

Of the Set of some of the Learned of these later Times.

THE modern doctors, who are authors of a new doctrine, by which they pretend to explain whatever is obscure in the antient books, appeared under the reign of the nineteenth family of Song, above a thousand years after idolatry had got footing in China: the troubles that the different sects, and the wars caused in the empire, have intirely banished from it the love of the sciences, and introduced ignorance and corruption of manners, which have been predominant there for many ages.

THERE were then found but few doctors who were capable of rousing men's minds from so general a lethargy, but the taste the imperial family of Song had for the antient books, revived, by little and little, an emulation for learning; there appeared among the principal Mandarines men of genius and spirit, who undertook to explain not only the antient canonical books, but the interpretation made thereon by Confucius, by Mencius his disciple, and other celebrated authors.

ABOUT the year one thousand and seventy was the time that these interpreters appeared, who gained a great reputation; the most famous were Tchu tse and Tching tse, who published their works under the reign of the sixth prince of the family of Song; Tchu hi distinguished himself so greatly by his capacity, that they revered him as the prince of learning: though these authors have been had in esteem for these five or six hundred years past, yet they are still looked upon as modern authors, especially when compared with the antient interpreters, who lived fifteen ages before them.

IN a word, about the year of our Lord one thousand

four hundred, the emperor Yong lo made choice of forty-two of the most skilful doctors, whom he commanded to reduce the doctrine into one body, and to take especial notice of the commentaries of Tchu tse and Tching tse, who flourished under the reign of the family of Song.

THESE Mandarines applied themselves to this work, and besides their interpretation of the canonical books, and of the works of Confucius and Mencius, they composed another containing twenty volumes, and gave it the title of Sing li ta tsuen, that is, Of nature or natural philosophy: they followed, according to their orders, the doctrines of these two writers, and that they might not seem to abandon the sense and doctrine of ancient books, so much esteemed in the empire, they endeavoured by false interpretations, and by wresting the meaning, to make them speak their own sentiments.

THE authority of the emperor, the reputation of the Mandarines, their ingenious and polite style, the new method of handling the subject, their boast of understanding the ancient books, gave a reputation to their works, and many of the learned were gained over thereby.

THESE new doctors pretended that their doctrine was founded on the most ancient of the Chinese books, but their explanations were very obscure, and full of equivocal expressions, that made it seem as though they were afraid of rejecting the old doctrines, and yet in reality what they advanced was entirely new: the following is a sketch of their system, which it is hard to make sense of, and perhaps the inventors themselves had no clear notions of what they had written.

THEY give the first principle of all things the name of Tai ki, which they say is impossible to be explained, being separated from imperfections of matter, and

therefore can have no appellation agreeable to its nature; however they compare it to the ridge of a house, which serves to unite the roof; to the root of a tree, to the axletree of a chariot, to a hinge on which all things turn; and they affirm it to be the basis, the pillar, and the foundation of all things: it is not, say they, a chimerical being, like to the vacuum of the Bonzes; but it is a real being which had existence before all things, and yet is not distinguishable from them, being the same thing with the perfect and imperfect, the heaven, the earth, and the five elements, insomuch that every thing may in a sense be called Tai ki.

THEY say likewise that we ought to consider of it as a thing immovable and at rest; when it moves it produces a Yang, which is a perfect, subtle, active matter, and is in continual motion; when it is at rest it produces Yin, a matter gross, imperfect, and without motion: this is something like a man who, while he is at rest, profoundly meditates upon a subject, and who proceeds from rest to motion when he has explained what he meditated upon: from the mixture of these two sorts of matter arise the five elements, which by their union and temperament produce different beings, and distinguish one thing from another: hence arise the continual vicissitudes of the parts of the universe, the motion of the stars, the repose of the earth, the fruitfulness or sterility of the plains: they add that this matter, or rather this virtue inherent in matter, produces, orders and preserves all parts of the universe; that it is the cause of all the changes, and yet is ignorant of its own regular operations.

HOWEVER, nothing is more surprising than to read of the perfections that these modern commentators attribute to Tai ki: they say its extension is infinite, its nature pure and perfect, duration without beginning

and without end: it is the idea, the model, and the source of all things, and the essence of all other beings: in short in some places they speak of it as of an animated being, and give it the name of soul and spirit, and look upon it as the supreme understanding, but when they would reconcile these notions to the ancient books they fall into the most manifest contradictions.

To the same being, which they call *Tai ki*, they likewise give the name of *Li*, and this, they say farther, joined to matter is the composition of all natural bodies, and specificates and distinguishes one thing from another; their method of reasoning is as follows: you make out of a piece of wood a stool or a table, but the *Li* gives the wood the form of the table or stool, and when they are broke the *Li* of neither subsists any longer.

THEIR reasonings in points of morality are the same; they call *Li* that which establishes the reciprocal duty between the prince and the subject, the father and the son, the husband and the wife; they give likewise the name of *Li* to the soul, because it informs the body, and when it ceases to inform it, the *Li* is said to be destroyed; in the same manner, say they, as ice dissolved by heat loses the *Li* whereby it became ice, and resumes its fluidity and natural being.

IN short, when they have disputed in this unintelligible manner concerning the nature of *Tai ki* and *Li*, they necessarily fall into atheism, because they exclude every efficient supernatural cause, and admit no other principle than an inanimate virtue or energy united to the matter, to which they give the name of *Li* or *Tai ki*.

BUT they find themselves most embarrassed when they would vain elude the great number of plain texts, in the ancient books, which speak of spirits, of justice, of

the providence of a supreme Being, and the knowledge which he has of the secrets of men's hearts, &c. or when they endeavour to explain them in their own gross manner, they are certain to fall into fresh contradictions, destroying in one place what they establish in another.

HOWEVER, if we may credit the testimony of a great number of missionaries, who have spent the chief part of their lives in the empire, and who have gained an exact knowledge of the Chinese affairs by means of studying their books, and conversing with men of the greatest repute for knowledge among them, the truly learned have not given way to these mad notions, but have adhered strictly to the text of the ancient books, without regarding the extravagant opinions of modern commentators.

So that the sect of the learned may very properly be said to be of two classes.

THE first are those who pay little regard to the commentaries of the moderns, but have the same notion of the supreme Being, the Author of the universe, as the old Chinese, that is the Chinese who have lived since Fo hi, and before the time of these new commentators.

THE second are those who, neglecting the text, seek the sense of the ancient doctrine in the glosses of the new commentators, and adhering, like them, to a new philosophy, are desirous of gaining a reputation from their confused and dark notions: they are willing to persuade people that they are able to explain the manner of the production and government of the world by material causes, and yet they would still be thought the true disciples of Confucius.

BUT that I may act the part of a faithful historian, I cannot deny that some of the missionaries have been persuaded that all the learned in the empire are no bet-

er than so many atheists, and that whatever declarations the emperor Cang hi and others have made to the contrary, have been the effects of mere complaisance, or downright dissimulation; for though the above-mentioned prince averred that it was not to the visible and material heaven that he offered sacrifice, but to the Lord and Creator of heaven and earth, and all things, he might mean the root and origin of all things, which is nothing else but the Li or celestial virtue inherent in matter, which is, according to the Chinese atheists, the principal of all things.

BESIDES, when we read in their books, or hear the Chinese affirm, that life and death, poverty and riches, and all events in general, depend on Tien or heaven; that nothing is done but by his orders, that he rewards the good and punishes the wicked, that he cannot be deceived, that he sees all things, hears all things, and knows all things; that he penetrates the secret recesses of the heart, that he hears the complaints of the good and virtuous, and grants their petitions, &c. all these expressions, according to them, ought to be looked upon as metaphorical, by which they would have the people understand that all things happen as if in reality heaven was an intelligent being.

IN short they pretend that as the Stoicks ascribed the variety of events to fatal necessity, in like manner the learned among the Chinese attribute to heavenly and the influence thereof, good and evil, rewards and punishments, the revolutions of states and kingdoms; and, in a word, all sorts of events, whether happy or unhappy, that we see in the world.

Thus having related the sentiments of skilful persons, who have made it their business to study the Chinese affairs, I must not forget a particular sort among the learned of this nation, who have composed

a system of their own from all the different sects, and have endeavoured to reconcile all together.

As the study of letters is the road to the highest dignities, and as it is open to persons of all degrees, there must needs be many of mean extraction, who have been brought up in idolatry, and when they become Mandarines, either through the prejudice of their education, or a publick complaisance to the people, and to maintain the public tranquillity, seem to adopt the opinions of every different sect, and the rather because the Chinese of all ranks seldom look any farther than the present life: the Mandarines, who are generally the living deities of the country, have seldom any other god but their fortune, and as it is subject to several troublesome turns, their principal care is to avoid these misfortunes, and to keep themselves safe in their posts. The students, who may be looked upon as the lesser nobility, have nothing at heart but a certain honour, which consists in succeeding in their examinations, and in raising themselves to the highest degree. The merchants think of nothing, from morning to night, but their business; and the rest of the people are entirely taken up in procuring a livelihood, that is a small quantity of rice and pulse: in this manner is the time of all the Chinese taken up.

THE learned, of whom I am speaking, are as forward as the rest in declaiming against false sects, but experience shews that they are as much slaves to Fo as the vulgar themselves; their wives, who are strongly attached to idols, have a kind of an altar in the most honourable part of their houses, whereon they place a company of images finely gilt; and here, whether out of complaisance, or otherwise, these pretended disciples of Confucius often bow the knee.

THE extreme ignorance of the nation greatly con-

tributes to the readiness wherewith these Chinese doctors, as well as the vulgar, fall into the most ridiculous superstitions; but this ignorance has no relation to their skill in carrying on business; for in this they generally exceed the Europeans; nor does it respect their laws of government, for no people in the world have better; nor yet does it regard their moral philosophy, for their books are full of wise maxims, if they would but put them in practice; but their most skilful doctors are ignorant of all other parts of philosophy, for they know not how to reason justly on the effects of nature concerning their souls, or the supreme Being, for these things take up but little of their thoughts; nor do they much concern themselves about the necessity of religion, or their state after death: however there is no nation in the world more addicted to study, but then they spend their younger years in learning to read, and the remainder of their lives is taken up either in the duties of their function, or in composing academical discourses.

THIS gross ignorance of nature makes great numbers attribute the most common accident to some evil genius, but this is chiefly among the common people, especially among the women, and they endeavour to appease it by impious and ridiculous ceremonies; sometimes they pay homage to some idol, or rather to the demon belonging thereto; sometimes to some high mountain or great tree, or an imaginary dragon which they suppose in the sky or at the bottom of the sea; or else, which is still more extravagant, to the quintessence of some animal; for instance a fox, an ape, a tortoise, a frog, &c.

THEY affirm that these animals, after they have lived some time, have the power of purifying their essence, and of divesting themselves of whatever is gross and

earthly, and this refined part which remains is that which troubles the imagination of men and women; but of all a fox thus purified is the most dreadful.

THERE are three other things that contribute greatly to keep them in ignorance.

THE first is what the Chinese call Souan Ming, Telling of fortunes; the country is full of a sort of people who pretend to be skilful in reading the destinies of mankind; they are generally blind, and go from house to house playing on a kind of Theorboe, and will give a specimen of their skill for about a halfpenny; it is surprising to hear their extravagant fancies about the letters of the year, day, month and hour of a person's birth; they will predict the general misfortunes that attend you, but are very particular in promising riches and honours, and great success in trade or study; they will acquaint you with the cause of your own distemper, or that of your children, and the reason of your father's or mother's death, which they always pretend is owing to some idol that you have offended, and must appease; if what they have foretold comes to pass by mere chance, then they are confirmed in their errors; but if the contrary happens, they are satisfied with saying, That this man did not understand his business.

THE second thing is drawing the lots called Pa coua; there are several manners of drawing them, but the most common is to go before an idol and burn certain perfumes, knocking the forehead several times against the ground; there is also near the idol a box full of flat sticks, one whereof they let fall at a venture, on which there are enigmatical characters written, the sense of which is explained by the Bonze who presides over the ceremony, or else they consult an old writing which is stuck against the wall, by which they find out the conjuration; this is commonly put in

practice when they undertake any affair of moment, or are going any journey, or are about marrying their children, and upon a hundred other occasions, that they may meet with a fortunate day and happy success.

BUT the third thing is most ridiculous of all, and what the Chinese are most insatuated with; they call it Fong choui, that is, The wind and water, and they mean by that the happy or unhappy situation of a house, and especially of a burying-place; if by chance a neighbour builds houses in a contrary situation to your own, and one of the corners of his is opposite to the side of yours, it is sufficient to make you believe that all is lost, and it begets a hatred that cannot be extinguished as long as the new house stands, and is an affair that may be brought before the Mandarins; but if there happens to be no other remedy, you must set up a dragon, or some other monster, made of baked clay, on the middle of your roof; the earthen dragon must give a terrible look against the fatal corner, and open a dreadful mouth as it were to swallow up the evil Fong choui, that is the bad air, and then you will be a little more secure.

THIS was the method that was taken by the governor of Hien-tchang to defend himself against the Jesuit's church, which is built upon an eminence, and overlooks his palace in the bottom; he had likewise the precaution to turn the apartments of his palace a little more oblique, and raised about two hundred paces from the church a kind of a gatehouse three stories high to shew off the influence of the Tien-tchu-tang, that is, The church of the Lord of heaven.

MANY other things might be related with regard to the situation of a house, the place of the door, and the day and manner of building the oven for rice, but that

wherein the Fong choui triumphs most, are the tombs and sepulchres of the dead: there are a sort of impostors, whose business is to find out a fortunate hill or mountain for this purpose, and when they have determined by their juggling tricks, which is so, no sum of money is thought too great for the purchase of it.

FONG choui is regarded by the Chinese as something more valuable than life itself, because they imagine that the happiness or misery of life depends upon this absurd chimera; so that if any person has greater talents or capacity than the rest of mankind, if he attains his doctor's degree only, or is raised to a Mandarinate, if he has several children, lives to a good old age, or succeeds in trade, it is neither his wit, skill or honesty that is the occasion of it, it is his house happily situated, it is the sepulchre of his departed parents and relations that has an excellent Fong choui.



Of the COINS and MONEY of the CHINESE.

NEITHER in Canton, nor indeed throughout the whole empire, are any coins struck, excepting the Li or Cash. This Li is made of the scum of copper, mixed with other coarse metal; it is somewhat larger than our English farthing, but thinner, with some Chinese characters on each side; and in the center of each Cash is a square hole in order to put them on a string, for the ease of numbering. Instead of coins they cut their gold and silver into small pieces of different weights. There is almost no gold used in our dealings with them, it being about fifty per cent. cheaper there than in Britain. We therefore use silver as the current money in traffic.

As the Chinese pay no regard to coin, so all goes by weight. Nor do they regard the workmanship of any thing in silver; it is the same to them when melted down, as in the finest work.

THEIR weights for silver, by the names of which they denominate any piece of money, are called

By the Chinese, Leang, Tsean, Foan, and Li.

By the Portuguese, Tael, Mace, Candarins, and Cash.

THE Leang or Tael, is equal to six shillings and three pence sterling, which is divided into ten Tsean or Mace, equal to seven pence halfpenny sterling each. These are again divided into ten Foan or Candarins, equal to three farthings sterling, and each of these are divided again into ten equal parts, called Li or Cash, equal only to the tenth part of three farthings.

OUR English crown passes currently for eight Mace,

though it oftener weighs less than more. It is from this that I value the Tael at six shillings and three pence, though commonly reckoned six shillings and eight pence. For,

| | <i>l.</i> | <i>s.</i> | <i>d.</i> |
|---|-----------|-----------|-----------|
| Eight mace, the current value of our crown, is ———— | } | 6 | 5 |
| Two mace more is, at that rate, equal to ———— | | | |
| | | 0 | 1 |
| | | | 3 |
| So that ten mace, or one tael, is equal to ———— | } | 0 | 6 |
| | | | |
| | | | 3 |

TABLE of the CHINESE and ENGLISH Money.

CANDARIN.

| | <i>d.</i> | <i>grs.</i> |
|------------------------|-----------|-------------------------|
| 1 Candarin, equal | to | $\frac{1}{4}$ sterling. |
| 2 ditto ———— | to | $1 \frac{1}{8}$ |
| 3 ditto ———— | to | $2 \frac{1}{4}$ |
| 4 ditto ———— | to | 3 |
| 5 ditto ———— | to | $3 \frac{1}{2}$ |
| 6 ditto ———— | to | $4 \frac{1}{4}$ |
| 7 ditto ———— | to | $5 \frac{1}{2}$ |
| 8 ditto ———— | to | 6 |
| 9 ditto ———— | to | $6 \frac{1}{4}$ |
| 10 equal to a mace, or | to | $7 \frac{1}{2}$ |

MACE.

| | | | s. | d. | |
|----|----------------------------|---|----|----|-------------|
| 2 | Mace, equal | | to | 1 | 3 sterling. |
| 3 | ditto | — | to | 1 | 10½ |
| 4 | ditto | — | to | 2 | 6 |
| 5 | ditto | — | to | 3 | 1½ |
| 6 | ditto | — | to | 3 | 9 |
| 7 | ditto | — | to | 4 | 4½ |
| 8 | ditto | — | to | 5 | 0 |
| 9 | ditto | — | to | 5 | 7½ |
| 10 | ditto, equal to a tael, or | | 6 | 3 | |

T A E L.

| | | | l. | s. | d. | |
|-----|-------------|---|----|----|----|-------------|
| 2 | Tael, equal | | to | 0 | 12 | 6 sterling. |
| 3 | ditto | — | to | 0 | 18 | 9 |
| 4 | ditto | — | to | 1 | 5 | 0 |
| 5 | ditto | — | to | 1 | 11 | 3 |
| 6 | ditto | — | to | 1 | 17 | 6 |
| 7 | ditto | — | to | 2 | 3 | 9 |
| 8 | ditto | — | to | 2 | 10 | 0 |
| 9 | ditto | — | to | 2 | 16 | 3 |
| 10 | ditto | — | to | 3 | 2 | 6 |
| 20 | ditto | — | to | 6 | 5 | 0 |
| 30 | ditto | — | to | 9 | 7 | 6 |
| 40 | ditto | — | to | 12 | 10 | 0 |
| 50 | ditto | — | to | 15 | 12 | 6 |
| 60 | ditto | — | to | 18 | 15 | 0 |
| 70 | ditto | — | to | 21 | 17 | 6 |
| 80 | ditto | — | to | 25 | 0 | 0 |
| 90 | ditto | — | to | 28 | 2 | 6 |
| 100 | ditto | — | to | 31 | 5 | 0 |

THIS table will be very useful to those who make a voyage to China, for readily finding the value of their money.

THE Chinese people keep scales and weights in their pockets, for weighing the money they receive or pay. They are put in small portable wooden cases. These scales are made after the manner of the Roman balance, or our English stilliards, called by the Chinese Litang, and by us Dot-chin.

It is no less the interest of all foreigners to have a case of these about them, to weigh money; as there are a number of sharpers, not only among the common people, but even among the merchants, who have false Dot-chins, and a sly way of holding them in their hand to cast the weight to their own advantage.

THE Chinese have also a large instrument, somewhat like scissars, for cutting money into such small pieces as they have occasion for, which the English call Chop-chin. Even in the using this instrument they will impose upon you. When I have given a dollar to be cut in two, I have lost a Candarin or two in the weight. The upper part of this instrument is sharp for cutting the money, and the lower has a slit or pocket to receive the upper; but sometimes the upper part, which should be single and sharp, is double and hollow, that in cutting, is filled up with a thin bit of the money which they cheat you of. The larger sort of these instruments are kept in the houses and shops of merchants, and the smaller ones they keep in their pocket.

As the Chinese divide their money into decimal parts, it is very easily reckoned. Instead of using pen and ink, as we do, in their arithmetical computations, they use round timber beads, fixed on wire, or on

small pieces of wood, that are again fixed on a long square wooden stand, about an inch deep, much like common wooden ink-standage.

*Of the TRADE, MERCHANDISE, and SHIPPING of
the CHINESE.*

THIS empire has always been rendered very flourishing, by the facility of transporting merchandise by means of the rivers and canals, and by the particular riches of every province. As the Chinese have among themselves every supply for the necessities and pleasures of life, they seldom trade with any nation far distant from their own.

THEIR ports under the emperors of their own nation were always shut up to foreigners, but since the Tartars are become masters of China they have been open to all nations. Thus to give a full account of the Chinese trade, we may speak of that carried on among themselves and their neighbours, and then of that carried on by the Europeans with them.

THE trade carried on within China is so great, that that of all Europe is not to be compared therewith; the provinces are like so many kingdoms, which communicate to each other what they have peculiar to themselves, and this tends to the preservation of union, and makes plenty reign in all the cities. The provinces of Hou quang and Kiang si supply all the provinces with rice that are not well provided; the province of Tche kiang furnishes the finest silk; Kiang nan varnish, ink, and curious work of all sorts; Yun nan, Chen si, and Chan si yield iron, copper, and several other metals, horses, mules, furs, &c. Fo kien has sugar and the

best tea; Se tehuen, plants, medicinal herbs, rhubarb &c. and so of the rest; for it is not possible to describe exactly the particular riches of each province.

ALL the merchandises, so readily transported along the rivers, are sold in a very short time; you may see for instance, merchants who three or four days after their arrival at a city have sold six thousand caps proper for the season. Trade is never interrupted but on the two first days of the first moon, which they employ in diversions and the common visits of the new year: Except at this time every thing is in motion as well in the cities as in the country. The Mandarin themselves have their share in business, and there are some among them who give their money to trusty merchants to increase their income in the way of trade.

IN short there are none but the poorest families, who but with a little management can find means to subsist very easily by their trade. There are many families whose whole stock does not amount to a crown, and yet the father and mother, with two or three children, are maintained by the little trade that they carry on, get garments of silk for days of ceremony, and in a few years time enlarge their commerce to something considerable.

THIS is difficult to comprehend, and yet happens every day; for instance, one of these small merchants, who has about fifty sous, will buy sugar, meal, and rice, and make small cakes, which he has baked an hour or two before day, to kindle, as they express it, the heart of travellers; his shop is hardly open before his merchandize is carried off by country people, who come in crowds in a morning to every city, by the workmen, porters, advocates, and children of the district. This little trade produces in a few hours twen-

sons more than the principal, the half of which is sufficient to maintain his small family.

IN a word the most frequented fair is but a faint resemblance of the incredible crowds of people that are to be seen in the generality of cities, who either sell or buy all sorts of commodities. It were to be wished the Chinese merchants were more honest in their dealings, especially when they trade with foreigners; they always endeavour to sell as dear as they can, and often make no scruple of adulterating their commodities.

THEIR maxim is that those who buy should give as little as possible, and upon this principle they think themselves in the right to ask the greatest price, and to make it if the buyer is so simple or ignorant as to give it: It is not the merchant who deceives, say they, it is the buyer who deceives himself. However, those who act upon these detestable principles are the first in praising the honesty and disinterestedness of others, so that they stand self-condemned.

TRADE being so extensive in all the provinces of China, as I have already said, it is not at all surprising that the inhabitants are so little desirous of foreign trade, especially since they have contemptible thoughts of all foreign nations: Thus in their sea voyages they never sail through the streights of Sonda; their farthest voyages reach no farther on the side of Malacca than to Achen, on the side of the streights of Sonda to Batavia, which belongs to the Hollanders, and to the north as far as Japan; I shall therefore explain as briefly as possible to what places on these seas they carry on a trade, and what is the nature of the merchandise which they import and export.

I. JAPAN is a kingdom which they often frequent, and commonly set sail for it in the month of June or July at farthest: They go to Camboya or Siam, where

they import merchandises proper for those countries, and take in others that there is a great demand for at Japan, and when they return into their own country they find that they have made two hundred per cent. by their voyage.

If from the ports of China, that is from Canton, Amoy, or Ning po, they go directly to Japan, then they export the following merchandises: 1. Drugs, such as ginseng, birthwort, rhubarb, and such like. 2. Bark of Arika, white sugar, buffalo and cow-hides: As for the sugar they gain greatly by it, even sometimes a thousand per cent. 3. All sorts of silks, but chiefly fattins, taffeties, and damasks of diverse colours, but principally black. Some of these pieces cost but six taels in China, and yet sell at Japan for fifteen taels. 4. Silken strings for instruments, eagle and sandal wood, which is much in request among the Japanese for perfumes, because they constantly offer incense to their idols. 5. European cloth and camblets, which have a quick sale, but as they are imported by the Dutch the Chinese never carry them unless they can sell them at the same price, and yet they affirm they gain fifty per cent. thereby, which shews what a great profit the Dutch make by the trade.

THE merchandises which the Chinese traders load their vessels with back are,

1. FINE pearls, which cost more or less in proportion to their beauty and bigness, and at some particular times they gain a thousand per cent. by them.

2. RED copper in bars, which they buy for three or four taels, and sell in China for ten or twelve; wrought copper, such as balances, chaffing dishes, incense-pans, basons, &c. which they sell very dear in their own country, the copper being fine and agreeable to the sight.

3. SABRE BLADES, which are much esteemed in China; they cost but a piafter in Japan, and sell sometimes for ten piafters in China.

4. SMOOTH flowered paper, of which the Chinese make fans.

5. PORCELAINE, which is very beautiful, but is not used in the same manner as that of China, because it will not bear boiling water; it is sold in Japan much at the same price as china ware is sold in China.

6. JAPANNED works, which are not equalled in any other place in the world: The price is not settled, but the Chinese dare not load but seldom with them, for fear they should not sell again, but when they do import them they sell extremely dear: A cabinet that was but two feet high, and much above the same breadth, was sold in China for a hundred pieces of eight: The merchants of Emouy and Ning po are those which load most freely with them, because they carry them to Manilla and Batavia, and gain considerably by the Europeans who are fond of these sort of works.

7. GOLD, which is very fine, and a certain metal called Tombac, by which they gain fifty or sixty per cent at Batavia.

If one may depend on the honesty of the Chinese it would be easy for the Europeans to have commerce with Japan by their means; but this is impossible unless they were to bear them company, and be masters of the cargo, and had a sufficient force to prevent insults.

II. THE Chinese also trade to Manilla, and import a great deal of silk, striped and flowered satins of different colours, embroidery, carpets, cushions, night-gowns, silk stockings, tea, china-ware, japanned-work,

drugs, &c. by which they gain generally fifty per cent. and bring nothing back but pieces of eight.

III. THE trade that the Chinese carry on the most regularly is to Batavia, which they find most easy and most gainful: Not a year passes but vessels sail for that city from Canton, Emouy, and Ning po: It is towards the eleventh moon, that is in December, that they put to sea. The merchandises they are loaded with are,

1. A kind of green tea, which is very fine and of a good smell, but Song lo tea is not much sought after by the Dutch.

2. CHINA-WARE, which is sold as cheap there as at Canton.

3. LEAF-GOLD, and gold-thread, which is nothing but gilt paper; some of this is not sold by weight but in small skins, and is dear because it is covered with the finest gold, but that which the Chinese bring to Batavia is sold only by weight; it is made up in parcels with large long tufts of red silk, which is put there on purpose to set off the colour of the gold, and to make the parcels weigh heavier: The Hollanders make no use of it, but they export it to Malais, where they make a considerable profit of it.

4. TEUTENACK, a metal that is between tin and iron, and brings the merchants a hundred, and sometimes a hundred and fifty per cent.

5. DRUGS, and especially rhubarb.

6. A great quantity of utensils of copper, such as basons, chaffing-dishes, great kettles, &c.

THEY import from Batavia, 1. Silver in pieces of eight. 2. Spices, particularly pepper, cloves, nutmegs, &c. 3. Tortoise-shells, of which the Chinese make very neat toys, and among others, combs, boxes, cups, knife-handles, pipes, and snuff boxes after the fashion

of those in Europe, and which cost but five pence. 4. Sandal-wood, and red and black wood proper for cabinet-work, and another red wood which serves for dyeing, commonly called Brazil-wood. • 5. Agate-stones ready cut, of which the Chinese make ornaments for their girdles, buttons for their caps, and a kind of bracelets for their necks. 6. Yellow amber in lumps, which they sell very cheap; in a word, European cloths, which they gain as much by as when they sell them at Japan.

THIS is the greatest trade that the Chinese carry on out of their own country; they likewise go, but very seldom, to Achen, Malacca, Iher, Palana, Ligor, which depend on the kingdom of Siam, to Cochinchina, &c. The trade that they carry on at Iher is the most easy and gainful; they even would not gain the expence of their voyage when they go to Achen, if they failed of being there in the months of November and December, which is the time that the ships belonging to Surat and Bengal are upon the coast.

THEY seldom import any thing else from this country but spices, such as pepper, cinnamon, &c. birds-nests, which are counted so delicious at the Chinese feasts, rice, camphire, ratan, which is a kind of long cane, which they weave together like small strings, torches made of the leaves of certain trees which burn like pitch, and serve for flambeaux when they march in the night, and gold, tin, &c.

THERE now remains nothing to be spoke of but the trade the Europeans carry on with the Chinese.

THE gains of the English in a voyage to China chiefly arise from the goods imported from that empire, and not from what are carried thither. We buy the most part of their goods with silver. Lead is almost the only commodity for which our merchants get more

than prime cost. We carry also scarlets, blue, black, green and yellow broad cloths thither. But the remnants or small pieces which we get cheap in England, turn to better account, than whole pieces. Of these small pieces the Chinese make long purses which hang by their side, tied by silken strings to their girdle.

THE following goods turn also to pretty good account, if they can be conveyed ashore without paying the duties, otherwise the charge and trouble will be equal to the profit, viz.

Large looking glasses,
Coral branches,
Flint ware for shamshue-cups,
Ordinary horse pistols with gilt barrels,
Old wearing apparel of scarlet or blue cloth,
Sword blades about 14 s. per dozen,
Spectacles set in horn, about 8 s. 6 d. per dozen,
Clocks and watches of small price,
Small brass tweezer cases,
Any new toy not before imported.

Goods imported from China, are teas, porcelain, quicksilver, vermilion, and other fine colours; china root, raw and wrought silks, copper in bars, of the size of sticks of sealing wax, camphire, sugar-candy, fans, pictures, lacquered ware, soyl, borax, lapis lazuli, gallingal, rhubarb, coloured stones, tutanague, i. e. a sort of tin; gold, with many things made of mother of pearl.

GREEN tea is drank in India, Persia, and all the Eastern nations. Bohea is little esteemed by them. Single or green tea is to be chosen by its fine smell, and light colour; for if any of the leaves appear brownish or withered, it is not good. Imperial or Ling tea is still

lighter than green tea, of a pleasant smell, but not so strong as singlo. If it once lose its crispness, it is good for little; which it will do, though very fresh and good when bought, if great care is not taken in packing it.

ALTHOUGH the exportation of gold be prohibited, the Mandarines themselves sell it in a concealed way, to the European merchants. Ten tael weight of gold touch 92, bought at touch for touch, (the most governing price) amounts to 111 oz. 8. dwt. 5. gr. current. Ten tael of silver, at 5 s. 6 d. per oz. is 30 l. 12 s. 8 d. for which you have 12 oz. 2 dwt. 4 gr. worth about 4 l. an ounce in London, is 48 l. 8 s. 8 d. and makes upwards of 58 per cent profit. But gold is a commodity that is seldom bought there by any but those who have more money to lay out than they have either room or privilege in the ship, which seldom happens. There are a great many sorts of goods on which they may make 5 or 600 per cent. if got ashore in London without paying duty, and sold to proper hands.

A great deal depends on a person's knowledge of what things are likely to take in England, and at what price they are commonly sold. If a private trader would improve such a voyage to advantage, he should consult with the hard-ware, china or toy merchants in London, before he goes, and should carry with him patterns or musters by which things may be made or painted in China; for the Chinese workmen of all professions are so ingenious, that they will imitate any thing that is shown them to the greatest perfection and exactness.

*Prices of goods sold at Canton by the English company,
1747-8.*

- Lead per pecul of 133 lb. from three tael to three tael six mace.
Scarlet cloth per cattie, of 20 oz. avoirdupois from three tael to four tael.
Slips of ditto, from three tael to three tael five mace.
Looking-glasses per square foot, from one tael five mace to two tael.

*Prices of Indian goods carried from Batavia, and sold
at Canton.*

- Pepper per pecul of 133 lb. from eight tael to ten tael.
Bees-wax per ditto from twelve tael to fourteen tael.
False amber per ditto at twelve tael.
Fine amber per ditto from one hundred tael to one hundred and ten tael.
Rozin allas per ditto at sixty tael.
Block tin at eleven tael.
Pitchuck at twenty two tael.
Birds nests per cattie, of 20 oz. from two tael five mace to three tael.
Opium per ditto at six tael.

FOUR hundred pound net English weight, is equal to three peculs Chinese weight. One pecul Chinese weight, is equal to $133\frac{1}{2}$ lb. English weight. Sixteen tael is equal to one cattie.

*Prices of goods bought at Canton by the English company,
anno 1747-8.*

BOHEA TEAS.

Common bohea per pecul of 133 lb. from thirteen tael to fifteen tael.

Congo from twenty five tael to thirty tael.

Souchong from thirty five tael to seventy tael.

GREEN TEAS.

First singlo at thirty tael.

Second ditto at twenty five tael.

Third ditto at twenty two tael.

Fourth ditto at sixteen tael.

Best hyson at sixty tael.

Second hyson at forty five tael.

Hyson gobi at sixty six tael.

OTHER TEAS.

Uchang at forty tael.

Imperial at thirty eight tael.

RHUBARB ROOT from eleven tael to twenty eight tael.

OPIMUM is an advantageous commodity when carried to China, but must be sold privately, for the importation of it is strictly prohibited by the emperor.

THE porcelain or china is so various in quality and fashion, that it is impossible to fix a price. I have seen exquisitely fine enamelled work, which, I believe, would bring more profit than teas, or the china-ware which takes up a great deal of room, and is liable sometimes to suffer great damage. These enamelled vessels must be smuggled from Canton to the ships,

for the duty on all metals there is as much as the prime cost, and amounts almost to a prohibition of the exportation of them.

As soon as the European ships come to an anchor at Wampo, a few miles from Canton, a couple of Hapoo or customhouse boats, are placed on each side of them, to see that nothing is smuggled out of or into the ship. They search every chest, &c. that they suspect, and sometimes even our pockets do not escape them. Yet I have seen many small things carried aboard without their notice; such as gongs, [a curious whistle,] bows, arrows, and other things that are strictly prohibited to be exported; and sometimes the Chinese themselves assist our people in bringing them on board.

ALL boats, whether our own or those of the Chinese, that go from our ships or bankfalls with European goods or passengers aboard, bound for the factory, must have a Chop or permit from a customhouse officer; which must be renewed at every customhouse in their way. There are three Hapoo or customhouses between Wampo and Canton, situated by the river side, distinguished by having the emperor's yellow colours hoisted upon a long pole before the door. The boat must call at each of these Hapoo houses, to renew the Chop; the ship's pinnace, however, or other boat having a captain or supercargo aboard, is allowed to pass without being obliged to stop at any of these Hapoo houses.

AFTER the supercargoes have agreed with the Hapoo with regard to the duty, and with the merchants about the prices of goods aboard, and what kinds of Chinese goods are wanted to load with; then the customhouse retainers come aboard, measure the ship, and weigh and take an account of all the goods, which are immediate-

ly sent to the factory, or the merchant's house who purchases them, in a large sampan.

To prevent any embezzlement, there are two or three of the ship's company, well armed, sent along with the goods, and a Chinese customhouse officer on behalf of the Hoppo. After they arrive, and are unloaded, the merchant weighs them ~~over~~ again; and the supercargoes attend them in English scales.

THE Chinese merchants having agreed to provide such goods as are wanted, in particular quantities, at a fixed price, and to have all ready against a certain time; the supercargoes attend, view and taste the goods, and order every chest to be packed, tared, weighed and marked; upon which they are carried from the Chinese merchant's warehouse to the factory.

THESE warehouses are commonly large, full of teas standing in baskets as they are brought from the field. [Only the coarser teas are here meant; fine hyson is never unpacked.] It is packed in chests lined with sheet-lead, to keep it from wet or damps, which would entirely spoil it. I have seen two hundred coolies or porters, all naked to the middle, packing and treading the tea in chests. Two of them get into a chest together, and tread it down as it is filled. I make no doubt, but that if some nice British ladies were to see some of these coolies, with their nasty feet and legs, perform this office, they would be apt to lose conceit of their beloved plant.

THE porcelain or china warehouses are generally very spacious, and contain large quantities of china, of all sizes and figures, fit for the European market. The supercargoes attend the packing of this article too; for, if a strict eye is not kept upon them, they will sometimes put up china cracked, broken, or of an inferior quality. They have even gone so far as to fill

up chests with stones or bricks, in place of the finest commodities; which has not been discovered till they were opened in England.

If the chests are not sent immediately to the factory, or to the ships, after they are packed, it is absolutely necessary to send a man or two to watch them in the merchant's warehouse, otherwise they may be subject to great abuse; and there must be a guard on them all the way to the ships.

THE customhouse officers must also be bribed with presents now and then, otherwise they become very troublesome. It is best to feed them from time to time with small presents; for if you give them one ever so large, it will soon be forgot, unless their memories are frequently refreshed by another. In short, it requires a great deal of patience and cunning to trade with the Chinese. An equal temper, and a smooth tongue, are qualifications absolutely necessary for a supercargo; for they must be dealt with in the same crafty manner that they deal with others.

A private trader that buys a quantity of goods in chests, tubs, or boxes, must get a clearance from the merchants, to enable him to get it aboard, for which he pays a small matter extraordinary. The merchant writes his name, or pastes a small bit of printed paper upon the chest, &c. by which the Mandarines, who weigh all the company's goods as they are shipped off, know what merchant to debit for the duty; which they collect at their leisure. The chests, boxes, &c. that have the merchant's Chop or mark are seldom opened; yet I have sometimes seen even these inspected by the Mandarines, on suspicion that they contained goods of greater value than they were marked at. When a fraud is detected, I know not exactly how they settle matters, but it is probable the merchant is fined.

A private man who picks up trifling articles here and there, must collect them in a chest before they are sent aboard; and use his interest with the linguist, or one of the customhouse retinue, to take a note of such things as pay duty, who will carry it before the Hap-po, along with the key of the chest; and if the Hap-po put his mark upon it, the chest passes without further trouble, and the key is returned. The goods, in chests, &c. must have the Hap-po's chop or mark upon them, otherwise they will be seized.

EVERY thing is sold by weight in China, flesh, fowls, fruits, rice, &c. and even liquids. To encrease the weight, I have known them cram their poultry with stones and gravel.

THE Chinese will not scruple exchanging a live hog for a dead one, if the latter is a little larger; for they like them as well when they die of a distemper, as when killed by a butcher. For this purpose they will sometimes give such hogs as we purchase a dose to kill them soon after they are brought aboard; and when we are obliged to throw them away, they will take them up, and sell them over again to their own people.

EVERY person in dealing with the Chinese, should thoroughly inspect their goods, and should be particularly careful of their weights and measures. You must carefully observe that the beam be not longer on one side than the other. Some of them have holes or notches at each end of the beam, by which they can, by hanging scales in the one or other, diminish or increase the weight considerably: In others the beams may be pulled out or contracted on one side: But that which is least discernible, and apt to deceive you, is when the strut or centre of the beam is made to slide, which they can do by a slight of hand not easily ob-

served. It is, indeed, so difficult to know all their tricks, that you cannot be thoroughly safe unless you weigh every thing after them in English scales. Those, also, who have confided in their package, have been no less deceived, than those who have trusted to their weights. They have found chests, boxes, tubs, and canisters so easily imitated and marked, with damaged goods, or things of little value, and put in the place of fresh goods, that our people made no doubt that all was right, till they found out the deception upon their unpacking them in England.

THE Chinese excel the Europeans in nothing more than in the art of cheating. When they have any point to manage in which their interest is concerned, no people know better how to insinuate themselves into the good opinion of those they mean to take an advantage of, or to improve an opportunity of doing it to the utmost. Nor will they decline the most hazardous undertaking when they have gain in their view. They are indeed very cunning, malicious and deceitful; all their revenge is managed secretly; and they can not only dissemble their malice, but seem patient even to insensibility, till they have a favourable opportunity to strike home. They apply themselves assiduously to discover the inclinations, humours, and tempers of those they deal with, and will keep up a fair appearance of friendship to their greatest enemies.

THOUGH there are not wanting among them instances of fair dealers, of open generous usage to strangers, and of fidelity not to be corrupted; yet the generality of them will make no scruple of imposing upon you, and are so far from being ashamed of it when detected, that they often laugh at those they have bubbled. Indeed an European always runs a great risk of being cheated if he trusts to his own judgment; and if he

employs a Chinese broker, as is often done, the broker and merchant will sometimes combine to deceive him. I myself, says our author, once bought a piece of stuff for waistcoats and breeches; without looking over the whole of it, imagining it was all alike; and sent it to my tailor; but, was much surprised on his bringing them home, to find my waistcoats of different colours, and different substances. A gentleman of my acquaintance went into a goldsmith's shop, with an intention to buy a gold head for his cane; the goldsmith had none of the pattern he wanted, in that metal, though he had one of them in silver, but desired him to call in a day or two, and he should have one. He called, received the head, paid for it, and had it put on his cane. The gentleman, however, since my arrival in England, informed me that his supposed gold head proves to be a silver one, and in all likelihood the same he was shown in the shop, by which he had desired that the gold one might be made. When I have been in the merchant shops, I have frequently had my handkerchiefs, fans, and staves stolen from me; and when I presumed to demand them again, they would fall laughing at me, without giving me any satisfaction. To use violence, I perceived, was in vain, and would be only making a bad affair worse. I knew a poor sailor, who pulled out his purse to count a few dollars which he had got that morning from the purser at forty per cent. in order to provide a little tea, &c. for his homeward passage. A Chinese observing him, snatches the purse out of his hand, runs off, and the sailor after him. And though several Chinese saw the robbery, yet not one of them offered to stop the thief, but, on the contrary, fell a laughing at the Englishman's simplicity in pretending to recover it. At last the Chinese man, finding he was near overtaken, dropped

the purse; on which the poor tar stopped to take it up; but, to his great grief and mortification, he found only one dollar left. Thus the poor sailor was robbed of his money. Had he overtaken the thief, it is more than probable the mob would have rescued the villain, and sent home the poor sailor half dead with blows to the factory; for the mob are often so insolent, that they behave to strangers, as if there were neither law nor government in the country; excepting when a Mandarin passes by, and then they are all hush, and stand aside with their eyes fixed on the ground.

THERE is no body to complain to on these occasions, but the English linguist, who always pretends that he cannot find out the aggressor; or if he be found, that he denies the charge. By such trifling reasons, he evades the trouble he ought to take, and would make one believe that he is either bribed, or receives a share in the booty.

THOUGH the ships of the Chinese for the sea-service are not comparable to those of Europe, and their skill in navigation is but mean; yet upon their rivers or canals they manage large vessels, as big as ships, by a few hands, with great dexterity: Of these vessels there are not less than ten thousand in the southern provinces equipped for the emperor's service: They are flat-bottomed, the head and stern square, but the forepart not quite so broad as the stern; they have a main-mast and a fore-mast; the fore-mast has a yard and a square sail, but the sail of the main-mast is narrow a-top like a sloop's sail: Their masts are not pieced as ours, and set one on the top of the other, but are only one single tree. Their sails are made of a thick mat strengthened with laths or split cane at about two feet distance: Upon the deck they build little rooms or cabins from one end to the other, raised about seven or eight feet

gh, which are gilded both within and without, and are very commodious, that they make the longest voyage tolerable. The Mandarines, or great officers, often travel together in this manner, and nowhere spend their hours more agreeably; for here they visit one another without ceremony, and play and pass away their time as if they were all of one family; which freedoms are never taken by magistrates on shore.

BUT notwithstanding the sailing upon the rivers and canals is generally exceeding pleasant, there are several rapid torrents on which they sail with the utmost hazard. Le Compte tells us, he was once upon such a stream, when the vessel was whirled round with an incredible swiftness for a considerable time, and at length dashed upon a rock. That in the province of Fokien, for eight or ten days sail the vessel is in continual danger of perishing; there are so many cataracts and rocky straights that it is hardly possible for the boat to pass through without being dashed to pieces on one side or other: Every day almost some vessel or other is shipwrecked in these torrents, but they have often the good fortune to spit near the shores, and the passengers are saved; sometimes indeed the vessel is dashed to pieces, and the crew buried in a moment. Le Compte says, though he had sailed upon the most tempestuous seas, he thinks he never run so many hazards in ten years, as he did in ten days upon these torrents: But all this danger it seems proceeds from want of hands to manage their barks, for if instead of eight men they carried fifteen, all the violence of the streams would not be able to carry them away, so dexterous are the Chinese at stemming the force of the current. But it is common in China, as well as other parts of the world, to hazard men's lives, and venture losing all their effects, rather than be at a trifling

charge more, than they apprehend to be absolutely necessary.

FATHER Gemelli Careri observes, that there is hardly a city or village through the whole empire, especially in the southern provinces, but enjoys the convenience of some navigable river, lake, canal, or arm of the sea; and that there are almost as many people upon the water as upon the land; wherever there is a town upon the shore, there is another of boats upon the water; and some ports are so blocked up with vessels, that it will take up several hours to get cross them to land. These vessels are made as commodious as houses; and there are many born, and live, and die in them; and they keep hogs, poultry, dogs, and other domestic animals on board, as if they were on shore.

BESIDES these vessels, there are a prodigious number of floats of timber perpetually going up and down the rivers and canals, which carry whole villages of people upon them. This timber is cut chiefly in the province of Suchuen, which adjoins to India on the west; and these floats are some of them a mile in length; they rise two or three feet above the water, upon which the people build little wooden huts, or cabins, at equal distances, where they live till they have disposed of the timber on which they are built: Thus great quantities of it are conveyed as far as Peking, being above three hundred leagues from the place where it is cut.

THEIR ships which go to sea are deeper and more capacious than those for the canals, but their masts and sails are made much after the same manner, and their heads and stems square like the former. They have some two masts, and others three, and their largest are above a thousand tun burden.

ALL ships have frightful images of their gods, and

have altars and lamps burning before them. The hold of the ship is divided into many small partitions, which are made so tight, that if they spring a leak, only the goods stowed there will be damaged, and it can go no further.

THESE sort of vessels are not good sailors, though they hold much more wind than ours, because of the stiffness of their sails, which do not yield to the gale; yet as they are not built in so neat a manner, they lose the advantage they have over ours in this point.

THEY do not caulk their vessels with pitch and tar as they do in Europe, but with a sort of particular gum, which is so good that a well or two made in the bottom of the hold of the vessel is sufficient to keep it dry; hitherto they have had no knowledge of a pump.

THEIR anchors are not made of iron, like ours, but of a hard and heavy wood, which on that account they call Tie mou, that is to say, Iron-Wood; they pretend that these anchors are much more serviceable than those of iron, because, say they, these are apt to bend, which those of the wood they use never do; however, they most commonly tip the two ends of them with iron.



*Of the AGRICULTURE and GARDENING of the
CHINESE.*

IN so large an empire as this we ought not to be surprised that the nature of the soil is not every where the same, it differing according as you are nearer or farther from the south; but such is the industry of the husbandmen, and so inured are they to labour, that there is not one province which is not very fruitful, and scarce none but what will yield subsistence for an inconceivable number of inhabitants.

BESIDES the goodness of the land, it is interspersed with a prodigious number of canals, which greatly contribute to its fertility; and though there are gathered so many different sorts of grain, that great quantities are used for making wine and strong waters, yet when they are afraid of any place becoming barren, the Mandarines prohibit the making of those liquors for a time. Agriculture is in great esteem, and the husbandmen, whose profession is regarded as the most necessary for the state, are not of the meanest rank, having large privileges granted to them, and being preferred to mechanics and merchants.

THIS country, like all others, has its plains and its mountains, and all the plains are cultivated; but neither hedge nor ditch is to be seen, and but few trees, so much are they afraid of losing an inch of ground.

PROVINCES which lie to the north and west produce bread-corn, barley, several kinds of millet, tobacco, pease that are always green, black and yellow pease, which serve instead of oats for horses; they likewise produce rice, but in less quantities, and in several places where

the earth is dry it must be sown, the rice is harder, and requires more boiling; those of the south produce great quantities of rice, because the land lies low, and the country is full of water.

IN the provinces where the plains are mingled with hills and mountains, some of them must needs be barren, but the greatest part have good soil, and they cultivate them to the very edge of the precipices.

IT is a very agreeable sight to behold in some places plains of the extent of three or four leagues, surrounded with hills and mountains cut into terraces from the bottom to the top; the terraces rise one above another, sometimes to the number of twenty or thirty, every one being three or four feet high.

THESE mountains are not generally rocky, as they are in Europe, the soil being light, porous, and easy to be cut, and so deep in several provinces, that one may dig three or four feet deep before the rock appears.

WHEN the mountains are rocky, the Chinese loosen the stones, and make little walls of them to support the terraces, then level the good soil, and sow it with grain.

THE husbandmen divide into plots that which is of the same level, and that which has great inequalities is separated into stories in the form of an amphitheatre; and as the rice will not flourish without water, they make reservoirs at proper distances to catch the rain-water, and that which descends from the mountains, that they may distribute it equally among all the plantations of rice; never complaining of the pains and labour they take, either in guiding the water, according to its natural bent; from the reservoirs above to the reservoirs below, from story to story, even to the highest.

THEY make use to this purpose of hydraulic engines, of a very simple kind, to convey the water from place to place, that the earth may be constantly watered, in so much that the husbandman is almost certain to find a harvest proportionable to his industry and labour; the traveller likewise receives a great deal of pleasure in passing through these delightful fields and valleys, where in the scenes are agreeably diversified by the different disposition of the mountains that surround them, and finds himself every hour pleasantly surprised by a new landscape that perpetually appears in view in a constant succession of verdant amphitheatres, which he discovers one after another in his journey.

THIS sort of engine which they make use of is very simple, both with respect to its make and the manner of playing it; it is composed of a chain made of wood, like a large ring, which consists of a vast number of little pieces of board or trenchers of six or seven inches square, strung through the middle, and placed at equal distances parallel to each other; this chain is laid in a wooden trough made of three planks, in such a manner that the lower part of the ring lies at the bottom of the trough, and fills it exactly, and the upper part, which is parallel to it, is close to a plank laid on the open part of the trough; the lower part of the ring passes round a moveable cylinder, whose axle-tree is laid upon the two sides of the lower end of the trough; the other end of the ring, that is to say, that above, is supported by a kind of drum, with little boards fixed to it in such a manner that they suit exactly with the boards of the chain; this drum being turned about by a power applied to its axle-tree, causes the chain to turn, and at the upper part of the trough, by which the drum is supported, is fixed at the same height as the water is to be brought, and the inferior

part is plunged into the water that is to be raised, it is necessary that the inferior part of the chain, which exactly fills the tube or trough, in ascending through the tube carries with it all the water (which is between each board, that is as much as the tube can contain, in a continual stream to the place where it is designed, as long as the machine is in motion; meanwhile the upper part of the chain descends gradually along the plank which supports it: these two motions joined together make all the secret of the machine: It is put in motion three different ways, in the following manner:

FIRST, with the hand, either with one or two wind-lasses fixed immediately to the ends of the axle-tree or the drum.

SECONDLY, with the feet, by means of certain large wooden pegs, standing out about half a foot round the axle-tree of the drum; these pegs have large longish heads, round on the outside, that is to say, of a proper shape to tread upon with naked feet; inasmuch that several men, according to the number of the rows of the pegs, either standing or sitting, may easily put the engine in motion with very little trouble, holding an umbrella in one hand, and a fan in the other, and so send a continual stream to the thirsty land.

THIRDLY, by the assistance of a buffalo, or some other animal, who is made fast to a great wheel about four yards in diameter, placed horizontally; in the circumference of which are fixed a great number of pegs or teeth, which tally exactly with the teeth of the same sort fixed round the axle-tree of the drum, by which means the largest machine is turned about with ease.

When a canal is to be cleaned, which frequently happens, it is divided at convenient distances by dams, and every neighbouring town has a proper share al-

lotted to it; and then immediately appear several companies of peasants, with engines like that I have described, which they make use of for raising the water out of the canal into the fields; and as the banks are very high, they place three engines one above another, so that the water is conveyed from one to the other. This labour, though long and painful, is soon ended, by reason of the number of hands that are employed therein.

IN the provinces of Peking, Xanfi, Xenfi, and Su-chuen, which lie towards the west and north, they sow wheat, barley, and pease; Huquam, Nanking and Chiekiam, which are low watry countries, abound in rice.

THE soil of their ground is so light that they plow with a single buffalo or heiter; after they have plowed, they clean the ground of all weeds; and if the field be designed for rice, they let in the water and moisten the earth till it become a perfect pulp or horch-potch. They sow their rice first in little beds or plots, where it comes up so thick that it would never yield, therefore they transplant it after it is six or eight inches high, and plant their fields in straight lines, as our gardeners do their beans, leaving little spaces between. They continually supply these fields with water, in which the rice grows till it is almost ripe; and then the water being dried up, they cut and thresh it out, often in the fields where it grows. The rice has an ear the most like bearded barley of any European grain, and grows usually four feet, sometimes two yards high.

THEY prepare their ground for wheat and barley by grubbing up the grass and roots, and burning all together with straw; then having sifted this earth fine, they mix and sow it with seed in a straight line in trenches, and not promiscuously as our husbandmen do.

IN order to make the rice grow the better they are careful, in certain places where they sow, to bury balls of hogs-hair, or any other sort of hair, which, according to them, gives strength and vigour to the land, and makes the rice better; those whose business it is to shave the head are very careful in saving the hair, till the inhabitants of these parts come to purchase it for about a halfpenny a pound, conveying it away in bags, and you may often see barks loaded with nothing else.

WHEN the plant begins to ear, if the land be watered with spring-water, they mix quick lime with it, pretending that it kills worms and insects, destroys weeds, and gives a warmth to the ground very much tending to make it fruitful.

THE Chinese have no meadows, natural or artificial, and have not the least conception of fallowing, never permitting their lands to lie the smallest time fallow. Their husbandmen would consider meadows, of every denomination, as lands in a state of nature; they sow their lands all with grain, and give the preference to such grounds as we generally lay out in meadows, which, lying low, and being properly situated with respect to water, are consequently the most fertile. They affirm, that a field sown with grain will yield as much straw for the nourishment of cattle, as it would have produced of hay, besides the additional advantage of the grain for the maintenance of man, of which they can spare too in plentiful seasons, a small portion for the animal creation.

SUCH is the system adhered to from one end of the empire to the other, and confirmed by the experience of four thousand years, amongst a people the most attentive to their interest of any nation in the universe.

A Chinese farmer could not but laugh, if you told

him, that the earth ought to rest at a certain fixed period of time. All their grounds, even in the northern provinces, yield every year two crops, without one single fallow season, during the many thousands of years that they have been converted to the purposes of agriculture.

THE Chinese use the same manures as we do, in order to restore those salts and juices to their grounds, which an unintermitting production is continually consuming. They know nothing about marl, but make use of common salt, lime, ashes, and all sorts of animal dung, but above all that which we throw into our rivers: They make great use of urine, which is carefully preserved in every house, and sold to advantage: In short, every thing produced by the earth is conveyed to it again with the greatest care, into whatever shape the operations of nature and art may have transformed it.

WHEN their manures are at any time scarce, they supply the deficiency, by turning up the ground with the spade to a great depth, which brings up to the surface of the field a new soil, rich with the juices of that which descends in its room.

WITHOUT meadows the Chinese maintain a great number of horses, buffaloes, and other animals of every kind necessary for labour, for sustenance, and for manure. These animals are fed some with straw, others with roots, beans, and grain of every kind. It is true, they have fewer horses and horned cattle, in proportion, than we have, yet it is not necessary that they should have more.

THE continual labour and pains of these poor people are sometimes rendered ineffectual, by the great number of locusts that destroy the fruits of the earth; it is

a dreadful plague, if we may judge of it from a Chinese author : " One sees such prodigious multitudes of
 " them, says he, that they cover all the sky, and are
 " so close, that their wings seem to touch each other ;
 " their number is so great, that in lifting up your eyes
 " you would imagine you saw over your head high
 " green mountains, and the noise they make in flying
 " is like the beating of a drum."

THE same author observes, that this incredible quantity of locusts does not appear but when great floods are followed by a very dry year ; for it is his opinion, that the spawn of the fish being left upon the ground, and afterwards hatched by the heat of the sun, produce this vast multitude of insects, that in a short time destroy the hopes of a plentiful crop.

THIS empire was established by husbandmen, in those happy times, when the laws of the great Creator were still held in remembrance, and the culture of the earth regarded as the grandest of all employments, the most worthy of mankind, and the chief trade of all. From Fou hi, even to this day, all the emperors, without excepting one, glory in being the first husbandmen of their realm.

THE Chinese historians have carefully preserved an anecdote of generosity in two of their ancient emperors, who, not observing among their children any one worthy of mounting a throne, which virtue alone ought to inherit, named two simple husbandmen to succeed them. These husbandmen, according to the Chinese annals, advanced the happiness of mankind during very long reigns ; their memory is still remembered with veneration.

AGRICULTURE is honoured, protected, and practised by the emperor, and the great magistrates, who for the most part are the sons of simple husbandmen, whom

merit has raised to the first dignities of the empire; and, in short, by the whole nation, who have the good sense to honour an art the most useful to man, in preference to others more frivolous, and less important.

On the fifteenth day of the first moon, in every year, which generally corresponds to the beginning of March, the emperor in person performs the ceremony of opening the grounds. This prince in great pomp, marches to the field appointed for the ceremony: the princes of the imperial family, the presidents of the five great tribunals, and a vast number of Mandarines accompany him. Two sides of the field are occupied by the emperor's officers, and guards; the third is allotted for the husbandmen of the province, who repair thither to behold their art honoured, and practised by the chief of their empire; the fourth is reserved for the Mandarines.

THE emperor enters the field alone, lies down, and nine times knocks his head against the ground, in adoration of Tien, the God of heaven; he pronounces, with a loud voice, a prayer appointed by the tribunal of rites, invoking the blessing of the almighty Sovereign on his labour, and on the labour of his people, who form his family: he then, in quality of sovereign pontiff of the empire, sacrifices a bullock, which he offers up to heaven, as the origin of all happiness; while they cut the victim in pieces, and place them on the altar, they bring to the emperor a plough, in which are yoked a pair of bullocks, magnificently adorned. The emperor then, laying aside his royal robes, takes hold of the handle of the plough, and turns up several furrows the whole length of the field; then, with a complaisant air, having delivered the plough to the Mandarines, they successively follow his example, emulating one another in performing this honourable

labour with the greatest dexterity. The ceremony ends with distributing money, and pieces of stuff, among the husbandmen there present; the most active of whom finish the remaining labour, before the emperor, with great nimbleness and address.

SOME time after, when they have sufficiently laboured and manured their lands, the emperor repairs again, in procession, and begins the sowing of the fields, always accompanied with ceremony, and attended by the husbandmen of the province.

THE same ceremonies are performed, on the same days, in all the provinces of the empire, by the viceroys, assisted by all the magistrates of their departments, in presence of a large number of husbandmen, of their respective provinces. I have seen this opening of the grounds at Canton, and never remember to have observed any of the ceremonies invented by men with half the delight and content with which I beheld this.

THE Chinese agriculture has likewise other encouragements. Every year the viceroys of the provinces send the names of such husbandmen as have particularly distinguished themselves in their employments, either by cultivating grounds which had till that time been looked upon as barren, or, by a superior culture, improving the production of such lands as formerly had bore grain, to court. These names are presented to the emperor, who confers on them honourable titles, to distinguish them above their fellow husbandmen. If any man has made an useful discovery, which may influence the improvement of agriculture, or should he, in any manner, deserve more distinguished marks of respect than the rest, the emperor invites him to Peking, defraying his journey, with dignity, at the expence of the empire; he receives him into his palace, questions him with respect to his abilities, his

age, how many children he has, the extent and quality of his lands; then dismisses him to his plough, distinguished by honourable titles, and loaded with benefits and favours.

THE Chinese ascribe the invention of the plough, and several instruments of agriculture, and the proper method of sowing wheat, rice, barley, and other grains, to some of their emperors; and books have been written by their princes upon the subject of tillage, the nature of different soils, and the manure proper for each, which serve as directions to the husbandmen at this day.

THE gardens of the Chinese are generally very small. Nature is their plan, and their aim is to imitate her in all her delightful irregularities. Their first consideration is the form of the ground, whether it be flat, sloping, hilly, or mountainous, extensive, or of small compass, or a dry or marshy nature, abounding with rivers and springs, or liable to a scarcity of water; to all which circumstances they carefully attend, choosing such dispositions as humour the ground, can be executed with the least expence, hide its defects, and set its advantages in the most conspicuous light.

The Chinese not being great lovers of walking, we seldom meet with avenues or spacious walks, as in our European plantations. The whole ground is laid out in a variety of scenes, and you are led, by winding passages cut in the groves, to the different points of view, each of which is marked by a seat, a building, or some other object.

THE perfection of their gardens consists in the number, beauty, and diversity of these scenes. The Chinese gardeners, like the European painters, collect from nature the most pleasing objects, which they endeavour to combine in such a manner, as not only to

appear to the best advantage separately, but likewise to unite in forming an elegant and striking whole.

THEIR artists distinguish three different species of scenes, to which they give the appellations of pleasing, horrid, and enchanted. Their enchanted scenes answer, in a great measure, to what we call romantic, and in these they make use of several artifices to excite surprize. Sometimes they make a rapid stream, or torrent, pass under ground, the turbulent noise of which strikes the ear of the new comer, who is at a loss to know from whence it proceeds. At other times they dispose the rocks, buildings, and other objects that form the composition in such a manner, as that the wind passing through the different interstices and cavities, made in them for that purpose, causes strange and uncommon sounds. They introduce into these scenes all kinds of extraordinary trees, plants and flowers, form artificial and complicated echoes, and set loose different sorts of monstrous birds and animals.

IN their scenes of horror, they introduce impending rocks, dark caverns, and impetuous cataracts rushing down the mountains from all sides; the trees are ill-formed, and seemingly torn to pieces by the violence of tempests; some are thrown down, and intercept the course of the torrents, appearing as if they had been brought down by the fury of the waters; others look as if shattered and blasted by the force of lightning; the buildings are some in ruins, others half consumed by fire, and some miserable huts dispersed in the mountains serve, at once, to indicate the existence and wretchedness of the inhabitants. These scenes are generally succeeded by pleasing ones. The Chinese artists, knowing how powerfully contrast operates on the mind, constantly practise sudden transitions, and a striking opposition of forms, colours, and shades. Thus they

conduct you from limited prospects to extensive views; from objects of horror to scenes of delight; from lakes and rivers, to plains, hills, and woods; to dark and gloomy colours they oppose such as are brilliant, and to complicated forms simple ones; distributing by a judicious arrangement, the different masses of light and shade, in such a manner as to render the composition at once distinct in its parts, and striking in the whole.

WHEN the ground is extensive, and a multiplicity of scenes are to be introduced, they generally adapt each to one single point of view: But where it is limited, and affords no room for variety, they endeavour to remedy this defect, by disposing the objects so, that being viewed from different points, they produce different representations; and sometimes by an artful disposition, such as have no resemblance to each other.

IN their large gardens they contrive different scenes for morning, noon and evening; erecting at the proper points of view, buildings adapted to the recreations of each particular time of the day: and in their small ones (where, as has been observed, one arrangement produces many representations) they dispose in the same manner, at the several points of view, buildings, which, for their use point out the time of day for enjoying the scene in its perfection.

As the climate of China is exceeding hot, they employ a great deal of water in their gardens. In the small ones, if the situation admits, they frequently lay almost the whole ground under water; leaving only some islands and rocks: And in their large ones they introduce extensive lakes, rivers, and canals. The banks of their lakes and rivers are variegated in imitation of nature; being sometimes bare and gravelly, sometimes adorned with woods to the water's edge.

In some places flat and covered with flowers and shrubs, in others rocky, and forming caverns into which part of the waters discharge themselves with noise and violence. Sometimes you see meadows covered with cattle, or rice grounds that run out into lakes, leaving between them passages for vessels; and sometimes groves, into which enter, in different parts, creeks and rivulets, sufficiently deep to admit boats; their banks being planted with trees, whose spreading branches in some places form harbours, under which the boats pass. These generally conduct to some very interesting object; such as a magnificent building; places on the top of a mountain cut into terraces; a casine situated in the midst of a lake; a cascade, a grotto cut into a variety of apartments; an artificial rock; and many other such inventions.

THEIR rivers are seldom straight, but serpentine, and broken into many irregular points; sometimes they are narrow, noisy, and rapid; at other times, deep, broad, and slow. Both in their rivers and lakes are seen reeds, with other aquatic plants and flowers; particularly the Lyen hoa, of which they are very fond. They frequently erect mills, and other hydraulic machines, the motions of which enliven the scene. They have also a great number of vessels of different forms and sizes. In their lakes they intersperse islands; some of them barren, and surrounded with rocks and shoals; others enriched with every thing that art and nature can furnish most perfect. They likewise form artificial rocks; and in compositions of this kind the Chinese surpass all other nations. The making them is a distinct profession: And there are at Canton, and probably in most other cities of China, numbers of artificers constantly employed in this business. The stone they are made of comes from the southern coasts

of China: It is of a blueish cast, and worn into irregular forms by the action of the waves. The Chinese are exceeding nice in the choice of this stone, in so much that I have seen several sold given for a bit no bigger than a man's fist, when it happened to be of a beautiful form and lively colour. But these select pieces they use in landships for their apartments; in gardens they employ a coarser sort, which they join with a blueish cement, and form rocks of a considerable size. I have seen some of these exquisitely fine, and such as discovered an uncommon elegance of taste in the contriver. When they are large they make in them caves and grottos, with openings, through which you discover distant prospects. They cover them in different places with trees, shrubs, briars, and moss; placing on their tops little temples, or other buildings, to which you ascend by rugged and irregular steps cut in the rock.

WHEN there is a sufficient supply of water, and proper ground, the Chinese never fail to form cascades in their gardens. They avoid all regularity in these works, observing nature according to her operations in that mountainous country. The waters burst out from among the caverns and windings of the rocks. In some places a large and impetuous cataract appears; in others are seen many lesser falls. Sometimes the view of the cascade is intercepted by trees, whose leaves and branches only leave room to discover the waters, in some places, as they fall down the side of the mountain. They frequently throw rough wooden bridges from one rock to another, over the steepest part of the cataract; and often intercept its passage by trees and heaps of stones, that seem to be brought down by the violence of the torrent.

In their plantations they vary the forms and colours

of their trees, mixing such as have large and spreading branches with those of pyramidal figures, and dark greens with brighter, interspersing among them such as produce flowers, of which they have some that flourish a great part of the year. The weeping willow is one of their favourite trees, and always among those that border their lakes and rivers, being so planted as to have its branches hanging over the water. They likewise introduce trunks of decayed trees, sometimes erect, and at other times lying on the ground, being very nice about their forms, and the colour of the bark and moss on them.

VARIOUS are the artifices they employ to surprize. Sometimes they lead you through caverns and gloomy passages, at the issue of which you are, on a sudden, struck with a view of a delicious landskip, enriched with every thing that luxuriant nature affords most beautiful. At other times you are conducted through avenues and walks, that gradually diminish and grow rugged, till the passage is at length entirely intercepted, and rendered impracticable, by bushes, briars, and stones; when unexpectedly a rich and extensive prospect opens to view, so much the more pleasing, as it was the less looked for.

ANOTHER of their artifices is to hide some part of a composition by trees, or other intermediate objects. This naturally excites the curiosity of the spectator to take a nearer view; when he is surprized by some unexpected scene, or some representation totally opposite to the thing he looked for. The termination of their lakes they always hide, leaving room for the imagination to work; and the same rule they observe in other compositions, wherever it can be put in practice.

THOUGH the Chinese are not well versed in optics, yet experience has taught them that objects appear less

in size, and grow dim, in proportion as they are more removed from the eye of the spectator. These discoveries have given rise to an artifice, which they sometimes put in practice. It is the forming projects in perspective, by introducing buildings, vessels, and other objects, lessened according as they are more distant from the point in view; and that the deception may be still more striking, they give a greyish tinge to the distant parts of the composition, and plant in the remoter parts of these scenes trees of a fainter colour, and smaller growth, than those that appear in the front, or fore-ground; by these means rendering what in reality is trifling and limited, great and considerable in appearance.

THE Chinese generally avoid straight lines; yet they do not absolutely reject them. They sometimes make avenues, when they have any interesting object to expose to view. Roads they always make straight, unless the unevenness of the ground, or other impediments, afford at least a pretext for doing otherwise. Where the ground is entirely level, they look upon it as an absurdity to make a serpentine road; for they say, that it must either be made by art, or worn by the constant passage of travellers: In either of which cases it is not natural to suppose men would chuse a crooked line, when they might go by a straight one.

WHAT the European gardeners call clumps, the Chinese are not unacquainted with; but they make not such frequent use of them as we do. They never fill a whole piece of ground with clumps; they consider a plantation as painters do a picture, and groupe their trees in the same manner as these do their figures, having their principal and subservient masses.

THE Chinese manner of laying out grounds is vastly difficult, and not to be attained by persons of narrow

*On teng chu, or
the Varnish Tree*



*The Leaf, Root and Flower
(of) Ginseng*

The other Root

*Thick one fourth
of the true Height*



*Two sorts of
Cotton Trees*



The Tea



Betel

Jaca



intellects; for though the precepts are simple and obvious, yet it requires genius, judgment, and experience, a strong imagination, and a perfect knowledge of the human mind, to put them in execution: This method being fixed to no certain rule, but liable to a many variations as there are different arrangements of things in the world.

Of the TREES, SHRUBS, and PLANTS of the CHINESE.

WERE the Chinese as careful in cultivating their fruit-trees, as we generally are in Europe, they would have abundance of all kinds, the only difference would be the want of variety of each distinct sort; as for instance, they have but three or four kinds of apples, seven or eight of pears, as many of peaches, and none of cherries but what are very indifferent.

BUT what makes amends for this defect is, that they have several excellent fruits to which we are strangers; particularly one which they call Tse tse, and the Portuguese, figs, because when it is dried it becomes mealy and sweet like a fig. The trees on which they grow, when grafted become very charming to the eye; they are as tall, and spread about as much as a middle sized walnut-tree: The leaves are large, and of a lively green, which change in the autumn to an agreeable red. The fruit is about the bigness of a handsome apple, and their colour, when ripe, is of a bright yellow.

In the southern provinces there grow other fruits which are still in greater esteem among the natives.

for, besides oranges of several sorts, lemons, citrons, which were many years ago brought into Europe, we meet with two several kinds which are unknown among us. That which they call Li tchi is about the size of a date. The stone is equally long and hard, it is covered with a soft pulp full of moisture, and of an excellent taste: when dried, it loses a great part of its fine flavour, and becomes black and wrinkled like our ordinary prunes. The rind outwardly resembles shagreen, but it is smooth within; the figure is nearly oval.

THE other kind has the name of Long yen, that is to say, the dragon's eye; the shape is round, the rind yellowish, the pulp white, moist, and inclinable to the acid. It is pretended that this is not so agreeable as the former, but it is more wholesome, for it never occasions any disorder.

THE Yeou and Quang lau are ordinary fruits, and not worth insisting on in particular. However, the way of gathering the latter, which are a kind of olive, is worth observation. Before they are quite ripe, and yet are in a condition proper for eating, instead of beating them down with long poles, which is the custom in other places, they make a hole in the body of the tree, in which they put salt, and then stop it up; by this means, in a few days time, the olives fall from the tree of themselves.

AMONG other trees, there are two which ought not to be omitted, for besides their singularity, they are useful at meals. The one produces a kind of pepper, called Hao tiao; it is the rind of a berry as big as a pea; the kernel is too hot and biting to be made use of; the colour of it is gray mingled with streaks of red. It is not so pungent nor agreeable to the taste as pepper, and consequently is only used by the meaner peo-

ple. The plant that produces it in some places is a thick bush; in others a tree of moderate height.

THE other tree produces pease. The shape, colour, shell and taste are extremely like our ordinary pease. This tree is common enough in several provinces, and for tallness, spreading branches and thickness, gives place to very few.

BUT among trees which claim the attention of the public, and which are most likely to raise the envy of the Europeans, are the four that follow.

THE first is the varnish tree [Tli chu.] Its size is very mean, its bark whitish, its leaf resembles that of the wild cherry tree. The gum, which distils drop by drop, is like the tears of the turpentine-tree. It yields a greater quantity of liquor if an incision be made in it; but then it soon destroys the tree.

THIS varnish is constantly used, and greatly esteemed by the artificers; it takes all colours alike, and if it be well managed, neither loses its lustre by the changes of the air, nor the age of the wood to which it is applied.

THE second tree is Tong chu, from which a liquor is gained not much differing from varnish. It resembles a walnut-tree so nearly, that many have been deceived by it. The nut is full of a thickish oil mixed with an oily pulp, which they take care to squeeze, otherwise they would lose a great part of the liquor. This, as well as the varnish, is supposed to have a poisonous quality. To make it fit for use, they boil it with litharge, and may mix it with any colour at pleasure. It is often used of itself to varnish wood, which preserves it from the bad effects of rain; as also to give a lustre to the floors of the emperor's apartments, and those of the grandees.

THE third remarkable tree is the Tallow-Tree. It

is as high as a large cherry tree; the fruit is contained in a rind, which, when ripe, opens in the middle like a chestnut: It consists of white kernels of the size of a hazel nut, whose pulp has the properties of tallow, and of which candles are accordingly made.

THE fourth is the most uncommon of all; it is called *Pe la chu*, that is, the white-wax-tree. It is not so tall as the tallow-tree, from which it also differs in the colour of the bark, which is whitish, and in the shape of the leaves, which are longer than they are broad. A little kind of worm fixes itself to the leaves, and forms a sort of comb much smaller than a honey-comb. The wax of this is very hard and shining, and of far greater value than their common bees-wax.

THE wood called *santal* or *sanders* is another production of China, as well as of the kingdom of Siam. There are three sorts of *sanders*, white, yellow, and red, which are all produced by trees of the same kind, their different colours being supposed to arise from the difference of climates where they grow, or from the different parts of the tree from whence they are taken. According to many, the cortical part is the white *sanders*, and the medulary part the yellow *sanders*; but *Garcias* says they are had from two different trees, tho' so much alike that they cannot be distinguished except by the natives. This, however, we are better assured of, that the tree producing yellow *sanders* grows as high as our walnut trees, bearing leaves resembling those of the lentisk, bluish flowers, and fruit like a cherry, green at first, but blackening as it ripens, and of a faintish taste. The white *sanders* is the paler marrow of the same tree, which has not such a fragrant smell nor aromatic taste as the yellow *sanders*, and is therefore less esteemed. The red is the heart of another species

of this tree, very solid and ponderous, but less odorous than either of the former. They are all reckoned refrigerating, drying, and cordial; and the red is pretty astringent.

THERE is another tree which bears a fruit from which is drawn an excellent oil. This tree has some distant resemblance to the tea shrub, with respect to the shape of the leaf, and the colour of the wood; but greatly exceeds it in height and thickness. The berries, which are green, and of an irregular figure, contain several kernels.

THE cotton shrub is one of the most useful in all China; on the same day that the husbandmen get in their harvest they sow cotton in the same field, doing nothing else but raking the earth over the seeds.

WHEN the earth is moistened with rain or dew, there soon grows up a shrub about two feet high, the flowers of which appear at the beginning or towards the middle of August; they are generally yellow, but sometimes red. To this flower a small button succeeds, growing in the shape of a pod of the bigness of a nut.

THE fortieth day after the appearance of the flower the pod opens of itself, and dividing into three parts, discovers three or four wrappings of cotton, extremely white, and of the same figure as the cocoon of a silkworm; they are fastened to the bottom of the open pod, and contain seeds for the following year: It is then time to get in the crop, but in fair weather they leave the fruit exposed to the sun two or three days, which swelling by the heat makes the profits the greater.

AS all the fibres of the cotton are strongly fastened to the seeds that they enclose, they make use of a sort of an engine to separate them; it contains two very

smooth rollers, one of wood and the other of iron about a foot long, and an inch thick; they are so close to one another that there is no space left between; while one hand gives motion to the first of those rollers, and the foot to the second, the other hand applies the cotton, which loosening by the motion, passes on one side of the engine, while the naked seed remains on the other.

CHINA produces great quantities of ginger, which grows wild in many places near the sea; but this is not near so good as that which is cultivated. There are two kinds of this root, male and female: the female has the smaller leaf, and the root is not so large as the other: its leaf is like that of a reed, and not easily distinguished from it; the root is dug up about midsummer, when the leaf begins to fall; when it is fresh and moist it is not near so hot as when it is dried. It is a very pleasant sweetmeat preserved green, and much eaten in this country. It is reckoned very good in many distempers, particularly the cholic and flux.

SUGAR CANES grow in great abundance in this country, they are found chiefly in marshy grounds, and have leaves like reeds; they are about three fingers thick, and full of knots, and shoot up six or seven feet high.

THERE is another small reed or cane which grows upon the mountains in China, called a Rattan or Japan cane; when dry it is said they will produce fire if struck against one another, and that they are used in some places instead of flints. These rattans are very tough, and being twisted together they make cordage of them. The Javans and Japanese make cables of them, which will not rot so soon in the water as those made of hemp.

THERE is still another sort of reed or knotty cane,

called the Bamboo, the body whereof grows to such a bigness that it is often reckoned among their trees. It thrives best in marshy ground, and is naturally very straight and tall; but they bend it in the middle while it is growing, to make poles for their chairs. Of these bamboos are often made canoes or wherries, and being a light cane, they are rowed with incredible swiftness. They serve also instead of timber in their houses and other buildings.

THERE are great woods of mulberry-trees in this country, particularly in the province of Chekiang, with the leaves of which they feed their silk worms. These woods are some of them cut down every year, because the silk which is produced by those worms, which feed on the leaves that spring from the young shoots, is much the best.

IN the province of Quangsi there is some cinamon.

THERE grow also, as we are told by Nieuhoff, cloves, nutmegs, and mace in China; but it is in such small quantities, he confesses, that they as well as the Europeans are supplied from the Molucca islands with these spices.

THEY have most kinds of wood that are to be found in Europe; but that of greatest esteem among them is called Nan mon. The ancient palaces of the emperors have the windows, gates, beams, and pillars of this wood. The natives imagine it will never decay, and consequently that whatever is formed of it will last for ever. Some have supposed it to be a kind of cedar, but the leaves are not at all like it. It is a very tall tree, and the body of it is very straight.

BUT no kind of wood for beauty can equal the Tse-tam; it is of a reddish black, and full of fine veins, which seem painted. It is very proper for cabinets,

and the very finest sort of joiner's work ; and whatever is made of it is of great esteem.

WITH respect to strength and firmness, the Iron wood gives place to none. The tree is as tall as our large oaks, but differs from them in the thickness of the trunk, the shape of the leaf, the colour of the wood which is darker, and more especially in the weight. The anchors of their ships of war are made of this wood, and the emperor's officers pretend that they are preferable to those made of iron ; but in this they must needs be mistaken.

THE flowering trees and shrubs are very numerous in every province. Some of the flowers resemble tulips, others are like roses, which, intermixed with the green leaves, make a beautiful appearance.

AMONG the shrubs there are but three or four kinds that bear odoriferous flowers ; of these the double jessamine-tree [Mo li hoa], is the most agreeable. In the south it attains a moderate height, but in the north it is no more than six feet high, though it be kept in the green-house all the winter. The flower in all things resembles a double jessamine, but the leaf is entirely different, and comes pretty near that of a young citron-tree.

THE tree which produces the flowers called Kuey hoa, is very common in the southern provinces, but is rarely found in the northern. The flowers are small, of various colours, and have a charming scent. The leaves are not unlike those of a bay-tree.

THERE is yet another species of these plants, proper to the maritime provinces ; it bears the flower called Lun hoa. It is not so agreeable to the sight, being of a dusky yellow, as the former, but the scent of it is the most delicious of all.

THERE is a shrub not odoriferous, which bears

a white flower as large as a double or triple rose. The calix, or cup, becomes afterwards a fruit of the shape of a peach, but the taste is altogether insipid. In its cells it has several pippins, or seeds, covered with a blackish skin, of a pretty firm consistence.

THE piony of China are more beautiful; and have an agreeable smell, but the rest of their garden-flowers are no way comparable to ours.

THE meaner sort, who live upon nothing else besides vegetables, are very careful in the cultivation of their kitchen-gardens; as soon as one thing is off the ground, another is immediately sown or planted, insomuch that the earth is never suffered to lie still.

AMONG the pot-herbs which we have not, there is none that deserves any notice but the Pe tsai, and this indeed is both useful and excellent. It has been taken for a kind of Roman lettuce, but is like it in nothing but the first leaves; the seed, flower, taste, and height being entirely different. The quantities that are sown of it are almost incredible. In the months of October and November the nine gates of Peking are embarrassed with the waggons that are loaded with it. They preserve it with salt, or pickle it, and so mix it with their rice, to which it gives a relish.

OF all the vegetable productions of China, the tea-plant is the most valuable, as its leaves afford us such a favourite liquor by infusion, that it is daily used amongst us almost universally, and by people of all ranks and conditions. This shrub, which seems to be a species of myrtle, seldom grows beyond the size of a rose bush, or at most six or seven feet in height, tho' some have extended it to a hundred. It affects a gravelly soil, and is usually planted in rows upon little hills about three or four feet distant from each other. Its leaves are about an inch and a half long, narrow,

tapering to a point, and indented like our rose or sweet-briar leaves, and its flowers are much like those of the latter. The shrub is an evergreen, and bears a small fruit, which contains several round blackish seeds, about the bigness of a large pea, but scarce above one in a hundred comes to perfection. By these seeds the plant is propagated, nine or ten of them being put into a hole together, and the shrubs thence arising are afterwards transplanted into proper ground. They thrive best when exposed to the south sun, and yield the best tea; but there is a sort ~~that grows~~ without any cultivation, which, though less valuable, ~~often serves~~ the poorer sort of people.

THE Chinese know nothing of imperial tea, and several other names, which in Europe serve to distinguish the goodness and price of this fashionable commodity. In truth, though there are various kinds of tea, they are now generally allowed to be the product of the same plant, only differing in colour, fragrantcy, &c. according to the difference of soil, the time of gathering it, and the method of preparation. The Vow, Bohi, or Bohca tree is so called, not from the mountains of Fokien, where the best of that sort is said to grow, but from its dark and blackish colour. This chiefly differs from the green tea, by its being gathered six or seven weeks sooner, that is, in March or April, according as the season proves, when the plant is in full bloom, and the leaves full of juice; whereas the other, by being left so much the longer upon the tree, loses a great part of its juice, and contracts a different colour, taste, and virtue, being more rough to the palate, and raking to the stomach. The green tea is most valued and used in China, and the Bohca seems not to have been known there so long as two centuries ago; for a judicious Hollander, who was physician and

botanist to the emperor of Japan, about a hundred and sixty years ago, tells us he had heard of the Bohi or black tea being come into vogue in China; but, upon the strictest search he could make, could find no such thing, and therefore believed it was a false report. This makes it probable, that originally they gathered all the tea at the same time, but that, since the discovery of the smoothness and excellence of the more juicy Bohea, they have carried on their experiments still farther, by gathering it at different seasons; for Dr. Cunningham, physician to the English factory at Chusan, gives us an account in the Philosophical Transactions, that the Bohea, which he calls the first bud, is gathered at the beginning of March, the Bing or Imperial in April, and the Singlo or Green in May and June. It is farther to be observed, that what the doctor styles the first bud is indeed the finest of the Bohea kind, and that there are several degrees of coarseness in the leaves after they are full blown and expanded; for, during all the months of gathering, the leaves on the top of the shrub are the finest and dearest, and are gradually coarser the nearer the bottom——As to the manner of curing the tea, the Bohea is first dried in the shade, and afterwards exposed to the heat of the sun, or over a slow fire, in earthen pans, till it is convolved or shrivelled up (as we see it) into a small compass. The other sorts are commonly crisped and dried as soon as gathered; though according to Dr. Cunningham the Bohea is dried in the shade, and the Green in pans over the fire.

It is very rare to find tea perfectly pure, the Chinese generally mixing other leaves with it to increase the quantity; tho' one would think the price is too moderate to tempt them to such a cheat, it being usually sold amongst them for threepence a pound sterling, and ne-

ver more than ninepence; so that it is most probable the worst adulterations of it are made by our own retailers. Bohea tea, if good, is all of a dark colour, crisp and dry, and has a fine smell: Green tea is also to be chosen by its crispness, fragrant smell, and light colour with a bluish cast, for it is not good if any of the leaves appear dark or brownish—As to the properties of the tea, they are very much controverted by our physicians; but the Chinese reckon it an excellent diluter and purifier of the blood, a great strengthener of the brain and stomach, a promoter of digestion, perspiration, and other secretions, particularly a great diuretic, and cleanser of the reins and urethra. They drink large quantities of it in fevers, in some sorts of cholics, and other acute diseases; and think it corrects the acrimony of the humours, removes obstructions of the viscera, and restores decayed sight. That the gout and stone are unknown in China is ascribed to the use of this plant; which is also said to cure indigestions, to carry off a debauch, and to give new strength for drinking. Some of the virtues attributed to tea are undoubtedly imaginary, and it has ill effects upon some constitutions; but experience shews, that several advantages attend the drinking it with discretion. It quickens the senses, prevents drowsiness, corrects the heat of the liver, removes the head-ach, especially that proceeding from a crapula, and being gently astringent, it strengthens the tone of the stomach.

As much as the Chinese esteem their tea, they seem to put a still greater value upon the plant called Ginseng, which is very scarce, being only found in the province of Leao tung, and the neighbouring mountains of Tartary. It is in so much request among their physicians, that they have wrote many volumes on its virtues, and given it the name of the spiritual plant,

the pure spirit of the earth, the immortalizing plant, and suchlike pompous titles. Martinius, Kircher, Tachard, Le Compte, and all the writers of the Chinese affairs, make mention of the ginseng; and yet we knew but very little of this plant before father Jartoux, a jesuit missionary in China, who, being employed by order of the emperor in making a map of Tartary, in the year 1709, had an opportunity of seeing it growing, and has given us a draught of it, with an accurate description thereof, its virtues, and the manner of preserving and preparing it for use; which being a curious piece of natural history, the reader will not be displeased if we are a little particular on the subject.

THE ginseng, as described by father Jartoux, has a white root, somewhat knotty, about half as thick as one's little finger; and as it frequently parts into two branches not unlike the forked parts of a man, it is said from thence to have obtained the name of ginseng, which implies a resemblance of the human form, tho' indeed it has no more of such a likeness than is usually seen among other roots. From the root arises a perfectly smooth and roundish stem, of a pretty deep red colour, except towards the surface of the ground, where it is somewhat whiter. At the top of the stem is a sort of joint or knot, formed by the shooting out of four branches, sometimes more, sometimes less, which spread as from a centre. The colour of the branches underneath is green with a whitish mixture, and the upper part is of a deep red like the stem, the two colours gradually decreasing till they unite on the sides. Each branch has five leaves; and it is observable, that the branches divide equally from each other, both in respect of themselves and of the horizon, and with the leaves make a circular figure, nearly parallel to the surface of the earth. All the leaves are finely jagged or

indented, of a dark green colour above, and of a shining whitish green underneath, and on the upper side they are beset with small whitish hairs. From the centre of the branches proceeds a second stem or stalk, very straight, smooth, and whitish from the bottom to the top, where it bears a bunch of round berries, of a beautiful red colour, but not good to eat. The bunch that father Jartoux saw was composed of twenty-four berries, containing a white pulp, and two rough stones, of the size and figure of our lentils. The pedicles, on which the berries grow, arise from the same centre, and, spreading like the radii of a sphere, make the cluster of a circular form. As to the flower, our missionary never saw it, but some assured him it is white, and very small.—This plant dies away every year, and its age may be known by the number of stems it has shot forth, of which there are always some marks remaining on the root.

Our author is of opinion, that the stone of the ginseng lies a long time in the ground before it takes root; and, if the woods in which it grows take fire and are consumed, the plant does not appear till two or three years after. It is not to be met with in plains, vallies, marshes, or places too much open and exposed to the sun; but is found on the declivities of mountains covered with thick forests, upon the banks of torrents, or about the roots of trees, and amidst a thousand other different sorts of vegetables.

THE same father informs us that the Chinese emperor, having a mind the Tartars should reap all the advantages to be made of the ginseng, gave orders in 1700 to ten thousand of those people to go and gather all they could find, on condition that each person should give him two ounces of the best, and that the rest should be paid for, weight for weight in pure silver. It was

computed that by this means the emperor would get that year twenty thousand weight of it, which would not cost him one fourth part of its value. Father Jar-toux met some of these Tartars in the deserts, and says this army of simple men observed the following order: After they had divided a tract of land among their several companies, they spread themselves out in a right line to a certain fixed place, every ten of them keeping at some distance from the rest; and in this order, going leisurely on, and looking carefully for the plant, they traverse the space of ground allotted them. When the time is expired, the Mandarines or officers who are appointed to inspect and command them, and are incamped in such places as are proper for the subsistence of their horses, send to view the companies, to give them fresh orders, and to know if their number is complete. If any one be missing, as it often happens, either by straggling from the main body, or being attacked by wild beasts, they make a careful search after him, and then return to their former business.—To secure this profitable harvest to the Tartars, it is said the whole province where the ginseng grows is encompassed by wooden palisades, and guards are continually patrolling about, to hinder the Chinese from searching after it: But, notwithstanding all this precaution, the desire of gain induces the Chinese to steal into the deserts where this plant grows, sometimes to the number of two or three thousand, at the hazard of losing their liberty, and all the fruit of their labour if they are taken, either as they go into or come out of the province.

Those who gather the ginseng have little regard to the leaves, but carefully preserve the root, burying together under ground all they can get in ten or fifteen

days time. After this they wash it well, and scour it with a brush; then dip it in scalding water, and prepare it in the fumes of a sort of yellow millet, which gives it part of its colour. The millet is boiled over a gentle fire in a vessel with a little water, and the roots are laid over the vessel upon small transverse pieces of wood, where they receive the steam, being covered with a linen-cloth. They may also be preserved only by drying them in the sun or by the fire; but then, though they retain their virtue well enough, they have not that yellow-colour which the Chinese admire. The roots must be kept close in a very dry place, otherwise they are in danger of corrupting, or being eaten by worms.

THE ginseng, as we have observed, is in the greatest request among the Chinese physicians, who make it an ingredient in almost all the medicines they prescribe for the nobility and the richer sort of patients, it being too dear for the common people. They affirm that it is a sovereign remedy for all weaknesses, occasioned by excessive fatigues either of body or mind; that it attenuates pituitous humours, cures weaknesses of the lungs and the pleurisy, corroborates the stomach, and helps the appetite; that it dispels fumes and vapours, fortifies the breast, and is a remedy for the shortness of breath; that it strengthens the vital spirits, is good against dizziness in the head and dimness of sight, and prolongs life to extreme old age. Those who are in health often use it, to render themselves more strong and vigorous.

It is scarce to be imagined that the Chinese and Tartars would set such a value upon this root, if they did not find it produce the most salutary effects. It is certain that it subtilizes, warms, and increases the motion of the blood; that it promotes digestion, invi-

gorates, and removes weariness in a very remarkable manner. The Chinese seldom use more than a fifth part of an ounce of the dried root, when they give it to sick persons; but as for those who are in health, and only take it for prevention or some slight indisposition, our author advises them not to make less than ten doses of an ounce, and not to take it every day. In order to extract its virtues, the root is to be cut in thin slices, and put into an earthen pot well glazed, with about a pint of water. The pot must be well covered, and set to boil over a gentle fire; and when the water is consumed to the quantity of a cup-full, it is to be sweetened with a little sugar, and drank off immediately. After this, as much more water is to be put into the pot, and boiled as before, that all the juice and spirituous parts of the root may be extracted. One of those doses is to be taken in the morning, the other in the evening.

THERE is a medicinal root, known to us by the name of China-root, as growing plentifully in that country, which had once an uncommon reputation for its efficacy in curing the venereal distemper. It is of a pale red colour externally, but white within, of a farinaceous, earthy, and somewhat astringent taste, and without any smell. It grows in fenny places, frequently overflowed by the sea; which, upon its retiring, leaves great quantities of it on the shore. The emperor Charles V. found considerable relief from this root, when afflicted with the gout and cachexy, which contributed greatly to raise its character. Its credit as an antivenereal was first raised in the sixteenth century, but seems to have soon diminished: for Vesalius, in a letter published in 1542, assures us, that decoctions of China-root were far inferior to those of guaiacum for

the cure of malignant venereal ulcers. And Dr. Astruc informs us, that in venereal cases he could never produce any good effects by means of this root.

RHUBARB grows in all parts of China, and particularly near the great wall. It was formerly brought from China through Tartary to Aleppo, from thence to Alexandria, and at length to Venice; but we have it now from Russia and the East-Indies. It is certain, that rhubarb was unknown to the ancients; for their rhapontic, which nearly resembled it, was not really the same. It is said, that the true rhubarb first puts out large downy leaves, then small flowers in the form of stars, which are followed by the seed. When the root is newly drawn out of the earth, it is blackish on the surface, and reddish within; but, when dried, its outside becomes yellow, and its inside of a nutmeg colour. It is pretty solid and ponderous, has a bitter astringent taste, and an agreeable aromatic odour. If it be good, it will tinge water almost like saffron, and when broken it appears of a lively colour, with a cast inclining to vermilion. Some druggists have the infamous art of disguising their old decayed rhubarb, by giving it a yellow tincture; but by handling it the cheat is discovered; for the powder they make use of will stick to the fingers. Rhapontic is often mixed with rhubarb, by those who send it to Europe; but this imposition may likewise be discovered, the true rhubarb being usually in roundish pieces, and its internal grain or streaks running transversely, whereas rhapontic is in longish pieces, with its streaks running lengthwise; and besides rhapontic being chewed, leaves a clamminess in the mouth, which rhubarb does not. This root is one of the best and mildest purgatives in nature, and very proper to strengthen weak stomachs and the intestines. It is a good remedy for worms,

evacuates the bile, and opens obstructions of the liver; and, as it purges and strengthens at the same time, is very serviceable in a looseness. However, it is not very proper where there is a feverish heat.

To the roots already mentioned we may add another called Huchu, which indeed would be more remarkable than any of the rest, if all were true that the Chinese relate concerning it. Dr. Cunningham saw the root in the island of Chusan, to which he says the natives ascribe wonderful properties, as that of prolonging life, and turning grey hairs black, &c. by drinking an infusion of it for a considerable time. They tell the following story of the discovery of its virtues: A certain person, say they, being once a simpling upon the mountains, he accidentally fell into such a deep cavity, that he could by no means get out again; whereupon looking about for something to support life, in this melancholy condition he spied this root, and having eat thereof he found it served him both for food and cloathing, by keeping his body in such a temperature, that the injuries of the weather had no influence upon him during his stay there, which was several hundred years; till at last an earthquake happened in that place, whereby the mountains were rent, and he found out a passage to his own house, from whence he had been so long absent: But so many alterations had happened there in such a number of years, that the people at first gave no credit to his story; till consulting the annals of their family, which gave an account of one of them who was lost about that time, they were convinced of the truth of this relation.—This shews the credulity of the Chinese.

THE plant that some authors call *Radix xina*, and the natives Fou lin, is of all the most made use of

by the Chinese physicians. It is found in greatest plenty in Se tchuen; its leaves, which are long and narrow, creep upon the ground. The root when full grown is very thick, and, if the natives are to be believed, has sometimes a circumference as big as an infant's head.

BUT whether it be great or small, this is certain that it contains in a kind of pod a white pulp, a little clammy or viscous. There is a wild sort of this plant in several parts of the country, which also is much used, and is sold at a much lower rate. Some of the missionaries, who are natives of that part of France where truffles are plenty, affirm that the Fou lin is a kind of truffle. The good effects of this plant are not to be doubted of, after the experience of so great a nation; yet it is hard to say for what distemper it is most proper, because like a panacea, it is prescribed in almost all.

THE root of the plant which is called Fen se, is not so commonly used, but is much dearer; it is even scarce in the province of Se tchuen where it grows, between 29 and 30 degrees of latitude; it is of a warm nature, and is looked upon as an excellent remedy for all diseases arising from cold humours, as also for all kinds of obstructions. Its shape is singular, it is semi-circular on one side, and almost flat on the other. The flat side is fixed to the earth by several filaments, and from the half round arise several different stems, each of which grows up in the form of a nosegay. Nothing but the root is of any value.

TI hoang is another root of a very beautiful plant, which grows in the greatest plenty in the north of the province of Ho nan, in 35°. 6'. of latitude. At first sight one would take it for a sort of liquorish, with a leguminous flower, and a crooked pod; but when one

examines the leaves, the seeds and the taste, it is a hard matter to decide among what species it ought to be placed. It is very much used to fortify and to restore by little and little the decays of strength.

BUT of all the plants of which we have spoken, next to the Ginseng, none is so precious as the San tsi; they attribute almost the same virtues to the one as to the other, only the latter is accounted the more efficacious in women's disorders, and hemorrhages of all sorts. It is not at all like the Ginseng in shape. This grows in the province of Quang si, and is to be found only on the tops of high steep mountains.

A kind of goat of a greyish colour is very fond of feeding upon this plant, inasmuch that they imagine the blood of this animal is endowed with the same medicinal properties. It is certain that the blood of these goats has surprising success against the injuries received by falls from horses, and other accidents of the same kind. This the missionaries have had experience of several times. One of their servants that was thrown by a vicious horse, and who lay some time without speech or motion, was so soon recovered by this remedy, that the next day he was able to pursue his journey.

It must not be forgotten that this plant is reckoned a specific against the small pox. Instances of its success are frequent. The black and tainted pustules become of a fine red, as soon as the patient has taken the remedy. For this reason it is prescribed in several disorders, which are supposed to arise from bad qualities in the blood. The worst circumstance is, that it is dear and not easy to be had, and seldom free from adulteration. In the experiments above mentioned, the blood of a goat was made use of that had been taken by the hunters.

IN the province of Yun nan are found the trees which bear the *Cassia fistula*; they are pretty tall, and the pods are longer than those which we see in Europe; they are not composed of two convex shells like those plants of the leguminous kind, but are a sort of hollow pipes, divided by partitions into cells, which contain a soft substance no way differing from the *Cassia* made use of by us.

THERE is a flower named Mutang, or, The King of Flowers, much esteemed by the Chinese, and spreads its leaves broader than our common roses, but is not so sweet. The colour is a pale purple streaked with white, and some are red and yellow. It grows on a shrub like the birch-tree, and is planted in all their gardens; but they abound in nothing so little as fine flowers.

ANOTHER herb our travellers tell us grows in China, called, The Herb of a Thousand years; which they would have us believe never fades or dies.

THE Betel tree is useful in many disorders.

THE Jaca, a curious kind of shrub, is much esteemed by the Chinese.



T of all the WORDS that form the CHINESE LANGUAGE

| | | | | | | | |
|-------|--------|-------|-------|-------|--------|-------|--------|
| yam | kio | lo | mouen | nim | pouen | fiou | tiao |
| iao | kiu | lou | moui | niu | poum | sim | tie |
| ie | kiue | loui | moum | no | pouon | fin | tien |
| ien | kieuen | loun | mouon | nou | qua | fio | tieou |
| ieou | kioum | louan | na | noui | quoue | fiou | tim |
| im | kiun | louon | nai | noum | quouai | fiue | to |
| in | la | lun | nam | nouon | quouam | fiuen | tou |
| io | lai | ma | nan | nun | quouei | fiun | toui |
| iu | lam | mai | nao | o,ou | quouen | fo | toum |
| iuê | lan | mam | nem | pa | qouo | fou | tun |
| iuen | lao | man | ngai | pai | qouon | fiu | touon |
| iun | le | mao | ngan | pam | fa | foui | tfa |
| ke | leao | mau | ngao | pa | fai | fu | tfa |
| kem | lem | me | ngue | pao | fam | foum | tfam |
| ken | leou | mem | nguen | pe | fan | fun | tfan |
| keou | lh | meou | ngo | peou | fao | fouon | tfao |
| ki | li | mi | ni | pi | fe | ta | tfe |
| kia | lie | miao | niam | piao | fem | tai | tfem |
| kiao | lien | mie | niau | pie | fen | tam | tfen |
| kie | lieou | mien | niao | pien | fou | tan | tfi |
| kien | lim | mim | nie | pim | fi | tao | tfiam |
| kieou | lin | min | nien | pin | fam | te | tfiao |
| kim | lio | mo | nieou | po | fiao | tem | tfe |
| kin | liu | mon | nio | poi | fie | teou | tfien |
| | | | | pou | fien | ti | tficou |



Of the LANGUAGE of the CHINESE.

THE Chinese language bears no affinity with any languages, dead or living, with which we are acquainted. All other languages have an alphabet composed of a certain number of letters, by the various combinations of which syllables and words are formed: Whereas there is no alphabet of the Chinese language; but there are as many different characters and figures as words.

THE only resemblance it bears to the European languages is, as most of the alphabets (consisting of about twenty four letters) are wholly formed of six or seven different strokes; in like manner all the Chinese characters are formed of six different strokes or lines.

THE Chinese have two kinds of language: First, the vulgar, this being spoke by the common people, and varying according to the different provinces; and secondly, the Mandarin-language, which is in China, as the Latin tongue is in Europe. The Mandarin-language is properly that which was formerly spoke at court, in the province of Kiang nan [Nanking] and spread, amongst the polite, into the rest of the provinces.

As it consists of not above three hundred and thirty words, all which are monosyllables and ideclinable, it consequently must appear very barren; and yet these enable persons to express themselves on all subjects, because the sense, without multiplying words, is varied almost to an infinitude, by the different accents, inflexions, tones, and aspirations, and other changes.

of the voice; whence it is, that persons who are not exceedingly well versed in this language, often mistake one word for another. Of this father du Halde gives some examples, such as, that the word Tchu, when differently sounded, signifies a Lord, or Master, a Hog, a Kitchen, or a Column. In like manner the syllable Po, has, according as it is sounded, the following different meanings, Glas; to boil, to winnow rice; wise or liberal; to prepare; an old woman; to break or cleave; inclined; a very little; to water; a slave or captive: Thus this language, which appears so poor, is rendered very copious and expressive. Likewise the same word joined to others, signifies a vast variety of things: For instance, Mou, or Mo, when single, signifies a Tree, or Wood; but when compounded, it has many more significations; Moo siang, signifying a chest of drawers; Moo nu, a kind of small orange, &c. In this manner the Chinese, by variously combining their monosyllables, can form regular discourses; and express themselves with great clearness and elegance, almost in the same manner as the Europeans compose all their words by the different combinations of about twenty four letters. The Chinese do not sing in speaking, as some authors relate; they pronouncing the different tones with so much delicacy and ease, that foreigners are scarce able to discover the difference.

THE art of joining these monosyllables is exceedingly difficult, particularly in writing, and requires much application. As the Chinese express their thoughts by figures, and never employ accents in writing to vary the pronunciation, they are forced to use as many different characters or figures as there are various tones, which give so many different meanings to the same word.

FARTHER, some characters signify two or three words, and sometimes a whole period; for instance, to write these words, Good morrow, Sir, three single characters must not be employed, but one which expresses monosyllables, is sufficient to write so as to be understood, without the three words. This method of joining them is trifling, and used only by the vulgar. Those who endeavour to shine in their compositions, employ a style quite different from that which is spoke, though the words are the same. In writing, purer words, loftier expressions, and certain metaphors must be employed. The characters of Cochin-China, of Tonquin, and Japan are the same as the Chinese, though the language is very different; so that the books of these several nations are in common.

THE learned must not only know the characters used in the common occurrences of life, but likewise be acquainted with their different combinations; and the various dispositions, which, of several simple strokes, form the compound characters: And as there are four-score thousand Chinese characters, that man is most learned who is acquainted with the greatest number, and can read and understand the largest number of books. This shews how exceedingly difficult it must be to attain the language in question. However, a person who understands 10,000 characters is able to express himself in this language, and understand a multitude of books. Most of the learned do not understand above 15,000 or 20,000; and but few doctors are masters of 40,000.

ALL their characters are collected in their great vocabulary, called *Hac peen*. The Chinese language has its radical characters, like the Hebrew, which shew the origin of words: For instance, under the charac-

ter of trees, mountains, of man, of the earth, of a horse, &c. must be sought whatever belongs to trees, mountains, man, the earth, and a horse; besides which, the learner must know how to distinguish, in every word, the strokes or figures placed above, beneath, on the sides, or in the body of the radical figure.

THERE also is a shorter vocabulary, containing only 3000 or 10,000 characters, which is employed for reading, writing, or composing books. When words wanted are not found here, recourse is had to the great dictionary. The missionaries have drawn up a book for their own use, and that of their converts, &c.

THE Chinese, in the beginning of their monarchy, communicated their ideas by drawing upon paper the natural images of the things they wanted to express; for instance, to express birds, mountains, a forest, or rivers; they drew waving lines expressing birds, mountains, trees, or rivers. But this method being very imperfect; not to mention that a numberless multitude of objects could not be represented by drawing, such as the soul, the thoughts, the passions, the virtues, vices, beauty, the actions of men and animals, and many others, which have neither shape nor body; they therefore altered insensibly their ancient manner of writing; composed characters of a more simple nature, and invented others to express such things as are the object of our senses.

NEVERTHELESS, these more modern characters are truly hieroglyphical; first, because they consist of simple letters, which retain the signification of the primitive characters: Secondly, because the institutions of men have affixed the same ideas to the figures in question, which the first symbols represented naturally: For every Chinese letter has its proper signification, which it

always preserves, though joined with others, T'ai, signifying a misfortune or calamity, is formed of the letter Meen or Me en, a house; and the letter Ho, fire; no misfortune being greater than seeing one's house on fire. Hence it is plain, that the Chinese characters are not mere letters like ours; but are so many hieroglyphics, by which images are formed, and thoughts expressed.

THE style used by the Chinese is concise, mysterious, allegorical, and sometimes obscure to such as are not perfectly skilled in the characters. They express a great deal in a few words: Their expressions are animated, and interspersed with bold comparisons and noble metaphors. To observe, for instance, that as the emperor has approved the Christian religion by an edict, it therefore ought not to be destroyed, they would write thus: "The ink with which the emperor's edict, in favour of the Christian religion, was wrote, is not yet dry, and yet you attempt to destroy that religion." As they compare their compositions to a picture, they compare the sentences they borrow from their books to the five principal colours used in painting, and it is in this their eloquence chiefly consists. They value themselves exceedingly on their writing neatly and accurately: They even prefer a beautiful character to the most finished picture. A page of old characters, when well drawn, often sells at a high price. If they happen to find any printed leaves, they gather them up respectfully.

It was observed above, that we may distinguish two kinds of language in China, but I shall now consider three sorts, that of the vulgar, that of the polite, and that of books. The first has none of the imperfections which many Europeans pretend to find in it.

THOSE Europeans who come to China, and do not

understand the language well, suppose ambiguous meanings where there are none. As they do not take the pains to pronounce the several Chinese words with their proper accents and aspirations, they understand the natives but very imperfectly, which consequently is not the fault of the language. If the Chinese Literati sometimes trace characters with their finger, or with a fan upon their knees, this must be out of vanity or custom rather than necessity; or else to express some technical term seldom used.

NEXT to the vulgar language is another more polished and refined, and this is employed in a numberless multitude of novels, whether true or fictitious; they are writ with the greatest elegance and wit; and abound with lively descriptions, characters, and contrasts, which may be easily read and understood.

THE third language is that of such books as are not writ in a familiar style, in which there are several degrees of superiority, before the student can attain to the sublime, majestic brevity of the Kings.

THIS most refined language is never used in common conversation, it being employed only in writing. The style of it is neat and flowing; each thought is usually expressed in four or six characters; nothing occurs that shocks the most delicate ear; and when the various accents are pronounced with art, they form a soft harmonious sound.

THE difference between other books, and those written in the style called the Kings, is, the diction of the former is never so elevated and noble, nor the style so concise and grand, as that of the latter. No pointings are used in compositions of the sublime kind; for being designed only for the learned, these easily distinguish wherever the sense ends.

THE copiousness of the Chinese language is owing to the multitude of characters in it; from the various meanings annexed to them, and from the manner of their being joined, which is commonly two and two, frequently three and three; and sometimes four and four together. A dictionary was compiled, by order of the late emperor, consisting of one hundred and nineteen volumes, most of them writ in a small character, and very thick. It is certain that no language in the world is more copious than the Chinese.

THE Chinese have still an ancient kind of language, now used only for titles, inscriptions, seals and mottoes; wherein there are likewise some books which the Literati are obliged to understand. They also have common characters used for public acts, contracts, bonds, and other civil affairs, and which answer to our law characters. Lastly, they have a character (employed for dispatch) which requires a particular study, there being many abbreviations in it.





A COMPENDIUM of the CHINESE GRAMMAR.

THIS compendium of the Chinese grammar will be of great advantage towards understanding this language, which consists of words of no more than one syllable, and those undeclinable, can hardly be reduced to rules; nevertheless the following may be given with respect to the nouns, pronouns, conjugations of verbs, prepositions, adverbs, the numbers and particles.

Of Nouns positive, comparative, and superlative.

THERE is no diversity of genders, cases, and declinations in the Chinese language; frequently the noun is not distinguished from the verb, and the same word which, according to the place it is put in, is a substantive, may become an adjective and even an adverb.

For example, these two words Ngai, I love; Siang, I think: may be both nouns and verbs; if they are placed before another word so as to signify some action, they are verbs: Example, Ngo ngai ni, I love you; Ngo siang ta, I think of him: But if on the contrary they are set before another without signifying an action, they become nouns: Example, Ngo ti ngai, My love; Ngo ti siang, My thought.

THE adjective always goes before the substantive, Hao gin, Good man: but if the same word follows another it becomes a substantive, as Gin ti hao, The goodness of man; it appears that the word Hao, which

is an adjective when it comes before the word *Gin*, becomes a substantive when it follows it:

THE particle *Tsëe* is often added to substantives, and it is proper to many; for instance, *Fang tsëe*, A house; *Co tsëe*, Fruit; however we must observe, that it is only added to those substantives which can never be adjectives.

THE cases and numbers are known only by the compositions; the plural number is distinguished by the particle *Men*, which is common to all nouns; here follow some examples, *Gin*, a Man; *Gin men*, Men; *Ta*, He; *Ta men*, They.

BUT when the noun is preceded by some word that signifies numbers, then the particle *Men* is not used after the noun.

THE particle *Ti* often makes the genitive case both singular and plural, when it comes after nouns, as *Gin ti hao*, The goodness of man; *Gin men ti hao*, The goodness of men: There are no other cases in the Chinese language.

THE particle *Ti* is also sometimes put after pronouns like derivatives: Example, *Ngo ti keou*, My dog: *Ta te keou*, His dog.

THE comparatives are also formed by adding of particles; for instance, they use the particle *Keng*, which is always put before the nouns, and signifies Much; *Keng hao*, Better; The particle *To* is frequently used, which signifies also Much, but it is commonly put after the noun, *Hao to*, Better; *Yuen to*, farther off.

THE particle, which denotes the superlative, may be put before or after the nouns; so that one may say *Tüve hao*, or *Hao tüve*, Best; *Tüve siao*, or *Siao tüve*, Smallest.

THE particle *Te kin* also denotes the superlative degree; *Hao te kin*, Best; *Ta te kin*, Greatest; *Siao te kin*, Smallest.

Of the PRONOUNS.

THERE are no more than three pronouns in the Chinese language, and these are personal, *Ngo*, I; *Ni*, Thou; and *Ta*, He; they become plural by the addition of the particle *Men*.

THEY become possessives by adding the particle *Ti*, *Ngo ti*, Mine; *Ni ti*, Thine; *Ta ti*, His: Add the particle *Men*, and the same words will signify Ours, Yours, &c. *Ngo men ti*, Ours; *Ni men ti*, Yours.

THE pronouns possessive, like those of nation or family, are distinguished only from the derivatives by putting after the pronoun the name of the country, city, &c. *Ngo ti koue*, My kingdom; *Ngo ti fou*, My city.

CHOU is the particle which is made use of for the pronoun relative, Which or Who; this particle is never joined with that which denotes the plural number.

Of the VERBS.

THE present, the preterperfect, and the future, are properly the only tenses the Chinese verbs have: The verb passive is expressed by the particle *Pi*.

WHEN there is no particle added to the verb, and it is only joined with the pronouns personal *Ngo*, *Ti*, *Ta*, it is a sign of the present tense.

THE addition of the particle *Leao* denotes the preterperfect, or the time past.

To distinguish the future tense they use the particle

Tfiang, or Hoci;—but examples will more plainly show this.

PRESENT TENSE.

SINGULAR NUMBER.

| | |
|-----------|--------------|
| Ngo ngai. | I love. |
| Ni ngai. | Thou lovest. |
| Ta ngai. | He loveth. |

PLURAL.

| | |
|---------------|------------|
| Ngo men ngai. | We love. |
| Ni men ngai. | Ye love. |
| Ta men ngai. | They love. |

PRETERPERFECT TENSE.

SINGULAR.

| | |
|----------------|------------------|
| Ngo ngai leao. | I have loved. |
| Ni ngai leao. | Thou hast loved. |
| Ta ngai leao. | He hath loved. |

PLURAL.

| | |
|--------------------|------------------|
| Ngo men ngai leao. | We have loved. |
| Ni men ngai leao. | Ye have loved. |
| Ta men ngai leao. | They have loved. |

FUTURE TENSE.

SINGULAR.

| | |
|----------------|------------------|
| Ngo haei ngai. | I shall love. |
| Ni haei ngai. | Thou shalt love. |
| Ta haei ngai. | He shall love. |

PLURAL.

| | |
|--------------------|------------------|
| Ngo men haei ngai. | We shall love. |
| Ni men haei ngai. | Ye shall love. |
| Ta men haei ngai. | They shall love. |

THE optative mood is formed by these words, Pa pou te, which signify O that ! Would to God ! For example, Pa pou te ngo ngai, Would to God I might love ; Pa pou te ni ngai, Would to God thou mightest love, &c.

THE greatest part of the verbs of action may have a passive signification ; but the verb active is always put before the nouns which are the subject of the action.

EXAMPLE.

| | |
|--------------|----------------|
| Ngo ngai ni. | I love thee. |
| Ngo ta ni. | I strike thee. |

IT would be an absurd and senseless manner of speaking to say,

Ngo ni ngai.
Nga ni ta.

ON the contrary the verb passive always follows the noun, adding the particle *Pi*, which denotes the passive.

| | |
|-----------------|---------------------|
| Ngo pi ta ngai. | I am loved by him. |
| Ngo pi ta ta. | I am struck by him. |

THE preterperfect and the future are formed with the same particles that are used for the verb active.

Of the PREPOSITIONS.

NOTWITHSTANDING the small number of words in the Chinese language, yet it is very copious, not only because the same word may be both noun and verb, but because it may often be an adverb, preposition, &c.

THE Chinese have therefore some prepositions that are not naturally so but by custom, such as these words, *Tien*, Before; *Heou*, After; *Chang*, Above; *Hia*, Below; they are prepositions if they are joined to a verb, and come before it; but they are postpositions if they are joined to a noun, and follow it; for example, *Sien tso*, I go before, *Heou lai*, I come after, *Chang tseou*, I go above; *Hia tseou*, I come below; these are prepositions because they are put before the verbs; but the following word *Fang tien*, Before the house; *Mu-en heou*, Behind the door; *Tcho chang*, upon the table; *Ti hia*, Beneath the earth, are postpositions because they are put after the nouns.

THE same must be understood of *Nui*, Within; *Vai*, Without; and other words of the same nature.

Of the ADVERBS.

THERE are properly no adverbs in the Chinese language, they only becoming so by custom, or by the place we possess in the discourse : We are frequently obliged to use several words to express the adverbs of other languages ; they have none that are demonstrative or proper to calling and exhorting, but in their stead we must use nouns and verbs ; the following are commonly used, viz. of

| | | |
|---------------------------|--|---|
| Desiring | Pa pou te | Would to God |
| Asking | { Ju ho Ho ju T'feng mo | Which way. In what manner. How. |
| Answering | Chi oui tse gen | Certainly. |
| Confirming | { Tching tie Co gen Ching tching tie | Indeed. Most certainly. Most truly. |
| Denying and forbidding | { Pou or mo Pou jo Pou gen | No. That is not convenient. No certainly. |
| Doubting | Hoe or Hoetche | Perhaps. |
| Chusing | Ving | [that. Better, rather this than |

| | | |
|---------------|---|--|
| Comparing | { Keng chao Keng or Keng to Keng hao | Much less. Much more. Better. |
| Assembling | Tong or y tong | Together. |
| Separating | { Ling Ling via | Furthermore. Separately. |
| Increasing | { Kin Kiang | Diligently. Stoutly. |
| | { Kin ge. Min ge Tso ge Tien ge Heou ge | To-day. T-morrow. Yesterday. [day. The day before yester- After to-morrow. |
| Place | { Tche le Tsee | Here. [way. From thence, or that |
| Number | { Y tsée Eul tsée Tchang tchang | Once. Twice. Often. |
| Order | { Ti y or teou y Heou mien Tchong or tong | Firstly. Next. Lastly. |
| The Event | Hoe gen | May be. |
| Similitude | Ju | As. |
| Dissimilitude | { Pou ju Pou tong | Not as. Differently] |

| | | |
|------------------------------|----------------------|-------------------------------|
| Quality | { Chao To Kcou | A little. Much. Enough. |
| Excluding | Tin | Only. |
| A thing not quite done. } | Tcha pou to | Almost. |

Of NUMBERS and their PARTICLES.

THE Chinese have several particles proper to numbers; they are generally used, and in a way peculiar to this language, for every noun has a particle signifying the number that is proper to it: Whereas in our language, One, Two, Three, are applied to different things, and we say, A man, Two women, Three sheep, but this method of expression would be gross and barbarous to a Chinese. Each noun must be expressed with a particle proper to it, but examples will make this more plain; below you have the Chinese numbers, and then the particles of numbers, which must be used with each noun.

The CHINESE NUMBERS.

| | |
|-------|--------|
| Y, | One. |
| Eul, | Two. |
| San, | Three. |
| Sséc, | Four. |
| Ou, | Five. |
| Lou, | Six. |
| Té, | Seven. |

| | |
|-------------|----------------------|
| Pa, | Eight. |
| Kieou, | Nine. |
| Che, | Ten. |
| Che y, | Eleven. |
| Eul che, | Twelve. |
| San che, | Thirteen. |
| Pe, | An hundred. |
| Eul pe, | Two hundred. |
| Y tſien, | A thousand. |
| Y ouan, | Ten thousand. |
| Eul ouan, | Twenty thousand. |
| Che ouan, | An hundred thousand. |
| Y, pe ouan, | A million. |

Of PARTICLES of NUMBERS.

CO is made use of for men; Y co gin, a man; Y co ſougin, a woman.

HOEI is made use of for illustrious men; Y hoei gin, an illustrious person.

Tche or tchi is made use of for ships, dogs, hens, and all other things, which though mentioned alone should be ſollowed, as shoes, stockings, &c. thus they ſay, Y tchi chuen, A ſhip; Y tchi keou, A dog; Y tchi hia, A ſhoe; Y tchi ki, A hen.

TIAO is made use of for things that are long and ſuſpended; Y tiao lou, A cenſer, and Y tiao ching, A rope.

QUEI is proper to fiſhes; Y ouei yu, A fiſh.

KEN is made use of for long ſtraps of leather; Y ken, ſai, A ſtrap.

TCHANG is made use of for paper, a table, and a ſeat; Y tchang tchi, A ſheet of paper; Y tchang tcho, A table; Y tchang y, A ſeat.

PU is made use of for knives, swords, fans; **Y pa tao** A sabre or sword; **Y pa chen**, A fan.

CHAONG is made use of for like things that are commonly joined together; **Y choang hiai**, A pair of shoes, **Y choang oua**, A pair of stockings.

KIEN is made use of for chambers or houses; **Y kien fang**, An house or chamber.

FO is made use of for whole pieces of cloth or silk; **Y fo pou**, A cloth; **Y fo cheou**, A piece of particular sort of silk: It is also used for pictures.

MEY is made use of for pearls and precious things; **Y mei tchin**, A pearl.

TCHU is made use of for perfumes; **Y tchu hiang**, A pastil.

PI is sometimes made use of for garments of cloth or silk, but most properly for a horse; **Y pi ma**, A horse.

PEN is made use of for books; **Y pen chu**, A book.

TING is made use of for caps or hats; **Y ting kin**, A cap.

Tso is made use of for great houses and walls; **Y tso fang**, An house: **Y tso ching**, A wall.

TENG is proper to oxen and cows; **Y teng nieou**, An ox.

MOUEN is made use of for musquets: **Y mouen tiang**, A barrel of a gun.

To is made use of for flowers; **Y to hoa**, A flower.

LING is made use of for garments; **Y ling poa**, A gown.

TAI or **Pen** is made use of for comedies; **Y tai**, or **Y pen hi**, A comedy.

Co is made use of for trees; **Y co chu**, A tree.

MIEN is made use of for standards; **Y mien ki**, A standard.

TOA is made use of for letters, and little bundles of paper; Y tao cheou chi, a book of poetry.

TCHIN is made use of for sedans and chariots; Y tchin kiao, A sedan.

QUAN is made use of for pens or pencils; Y quan pi, A pen.

CO is made use of for corn and pulse; Y co mi, A grain of rice, &c.

END OF VOLUME FIRST.

