

ARR. V. *Flora Cochinchinensis: sistens plantas in regno Cochinchina nascentes. Quibus accedunt alie observate in Sineso imperio, &c.*

A Flora of Cochinchina, containing descriptions of the plants growing in the kingdom of Cochinchina, to which are added others observed in the empire of China, the east coast of Africa, and in various places in India; arranged according to the sexual system of Linnæus; being the work of John de Loureiro, fellow of the Royal Academy of Sciences in Lisbon, and formerly a preacher of the Catholic faith in Cochinchina, and there a professor of mathematics and physic in the royal palace. Printed in Lisbon, 1790, 2 volumes 4to, pp. 744.

THE BOTANY of the Chinese empire is a subject to which we have drawn the attention of our readers on a former occasion, when we presented a paper written by Dr. Livingston of the East India company's medical service: in which he exhibited some parts of the unexplored field there is in China for the examination of the student of nature, and the facilities enjoyed at Canton for purchasing native plants of the Chinese florists. Reference has also been made to the subject in other pages of the Repository. It will, however, need no labored argument to show conclusively that the botany of China, and indeed, all the other departments of its natural history, can be discoursed upon most learnedly, while little or no real progress is made in elucidating and applying them to the arts of life. Any one who will take the trouble to examine what has already been said on this subject, will be convinced that the confined situation of foreigners precludes nearly every attempt to make new acquisitions; and by shutting us up as the Chinese do, they shut out from themselves all the advantages which might arise from the scientific application of the mineral and vegetable treasures this great empire contains, to the purposes of common life. And in botany especially is close and repeated observation indispensable before certainty can be attained, and conclusions drawn that can be relied upon. As well might a man who had never moved beyond the precincts of Madrid, undertake to describe the plants of France from drawings and descriptions, as that persons should write upon the vegetable productions of China from what can be gleaned out of foreign authors. We know the existence of the varnish tree, the cotton tree, the tallow tree, the tea shrub, and many others, and that important products are obtained from them, and so did Matthew Ricci; and we now cannot boast of much greater knowledge than he and his companions had then obtained. To this day, it is a matter of dispute whether the green and black tea are species or varieties, although the leaf has been an article of commerce ever since the ninth century. During the long time that foreigners have traded to this port, there has been a succession of travelers and naturalists, like Osbeck, Toreen, Abel, and others, who have examined the plants growing about Canton and Macao, with a good degree of minuteness, much more so than in

a great many other parts of Asia. The rest of the empire, together with Japan, Corea, and the isles adjacent, are still open (shut rather,) to the investigation of whoever has the hardihood of a Tournefort and the zeal of a Pursh. And zoölogy, mineralogy, and geology are also in the same case; just as inviting and just as unknown.

But if the works of nature in China are shut out from our gaze, we can look into the books of the Chinese, and ascertain if they have studied the handy works of God to any purpose. Their medical and botanical treatises are numerous and voluminous indeed, and we might reasonably promise ourselves a reward in reading them, by ascertaining their modes of applying the resources of the land to heal disease, and administer relief to the sick. Judging from the multitude of doctors and herb-sellers seen at the corner of the streets of this city, we might infer that the Chinese possessed great facilities for curing at least what ills their flesh is heir to. The signs of the apothecaries also corroborate this notion. But alas, on examination it will be ascertained that very little science can be found in their best books on materia medica; and that their practice is not yet perfect, we have ocular demonstration. The practice of the Chinese is founded on the pulse, and by a long observation of the effects of certain medicines on the system as indicated by the pulse, a man will acquire some experimental knowledge of the necessary remedies. But for the most part, the medical practice among this people deserves no better name than impudent quackery. Some get a reputation by a few fortunate cures, and trumpet them far and wide; leaving all the failures occasioned by their ignorance to die in obscurity: a mode of procedure not unlike what may be seen in some western countries, in their nostrums and medicamentums. Little dependence can be placed on what the Chinese now know of the art of healing; a new era must be introduced by foreigners; the well established systems of pharmacology known in the west must supersede the Pin Tsaou; and the dogmas of Shinnung, and the modern quacks must be exchanged for the demonstrations of the Hunters and the Coopers.

We are losing sight, however, of our present object; which is not to give a sketch of the state of medicine among the Chinese, nor to dilate upon the blessings accruing to them from the introduction of a better practice, nor to fill up pages in treating of the botanical treasures of China as described in glowing terms by the Abbé Grosier and Du Halde, but simply to give some account of the work which stands at the head of this article.

This is the production of John de Loureiro, a Portuguese, formerly missionary in Cochinchina. We have not been able to ascertain any thing of his life, except what he says of himself in the preface to his work, which was printed at the expense of the Royal Academy of Lisbon, under Loureiro's own superintendance; and as it justly should be, is dedicated to that body. In his dedication, he observes that, for twenty years he had been endeavoring to get the book printed before the Academy undertook it. Due respect is paid to those who had preceded him in the study of Flora in the unexplored regions

of the Indian archipelago, and countries adjacent, among whom Garcias' work on the spices, and Rumphius' Herbarium Ambouense afforded him much assistance. Speaking of the neglect this science experienced, he says: 'But I know not by what fate it has happened, that our predecessors, to whom neither talents nor opportunity were wanting, neglecting to follow the example already set them by their countrymen, have scarcely made an acquaintance with botanical science. From which cause great loss has arisen, inasmuch as we have been in a manner deprived of valuable treasures contained in the vegetable kingdom, while other nations have been deriving benefit from them. But this will not always continue, because opportunity will arrive, if the powers above favor, to change the untoward into fortunate and prosperous circumstances.' After a proper portion of flattery is applied to those who needed it, Loureiro thus closes his inscription: 'It will not be in my power to contribute stones, metals, and more precious things towards the erection of the fabric (the temple of science), yet I will not be entirely an idle and useless member. From my stores, such as they are, I offer you this Flora of Cochinchina. Among its treasures you will find wood fit for the building, colors to adorn, food and medicines to recruit the laborers who spend their strength in the completion of the work, and devote it to the public good.'

Our author then proceeds, in an address to the candid and studious reader, to give some account of his residence in Cochinchina, the cause and manner of his collecting the materials for his Flora, with an eulogy on the system of Linnæus. Speaking of his residence in that kingdom, which, according to him, extends from 18° of north latitude, comprising Tsiampa and part of eastern Camboja, and stretches southwards more than nine degrees to the gulf of Siam, he says: 'During the thirty-six years I resided in that country, I had time to examine into the mysteries of nature peculiar to those regions; but, as leisure and aid were wanting, diligence and industry were my only assistants. I first went thither as an evangelist and preacher, to announce to them the common Creator of all, and the Savior Jesus Christ. But when heathen superstition opposed too hard, and the laws of the kingdom forbade Europeans setting foot there, this work was of service to me, as by it I obtained permission to remain, and to labor as far as prudence, fortitude, and charity would allow: prudence, lest imbued with too much zeal, I should seem openly to despise the laws of the king, while at the same time by attending to these sciences, which were able to please him the more, I could secure his favor the more firmly: fortitude, by bearing in a foreign country all those evils, which not unfrequently occur in one's own; and charity, since by becoming all things to all men and by a disregard of private advantage and gain, I could relieve the wants of others: more especially by practicing the medical art, according to the divine injunction, "heal the sick who are in that place;" hence I distributed medicines gratis to all who solicited me, both believers and infidels. Thus by the favor of God, and the popular

well approving, it was not difficult for me to obtain permission to remain in the country, nay the king even appointed me professor of mathematics and medicine in his own palace. But in this situation I was not at liberty to promulgate the doctrines of the gospel, yet, by acting cautiously and secretly, these designs could be carried on.

"Affairs being thus circumstanced, I was almost overwhelmed by the multitudes who came to me, many of them desiring to be instructed in the mysteries of the Catholic religion, but the greatest number intreating to have their bodily maladies healed. For curing all these different diseases, I was not able to obtain any necessary articles from Europe; nor if I had been able, could I have paid for the same. Such being the case, I began to consider whether I could not substitute the materia medica indigenous to Cochinchina, and by some mode make what was in that country supply the place of the more precious things from Europe. This was the beginning and cause of my commencing the science of botany.

"On account of the want of teachers and authors my progress was slow. Neither from Dioscorides, nor his commentator Laguna, nor from Ray or Tournefort, whose botanical works I had successively procured, could I obtain so much light, as to distinguish clearly the plants of India; many of which, both genera and species, are in appearance very different from those found in Europe. At length, after a wearisome delay, I obtained the works of the illustrious Linnæus, which were sent to me by Thomas Riddeil, the captain of an English ship, an excellent man, to whose kindness I owe much. From these volumes I obtained a knowledge of the doctrines and terminology of Linnæus; and immediately I saw how much this system excelled the others, and how greatly it aids the tyro when other props are wanting. The botanical gardens and the green houses of princes, which are found in Europe, were much desired in Cochinchina, that I might compare those plants with these and thus easily know what difference existed between the two. The wild plants of Cochinchina are numerous, and to seek them in the highest mountains and extensive jungles was attended with much toil and oftentimes with danger. * * *

"Wherefore, the system of Linnæus comprising ample materials, I easily obtained sufficient for my medical use. I have carefully described the characters, properties, and habits of all those plants whose qualities I knew either from European, Chinese, or native works; those which I judged useless in the practice of medicine I at first discarded. But yet, since the number of these latter daily increased, it occurred to me that it would not be useless to collect and describe them as well as the others; it would be increasing the catalogue of Linnæus, and be useful in future, although it might appear lost labor at present. Thenceforward I collected all indiscriminately, and placed them in my collection. * * * From these and many other plants, preserved by me and again examined, is this Flora composed; nor yet do I suppose it to be complete; for many having to be sought for in remote forests, and, though growing

spontaneously and rarely in Cochin-China, I could not obtain, and therefore deem that but about the fourth part of the entire Flora is described.

"During a three years' residence at Canton, I examined many Chinese plants, which for money were brought to me by a Chinese rustic, for Europeans are not permitted to wander about the suburbs of the city. This native, not altogether ignorant of Botany, was in the habit of collecting beautiful plants to sell for medicinal uses. He would also tell me the names in the local dialect of Canton; yet I do not place much confidence in them; for when urged to give the name, we may suppose that if the true one did not occur to him he would substitute an arbitrary term, which is the practice of the Chinese lest they show their ignorance. But the names of those plants which are used in medicine or which serve for purposes of luxury are more correct, as they are generally taken from Chinese books, and expressed in the universal language of China used by the learned throughout the empire.

"When returning from China to Portugal, I was compelled to stop at the island of Mozambique in eastern Africa, in about 15 degrees of S. latitude, where for three months I had opportunity to prosecute my botanical studies, collecting and describing rare plants from the neighboring continent of Africa. I have also got together a few others from different parts of India, where I have been; namely Camboja, Tsiampa, Bengal, Malabar, Sumatra, and elsewhere, some of which I have inserted in their proper places in the Flora.

Such were the advantages which were enjoyed by Loureiro, during his long residence in the east, for collecting the materials of his work. He has described and named one hundred and eighty-four new genera, and more than three hundred new species. In his very full description of the plants, he has inserted their height and appearance; the uses to which they can be applied, and what parts are employed; their medical virtues, as he himself ascertained, and as used by the natives of the country; the mode in which they are cultivated; and any other circumstances he thought important. The names of the most common plants are given in the Cochin-Chinese and Chinese languages, and a few in the Malay. His Flora contains, however, only a small part of what there is in these countries to reward examination and industry. The field is too large for one or even a few to investigate, too interesting to be neglected longer, and too promising to suppose it will remain long unexplored. We hope the industry of Loureiro and others who have succeeded him in these pursuits will find imitators, till all the productions of the Chinese empire are as well known as those of any part of Europe.

M. Diard, a French naturalist, has spent some years in Cochin-China, where we believe he is still residing; and if, as he hoped, he has been permitted to visit different parts of the country, we may reasonably look for valuable results from his labors.

ART. VI. *Relations of Great Britain with China: policy hitherto pursued, with suggestions respecting future measures: case of the bark Troughton.*

CONVINCED as we are that, if the government and people of Great Britain were fully informed both of the policy hitherto maintained by their representatives in this country, and the footing on which the "Hunghmaou" here stand, they would immediately adopt measures to improve the relations between the two nations, we welcome every new publication fitted to afford the desired information. Such a work has just fallen into our hands: it is entitled, 'Address to the people of Great Britain, explanatory of our commercial relations with the empire of China, and of the course of policy by which it may be rendered an almost unbounded field for British commerce.' It was written 'by a Visitor to China,' and published in London early this year. Before commencing the Address, the reader is advertised; "that this attempt to throw light on a subject which has been much misrepresented, and is but little understood by the public at large, is from the pen of a gentleman who visited China for purposes entirely unconnected with commerce; and who, with the advantage of personal observation, may reasonably be supposed to have formed a more impartial and dispassionate judgment, than could have been arrived at by one writing under the smart of the injuries which he portrays." Our local readers will have no difficulty in identifying the writer of the Address with the leader of two expeditions undertaken during the last year, to gain information respecting the cultivation of tea in the province of Fuhkeen. We wish he had put his own name to the pamphlet, and that it were generally known to those who read it, that he availed himself of the most authentic sources of information extant. It may also be remarked, that for many years he has resided in India, a part of the time engaged in commerce, and a part employed by the government.

Nowhere have we seen so great a number of facts, in so small a compass, (one hundred and twenty octavo pages,) all tending to elucidate former intercourse with China, as are thrown together in the pamphlet before us. To those who wish for information on this subject, we recommend its perusal. If those who 'visit' China; or who return to the west after a long 'residence' here, will only in a plain and lucid manner tell the truth, and nothing but the truth, although it be not the whole truth, they will merit the praise of their own and future generations. But while we would encourage authorship, by those who are competent, we would never by any means countenance those who are not so. Several productions, some great some small, designed to 'throw light on China,' have come forth to the world within the last two or three years, which were more fit for the