Libraries, but large extracts from the Kinash are perserved in the Continens of Rhazis.

# Geurgis Ebn Bakhtishwa جورجس بن لختيشوع.

This was the first person known at Bagdad of a samily which, in succession, supplied the Khalifs with Physicians for above two centuriess. George was brought from Iondisabur, to the court of Almansûr, in order to attend the Khalif who was indisposed, and after being magnishently rewarded for his services, he obtained permission, on account of infirmity, to return home to his family. The answer was remarkable which he made to Almansûr, who had condescended to solicit his conversion from Christianity to Mohammedanism, and offered to insure him a place in Paradise upon his compliance. "No," replied the doctor, "I am very well contented to go wheresoever my foresathers are gone, be it to heaven or to hell." (Hist. Dynast. p. 144.) (M. S. Histor. Philos. p. 247.)

THE SON OF GEORGE, (by Historians named simply Bakhtishwa, or Abu Gibrail, (the father of Gabriel) remained to take care of the hospital at Jondisabur when his father was called to Bagdat; but he was afterwards obliged to repair to Bagdat himself, being first sent for by the Khalif Almohdi, and a second time by Harûn Al Rasheed, about the year 787. (M. S. Hist. p. 149.)

GABRIEL THE SON OF BAKHTISHWA, who in the sequel made so great a figure, was at first recommended by his father to Giaser the Prime Minister, and afterwards, being introduced to the Khalif, he was joined with Mesue and the other Physicians in the service of the Khalifs. He continued mostly in that office till the latter part of the reign of Al Mamun, when, being unable from sickness to attend the Khalif in the expedition against the Greeks, he sent his son in his stead, and died soon after, about the year 829. (M. S. Hist. p. 204.) Freind has given his life. (Hist. of Phys. vol. ii.)

This Gabriel was therefore the third Physician of the Bakhtishwa family, not the second as represented by Herbelot, who on this article is somewhat confused, or incorrect.

The Son of Gabriel, distinguished by the name of Bakhtishwa Ebn Gibrail, was the fourth Archiater of the family, and the person alluded to by Abu'l Furrage in the pleasantry between Mesue and Bakhtishwa in the camp of Almotasem, of which he gives an account (p. 154. Hist. Dyn.) and which, if dates be not attended to, may occasion some perplexity; for Gabriel was at that time dead, and therefore the Historian, who relates anecdotes not in chronological order, speaks there of the son. Gabriel's son was Physician to the Khalif Al Motawakhal, who succeeded in 847; but he had been before in the service of Al Mamûn. He dyed in 869. (M. S. Hist. p. 155.) and left a son named Abdullah, but who was not the author to be mentioned hereafter.

BAKHTISHWA EBN YAHIA, the next celebrated Physician of the family and one of the principal Physicians of the Khalif Almoktader who was murdered in the year 932. (M. S. Hist. p. 152.) (Hist. Dinast. p. 192.) Another of the Bakhtishwa family is mentioned in the M. S. p. 156. as Physician to the Mattaki, who succeeded to the Khalifat in 941.

None of the works of those Christian Physicians have reached the present times, some fragments excepted which have been preserved in the collections of subsequent writers, particularly of Rhazis.

A Treatise still extant on the virtues of animals, or their use in medicine, was the work of one of the family of Bakhtishwa named Abdullah Ebn Gibrail. Herbelot suspects him to have been a Moslem, from his name, because the Christians, he says, never give the name of Abdullah to their children; but in this circumstance he most certainly was mistaken, that name being not less common among the Christians than the Mohammedans.

The Grandson of the samous Gabriel (as mentioned above), was named Abdullah and died in the reign of the Al Moktader. It does not appear that he was a Physician, but he left a young son named Gabriel who made a considerable figure in Physic, was the author of several books, and died at the age of 85, in the year 1005 (M. S. Hist. p. 232. 238.) It might probably be the son of this Gabriel who was author of the book of animals.

Johana Ebn Masuiah. يوحنا بن ماسويه.
The M.S. Hiftory of Philosophers (p. 581.) gives a very long account

of Mesue, and from thence Abu'l Furrage has taken most of what he says in his History concerning this extraordinary man.

Mesue was one of the Physicians to Haroon Al Rasheed, and continued to serve the succeeding Khaliss till the time of the Motawakal, who began his reign in the year 846. There is a blank lest in my M. S. at the place where the date of his death should have been inserted, and Abu'l Furrage leaves that circumstance uncertain. Abi Oseibah (Freind-Hist. p. 38.) sixes the time of his death in 865, and Leo Africanus (Holting. Bib. p. 249.) in 826. Gabriel the son of Bakhtishwa was his contemporary at the court of the Rasheed, but it does not appear probable that Mesue had ever been his disciple; nor is there any ground from the M. S. which gives a list of his works, to think he did not write in Arabic.

The list of Mesue's works is given by Casiri (Bib. Tom. i. p. 316<sub>tt</sub>) and he adds. "Ex quo sussoriori Catalogo facile apparet hujus auctoris multa vel intercedisse opera, vel adhuc in Bibliothecis inedita delitescere."

Among the works ascribed to this author in the Latin translations, are fome contained in the above list, but passages of later date by other hands have probably been inserted among them, and have produced such confusion and anachronism, that some have been led to think there were two different authors of the same name. M. le Clerc seems to have been of this opinion, and gives it as a remark of Alpagus, the samous translator, that the original of the works ascribed to Mesue were not to be found in the East, and that the real writings of that author had never been translated. (Hist. de Medecine.) But in this circumstance Alpagus was mistaken; for the Tracts on Purgative medicines, on the correction of Purgatives, on Barley water, and, probably, that on Antidotes, (though under a different title) stand in the M. S. list of Mesue's works.

How he came in the first translations to be dignified with the title of Damascenus, Filius Hamach filii Abdela Regis Damasci, or by Chronologists to be transported to the middle of the 12th century, does not appear.

The Grabadin is rendered by the translator of Mesue, Compendium Secretorum; and by the commentator, Grading, Grabatin, i. e. Antidotarium inventum ex Gratia Dei. The word is of Persic Origin Krabazeen, and Mesue's own account of the work to which he had applied the title, is as follows. "Nobis visum hæc (Medicamenta) in opus unum ordine idoneo cogere cui titulum Grabadin, seu de antidotis, fecimus, in quo Medicamenta experta & Secretoria tum a nobis inventa.

"tum ab his accepta qui artis Medicæ Arcana perserutari sunt, compendio tradere dignum existimabimus."

The first book of the Grabadin is properly a Dispensatory, containing directions for the preparation of Remedies internal and external. The second book treats of the application of those and other remedies, in particular distempers, beginning in order with diseases of the head. This last book is incomplete, going no further than to diseases of the heart; and the rest is supplied by Petrus Apponus.

The title Grabadin is not found in the M. S. Catalogue of Mesue's works but probably stands there under that of Tumam wa Kamel, Ars perfecta et integra. In the first book there are no references to authors; but in the second book, among a variety of names quoted, that of Rhazis is found, who could not be much more than ten years old when Mesue died. Serapion also is very frequently mentioned; and Haly, distinguished sometimes by the epithet Senex. This ould not be Haly Abbas, who was posterior to Rhazis: but there were many Physicians of the name of Haly.

It may be remarked that in the book of Purgative Medicines (which is undoubtedly genuine) Rhazis is not quoted; but Haly, Humain, and Serapion are; (p. 51. 53. 61.) If Mesue therefore lived till 865, Serapion, though said to have lived towards the close of the 9th century, may nevertheless be supposed to have been known to him. The edition of Mesue's works to which I refer, is that of Venice. (Fol. 1602.)

Honain Ebn Ishak Abuzeid Al Abady حنين ابن اسحاف العمالي

This celebrated translator of Hippocrates, Galen, and other Greek writers, died in the year 881. Some of his translations were in the Syriac, and others in the Arabic language. He left a son and several disciples, who distinguished themselves as translators. Some account of his life and of his works, is found in the M. S. History of Philosophers (p. 269.) of which an abstract has been given by Casiri (Bib. Arabo-hisp. Tom. i. p. 286.)

Of Honain's own Medical works, I do not find any have been translated into Latin; but his medical Questions, with several other Tracts, are read in the East: M. S. S., particularly of his Questions, are common in the European Libraries. His translations from the Greek, or such at least as go under his name, are common at Aleppo. (Bib. Bodl. Marsh. No 403.

Hunt.

Hunt 291. 60.) (Bib. Med. Laur. Cod. 228.) (Bib. Paris Cod. 1090. 1031. 1038.) (Bib. Ludg. 729. 769.) (Bib. Arabo-hisp. 847. 848. 892.)

ISHAK EBN HONAIN. وينحاف ابن حنين

This was one of the fons of Honain, and applied himself chiefly to translating. There is a M. S. work of his in the Bodleian Library, but I have not met with any of his works in the foreign Catalogues. (Bib. Bodleian. Hunt. 600.)

. يعقوب ابن اسحاف الكندي .IACUB EBN ISHAAC AL KINDI.

Al Kindi was one of the most celebrated of the Mohammedan writers; distinguishing himself by various works on most branches of Philosophy, on Mathematics, Astrology, &c. and also on Medicine. He made a figure in the reign of Al Mamun, and was contemporary with Albumazar, but did not live to so great an age. The M. S. History of Philosophers (page 562.) gives a Catalogue of his works, a translation of which may be seen in the Escurial Catalogue, (Tom. i. p. 351.)

The Tract ascribed to him, and translated into Latin under the title De Medicinarum compositarum gradibus investigandis. I do not find in the M. S. Catalogue; for the last article there, under the medical division, De Medicamentis Compositis, can hardly be supposed to be it: at least the title Krabazeen is generally understood to mean a work very different from that of Al Kindi's which is not an Antidotarium, or Dispensatory, but a refined piece of Philosophical Theory, in which, Averrhoes is of opinion that Alkindi had mistaken the sense of Galen. See Freind, (Hist. vol. ii. p. 122.) and the work itself, which consists of ten or twelve pages. (Mesuæ Opera Ven. 1602.)

Herbelot represents Al Kindi as a Jew, who was persecuted on account of his religion; which is directly contrary to the account of his genealogy in the M. S. History of Philosophers (p. 562,) where his father's great grandfather is said to have been one of the Companions of the Prophet.

Johanna Ben Seraphioon يوحنا بن سرافيون The title of his work Al Kinash Al Keeber wa Izreer الكناش الكبير

Seraphion is not mentioned by Abu'l Furrage, nor do I find his name in Herbelot. The Eras assumed by Chronologists (Vanderlinden) are obviously erroneous; A. Ch. 742. being above a century too early, and 1066,

towards the close of the ninth century, and remarks, (Hist. vol. ii. p. 42.) that he often transcribes out of Alex. Trallian, an Author which few of the other Arabians seem to have been much acquainted with. The manuscript History of Philosophers (p. 581.) contains a very short account of Serapion taking no notice where he lived, or when he died; but says expressly that he wrote his great Collection, containing twelve Books, and the smaller containing seven, in Syriac; which were afterwards translated into Arabic. Casiri mentions the names of the Arabic translators, (Tom. i. p. 261.) which are not in my M. S.

From this it should appear that Dr. Freind was mistaken in the notion of Serapion being an Arabic writer, and indeed the first that wrote in that language. It is remarkable also, that Abu'l Furrage should have past Serapion in silence, having borrowed so much concerning others from the History wherein he is mentioned so honorably.

The Latin translations of Serapion may be seen in Vanderlinden.

The only M. S. I have met with in the European Catalogues is in that of the Escurial (Cod. 814.) which contains only a small part of the Kinash. I never met with any of this Author's works in the East.

Mohammed Een Zachariah, Abu beker Al Razi. سحمد بن بن

Rhazis is faid, in the M. S. Hiftory (p. 408.), to have died in the year 932, (Heg. 320); which is followed in that circumstance, by Abu'l Furrage; who, in his account of Rhazis, has borrowed from thence liberally as usual. But the M. S. likewise mentions another writer, who had affigned a different period for the death of Rhazis; and, according to Herbelot, he died ten years earlier. Leo Africanus afferts, that he died at Cordova, in the year 1010, (Heg. 388); in which he happens (no uncommon thing with him) to be erroneous. Mistake in Arabic names often produces chronological errors; and Casiri has properly remarked, that the Prince to whom the Mansuri was dedicated, was neither the Al Mansûr of Spain (who lived long after Rhazis's time), nor the famous Al Mansûr (who lived above two centuries earlier), but Al Mansûr Ebn Isaac, Governor of Raia, under his uncle, the Khalif Muktasi. (Bibliot. Arabo-hispan. tom. i. p. 261.)

The M. S. History of Philosophers gives an account of Rhazis, with a catalogue of his works, which is faid to have been taken from his own index; and both have been translated by Casiri, (Bib. p. 262.) It may

be remarked, that in the index of the folio edition of Rhazis, published at Basil in 1544, there are several titles not found in the M.S. History.

The Latin Editors of Rhazis may be seen in Mangetus. The Tract on the Small-pox, published in Arabic and Latin by the late Mr. Channing, is very well known in England, and contains some useful notes. I had the book collated with other M. S. S. in the East; and the readings were, upon the whole, sound very exact. (Oxon. Bib. Bodleian. Cod. 507. Laud. B. 92.;) (Bib. Med. Laur. Pal. Cod. 240.;) several Tracts in the (Bib. Arabo-hisp.)

ALY EBN AL ABAS AL MGTUSI. علي بن العباس البجوسي or Kamel al Sinnat al Tabia, كامل الصنعة الطبية

Haly Abbas flourished about forty or fifty years after Rhazis, and wrote his Milleki, as it is said, about the year 980; that is, about two years before the death of the Prince to whom it was dedicated. Dr. Freind has inadvertently termed this Prince Khalif; but he was the famous Adad al Dowla, Prince of Persia, and afterwards Emeer al Omra to the Khalif Al Taji. The M. S. History does not mention the time of Haly's death, but makes the following remark on his work, which has been copied verbatim by Abu'l Furrage. "Al Malaki quod ad praxim fpectat potior, Canon vero (Avicennæ) quod ad scientiam solidior." (MS. p. 351.)

The M. S. remarks further, that this work of Haly Abbas was much read by the physicians of those times, and maintained its reputation, till eclipsed by the Canon of Avicenna, when it fell into neglect. (See also Hist. Dynast. p. 214.) Dr. Freind is of opinion, that Haly's system is less confused than that of Avicenna. (Hist. vol. ii. p. 73.)

The Milleki was translated, in the twelfth century, into Latin, by Stephen of Antioch, and printed at Venice in 1492, and at Leiden, 1523.

Arab M. S. S. of Haly's works are common. (Oxon. Laud. 414., Hunt. 195. Marsh 105.) (Bib. Med. Laur. C. 246;) (Bib. Lugd. Bat. C. 334.) (Bib. Arabo-hisp. 814.;) (Bib. Paris. C. 1059., &c.)

Haly Abbas appears to have taken unusual pains to secure the literary property of his work, having in the prolegomena to the Milleki, affigned a particular reason for inserting his name. "Nominis autem aucto-Vol. II.

L11 "ris

- " ris necessariam judicaverunt sapientes notitiam, ne forte aliquis inve-
- " niens et ignorans librum quem sapientium aliquis composuerit, referat
- " illum ad fe & fuo nomine nuncupet."

But this precaution did not prevent a certain Monk in Europe, within less than a century after Haly's death, from giving a Latin translation under a different title, and passing it as an original work of his own; nor, when that fraud was detected, did it prevent the work being transferred to a second writer, concerning whose era authors are far from being agreed.

Constantine Africanus was a native of Carthage, who passed many years of his life at Bagdat, where he became master of the oriental languages and learning. After his return from the East, he was for some time secretary to Robert Guiscard (created Duke of Apulia in 1060), and afterwards became a Monk in the convent of M. Casino, where he compiled and translated several medical works.

He is supposed, by Dr. Freind (Hist. v. ii. p. 219.), to have been the first who introduced the Greek or Arabian Physic into Italy. But, if another conjecture of the Doctor's be well founded, the Arabian Physic must have found its way thither long before; for he thinks it probable (p. 218.) that in the middle of the seventh century (the eighth) there were Hebrew, Arab, and Latin professors of Physic settled at Salernum; which place grew soon into that credit, that, in 802, Charles the Great thought sit to sound a college there.

Constantine was so egregious a plagiary, that it is difficult to decide which of the works ascribed to him are properly his own. In his dedication to the abbot of the monastery, he represents himself as a compiler from others, though not without intermixing some things of his own. Unde ego evolutis omnibus bonis medicorum auctoribus, veteribus et modernis, Græcis et Latinis, maxime Græcis, qui adhuc in hac facultate, ut in aliis multis Latinis præstant, contraxi in arctum quæ nimium suse omnes isti habent, omnia quæ possent persectum medicum efficere... etsi nihil addidi (putem autem me multa etiam invenisse et addidisse) erunt samen Commentarii idonei Interpretes Hippocrati, &c."

Constantinus (Opera reliqua Basil, 1539).

The work to which this introduction is prefixed, contains only the first part, consisting of ten books of the Pantechni; but in the preface he gives a prospectus of the second part, which is found entire in the collection of

works under the name of Isaac Israelita published at Basil, 1515, and both parts are clearly an abridged translation of the Milleki of Haly Abbas.

Dr. Freind hopes he did no injustice to Constantine in suspecting that he meant to pass this work among the Italians for an original of his own, (p. 222.) but there was no occasion for so much delicacy, the Author declaring it, in his introduction to the Pantechni, to be so in the most direct terms. "Nomen Auctoris hic scire est utile ut Major auctoritas libro ha-66 beatur, est autem Constantinus Africanus Auctor: quia ex multis libris " coadunatur." It is remarkable that Constantine here assigns a reason for inferting his name different from the reason given by Haly in his Preface to the Milleki, though in other respects he does little more than translate part of that Preface. Haly, after making some remarks on several Greek and Arabic writers, fays he undertook his work with a view to collect medical knowledge within a fmaller compass, and to correct the defects of his predeceffors in method and arrangement; and thinks it expedient to declare his name, in order to prevent others from usurping the merit of a work which did not belong to them. Constantine follows him literally respecting the Greek writers, but is totally silent with respect to the Arabs, and fubilitutes a different reason for inserting the name of the Author. But in his Preface to another work called the Viaticum, (which is also suspected not to be his own) he gives the following reason for prefixing his name. "Nostrum autem nomen huic Opusculo apponi sensui: " quia quidem homines alieno emulantes labori, cum in eorum manus Labor alienus venerit sua furtim & quasi ex latrocinio supponunt." (p. 144.) This passage upon comparison with what Haly had said long before in the introduction to his Milleki, is so nearly alike, that there seems little doubt of its having been stolen from thence; and considering that Constantine must have been conscious of what he himself had done in regard to Haly, he certainly had very good ground for apprehension of what might be expected from future Plagiaries.

In the quotations from the Pantechni and the Viaticum I have followed the Basil Edition (1515.) of Isaac Israelita's works; for in the works under the name of Constantine, (Basil 1536, and 1539.) the first ten Books only of the Pantechni are found under the title De communibus Locis; and the Viaticum stands under the title De Morborum Cognitione & curatione Consilium. The property of the Viaticum, which work Constantine says he compiled, or abridged from the Pantechni, is disputed

by the Editor of Isaac Israelita, and transferred to that writer. "Viati"cum Isaac in 7 Libris partitum, quod Constans Africanus M. Casiri
"Monachus latine fecit, (ut pleraque alia ipsius Opera) sibique id arrogare
"non erubuit." If that work be a translation it does not appear from what original the translation was made, which is not the case with the Pantechni where the original work is extant, and the fraud has been plainly detected.

From all circumstances it is evident that the Pantechni is a translation of the Milleki; yet it is in many places abridged, and a few flight variations may be remarked in the distribution of the chapters; some new prefcriptions are likewise introduced: but in general the version (admitting a few interpolations) is literal. Examples of variation occur frequently; particularly in the chapter on the Soda, and in that on Quartan Agues. Confer. Haly Abbas, (Pract. lib. iii. c. xiv. and Pantechni, lib. iii. c. xxxv.) Upon the whole, the character given of Constantine's translation, by Stephen of Antioch, appears to be just; for though Constantine is not named, he certainly was meant in the following passage of Stephen's Preface to the Milleki. Speaking of a former translation, "Alteram vero " interpretis calida depravatam fraude, nomen etenim Auctoris Titulum-" que substraxerat: seque qui interpres extiterat, & inventorem libri posuit, " & fuo nomine titulavit, que ut facilius posset & in libri prologo & in aliis " multa pretermifit plurimis necessaria locis: multorumque ordines com-" mutans, nonnulla aliter pertulit, hoc uno tantum observato nihil prorsus " ex suis addidit. In quo manifeste nobis innuit ipsum interpretem potius. " quam scriptorem fuisse."

When the fraud of Constantine with regard to the Melleki was detected, the work, instead of being restored to the true owner, was referred to a second writer whose Era is involved in obscurity.

ISAAC ISRAELITA SALOMONIS ARABIÆ REGIS, FILIUS ADOPTIVUS.

This writer by some is placed in the seventh, by others in the twelfth century; and the Parisian Catalogue of M. S. S. in the Royal Library (Cod. 425.) mentions a Tract on Ulcers and Inflammations, under the name of that Author, a Hebrew translation from the Arabic: remarking at the same time that the Author died Anno Domini. 94.—Camperius in a Letter to the Editor of Isaac's works, (Basil 1515.) imagines there were two persons bearing the name of Isaac, the one Heben Amaran, a Philosopher

Philosopher and Author of the Book De Difinitionibus; the other a Physician, Author of the Milleki and other Medical Tracts: for he pretends, that Stephen of Antioch had no just ground for ascribing that work to Haly Abbas; and agrees with others in confidering it as a clear proof of this, that in the book of Fevers (which he thinks belongs unquestionably to Isaac) reference is made by the Author to his own work the Pantechni (or Milleki,) and that feveral passages in the Pantechni are found almost verbatim transcribed in the Continens of Rhazis under the name of Isaac. Camperius may possibly by right in supposing two Isaacs, though wrong in his conjecture of one being a Physician, and the other only a Philosopher; Ebn Beithar expressly mentioning two, Isaac Ebn Amran and Isaac Ebn Sulyman a Jew, both Physicians: (Bibliot. Arabo-Hispana, Escur. vol. i. p. 276.) But there is no doubt of his being in an error concerning the Author of the Milleki. As to the book of Fevers, according to Constantine's translation, it is certain that reference is made not only to the eighth Chapter of the tenth Book of the first part of the Pantechni, but likewise to the ninth Chapter, which happens to be one not existing in the original Arabic of Haly Abbas, but foisted by Constantine into the Pantechni: by which means the tenth Chapter of that work comes to be the ninth of the Milleki, and in consequence of the interpolated Chapter, the Pantechni contains thirteen Chapters instead of twelve. This circumstance must have escaped Camperius; and what is more remarkable, he did not advert that the reference must be supposed made by Constantine in the character of translator; for it cannot be supposed that Constantine who was professedly translating, should make the. Arabic Author refer to the Pantechni, a work which he himself claimed as his own. "Quod utrunque explanabimus in nostro libro Pantechni, " & si quis facillime intelligere desideraverit, legat Cap. De Ymeacrisios " fcriptum in eodem libro, ibi enim plene diximus & monstravimus " quod impares funt fortiores." By the way it will be found that what is here faid on the subject of Critical Days, is verbatim parts of the interpolated Chapter in the Pantechni. It should be remarked also that though Constantine in his Preface declares the Book on Fevers to be a translation from the Arabic, he does not name the original Author, as he has done in the book De Urinis.

In regard to certain passages in the Pantechni being found in the Continens of Rhazis, quoted under the name of Isaac, the fact is admitted, and naturally enough accounted for by Dr. Freind (vol. ii. p. 36.) But

in a curfory perusal of the Continens, I have been able to discover very few such passages, comparatively to the number under the name of Isac, in which no resemblance whatever can be traced either in the Milleki, the Pantechni, or the book of Fevers. When it is said no resemblance, it is meant none such as would render it probable that the Authors transcribed from each other; for in writers professedly compiling from the same materials, and borrowing with great freedom from one another, some coincidence must unavoidably happen in expression as well as sense. The passage in the following pages of the Continens may be compared with the corresponding Chapters in the Pantechni. (p. 63, 69, 77, 91, 176, 184, 217, &c.)

The Editor of Isaac Israelita's works assumes it as certain that Isaac, not Haly Abbas, was the Author of the Milleki; and that he was the Author not only quoted by Rhazis, but known even to Mesue, which of course would make him prior to Serapion. With respect to the Milleki, it is needless to say much more, the notion being inconsistent with the whole of the Arabian History, the Arabic M.S.S. yet extant, and the very distinct account the Author gives of the reasons that induced him to undertake the work. Had any fuch compilation existed before Rhazis's time, it is probable Isaac would have made a greater figure in the Continens; for in comparison with Serapion and Mesue, he is very seldom cited: nor is it likely that in the East, where the Book long maintained fuch high reputation, any man should have been bold enough to impose himself upon the Literati of those times, as the Author of an ancient book, in the manner Constantine successfully attempted afterwards, in a country ignorant of the Arabic language, and where medical learning was only beginning to dawn.

It may be remarked here that the M. S. S. of Isaac's works found in the European Libraries, are Hebrew versions from the Arabic. In the Parisian Catalogue, Cod. 391. 424. 426. De Urinis. Cod. 423. De Febribus, and Cod. 386. is said to contain his medical works. Cod. 425. De Ulceribus has never been translated.

The authority of Haly Abbas being established, it will appear from what he says, that the Isaac quoted by Rhazis, cannot be the same with Isaac Israelita. In the Prolegomena to the Milleki, he says Rhazis had collected in his Continens every thing relating to physic, from the time of Hippocrates to that of Isaac the son of John. "Ab Hippocrate & Galeno usque

usque Isaack Johannis filii qui intersuerint Medicos modernos & antecedentes commemorans." In one part of the Continens (p. 421.) Isaac is called filius Johannicii, but in other places he is quoted simply under the name Isaac. Now neither of those, supposing them different, could be the Isaac filius Salomonis, which is the person understood by Isaac Israelita, nor could Israelita be the same whom the Editor of his works thinks was copied in some things by Mesue; for it may be concluded, from the order in which Isaac is placed by Haly Abbas, that he wrote after Serapion.

It may further be remarked respecting Haly Abbas, that Dr. Freind. feems rather to have been mistaken in thinking, that he mentions only the Continens of Rhazis without taking notice of the ten Books addressed to: Al Mansûr. (Hist. of Physic, vol. ii. p. 46.) Rhazis, in his introduction to those books, gives the following idea of his work. "Summa quædam "Medicæ Artis Capita ac flores Medicinalis doctrinæ, maxima fide & di-" ligentia in unum veluti fascem collecta, quam possem compendiose con-" fcribam." Now Haly Abbas, before mentioning the Continens, refers to another work which he thought exceptionable on account of not explaining sufficiently the matter treated of. "Molesta (Rhazis scilicet) of utens brevitate nihil explanat ut expedit: quia ejus hoc fuerit proposi-" tum, & intentio," and after this, which feems referable to the ten Books of Rhazis, he proceeds " Edidit & Librum qui Continens dicetur." The passage now cited from Haly must either have escaped Dr. Freind, or struck him in a different light, when he expresses his surprize at Haly's taking no notice of a work which must have born a considerable character: in that age.

I now return (after this long difgression) to the Arab writers next in order of time to Haly Abbas.

ابو علي الحسين ابن ABU ALY HASSEIN EBN ABDULLAH EBN SINA عبدالله بن سينا

Avicenna died at Hamadan in the year 1036 in the fifty-eighth year of his age. Some of the medical Chronologists, in contradiction to all history, place him about the middle of the twelfth century; and Leo Africanus makes him live to the age of eighty. The M. S. History of Philosophers (p. 623.) contains a very full account of Avicenna given by Georgiani his disciple, who had lived familiarly with him for many years,

and part of his narrative is supposed to have been drawn up by Avicenna himself.

When Avicenna fled from Hamadan in the difguise of a Dervise, he was accompanied by this faithful adherent, who enters into a detail not only of his literary labours, but of his looser hours and amusements. He gives an account likewise of his last illness, which appears to have been a Dysentery, and of which he had suffered several relapses, owing in some measure to his own intemperance. The last attack of the distemper happened while he was upon the road from Jspahan to Hamadan, in the suit of Ala-al-Dowlah; and soon after his arrival in that city, finding medicines of no further service, he abstained from taking them, and resigned himself to his sate.

The account of Avicenna given by Abu'l Furrage (Hist. Dynast. p. 229.) is taken entirely from the M. S. History of Philosophers; and Casiri (Bib. Arab-his. Tom. i. p. 268.) has given a large extract from the history, though a great many anecdotes appear to be omitted which are found in my M. S.; but the account of the writings left by this Author is nearely the same.

To the Venetian Latin Edition of Avicenna of 1606, is prefixed a life of the Author, being a Latin translation from the Italian, of an Arabic M. S., which had been brought from Syria by Andreas Alpagus. The first translator, Marcus Fadella, a Christian from Damascus, and interpreter for the Venetian merchants, has been even less successful than his countryman was in the life of Gabriel Bakhtishwa. The whole is perplexed and confused; and the names of persons and places are so distorted that it is not easy to decypher them. The name of the disciple by whom the life is supposed to have been written is transformed from Giuzgiani into Sorsanus; his real name being Abu Abaid Al Giuzgiani lipe several circumstances however in this life, omitted by Abu'l Furrage, are found in the M. S. History.

Missed by this translator, Dr. Freind sell into the mistake (Hist. of Physic, p. 71.) of Avicenna's dying at Medina. Besides the sact being contradictory to the authority of the Arab historians, and even (in the M.S.) of this Sorsanus himself, it would have been improbable, had he died at Medina, that his body should have been transported to Hamadan; for though there are instances of some Khalifs and great men being buried at a distance from where they died, the custom was by no means common among the Mohammedans, nor does any reason appear from superstition,

for transporting the corpse of Avicenna from the city where the Prophet lay interred, to a city which was not his native country.

The Arabic M. S. S. of Avicenna are common enough at Aleppo, and are found in feveral of the European Libraries. Bibliot. (Bodleian. Laud. No. 469. 3746.)

Among a number of M. S. S. of Avicenna in the Bibliot. Med. Laurent. & Palat. is Cod. 215, from which was printed the Arabic Edition at Rome 1593, and now far from scarce in Syria.

ALY BEN RADWAN EBN ALY BEN GIAFAR, علي بن رضوان بن علي بن علي بن علي بن علي بن علي علي علي علي علي علي علي علي

Eben Radwan, called by the Latin writers Haly Redohan, or Eben Rodan, or Haly Roboam, died about the year 1063 (Heg. 460.) Some account of this writer is given in the M. S. History of Philosophers, (p. 671.) and several anecdotes relating to him may be found in Abu'l Furrage (Hist. Dynast. p. 234.) He was the Author of several Philosophical and Astrological Books, and wrote commentaries on some of the books of Galen, one of which has been translated into Latin.

Manuscripts of his works are found in several Libraries. (Bib. Reg. Paris Cod. 833.) (Bibliot. Arabo-hisp. Cod. 799. 847.)

Krigurius Abu Al Furage, Eben Ahrun Al Mattibub, كيغوريوس ابوالغرج ابن اهرون المتطبب

Abu'l Furrage, whose Compend of Universal History has been transfated by Pocock, was the Author also of several medical works, sew or none of which have been preserved. He was born in 1226, and died in 1286.

A particular account of this Author is contained in the Bibliot. Orient. Vatican. Tom. ii. p. 245. where he is stilled by the elder Assemani, "Gregorius Bar Hebræus, Scriptorem Jacobitarum facile princeps." Upon the Tartar Invasion in the year 1243., his father (who was a physician) and himself, were prevented by an accident from slying from Malatia, his native town, to Aleppo; but, the following year, he went to Tripoly, where he was first ordained Bishop of Guba, then of Lucaba, afterwards of Aleppo, and lastly was made Primate of the East, in which station he died.

A complete list of his works is given in the Bib. Vatic. and among the medical, are the following. A Syriac translation of two books of Avi-Vol. II.

M m m cenna:

cenna; a translation of Dioscorides; a work upon the subject of Medicine; a commentary on Hippocratis's Aphorisms in Arabic; an abridgement of Honain's Questions, and No. 26 is a large work, being a collection of the opinions of physicians. Besides the historical work already mentioned, he wrote the Chronicon Syriacum containing much curious historical information.

Pocock remarks that in one of the Codexes of the History of the Dynasties, he found the Author entitled, in the margin, Ebn Koph Al nasrani; and Casiri (Bib. Esc. Tom. i. p. 298.) takes notice of an Author who frequently cites Abu'l Furrage under the name of Ebn Al Koph: but it is perhaps more probable that Ebn Al Koph was a distinct person. (Bib. Paris Cod. 1097. Comment on Galen.)

ABI AL FURAGE EBN IACUB, EBN ISHAC ALMAROOF B'EBN AL KOPH, Al MISSEEH. ابي الغرج بن يعقوب بن اسحاف المعروف بابن الغنا المسيحي

This writer is undoubtedly different from the Historian Abu'l Furrage whose father's name was Ahron; but it is probable they were contemporary. I brought with me from the East a large work of this Author's on Surgery, in three volumes, entitled, Al Omdat fi'l Jiraha I And in the Bib. Orient. Vat. Tom. i. p. 627. among the MSS. brought to Rome by Assemani, there is a medical work of the same Author, Liber in partes duas divisus in fol. Bomb. 259. script. An. 1271. There is no date to my MSS., nor is it clear whether it be precisely the same or a different work, but the name of the Author in both is exactly the same, and though Assemani's M. S. was written several years before the death of Abu'l Furrage the historian, it may be inferred from Assemani's silence that he had no doubt of Ebn Al Koph being a different person from Gregory Abu'l Furrage.

This Surgery of Ebn Al Koph was in confiderable esteem at Aleppo.

علاءِ اللاين على بن النغيس .ALA AL DEEN ALY BEN AL NAPHEES

Ebn Al Naphees, the Author of a work much esteemed in the East entitled Al Moujez si Al Tubb, الهوجس في الطب, slourished in the thirteenth century, about the year 1283. His work is a compend of physic chiefly

chiefly abstracted from Avicenna and Haly Abbas, and has been explained or commented upon by many writers.

The works of this Author are common in the East, as well as in the European Libraries. There are no less than six M. S. S. in the Bodleian. Cod. 571. 590. 625. 631. 637. 643. Uri (Bibliot. Bodleian. Oxon. 1787.) See also Casiri (Bib. Escur. Cod. 824. 826. 831.) Assemani (Bib. Med. Laurent. Cod. 255.)

The variation in the defignations of this Author, has fometimes occasioned his being confounded with his Commentators.

# SECT. II.

OF MEDICAL WRITERS UNDER THE WESTERN EMPIRE OF THE SARACENS.

FROM the writings of the elder Asiatic Physicians not having been quoted by Avenzoar, Doctor Freind was led into an opinion that little or no intercourse could have existed between the Eastern and Western Empires of the Saracens: and remarks further that the works of Averrhoes which made so much noise in Europe, "were not, neither are they at this day, known to the Arabians of the East." The inveterate hatred substituting between the Houses of Ommiyah and Abbas, he thought must have hindered any commerce between the two Empires, and that the Asiatic writers only began to be known in Spain, in the latter part of the twelsth century. (Hist. of Physic, vol. ii. p. 112.)

But though the Afiatic writers are not expressly named by Avenzoar, it does not follow that he was unacquainted with their writings. Haly Abbas in the course of his work, and Rhazis in several of his Tracts, do not cite the names of those from whom they have borrowed. Avenzoar's filence may therefore rather be ascribed to the plan of his work, which did not require explicit citation, than to his unacquaintance with writings from which, by comparing passages, he clearly seems to have borrowed, and to which he may be supposed to refer, as he does frequently, under the general title of Physicians. It may be further remarked that Hippocrates, Aristotle, and Galen are sometimes cited by Avenzoar, of whose writings it does not appear that the Arabs of Spain had any knowledge but through the Eastern translations; and if these translations found their way into Spain, it can hardly be supposed that the writings of the Asiatic Physicians did not by the same channel find their way also. As to the works of Averrhoes not being known to the Arabians of the East, it does not appear on what authority Dr. Freind afferts it, but I apprehend it to

be a mistake in fact; for of the M. S. works of that author extant in the European Libraries, several are said to have been brought from the East.

How far the enmity between the houses of Ommiyah and Abbas, which Dr. Freind justly conjectures might prevent commerce between the Eastern and Western empire, did in reality operate in obstructing all literary communication between them, can only be known from the history of the times; and in order to place the Introduction of Literature among the Arabs in Spain, in a clearer light, a few remarks on the Annals of that country, restricted to this single point of view, may perhaps prove acceptable to those who happen not to be much conversant in a part of history that is little studied.

From the invasion of Spain by the Saracens in 712, to the entire disjunction of that country from the Eastern Empire in 759, the Province was governed by Lieutenants appointed, or confirmed, by the Khalif; and during this period of 47 years, the Arabs in Spain were almost constantly involved either in war with their Christian neighbours, or in civil wars among themselves.

Musa Ebn Nasir, the Saracen Governor of Africa, under whose auspices the conquest of Spain had been undertaken and completed, being recalled by the Khalif, returned to Syria laden with the rich spoils of the new conquered Province; and spread so favourable an account of the country, that numbers of the Asiatic Arabs were induced to go thither to seek their fortune. (Cardonne, Hist. de L'Afrique and de L'Epagne. Tom. i. p. 104. Paris 1765.)

But though in this manner many of the Asiatic, as well as the African Arabs, were encouraged at that time to leave their native country, and numbers continued afterwards to transmigrate, the turbulent condition of the times was neither favorable to letters, nor had Literature hitherto in the East, made much progress among the Saracens.

The almost total extirpation of the Ommiyahan Race was the immediate consequence of the accession of the house of Abbas to the Moslem Throne, in the year 749; and Joseph Al Fahri, who had been made Governor of Spain by Merwan the last Eastern Khalif of the proferibed family, transferring his allegiance, was continued in office by the new created Prince.

The Arabs in Spain, beheld with indignation the barbarous usurpation of the Abbassides in the East, and within sive or six years after the revolu-

tion, receiving intelligence that Abdalrahman, a furviving Prince of the Ommiyahan line, had taken refuge in Africa, Deputies were fent from some of the principal tribes, to invite him to assume the Government-Abdalrahman gladly accepted the offer. Fahri made all the resistance in his power, but fell at last a facrifice to the conqueror, who in 759, being placed securely in the Government, assumed the title of Khalif, and fixed the royal residence at Cordova. (Cardonne Tom. i. p. 190).

In this manner was Spain, from which the Ommiyahan Khalifs had drawn a vast revenue, for ever divided from the Eastern Empire; and the Abbassides, however they might deplore the loss, seem never to have made any vigorous efforts for the recovery of so valuable a Province. In the year 764, indeed, an invasion was made from Africa by command of the Khalif Al Mansur, and a second attempt was made about thirteen years after, under his successor Al Mohdi; but both expeditions proved unsuccessful: the head of the General who commanded the first was sent in contempt, to Al Mansur, then at Mecca; and Abdalrahman was so incensed at the second Invasion, that he meditated in revenge an expedition into Syria. Cardonne (Hist. Tom. i. p. 194. 204.)

The History of the Reigns of the three first Western Khalifs, the last of whom died in 822, affords little more than an alternate Series of civil revolts; and wars carried on with reciprocal cruelty; against the Christian Princes. Yet Al Hakam, the third of those Khalifs, is celebrated as a patron of learning.

The reign of Abdalrahman the Second was not less turbulent than those of his three predecessors. He sound leisure nevertheless to cultivate the arts of peace; he passed his leisure hours in conversation with learned men, and was particularly fond of Philosophy and Poetry; "Sumanı rei "militaris peritiam optimarum artium Studiis adjunxit; Subjectorum omnium gratiam moribus elegantissimis promeruit." (Bibliot. Arabo-Hisp. Escur. Tom. ii. p. 34.) Cardonne (p. 282.)

It may be remarked that in this Prince's Reign, (about the year 838.) an Embassador arrived from Constantinople, who was sent to form an alliance against the Eastern Khalif, and to induce Abdalrahman to undertake an expedition into Syria. The Khalif, in consideration of the state of his affairs at home, prudently declined this proposal for the present; but concluded a treaty with the Greek Emperor, and sent Gazali, a celebrated Philosopher and Poet, his Embassador to Constantinople. (Car-

donne.

donne, p. 272.) This last circumstance is a strong presumption that Philosophy had made some progress in Spain before the political connexion took place between Constantinople and Cordova; while another circumstance shows, that the intercourse with the East was not so much obstructed, but that artists could find their way thence to Spain; for we find, that Aly Zeriab a samous Musician, who had been invited from Persia, came about that time and settled at Cordova. (Cardonne p. 283.)

Abdalrachman died in 852, but transmitted the love of letters to his posterity; his Son and Grandson becoming distinguished Patrons of learning. The first reigned thirty one years, and is represented as an excellent Prince, "Qui fortitudine, liberalitate, comitate, dicendi copia, atque poetica & "calculatoriá facultate omnes ante se Reges longe superavit." The second reigned twenty-sive years, "Princeps eloquentissimus & apprime eruditus." (Bibliot. Arabo-hispan. Tom. ii. p. 34.) But, unfortunate in his affairs, he lived to see most of his cities in open rebellion; the Christians taking every advantage of the intestine distractions; the Abbaside Khalif prayed for publicly in the Mosques of the revolted cities; and, a little before his death, his authority confined within the narrow bounds of his Capital.

It was referved for his Nephew Abdalrahman the Third, who (contrary to the usual course of succession) was raised in 912, (A. H. 300.) to restore the almost expiring Khalisat to its former splendor; to enlarge its territory, and, (what more than conquest redounds to his honour in the annals of Princes) to extinguish by a firm and spirited conduct, the baleful spirit of revolt, so long prevalent among his subjects; to conciliate their affections, by supplying the blessings only enjoyed under a wise administration; and to enrich the tranquillity he had procured for his country, if not by the introduction, at least, by the liberal patronage of Science.

A Sketch of the introduction of the Greek learning among the Eastern Arabs has been given before. It may be recollected here that some branches of learning had been sedulously cultivated before Al Mamun succeeded to the Khalifat in the year 813. From that period till the time of Abdalrachman the Third, of Spain, a century elapsed, in which science had in the East continued to make a rapid progress, under the patronage of the Asiatic Khalifs; and if it should be found, that the sanguinary wars in which they were almost constantly involved with the Greek Emperors, did not put

<sup>\*</sup> See page 88. 119. and Note XXIX of this Volume.

a ftop to all amicable intercourse between the hostile nations, nor prevent the Saracens from borrowing science from the declared enemies of their religion and ambition, it can hardly be supposed, that the political enmity subsisting between the family of Abbas and the injured house of Ommiyah, should so obstruct all communication between a people united in the same faith, manners, and language, as to hinder the liberal spirit of science, which had by that time pervaded the Eastern Provinces, from sinding its way into Spain; either directly from Bagdat, or by sea from Egypt, or Africa.

It may also be remarked, that in the period of which we are now fpeaking, translations of most of the medical Greek writers were made at Bagdat, and that Mesue, Honain, Serapion, and Rhazis, together with a number of other Physicians, whose works have been lost, made a confpicuous figure in the East. To render it probable therefore that the Afiatic writers remained unkown in Spain, it must contrary to the tenor of history be supposed, that the Spanish Saracens had no commercial intercourse with Africa, Egypt, or any other part of the Abbasside Khalif's dominions; and that the subjects of the different Empires never met together at Mecca, nor in the ports of the Greek Emperor, which were open to Spain, and do not appear to have been at all times shut to the commercial subjects of the Eastern Khalifs. But there can be little doubt that Spain, as early as the 9th century, exported the rich productions of her country, and received in return many of the articles of Eastern Luxury. Under such circumstances it could hardly happen that men of learning in Spain, should remaine wholly ignorant of what was passing at Bagdad; and if Science and Commerce made slow progress in Spain, proportionately to what both had done during the same period in Asia, it must be ascribed to different causes from that of enmity to the Abbaffides.

Some idea of the rich and flourishing state of Spain under Abdalrachman the Third, may be formed from the accounts given by Arab writers, of the Presents made to him by a Vizir about the year 938, and of the magnificent reception of a Greek Embassador, sent to induce the Khalif to carry war into Syria. (Cardonne p. 320.) In the list of these Presents, besides a vast quantity of Aloes-wood, Ambergris, and Camphor, are sound Persian Carpets, and some of the rich manusactures of Bagdat, which plainly shows that Spain's Eastern commerce was then at a great height; and though

though it may be allowed to have owed much of its increase to the long intervals of tranquillity during a reign of half a century, there is no reason for thinking that commerce had so rapidly risen to such a height, in the space of thirty years, or that it had not commenced before Abdalrahman's accession to the Throne.

The Palace and new City of Zohra, built by the Khalif, may ferve as an inftance of the Saracen magnificence in Spain, about the middle of the Tenth century; (Cardonne, p. 330.) and though some circumstances, as usual, may be heightened by the Arab writers, enough will still remain after the allowance made for exaggeration. It appears that the building was conducted by a Greek Architect; that a hundred and forty marble columns were sent by the Greek Emperor as a present; and that other ornamental marbles had been worked at Constantinople. (Card. p. 333.)

The intercourse almost constantly maintained between Spain and that Capital, led me at first to suspect that the Western Saracens might have received the Greek Physic, directly from thence; but it seems on the whole more probable, that their first acquaintance with the Greek writers was by means of the oriental translations.

Abdalrachman the Third, as already observed, was raised to the Khalisat in the year 912, and assumed the title of Emeer al Moumeneen which had till that time been peculiar to the Abbasside Khaliss. After a glorious reign of sifty years, he left his kingdom, in prosound peace and in a most flourishing condition, to his son Al Hakam. It should seem that he transmitted the love of letters to all his children; some of whom distinguished themselves in that way, and one in particular, wrote a history of the Abbasside Khaliss. Abdalrachman himself is mentioned by historians as an eminent patron of learning. "Hic Arabum factiones & bella civilia, quibus universa Hispania jam diu ardebat, prudentia ac fortitudine penitùs delevit extinxitque: adeo ut, eo Rege, Imperium justitia ka pace quam maxime floruerit; ac proinde Litteræ quas ipse honoribus præmiisque sovebat & suo etiam exemplo promovebat, non parum ceperint incrementi." (Bibliot. Arabo-hisp. Tom. ii. p. 37.)

His fuccessor Al Hakam, reigned fifteen years in a prosperous state of peace, and may justly be reckoned the Al Mamûn of the Western Khaliss; having carried literature in Spain to a higher pitch than it had ever been before. Had the following passage, collected by Casiri from Arabic authority, happened to have fallen in Dr. Freind's way, it is hardly to be Vol. II.

doubted that he would have retracted the opinion, in which I have prefumed to differ from him, and would have placed the introduction of the writings of the Asiatic Physicians into Spain, at least two centuries earlier than it now stands in his History of Physic.

I shall transcribe the whole passage, as being materially to the point, and containing curious information relative to the literary history of Spain. "In regnum fic pacatum fuccessit ejus (Abdrahmani) filius Alhakemus " hujus nominis secundus, Almostanserus Billa nuncupatus, qui fato func-" tus est Anno Egiræ 366 (Ch. 976.) die 2da mensis Saphari, quum im-" perasset annos quindecem & Menses quinque. Alhakemus, teste " Alrazzo & Ebn Haiano, omni Scientiarum genere fuit excultissimus: "ita ut fummam in eo Juris peritiam, nec vulgarem eruditionem facile " agnosceres. Nullum unquam evolvit librum in quo doctas annotationes "manu fua exaratas non reliquerit. Bonarum Artium in Hispania au-" gendarum in primis studiosus, eruditos quosque viros ex oriente summis " propositis præmiis evocandos; Codices præterea omni doctrina refertos " immensis pecuniæ largitionibus undique conquirendos curavit. Quorum "tanta confluxerat copia, ut si scriptoribus sides, Bibliotheca regia illo " ævo ad fexcenta voluminum millia excreverit: quæ non nifi quadraginta " quatuor ingenti mole Catalogis recensebantur. Celeberrima Cordu-" bensis Academia tanti principis auspiciis condita, complura etiam Col-" legia studiorum causa exstructa, complures per universam Hispaniam "Bibliothecæ conflatæ; nec pauci scriptores, eodem rege auctore, vir-" orum doctrinà & eruditione inter Hispanos excellentium facta litteris "confignarunt." (Bibliot. Arabo-hispan. Tom. ii. p. 37.)

The Khalif al Hakam was succeeded in 976 by his Son of the same name, a minor, who leaving the administration of publick affairs to his ministers, passed an inglorious life of indolence midst the pleasures of his Seraglio. His Vizir, Al Mansûr, however, who ruled with sway almost absolute for twenty-six years, carried on successful wars against the Christians; but the advantages he had gained, were lost by the mismanagement of his Son Abdalmilek, who had succeeded him in office, and who died in 1006. From this period the Spanish History is filled with civil discord, revolts, and usurpations; and in the year 1038, the Ommiyahan Dynasty in Spain terminated in the person of Al Mutemed, the last Khalif of that line. (Cardonne, Tom. i. p. 375.)

Upon

Upon the abolition of the Khalifat, the feveral Governors of the principal cities, fetting up independent states, assumed the title of Kings; and Spain in this chaos of divided interests, weakened by the cruel oppression of petty tyrants, by intestine wars, and by the intrigues and conquests of the neighbouring Christian powers, was driven at length in despair to implore the aid of the African Moors. Joseph Tesephin, the second Prince of the Almoravide Dynasty, who succeeded in 1069 and sounded the City of Marocco, was invited as an auxiliary into Spain, and had a confiderable share in the victory gained over Alfonso of Leon, in the year 1087. that ambitious, and perfidious Prince, taking advantage of the times, feized in 1091, the territories he had as a friend come to protect, and joined Moorish Spain to his other conquests: blackening, at the same time, his guilt by breach of treaty, and the barbarous treatment of Ebn Abad and his family, the unfortunate Prince who had trusted to his honour. (Cardonne, Tom. ii. p. 155. 153. 203.) (Bibliot. Arabo-hispan. Tom. ii. p. 41.)

From the above sketch of the Saracen History, in the interval between the death of Al Hakam and that of Eben Abad in 1096, a period of 120 years, it might reasonably be conjectured that the sciences must have languished; but the contrary is apparent from the annals of Spain. The spirit diffused under Abdalrahman and Al Hakam rose superior to the turbulence of the times. The house of Abad Aphas (according to Casiri) in particular, was celebrated for its love of letters; and the last Prince of that line, during the painful confinement of fix years before his death, found consolation in Poetry; in describing the horrors of his dungeon, and recording in elegant verse, the distresses of a feeling mind, sunk from the height of regal grandeur, into the lowest state of human wretchedness. (Cardonne, Tom. ii. p. 206.) It may lastly be remarked in respect to Physic, that it must have been in this interval that Albucasis slourished; for his death happened in 1106, and Avenzoar who was born about 1027, must have made a figure at the same time: but as the latter lived to an extraordinary age, he may be faid to belong also to the twelfth century.

Albucasis is one of the oldest Saracen Spanish writers on Physic, whose works have reached the present times.

KHALIF EBN ABBAS ABU'L CASEM AL ZAHRAWI خلف بن عباس الهواوي

Nnn2

The

The title of his work. Al Tafrif النصريف.

Albucasis, whose name has been so strangely confounded in the Latin, Buchasis, Absarabius, Azaragi &c. was a native of Cordova, where he practifed Physic and Surgery with great success, and died in the year 1106 (Heg. 500.) as appears by a M. S. in the Escurial Library (Bib. Ar. hisp. Tom. ii. p. 136.)

Both his Medical and Chirurgical works were highly esteemed, but were not translated into Latin till the 16th century. See Mangetus (Bibliot. Scriptorum medicorum. Tom. i. p. 110. Genev. 1731.)

An account (rather full) of Albucasis, may be found in doctor Freind's History (p. 123.) where a very just remark is made on the usual practice of Editors of the Arabian writers. I shall refer also to the History for an account of the M. S. S. of Alfaharavius in the Bodleian Library, which affords a strong instance of the confusion produced by the translation and abbreviation of Arabic names.

The late Edition of Albucasis in Arabic and Latin, from the Clarendon press, by Mr. Channing, affords a good specimen of Arabian surgery. Albucafis (de Chirurgia Arabice & Latine cura J. Channing. Oxon. 1778.

ABU MARWAN EBN AAD AL MILLEK EBN ZUHR. ابو صروان ابن عبد الملك بن زوهر

The title of his work Al Taiseer.

Avenzoar, as appears from a M. S. in the Escurial, (Bib. Tom. ii. p. 132.) died about the year 1162, and if it be true that he had lived to the age of 135, (Freind vol. ii. p. 72.) and begun practice very young, he must have made a figure in the 11th century, and been born 8 or 9 years before the death of Avicenna. Leo places his death in 1197. (Hotting. Bib. p. 271.) which is about ten years before that of Averrhoes, but this is evidently erroneous; for Averrhoes speaks of the sons of Avenzoar as his acquaintance, but does not mention the father as his contemporary: he always speaks of him with great respect, and in the conclusion of the Colliget refers to him in these words. "Unicuique volenti ad hujus modi preclaritates scientiam pervenire, bonum est ut libros Abumeron Avenzoar Studiose legat; nam illic Medicinæ Thesaurus patet manifeste. (Colliget Ven. 1490., p. 63., 1542. p. 107.)

Dr. Freind is more full in his account of Avenzoar than of any of the other Arabians, and thinks he comes more justly under the character of an original writer; (History, p. 74. p. 114.) He remarks also that the translation of his works, as well as of all the Arabian writers, is very barbarous; and indeed many passages both in him and Averrhoes are hardly intelligible. The passage in which Averrhoes mentions the great age of Avenzoar, (in the Edition of 1490. p. 31.) with difficulty can be understood till compared with the corresponding passage in the other Edition (1542). Avenzoar died at Seville, according to the Escurial Catalogue, which is more to be depended upon than the authority of Leo, who says he died at Marocco. Casiri (Bib. Arabo-hisp. Tom. ii. p. 132.) Assemblies Med. Laur. Cod. 216.) Casiri (ut supra, &c. Cod. 829.)

ABU ALY ZUHR. EBEN ABD AL MILLEK ZUHR الموعلي زوهر ابن عبد

Aboualy Ebn Zoar, should appear to have been one of the Sons of Avenzoar, and the same with Zoar to whom Vander Linden and Mangetus ascribe the Tract De Curatione Lapidis; for in the translation to which both refer, he is called Abuale Zor filius Abmeleth filii Zor, and the Tract is dedicated Imperatori Sarracenorum Haly filio Joseph filii Tesephin. This Haly was the second King of Marocco, who, succeeding his Father Joseph (the sounder of that city) in 1106, died about the year 1134. The small Tract De regimine Sanitatis, for any thing I can find to the contrary, belongs to the same Author, and there appears no reason for distinguishing Zoar from Abohaly Zoar.

Two Zoars are mentioned by Leo Africanus, but the Chronology is so consounded that what he says serves little to clear up matters. The first Ibnu Zoar, was according to him, Physician to Joseph Tesephin, and died in the ninety second year of his age, An. Heg. 564, or of Christ 1168. Now Joseph Tesephin died in the year 1106, when this Ebn Zohar was only thirty years old, an early age to have been employed in such a station. But if Avenzoar, whose works are still extant, be here meant, which seems more probable, Leo's mistake consists in allotting him only ninety-two, instead of one hundred and forty years of age, allotted him by Averrhoes: in which case, Avenzoar must have been seventy-nine, at the time of Joseph Tesephin's death, and might consequently with propriety have been employed as his Physician.

The other Ibnu Zohar mentioned by Leo, as Son of the former, if he was the Son of Avenzoar, must have been born when his Father was one hundred

hundred and fixteen years old, that is in 1143; and as Joseph Tesephin's fuccessor Aly was dead at that period, this Ibnu Zohar must have been a younger brother of Abohaly, one of whose Tracts, as already mentioned, was dedicated to that Prince.

ABU AL WALEED MOHAMMED EBN AHMED EBN ROSHD ابو الوليد

Averrhoes died about the year 1198 at Marocco: or, according to Leo, eight years later. He distinguished himself chiefly by his translation and Commentaries upon Aristotle. His principal medical work is what has been translated under the Title of Colliget besides which he wrote several other Tracts that have also been translated. In the Escurial Catalogue, (Tom. i. p. 299.) mention is made of an Index of his books, amounting in all to seventy-eight. Several of his medical works have never been translated.

A long account of this writer is given by Leo Africanus, (Hottinger, p. 271.) who fixes his death in 1206; (Heg. 603.) but greater anachronisms may be remarked in the Authors cited by Vander Linden; for he is even made to have been a contemporary of Avicenna, who died at least a hundred and fixty years before him.

His name, as expressed in the Latin, would in the East be still more unintelligible than that of Avenzoar; Abhomeron Aben Zar, being nearer to Abu Marwan Ebn Zuhr, than Ebn Roshd is to Averrhoes.

The Latin Editions of his Medical works may be seen in Vander Linden, &c. Of the M.S.S. preserved in different Libraries, and particularly at Vienna, many are either Hebrew translations from the Arabic, or Arabic written in Hebrew characters. (Bib. Bodleian. Laud. Cod. 398.) (Bib. Med. Laur. Cod. 180.) (Bib. Arabo-hisp. Cod. 826.)

Musa Ben Maimoon Al Israeli موسي بن مسيمون الاسرايلي Maimonides, or Rabbi Moyses, was a native of Cordova, and died at Cairo in the year 1208. (Hej. 605.) The M.S. History of Philosophers

(p. 490.) contains some account of his life, which has been translated by Casiri (Bib. Escur. Tom. i. p. 293.) see also Leo apud Hottinger, (p. 288.) In Vander Linden, he, as well as Averrhoes, is placed by the Chronologica to contain

gifts too early.

His Aphorisms, and a Tract de Regimine Sanitatis have been translated as likewise some Excerps from Galen; which should seem to be the chief of his medical writings. (Bib. Bodleian. Cod. 863. 864.) (Bibliot. Arabohisp. Cod. 863. 864.)

His Aphorisms are found in a volume entitled Rasis, &c. Venet. 1506. in the British Museum. And in another volume there is another Tract of his bound up with Avenzoar and Averrhoes. Venet. 1542.

ABDULLAH BEN AHMED DHIA AL DEEN EBN AL BEITHAR AL ANDALUSI عبدالله بن احمد صياء الدين ابن البيطار الاندالسي

Eben Beithar was born at Malaga in Spain; and died at Damascus in the year 1248. Casiri properly corrects the mistake of Leo Africanus who places Beithar's death in the year 1197.

The Escurial Catalogue (Tom. i. p. 277.) contains an account of his life extracted from Abu'l Feda's history; and Casiri has given a translation of Ebn Al Beithar's Preface, from which it will appear what pains were bestowed by the Author on his work, and with what injustice it sometimes has been represented as a mere translation of Dioscorides.

The M. S. S works of this writer are common both in Europe and in the East, but have never been translated. Casiri remarks that Tournesort makes mention of a translation of Beithar by Galand; but observes that no such work is to be found in the Paris Catalogue, and that to the best of his knowledge, it never was printed; he regrets at the same time, that so valuable a work should remain so little known in Europe, from want of translation.

It is in high estimation in the East. Bochart in his works, has translated many extracts from Ebn Beithar whose great work is entitled "Collectio magna Simplicium Medicamentorum. A Tract De Limoni- bus" under the name of Embitar has been translated by Alpagus. Mangetus (Bib. Tom. i. p. 109.) (Bib. Bodleian. Pocock 402. 403. (a beautiful M. S. Hunt, 86.) (Bib. Arabo-hisp. Cod. 834. 835. 836. 837.

Having, I believe, taken notice of the principal Arabian Physicians who wrote before the sisteenth century, and whose works are extant in Syria, and sound in European Libraries; it is time to conclude a disquisition which has run out to an unexpected length: as it certainly was far from my intention to attempt a task so much beyond my abilities, as that of exhibiting a complete Catalogue of Arabic writers in Physic. I shall therefore

therefore only add a few names found in Mangetus, but of whose M. S. S. I have observed no trace in the European Libraries; and, not having heard of them in the East, I do not presume to determine their proper Arabic names.

### ALBENGNEFIT, OR ABBENGUEFIT.

Libellus in quo de Medicinarum Virtutibus in generale & speciale brevissime & ordinatissime pertractat. Nuper Joan. Nicol. Brix. Salodiens opera castigatus. This Tract consists of three or four solio leaves, and is among the Opuscula joined with the works of Mesue. (Venet 1541. et 1602.)

### BULCHASIM BENABERAZERIN.

This is probably the Albulcasis of Mangetus, said to have been contemporary with Mesue. His Tract called Liber Servitoris, consisting of nine or ten solio leaves, is joined to the works of Mesue in the Editions above-mentioned. Liber 28. Bulchasim Benaberazerin translatus a Symone Januensi interprete Abraam Judeo Tortuoscensi.

### ALCANAMOSALUS SEU CAMAMESALUS.

De passionibus Oculorum Liber. Vide (Manget Biblioth.)

ELLUCHASEM ELIMITHAR DE BALDACH, FILIUS HAHADVM, FILLI DUCELLAM DI BALDACH. Vixit A. C. 1305. (Justus in Chron. Med.) The title of this writer's work is Tacwim Sanitatis, and was published, with some small Tracts of other Arab writers, at Stratzburg, in 1531. 1533. in fol. (Vander Lind. p. 158.)

Takwim, تغوير, is a title which several Arabian medical writers have given to their works; and was adopted by Abu'l Feda for his Geographical Tables, in imitation (as he says himself) of Ebn Jazalah, who had named a medical work Takwim al Abdan. (Præsat. ad Chorasmiæ descriptionem, vers. J. Gravii. Lond. 1650.) "Ce mot Arabe Tacouim, se prend particuliérement pour un ouvrage divisé par Tables." Herbelot (Bibliot. Orient. p. 837.)

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