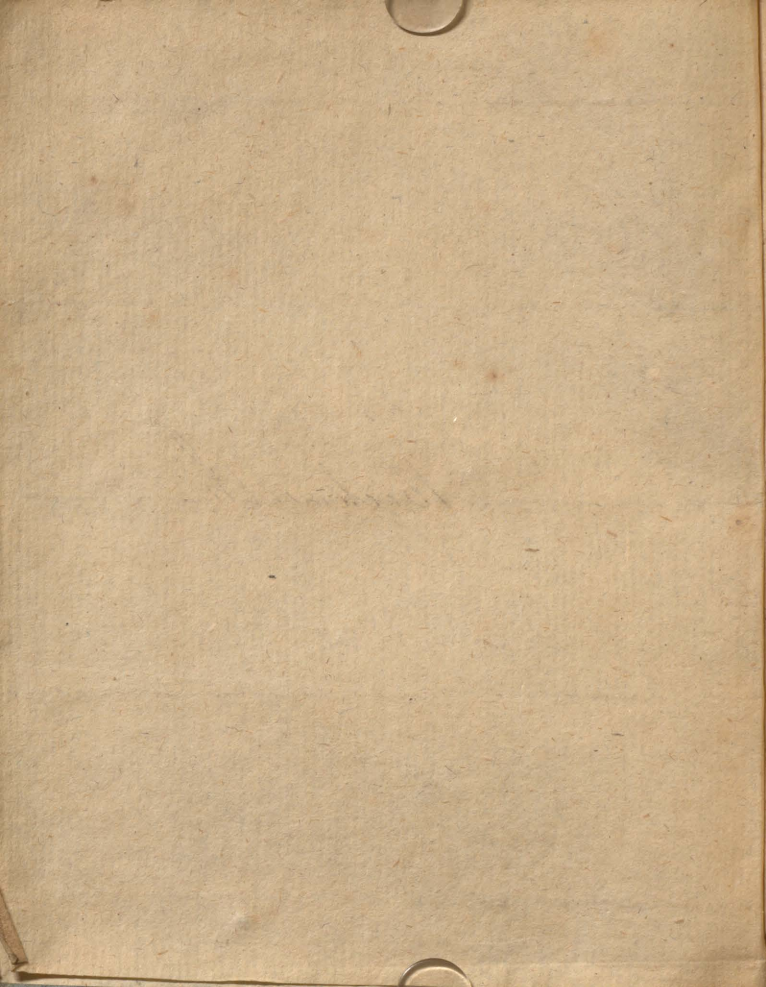


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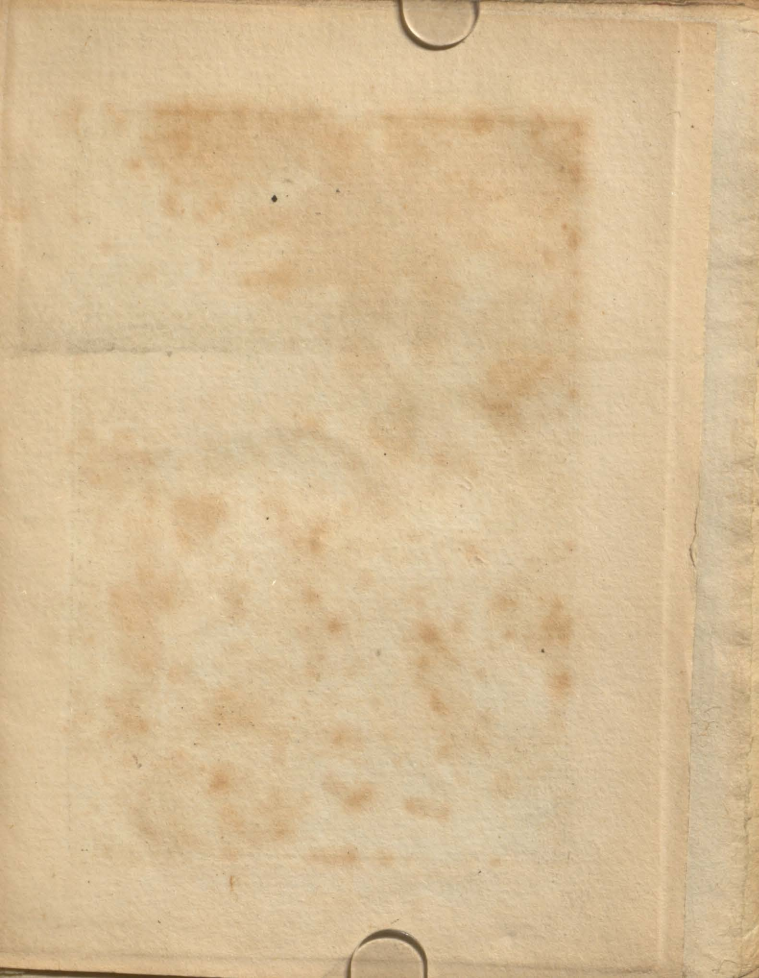
THE
B E A U T I E S
OF THE
C R E A T I O N.

VOLUME V.

F L O W E R S.

THE
BEAUTIES
OF THE
CREATION

VOLUME V
FLOWERS





Pub^d July 1. 1790 by G Riley Ludgate Street

THE
B E A U T I E S
OF THE
C R E A T I O N :
OR, A NEW MORAL SYSTEM OF
NATURAL HISTORY:
IN FIVE VOLUMES:

Consisting of

QUADRUPEDS,

BIRDS,

FISHES AND REPTILES,

INSECTS,

TREES AND FLOWERS,

&c. &c.

Designed to inspire Youth with Humanity towards the
Brute Creation, and bring them early acquainted with
the wonderful Works of the Creator.

*Who can this field of miracles survey,
And not with Galen, all in rapture, say,
Behold a God! adore him, and obey!*

THE SECOND EDITION.

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THE
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FOR DEPOSIT

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OF MONEY

AND

SAVINGS

AND

TRUSTS

A
CONCISE DESCRIPTION

OF

T R E E S;

PARTICULARLY THOSE OF THE

DRUG OR MEDICINAL KIND.

B

A
CONCISE DESCRIPTION

OF
THE
F

PRACTICAL PART OF THE

DRUG OR MEDICINE

B



COFFEE BRAND



COFFEE SHRUB.



NATURAL HISTORY.

COFFEE SHRUB.

THE Coffee shrub grows in Arabia-Felix, and is brought from Mocha: the flower resembles the Jessamine; and the leaf, that of the Bay-tree. It is propagated by seeds, and grows to the height of eight or ten feet. The twigs and leaves rise by pairs: the leaves are two inches broad in the middle, from whence they decrease to a point at each extremity. As this tree will not thrive when transplanted, unless kept in mould, it

has been found very difficult to rear it in distant climates: but this inconvenience has, by attention and perseverance, been so considerably diminished, that it is now cultivated, with the most promising success, in the West as well as the East Indies.

The fruit hangs on the twigs, by a foot-stalk, containing one, two, or more, in the same place. These shrubs are watered by artificial channels, like other vegetables; and, after three or four years bearing, the natives plant new shrubs, in consequence of the old beginning then to decline. They dry the berry in the sun, and afterwards divest it of the outward husks, with hand-mills. In the hot seasons, they use these husks, roasted, instead of the Coffee berries; and esteem the liquor impregnated with them more cooling.

The Coffee berries are generally ripe in April: they are esteemed, as being of an excellent drying quality, comforting the brain, easing pains in the head, sup-
pressing

pressing vapours, drying up crudities, preventing drownsness, and reviving the spirits.

Coffee, says POMET, is the fruit of a tree, whose berries are brought from Arabia-Felix, and the leaves of which are thick, and always green. That which is greenish, fresh or new, and that does not smell musty, but whose berry is of a middle size; in short, the cleanest, dryest, and plumpest are the best. There is a great consumption made of it, in the prepared berry, which is done by drying it in an oven or kiln, so long, until it is well parched, or rather half calcined, and looks not of an absolute black, but rather of a dark purple, inclining to black; if it be well burned, and not over high, it has a grateful flavour; but if over much, or too little done, or if afterwards it be ground any time before it be used, it loses all its force and virtue; so that in making Coffee, the powder is to be fresh ground, and used immediately; for an hour's time will pall and flat it, so as it shall lose all its volatile parts, which float like an oil upon the

liquor, when fresh ; but upon the least keeping, after reduced to powder, its essential particles are so subtle as to fly away, or be destroyed by the corrosive nitre of the air, which being exposed but for a few minutes, they instantly imbibe.

According to LEMERY, it is a small berry, longish, and round, like a Pine Apple, of a dark brown colour ; its bark is a kind of husk that is a little hard and woody ; it encloses a berry as large as a great pea, of an oval figure, dividing itself into two parts, yellowish, inclining to white ; the fruit grows upon a tree of the same name, which is common in the Happy Arabia, from whence it is transported through all the dominions of the Great Turk, and from Turkey brought to us, as is supposed, cured, that it might not be planted in other countries.

It is of an excellent drying quality, comforts the brain, and dries up crudities in the stomach ; it helps digestion, eases pains of the head, rarifies the blood, suppresses

suppresses vapours, gives life and gaiety to the spirits, hinders sleepiness after victuals, and contracts the bowels; it is an excellent dryer, fit for moist bodies, and moist constitutions.



B 5

TEA



TEA SHRUB.

T E A S H R U B .

THE Tea shrub grows plentifully in several parts of the East-Indies, and affords a leaf which is too well known, according to the opinion of our physicians, in every country in Europe. It is brought from China, Japan, and Siam. The leaves are gathered in the spring; and bear a flower of five leaves, resembling a rose: to these succeed a cod, like a Hazel-nut. The Tea shrub flourishes equally in rich and poor ground. The leaves are dried and parched by fire; in which state they are sent to Europe, and other parts of the world. The best Tea is that which is the greenest, best scented, and most free from dust. The cause of Tea being so much drunk in Europe, is said to be from the Chinese bartering it for our Sage, which they esteem as possessing the most invaluable qualities. This is not improbable, from our physicians having a Latin proverb, respecting Sage of virtue; which asks, Why will

a man die, with Sage in his garden? Although Tea is drunk more for pleasure than for any medicinal purpose, it is justly allowed to possess many salutary qualities.

This shrub is thus described by POMET : “ The
“ Tea, which the people of China and Japan call *Cha*,
“ or *Tcha*, is the leaf of a little shrub, which grows
“ plentifully about Pekin and Nankin, in China, and
“ in several parts of Japan. It is a slender green leaf,
“ pointed at one end, and divided at the other, and a
“ little cut or indented round about. In the middle
“ of each leaf, there runs a filament or string, from
“ whence proceed a number of little fibres. After
“ the leaves, grow several pods, which are each the
“ size of one’s finger end, of a very particular shape
“ like the Areca ; in each of which are found two
“ or three berries, of a mouse-coloured grey without,
“ and having a white kernel, very subject to be
“ worm-eaten. The Japan Tea, differs from the Chi-
“ nese only in the leaves, which are much smaller,
“ and

“ and the taste and smell more agreeable, it is like-
“ wise of a finer clear green. This variety of smell,
“ taste, and colour, renders it of much greater value.”

MONSIEUR LEMERY describes it as a very little leaf,
growing on a small shrub, from whence it is gathered
in the spring, at which time it is little and tender.
He adds, that it lightens and refreshes the spirits, sup-
presses vapours, prevents and drives away drowfiness,
strengthens the brain and heart, hastens digestion,
purifies the blood, and is proper against the scurvy.



B 7

COCOA-



C O C O A - T R E E .

C O C O A - T R E E.

THIS Tree, bearing the Cocoa or Chocolate nut, resembles our Heart Cherry-tree; except that, when full grown, it is much higher and broader. It has abundance of leaves, similar to those of the Orange-tree. It flourishes throughout the year, especially near the summer and winter solstices. As the leaves perpetually replenish themselves, this tree is never disrobed of its verdure. The blossoms are small, regular, and like a Rose, but scentless. Every blossom is joined to the tree by a slender stalk; and leaves, in falling, long green filaments; which produce a pointed, yellow fruit, of the size of our Melons: these adhere to the thick branches, without any intermediate stem; as if Nature thus providentially provided it a support strong enough to bear the greatness of its weight, when grown ripe, and to its largest size. Each fruit contains from between fifteen and twenty-five small nuts, or almonds, covered

with a thin yellow skin; which being separated, a tender substance appears, divided into several unequal particles, that, although sharp to the palate, are nourishing to the constitution.

These trees grow in all the Spanish West-Indies, Jamaica, &c. where they commonly produce fruit every seven years at most, after the first planting: but, in the interim, they are sometimes twice or three times removed; when great care is taken to secure them, with such shade as may preserve them from the intense heat of the sun. Being once reared, they are not liable to this injury; and, therefore, the precaution being no longer necessary, is discontinued; for, being ranged in rows, with shady Plantains, they are both mutually sheltered by each other from the parching sun, and boisterous winds. It is a tree of singular beauty, profit, and utility. Its large, broad, and green leaves, hang like so many shields, as if to defend the tender and valuable fruit from injury. As the fruit adheres to the large branches, the tree appears as if most beautifully
fringed,

studded, from the root to the most large and expanding branches.

The Cocoa-nuts, affording to the Indians and Spaniards food, raiment, riches, and delight, are received in payment, as currency.

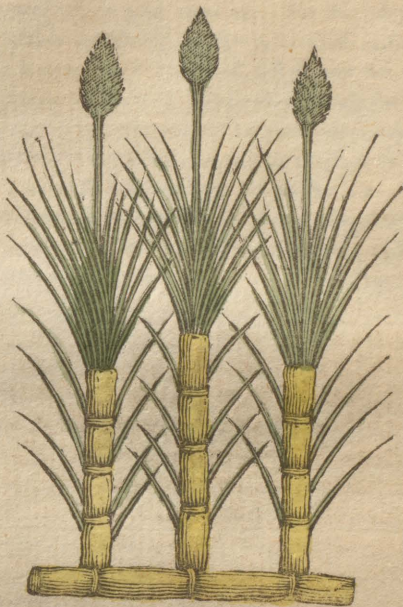
It is unnecessary to add, that, from this extraordinary tree, that wholesome beverage Chocolate is made, in such quantities as to supply the greater part of the world with a liquor distinguished for its nutritive and restorative qualities.

POMET tells us, that there are four sorts of trees which bear the Cocoa-nut. The first and second sort are called the large and small Carach, being thus named from the province of Nicaragua, from whence they are brought; the third and fourth are called the large and small Island Cocoas, because they come from the American Islands. The most valued of the four kinds, is the large Carach, especially for making
Chocolate,

Chocolate, which is its chief use. For this purpose, those which are plump, weighty, blackish without, and of a deep red within, well tasted, and not of a musty smell, are the best. The pods in which the nuts are contained being broke, the nuts are taken out and laid on mats to dry in the sun, till the moisture within them is exhausted, when they are fit for use. This fruit, according to LEMERY, is of a cooling nature, helps digestion, eases complaints in the lungs, and is a restorative in consumptions.







THE SUGAR-CANE.

THE SUGAR-CANE

IS the produce of Barbadoes, Jamaica, Nevis, &c. This plant bears on each joint a cane, five or six feet high, and adorned with long, straight, green leaves, similar to Flags, or Fleur-de-Lis. On the top they have a plume of silver-coloured flowers. The canes contain a porous substance, of which the sugar is made. When they are mature, the canes are cut off, at the first joint from the ground; and are laid in heaps, like our sheaves of corn in harvest-time: being cleared from their leaves, they are tied in bundles, and carried to the mills, which press out their juice: this is put into boilers, in order to evaporate the watery particles, so as to let nothing but the sugar subside. The sugar is then cleared, by a mixture of ingredients, adapted to the purpose of finishing and preparing it for graining. While it is boiling,
the

the scum, which rises in great quantities, is clearly taken from the surface, until the sugar is ready to be emptied into the coolers; from whence it is again shifted into earthen pots, with holes in their bottoms, which drains the molasses into other pots, placed beneath: the latter is an entire month in separating itself from the sugar; which is then put into casks, or hog-heads, for transportation.

The canes, according to POMET, are brought to maturity in the following manner: the ground being properly prepared by digging with a spade, about eighteen inches deep, after the manner of trenching, a cane of about three feet high is put into it; a rider of a foot at each end is then made for two other canes; and in this manner they continue to plant till the ground is full. At the end of six or seven months, which is the time the beams are usually raised, care must be taken for the preservation of the sugar, otherwise a great deal will be lost.

The

The Sugar-cane, in England, is so tender as not to admit of being reared without artificial heat. It is, however, preserved as a great curiosity, in the gardens of those who keep hot-houses, for the purpose of having such curious exotic productions of Nature.





THE NUTMEG AND MACE TREE.

THE NUTMEG AND MACE TREE.

THE Nutmeg, or Aromatic Nut, says POMET, is, properly speaking, the almond, or kernel of a fruit of the size of our green Nuts, which are distinguished into two sorts: the Male, or long Nutmeg, and the Female, or round, common Nutmeg.

The tree that bears the Nutmeg is of the bigness of the Peach-tree, and the leaves have a very near resemblance to those mentioned by DALECHAMP, except that they are shorter and narrower; after which come fruit of the Nut or Apricot size. This tree, according to Mr. TAVERNIER, is not planted, but grows by means of certain birds, or fowl, which swallow the Nutmegs whole, and throw them up again without having digested them; and that the Nutmeg being then covered with a viscous and gluey matter, and
being

being cast upon the ground, they take root, and produce a tree, which grows just as if it had been planted after the manner of others.

The Nutmeg is likewise a commodity which none but the Dutch are masters of, because it is cured nowhere but in the Banda and a few other islands belonging to them in the East Indies. It is remarkable, that so little a spot of land should furnish all the world with Nutmegs. But this is not hard to believe, when we consider, that these isles are so stocked with Nutmeg-trees, that it is almost incredible; and besides, these parts lye in so good a climate, that the trees are always loaden with flowers and fruit, and that they have three crops a year; viz. in April, August, and December; that of April is much more valued than those which are got in August or December; and the climate is so temperate, that the men live to one hundred and twenty years of age, and have nothing to do but eat, drink, and sleep, and now and then walk about, while the women employ themselves in separating

rating the browze from the Nutmeg, drying the Mace, and breaking the shells wherein is the Nutmeg, being the chief commodity of the country, and almost all they live by.

The Nutmegs are the kernels of the fruit, which are covered with a hard, thin, and blackish shell. On the outside of the shell is found a covering, which is thin and reddish, of a sweet smell, and aromatic taste, and is what we call Mace, but vulgarly, and improperly, the Nutmeg-flower. After the Mace there is a green browze, that is of no manner of use. From whence it is to be observed, that the Nutmeg has three wrappings or coverings; viz. the Shell, the Mace, and the Browze.

The trees which bear the female, or common Nutmegs, grow not but in cultivated, or improved lands; but those which produce the male, or long Nutmegs, grow in woods and forests, which makes the Dutch call them wild Nutmegs; but as they are little used,
because

because they are almost without taste or smell, and void of any virtue, they are seldom brought hither.

As to the common Nutmegs, we ought to chuse such as are heavy, firm, hard, and of a full plumpness, of a light grey, whose outside is finely marbled, and the inside reddish, being of a fat, oily body, which are the signs of their newness, and which being grated, affords a sweet flavour, and put into the mouth, yields a warm, piquant, aromattick taste. As to the little hole that is met with so very common in Nutmegs, it is a vulgar error to believe, that that makes it loose its virtue; for there is no Nutmeg without it, that being the place where the stalk adheres to the Nut.

The use of the Nutmeg is so well known, it would be needless to say any thing of it; I shall only add, that it is much valued in medicine.

Nutmeg, says LEMERY, is a kind of nut, or fruit, of a foreign tree, as large as a Pear-tree, with leaves like

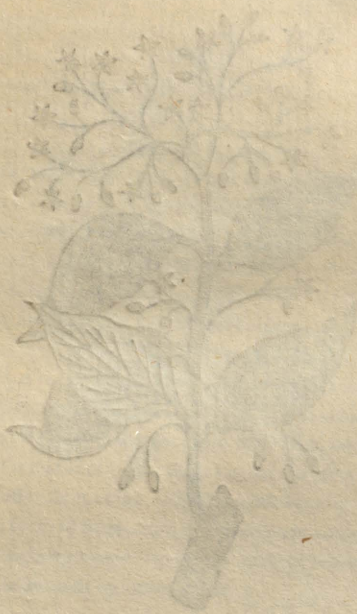
like the peach, but they are much smaller: the flower is in the shape of a rose, of a pleasant smell; after which is falled off, a fruit appears as large as a green walnut, covered with two barks; the first of which is very thick, and pulled off when the fruit is ripe; the second is much thinner and finer, reddish or yellowish; it is separated from the Nutmeg in order to dry, and is what we call Mace, not the Nutmeg-flower; this yields a great deal of oil and volatile salt.

When the Nutmeg is separated from the barks, they dry and preserve it: the tree which bears this grows plentifully in the isle of Banda, where there are two sorts, the wild and the cultivated, or male and female; the male, which is a long and large nut, is seldom used: the female which is the rounder and lesser nut, is that generally sold in the grocers' shops; when gathered, some say they are laid in quick-lime, in the Indies, for two reasons: first, that being carried into other parallel or proper climes, they might not grow,
for

for so in time it might prove to their damage. Secondly, that being thus cured, the worm might not take them: the best are those of a reasonable size, fresh, heavy, firm, not spongy, of an oilyness when grated, and of a pleasant smell and taste, not too bitter or acrid. They fortify the brain, nerves and stomach, assist digestion, expel wind, and resist putrefaction.

Mace has the same virtues with the Nutmeg, but these are more exalted, and it acts with greater penetration and efficacy. The Mace bark or wood of the ancients, is the bark of the trunk of a tree of the same name, which grows in Barbary, and is thick, reddish, and of a bitter smart taste. Its virtue is astringent; but as this bark is seldom brought among us, they impose it instead of Mace, though the qualities are different, and so confound the Mace-bark with the true Mace.

CINNAMON.





CINNAMON-TREE.

CINNAMON-TREE.

WHAT the ancients, as well as the moderns, call Cinnamon, says POMER, is the middle bark, or inner rind of the branches of a tree, which grows to the height of a Willow, and whose leaves are so like the *Folium Indum*, or Logwood, that it is difficult to find the difference at first sight, which has given grounds, to some people to assert, that the *Folium Indum* was the leaves of a tree that bore the Cinnamon; but if the leaves are so like, that the eye cannot readily distinguish, the palate can do it with ease, because the leaves are of so sweet a taste and smell, that they surpass, in some measure, the lesser Cinnamon. After the leaves arise white flowers, in form of little cups, from whence come berries of the figure of an olive-stone; each of which adheres to the branch by little stalks.

As to the place from whence the Cinnamon comes, and the manner of barking the tree, I think it proper to relate what Mr. TAVERNIER has writ of it. The Cinnamon comes from the isle of Ceylon in the East-Indies; the tree that bears it is very like our Willow, and has three barks or rinds; but the second or middlemost bark, is that which is chosen for use, and the others rejected as of no importance. This Cinnamon costs the Dutch more than can be believed; for the king of Ceylon, otherwise called king of Candy, from the name of the capital city, was a sworn enemy to the Hollanders; so that every year he set a guard of five or six hundred men to cover and defend as many labourers, during the season, for barking the Cinnamon-trees; and entertained these workmen all the rest of the year, without reckoning the several garrisons maintained throughout the whole island: these great charges enhanced much the price of Cinnamon, which grows as before described.

When the inhabitants of the island gather their crop of Cinnamon, they free it from the outward bark, which

which is brown and rough, then they lay it to dry and roll it up; by this means it acquires the figure we see it in, and becomes of a reddish colour, being of a sweet smell, and piquant taste, aromatic, and very agreeable: therefore chuse such, together with the thinnest bark, and of the highest or deepest red colour that you can get, throwing aside such as is thick, or has little taste or smell.

Cinnamon is of such great use, that we have few drugs which we use so much of, as well because of its virtues, as from its agreeable taste and smell. The Dutch bring us another sort of Cinnamon, with a large bark, and very thick, which is that the ancients, from the Arabs, call Draheni, and we, unpolished or rough Cinnamon. This Cinnamon is the bark of the trunk and large branches of the tree bearing the Cinnamon, but it is a merchandize, or commodity, of little value.

Besides the foregoing there are three other sorts of Cinnamon; viz. the *Cassia lignea*, which is also a

second bark of the trunk and branches of certain trees, very like those which produce the Cinnamon. These trees grow here and there, intermixed with those trees that bear the Cinnamon,

Cassia lignea differs from Cinnamon, in that it is weaker, darker coloured, and, when chewed in the mouth, more glutinous, dry, and harsh; whence it appears that the *Cassia lignea* tree, and that of the Cinnamon, are two different trees.

White Cinnamon, to which some give the name of White Costus, Costus Bark, Winter's Bark, or Winter's Cinnamon, because WILLIAM WINTER was the first who brought it into England. This is the bark of the trunk and branches of a tree of the size of a Pear-tree: the branches are slender, high, straight, and well adorned with leaves, like those of the laurel, but more delicate, softer, of a sea-green, and very fine smell; after which grows a round fruit, of a beautiful red. This tree grows plentifully at St. Domingo, in Guadaloupe, all about the sandy, mountainous, or rocky

rocky parts; and is met withal in the isle of St. Lawrence or Madagafcar, where it is called Fimpi.

Clove Cinnamon, or what we call, improperly, Clove-wood, is the second or inner bark of the trunk and branches of a tree, whose leaves come very near those of the laurel; after which spring round fruit, of the size of gall-nuts, chefnut-coloured, very light, which being broke, you may find within a kind of kernel: the fruit has the smell and taste of the Clove, which gave occasion to the ancients to call it Clove or Madagafcar Nut, because we meet with great quantities of those trees in that island. The Clove-wood, or rather the bark, having the taste and smell of the Clove, is at present made use of, especially by the hawker's, who sell it, after it is beat to powder, for powdered Cloves, though the Cloves are four or five times as dear again as this bark; and so they deceive the ignorant.

Cinnamomum, seu Canella, in English, Cinnamon, says LEMERY, is a thin bark, that is smooth, and rolled in
 hollows. C 3 long

long pipes, of a ruffet colour, or yellowish, inclining to red; of a sweet smell and taste, piquant, fragrant, and very aromatic: it is taken from the branches of a tree about the height of our Willow, which bears a leaf shaped like the Indian leaf we call Malabathrum, which smells and tastes like the Cinnamon. The flowers grow in little cups, white and odoriferous, succeeded by a fruit that is of the shape and size of a small olive, green at first, but growing black as it ripens. This tree grows in the isle of Ceylon, which is in the meridional part of India; and the wood is without smell or taste. The principal virtue lies in the bark, which, when fresh, is greyish without, and yellowish within: when it is separated from the tree, it easily divides into two barks, and they keep the inner bark as the most valuable, which they dry in the sun, and roll it up just as we have it come to us. This has little or no smell or taste when taken from the tree, but acquires both afterwards.

When they have barked the Cinnamon-tree, if they let it alone for three years together, it will produce another

another bark as good as the former. This Cinnamon yields a great deal of exalted essential oil and volatile salt, therefore is proper for the head, brain, and nerves, to fortify the vitals, comfort the heart, assist the stomach, expel wind, help digestion: it is the greatest restorative in nature, and an excellent antidote against poison, plague, and any malignant diseases.



C 4

CLOVE-



CLOVE-TREE.

CLOVE-TREE.

THE Clove, as is commonly thought, is the flower of certain trees, that is made hard and black by the heat of the sun: they were always very common in the Molucca Islands, until of late years, the Dutch not being able to hinder the English, Portuguese, and French, from going thither, and bringing away Cloves from thence, thought it adviseable to make themselves entirely masters of that commodity, to pluck up all the trees and transport them to an island of their own, called Ternate, by which means other nations are forced to purchase that valuable merchandize from them.

When the Clove begins to appear, it is of a whitish green, afterwards reddish, and according as it ripens

it grows brown; and that without being steeped in sea-water, and dried before the fire, as some authors have observed: for the Dutch, and natives of the islands make no other preparation of the Clove, than after it is fallen from the tree, to let it dry in the sun, exposed in the open field; and after that to keep them carefully from the air. As it is impossible but there must remain some Cloves upon the trees after the crop is got, these grow to the size of a man's thumb, and become a hard, black fruit, of a pleasant smell, and fine aromatic taste. We now and then meet with some of these Cloves, but very seldom, because the Dutch sell them separately, by the name of the Mother Clove; and these large ones are known in physic, by the name of *Antofle*.

It is observable, that where the Clove-trees grow, no tree or plant will thrive, because of the great heat of these trees, which consumes or wastes all the radical moisture of the earth round about them. It is observable likewise, that there are no trees or plants
in

in the whole world, that afford so sweet a smell as the Cloves when they first appear.

Such Cloves as are well fed; or oily, dry, brittle, or easy to break; of a tawny red, well furnished at the top, and of a clear tawny colour; and which being put into the mouth, yield a hot piquant, aromatic taste, are to be preferred in chusing them.

There is another Clove to be met with now and then in Holland, though it is but seldom, which is a small fruit of the shape and bigness of a barley-corn, and which terminates in a point, sticking five or six together upon one small branch; so that they resemble, in some measure, a little crown.

This Clove is of an iron colour, and has the same taste and smell as the common Clove. The tree which bears it, is the only one in the world; and only found in the middle of the isle of Massia, in the East-indies, where it is called, by the Inhabitants of the island,

Thinca-Radoi, which signifies Royal-Clove. This fruit, by the order of the king of the island, is guarded by soldiers, that no person may have it but himself. They pretend likewise, that when this tree is laden with fruit, the other trees bend down towards it, to pay their homage; and that the flowers of the common Clove fall off, when these begin to appear.

Cloves, says LEMERY, are called a fruit, but are rather an aromatic flower, from an Indian tree, whose leaves are long, broad, and pointed; when the fruit begins to appear, their colour is of a whitish green, afterwards they grow red; and at last, when ripe, are of a dark brown, as we see them of now. The large cloves are called, in Latin, *Antophylli*, or the Mother Cloves, but they are very scarce. There is also the *Cariophyllus Regius*, or the Royal Clove, before described; it has this name from bearing on its top a sort of crown, for which reason the king of the country keeps it in his own possession; and because
there

there is a common fabulous opinion, that the other trees bow towards this, as their king.

The Cloves, in general, are cephalic, neurotic, and cardiac, proper for epilepsy, palsy, and vertigo; are good in wind and cholic, and are allowed, especially the oil, to be the best specific in the tooth-ach.



C

PEPPER-



PEPPER-TREE.

PEPPER - TREE.

THERE are several sorts of Pepper, of which the following are the principle:

White Pepper, says *ПОМЕТ*, is the fruit of a climbing plant, commonly called a Creeper, whose leaves are entirely like those of our Currants; after which come small clusters, as it were adorned with round seeds, green at first, but when ripe they are of a greyish colour.

As the Pepper-plant cannot support itself, the inhabitants of those parts where it grows plant it at the root of certain trees, as the Areca, which is a sort of Palm-tree, very straight and tall; the Cocoa, or other trees of the like nature: but as this Pepper is rarely brought to us, a great many persons will affirm, it is not the true white Pepper, being nothing more than the bark of the black Pepper.

The best white Dutch Pepper, is that which is the largest, best fed, heaviest, and has the least black seeds amongst it.

Black Pepper is likewise the fruit of a creeper that has large broad leaves, very fibrous, and supplied with seven strings, or nervous ribs, that are very conspicuous. The Dutch and English bring three sorts of black Pepper, which differ not one from the other, but according to the places where they grow. The first and finest is that of Malabar; after that the Pepper of Jamby, which comes the nearest to the Malabar; the third sort is a meagre, lean, dry Pepper of Bilipatham; and though that be the least of all, it is nevertheless most esteemed by the Mahometans; because, say they, the smaller the Pepper is, the better condition it is of; for the smaller Pepper has the large grain, and it is not so hot as the great Pepper, which is the reason the Dutch rarely bring any of the little Pepper from India.

The

The Thevet Pepper is a small, round berry, of the size of white Pepper, reddish as to colour, and at one end has, as it were, a little crown; but as this Pepper is of no kind of use, by reason of its scarcity, I shall say nothing further of it, but only that it has a pleasant, aromatic taste.

Long Pepper is a fruit or berry of a plant altogether like that which bears the black Pepper, except that it climbs not so high, but grows commonly in the nature of a shrub, and supports itself upon its own stem, and has smaller, and much greener leaves, and the stalks, or tails, are not so long.

The East-India long Pepper, which is that usually sold, is a berry of the thickness and length of a child's finger; that is, properly speaking, nothing else but a collection of little seeds together, something red without, and blackish within. In each of these seeds, or kernels, is a sort of white powder, of a hot biting taste; and they stick so close together, as not to be separated but by pounding; and this mass forms a
Berry

berry of the size and length aforesaid. The Dutch and English bring plenty of this Pepper from India.

There is found in the islands of America a shrub, that has leaves almost like those of Plantane, which produces a fruit, or berry, about a foot long. This berry is composed of several little grains, or seeds, that together make a long spike, or pod, and are contiguous one to the other; of the same shape as the long Pepper. The fruit, when fresh and young, is green; but when the sun has ripened it, black, and that it has more acrimony than the long East-India Pepper.

Besides the other two sorts of long black Pepper, before particularized, sometimes, though very rarely, a third sort is sold, by the name of long black Pepper, or Ethiopian Pepper, Moorish or Zelim Berry. This Pepper is the fruit of a creeping stalk, which produces neither leaves nor flowers, but only five or six heads of the bigness of one's thumb end, hard and half round; from whence proceeds several pods of the length of one's little finger, and the thickness of a quill,

quill, brown without and yellow within. These pods are divided by knots, and in each knot is found a little bean, black without and reddish within, without any taste or smell. That which is most like the pod, is of a hot, acrid, biting taste, and pretty aromatic, especially when held long in the mouth; and by reason of its great acrimony, the Ethiopians make use of it for the tooth-ach.

Guinea Pepper, which the Americans call Mexico Pepper. *Pimento*, or American Pepper, is a red Pepper, whereof there are three sorts: viz. The first comes in pods of the thickness and length of one's thumb. The second is much smaller, and comes almost in shape of a mineral, and as it were embossed. The third is much less, and almost entirely round. All the three sorts of Pepper, as they hang to the plant, are green in the beginning, yellow when half ripe, and red at last; of the three sorts only the first is used, the others being so acrid, that the natives cannot make use of them.



GINGER PLANT.

GINGER PLANT.

THIS plant is called the Club-reed; from the root of which is the ginger, which, at the end of every root, is in form like a foot. The leaves of the plant are long, large, and of a deep green: and the whole flower resembling a club, has caused it to be called by some the Club-reed, and by others Ginger with a club flower. Ginger consists of one sort which is white and mealy, and another which is black and hard: the first is the most esteemed. Both the East and West Indies produce Ginger: in the Antilles it is greatly cultivated; but the greatest quantities are imported from the Leeward Islands of Barbadoes, Nevis, St. Christopher, and Jamaica. Little is now brought from the East-Indies, except what comes as confectionary, and is called Green Ginger, which they prepare in India. Some indeed is prepared in England and other parts, by steeping the fresh roots two or three days in warm water,

water, keeping it all the time in a balneo, which smells and softens it. It is then boiled, either slit or whole, with refined sugar, until it becomes a syrup.

Ginger, says POMER, is the root of a plant which the botanists call the Small Club Reed with the sharp root: it represents in shape a sort of foot at the end of every root, for which reason the inhabitants of St. Christopher's, and the other Leeward islands have called this Pâte in French, or Gingembre, which signifies a paw or foot. This produces several reeds bearing large long green leaves, and afterwards a reddish flower, mixed with a little green, the whole head of the flower resembling a club, from whence it is called Ginger with the Club Flower.

This root is brought to us sometimes from the East Indies, but that which is cultivated in the Western Islands is more used, and much better, because they dry it with more care, so that it is not parched and withered; therefore such as is new, dry, well fed, not
easy

easy to break, of a greyish colour, resinous within, and of a hot piquant taste, is the best sort.

The West Indians candy their Ginger when it is taken from the earth, and likewise they make a preserve of it green, as the East Indians do, from whence we have great quantities of green Ginger.



CURRANT

CURRANT VINE



CURRANT VINES.

CURRANT VINES.

THE Raisins of Corinth, or Currants, are little raisins or Grapes of different colours, being black, red and white, and commonly of the size of the red Gooseberry: the vine that bears this is low, furnished with thick leaves very much indented, which grow plentifully in a vast spacious plain that is situated behind the fortress of Zant in Greece. This plain is surrounded with mountains and hills, and is divided into two vineyards, in which are abundance of Cyprus, Olives, and houses of pleasure, which make, together with the fortress and the mount Discoppo, a prospect perfectly beautiful.

When these little raisins are ripe, which happens in August, the people of Zant gather and stone them, then spread them upon the ground to dry, and when dried carry them into the town, where they are
thrown

thrown through a hole into the great magazine, called the Seraglio; where they are squeezed so close by them that own them, that they are obliged to use iron instruments to pull them out, and when they are pulled out, to put them into casks or bales of different bigness, and to make them so tight as they are brought to us, they employ men to tread them with their feet, for which purpose they rub them well with oil beforehand.

Sometimes also we bring raisins from Natolia, Lepanto, and Corinth; from whence they take their name.

The people of Zant believe to this day that the Europeans use these raisins to dye cloths, not knowing that they are for eating.

POMEGRANATE-

NATURE'S HISTORY

©



POMEGRANATE TREE.



POMEGRANATE-TREE.

POMEGRANATE-TREE.

THIS tree grows both wild and cultured. The branches of the first are small, angular, and armed with thorns. The bark is red, the leaves small, like the Myrtle; and the flower is large, of a beautiful garnet, and composed of several leaves representing a little basket of flowers. The cup is oblong, purplish, and in form like a bell. - From this blossom is produced a fruit, which grows into a large round apple, with a thick, smooth, brittle rind, adorned with a purple cup. This apple is called the Pomegranate, which is too well known in our elegant deserts to require a particular description. The wild Pomegranate is only produced in hot countries. The juice of the Pomegranate is much valued in medicine. Of this tree the English reckon five sorts, which are cultivated more for ornament than utility. They consist of the common,

mon, sweet, wild, double-flowered, and American dwarf Pomegranate. The first of these is the most common in this country, which, with care, has been known to afford fruit that has ripened tolerably well in warm seasons: but as they ripen late, they are seldom well tasted, of our produce. The double-flowered, continuing its beautiful bloom for near three months, is esteemed by our nobility and gentry as the most valuable flowering tree yet discovered.

Punica Malus, says LEMERY, or the Pomegranate, is a shrub, whereof there are two kinds, one cultivated or domestic, and the other wild. The branches are small, angular, armed with thorns; the bark is reddish, the leaves are small, and resemble those of the Myrtle, but less pointed, hanging by reddish stalks, of a strong smell, when they are crushed or bruised; the flower is large, beautiful and red, inclining to purple, composed of several leaves, like a Rose in the hollow of a cup, representing a little basket of flowers; the cup is oblong, hard, purplish, large at the top, having, in some measure,

measure, the figure of a bell; at the bottom comes a fruit after the flower is gone, which grows into a large, round apple, adorned with a crown, formed by the top of the cup; the bark is as hard as leather, of a purple hue, dark without, and yellow within. It is divided internally into several partitions full of seed, heaped one upon another, being fleshy, of a fine red colour, abounding with a very pleasant juice, each of which contain, in the middle of them, an oblong grain, yellow, and sometimes very irregularly formed.

There are three sorts of Pomegranates which differ in taste; the one sort are eager, or sharp, the other sweet, and some are betwixt both, manifestly neither the one nor the other prevailing, called vinous: these Pomegranates are improved in our gardens, especially in all the warm countries, as Spain, Italy, France, &c.

The second sort is called *Punica Sylvestris*, the wild
Pomegranates:

Pomegranates: this is a shrub like the former, but more rough and thorny: they gather the flowers when in their prime, these are dried to keep, which the merchant brings from the Levant. The wild Pomegranate grows only in the hot countries, contains in it a good deal of flegm, oil, and essential or acid salt.



RICE

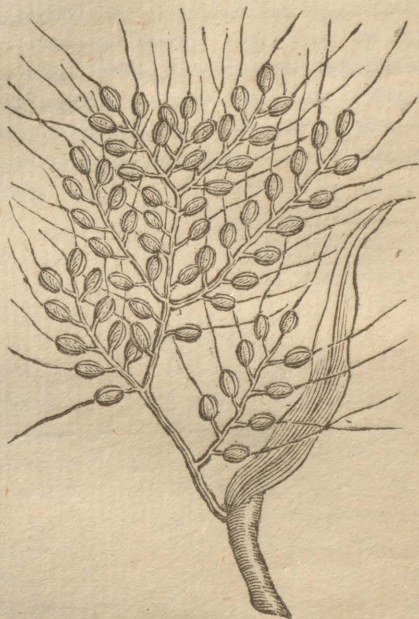
WALTER J. BARNUM

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WALTER BARNUM



RICE PLANT.

RICE PLANT.

THIS plant is much cultivated in the East, and produces the grain so much consumed, which is called Rice. Although a native of the East, great quantities of it have been reared in South Carolina, where it is found to succeed as well as in its original soil: and it being a grain that from its use may be called the manna of the poor, it has proved most beneficial to that province.

Rice, says POMET, is the product of a plant which grows very common in many places of Europe; but more particularly in Spain and Piedmont. This is a Seed of so great use and profit, that it is called the manna of the poor; and, throughout several entire countries, they have scarce any thing else to subsist on.

This plant, according to LEMERY, bears its stalk about three or four feet high? much thicker and stronger than that of wheat or other corn: the leaves are long, like the reed, and fleshy; the flowers blow on the top like barley, but the seed which follows is disposed in clusters, each of which is enclosed in a yellow husk, ending in a spiral thread. This seed is oblong, or rather oval and white: the plant is cultivated in moist or low grounds in Italy, and the seed brought dry from Piedmont, Spain, America, and several other places: its chief use is for food, but is sometimes made use of in physic; it nourishes well, and stops fluxes, therefore is good in armies, camps, and sieges, because it is of light carriage, and excellent sustenance, and easily prepared: it encreases blood, and restores in consumptions.

Such as are desirous of cultivating it in England should place the plants, reared in a hot-bed, in pots filled with rich light earth, and placed in pans of water, which should be plunged in a hot-bed, and
replenished

replenished as the water is by the heat diminished. In July they should be openly exposed, but in a warm situation, and with the same watery nourishment. Towards the latter end of August they will produce their grain tolerably ripened, if the Autumn should happen to be favourable. The newest Rice should be chosen, and such as is large, white, and well cleaned.



CORK-TREE.

OF this tree there are several species. The chief are the broad-leaved, the evergreen, and the narrow-leaved with smooth edges. The first is only requisite to be described, which is always green, of a moderate height, resembling the Oak, and having a thick, light, spongy bark, of an ash colour, which is first taken from the tree, and afterwards separated from an inner bark. The leaves, cups, or acorns, resemble, like the form of the tree itself, those of the oak. It grows in Italy, Spain, and especially towards the Pyrenees and in Gascony, &c. The inhabitants of these countries, when desirous of making a crop of this produce, strip the bark from the top to the bottom of the Cork-trees, and pile them to a reasonable height in a pit or ditch filled with water. Having loaded these heaps with weights, they leave them until they are thoroughly soaked

foaked and straitened; then they are removed to another ditch, and from thence to a third and a fourth. They are next taken out of the water, dried, and packed in bales for exportation. To choose the best Cork, the finest boards that are free from knots and chinks, of a moderate thickness, yellow on both sides, and firm in texture, should be selected. This best sort of Cork is called the White Cork of France, from its being chiefly produced about Bayonne in the province of Guienne. From the same part is brought a sort which is called the Spanish Cork, which seems as if it had been burnt: but its blackness is said to be caused merely by having been steeped in sea-water instead of fresh water. The inside is, however, yellowish, and easily cut. Of this the thickest should be chosen.

Cork, says POMET, should be chosen, in fine boards, all of a piece, not full of knots or chinks, of a moderate thickness, yellowish without and within, and when it is cut entire.

The use of this is too well known to need any further account of it. It is of some small use in medicine, as to stop bleeding, being reduced to powder, or thrown into some astringent liquor. The Spaniards burn Cork into an extraordinary black, which is what we call Spanish-black, and used for several sorts of work.

The broad-leaved Cork, says LEMERY, that is always green, is a tree of a moderate height, very much resembling the Oak, but the trunk is thicker, bearing fewer boughs, and the bark is a great deal thicker, very light, spongy, of an ash colour, tending towards a yellow, which is taken from the tree first, and afterwards freed from an inner bark; the leaves are like the Oak, but much larger and longer, softer, greener on the outside, sometimes a little indented; the cups and the acorns are also like those of the Oak. This tree grows in the hot countries, as Spain, Italy, towards the Pyrenees, and in Gascony: that which grows in Spain is different from those that grow about the Pyrenees, and in Gascony, in that the bark is black on the
outward

outward surface, and the leaves continue green all the winter, whereas they fall from the others at the end of autumn.

The acorn of the Cork is astringent and proper in the cholic.



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TOBACCO

TOBACCO PLANT.



TOBACCO PLANT.

TOBACCO PLANT.

OF this production there are five species: the first is the Oroonoko, of which there are two sorts; the one has very broad, rough, roundish leaves; while the leaves of the other are narrow, smooth, and pointed: but neither of them is valued by the planter, in consequence of their not being much consumed in England. The second sort is called the sweet-scented Tobacco, from its affording, when smoked, a most agreeable scent: this sort is much cultivated in Cuba, Brazil, Virginia, and several other parts of America; from whence it is brought to most parts of Europe, but especially to England, where its general culture is prohibited, lest the revenue should be diminished. The third sort is the greater narrow leaved perennial Tobacco, imported from the French settlements in the

West-Indies into the Royal Gardens at Paris, where it is cultivated in small quantities for the making of snuff. The fourth and fifth sorts are preserved in Botanic gardens, less for use than for variety.

Tobacco is raised from seeds sown in a rich ground, where the rising plants are covered, to defend them from the sun: in the rainy seasons they are transplanted into large pieces of ground that are cleared and prepared for the purpose. The distance of the rows in these plantations is about two or three feet, or such a distance as will not admit of their extending leaves touching, which would cause them to rot, by corrupting each other. The Tobacco being thus transplanted, they only require to be weeded, until the flower-stems appear, when they cut off the tops in order to afford more nourishment to the leaves: the leaves hanging on the ground are likewise pulled so as to let remain about ten or twelve upon each stalk, which causes a great increase. The leaves, when ripened, are cut and spread upon the ground: they

they are then strung upon certain cords in little knots, at such distances as the plants may not touch one another: they are next hung to dry in the air in a situation guarded from the wet, during fifteen or twenty days. When sufficiently prepared, they are made into such forms as the purchaser desires.

Tobacco, says *POMET*, is so called, because it is met with plentifully, in the isle of Tabago; and, by some, it is called *Nicotiana*, because *Mr. J. NICOT*, a French ambassador in Portugal, was the first that brought it into France to the queen regent; upon which account it was likewise called the *Queen's Herb*: it is also called *Antartick Bugloss*, because this herb grows much in those isles; and *Holy Herb*, from its great virtues; last of all, *Petum*, which is the name that the Indians give it, and which was the first, and is the true name for Tobacco.

This plant, at present, is very common in France, there being few gardens where it does not grow: but

I shall not entertain you with a long account of it, it having been writ upon by so many authors, who have esteemed it more or less, according as this commodity has been agreeable to them.

If the trade of Tobacco had been free, as it was some years ago, I could have said something more satisfying upon this subject; but as we are not permitted to buy any but at the office, it is for that reason I shall treat of it only under those different names it is there called by. We buy two sorts of Tobacco of the farmers, viz. in roll and in powder. That in roll is distinguished by several names, as the Brasil Tobacco, which is a black Tobacco, of the size of one's finger: the second is in a dry reddish leaf, rolled the thickness of a large cane, and is called Sausage Tobacco, from being like a sausage in shape. There is another sort in this form, that comes from Holland. The third kind is that called Dieppe Tobacco, and is a little black roll, of the thickness of a child's finger, or thereabout. There are several
other

other sorts of Tobacco, as those of Virginia, St. Domingo, &c.

Nicotiana, in English, Tobacco, says LEMERY, is a plant whereof there are three kinds; the first is called the broad-leaved Tobacco. This first kind bears a stem of five or six feet high, as thick as a man's thumb, round, hairy, full of white pith; the leaves are broad, and larger than those of *Enula Campana*, without stalk, a little pointed, stringy, of a pale green colour, glutinous in touching, of a sharp burning taste. Mr. TOURNEFORT says, that the top of the stem is divided into several sprigs, that sustain flowers made like bells, cut or separated into five parts, of a purple colour; when the flowers are gone, there is a husky, oblong fruit succeeds, that is partitioned into two cells, containing in them a good deal of small, reddish seed: the root is fibrous, and of a very biting taste: the whole plant is of a strong smell.

The second sort is called great narrow-leaved Tobacco, in opposition to the first. It differs only from

the other, in that the leaves are narrower, sharper pointed, and hang to the stem by longer tails or stalks.

The third is called the Small Tobacco. It bears a stalk a foot and half, or two feet high, round, hard, hairy, the thickness of one's finger, sometimes branchy, glutinous to the touch, and carries its leaves, ranged alternately, oblong, thick, and of a brownish green colour, hanging upon short stalks; the flower, fruit and seed, are like the first sort, but the flowers more inclinable to a yellowish purple; the root about a finger's thickness, and sometimes divided into white fibres, that spread themselves round in the ground. Tobacco is cultivated in fat, rich land in gardens, and yields abundance of a sharp, biting salt, both fixed and volatile.

It purges upwards and downwards with a great deal of violence in the apoplexy; applied outwardly to the part, or smoaked, it relieves the tooth-ach;

in powder or snuff it purges the nostrils, and excites sneezing, and is a very good vulnerary, the leaf, ointment or powder, being applied to the wound.



COTTON

COTTON LEAF



COTTON

COTTON PLANT.

COTTON PLANT.

THE fruit of this plant is the Cotton, which is so much used as a material of manufactures chiefly made at Manchester. Its plant bears a stalk about eight feet high, covered with a reddish hairy bark, divided into several short branches. The leaves are rather less than those of the Sycamore; they are shaped like those of the Vine, and are suspended by small stalks adorned with a nap, or hairy substance. The flowers are fine, large, and numerous, of a yellow colour, mixed with red or purple, and shaped like a bell; the flower is succeeded by a fruit as large as a filbert, which, being ripe, opens into three or four partitions, where the Cotton is found as white as snow. Heat swells each flake to the size of an apple. There

is

is another sort of Cotton-tree that differs from the former in size; for this grows to four or five feet high: the flowers and fruit are like the former. Both these sorts grow in Egypt, Syria, Cyprus, Candia, and the Indies. In Jamaica, Barbadoes, and other parts of the West Indies, the Cotton plants grow to a tolerable height, and spreads on every side its branches: it has small, green, pointed leaves, and bears a yellow flower, resembling in form the rose of the sweet-briar. The fruit is as large as a tennis-ball, and has a thin crusty shell, of a brown or blackish colour. In these are found the Cotton. In some of the American plantations there are Cotton bushes very like those of Egypt, Arabia, &c.

Cotton, says POMET, is a white soft wool, which is found in a kind of brown shell, which grows upon a shrub, in form of a bush. The branches that stretch wide are well charged with leaves, something less than those of the Sycamore, and almost of the same shape: it bears a great many fine, yellow, large flowers;

ers; the head of the flower is of a purple colour, and it is all stripped on the inside; it has an oval button that appears in the middle, and grows in time to the size of a pigeon's egg; when ripe it becomes black, and divides itself into three parts at top, the Cotton, or down, looks white as snow: in the flake, which is swelled by the heat to the size of a pullet's egg, there are seven seeds as large as lupins, sticking together: within it is white, oily, and of a good taste.

The Cotton of the shops, according to LEMERY, is a plant whereof there are two kinds:—The first is called the Herb Cotton, the Annual Shrub Cotton, or that with the white seed: it bears a stalk of a foot and a half, or two feet high, that is woody, covered with a reddish hairy bark, divided into several short branches; the leaves are a little less than the Sycamore leaves, shaped almost like those of the Vine, hanging to long stalks, adorned with a nap or hair; the flowers are numerous, fine, and large, having the shape or
form

form of a bell, slit or cut into five or six divisions to the bottom, of a yellow colour, mixed, with red or purple: when the flower is fallen, it is succeeded by a fruit the bigness of a filbert, which, being ripe, opens into three or four quarters or partitions, from whence appears a flake of Cotton, white as snow, which swells up or tumefies by heat, to the size of a little apple: it contains in it gross feeds like small peas, oblong, white, and cottony; each having in it a little oleaginous kernel that is sweet to the taste.

The second sort is the Tree Cotton, which differs from the former in bigness; for this grows into a tree or shrub of four or five feet high. The leaves approach, in some measure, to those of the Linden-tree; indented deep into three parts, without nap or down: the flowers and fruit are like those of the other kind. The two species of Cotton grow in Egypt, Syria, Cyprus, Candia, and the Indies: the flowers are vulnerary; the seed pectoral, proper for
asthmas,

asthmas, coughs, to consolidate wounds, for dysenteries, spitting of blood, &c.



MANDRAKE

MANDRAKE PLANT.

THIS plant is of two species: one is the common, and has a round fruit called the Male Mandrake; the other has a purple flower, and is called the Female Mandrake. The leaves of the former rise immediately from the root, and are about a foot long, and broader than a man's hand, of a smooth surface, a deep green colour, and of a disagreeable smell. The flowers of both are shaped like a bell, which leave a soft globular fruit containing many seeds, shaped like a kidney. The root, according to some naturalists, represents the lower parts of a man, and is therefore called Anthropomorpha, which, in Greek, signifies the figure of a man. But this feigned resemblance of the human form is only devised by the cunning of quacks and impostors, who deceive the ignorant by forming the fresh roots of

of Briony and other plants into these resemblances. There is likewise another ridiculous fable devised respecting this plant; which is, that as it is certain death to those who root it from its parent mould, the stem is tied to a dog's tail, and thus is it taken from the earth in order to prevent the above disaster happening to any of the human species. The report of the Mandrake crying like a child, when torn from its soil, is equally false and ridiculous; for many of this plant have been removed without any other effects than those attendant on the removal of all deep-rooted vegetables. But what deserves credit relative to the Mandrake is, that the roots will remain sound above fifty years, and retain all the vigour of the most youthful plants: they should never be removed after their roots have arrived to any considerable size, lest the lower fibres should be broken, and thus the growth of the plant be diminished, and its strength debilitated; if thus injured, they will not recover their former vigour in less than two or three years. Both the Male and Female Mandrake grow in hot climates, and are mostly found

found in plains. They are propagated in gardens by seeds, which should be sown upon a bed of light earth soon after they are gathered. In this situation they should remain until the latter end of August. Having kept them during this time free from weeds, they should be transplanted into the places for their future vegetative existence. The soil of these should be light and deep, in order to admit the roots penetrating so low into the earth as they are by nature formed to fix themselves. Thus transplanted, they will produce great quantities of flowers and fruits for a series of years. The Mandrake is mentioned in the thirtieth chapter of Genesis, where Reuben is said to have found one in the field during the wheat harvest: it being said in the Canticles, "The Mandrakes give a smell, and "at our gates are all manner of pleasant fruit," seems as if the fruit of the Mandrake was delightful in smell; for surely Solomon must mean a grateful smell, otherwise he would never have chosen it as an embellishment of a pastoral song. However, the Mandrake known to us at present has no such delightful quality

as

as to render it so valuable as to cause a woman to exchange her husband, as Rachel did, for one of them. POMET thus describes both the male and the female :

The Mandrake, as it grows, bears large green leaves, trailing or hanging upon the ground, and the fruit is very like that of the *Coloquintida*. The bark of the root is of an ash-colour within, and a little more reddish without, is of some small use in physic, as it is put into some of the galenical compositions.

The bark of the Female very much resembles, in size and colour, the large or gross Cinnamon, except that it is more decayed on the outside, and of the colour of a broken nutmeg within, distinguished with many little sparkles; it is very light and spongy, of an almost insipid taste, and without smell. This is of no other use, than as the Choüan, to add to the perfection of carmine colour.

They

They are thus further described by LEMERY: The Mandrake is a plant without a stem, of which there are two kinds, first, the *Mandragoras mas fructu rotundo* of Tournefort; the leaves rise directly from the root, above a foot long, broader than a man's hand in the middle, and narrow at both ends, smooth, of a brownish green colour, and a disagreeable smell; among these rise short stalks, each of which bear a flower made like a bell, divided commonly into five parts, a little hairy, of a white colour, inclining to purple: When the flower is gone, it is succeeded by a little round apple as big as a Medlar, fleshy, and of a yellow green colour; it contains some white seeds, which bear the figure of a small kidney: the root is long, thick, whitish, slit, or divided into two considerable branches, set about with short filaments, slender almost as hairs; representing, when it is whole, the lower parts of a man, from whence it is called *Anthropomorpha*, which signifies the figure of a man.

The

The second sort is called the Female Mandrake, according to *TOURNEFORT*, the Mandrake with a bluish purple flower: it differs from the former, in that the leaves are smaller, narrower, more folded, blacker, trailing on the ground, of a strong stinking smell; and that the flowers are bluish, inclining to purple; the fruit less and paler, not formed like a Pear, as some authors will have it, but round, scented, full of juice, and containing very small black seeds; the root is about a foot long, divided into two branches, brown without, white within, and furnished with some fibres, but nothing like the former: both sorts grow in the hot countries, in the plains, or mountainous places, but the last much rarer: they contain in them a great deal of oil and phlegm, but little salt; they are narcotic, cooling, stupefying, &c. applied outwardly, and likewise relieve inflammations of the eyes, erysipelas, scrophulous tumours, and the like: the apples are cold and moist, but not so cold as the root; being smelled to, they cause sleep; so also their juice taken inwardly, in little quantities, in a
good

good generous wine: some pick them, and so eat them; others eat them with pepper and hot spices; the antidote against their poison is wormwood, rue, scordium, mustard, origanum, castor, &c. with wine and vinegar. The ancients, by Mandrake, intended another plant quite different from this.



BALM

BALM OF GILEAD.

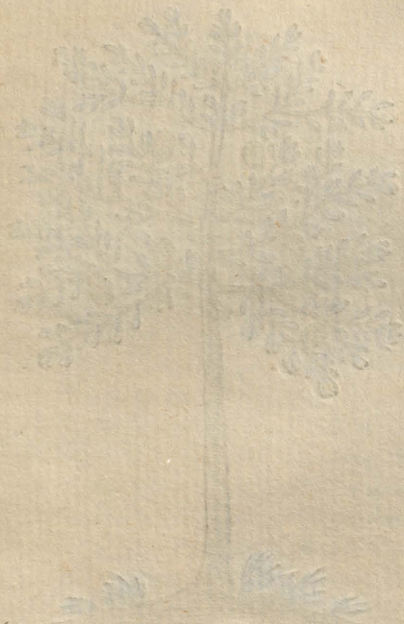
FROM the trunk of this plant flows a white liquid balfam, which bears the name of the vegetable. The plant bears leaves like rue; and white, flarry flowers, which produce, in their middle, berries enclosing a small kernel. When the balfam first runs, it is of the confistence of oil of fweet almonds; but age caufes it to refemble turpentine; when it lofes great part of its perfume, and turns rather blackifh. When fresh, the fmell is moft agreeably aromatic, and the tafte like citron-peel. Jericho was the only place where this balfam was to be found; but, fince the Turks have poffeffed the Holy Land, thefe fhrubs have been transplanted into the gardens of Grand Cairo; where they are guarded, during the flowing of the balfam, by the Janiffaries. At this time it is very difficult for the
Christians

Christians to obtain a sight of these balsams. With respect to the balsam itself, it is almost impossible to obtain any, unless from an Ambassador, who may have some sent him, as a present, from the Grand Seignior, or from the soldiers appointed to guard this valuable liquid. This circumstance plainly evinces, that the balsam sold here, can only be the White Balsam of Peru; which is prepared with spirit of wine rectified, or with some distilled oils. Mr. POMET says he received, from a friend, the present of an ounce, which he brought from Grand Cairo. He describes it to have been of a solid consistence, like the turpentine of Chio, of a golden colour, and a citron smell.



CEDAR

NATURAL HISTORY



E

GENUS OF LIRIODENDRON



CEDAR OF LIBANUS.

CEDAR OF LIBANUS.

THIS tree is very large, thick, and straight: the leaves are slender, and much narrower than those of the Pine-tree: they are disposed in clusters along the branches; upon the upper part of them grows erect the fruit, like our pine-apples; but they never drop in a whole state. It is said there issues from the trunk, in the warm months, a sort of white resin, which is very clear, of a grateful odour, and is called Cedar gum: the large trees are said to afford no less than six ounces per day of this substance. The cones of the Cedar, if preserved entire, will contain their seed for several years. They ripen most commonly in the spring, and are nearly twelve months old before they arrive to us from the Levant. To manage the Cedar plant, we refer our readers to MILLER's directions, in his Gardener's Dictionary.

What is mentioned in Scripture, respecting the lofty Cedar, cannot be applied to this tree; which, instead of rising in height, is more inclined to extend its branches in breadth. Mr. MAUNDREL observes, that when he visited Mount Libanus, he only found sixteen large Cedars remaining; but that there were several young trees, of a smaller size. One of the largest he found to be twelve yards six inches in circumference, and thirty-seven yards in the spread of the boughs. At above five or six yards from the ground, it was divided into five limbs, each being as large as a great tree.

Cedar is said to be proof against the putrefaction of all worms, or animal bodies. The saw-dust is thought to be used by those mountebanks who pretend to have the secret of embalming. The wood is said, likewise, to yield an oil which preserve books and writings.

Lord Bacon asserts, that Cedar will continue sound a thousand years. Of this wood it is needless to observe,

serve, that the timber work of that glorious structure the Temple of Jerufalem was formed.

POMET says, the Cedar of Lebanon is a tree which grows to a prodigious size, and of a pyramidal figure, whose branches are adorned with little, narrow, green leaves. There are during the hot season, little bladders made by the scorching of the sun, which being pierced, afford a clear white liquor, like water, of a strong penetrating smell, and is of the turpentine kind; and when the tree ceases to produce any more of that, being cut, there flows an unctious matter, which, drying as it runs down the tree, is what we call Resin of Cedar, which is very rare, as well as the other productions of this tree. This resin is of a very fine yellow, bright, and transparent, and of a very grateful odour.

The Lesser Cedar is a tree of various sizes, commonly crooked, bearing long sharp-pointed leaves, always green, especially in winter; after which come

berries of the bigness of Holly-Oak, or Knee-Holm; green at first, but red when they are ripe. The trunk being cut, there issues forth a very clear transparent gum, which is the true *Sandarac*.

They make of this wood, by the assistance of the retort, a black oil, which being rectified, is called oil of Cedar. The true oil of Cedar is admirable for curing sores in horses, cattle, sheep, and other beasts.

According to *TOURNEFORT* it is a species of the Larch-tree, or a very large, thick, straight tree, rising pyramidal, whose bark is all of a piece; the wood very hard and durable, so that it is said never to decay; the leaves are small, straight, and green, disposed in clusters along the branches, putting forth in spring-time, and falling at the approach of winter; the flowers and fruit as before described. There runs a sort of gum from the tree, without incision, hard, and as it were in grains like Mastic, from

from whence it frequently is called Mastick Cedar. The wood is used in fine joiner's work, and turner's ware. The tear that flows from the tree, is improperly called a gum, because it is the purest resinous part of the tree, and is digestive, deterfive, consoliding, strengthening, good against gangreens, and proper for dislocations and fractures.

There is another sort of Cedar, called the Cedar, that bears a Berry, or the Lesser Cedar, of which there are three kinds; the first is called the Phœnician Cedar, or the Great Cypress-leaved Cedar, with the yellow fruit; the trunk and branches whereof are crooked and knotty, the wood reddish, yielding a smell like the Cypress; the leaves narrow and sharp-pointed, harder than those of Juniper, and more prickly, green all the year as the Cypress: the shells or husks are made up of several little scales, at the bottom of which grow several bags, or membranous vesicles, full of dust; the fruit arises upon the same

foot or stalks with the husks, but divided into cells, which are berries, that turn yellow when ripe, are a little fleshy, odoriferous, and of a grateful taste; each of them containing three woody kernels that are hard, hollow on their backs, and flat on the other side, each kernel having an oblong seed; there comes from the trunk of the said tree, in the hot countries, a gum called varnish.

The second sort is called the Lycian Cedar, or the Middlemost Cypress-leaved Cedar, with the great Berries; this tree differs from the former, in that it is lower, and the berries are much bigger.

The third sort is called the Tall Spanish Cedar, with the great black Fruit; it is much higher than the rest, and the berries a great deal bigger, of a black colour: these Cedars grow in Italy, Spain, Provence, and Languedoc; they remain always green, and yield abundance of oil; the wood is sudorific,

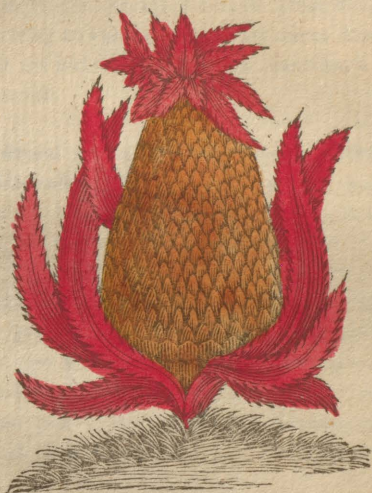
rific, being used in decoction: the berries are proper to strengthen the stomach, and assist digestion. The oil drawn after the common method, by a retort, being black, and passes for the true oil of Cedar.



E. 5

ANANA

ANANA PLANT.



ANANA PLANT.

ANANA PLANT.

FROM this plant is produced a species of Pine-apple, that is reckoned, from its richness of flavour, the king of fruits. It has the delicious tastes of the peach, quince and muscadine grape, united. The top of it is adorned with a little crown, and a bunch of red leaves, like fire. When the crown falls, which is thought to be an emblem of its royal excellence, another succeeds, possessing all its predecessor's qualities. The plant is herbaceous, and has leaves somewhat resembling those of the Aloe. The fruit, which is like the cones of the Pine-tree, is supposed to have been the cause of its name. The place of its nativity is not determined: it was, however, first brought from the East-India factories, and planted in the hottest islands in the West-Indies, where it succeeded so well, as to afford now a most plentiful produce.

It has lately been introduced, with success, into the European gardens. The first person who succeeded in this attempt, was *MONS. LE COUR*, at Leyden, in Holland. From him, our gardens in England were first supplied with this royal fruit. From its juice, is made a wine, almost equal to *Malmsey sack*; it will, likewise, intoxicate as soon as the strongest juice the grape affords.

POMET tells us, it was thought a just appellation, after father *DU TERTRE*, to call the Anana the king of fruits, because it is much the finest and best of all that are upon the face of the earth. It is for this reason that the king of kings has placed a crown upon the head of it, which is as an essential mark of its royalty; and at the fall of the father, it produces a young king, that succeeds in all his admirable qualities. It is true, there are others besides that bud again underneath the fruit, and the same at the bottom of the stalk that produces the *Ananas* in much less time, and with the same ease with that which
bears

bears the crown: but it is also true, that the fruit which produces this, is incomparably much finer than the others.

This fruit grows upon a round stalk, the thickness of two thumbs, and about a foot and half high, which grows in the middle of the plant, as the artichoke in the midst of its leaves; they are about three feet long, four fingers broad, hollow like small canes, and altogether hairy, or rather bristly on the sides or edges, with little sharp prickles, and ending with a sharp thorn like a needle. At first the fruit is not so big as one's fist; and the cluster of leaves, which is the little crown borne upon the head, is red as fire; from every scale or shell of the rind of the fruit, which in shape, though not in substance, is very like the Pine-apple, there arises a little purplish flower, which falls off, and withers as the fruit increases.

They are distinguished into three sorts, namely, the large white Ananas, the Sugar-loaf, and the Rennet-

apple: the first is often eight or ten inches diameter, and five or six high; their flesh white and fibrous, but the rind of a golden yellow; when it is ripe it sends forth a ravishing smell, which is as strong as that of the quince, but much more delicate; but though it is much larger than others, the taste is not so excellent, neither is it so much esteemed.

The second sort bears the name of the Sugar-loaf from its shape and form, that entirely resembles it: it has leaves a little longer and narrower than the former, and that are not so yellow; the taste is bitter, but it makes their gums bleed that eat much of it. I have found in this kind a seed like a sort of cresses, though it is the general opinion that the Ananas does not seed at all.

The third is the least, but the best, and is called the Rennet-apple, because of its taste in particular, and smell, that both agree to that fruit; it seldom sets the teeth on edge, or makes the mouth bleed, if it is
not

not eat of to a great excess indeed: all agree that they grow after the same manner, bearing all their tufts of leaves, or their crown upon their head; and the Pine-apple rind, that rises and cuts like that of the Melon, and is very fleshy and fibrous, the one as well as the other; this altogether melts into water in the mouth, and is well tasted; that it partakes of the Peach, the Apple, the Quince, and the Muscadine Grape, altogether.

Some, to take away the quality it has of bleeding the gums, and inflaming the throats of such who eat too much, or before they are full ripe, after having paired off the rind, and cut it into slices, they leave it a little while to steep in Spanish wine; and it not only frees the Ananas from ill effect, but it communicates to the wine a most agreeable taste and smell.

The Anana, says Mons. LEMERY, is a very fine East-India fruit, which grows upon a plant like a Fig-tree, and of the size of the Artichoke. This fruit is

adorned on the top with a little crown, and a bunch of red leaves like fire: the rind appears with a shell like those of the Pine-apple, but separate like that of the Melon.

They make a confection of the Ananas upon the spot, which is brought hither whole; this is good to warm and restore a weak and aged constitution.



GREAT

NATURE'S HISTORY



GREAT AMERICAN ANGE



GREAT AMERICAN ALOE.

GREAT AMERICAN ALOE.

THE Aloe is a plant, which has leaves thick, and armed on the edges with spines. The flower consists of one leaf, which has six parts at the top, like the Hyacinth; the fruit is oblong, and divided into three cells; in which are inclosed flat and semicircular seeds. In the curious gardens of Botany in England, there are near forty different sorts, which are natives of both the East and West Indies: but the most curious Aloe is brought from the Cape of Good Hope. Most of the African Aloes produce flowers with us annually, when grown to a sufficient size, which is often in the second, and seldom more than the third or fourth year after planting from off-sets: but the American Aloes, which produce their flower-stems mostly from the centre of the plant, seldom flower until they are of a considerable age, and then but once during the life of the plant; for the flower-stem, shooting

shooting to so high a stature, draws from the centre such a quantity of nourishment as to render the leaves irrecoverably decayed; and when the flowers are full blown, scarcely any of the leaves remain alive but whenever this happens, the old root shoots a numerous quantity of off-sets, by which these plants are not only preserved, but considerably increased.

The accounts of this plant are, like those of many others, rather fabulous. That of its blooming only once in a hundred years, and making a report like a gun, are equally false: for many American Aloes have been known to bloom in much less time. In the year 1729, a great American Aloe flowered at the age of forty years, in a garden belonging to Mr. Cowell, at Hoxton: and of a later date, some have been known to bloom at the distance of twenty years.

Aloe, according to POMET, is a plant that is bigger, more or less, according to the soil it meets with, which

which has given occasion to some people to say, that it rises as high as some of our largest trees; which is not altogether false; for there is found in Spain, especially in the mountains of Sirna Morena, Aloe plants of an excessive height; the leaves whereof are so thick, hard and sharp, that some of them will saw a man asunder: in the middle of the leaves rises a stalk that contains a white seed, extremely light, and half round.

Aloes, says LEMERY, is the thick or concreted juice of a plant, called by the same name, that grows of several sizes, according to the soil and climate; they are to be met with in Spain, and many other hot countries; the leaves proceed from a root that is long, large, very thick, fleshy, firm, indented, sharp on the edges, fat and full of juice: there rises from the middle a large stalk, which carries on its top white flowers deeply flathed in, or divided into six parts, which are succeeded by oblong, or as it were, cylindrical fruit, divided each lengthways into three partitions

partitions full of flat seeds: the root is of the shape of a stake fixed in the ground; all the plant is extremely bitter, and grows in the Southern climes; as Egypt, Arabia, Spain, and America.

The Aloe is divided into three kinds; the Succotrine, the Hepatick, and the Caballine: all the kinds are of a purgative nature.



SENSITIVE.

SENSITIVE PLANT.

THIS plant is very surprising in its contexture, and has caused much investigation among the naturalists, to account for the contraction of its leaves when any of them are touched. They close themselves by pairs, joining their upper superficies together. Aqua-fortis being dropped on the sprig between the leaves was found to cause them to close by pairs successively to the top of each sprig, and to continue in this state some time: but the next day the leaves on two or three sprigs were again expanded, except those on that where the aqua-fortis had been dropped, being withered from the place upwards, although they continued green downwards. A pair being suddenly cut off with scissars, the next pair above and below immediately closed, and after a little time all on the same sprig followed the example, which extended even to those on other sprigs. One of the harder branches being cut, emitted a liquor, which was very clear,

clear, and of a bright greenish colour, bitter in taste, and somewhat resembling that of Liquorice. The above experiments were made by Dr. Hook on some Sensitive plants growing in a garden in St. James's Park.

In the passage of the Isthmus, from Nombre de Dios to Panama, in America, there is related to be a whole wood full of Sensitive plants, which being touched, close their leaves with a rattling noise, and thus twist themselves into a winding figure. MILLER gives us eight species of the *Mimosa* or Sensitive plant.

He further says, that there are some other species of this plant, which grow in the warm parts of America; but those here mentioned, are what I have observed in the English gardens.

The first sort is commonly known by the name of Sensitive Plant, to distinguish it from the others, which
are:

are generally called Humble Plants, because, upon being touched, the pedicle of their leaves falls downward, whereas the leaves of the other sort are only contracted upon the touch.

These plants are all propagated from seeds, which must be sown upon a hot-bed early in the Spring; and when the plants come up, they must be transplanted into small pots filled with light rich earth, and plunged into a fresh hot-bed, observing to water and shade them until they have taken root: after which you must often refresh them with water, and let them have air in proportion to the warmth of the season, always observing to keep the bed in a good temper for heat as also to cover the glasses every night with mats, which will greatly facilitate their growth.

You must also observe to give them a greater share of air, as the season advances in warmth; but you must never expose them to the open air, which will

no

not only retard their growth, but also destroy the sensitive quality; so that I have seen some plants of these kinds, which after having been exposed to the open air a few days, having intirely lost their motion.

The first of these sorts, if duly watered, and preserved in a kindly warmth, will grow, in the compass of one season, to the height of eight or nine feet, and produce greater quantities of flowers; but unless the Autumn proves very favourable, the seeds will seldom ripen; and the plant, being much tenderer than the other sorts, is rarely preserved through the Winter, though placed in the warmest stoves, so that we are obliged to procure the seeds from abroad.



TAMARINDS.

HISTORICAL HISTORY

184



TAMMAMAT



TAMARINDS.

TAMARINDS.

TAMARINDS are sharp acrid fruit, which are brought from the Levant; sometimes in bunches, but more commonly freed from their stalks: the tree which bears them has very small leaves; after which come white flowers, almost like Orange-flowers, from whence arise husks that are green at first, and grow brown as they ripen, when the inhabitants of those parts gather them in clusters, which they dry a little before they are sent hither.

Chuse your Tamarinds fat or oily, fresh, of a jet black, and a sharp pleasant taste, which have not been laid in a cellar, which may be known by their too
great

great moisture, and their smell of the vault; besides, their kernels that are blown up: avoid such as are adulterated with molasses, sugar and vinegar; they are much used in medicine, because of their cooling, purgative quality.

There grows a great many Tamarind-trees at Senega, where the negroes make the fruit into cakes, after they have stoned them, and freed them from their little stalks, which they make use of to quench their thirst: these Tamarind cakes are very scarce in France. They cleanse Tamarinds like Cassia, and with sugar make a confection of it, which is not unpleasant.

Tamarindi is a fruit, says LEMERY, about the length of one's finger, as broad and thick as the thumb, covered with a green bark at the beginning, but that grows brown as it ripens, and is so tender that it easily falls off, or separates; the fruit affords a black, fourish, or sharp pulp, that is grateful to the taste,
and

and that hangs by long fibres, or woody strings, formed in the nature of a bunch: they take this pulp from the seeds or pepins, as they do that of Cassia or Lupins.

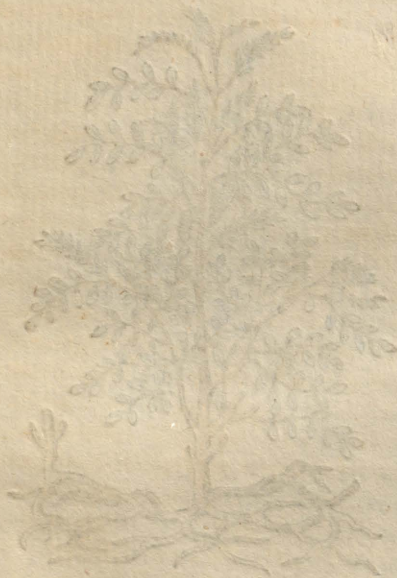
The trunk is large, covered with a thick, ash-coloured bark; the wood is hard, the branches furnished with a great many leaves, like those of the Femelle Fern, long as one's hand, composed of several small leaves, ranged on the side, hard, nervous, or stringy and green, of a pleasant taste; the flowers springing from wings of leaves, joined eight or ten together, like those of the Orange-flower, white coloured, sometimes striped with red veins; the roots are long, large and red: this tree grows in several parts of India, as Cambaya, Senega, &c. The leaves are proper for quenching thirst, and cooling in burning fevers, being taken in decoction.

The Indians separate the Tamarinds from the bark and the bunch, after having dried them a little, as we
have

have them now frequently amongst us, hanging one to another. Choose the newest that are hard as paste, pulpy, black, of a sharpish grateful taste, and vinous smell; they yield a good deal of acid salt, oil and phlegm; are deterfive, gently laxative and astringent; they abate feverish heat, cool and quench thirst; they are given in continual fevers, being taken in decoction, bolus, &c. or a pulp may be made, as of Cassia, dose from an ounce to two; it strengthens the stomach, creates an appetite, resists vomiting, and cuts rough phlegm; an extract is made thus: take Tamarinds, boil them in fair water, strain, clarify with the white of an egg, and thicken by confounding the water to a due consistence; dose from two drams to half an ounce: It cools inflammations of the stomach and liver; is good in catarahs, rheums, eruptions of the skin, salt and sharp humours, St. Anthony's fire, &c.

LIQUORICE.

NATURAL HISTORY



LICHORIS



LIQUORICE.

LIQUORICE.

THE Liquorice is a plant which has clammy leaves, that are green, shining, and half round; the flowers like those of Hyacinth, of a purple colour; from whence come the husks, which make, in some measure, a round ball, wherein the seed is contained.

The Liquorice sold at Paris, is brought thither, by bales, from several parts of Spain, but chiefly from Bayonne and Saragossa side of the country, where that plant grows in abundance. Chuse your Liquorice fresh, of about two inches thick, reddish without, of a gold colour within, easy to cut, and of a sweet agreeable taste: that of Saragossa is the best, and is to be preferred to that of Bayonne, which is greyish without, less, earthy, and of little esteem. As to dry or powdered Liquorice, chuse such as is yellow and dry, and take care to avoid that which comes loose, and is

not brought in bags or bales, which is commonly black, spoiled, and of no virtue. The use of Liquorice is well known.

This plant bears several stalks three or four feet high: the leaves are longish, viscous, green, and shining, disposed into wings like the oak, or the Acacia, ranged in pairs along the side, terminating in a single leaf, of a smart taste, tending to an acrid: the flowers are of the leguminous kind, and purple-coloured, succeeded by short husks, which enclose seeds that are ordinarily of the shape of a little kidney. The roots are large and long, dividing themselves into several branches, some as thick as one's thumb, and others as the finger.

There is another sort of Liquorice, which bears its branches a man's height, carrying long leaves, sharp at the ends, and made like the mastick-tree, green, a little glutinous, and disposed as the former species. The flowers are small and bluish; after which grow fruit,
composed

composed of several husks, which are long and bristled at the points, standing one against another, and joined together almost at the bottom. The roots are long, and as thick as an arm, growing straight in the ground, without any division at all: this grows chiefly in Italy, and is of no kind of use, because the other sort is so much the better both in taste and virtue.

Liquorice is brought to us out of Spain, and many other countries of Europe, but the best is that which grows in England: the best is large, thick, substantial, and of a good length, being of a brightish yellow within. The Spanish is much like the English, save that it dries faster, and is more wrinkled in its bark.



ORANGE-TREE.

THE Orange-tree is not very tall, but has a thick, woody, branched root, which spreads very much, and is of a yellow colour on the inside. The trunk is hard, whitish within, has an agreeable smell, and is covered with a greenish, smooth, white bark. The branches are numerous, flexible, and of a beautiful green, with a few thorns thereon. The leaves are somewhat like broad-leaved laurel, and are always green, thick, smooth, broad, and ending at each end in a point, with a foliated pedicle in the shape of a heart. When held up to the light, there appears to be a sort of holes in them like St. John's-wort. The flowers grow in bunches, and are rosaceous, consisting of five white petals placed in a ring, with many stamina, which have yellow apices, or heads; at the bottom and centre of the cup there is an orbicular placenta, which sustains a roundish pistil with a long tube, that runs into a glo-
bous

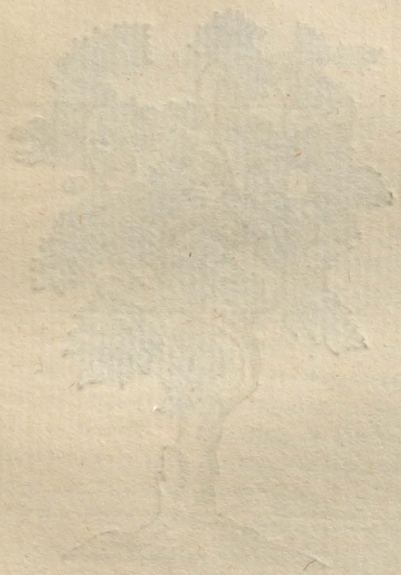
bous fruit, covered with a rind, which is very well known. There are several kinds of Oranges, as the common Seville Orange, the sweet Seville Orange, the China Orange, the curled-leaved Orange, the striped curled-leaved Orange, the horned Orange, the common striped Orange, the Hermaphrodite Orange, the willow-leaved Orange, commonly called the Turkey Orange, the striped Turkey Orange, the Pimple Nose or Shaddock Orange, the double flowered Orange, the common Dwarf or nutmeg Orange, the dwarf striped Orange, the dwarf China Orange, the childing Orange, the distorted Orange, the large warted Orange, the starry Orange, and the Orange with a sweet rind. Many sorts of these Oranges are cultivated in England, though more for curiosity than the fruit they produce; and of late years some of them have been planted against walls, with frames of glass to cover them in the winter. Some curious persons have likewise planted them in the open ground, and have had covers for them, which have been taken away in the summer; by this means the fruit has ripened so well as to be extremely

tremely good for eating. However, in hard winters it is very difficult to preserve them.

Orange-peel is an excellent bitter, especially that of Seville Oranges, which strengthens the stomach, helps digestion, attenuates gross humours, discusses wind, and eases cholic pains proceeding therefrom. It is an ingredient in tinctures, called stomachic bitters, and is now common in taverns, where they mix it with a glass of wine, and drink it before dinner to create an appetite. The essential oil distilled from the rind is also proper for the same uses, when two or three drops are taken upon sugar, as well as the peel when it is candied. The pulp of sweet oranges is cooling, quenches thirst, and excites the appetite; but the juice of four Oranges not only serves to make a cooling drink in hot weather, but is of late found to be excellent against the scurvy.

JACOBUS JACOBUS

11



F 5

LIBRARY OF THE



ALEPPO GALLS.

ALEPPO GALLS.

GALLS are the fruit of a kind of oak, that grows plentifully in the Levant, especially about Aleppo and Tripoli, which are those we call Aleppo and Tripoli Galls: besides they are brought from Smyrna. There are some that grow in France, in Provence and Gascony, but much inferior to those of the Levant, in that they are usually reddish, light, and altogether smooth; and those of the Levant are prickly, from whence they are denominated the prickly Galls, more heavy, blackish, greenish, or whitish. The variety of this fruit is the reason why they are put to different uses. Those of Aleppo and Tripoli are for dying black, and making ink; the white to dye or stain linen, and the light French Galls for dying silk: all the sorts are of some use in physic, especially the more astringent

and styptic they are; being good to draw together, and fasten loose parts, to dry up rheums and other fluxes, especially such as fall upon the gums, almonds of the throat, and other parts of the mouth; used in a decoction of water or wine, they cure diarrhæas, dysenteries, and are good against all weakness of the bowels.

There grows upon a species of oak in Turkey a little reddish fruit, of the bigness of a hazle-nut, called by the Turks, Bazdyendge, whose figure is represented by the impression of the oak. The Levantines, especially those of Aleppo, take a hundred drachms of cochineal, which they call cormeti; fifty drachms of Bazdyendge, and fifty drachms of tartar; and after powdering them all, they make a very fine scarlet. This fruit is very scarce in the other parts of Europe.

Galla, or the Gall-Nut, says LEMERY, is an excrescence which grows upon an oak in the Levant, whose origin

origin proceeds from this, that certain insects bite the tenderest part of the tree, so that an humour flows out into a shell or bladder, which fills and hardens as it grows on. There are several sorts of Galls, that differ according to their size, shape, or colour, by the surface of them being smooth or rugged; they are usually round, and as big as the common nut, some as the filbert, rough or prickly, white, green or black. The best come from Aleppo and Tripoli; chuse the best fed and weightiest.

There are also Galls that grow in Gascony and Provence, which differ as those of the Levant do; they being smooth, light, reddish, and afford a less tincture: they are astringent, and used in several medicinal compositions; as plaisters, ointments, injections, fomentations, &c.

Polypodium, or common Polypody, hath a root taking a very slight and superficial hold of the earth;

it is pithy and brittle, about the third part of an inch thick ; within, it is of a pale green colour, but, outwardly a little reddish, and covered over with fine thin scales when it is fresh and green ; but being dry, it becomes of a more red colour ; it is knotty, or full of round knobs, and adorned with several small filaments like hairs ; its pith is sweetish, with somewhat of a sharp, austere, or styptic taste. The leaves spring out of the knots, or hollow knobs of the roots ; they are single, about nine inches in length, and parted into several jags or scollops, cut close into the ribs ; they are sharp-pointed, of a light green colour, and growing alternately opposite to one another : it bears no flowers, but there arise several small knobs, like blisters, upon the lower or under part of the uppermost jags of the leaves, ranked in a double order ; they are round, and about the sixth part of an inch thick, consisting of a fine dust, that is first a little yellowish, and turns of a bright golden colour : every grain of this dust is a sort of small coffin, or
feed-

seed-vessel, being of a round figure, and membranous, which when ripe breaks into two equal parts, and pours forth several seeds so small, that they can scarcely be discerned by the naked eye.



CITRON-TREE.

THE Citron-tree is called *Malus Medica*, because it was first brought into Europe from Media: it is of a moderate height, with a branched spreading root, yellowish without, and whitish within. The trunk is slender, the wood white and hard, and the bark of a pale green: the boughs are numerous, long, slender, and tough, and the oldest of them are of a light yellowish green, and armed with pale prickles; but those that are more recent, are of a beautiful green. The tops of the branches are tender, and of a brownish red green, as well as the leaves, which are of the size of those of the walnut-tree, generally blunt, but now and then acuminated, and they are three times as long as they are broad: the lower part is not so green as the upper, and the edges are a little serrated. The tree is always clothed with them, both winter and summer; and when they are held up against the sun, they

they appear to have holes in them, like St. John's-wort, or rather, full of transparent specks. The flowers grow on the tops of the branches, and are rosaceous, with fleshy petals, which are generally five in number, and stand almost upright: without, they have a reddish blush, but are white within, and placed in a ring. The calyx is small, and divided into five segments; and under the yellow apex there are a great many stamina; and part of the flowers are fruitful, and part barren. Among the stamina there is a longish pistil, the rudiment of the fruit; and those flowers that are without, never produce any. The shape of the fruit is oblong, but sometimes globous; and some terminate in a point, while others are blunt; the surface is wrinkled and tuberose, and is often nine inches and upwards in length. The size is different, as well as the weight; for some weigh six, nine, and even thirty pounds. The outer rind is tough, thin, bitter, and hot; and the colour is at first green, which turns to that of gold, when ripe: the inner, or white rind, is thick, firm, and sweetish, with a little acidity. Within, it is divided into several cells,
full

full of an acid juice: the seeds are numerous, for sometimes an hundred and fifty have been found therein; they are oblong, half an inch in length, and sharp at both ends; they are bitter; yellow without, covered with a streaked skin, and contain a double white kernel. In hot countries both flowers and fruit may be seen on the tree at the same time, as well in the spring as the autumn; but they are more plentiful in the last.

Citrons are not used as an aliment, but as a sauce; and are cut into small slices, as we do lemons, to garnish the dishes, and to squeeze upon the meat. The acid is very agreeable, excites a weak appetite, and helps digestion, when used moderately. The outward rind, on account of its hardness, is not easy of digestion. It is an excellent remedy against the scurvy, and is a kind of specific to cure that disease, as well as the juice of Oranges and Lemons: when the gums of patients, afflicted with that disease, are ulcerated, this juice will cure them. The juice is also good in burning and malignant fevers, to quench thirst, and to
restrain

restrain the heat and effervescence of the blood. Besides, the juice of Citrons is diuretic, cleanses the kidneys of small gravel, and restrains vomiting, proceeding from bilious humours. The flowers, as well as the leaves, have an exceeding fine refreshing smell; though they will not prevent contagion on this account, as some pretend. The outer yellow bark has also a very fine aromatic smell, because it has a prodigious number of vesicles full of essential oil. Being chewed, it mends the breath, and by its bitterness strengthens the stomach: it powerfully discusses wind, and concocts crude humours in the stomach and intestines. However, the juice is not good in the pleurisy, inflammation of the lungs, spitting of blood, a consumption, and the like.

LEMON-

LEMON-TREE.

THE Lemon-tree has an affinity with the Citron, and is pretty tall, though not very full of branches: the leaves are like those of the Citron-tree, but shorter; and the prickles are more numerous, but less, and venomous. The flowers have much the same smell, and the shape of the fruit is likewise oval, but shorter, and not of so deep a yellow. Likewise the rind is thinner, and they are much fuller of juice, which is more acid, than that of Citrons; upon which account it is thought to be more cooling, and more efficacious in hot diseases: in short, what has been said of the juice of Citrons, may, in most respects, be applied to this.

ANIL,

ANIL, OR INDIGO PLANT.

THE Indigo plant grows about two feet high, with round leaves, of a green, inclining towards a brown on the outside of the leaf, and silver coloured underneath, pretty thick; after which come flowers, almost like those of pease, of a reddish colour, from whence come long, crooked pods, resembling a fickle or hook, which enclose a little seed in them, like the raddish-seed, of an olive colour.

When the Americans sow this plant, they first dress the ground, and afterwards make holes in it about a foot distance one from another, and into each hole they throw ten or twelve grains of the seed, which they cover lightly with earth, and in three or four days

days time this little seed will be sure to appear, especially in a wet season: and in two months, or sometimes in six weeks, this plant will be ready to cut and make Indigo of; and if it is left in the ground three months, it will yield both the flower and seed; but what they fear most, upon account of this plant, is a kind of caterpillar, which in St. Christopher's they find sometimes to breed in a night, and ruin all the promising hopes of the inhabitants: the way they have to remedy this is, immediately to cut down all the plant, and throw it into the fat or tub, with the caterpillars and all, which yet proves of little or no use: the other way to remedy this misfortune, is to clear a large space between what they have eat, and what they have not touched; this havock, nevertheless, is not made in Martinico.

Indigo is a meal or flower made by means of water, and oil-olive, out of the leaves of the Anil, or Indigo-plant; for there is a difference betwixt that made of the leaves, and of the small branches. The choicest
of

of the former fort is that which bears the surname of Serquiffe, from a village of that name, which is twenty-four leagues from Surat, and near Amadabat. It is made likewise about Biana of Indona, and Coffa near Agra, also in the kingdom of Golconda; the Dutch bring it from Brampour and Bengal, but that is the least valuable of all.

When the inhabitants of the places above-named would make the flower or meal of Anil, in order to make Indigo of it: they cut the said herb with a fickle, when the leaves begin to fall upon touching them; and after they have stript them from the branches, they put them into a sufficient quantity of water, which is in a vessel called the steeping vat, there letting them infuse thirty-six hours; after which they turn the cock, in order to let the water run off, which is tinged of a green colour, inclining towards blue, into a vessel of the nature of a churn, which is worked by the labour of several men, by means of a roller, or turner of wood; the ends of which run
pointed,

pointed, and are hooped with iron; this they work till the said water abounds with a lather, then they cast into it a little oil-olive; viz. one pound into such a quantity of the liquor as will yield seventy pounds of Indigo, which is the quantity now sold in one barrel; and as soon as the said oil is thrown in, the lather separates into two parts, so that you may observe a quantity curdled, as milk is when ready to break; then they cease churning, and let it stand to fettle; which when it has done some time, they open the pipe or cock of the churn, in order to let the water clear off, that the meal which is subsided may remain behind, at the bottom of the vessel, like clay or lees of wine. Having decanted it thus, they put it into straining bags of linen, to separate what water was left; then they convey it into chests or boxes that are shallow, to dry it; and being dried, it is what we call Indigo, and that name is given to this, in all appearance, because it comes from India. Sometimes the Indians make their Indigo in a sort of ponds, made in form of a basin, which they prepare with
lime,

time, that becomes of an equal hardness almost to marble.

We have another sort of this Indigo, called Agra Indigo, which is almost as good as the Sequisse; but as the form does not recommend it to all the world, it is only in use with the dyers. There is, besides this, several other sorts of Indigo, which have no other difference, than as to the places where they are made, and according to the different seasons and age of the herb from which they come; for the Indigo, made of the plant of the first gathering, is better than that of the second, and the second better than the third; and the younger the leaf is which is used, the finer the Indigo is, being of a more lively, shining, violet colour.

The use of the Indigo is for the dyers and the whiteners, serving the last to put among their linen to whiten it: the painters use it to grind with white, for painting in blue; or if it is used alone, and neat,
it

it turns black, and ground with yellow it makes a green. Some confectioners and apothecaries very preposterously use this to colour sugars to make conferves with, and fyrup of violets, by adding some Orrice, which they sell at an under rate.



FLORENTINE

FLORENTINE ORRICE.

FLLORENTINE ORRICE is the root of a plant, whose leaves are long, erect, and of a fine beautiful green, after which grow white flowers, as we have been assured by Mr. MORIN, physician to Madame the Duchess of GUISE, a man of great probity, and large experience in simples.

This plant is known in France by the name of Blew-flower-flag, Flower-de-lis, &c. which grows almost every where by the walls, water-fides, and in the gardens, and of which there are several sorts, which many authors have taken notice of; as to the Orrice, or in Latin *Iris*; they say there are flowers of it of various colours, which resemble in some kind the Rainbow, which is called *Iris*. Chuse such of this root as is large, well fed, of a piece, clean, white within

within and without, difficult to break, of a sweet smell like the Violet.

The Dyers, Perfumers, and Confectioners use this in their several trades to give a grateful scent to their several cloths, perfumes, comfits and the like. It has a great many other good qualities, and is of some small use in medicine, being employed in several Galenical compositions. There is a green colour made of it, to which they give the name of Verditer, which is used by the painters in miniature. This Verditer is made several ways, as is described in a little treatise of miniature, which those who desire to make, as well as Carmine, and other fine paints, may have recourse to.



RHUBARB.

RHUBARB.

THE Rhubarb that comes from Persia, some say grows there; others will have it that it comes from the side of Muscovy; but the most common opinion is, that it grows in Persia. Mr. TRAVERNIER, on the other hand, assures us, in his book of travels, that the best Rhubarb grows in, and is brought from the kingdom of Boutan.

This root, newly drawn from the earth, is thick, fibrous, blackish on the outside, and of a reddish colour marbled within: it bears large and woolly leaves, from whence arise little carnation flowers, resembling stars; after which follow the seed. Chuse your Rhubarb new, and that which is in small pieces sticking together, pretty firm and ponderous, of an astringent taste,

taste, and bitter, the smell not disgustful, but rather aromatic, and of a yellow colour, bright on the outside, and somewhat darker within; but such as, when infused in water, will produce a tincture like that of saffron, and, when bruised in a mortar, that the colour within be of a lively reddish cast.

Great virtues are assigned to the Rhubarb, especially for strengthening the stomach, and purging the gall with pleasure, principally if assisted with any other purgative. It is esteemed likewise very serviceable for stopping of bloody-fluxes, and other loosenesses, either chewed in the mouth, or grossly bruised, and infused in any proper vehicle; it is also given to children to destroy worms; and, in short, is an admirable, kindly, and salubrious medicine, as well in age as youth, and the full vigour of years; in all which difference of age or circumstance, duly proportioned and applied, it works friendly to nature, and efficacious to the disease.

The

The scarceness of Pontic Rhubarb from the Levant, hath given leave to some to substitute in its room, among those who have not a perfect knowledge of the other, the roots of the Hippolapathum, or Bastard Rhubarb, like the great common round Dock, which many people cultivate in their gardens; or there is another kind of Bastard Rhubarb, which has great leaves, but less round. The difference of these Rhubarbs are very considerable, for the Pontic from the Levant, is yellow on the inside, and streaked with red on the outside, and the Bastard Rhubarb is black and jagged on the sides, and yellow on the outside without any marbling.

Rhubarb, says LEMERY, is a thick fungous root, which is brought to us dried from Persia and China, where it grows, and sometimes from Turkey, which last is thought by the English merchants to be the best of all, being a sort of middle-sized pieces, smooth, fresh coloured, and of a mixed yellow oaker, of a lively strong smell, firm in cutting, not very hard, or
crusty,

crusty; being chewed, it is of a bitterish sub-astringent taste, giving the spittle a fresh yellowish colour, and a good flavour, not very heavy, nor yet spongy, or rotten within. The next sort of Rhubarb is that which is supposed to be brought from Tartary, Muscovy, and Russia, which is generally large and heavy and more crusty, though many times very fresh and well scented, but nothing near so good as that brought from the Levant.



THE
S C I E N C E
OF
B O T A N Y.

SECRET

SECRET



THE
SCIENCE OF BOTANY
BRIEFLY EXPLAINED.

TO usher our Young Readers into this pleasing and instructive Science, we offer the following Compendium of Botanical Illustrations to their attention, before they proceed to the study of the Flowers which we have shortly described in the following pages.

EVERY science, Botany excepted, possesses a language peculiar to itself. Every person who has pretended to teach

or explain the nature of Plants, has chosen terms to express himself, according to his own caprice, or his particular style of observation. This arbitrary mode of treating Botany, has considerably bewildered the student; and even, sometimes, dissuaded him from pursuing the science with that avidity and pleasure he would otherwise have done. Although the vocabulary of Botany has been always subject to this variation, it has never experienced more innovation than of late years: but, notwithstanding we lament this deficiency of stability in Botanical language, we are happy to find that, sometimes, the alterations have been very judicious amendments of terms falsely used by the ancients: for the modern Botanists have named the plants, from the parts which they contain; while their predecessors have named them from outward appearance, or supposed qualities. Thus are the long terms and denominations, which only perplexed the mind and burdened the memory, abandoned. Conformably to this improvement, Linnæus proposed simple and proper terms, to express, not only the different parts of Plants, but likewise their forms, qualities, situations, directions, and mode of existence,

of

of each part respectively. This method has, in general, been adopted by all succeeding writers in this science.

No method could be so proper for classing Plants, as that adopted by Linnæus; namely, from their sexual difference. This is most natural, and least subject to variation, from the differences being described according to the variation of the stamina in the male, and the pointals in the female parts of a plant.

ACCORDING to modern Botanists, Plants are described as consisting of six parts:---*Radix*, the Root; *Truncus*, the Trunk; *Fulera*, the Support; *Folia*, the Leaves; *Flores*, the Flowers; and *Fructus*, the Fruit.

I. RADIX --- THE ROOT,

IS that part of the Plant which adheres to the ground, from whence it draws its nourishment.

ROOTS are either fibrous, bulbous, or tuberos.

THE *Fibrous Root* is either perpendicular, horizontal, fleshy, as the *Carrot*; hairy, as the roots of *Grass*; or branching.

Bulbous Roots (among which are the *Snow-drop*, *Hyacinth*, and *Tulip*) are either solid, as the *Turnep*; coated, as the *Onion*; scaled, as the *Lily*; double, as the *Orebis*; or clustered, as the *White Saxifrage*.

Tuberous Roots are composed of many fleshy tubes, as the *Garden Ranunculus*; and either adhere closely to the stalk, or suspend from it by threads.

2. TRUNCUS --- THE TRUNK,

RISES immediately from the root, and sustains the branches. This part is called a *Trunk*, in trees, and a *Stalk*, in plants.

STALKS are either simple or compound.

A Simple

A *Simple Stalk* grows singly, from the root to the top, as the Sun-flower; and is distinguished by its being either naked, leafy, upright, as the Larkspur; oblique, twining, pliant, reclining, lying on the ground, as the Nasturtium; creeping, as the Pansey; having roots as long as itself; living several years, or only one year; being woody, shrubby, cylindrical in form, as the Star-flower; having two, three, or more angles; and being streaked, furrowed, or channeled, smooth, rough as the Aster; hairy, or prickly, as the Rose.

A *Branching Stalk* is one that shoots lateral branches as it ascends, as the Wall-flower; and is distinguished by the branches being either irregular, large, numerous, as the Piony; supported, or prolific in leaves, fruit, or flowers, as the Lily of the Valley, and the Jonquil.

A *Compound Stalk* is one soon dividing into branches, as the Flower of Parnassus; and is distinguished by being either forked, having two ranges of branches, or having these ranges subdivided; tubular, like a straw; being entire, branched, uniform, jointed as a Pink, scaly, or with or without leaves.

3. FULCRA --- THE SUPPORT,

IS that part which sustains or defends certain parts of a plant, and is divided into the following ten kinds: the leaf, supporting the flowers, the tendril or clasper, as the Honeyfuckle and Sweet-Pea, the spine, the thorn, the footstalk of the leaf, the footstalk of the flower or fruit, as the Columbine, the general stalk, the gland, and the scale. Each of these have their subdivisions, which we omit, as being too minute for the attention of young students.

4. FOLIA --- LEAVES,

ARE divided into the three classes, of single, compound, and determinate.

SINGLE LEAVES are those which have footstalks supporting only one, as the Cyclamen; and are described according to their circumference, border, surface, summit, and substance.

Their

Their circumference and border are either round, nearly round, oval, reversed oval, oblong, shaped like a wedge, angular, spear-shaped, as the Belvidere, narrow, shaped like an awl, triangular, deltoïde, or having four corners, quinquangular or five-cornered, shaped like a kidney, a heart, a moon, an arrow, or a pifte, divided into two or three parts, formed like a hand, pointed like a wing, jagged, indented as the Tuberoſe, divided or not into parts, ſingly or doubly ſawed, notched, groſſy, ciliated or hairy like an eyelid, lacerated, or ſeemingly torn or bitten, curled, or entire.

Their ſurface is diſtinguiſhed by being either downy, ſoft as velvet; hairy, as the Fox-glove; ſtinging, rough; ſmooth, as the Daiſy; briftly, prickly, warted, poliſhed, plaited, waved, wrinkled; veined, as the Gilliſflower or Carnation; nerveſe; plain, as the Auricula flower; depreſſed, compressed, convex, concave, or channeled.

Their ſummit or top, is either truncated, blunt, as if bitten, hollow, obtuſe, pointed as the Amaranthus, ſhaped like an awl, or taper like a pillar.

Their substance is either hollow, fleshy, or membranous, as Pinks.

COMPOUND LEAVES are either simple or decompound.

A compound leaf is formed of several small leaves growing from one footstalk, and is considered as one whole, produced from a single composition, as the Ranunculus, Rose, Carnation, Pink, &c. They are either fingered, composed of two, three, or many leaves, resembling wings, expanding from their common footstalk, and having alternate leaves, or being doubly winged.

A decompound leaf has a footstalk, dividing twice or more times before it is garnished with leaves.

DETERMINATE LEAVES are distinguished by their direction, place, insertion, or situation.

The direction is the manner in which the leaf expands from the bottom to the top, and is either arched, upright, spreading, horizontal, reclining, or revolving backwards.

The place is determined by the part of the plant where it is fastened, and is either called the seed-leaf, from rising immediately from the seed, or radical, from rising first from the root.

The insertion is the manner in which a leaf is fastened to a plant, and is either fastened to the disk, or has a foot-stalk to its base, grows from the branch without a foot-stalk, is fastened by a membrane, or furrounds the stalk without any part of the border adhering to it, like the Hare's-ear.

The situation is considered from the position of each, in relation to the others. The situation is, therefore, either jointed, furrounding the stalks like stars, opposed to each other, as the Jessamine; growing in an alternate position on each side their footstalk, or without any order; clustered, as the flowers of the Sweet William; ranged like tiles of a house, or the scales of a fish.

5. FLORES --- THE FLOWERS.

THE Flowers of Plants are divided into four parts: *Calyx*, the Cup; *Corolla*, the Petal, or Flower-leaf; *Stamina*, the Stamen; and *Pistillum*, the Pointal.

THE CUP OF THE FLOWER is that which incloses and sustains the flower; and is divided into seven sorts; the *Perianthium*, *Involucrum*, *Spatha*, *Gluma*, *Amentum*, *Calytra*, and *Volva*.

THE *Perianthium* is the most common of the Flower-cup; consists often of many parts, sometimes of only one part, separated half way into several divisions, as the India Pink, and always surrounds the bottom of the flower.

THE *Involucrum* embraces many flowers collected together, and which have each of them a *Perianthium*.

THE *Spatha* is a sheath, which covers one or more flowers that are generally without a *Perianthium*; it consists of
a mem-

a membrane, fastened to the stalk; and differs in its figure and substance.

Gluma is a sort of chaff, which particularly covers grain and grass seeds.

THE *Iulus*, or *Amentum*, is a mass of male or female flowers, covered with small scales, and fastened to an axis, in the form of a rope, as the irregular flowers of the Violet.

THE *Calyptra*, or *coif*, is a thin, conical, membranous cover, to the parts which generate fruitage.

THE *Volva*, or *purse*, is a thick covering, inclosing several species of the Mushroom productions.

THE COROLLA, Petal or flower-leaf, is one of those which form the flower, and surround the generative parts of the plant itself. Of these, there are the *Petal*, and the *Nectarium*: they are either entirely one, as the *Convulvulus*, or formed of many pieces. The petal is generally distinguished by the beauty of its colour, and the
nectarium

nectarium by containing those sweet juices which the bees change into honey. The Corolla is sometimes without a footstalk, as the Martegon,

THE STAMEN is the male part of flowers, and consists of the *filament* and the summit or *anthera*, as the Passion-flower.

THE *Filament* sustains the anthera, apex, or summit, and is either formed like a thread, or shaped like an awl.

THE *Anthera*, *Apex*, or *Summit*, is the essential part of the stamina, and contains the male organ of generation. It consists of a little bag, of one or more cavities, containing the male farina.

THE POINTAL includes the female parts of flowers, and consists of the *germ*, *style*, and *stigma*.

THE *Germ* incloses and defends the seeds.

THE *Style* rises from the germ, and supports the stigma.

THE

THE *Stigma* is the female organ of generation, and is situated upon the top of the style, if any; if not, it sits upon the germ.

6. FRUCTUS --- THE FRUIT.

THE different species of fruit, such as Plums, Berries, Apples, Seeds, &c. are too well known to require a description.

THE C L A S S E S.

FLOWERS are either hermaphrodite, from having both the sexual distinctions of male and female, *stamina* and *pointals*; male, from having *stamina* only; or female, from having only *pointals*.

THE *stamina* are either detached from each other, united together by one of their parts, or joined sometimes with *pointals*: they are of equal length, or have some shorter than the rest; and the number, proportion, and situation of the *stamina*, determine the *classes*, as the differences of the *pointals* determine the *orders* of flowers.

THE

THE Classes, according to the number of stamina in the male parts of the flower, are called,

1. *Monandria*, one stamen.
2. *Diandria*, two stamina.
3. *Triandria*, three.
4. *Tetrandria*, four.
5. *Pentandria*, five.
6. *Hexandria*, six.
7. *Heptandria*, seven.
8. *Octandria*, eight.
9. *Enneandria*, nine.
10. *Decandria*, ten.
11. *Dodecandria*, eleven.
12. *Icosandria*, when more than twelve.
13. *Polyandria*, when more than thirteen.

THOSE flowers which have two stamina shorter than the rest, are called,

14. *Dynamia*, as having two long and two shorter stamina.
15. *Tetradynamia*, as having four long and two shorter stamina.

THOSE

THOSE flowers which have their stamina united together, or with the pointal, are thus distinguished.

16. *Monadelphica*, stamina united into one body.
17. *Diadelphica*, stamina into two bodies.
18. *Polyadelphica*, stamina into three or more bodies.
19. *Syngenesia*, the stamina forming a cylindrical body.
20. *Gynandria*, the stamina fitting upon the pointals.

THOSE plants of different figures are thus distinguished.

21. *Monoecia*: the plants of this class have male and female flowers upon the same individual.
22. *Dioecia*, have male and female flowers on different individuals.
23. *Polygamia*, have hermaphrodite flowers upon the same individual.

ORDERS.

O R D E R S.

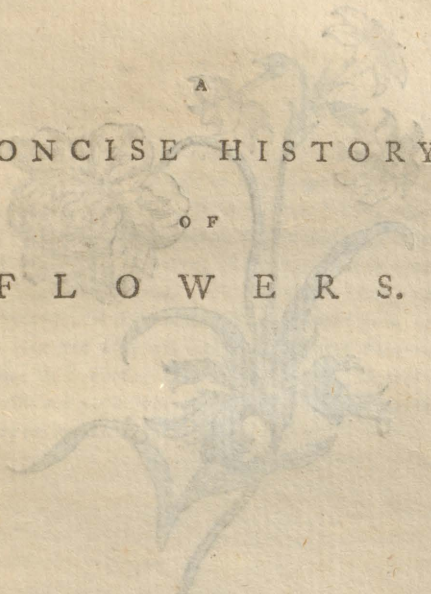
THE Orders, or Subdivisions of the Classes, are distinguished by the pointals, or female parts of the plant or flower, as the classes are by the stamina, or male parts of the flower. The number of pointals or stigmas are counted,

THE chief distinctions are the number of pointals, and nature of seeds, the nature of the pods, and the number and gender of the florets. According to the number of the pointals, the orders are termed Monogynia, Digynia, &c. according to the nature of the seeds, Gymnospermia, Angiospermia; according to the pods, Siliculosa, Siliquosa; and, according to the number and gender of the florets, they are termed Polygamia *Æqualis*, Polygamia *Superflua*, &c.

JONQUIL.

ATLANTIC HISTORICAL SOCIETY

A
CONCISE HISTORY
OF
FLOWERS.

A faint, light blue illustration of a flowering plant, possibly a rose or a similar species, is centered on the page behind the title. The drawing shows a stem with several leaves and a large, detailed flower head.



J O N Q U I L.

THIS charming flower comes, with all its graces, to deck the spring: it consists of several species; but the Great Jonquil has a stem, about a foot in height, which bears, from a third part upwards, several golden blossoms, consisting of five or six leaves, all curling in a most agreeable and beautiful manner. It is multiplied by seed; but, more properly, by their bulbs. They require a good, but not a very rich soil; and are usually planted along the borders; thus affording a most agreeable embellishment to the walks and parterres of any garden, meant to be distinguished for its taste and elegance.

NARCISSUS.



N A R C I S S U S.

THE Narcissus, or Daffodil, of which there is a great variety, may properly be classed with the foregoing beautiful flower. It is pretty common in many of the gardens near London, and produces only one single white flower on the top of the stalk, which turns on one side, and has a purple rim to the cup in the middle: it flowers the latter end of April and beginning of May, and is very hardy.

THERE is a species of the Narcissus, originally discovered at La Vera Cruz, which leaves like those of the Jonquil, and produce but one flower on each stalk. It is propagated

propagated by off-fets; but, being very tender, it must be preserved in the bark-stove, and treated after the same manner as the tender kinds of Lilio Narcissus, otherwise they will not thrive in this country.

FRITILLARY

IS a plant that has a stem about a foot high, round, smooth, and of a deep-green colour. It is garnished with about six or seven leaves, placed irregularly, and which are long and narrow. At the top of the stem grow one or two flowers, hanging down in the shape of a bell: these are speckled with several colours, and are composed of six leaves. The colours, being placed in the form of a chess-board, have caused this plant to be called the Fritillary, from *Fretillus*, which signifies a chess-board. They are multiplied by bulbs and-seeds. The bulbs are planted in September, and should be placed three inches deep, and at the same distance from each other.

ANEMONE.



A N E M O N E.

THIS beautiful flower, with proper culture, will blow twice a year; and thus continue to grace our gardens, when they are abandoned by all the rest of the flowering tribe. Their colours are chiefly red, blue, and purple. The roots of these plants should be taken out of the ground, and preserved, like those of the Ranunculus.

WHEN the seeds crack, or shew their down, they should be gathered, to prevent their being dispersed by the wind. From these seeds, innumerable varieties may be raised: and if they are sown in February, and lightly covered with earth, they will blow the second year after sowing.

THERE

THERE is a great variety of these flowers preserved in the gardens of the curious, which are commonly divided into two classes; viz. the broad and narrow-leaved sorts: under each of these divisions there are great numbers, differing in shape, colour, or size of the flower; the particulars of which would be tiresome to the reader, and of little use.

THE best season for planting these roots is from the latter end of September till the end of October, observing, if possible, to perform this work at or near the time of some gentle showers; for, should they be planted when the ground is perfectly dry, and there should no rain fall for three weeks or a month after, the roots will be apt to grow mouldy upon the crown; and if they once get this distemper, they seldom thrive afterwards.

WALL-



WALLFLOWER

IS called by some the Yellow Gillyflower. It consists of both single and double flowering kinds. It shoots out leaves of a dark green colour, which are pointed at the end: between these leaves grow several branchy stalks; on the top of which appear the flowers, composed of four, and sometimes more leaves, of a yellow colour. The single Wallflower is multiplied by seed, and the double by layers or slips.

THIS

THIS flower will grow every where; even upon walls, or among rubbish; but, when cultivated, more care should be taken of them, as they will prove an agreeable ornament to borders, or any other parts of a garden not destined for more choice flowers.

BLUE - BELL.

THE Blue-Bell plant shoots forth stalks two feet and a half high, which are hairy, and furnished with leaves: these are oblong, broad, and pointed at the end, notched at the edges, and downy: along these stalks, and at the stems of the leaves, the flowers grow, in form of bells: these blossoms are blue, notched at the brims, and divided into four parts; each is supported by a calyx, or little cup, divided likewise into five parts. This flower delights much in the soil of a kitchen garden. It is multiplied by sowing the seed, as thinly as possible, on the end of a plot, well dug, and smoothed on the surface. The time of sowing is September and October, and that of flowering is July.

FOXGLOVE.



FOXGLOVE

IS a large flower, resembling a thimble worn on the finger: from the root grows a stalk, two, and sometimes three feet high; and is hairy, and of a reddish colour: the leaves are oblong, and pointed at the end; covered with a little hair; indented on the edges: the outside is a brownish green, and the inside of a silvery white. On one side of the chief stem sprout several footstalks, which support single flowers that are wide at top, and are cut
 inge.

into two lines: their colour is generally purple, although they have sometimes a mixture of hues. In the middle of the cup is a chive, which adheres to the hind part of the flower. A light soil agrees best with this plant. The seed, being very small, should be thinly sown in September. Foxgloves flower in June. Being tall plants, they are only adapted for the borders of beds, where the larger species of flowers are set or planted.





H E A R T ' S - E A S E .

THIS flower, by the Latins, is called *Viola Tricolor*, from being adorned with three colours. It bears stems, which have a tendency to creep along the ground; and are full of leaves, and rather oblong: the stems branch into boughs; at the top of which grow the flowers, which are placed under the species of Violets, composed of five leaves, from bearing a cup divided into five parts: each flower is white, blue, and yellow-coloured. It is multiplied by seed, sown in beds as thinly as possible. When sufficiently

sufficiently raised, it is removed into pots, where it makes a more agreeable appearance than it does in its native humble situation, where it is lost and overlooked, like modest merit, amid its greater and more splendid neighbours.



LILY.



L I L Y.

THIS flower is a great ornament to a garden. The noble height of its stem, and the simple grandeur of the flower, render it a most delightful spectacle to those who have the least taste for the beautiful productions of Nature. The Lily is too well known, and admired, to require any particular description of its form or colour. The culture requires no curious rules, from its being easily reared in any soil; and, as if Nature meant this charming flower should be enjoyed by the poor, as well as the rich, we find it thrive with the least attention. Such is the beauty of the Lily, that many Noblemen place them in pots, in order to decorate the avenues to their sumptuous palaces.

SOME

SOME garden-walks are entirely bordered with them: and, indeed, wherever they are placed, they are always beautiful.

LARKSPUR.

THE Larkspur is one of those flowers that seem to delight in displaying the variety of colours with which the flowers of each stem are decorated. They grow on stalks of three feet high; and, when choicely reared, afford, in a bed, one of the most beautiful spectacles that Flora has to present, for our delight, wonder, and contemplation. It is generally sown in February; and may be expected to blossom, in all its richness of splendid beauty and elegance, in June and July. If properly attended, they will continue their bloom until August or September.



DAFFODIL, OR LONG-NECKED NARCISSUS,

WHICH is called *Cou de Chameau*, i. e. Camel's Neck, from the long stalk, when charged with flowers, representing the neck of this animal. This flower is to be admired for its being an agreeable ornament to the rural parts of a garden. They blossom in the spring, and grow about a foot high. The Daffodil thrives best in a rich soil, with which the bulbs need only be covered: it should not be much exposed to the sun, from the flower deriving most beauty from the lateness of its appearance. The bulbs should be set about four fingers distant from each other, in order to afford sufficient room for their expansion. It should be removed every three years. They flower in March.

COLCHICUM,

COLCHICUM, OR MEADOW SAFFRON,

IS so called, from its growing in Colchis, a country in the neighbourhood of the kingdom of Pontus, famous for the fable of the Golden Apples, and the Golden Fleece: see our Mythology, Vol. I. of the Historical Pocket Library. It is said to be so strong a poison, as to kill dogs, from which quality it is called Dog's-bane. Of the Meadow Saffron there is a variety of species. Its general description is, being a plant that shoots from its root five or six oblong leaves, about an inch broad, smooth, and of a brownish green. Amid these leaves rises the stalk, bearing at the top a yellow, single-leaved flower, like a pipe, and cut into six parts. The Colchicum will grow in any soil. It is multiplied by bulbs, which are produced every year in abundance. They should be planted in pots or borders, and transplanted in July; in which state they should lie until September. They flower in March.



POLYANTHUS.

IS divided into the Primrose and Cowslip kind; and these are subdivided again into the Single-flowering, Double-flowering, Hose in Hose, Pentaloons, and Feathers. The Single-flowering are chiefly [white, yellow, red, purple, and violet-coloured. They are multiplied by seeds, sown in February, upon a place prepared with earth taken out of decayed willows; often refreshing the new-sown spot with water; and keeping it shaded from the sun, all April and May, until the young plants appear. The Primrose kinds blossom close to the ground; and the Cowslip species, about six inches higher. Both these sorts may be planted near the edges of borders, and near houses, for the enjoyment
of

of their agreeable smell. Nothing can be more delightful than a number of these flowers, accompanied with Violets, growing under hedges, in avenues, and artificial wildernesses. They flower in April.

P E R S I C A R I A

HAS a towering stem, about five feet and a half high, resembling a Sugar-cane, which, towards the bottom, is garnished with several large green leaves, like those of the Lilac. It has a garnet blossom, which grows in the form of a feather, that hangs from their stems with considerable grace and beauty. They are cultivated in most gardens distinguished for their choice assemblage of elegant flowers. Their time of blossoming is during the summer months, when the parterres of those gardens in which they are cultivated, derive considerable ornament from their beautiful appearance.

H 3

PINK.



P I N K.

THIS plant shoots long, strait, thick, hard leaves, of a blueish green. In the middle rises the stem, long, round, and jointed at a certain distance: on the top of this the flowers grow, consisting of several variegated leaves, supported by a hollow membraneous cup. Such is reckoned the beauty of this flower, that it has been the first study of the most eminent gardeners, to raise them in the greatest perfection. Volumes have been written on their cultivation;

vation; and, as the flower is so well known, we shall only add, that Pinks are set indifferently, either in open ground, upon beds, in earthen pots, or in tubs, in Autumn, or the month of March. They are one of the chief ornaments of all gardens; and are remarkable for the variety, beauty, and excellence of the flowers.

A U S T R I A N R O S E.

THIS plant has, like other Roses, a prickly stalk, which is garnished with winged leaves of an oval form, and their lobes sawed. The flower consists of petals that are indented at the top, and which have one side red, and the other yellow. It being a shrub, it may be propagated from the suckers that grow from the root, or from the offsets, either in spring or autumn. It blossoms during the months of July and August. Although this flower is much cultivated, yet Miller observes, that it is only an accidental variety of the Rose, considered as a genus. Among the many species of Roses, this is cultivated as one of the most valuable embellishments of a shrubbery.



R O S E.

ALTHOUGH Roses are generally ranked among flowering shrubs, yet, as they are reckoned the greatest ornaments of an English garden, and are the chief beauty of any assemblage of flowers, we have placed, in this short Description of Flowers, the following concise account of them.

As a general description of the many sorts of Roses;— they grow on shrubs, that shoot forth hard, woody, thorny branches; with oblong leaves, indented, and armed with prickles.

prickles. On these branches grow the flowers, consisting of leaves, in a round form; their cups are leafy, and turn to round, or oblong, pulpy berries. The Pale Rose is fair, large, of a carnation colour, and possesses an agreeable smell and appearance. The Damask Rose is small, white, single or double, with a musky scent. The Common White Rose is large and beautiful, and remarkable for being, with the Red Rose, worn as the distinction of the Houses of York and Lancaster. The Yellow Rose has broad leaves, of a lemon colour, without smell. The Monthly Rose is like the Damask, and has red flowers, growing in bunches. The Striped Rose has white and red streaked leaves: and the Moss Rose is so called, from the stem and outward leaves appearing to be covered with moss, in a manner that appears singularly beautiful.

THE Wild Virginian Rose, with a larger pale flower, the American Musk Rose, with a smaller flower, and the most sweet-scented American late-flowering Rose, grow wild in the woods of North-America, from whence their seeds have been sent to England, and great numbers of the plants have been raised. They are very hardy, and may

be planted in any situation, but they love a moist soil. They may be propagated by layers or suckers, in the same manner as the common sorts of Roses; and being intermixed with them, they will add to the variety. There is some variation in the colour of the flowers of these sorts, which has arisen from the seeds which were brought over, as it frequently happens with all the other sorts of Roses; for, of late years, since some curious persons have sowed the seeds of Roses, there have been many new varieties obtained, some of which are very double, and of beautiful colours. Weston says there are upwards of five hundred different sorts of Roses, one or other of the species of which is in flower above five months.

JESSAMINE.



J E S S A M I N E .

ALTHOUGH all the species of Jessamines grow in a very irregular form, and are never submitted to the pruning-knife, they are a beautiful ornament to any garden. Of the Jessamine, there are too many sorts to be here described; we shall therefore confine ourselves to the Common Jessamine, which is so great a decoration to the cottages of our peafants, as well as the gardens of our nobility. It is a shrub that shoots forth several small branches; which are adorned with leaves oblong, pointed, placed in pairs along each branch, which terminates with a single leaf: at the end of the branches grow the blossoms, in form of umbrellas, consisting of five delicate white leaves, which possess a most agreeable smell. When

the Jessamine is in bloom, nothing can be more pleasing than the contrast of the green ground with the starry flowers with which it is so numerously studded.

CARNATION.

THESE are called, by the Greeks and Romans, the White Violet, from being of the same species with respect to the flowers. The Gillyflower is reckoned one of the most principal ornaments of our gardens. The variety and great number of its flowers seem to have acquired it this distinction. The leaves of the stem resemble those of Sage: from the middle of the root, the stem rises about eighteen inches, and then runs into several branches, tufted with beautiful flowers, composed of four leaves, in the form of a cross, which have a most fragrant smell. This plant is raised from seed being sown in March, on hot-beds, in small drills, drawn across each other: the seed being sown, is covered, with the hands, as lightly as possible. When the plants appear, they must be secured from the frost by glasses, matting, or dry dung. Among the Gillyflowers are ranked what are commonly called the Carnation, Old Blowers, &c.

PASSION-



PASSION FLOWER.

THIS flower cannot be esteemed less than a miracle, since God has thought proper to describe on it the principal emblems of the death and passion of our Saviour. The leaves are pointed, like a crown of thorns: the whiteness of the leaves represents the innocence of Christ; the red strings are emblems of his being scourged; and the little column, in the middle of the flower, is thought by Divines to be the figure of the pillar to which our Saviour was bound: another part represents the sponge; and the stamens, growing over the pillar, remind us of the three nails with which he was nailed to the cross: and, in a word, the pointed leaves raise a perfect idea
of

of the spear with which his sacred side was pierced. This most curious flower grows in all sorts of ground, especially in a soil inclinable to moist rather than light: it is multiplied by roots set three inches deep. As the roots spread considerably, care should be taken to prevent their injuring the roots of other neighbouring flowers.

AMARANTHUS

Is a plant that has, rising from its root, leaves that are large, pointed, of a brownish green, bordered with red. From the centre of these leaves grows a stem about eighteen inches high, of a red colour, bearing flowers either of a violet, purple, crimson, orange, red, or scarlet colour. From the beauty and simplicity of these colours, the Amaranthus is always esteemed as a most valuable appendage to a garden. The seed, which is remarkably small, curious, and beautiful, is preserved in little boxes
until

until the winter. These flowers appear graceful in pots filled with kitchen-garden earth and bed mould. If watered constantly and carefully, they will grow, in this state, to a fine size, and will make a most beautiful appearance: and, as the flowers continue a considerable time, and flourish when other flowers are scarce, the *Amaranthus* is considered as no inconsiderable part of an elegant garden.



RANUNCULUS.

THE Ranunculus, next to the Tulip, is desirable for its beauty. There are several sorts of them imported every year from Turkey. This plant blooms in April and May, upon stalks about six or eight inches high. The double-flowering sorts are crowded with petals, like the Province Rose flower. The colours of them are deep scarlet, veined with green and golden hues, yellow tipped with red, white spotted with red, orange colours, plain white, yellow with black, and one sort of a peach-bloom colour. The single Ranunculus blows somewhat taller than the double, and is most agreeably variegated with pleasant colours. They are both increased by offsets, found about the roots, after taken from the ground. They may likewise be propagated from seed, saved from the single blossoms. But we are indebted greatly to the French for them, in consequence of our climate being too cold for their culture.



D A I S Y.

THE Daisy, being of an agreeable aspect, was called by the Romans, *Bellis*, from *Bellus*, *i. e.* handsome. The Daisy has small, oblong, smooth leaves, both indented, and otherwise: in the middle of these leaves rise little, long stalks, tufted with a radiated flower, which is sometimes white, red, and variegated.

The Daisy, for its simplicity of beauty, and being the early grace of our banks and meadows, has been ever, and justly, one of the most charming subjects of pastoral poetry. To gather them, is the first pleasure of lisping infancy; and to view them, is the first delight of the humble cottager. Although this plant produces seed, yet

yet those who cultivate them in their gardens, replant the split roots. It grows very low; and is a most proper and beautiful border, either in the flower or kitchen garden.

T U B E R O S E

IS a sort of Hyacinth, called *Hyacinthus Indicus*. Although this plant is brought from such a distance as Asia, yet it is now plentiful in most parts of Europe. The *Tuberose* has, growing from its roots, several leaves, about six inches long, strait, and pointed at the end. In the middle grows a stem, to the height of three or four feet, and about half an inch in diameter. On the top of the stem grow the flowers, like Lilies, single-leaved, shaped like a pipe, indented, and looking like a bell. The flowers blow successively, which causes the *Tuberose* to continue long in blossom. So sweet is their odour, that they perfume the place wherein they are set. This plant, if set in May, will flower in Autumn. They should be placed where the sun is hottest. They will be found a greater ornament to windows than to parterres.

SNOW-



S N O W D R O P.

ONE of the first offerings which Flora displays on the shrine of Nature, is the Snowdrop. Pallid like the cheek of Spring, are its leaves; and, like the season in which it appears, its blossom hangs languid on the verdant stem. The flower is composed of six leaves, which together form a blossom, similar in shape to a bell: the odour is as grateful as the colour is delicate. The Snowdrop being a bulbous plant, is raised from its root, and is generally ranged with the Narcissus. Although it is a common flower, yet such is its beauty, simplicity, and cheering appearance, that it generally accompanies the Crocus in all parterres distinguished for their variety or their elegance.

SWEET-

SWEET-WILLIAM.

THERE are two sorts of this plant, consisting of single and double flowers. The single sort only differs in the colour of the flower: the one has branches of blossoms variegated with red and white; the other has clusters of deep crimson-coloured flowers. They both blossom in June and July, upon stalks two feet high. The double sort produces its beautiful red flowers in the same months, but upon shorter stems. The single-flowered Sweet-William may be raised from seeds sown in March or April: if planted in a loamy soil, they will thrive the best. The others may be also increased by the same means, or if they are laid down in the earth like Carnation layers.

CYCLAMEN.



C Y C L A M E N .

THE Cyclamen is so called in Latin, French, and English, from the root being almost round. It is a plant that produces from the root, leaves that are broad, almost round, of a dark green colour, speckled on the outside, and with purple on the inside: in the middle grow long pedicles, and at the top of which are the single-leaved flowers, dividing into five parts, folding inwards. Autumnal Cyclamens bear a red flower, sweetly scented.

In

In this season, blows one called the Constantinople Cyclamen, which bears the first year twenty flowers; the second, fifty; and the third, two hundred and all without the least smell. The Cyclamen is raised by seeds. The Autumn Cyclamen should be sown in Autumn, and the Spring Cyclamen in the Spring.

SCARLET LYCHNIS.

THE beauty of this plant is such, as to cause it to be ranked among the most elegant parterres. Both the Single and Double Lychnis are very delightful in appearance: they bear bunches of scarlet flowers, upon stalks above two feet high, in June and July. They are so greatly esteemed, that gardeners rear them in pots, to decorate the most beautiful parts of their garden, or to be placed, in the Summer season, in chimnies, where they prove a most pleasant ornament. The double kind is increased by slips taken from the root in March. The double flowering kind may be propagated by the same means, or raised in March, from seeds, which blossom the first year. An open situation, and a light soil, are most proper for their cultivation.

CROCUS.



C R O C U S.

THIS early flower, as if anxious to share with the Snowdrop in cheering the departing gloom of Winter, appears in January and February, but not to be a mere spectacle of beauty: it produces a most useful substance, which is saffron. The shape of the flower resembles the Lily, and possesses an agreeable scent. Considering its cheerful aspect, when few flowers appear, and its producing so valuable an essence, it is rather a wonder it should not be more cultivated in our gardens. The true Crocus is rather to be multiplied by the root than by its seed. It requires a rich soil, and ought to be planted in a ground exposed to the fostering rays of the sun.

COLUMBINE.

C O L U M B I N E.

THIS plant is called *Aquilegia*, from *Aquila*, an Eagle, in consequence of the leaves of its flower being hooked like the beak and talons of that bird. The Columbine shoots indented leaves of a blueish green, and growing to long stalks. In the middle rises a stem of eighteen inches long, which is slender, and of a reddish colour: from this stem sprout several little sprigs, which support a flower composed of five flat and five hollow leaves, coloured with red, blue, white, chesnut, and carnation. Columbines require a rich soil, and are cultivated by sowing the seed very thinly in September, in beds well dug, where it remains until the plants are ready to be removed to the plots of a parterre. The Columbine is one of those lasting plants which is kept alive by its roots, and will live a long time in the earth without requiring to be sown again.

COLUMBINE

DOUBLE



D O U B L E M A R Y G O L D.

THIS plant has been admitted into our gardens, from the richness of the colour, and the beautiful form of the numerous leaves. Nothing can be more splendid than their golden hue. With respect to the disposition of the leaves, they seem as if Flora had particularly disposed them into the form of a crown, for her own embellishment. The leaves are not only beautiful in themselves, but they are allowed, by physicians and botanists, to possess great medicinal virtues: they are said to cheer the spirits, by their infusion, as much as they cheer the sight by their appearance. Their flavour is likewise so agreeable,

able, as to have caused it to be mixed among the herbs that are usually boiled in our broths and soups. Thus, after delighting us in the parterre, they heighten the delicacies of our table.

B E L V I D E R E.

FROM the leaves of this plant, resembling those of Flax, it is called in Latin, *Linaria*, from *Linus*, which signifies Flax. It rises into several stems, two, three, or four feet high; and shoots into many branches, garnished with stait, oblong leaves, of a light-green colour. At the extremities of these boughs appear single flowers, with irregular leaves. These plants are of use in little courts, where they are set two feet distant from each other, in borders raised for the purpose; or in pots, placed in symmetrical order. The Belvidere is multiplied by seed, sown in plain ground, in any part of a nursery; from whence it is removed, as soon as it is strong enough to be replanted. As the air injures the root, it should be replanted the moment it is taken from its native soil, and watered immediately.

PRIMROSE.



P R I M R O S E.

THIS flower very early graces the lap of Nature. Its golden leaves are frequently seen rising from the snowy beds. So welcome is this flower to man, that it is frequently reared in pots; which are placed to adorn our windows, when scarcely any other verdure is to be seen abroad. When planted, it should be placed in good garden mould, and in a warm situation, among the smallest flowers, or else to edge the compartments of our parterres with its golden tiffues. As no flower is more cheering, or agreeable to the sight, we find it generally grace our most choice and beautiful gardens.

FLOWER

FLOWER OF PARNASSUS.

THIS plant is called Parnassus, or Gramen Parnassi, by the Botanists, from its being found on the Mountain of Parnassus. It bears leaves very like those of the Violet: from amidst these leaves rise several stems, about six inches high: on the top is a rosy flower, composed of several unequal leaves, fringed, and disposed in a circle. This plant is annual, and consequently multiplied by seed, which should not be thrown too thick. It thrives best in a fat, moist earth; and is cultivated like those other plants that are sown in hot-beds in March, and which are consequently to be secured from the cold by glasses, straw, or matting. This flower is not only a great beauty in parterres, but in pots, or very large tubs, where it appears to equal advantage.

FLOWER

LILY



LILY OF THE VALLEY.

MANY are surpris'd that this plant should be call'd a Lily, as the blossom has not the least resemblance to that flower. Of this plant there are two sorts; the white and the large-leaved Lily. The first has a stem a foot high, bearing three long, large, smooth, green leaves: the stem, from the middle upwards, is adorned with flowers almost round, white, very fragrant, and fastened to a small sprig. The second only differs from the first in having red flowers inclining to white, and not having so agreeable a scent. The Lily of the Valley is only multiplied by slips taken from the plant and roots. This plant, first arising in a valley, thrives no where so well as in shady places; for which reason, it is never set in the walks, but in some private part of the garden, where it is reared for the sake of its flowers.

SUN-



SUNFLOWER.

THIS plant is called Torn-Sol, by the Italians, which signifies turning towards the sun: it is therefore called Turnsole by several of our botanists. The cause of its turning towards the sun, is from the flower being heavy, and consequently inclining the stem to that position it is liable to, from being warped by the rays of this luminary.

The Sunflowers are of two sorts: one produces a stem between five and six feet high, which is very strait and branchless, with leaves nearly as large as those of the Vine, jagged, pointed, and rough: on the top of this stem

stem appear the flowers, resembling the fan. Care should be taken in what part of a garden it is planted, lest it should choke the flowers growing near it. The places most proper, are the broad allies planted with trees, and between which the Turn-sol may be planted at three feet distance.





I N D I A N P I N K.

ALTHOUGH this plant has a strong smell, yet it is raised in our gardens, for its beautiful flower. The Indian Pink shoots into a stem, about eighteen inches high, and then divides into several branches, full of leaves, indented and pointed. At the extremity of each bough, appear radiated flowers, round, composed of several well-formed leaves, which are of a yellow colour. The disk consists of several flourishes, divided into many parts. These flowers have likewise crowns, composed of half-flourishes, placed in a cup, of one leaf. The Indian Pink requires much the same management as the female Balsam Apple. The cold injures them very materially.

This

This plant is very proper in all the compartments of our parterres: but they should not be placed among plants of the smaller size, nor in the middle of beds; for, by such a situation, the great beauty of these Pinks would be lost to the spectator.





A S T E R.

OF this flower there is a great variety to be seen in the gardens of the curious botanists, ten of the most beautiful of which are described by Miller as very proper ornaments in borders of large gardens, when few other flowers are in beauty.

THOUGH these flowers are very proper in large gardens, where they may have room, yet in small places they are very apt to over-run whatever is planted near them; and the seeds are subject to scatter, and fill the garden with young plants, if the stalks are not cut down, and
carried

carried away soon after the flowers are past; for which reasons few people care to keep them; but yet, in large wildernesses, they are very good to fill up vacancies, and the flowers are very proper to adorn halls and chimnies; and as they come at a season when few better flowers appear, they are the more valuable.

THE Aster is propagated by parting the roots early in the spring, and will grow in almost any soil or situation; the larger sorts increase so fast, that, in a short time, they will run over a large spot of ground, if not prevented: these grow best in the shade; the lower kinds seldom creep at the root, but must be taken up and planted every other year, which will cause their flowers to be fairer.

THE seeds of this beautiful plant were originally sent from China by some of the French missionaries, to the royal garden at Paris; and have been since distributed to several persons in Europe. The seeds should be sown on a moderate hot-bed the beginning of March; and when the plants are come up, they must be transplanted on a new hot-bed, observing to shade them until they have taken

root; after this they must be frequently watered, and should have a pretty large share of air whenever the weather is favourable; for if they are kept too close, or have too much heat, they are very often in danger of rotting near their roots.

If the seeds of the Aster are sown on a warm border in the autumn, soon after they are ripe, the plants will come up in the spring, and be stronger, and flower better than those which are raised in the spring.

G I L L I F L O W E R.

OF this flower, according to Miller, there are three sorts, the first of which is the true Clove-gilliflower, which has been for a long time so much in use for making a cordial syrup, &c. of which there are two or varieties commonly brought to market, which differ greatly in goodness, some of them having very little scent, when compared with the true sort: the large kind have been much plentier formerly than at present.

THE third sort of this flower is only to be found in such small gardens as raise great quantities from seed, in order to supply the markets in the spring of the year: this being a very hardy kind, and their leaves being so broad, and the plants so vigorous, that people wholly unacquainted with them, make choice of them as the most promising plants, although they have seldom more than four or five leaves in flower, which are very small and ill-coloured.

THE first of these, viz. the Clove-gilliflower, is worthy of a place in every good garden; but of late years there have been so many new kinds produced from seeds, which are so very fine and large, that most of the old sorts have been excluded the gardens of the florists.

THESE flowers are propagated either from seeds, (by which new flowers are obtained) or from layers, for the increase of those sorts which are worthy maintaining.

THE value of these flowers cannot be ascertained till the second year, at which time the goodness of its properties may be decided upon. But, that the reader may be well

acquainted with what the Florists call *good properties*, we shall here set them down.

1. THE stem of the flower should be strong, and able to bear the weight of the flower without hanging down.

2. THE petals, or leaves of the flower, should be long, broad, and stiff, and pretty easy to expand, or, as Florists term them, they should be Free Blowers.

3. THE middle pod of the flower should not advance too high above the other part of the flower.

4. THE colours should be bright, and equally marked all over the flower.

5. THE flower should be very full of leaves, so as to render it, when blown, very thick and high in the middle, and the outside perfectly round.

HAVING made choice of such flowers as promise well for the large fort, they should be marked separately for pots,

pots, and the round, whole-blowing flowers for borders ; the single flowers, and such as are ill-coloured, and not worth preserving, should be pulled up, in order that the good ones may have the more air, as well as room, which makes the plant the stronger, and the flowers more luxuriant : these being laid, as soon as they have taken root, which will be some time in August, they should be taken off, and planted out ; those that blow large, in pots, the others in borders.



L U P I N E.

LUPINES consist of three sorts; the Great Blue, the Small Blue, and Yellow Flowering species. They all blossom in May and June. The first sort grows to about two feet high; and the two latter, about half the height of the former. They are a flower that is seen in most gardens; and are remarkable for their neatness of blossom, and simplicity of colouring. The yellow species possesses an agreeable scent, which is denied to the other sorts, that however are recompensed, in general, with a greater brilliancy of colouring.





C O N V O L V U L U S .

THIS plant consists of three species, called the Major, Minor, and the Scarlet-flowering kind. The Major has a flower of a rich purple colour; the Minor displays a flower of a delicate hue, between a sky and mazarine blue: this species is sometimes variegated with the colours of yellow and white. The Scarlet-flowering kind

is distinguished for bearing a flower, of the colour from which it derives its name. But that which most particularly characterises the Convolvulus, in all its three species, is the flower, consisting of a single leaf, which is a remarkable instance of the variety Nature displays in every part of the Creation, when contrasted with the Ranunculus, and other flowers, that are composed of such a multitude of leaves. The Convolvulus blows from June until August; and, as a picture of humility, creeps upon the ground.

A S P H O D E L.

THIS plant, from its appearance while blooming, being similar to a royal spear, is called in Latin, *Hastula Regia*, i. e. King's Spear. The stem of the Asphodel is three feet high. In the middle of it grow, up to the top, a great number of single flowers, each divided into five

five parts. It thrives in every sort of soil; is multiplied more by roots than seed; and, if well watered, will afford most beautiful flowers. The Asphodel is considered as a great ornament to a border, or any other part of a garden, where dwarfs, or tall flowers, are raised. It should be set three inches deep, and a span distance from each other, or from whatever flowers may be in the same compartments.

AURICULA





A U R I C U L A.

THIS flower has been the greatest pride of all gardeners. One root of it has sold for twenty guineas. These flowers are indeed very delightful, both in scent and beauty. They blossom in April, and are in full bloom about the 20th of the same month. The numerous variety of their flowers are distinguished by the names and titles of eminent and exalted characters: thus, it has been not unaptly observed, that, as Auriculas increased so fast, and great men, if possible, decreased faster, in a short time names of distinction would be wanting to denote their differences. The goodness of an Auricula consists in a strong flower-stem, short footstalks, large

large regular flowers, full, round, and white eyes; and that the flowers themselves may be flat, not the least inclining to cup.

The culture being particular, we refer our readers to Bradley's *New Improvements in Gardening and Planting*.

V I O L E T.

THE Violet produces, from its roots, tufts of leaves almost round, indented on the edges, and of a beautiful green. In the middle of these leaves grow the flowers, consisting of several irregular lips, shaped like a butterfly: the two uppermost resemble a stand; and those on the side are like wings; and the two lowermost are formed like a little bark. Thus curiously formed, it has been equally the pride of the peasant, prince, and poet. It is one of the most early beauties with which Flora presents reviving nature. It grows in any sort of ground, and is
particu-

particularly pleasing upon the borders of small gardens. The flower is as agreeable to the smell as to the sight, which has caused it to have been so universal a favourite. It should be replanted every three years, and kept from weeds, which is the chief trouble the culture of the Violet requires. The Double Violet is only that which is raised in our gardens.

V I O L E T



HELLE-



HELLEBORE

GROWS wild in Italy, Austria, and Lombardy. It thrives best on high situations. It has a plain stalk, unadorned with leaves, until it produces the blossom on its summit: the flower is yellow, and composed of five or more petals. The root is fibrous. This plant should
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be propagated by offsets, and the roots should be taken out of the ground, and transplanted. When their leaves decay, which is generally from the beginning of June to October, the roots should be planted in small clusters, in order to improve the appearance of their blossoms. If planted alternately with Snowdrops, their effect will be the more agreeable, as they flower about the same time.

I R I S.

THE Bulbous Iris shoots forth a stem formed of long, broad leaves, that are soft, and of a pale green colour. In the middle grows a stalk which bears, on its top, a single-leaved flower divided into six parts; and, in the centre of the flower, is a chive of three leaves arched. Their flowers are either white, yellow, blue, red, or ash colour, and are most beautiful in appearance. They are multiplied both by their seed, and by bulbs. When the seed is to be sown, it should be gathered in July, and preserved until September, before it is committed to the soil;

foil; and whatever colour that seed is, you may expect to have a flower arise from it of the same hue, which is a circumstance peculiar to the Iris, and may account for its name, which is derived from a Greek word, signifying to foretell or presage; for the seed thus foretells the colour of the flower.



NASTURTIIUM.



N A S T U R T I U M.

THE NASTURTIUM INDICUM, or Indian Cresses, are of two sorts; one large, and the other small. The large sort is known by the name of Monk's Hood: it has flowers, variegated with yellow and scarlet: they run upon the ground, and blow from May to September. This plant is raised with little care. The seed, being large, is sown in separate grains, at four inches distant from each other. The flowers of Monk's Hood grow upon small reddish stalks, and are composed of several irregular leaves. The stem is covered with leaves; which are sometimes round, and sometimes angular. The small sort of Nasturtium is frequently eaten as a pickle; but the larger, which is Monk's Hood, is considered as poisonous.

HOLY-

H O L Y H O C K S

CONSIST of several sorts. They have a large stem, that rises about six feet high; which is decorated with flowers, in the same manner as other flower plants are decorated with leaves. The flower blends the delicacy of the Poppy with the richness of the Rose. The colours of these flowers are various; as the red, white, purple, and black. Although the stems of the Holyhock are so strong and large as to grow six feet high, yet they wither every winter to the ground. Their seeds are sown in March, in the natural earth; and, notwithstanding they lie not long in the ground, they produce no flowers until the next year. They may be transplanted about March, or September. The time of flowering is in July and August.

CROWN



CROWN IMPERIAL.

THIS plant has a stem about two feet high, which is surrounded with long, pointed leaves, growing immediately from the root: the stem is likewise garnished with small leaves, growing in pairs, without any footstalk. Upon the top of the stem is the flower, composed of several green, upright leaves, that appear to grow from the germ of another flower, formed of yellow inverted leaves, in a figure somewhat resembling a turban: amid these leaves are seen stamina, with white anthera, which hang

hang down in a graceful manner. The anthera resemble dew-drops, falling from the filaments of the stamina. The Crown Imperial is propagated from its bulbs, which should be taken out of their mould in June, well cleaned, and carefully stored till September; when they should be replanted. It blossoms chiefly in March and April: during these months, its singular beauty, and graceful dignity, form one of the chief ornaments of our most elegant gardens.

H Y A C I N T H.

NEXT to these follows the Hyacinth, with all its virgin beauties: there are so many sorts of them, and so different in colour, that Nature seems to have taken pleasure in forming, and rendering them the more admirable by variety. As we are noticing the more early flowers, we have to observe, that the winter and spring Hyacinth is blue, and odoriferous. It is little, round, and of a single colour. Hyacinths, like many other flowers, are multiplied by seed. The bulbs that are produced from
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the seeds, bear no flowers until the fourth year. The greatest part of Hyacinths delight in places that are mostly exposed to the sun, and apart from other flowers. Like animals that herd together in flocks, Hyacinths are, by Nature, most adapted to grow in clusters, by themselves.





MARTAGON.

THE Martagon, or Mountain Lily, consists of several sorts. The Great Martagon has a red flower, growing on a stem between two and three feet high, without any footstalk. It is smooth to the touch, and of a deep green: the flower is crooked, and bends down at the end of the stalk, which supports it from falling. The plant may be set in any soil. It must be planted a span deep in the earth, and at the same distance from any other flowers which it accompanies. It is set among flowers of the larger size, or rather in the middle of borders, with flowers smaller than itself. The Martagon blooms in May. The bulbs should not be removed before you intend to transplant

plant them. Being sooner affected with heat than cold, the bulbs should be sheltered from the sun with little layers of earth, or preserved from the summer heat by frequent waterings.

SWEET PEA.

THIS plant is frequently introduced into gardens, from the sweetness of its scent, and the delicate beauty of its flowers. It is generally set with another, called the Painted Lady. The flower of the Sweet Pea is exactly the same as the Common Pea blossom, except being purple instead of white. The flower of the Painted Lady is pink and white. They are both raised from seed, which is sown about the time of the other Peas. They blossom mostly in July, and are no little decoration to those parts of a garden allotted for the irregular and beautiful simplicities of Nature.

POPPY.



P O P P Y.

THE Garden Poppy has a stalk about two feet high, which supports a flower distinguished for its delicate texture, beauty, and variety of colour, and its somniferous odour: but although the flowers are so agreeable in appearance, they are of short continuance. They should be sown in spots, in order to afford an assemblage of colours, their variety of hue is so well calculated to afford. The flower is said to yield a substance which is generally sold by our apothecaries as opium. The Dutch Wild Poppy does not blow so high as the former: the flowers are red and white striped, and bloom during the months of June, July, and August.

MEZEREON.

MEZEREON.

THIS plant is of two sorts; the Red and White flowering. The Red is very common in gardens; but the White Mezerion is rather scarce. They are both dwarfs, and seldom rise higher than about three feet: their stalks are ornamented with flowers so early as January, when the air is perfumed with their agreeable odours. They remain a long time in blossom, and are afterwards much adorned with the beauty of their fruitage. The only mode of propagating them, is by sowing their seeds in March. This plant may be profitably introduced in parterres, as a show flower, or in wilderness works, for its delightful blossoms. But they are adapted chiefly for a winter garden.

HONEY-



HONEY SUCKLE

IS a shrub, which shoots forth several branches, that expand on every side, and support themselves by twining round whatever is within their reach. At the knots of the branches, the leaves grow in pairs, opposite each other, at equal distances: they are soft, broad, pointed, green without, and white within. At the end of the branches the flowers grow in form of pipes, bending in a manner somewhat similar to a crown. The peculiar form of the leaf, an agreeable diversity of colour, and the aromatic odour it dispenses around the gardens it decorates, render the Honeysuckle one of the most desirable appendages to every spot where the bounties of Flora are collected for human delight.

ST.

ST. JOHN'S WORT

GROWS on a thin, leafy stalk, about a foot high. From the chief stem grow many branches, which are garnished with long, small, pointed, and plain-edged leaves. On the top of each of the smaller branches is a yellow flower, which greatly resembles the Daisy, both in size and form. If reared in a green-house, this plant will blossom in March: but, if cultivated in a garden, the usual time of flowering is in June, when it may be gathered for medicinal purposes. St. John's Wort is reared in most physic gardens, from its possessing qualities that greatly assist the cure of the jaundice: it is likewise a chief ingredient in that valuable balsam so well known by the name of Friar's Balsam, or Turlington's Drops.

T H E E N D.

